

Re: EX16.1

Attachment 7

Fare Policy: Current State Assessment

Fare Policy Review - Current State Assessment

Executive Summary

Transit fare policy needs to be considered in the context of ongoing initiatives being undertaken by the City, the TTC and Metrolinx. This report provides a current state assessment of transit fare policy in Toronto, focusing as a first step on issues related to the existing GO Transit fare structure.

Metrolinx is working on a Greater Toronto and Hamilton Area (GTHA) Fare Integration initiative, which has a goal to develop a seamlessly integrated regional fare structure involving all transit agencies operating in the region GTHA. The study is currently in Step 2 of a four-step process, in which the City and TTC have been involved. Fare structures currently being considered by the study include a modified 'status quo', zone-based fares and a hybrid fare structure (distance-based for higher-order transit and flat fares for local transit). These are illustrated in Figures 5 to 7.

Fares on GO Transit provide an essential foundation for considering fare policy regionally. As a first step, a focus on GO Transit fare policy issues offers the greatest potential near-term benefits to Toronto. The evolution of GO Transit from a suburban-to-downtown commuter system to an urban Regional Express Rail (RER) connecting Mobility Hubs with frequent, all-day, two-way service will also require a fundamental evolution of the fare structure to achieve its goals. City and TTC staff have identified three key fare policy challenges that should be addressed on GO Transit:

- GO Transit's distance-based fare structure makes short trips substantially more expensive (on a per-kilometre basis) due to the relatively high base and low distance components of the fare. This creates a barrier to using GO Transit in Toronto, where trips are relatively short.
- There is currently no co-fare option for transfers between GO Transit and TTC services (which is available for transfers with 905 transit agencies); this requires riders to pay two full fares when using both GO and TTC, reducing opportunities for riders to make integrated trips using both systems.
- GO Transit has stations within or in very close proximity to half of the City's Neighbourhood Improvement Areas, most of which are not served by existing rapid transit lines. Improving the affordability of GO Transit fares represents an opportunity to increase rapid transit access for low-income residents.

This report identifies some working principles that will guide City and TTC consideration of fare policy issues and options, and inform discussions with Metrolinx. These principles include:

- Revenue – generate sufficient revenue to cover a portion of system operating costs
- Efficiency – distribute demand in a manner that makes the most efficient use of capacity
- Fairness – provide consistent and logical prices for trips with similar characteristics

- Social Equity – provide affordable access to transit for residents of all incomes
- City-Building – align with the Official Plan vision and Provincial growth objectives
- Transportation Outcomes – support transportation policy objectives (e.g. mode share)
- Deliverability – technical feasibility, and addresses operational/customer service needs
- Acceptability – must be implementable at an acceptable cost to the user and taxpayer

This report proposes a series of possible actions and next steps for Metrolinx consideration to address barriers to using GO Transit in Toronto, including:

- Reducing the base component and increasing the distance component of GO fares;
- Extending the co-fare option currently offered by 905 transit agencies to TTC services; and
- Continue working with the City and TTC to establish an appropriate fare for SmartTrack, consistent with the approach to pricing other transit services in Toronto.

Some elements of the fare structure concepts being considered by Metrolinx in the GTHA Fare Integration review appear to conceptually address some of these considerations. Staff support the general direction that appears to show a reduction in the base fare for regional transit in each concept, and consistently applying the co-fare as shown in the modified 'status quo' concept. The actual fare levels for the base and distance components and co-fares have not yet been addressed.

The implementation of SmartTrack/GO-RER requires the resolution of fare structures, price levels and transfer policies between GO Transit and TTC services, particularly within SmartTrack corridors. Fares on SmartTrack must be logically consistent with fares for other transit services within the city, as well as fares within the corridor beyond SmartTrack stations, and have consideration for the principles outlined above.

Metrolinx is anticipated to submit a technical update on the GTHA Fare Integration study at their June 28, 2016, board meeting. The City Manager in consultation with the CEO, TTC, will report to Council as the Metrolinx study and assessment of the approach to SmartTrack fares progress.

Purpose

This report focuses on the current state assessment of the GO Transit fare structure in Toronto, as it represents the most significant opportunity for immediate improvements to the regional transit fare system in Toronto and sets the context for the approach to SmartTrack/GO-RER fares. It sets out the current fare policy issues facing transit riders in Toronto, identifies some key challenges that should be considered in the Metrolinx GTHA Fare Integration study, and suggests a series of possible near-term actions and longer-term next steps to rectify issues that represent barriers or disincentives to use GO Transit.

The GO Transit fare system is designed to benefit long-distance commuters, which encourages urban sprawl and limits its ability to be used for short and medium length urban trips, especially within the City of Toronto. This report highlights a number of challenges identified by the City and TTC:

- GO Transit fares are high for short trips (on a per-kilometre basis), a situation that discourages transit use in Toronto, who tend to make shorter and medium length trips.
- GO Transit fares are not affordable to low-income households, which limits access to economically vulnerable residents.
- TTC is the only transit that does not have a co-fare with GO Transit, making the cost of transferring to GO service from the TTC at least \$2 higher than in any other municipality.

The introduction of GO-RER/SmartTrack offers the opportunity to leverage existing rail infrastructure and provide service with high frequency, speed, reliability and capacity in two directions. The objective is to have GO-RER/SmartTrack meet a broader range of local and regional travel needs – from work, to shopping, recreation and social trips. Fare integration is essential to achieve this.¹

The implementation of SmartTrack/GO-RER requires the resolution of fare structures, price levels and transfer policies between GO Transit and TTC, particularly within the SmartTrack corridors. In adopting recommendations related to the SmartTrack work plan in January 2015 and the Smart Track progress update in October 2015, City Council directed staff to work in partnership with the Province on the implementation of SmartTrack/GO-RER, recognizing the need for the integration of fares between GO Transit and the TTC.

At the same time, Metrolinx is undertaking work on the GTHA Fare Integration initiative, which is working toward developing a seamlessly integrated regional fare structure that would involve all transit agencies operating in the GTHA. The recommended preferred fare structure that will emerge from this work could represent a significant change to the fare structure in Toronto and may have policy and financial implications that will need to be considered by City Council.

The City Manager in consultation with the CEO, TTC will report to City Council on SmartTrack fares and the potential implications for the City of Toronto and TTC as the GTHA Fare Integration Study progresses.

Background

The Greater Toronto and Hamilton Area's 10 transit agencies each have standalone fare structures, some of which are not integrated, and each having different approaches to the pricing of services. With the introduction of PRESTO, Metrolinx and the GTHA's municipal transit agencies have the opportunity to move toward transit fare structures that are consistent and integrated. Fare integration can help make the regional transit system more fair and efficient, while generating more ridership. The transit system in the GTHA is undergoing a major transformation with new transit lines being built and delivered over the next decade. To get the greatest benefit from this new infrastructure, fare integration needs to occur as that infrastructure is delivered.

¹ Metrolinx (2015), GO RER Initial Business Case, Appendix J. http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/GO_RER_Initial_Business_Case_Appendix_A-J_EN.pdf

Regional fare integration is being undertaken in a multi-jurisdictional environment where municipalities, their transit agencies and Metrolinx all have authorities for policy setting, implementation and management of their respective fare systems. This work is guided by the current legislative framework for fare integration. The [Metrolinx Act, 2006](#), establishes Metrolinx's role as promoting and facilitating coordinated decision-making and investment in the regional transportation area, including for routes, fares and schedules of the regional and local transit systems in the regional transportation area. It also provides authorities to implement the PRESTO unified fare system. The [City of Toronto Act, 2006](#), establishes the authority of the TTC to set fees and charges (i.e. fares), with the City authorizing the supporting subsidy through approval of the annual TTC operating budget.

Evolution of GO Transit

GO Transit, the regional public transit service for the Greater Toronto and Hamilton Area (GTHA), originated as a long-distance suburban-to-downtown commuter service. Conceived in the 1960s when the population of Toronto was rapidly decentralizing to the suburbs, its original purpose was to reduce the need for highway construction into Toronto by providing a practical alternative to automobile commuting to Downtown jobs.

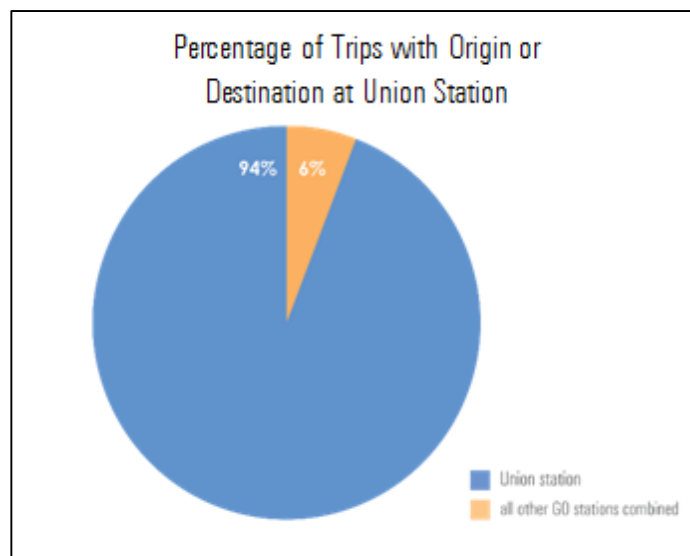


Figure 1 - Trips Destined to Union Station

The commuter rail experiment was highly successful, and GO Transit has evolved from a single rail line running along Lake Ontario in 1967 to a network of seven rail lines and 43 bus routes today. GO Transit has experienced an increase in commuters from 2.5 million passengers during its first year of operation to 69.5 million riders annually on the entire GO Transit network today. GO Transit's focus of service into Downtown Toronto (specifically to Union Station) continues to this day, as approximately 94% of its train ridership travels to or from Union Station in Downtown Toronto (shown in Figure 1).²

² Transportation Tomorrow Survey (2011)
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GO-RER: The Next Stage of Evolution

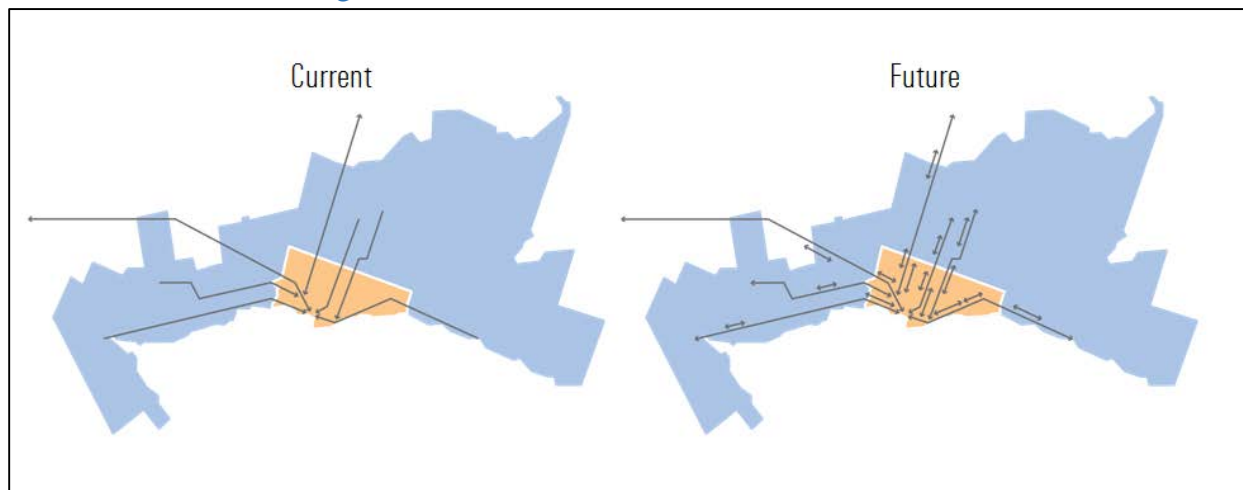


Figure 2 - Diagram explaining the evolution of GO Transit from a commuter system to an urban transit system

The introduction of GO Regional Express Rail (GO-RER), by Metrolinx, will transform GO Transit to a viable urban transit service for all trip purposes. It will provide fast, frequent, reliable, two-way service with electric trains running every 15 minutes or better throughout the day. It is intended that every area on the most heavily travelled sections of the GO network will have improved service and not be focused only on Union Station, as illustrated in Figure 2.³

Many GO stations have been identified as Mobility Hubs in the Regional Transportation Plan, which are planned to evolve into nodes with high levels of transit access with intensified transit-supportive land uses. The improved transit service on GO-RER must attract shorter-distance trips and maintain long-distance commuters who travel across multiple municipal boundaries.

SmartTrack

The City of Toronto is working in partnership with Metrolinx to introduce SmartTrack service, which is intended to be integrated into Metrolinx's GO-RER service on portions of the Kitchener and Stouffville/Lakeshore East corridors. SmartTrack will make GO-RER even more of an urban transit service as it introduces additional stations, closer station spacing, and higher frequency service within the City of Toronto.

The implementation of SmartTrack requires the resolution of fare structure and price levels across the GO Transit network within the City. The City's transportation model suggests that ridership performance on SmartTrack improves with fare levels consistent with a TTC fare, and full fare and service integration with the remainder of the TTC network in the City. The fare structure implemented for SmartTrack must also consider the implications for fares on the remaining GO Transit network in the City, as well as the broader TTC network.

³ Metrolinx (2016), Regional Express Rail. http://www.metrolinx.com/en/regionalplanning/rer/rer_service.aspx
Developing Toronto's Transit Network Plan
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GO Transit Fare Structure

The current fare structure used by GO Transit consists of base fare and zone-based distance components. The base fare component is currently \$5.30 (\$4.71 with a PRESTO fare card), representing the minimum fare riders must pay to access the system. The distance component is calculated by fare zones, which are identified as discrete geographic areas across GO Transit's service area. Fare zones for Toronto are shown in Figure 3.

Additionally, GO Transit offers co-fares for every local transit system in the GTHA with the exception of the TTC. GO Transit riders can transfer to or from local transit on journeys that include a GO Transit component for a reduced local transit price when using the PRESTO fare card. Co-fares currently range from \$0.50 to \$0.80, depending on the local transit system.

The GO Transit fare structure also provides concession fares for students, seniors, and children, which are available through all fare payment methods. Discounts for frequent users are provided exclusively through the PRESTO fare card. An 11.15% discount is provided for any trip paid for with the PRESTO fare card, an 87.75% discount applies to trips 36 to 40 made between the same stations/stops per month, and a 100% discount applies to trips 41+ in the same month.

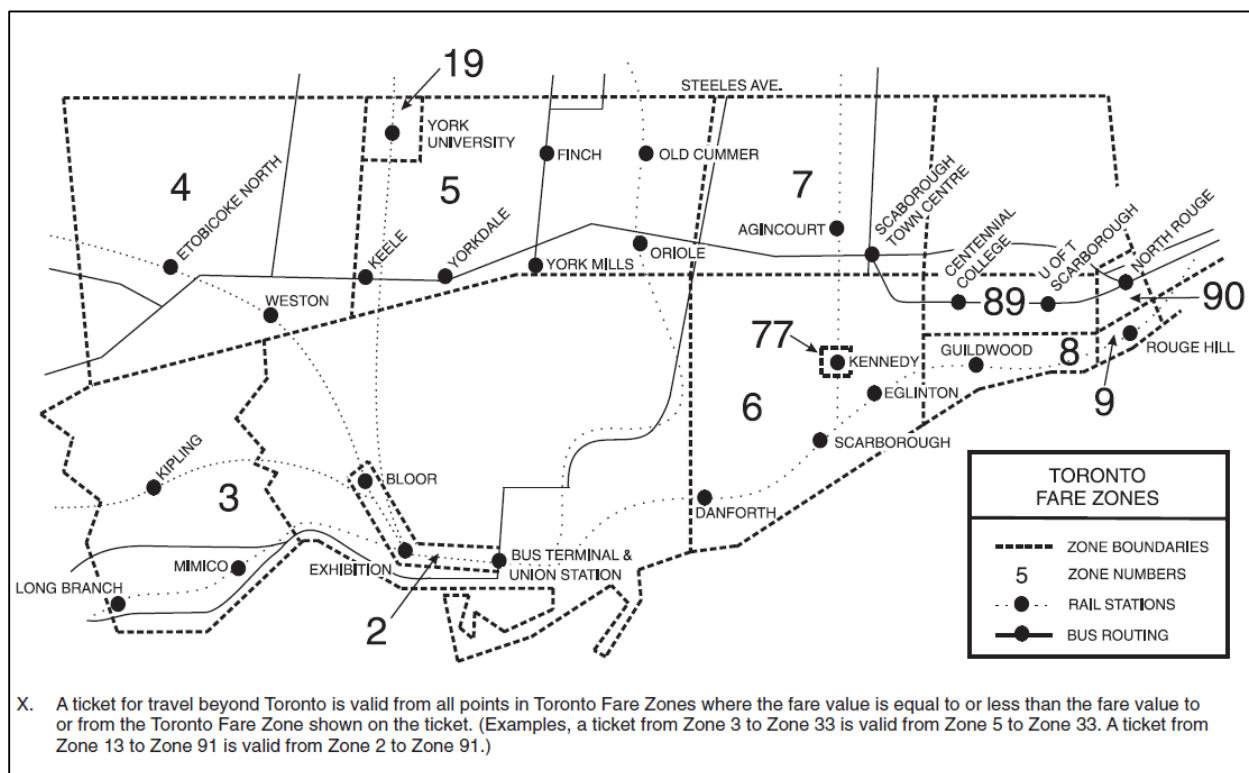


Figure 3 - GO Transit fare zone map for the City of Toronto.⁴

⁴ GO Transit (2016), Tariff, Passenger Rules and Regulations, Zones/Fares, Tariff of Fares, p. 25.

http://www.gotransit.com/public/en/docs/Tariff_EN.pdf

Metrolinx GTHA Fare Integration Study

Metrolinx is undertaking a GTHA Fare Integration study, with the goal of integrating fare structures across all transit agencies operating in the Greater Toronto and Hamilton Area (GTHA), including GO Transit and the TTC, to create a seamless transit network. The study responds to commitments made in the Big Move Regional Transportation Plan (Strategy #6)⁵ and Metrolinx's 5-Year Strategy (Objective #3)⁶ to deliver an integrated transit fare system for the region. The City and TTC are involved in this process as consulted stakeholders.

The Metrolinx evaluation criteria for the study are organized around the objectives of simplicity, value, and consistency. These categories encompass criteria from several perspectives such as customer, service provider, and regional perspectives. The criteria are heavily focused around customer service, operational, and financial considerations. The fare structure options currently being considered in the study are illustrated in greater detail in Figures 5-7 on the following page.

⁵ Metrolinx (2008), *The Big Move* (Regional Transportation Plan), pp. 42-43.

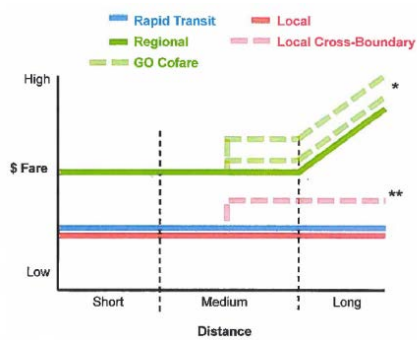
http://www.metrolinx.com/thebigmove/Docs/big_move/TheBigMove_020109.pdf

⁶ Metrolinx (2015), *2015-2020 Metrolinx 5-Year Strategy*, p. 14.

http://www.metrolinx.com/en/aboutus/publications/Metrolinx_Five_Year_Strategy_2015-2020_EN.pdf

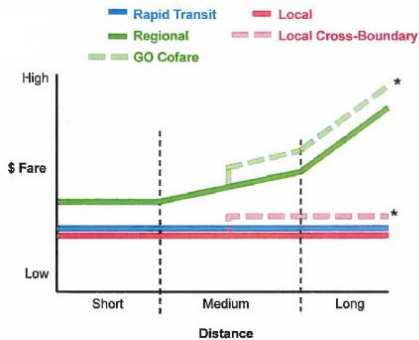
METROLINX'S PROPOSED FARE STRUCTURE CONCEPTS⁷

Figure 4 - Existing Fare Structure:
Status Quo



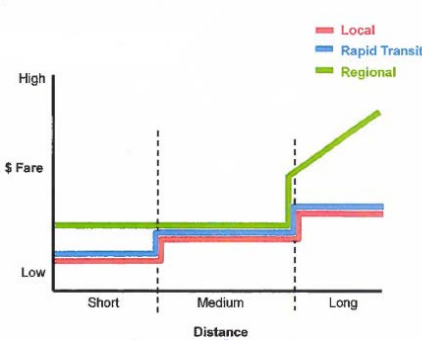
- High flat fare on regional transit for short and medium trips; distance-based long trips
- Lower flat fare on local and rapid local transit
- Range of co-fares between regional and 905 operators
- No co-fare between regional and Toronto operator

Figure 5 - Concept 1:
Modified Status Quo



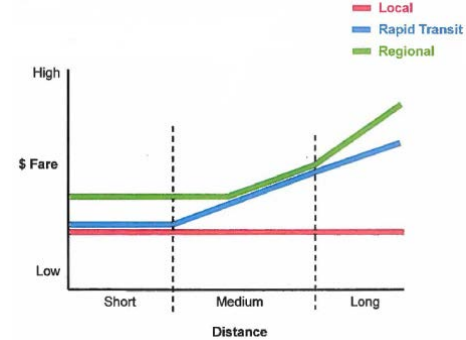
- Lower base fare on short regional trips
- Moderate distance-based fare for medium regional trips
- Higher distance-based fare for long regional trips
- Lower flat fare on local and rapid local transit
- Consistent transfer policy (co-fare) between all municipal transit and GO

Figure 6 - Concept 2:
Local and Rapid Transit Zones



- Lower base fare for short and medium regional trips
- Higher distance-based fare on long distance trips
- Very low short local and rapid local transit fare
- Low medium local and rapid local transit fare
- Medium local and rapid local transit fare for longer trips

Figure 7 - Concept 3:
Hybrid



- Lower base fare on short-medium regional trips
- Regional-wide flat local fare
- Rapid local transit comparable to local for short trips
- Moderate distance-based fare on rapid local transit and regional transit for medium trips
- Higher distance-based fares on regional and rapid local transit for long trips

CITY OF TORONTO / TTC SUPPORTED FARE STRUCTURE CONCEPTS BY METROLINX

- Lower base fare on regional trips
- Lower fare on short and medium regional trips
- No price differentiation between local bus and rapid transit trips
- Consistent transfer policy between municipal transit and GO

⁷ Metrolinx (2016). GTHA Fare Integration (presentation for Toronto Municipal Update), May 26, 2016.

City-TTC Comments

City and TTC staff support certain elements of the general direction presented in the Metrolinx fare structure concepts. Each concept shows a reduction in the base fare for regional transit, which is consistent with the direction this report suggests that Metrolinx consider. Actual fare levels for the base and distance components are not addressed in these concepts and need to be the subject of further analysis and discussion.

In Figure 4, Metrolinx has characterized the current 'status quo' fare structure. This diagram reflects the fare structure from the perspective of Union Station. A more generic characterization of the fare structure is diagrammed in Figure 8, reflecting fares for transit trips that could start and end anywhere in the region, and accurately shows GO Transit's distance-based fares applying to short and medium length trips.

Figure 5 shows the co-fare being made consistent across the region, with the price level again not defined. Concepts that introduce additional service-based elements into the structure (such as Figure 7) raise concerns, such as divergence between local surface and rapid transit, due the evolution of the TTC into a highly integrated system.

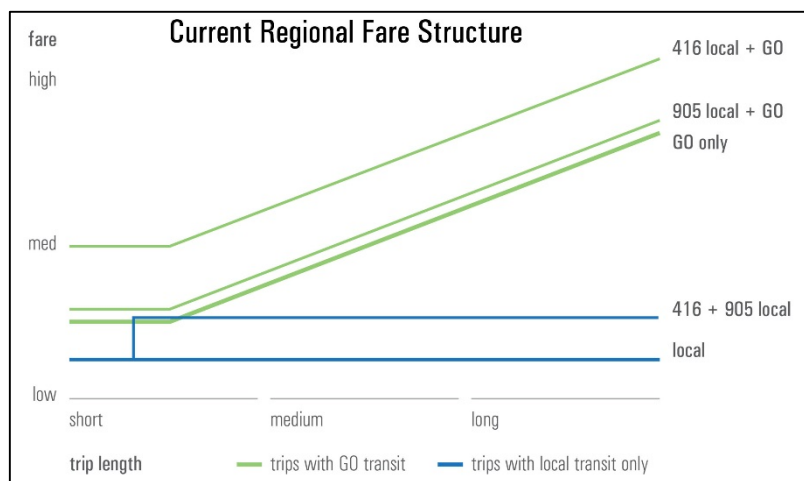


Figure 8 – Generic depiction of current regional fare structure.

In the past year, Metrolinx also conducted a comprehensive and in-depth social equity analysis of transportation in the GTHA. This analysis will be used to inform the GTHA Fare Integration study and the evaluation criteria for the study have been adapted to include insights from the social equity analysis.

Metrolinx is anticipated to submit a technical update on the fare integration study at their June 28, 2016, board meeting. The recommended fare structure concept from Step 2 is anticipated to be submitted to a future Metrolinx board meeting for consideration following further consultation with municipalities and transit agencies across the GTHA.

The current fare structure of GO Transit is inconsistent with a number of key local and provincial policies, especially in the areas of growth management, city-building, social equity, transit ridership and related policies (see the appendix to this paper). There are several reasons for this:

- The fare structure is not integrated with local systems (especially in Toronto where no co-fares is available), and fare levels are inconsistent with those charged by local agencies.
- The high base fare discourages shorter trips and compact development, and the low distance-based component encourages longer trips and urban sprawl.
- The lack of financial incentives to use GO Transit does not encourage alternative modes of transportation as a policy imperative, contributing to greater greenhouse gas emissions by private vehicles.

Equity and Access

GO Transit Distance-Based Fare Structure

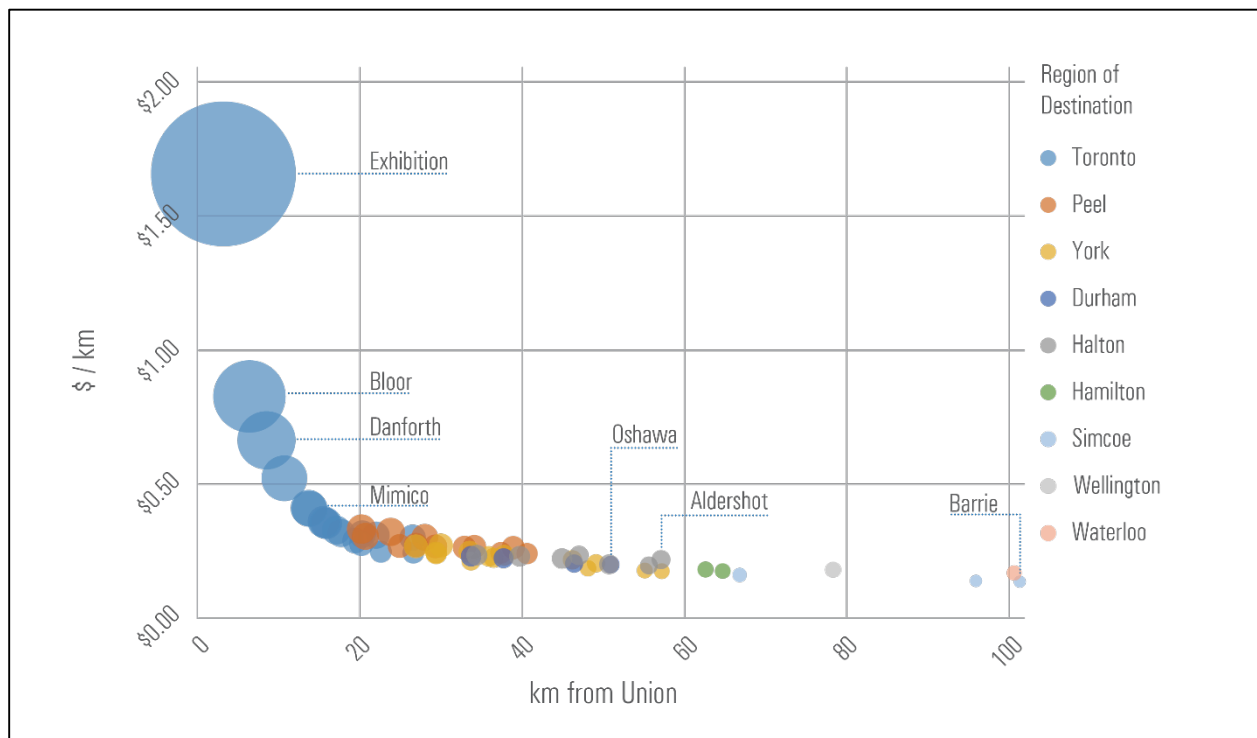


Figure 9 - Fare per kilometre for trips to/from Union Station on GO Transit (based on June 2016 prices), showing trips starting or ending in Toronto being up to 8x more expensive per kilometre than trips between Union Station and 905 GO stations.

GO Transit's distance-based fare structure makes typical trips within Toronto substantially more expensive, creating significant barriers to the use of the system in Toronto.

Reflecting the original purpose of the system, the fare structure has been designed to attract long-distance commuter trips and discourage short-distance trips. In order to encourage GTHA residents outside of Toronto to choose GO Transit, transit fares have been maintained at relatively low rates for longer-distance trips.

Residents of Toronto making short trips on GO Transit are charged significantly higher fares on a per-kilometre basis than regional residents who make longer trips to Toronto. Figure 9 shows how the per-kilometre fare for trips on GO Rail to/from Union Station decreases as the distance of the trip increases. The implications of this relationship can be illustrated by comparing fares for shorter and longer trips on the same line.

On the Lakeshore West line, for example, the fare to Union Station from Hamilton (a trip of 65 km) is currently \$11.50, or \$0.18 per kilometre. In comparison, the fare to Union Station from Exhibition (a trip of 3 km) is currently \$5.30, or \$1.67 per kilometre. Fares to Union Station from stations between Hamilton and Exhibition fall in between these extremes, but are consistently more expensive (on a per kilometre basis) for trips originating in Toronto than trips originating in 905 municipalities.

This situation is not unique for trips beginning or ending at Union Station. The example of fares for trips to/from Kipling Station (shown in Figure 10), a station in Toronto with relatively high ridership, is indicative of per-kilometre fares charged for short and long trips from the typical GO station. While a longer-distance trip between Kipling and Milton Stations costs about \$0.30 per kilometre, a shorter-distance trip between Kipling Station and the adjacent Dixie Station costs almost \$1.20 per kilometre, or four times as much.

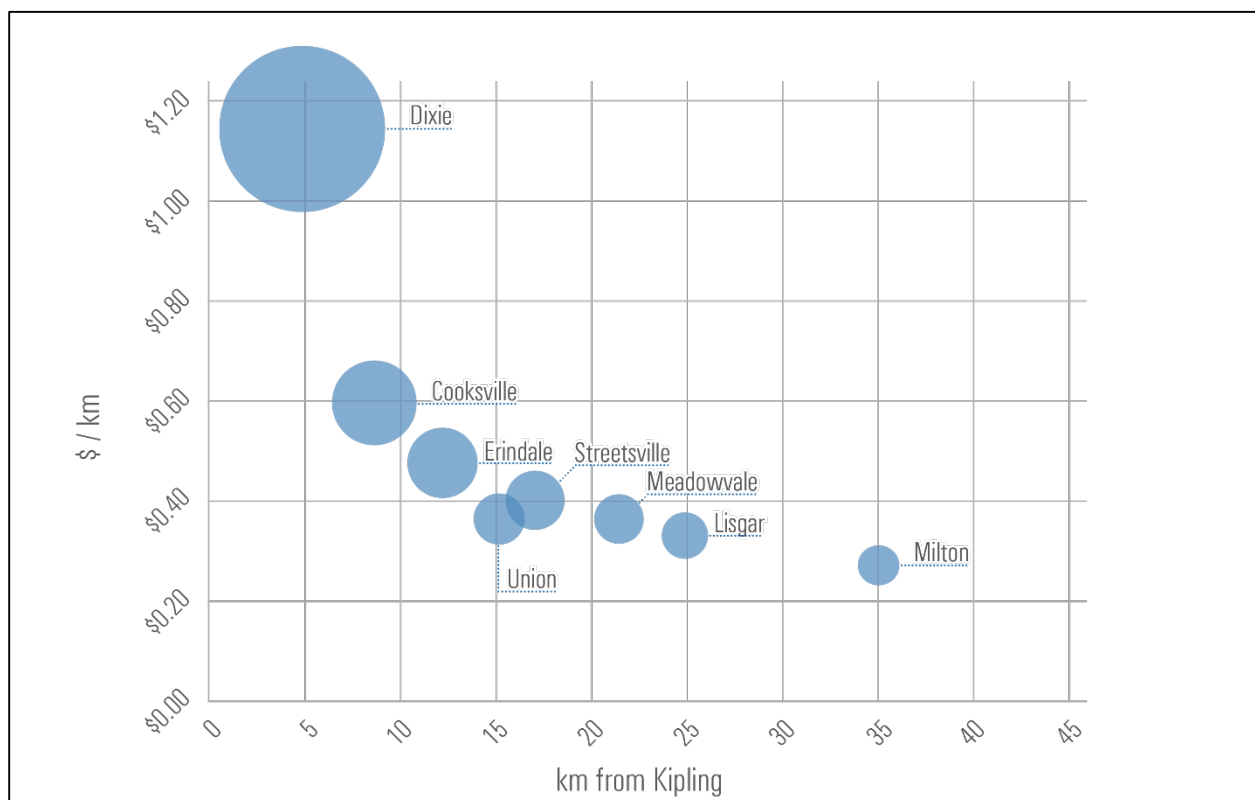


Figure 10 - Fare per kilometre for trips to/from Kipling Station on GO Transit (based on June 2016 prices), illustrating the relationship that short trips are significantly more expensive on a per-kilometre basis.

The relatively high base fare component and lower distance-based component makes short trips more expensive on GO Transit. On average, Toronto residents make shorter trips by all modes than 905 residents (8.0 km vs. 11.5 km)⁸. Toronto's higher population and employment density, mixed land use patterns, neighbourhood jobs-housing balance, and grid street network design tend to bring people closer to jobs and other destinations, all contribute to reducing the need to travel longer distances. The difference in average trip lengths is even greater for transit trips, at 8.7 km for Toronto residents and 19.6 km for 905 residents⁹. For trips made on GO Transit,

⁸ Transportation Tomorrow Survey, 2011. Figures represent straight-line distance.

⁹ Transportation Tomorrow Survey, 2011. Figures represent straight-line distance.

Toronto residents travel an average 23 km compared to 36 km for 905 residents¹⁰. This is partly because GO stations in Toronto are closer in proximity to Union Station, the hub of the GO Transit network (where 94% of GO trips begin or end).

Because Toronto residents make shorter trips, the relatively high base fare is distributed over fewer kilometres, and becomes a much larger component of the fare than trips to/from suburban stations. This reduces the value proposition of the GO fare for Toronto-based trips, an effect that is accentuated for the shortest trips between adjacent stations, such as the trip between Union and Exhibition stations. The price structure discourages Toronto-based trips from using GO Transit, even when the GO network may be the most efficient or logical choice when viewed from a transportation operator's efficiency perspective or user's travel time perspective. As shown in Figure 11, only 12% of GO Transit riders live in Toronto while 88% are residents in the GTHA outside of Toronto.¹¹

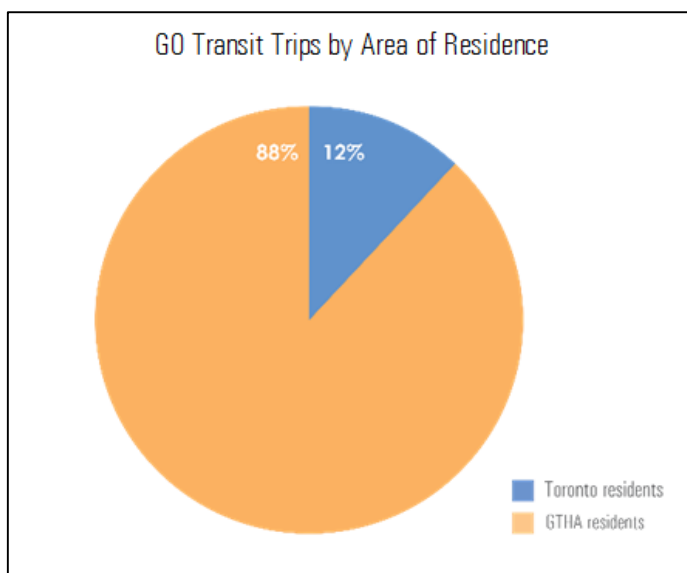


Figure 11 - GO Transit trips by area of residence, illustrating that only 12% of GO Transit riders live in the City of Toronto while 88% live in 905 municipalities.

Metrolinx has recently acknowledged the issues a high base fare creates for short-distance trips, and at Metrolinx's February 2016 board meeting, a number of options were presented for consideration. Three fare structure options were presented with diagrams showing a reduction in the base fare for regional trips (see Figures 5-7). Metrolinx has also taken some incremental but concrete steps toward correcting the problem. During the consideration of recent GO Transit fare increases taking effect February 2016, the Metrolinx board approved a tiered approach to fare increases where fares for short trips were frozen at 2015 levels. This effectively froze fares from Union Station to 75% of GO stations within Toronto.

Metrolinx should consider further steps to make GO Transit's fare structure more equitable and more viable for shorter trips by reducing the base fare component, consistent with the direction of the concepts at the February 2016 meeting, and increasing the distance-based component of the fare, as illustrated in Figure 12. In addition, the distance-based component could more accurately and consistently reflect the actual distance travelled than the coarse granularity provided by the current fare zones shown in Figure 3. The optimization of the actual price level charged for the base fare and distance increment could be analyzed further as part of the City/TTC contribution to the Metrolinx GTHA Fare Integration work. This analysis should consider the various principles and evaluation criteria set out in this report with an emphasis on ridership, city-building, revenue, equity, efficiency and other factors.

¹⁰ Transportation Tomorrow Survey, 2011. Figures represent actual trip distance.

¹¹ Transportation Tomorrow Survey (2011).

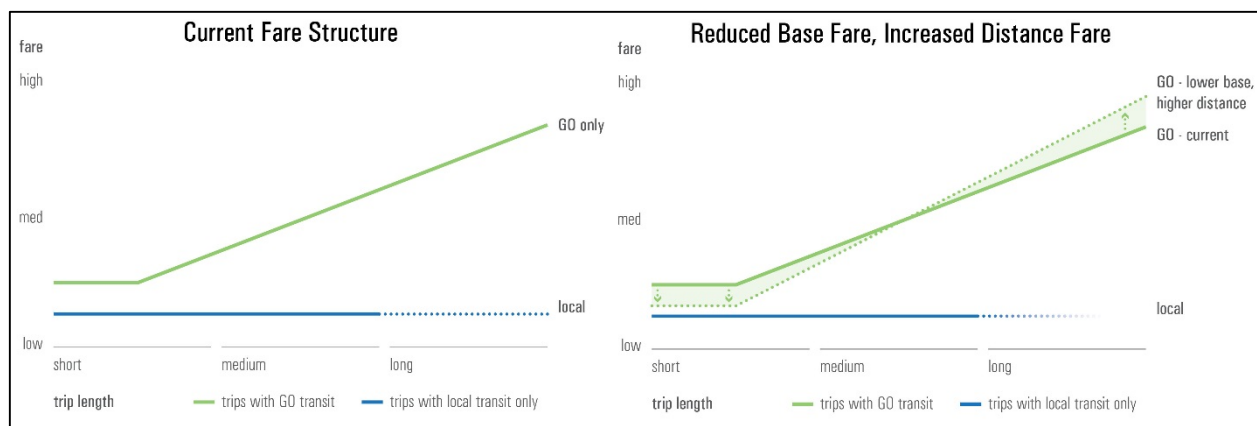


Figure 12 - Left: Illustration of current fare structure. Right: Reducing base fare and increasing distance fare on GO Transit.

Implications for "905" Transit Riders

Addressing the fare structure challenge for short and medium trips can have future benefits across the GO Transit network. Although the majority of GO Transit trips made by 905 residents today are focused on travel to Union Station, short trips to adjacent or nearby stations on GO Transit are also relatively expensive in municipalities outside of Toronto. As development and intensification occur around GO station Mobility Hubs in the 905 and these stations need to become a destination point for ridership, the same fare policy issues facing Toronto residents travelling to Union Station will become apparent for short trips to suburban GO stations.

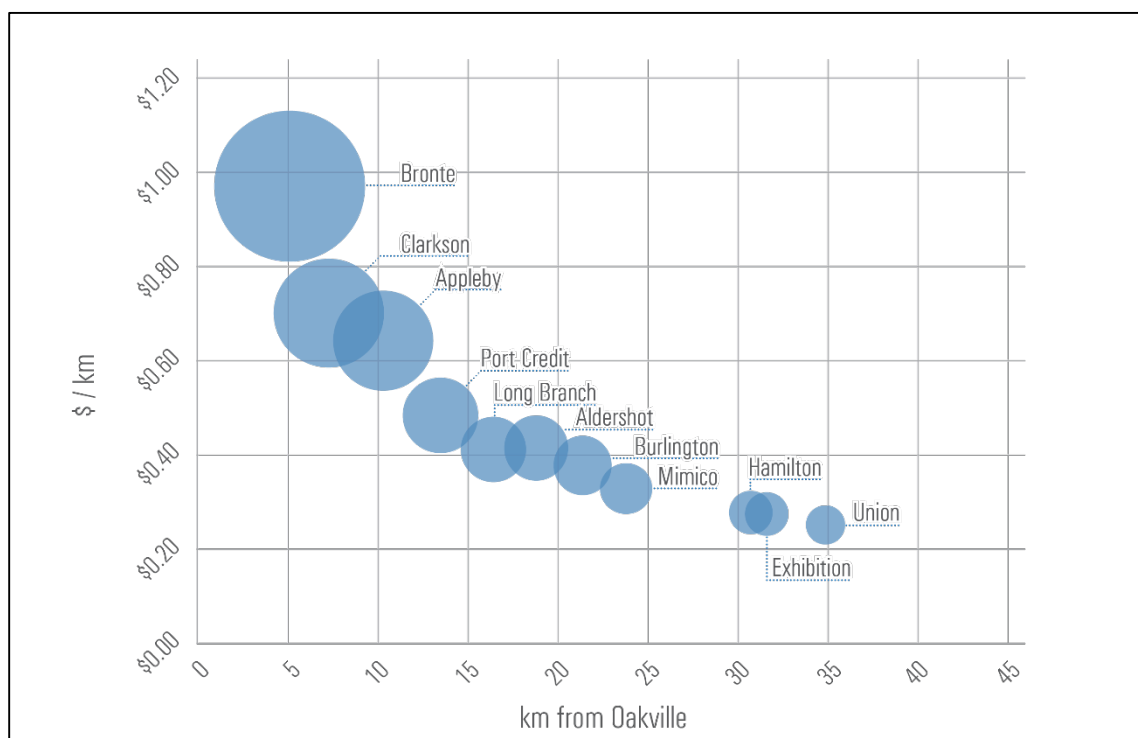


Figure 13 – Fare per kilometre for trips to/from Oakville Station on GO Transit (based on June 2016 prices), illustrating the higher per-kilometre cost of shorter trips and lower per-kilometre cost of longer trips.

Oakville Station is a representative example. It currently attracts among the highest ridership of all GO Transit stations, has been designated a Mobility Hub by the Regional Transportation Plan.

"Midtown Oakville" has been the subject of significant transit-oriented intensification planning sponsored by Metrolinx, the success of which will rely in large part to the ability of commuters to access the development via the GO Transit network.

Figure 13 plots the per-kilometre fare for trips to/from Oakville Station against the trip distance to/from Oakville Station. As with the pattern observed for Union Station, trips to/from adjacent stations are significantly more expensive on a per-kilometre basis than trips to/from more distant stations. The fare to Oakville from Union Station (a trip of 34 km) is \$8.65, which works out to about \$0.25 per kilometre. In contrast, the fare to Oakville from Bronte, the adjacent station to the west (a trip of 5.5 km) is \$5.30, or almost \$1 per kilometre.

These examples demonstrate how GO Transit's fare structure is inconsistent with the long-term objectives for the nodal transit-oriented development that GO-RER is intended to catalyze along GO Rail lines. The high base fare and low distance-based component makes short trips on GO Transit expensive, discouraging its use for that purpose.

Affordability of GO Transit fares for low-income residents

Fares on GO Transit are prohibitively expensive for low-income residents and GO Transit does not currently provide concession fares for low-income transit riders. Most transit agencies, including GO Transit and TTC, offer untargeted discounts to address social equity, primarily concession fares for seniors, children and students.

Recognizing that a fast-growing number of low-income Torontonians have unmet transit needs, the Toronto Poverty Reduction Strategy and the Toronto Strong Neighborhoods Strategy 2020 recommend investments in the core dimensions of transit equity: availability and affordability.¹² While infrastructure projects such as SmartTrack/GO-RER will improve availability, and the Fair Pass Program (Toronto Transit Fare Equity Project) currently being developed by City staff aims to increase affordability for low-income residents, there are additional opportunities to make GO Transit a viable option for residents of low-income areas with limited infrastructure.

Toronto has 31 neighbourhoods inequitably affected by poor health, low income, and/or limited infrastructure and community and social resources, formally recognized as Neighbourhoods Improvements Areas (NIAs). Only 5 of these 31 NIAs are currently served by the TTC rapid transit network.¹³

In contrast, as shown in Figure 14, 15 NIAs (approximately 50% of all NIAs) have a GO Transit station in or within 500 meters of it.¹⁴ There are eight GO stations directly serving NIAs, while an additional seven GO stations are within 500 metres. These NIAs represent a population of 307,000 residents or 12% of the City's population.

¹² City of Toronto (2015). Toronto Strong Neighbourhoods Strategy 2020.

<http://www1.toronto.ca/City%20of%20Toronto/Social%20Development,%20Finance%20&%20Administration/Shared%20Content/Strong%20Neighbourhoods/PDFs/TSNS2020actionplan-access-FINAL-s.pdf>

¹³ Kennedy Station serving Ionview, Kennedy Park and Eglinton East, Victoria Park Station and Main Station serving Crescent Town, and Downsview Station serving York University Heights.

¹⁴ 500 meters is approximately 5 – 10 minute walking distance, based on an average walking speed.

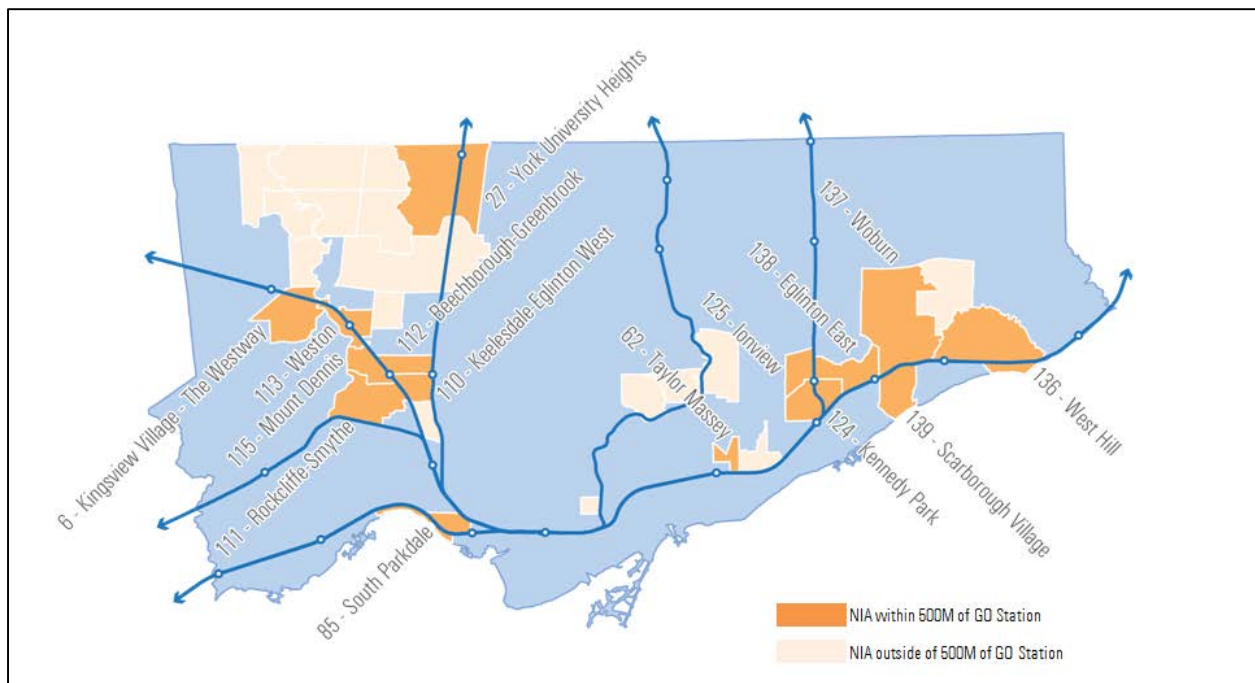


Figure 14 - Neighbourhood Improvement Areas in Toronto served by GO Transit stations.

Given the high cost of GO trips within city limits, described above, NIA residents do not take advantage of the GO Transit network. Research shows that most GO trips are initiated in areas with average household incomes between \$75,000 and \$100,000; only a very small percentage of trips start or end in low-income areas.¹⁵

Weston GO Station, for example, is located in a NIA where 24% of the population is under the Statistics Canada After-Tax Low-Income cut-off.¹⁶ A resident commuting to downtown daily can spend \$179 on 22 round trips to Union Station on GO Transit, or buy a \$141 TTC monthly pass that allows unlimited trips and transfers. Taking the TTC, however, requires spending about 25 hours more on transit every month.¹⁷

Reducing the base component of GO fares, therefore decreasing the cost of shorter trips, would improve transit access for low-income residents in neighbourhoods with limited infrastructure. The positive impact of this change could be maximized by the adoption of a TTC-GO Transit co-fare (discussed below) and the creation of a regional low-income discount program.

Many cities and regions served by the GO Transit network have low-income discount programs, namely, Mississauga, Hamilton, Peel Region, York Region, Guelph, and Waterloo. City of Toronto staff are developing a Fair Pass Program to be presented to City Council in the fall of 2016. Metrolinx should consider the creation of a GO Transit low-income discount program to improve both transit integration and transit equity across the region.

¹⁵ Kramer, A (2015). Trip patterns by income. Metrolinx.

¹⁶ City of Toronto (2011). NIA Profiles - Neighbourhood Demographic Estimates: 113 Weston. http://www1.toronto.ca/City%20of%20Toronto/Social%20Development,%20Finance%20&%20Administration/Shared%20Content/Demographics/PDFs/NIA_2014_Profiles/113%20Weston.pdf

¹⁷ \$2,150 annually is based June 2016 prices for one-way trips on GO Transit between Weston Station and Union Station only, by a single adult; \$1,700 annually is based on June 2016 prices for a monthly Metropass for TTC

Making transit more affordable on GO Transit for low-income residents can support city building opportunities, City policies, the Poverty Reduction Strategy, and ridership which increases transit modal split.

Integration with TTC Services - GO Transit Co-Fares

The absence of co-fares between GO Transit and TTC services represents a barrier to integrating transit services that discourages use of GO Transit in Toronto. This report suggests applying a consistent approach to co-fares throughout the region, including for TTC services, to improve equity, make best use of the existing system, and improve ridership.

Local transit agencies outside of Toronto provide a co-fare option that allows transit riders connecting with GO Transit services to transfer to/from local transit services for a reduced fee. As shown in Figure 15, co-fares currently range from \$0.50-\$0.80 depending on the transit agency, representing approximately 25% of the full local transit fare.¹⁸ Co-fares are generally available only through use of the PRESTO fare card.

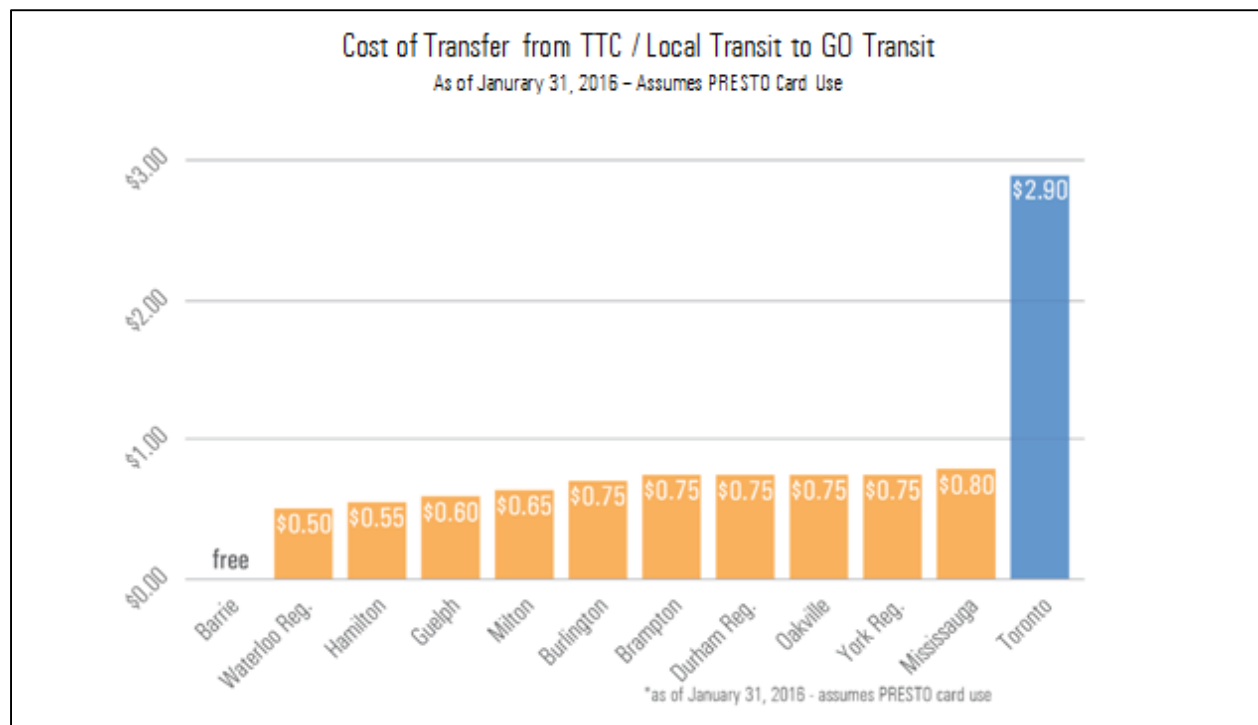


Figure 15 - Cost of transfer from TTC/local transit to GO Transit by municipality.

There is currently no co-fare option for transit riders making a connection between GO Transit and the TTC (with a minor exception on one route). Riders connecting between the two services must pay two full/separate fares. Riders connecting with the TTC at both ends of a GO Transit trip, however, are able to use the same TTC fare for both TTC trip segments. There does not appear to be a clearly stated policy rationale for the TTC (and trips originating in Toronto) to not have the same co-fare treatment as is offered to 905 municipal systems.

¹⁸ Research by City Planning on various GTHA transit agencies websites, January 2016.

These co-fare arrangements with local transit operators have been established and subsidized through agreements between Metrolinx and local transit agencies or municipalities. Metrolinx currently provides annual subsidies totalling approximately \$13 million per year to local transit agencies/municipalities in the 905 to pay for the co-fare option. The TTC currently receives about \$20,000 per year to provide a co-fare option on one route, 38 Highland Creek, which connects the Rouge Hill GO Station to UTSC.

The lack of co-fare between GO Transit and TTC can make some trips from 905 municipalities to Union Station cheaper than similar trips from Toronto to Union Station. Figure 16 illustrates an example where a Mississauga transit rider connecting from Mississauga's local transit service (MiWay) to GO Transit at Port Credit Station pays a total fare of \$6.52 to travel to Union Station (\$0.80 MiWay co-fare + \$5.72 GO PRESTO fare).

A Toronto transit rider making a similar trip by TTC, connecting with GO Transit at Long Branch Station, will pay a total fare of \$7.94 to travel to Union Station (\$2.90 TTC fare + \$5.04 GO PRESTO fare). Because of the co-fare available to the Mississauga transit rider, the Toronto transit rider pays \$1.42 more for a trip that is 5 kilometres shorter.

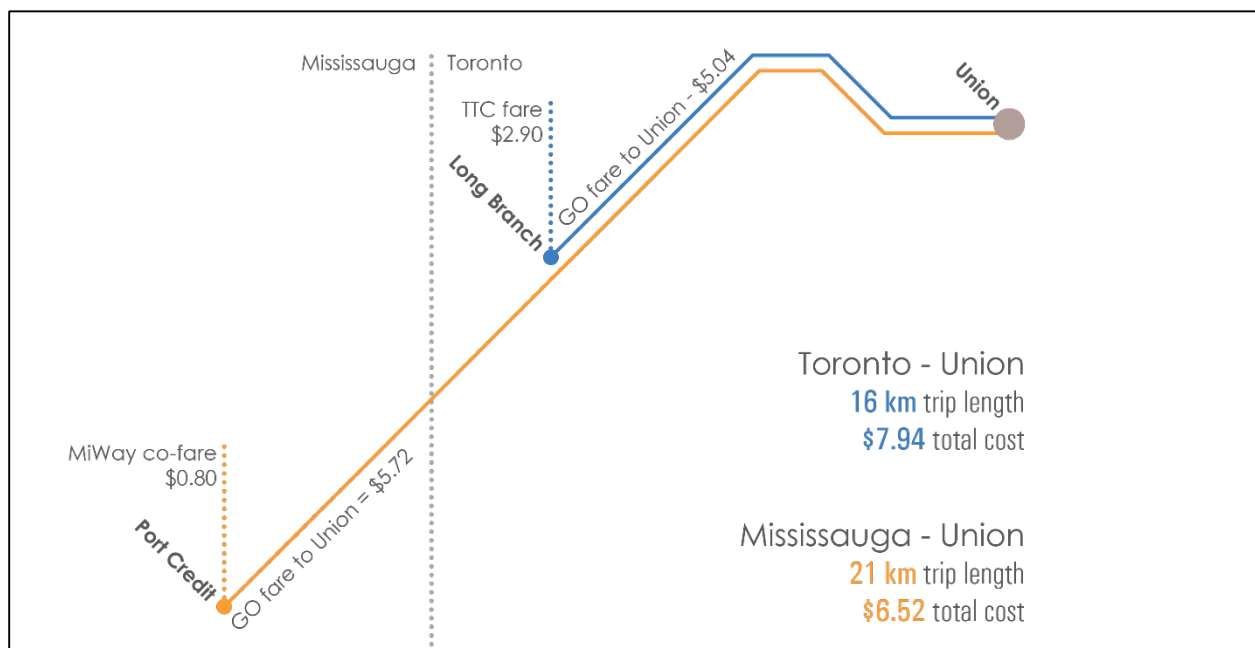


Figure 16 - Illustration of the effect of a co-fare between a transit trip originating in Mississauga and Toronto. Riders starting their trip on local transit in Mississauga can pay less for a longer trip to Union Station than riders starting on the TTC in Toronto.

The lack of a co-fare can also result in inefficient transportation choices for transit trips entirely within Toronto. Many Toronto residents who start and/or end their transit trip in Toronto on the TTC have the option of using GO Transit for a portion of their journey. Without fare integration between TTC and GO Transit, there is a significant price incentive to make the entire journey on the TTC, even if the journey on GO Transit would be more efficient from the perspective of the passenger and the transit network.

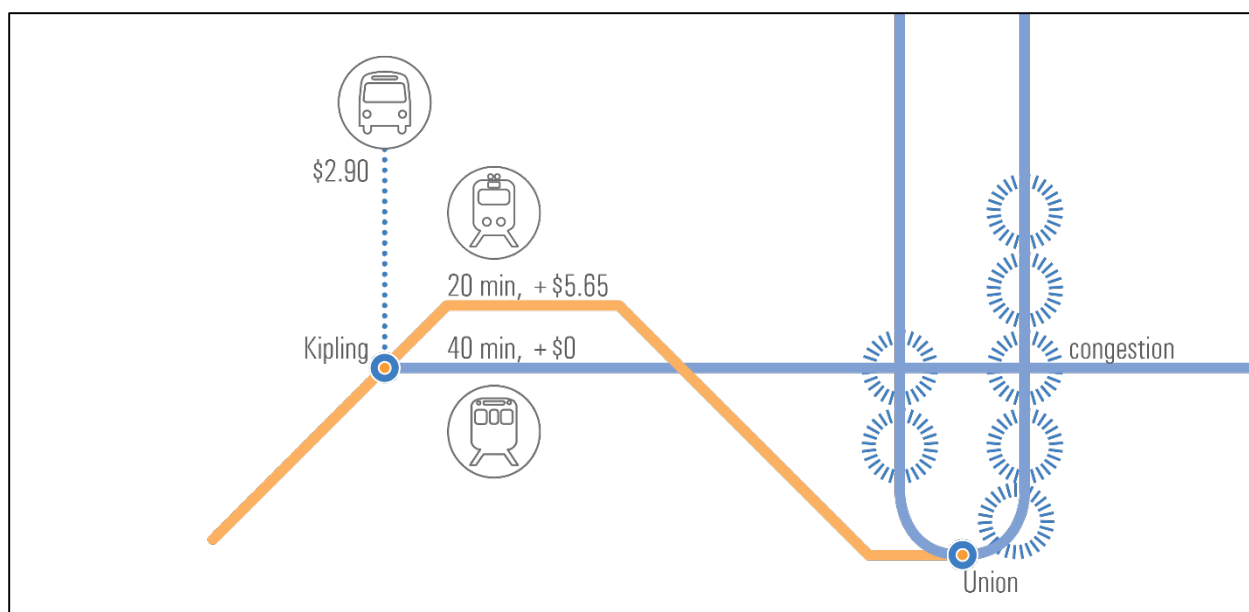


Figure 17 - Illustration of the fare differential paid by riders on GO Transit vs. TTC for a trip from Kipling to Union Stations. Riders taking GO Transit pay about 3x as much for their trip than riders taking the TTC subway.

Figure 17 illustrates the example of a passenger arriving by bus at Kipling Station and travelling to Union Station. The passenger has the option of transferring to the TTC subway, which takes 40 minutes to travel to Union Station, or GO Transit's Milton line, which takes 20 minutes to travel to Union Station. Since the passenger has already paid the \$2.90 TTC fare for the bus trip to Kipling Station, the subway transfer is available at no additional fare, making the total cost to the passenger \$2.90. Transferring to GO Transit requires an additional fare of \$5.65, making the total cost \$8.55, approximately three times the cost of making the entire trip on the TTC.

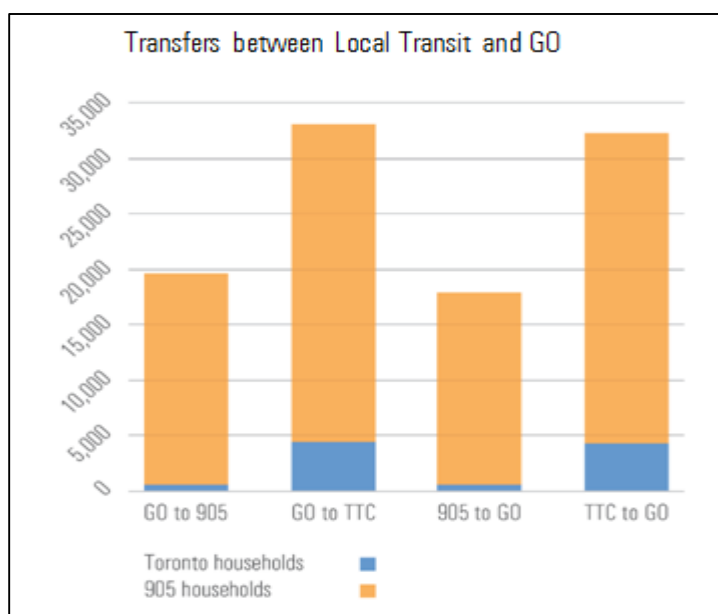


Figure 18 - Number of transfers occurring between selected transit systems in the GTHA. Note the low volumes of Toronto residents that transfer between TTC and GO Transit services compared to 905 residents that transfer between 905 local systems and GO Transit.

It can be inferred that because of this lack of fare integration, the number of transit riders transferring between GO Transit and the TTC is considerably lower than the number of 905 residents making such a transfer. As shown in Figure 18, fewer than 10,000 Toronto residents transfer between the two systems on an average day, while upwards of 38,000 905 residents transfer between GO Transit and 905 local transit systems.¹⁹

TTC and GO Transit have undertaken small-scale fare integration pilot projects in Toronto. For example,

TTC Metropass users travelling on the Lakeshore GO line from Exhibition or Danforth Stations

¹⁹ Transportation Tomorrow Survey (2011).

to Union Station could receive unlimited travel on GO Transit from these two stations for an additional fare of \$60 per month. The pilot project has attracted a relatively small number of customers despite significant marketing campaigns, possibly due to the high total cost faced by riders (exceeding \$200 per month).

Metrolinx has recently undertaken a review of the co-fare program. The original purpose of the co-fare was to replace GO Transit's discontinued community shuttles, which connected people living in 905 residential communities without good local transit to nearby GO stations during the system's earlier years of operation. A secondary benefit is relieving the need to construct and maintain expensive and land-consumptive parking spaces at GO stations. The review found that co-fares did not contribute significantly to ridership on the GO system, as existing co-fare users would either continue paying full local transit fares or drive to GO stations. Metrolinx will consider the future of the co-fare program in conjunction with a new station access policy.

The conditions for success for a co-fare are significantly different in the City of Toronto. The high frequency of service and good network coverage provided by local TTC routes means Toronto does not have the same "first and last mile problem" 905 transit providers have that discourages GO Transit riders from accessing GO stations by local transit. Further, there is a lack of abundant, free parking at GO stations in Toronto. It is expected that because of the different conditions within the City of Toronto, the introduction of a co-fare for the TTC will have a high benefit.

Metrolinx should consider introducing the co-fare program to the TTC as a first step toward full fare integration between GO Transit and the TTC. The effect on fares is illustrated in Figure 19. This would make the cost of connecting between GO Transit and TTC services similar to the cost of connecting between GO Transit and 905 transit agencies. If Metrolinx concludes that the co-fare program in 905 municipalities is ineffective and should be discontinued, Metrolinx should consider a redistribution of the current \$13 million budget to a co-fare program with the TTC, where the budget may provide greater value-for-money because of the TTC's more robust capability to feed riders to GO stations.

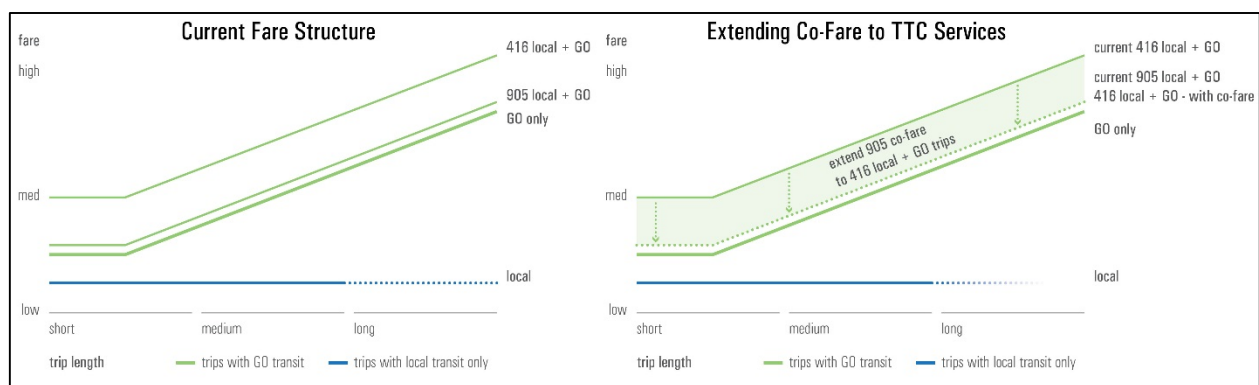


Figure 19 - Illustration of the effect of extending co-fares to TTC services on the total fares paid for combined GO/TTC trips.

Summary - Problem Statement

The fare policy issues with respect to the current state of GO Transit fares in Toronto can be summarized into the following problem statements:

1. GO Transit fares are structured to benefit long-distance commuters, which encourages urban sprawl and is thus at odds with City goals and objectives and provincial growth management policies.
2. GO Transit fares are relatively high for short trips (on a per-kilometre basis), which discourages transit riders in Toronto who tend to make shorter trips on average due to closer proximity to Union Station; the major destination point for trips on GO Transit.
3. GO Transit fares are not affordable to low-income residents (a large number of whom live in neighborhoods where GO Transit is the only rapid transit option) due to the high cost of short trips within city limits.
4. The absence of a co-fare between TTC and GO Transit services reduces the opportunity for transit riders in Toronto to use the GO Transit network as an integrated component of an efficient transit journey.

Metrolinx has identified some of the stated issues in their ongoing GTHA Fare Integration study. The City and TTC will continue to work with Metrolinx to assess solutions to effect positive near-term changes to the region's existing fare system, and to undertake further work to identify longer-term changes to transit fares in support of regional fare integration. Metrolinx should consider:

1. Reducing GO Transit's base fare component and increase the distance component; an option under assessment in the GTHA Fare Integration study. Implementation in the near term could achieve greater equity and increase ridership, as a priority.
2. Providing riders using transit in Toronto with the same GO Transit co-fare option on the TTC as riders starting trips in the 905 have. This allows transit riders to make use of GO Transit for integrated journeys without paying two full fares. Further analysis would be required to determine the potential impacts of extending this co-fare.

The City and TTC will continue to support the Metrolinx GTHA Fare Integration process; to establish an appropriate recommended fare for SmartTrack consistent with the approach to pricing transit with other services in the City; and, ensuring support for regional fare integration and advancement of City goals. The City Manager in consultation with the CEO, TTC, will continue to report to City Council on the approach to SmartTrack fares and implications for the City of Toronto and TTC as the GTHA fare integration work progresses.

Appendix

Policies Relevant to Fare Structures

The manner in which agencies structure and price fares has a material impact on the ability to achieve a wide range of desired policy outcomes including revenue generation, social equity, public health, environmental sustainability, transportation network efficiency, regional growth management, and supporting city-building objectives. Several policies adopted by the City of Toronto and the Government of Ontario provide the relevant context to inform the discussion on transit fare policy, including the policies referenced below.

City of Toronto Policies	General Description
Toronto Official Plan	Building a liveable, healthy and attractive urban region in Toronto
Toronto Transit Fare Equity	Making transit fares more affordable to low income residents.
Poverty Reduction Strategy	Making transit fares more affordable to low income residents to increase access to employment, goods, services, education etc.
Climate Change Action Plan	Encourages active transportation and transit to reduce greenhouse gas emissions by 80% by 2050.
Provincial Policies	
Provincial Policy Statement	Policies to encourage prosperity, energy conservation, and improved natural environment.
Places to Grow Act	Developing infrastructure to support growth and prosperity while preserving the natural environment by containing urban sprawl.
The Big Move	Encouraging increased transit access and affordability through an integrated regional transit system.
Mobility Hub Guidelines	Promoting transit oriented development to encourage transit use and development.
Transit Supportive Guidelines	Guidelines for fare strategies to encourage increased transit use.

The policy context related to transit fares can be organized around several themes:

Themes	Objectives	Policy Alignment/Implication
Regional mobility	The City and Province have both adopted policies recognizing the need to develop an integrated regional transportation system.	Fare system is not integrated with all municipalities resulting in a fractured transit systems with some people benefiting and others losing out.
Growth management	The Province outlines policies to manage growth which are to be adopted and implemented by the City and all municipalities in the GTHA.	Beneficial to longer trips as opposed to shorter trips encouraging urban sprawl.
Compact development	Policies that encourages higher density for increased walkability and active transportation options to access to goods, services, and employment.	Fare structure does not encourage trip chaining and short trips.

Themes	Objectives	Policy Alignment/Implication
Equity and affordability	Policies broadly recognize the need to provide more affordable transit options, particularly for low-income residents and other vulnerable populations. Toronto's Poverty Reduction Strategy recommends "Make transit more affordable for low income residents".	Fare structure is unaffordable to low-income residents and is not integrated with local transit in Toronto which decreases access to employment opportunities, education, goods and services for equity-seeking groups.
Environmental sustainability	The Climate Change Action Plan promotes "financial incentives to utilize public transit".	Although the structure encourages longer trips to be done by transit instead of automobile, longer trips are more energy intensive than shorter urban trips.

Principles for Fare Structures

Decisions about fare policy involve many considerations and impacts similar to developing transit infrastructure, but also have much broader effects. In consideration of the policies relevant to fare structures noted in this paper, the following principles will guide City and TTC staff in consideration of fare policy options and inform discussions with Metrolinx:

- Revenue – Transit fares should generate sufficient revenue to cover a portion of system operating costs, considering an appropriate balance of public and private good.
- Efficiency – The fare structure should distribute demand within the transit system in a manner that makes the most efficient use of capacity in the system.
- Fairness (horizontal equity) – The fare structure should provide consistent prices for trips with similar characteristics, and logical price relationships between different trips.
- Social Equity (vertical equity) – The fare structure should provide access to transit for residents of all incomes, with particular emphasis on access for vulnerable populations.
- City-Building – The fare structure should align with the Official Plan vision for the development of the city and support Provincial objectives related to growth management.
- Transportation Outcomes – The fare structure should support policy objectives for the transportation system including mode share.
- Deliverability – The fare structure must be technically feasible to implement, and address operational or customer service needs.
- Acceptability – The fare structure must be implementable at an acceptable cost to the user and taxpayer.

The principles articulated above are specific to fare policy, but many are consistent with and related to the "Feeling Congested?" framework developed for broader transportation decision-making. City Planning developed the "Feeling Congested?" framework organized around the principles of Serving People, Strengthening Places, and Supporting Prosperity. The principles include evaluation criteria such as Choice, Experience, Social Equity, Shaping the City, Healthy Neighbourhoods, Public Health and Environment, Affordability, and Supporting Growth. This framework was developed with public input and endorsed by Planning & Growth Management Committee, and has since been applied to the strategic case evaluation of infrastructure projects such as the Scarborough Subway Extension, Relief Line, and SmartTrack.