

No Free Rides: Winners and Losers of the TTC U-Pass

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Background

In March 2018, the Toronto Transit Commission board unanimously approved a U-Pass program that would allow post-secondary students at Toronto universities unlimited travel for \$70 per month, a discount from the then-current price of \$116.75 for an unlimited post-secondary transit pass. The pass does not include an option to opt-out and the fee is added to students' tuition. To be implemented, students at each post-secondary institution must vote to accept or reject the proposal. **This study analyzes this proposal through the lens of different notions of fairness and equity.**

Toronto's Unique Context

Toronto offers a challenging and unique context in which to implement a U-Pass for two reasons:

1. A lack of integration across different transit agencies in Greater Toronto means that many students live outside of the TTC service area. These students cannot benefit from the U-Pass as much of Toronto-based students.
2. There is high existing transit ridership from students. 64% of students use transit to get to school and only 8% drive to school. This means there is limited potential for increased ridership and most gains would come at the expense of active transportation trips.

Key Research Question

A student needs to take 94 or more TTC trips in a term (the term cost of the U-Pass divided by \$3 per trip) to benefit.

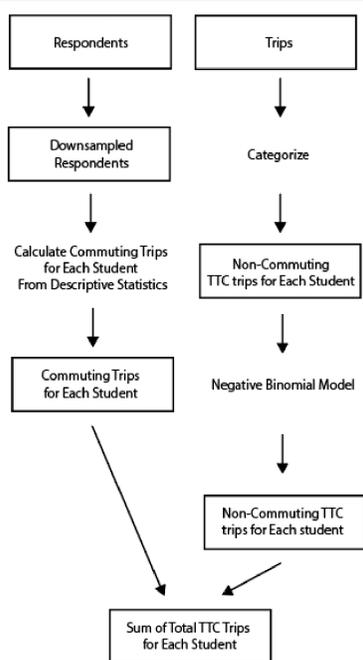
Which students benefit financially and which do not as a result of the U-Pass?

Data Source

StudentMoveTO is a 2015 dataset funded by Ryerson University with over 15,000 survey responses from students including information on

- Travel behaviour
- Attitudes towards transportation
- A trip diary for each respondent

Research Design



This research used the following steps illustrated on the left to estimate the number of TTC trips taken each student in the StudentMoveTO dataset:

1. The dataset was downsampled to be more representative.
2. The number of non-commuting TTC trips taken by each student was estimated using a negative binomial model.
3. The number of school commuting TTC trips taken by each student was estimated using responses from StudentMoveTO.
4. The estimated trips in 2 and 3 were summed to estimate the total number of TTC trips taken by each student.
5. Transit trips were re-estimated for different fare policy scenarios to reflect changes in fare policy that have occurred since the survey was taken.
6. An analysis of which students benefit and which do not, based on the number of TTC trips taken by each student, was conducted.

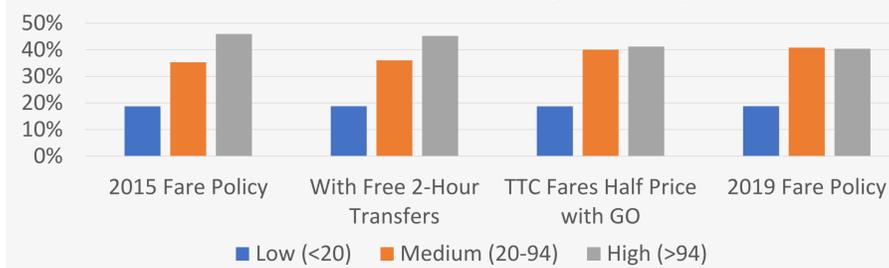
Global Results

Since the StudentMoveTO survey was conducted in 2015, there are been two major fare policy changes:

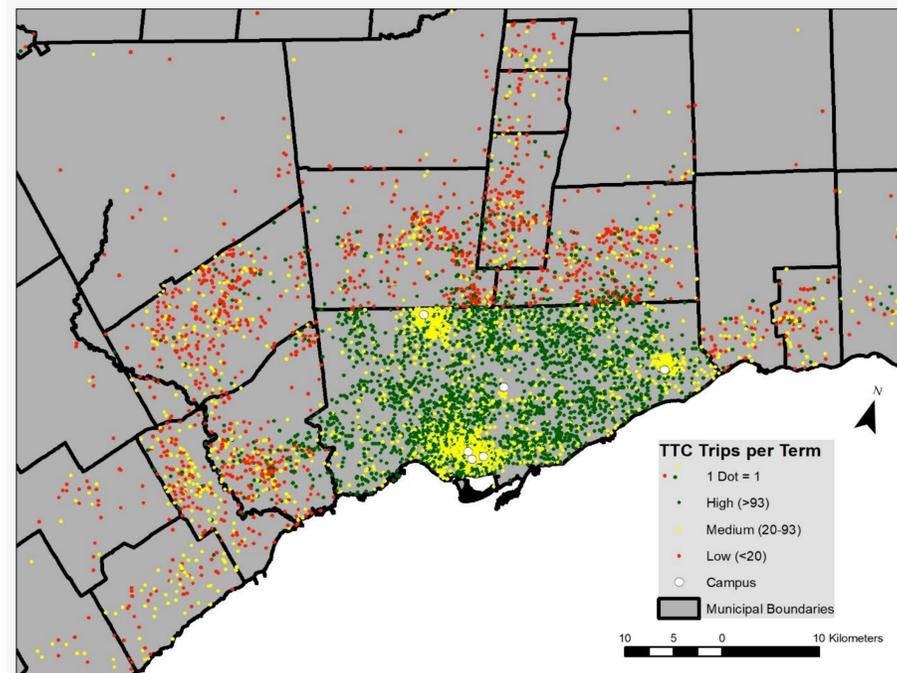
1. Free 2-Hour Transfers
2. Half Price TTC fares when combined with GO Transit.

Students are categorized into high, medium, and low users of TTC. High users benefit from the U-Pass and medium users use TTC frequently, but not enough to benefit. With these fare changes, the proportion of students that benefit drops from 46% to 40%.

Students' Paid TTC Fares by Fare Policy



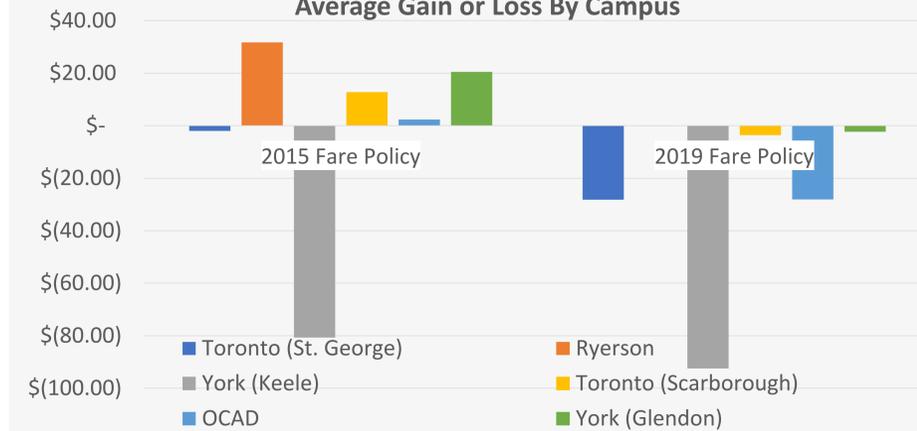
In general, low TTC users live outside of the City of Toronto and high users of TTC live inside the City of Toronto. Medium users of TTC are scattered throughout the region, however, there are significant clusters of medium users around each campus, including within the downtown core. These students are largely those that commute by walking or cycling.



Submarket Results

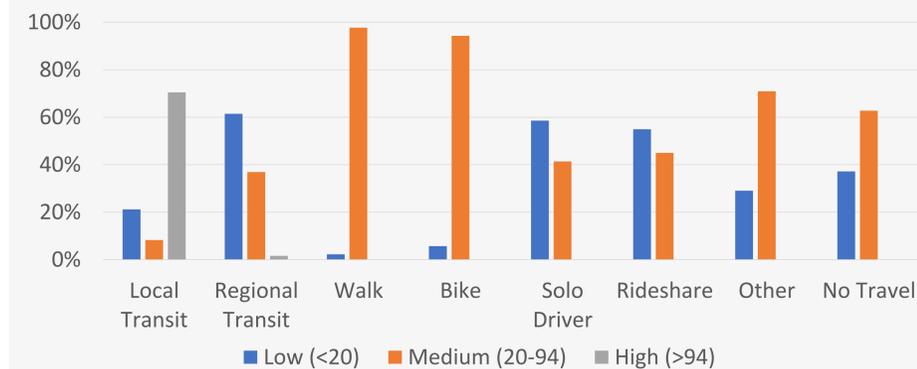
Suburban campuses like York University Glendon and the University of Toronto Scarborough Campus, stand to benefit the most due to a high rate of TTC commuting. Ryerson University is notable for being an urban campus with a high number of GO Transit commuters. Therefore, without the GO Transit discount, 60% of students stand to benefit from the U-Pass. When TTC trips combined with GO Transit are half price, that number drops to under 50%. Despite this study's estimate that most students would not benefit, the TTC U-Pass referendum passed at Ryerson University. However, most students would benefit under the simpler 2015 fare structure. This suggests that as the fare policy becomes more complex, students may not be tuned into the small changes that can make the difference between the U-Pass being in their interest or not.

Average Gain or Loss By Campus



Most students that use local transit to get to school, and a smaller portion of regional transit users would stand to benefit. Drivers and passengers benefit the least. While students that walk and bike to school do not benefit, they are almost entirely "medium" users of TTC. This means that while they do not use TTC enough to spend \$70 in a month, they use it for a significant amount of discretionary travel.

Paid TTC Fares by Students' Commute Mode



Policy Implications

Without additional funding, the TTC U-Pass is not a transit subsidy, but a redistribution of resources among different groups of students. The fact that it is predicated on being revenue neutral for the TTC means that the low and moderate users of transit that commute using active transportation or live outside of Toronto are subsidizing TTC commuters.

Integration with other transit agencies, a reduction in the price of the U-Pass, or an opt-out provision for students living outside of Toronto would make the TTC pass more equitable and beneficial to more students. In other cities, U-Passes are often subsidized by sources other than student fees including parking revenues.

Someone needs to pay for the revenue loss from the U-Pass, but there is little justification for that to be non-TTC commuter students. After all, there are no free rides.

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Acknowledgements

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