

# Solution: Mobility and Transit

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## PROBLEM

The problem our group has chosen to focus on is the necessity of owning an automobile for many lower-income folks. For the reasons below, people are virtually forced into owning an automobile to ensure they have the level of mobility required for employment. Vehicle ownership is a high-cost prospect when you consider purchase payments, insurance, regular maintenance, parking, and unexpected breakdowns in addition to the spiking cost of gasoline. Many lower-income individuals are struggling to meet their obligatory monthly rent and food bills and adding vehicle payments can be the tipping point. Now imagine an unexpected breakdown and that cost forcing families into difficult choices between food or being able to get to work.

### Problem Drivers

Some of the problem drivers (no pun intended) are:

#### **Distance between low-cost housing options and primary employment areas:**

Employment clusters are still heavily focused on the downtown cores of Kitchener and Waterloo and rising real estate costs in these areas mean that low-cost housing options are forced to the periphery of the cities.

**Limited public transit services – Service Times:** Grand River Transit (GRT) has a primary focus on “standard” commuting patterns with respect to the hours of operation. During the pandemic, many of the late-night services were cut so those working off-hour jobs were no longer able to utilize public transit to access employment. Pre-pandemic this was also a problem, but on a smaller scale as service ran a few hours later. The off-service jobs affected are in the industrial, factory and overnight cleaning service areas.

**Limited public transit services – Service Area:** Pandemic years aside, GRT has limited services in the periphery areas of the region. Those living in housing near the outskirts have limited options and may have to depart for work 60+ minutes early to compensate for the limited service. At shifts end, the trip home could take much longer than needed, again due to the limited services available.

**Rising land/home costs:** The dramatic increase in land/housing costs in the downtown cores make it impossible for low-income working-class families to purchase a home near where they work. Rent rates have increased greatly in these same areas which leads to the same affordability issues in the downtown core. The land values have risen so dramatically that governments are not able to purchase land to create affordable housing in the most employment (and service) dense areas of the Region.

**Development for Profit:** In conjunction with the above point, land developers are the primary entities able to afford downtown lands to construct housing. Of course, these units are high-density condominium buildings that are priced to generate profit. From a mobility point of view, this system perpetuates the problem as transit monies are spent on improving services to move the masses in the high-development dwellings of downtown, not those that have been relegated to the periphery.

**Inequitable treatment by Government (Transit):** GRT (Region of Waterloo) offers a discounted UPass to University of Waterloo students at a rate of \$27.50/month (\$110.78/term)<sup>1</sup> yet only offers low-income households a rate of \$46.80/month.<sup>2</sup>

## **Actors**

**Low-income individuals:** Ultimately, they have the final decision on vehicle ownership – but are often left with no viable alternative. While these people are at the heart of the conundrum, they are likely the most powerless to make a change. Finding a job that is closer to home or easier to access is likely very difficult. Even should a closer job be found, there may be no guarantee that the current housing will be affordable for the long term to remain close to the new employment. For a variety of reasons, it's likely easier to take on vehicle ownership than trying to change jobs or housing location.

**Regional Council:** The Regional Council decides on the budget that is allocated toward affordable housing in the downtown cores and toward transit services provided to the citizens of the Region. Regional councillors could bring forward their own initiatives to help address housing stock, mobility equity etc. or push more budget toward existing initiatives in these areas.

**GRT Staff:** GRT creates the service projects that they feel benefit the Region and then write issue papers justifying the projects as well as requesting the budget to implement them. These staff could also focus efforts on those in greatest need of services rather than pushing for increased ridership numbers by addressing services in the high-density downtown areas.

**Lawmakers:** Laws could be stricter and enforced more heartily with regards to developers offering affordable units in their high-density downtown buildings. This could include the number of units, types of units, price caps, duration of “below market value” offerings etc. This would be a much larger systemic change that would need to be undertaken at the Federal or Provincial level, so there would be a large number of actors in play.

## **Barriers to Solving the Problem**

One of the primary barriers to addressing the problem is political will. As outlined above, some of the key players are Regional Council and leadership staff at GRT. These groups are likely to lack the political will to focus large projects, staff time and budgets toward helping initiatives that help a small, marginalized group within the Region. Councillors try to help their own constituents to garner votes for the next election and transit staff tend to focus on large projects that are visible to citizens such as a new bus terminal or added services around the universities. When they both get together, you get a new LRT system! Something large and flashy, that helps the region in many respects, but does not address some of the fundamental issues for lower-income, marginalized groups struggling to find transportation that is affordable.

There is also the question of scope. This problem is not unique to the Region of Waterloo. Across Canada we see housing and land values increasing at unimaginable rates making downtown living (or anywhere really) out of reach for the lower-earning citizens. The Federal government is trying to address via borrowing rate changes and funds for house construction, but this truly is not even making a ripple in the water as the financial inequity among citizens is far too large in scope.

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<sup>1</sup> <https://wusa.ca/services/student-supports/upass/>

<sup>2</sup> <https://www.grt.ca/en/fares-passes/affordable-transit-program.aspx>

Another barrier is Capitalism. Love of Money. Lack of Empathy: the general feeling of looking out for self rather than community. Of course, this is a blanket statement but the general sentiment in Western culture is to amass wealth and construct a comfortable life for you and your family. Without empirical data, we suspect that if the upper 10% of Canadian earners were to divert funds (taxation, donation etc.) toward housing affordability, great strides could be made. Rent subsidies, land donations, and reduced margins on dwelling construction could all make a difference for those in need.

And finally, competing interests for funding – there are many worthwhile initiatives to help alleviate some of the challenges of modern living, particularly for disadvantaged individuals. There is only so much funding available for most of these, barring outside-of-the-box solutions and capital generation. Because of the limited nature of regional budgets, funding one initiative often comes at the expense of others.

### **Places to Intervene**

Here are potential levers to impact the current status quo:

- Change societal values to that of community success rather than individual success
- Educational opportunities for those in low-income positions or households
- Construct more low-cost housing near employment hubs
- Expand public transit services for more of the citizenry
- Reduced cost/free public transit
- Increase tax rate for top 10% earners with proceeds dedicated to housing initiatives
- Promote ride-sharing services and ethos among the population

## **PROPOSED SOLUTION**

Free transit for everyone. At a bare minimum, we'd like to see the pre-pandemic public transit service made fare-free to offer the highest level of mobility to everyone in the community.

### **Persona**

I'd like to introduce you to Marcy, an individual who lives in the Fischer Hallman and Ottawa area and works as a server/bartender in downtown Kitchener. Marcy is new to the area, having moved from Calgary. Marcy's highest level of education is high school with a couple of post-secondary college courses for general interest.

While money is not abundant, her paycheque allows her to rent a house and provide for her son but forced car ownership requires her to make difficult decisions and trade-offs in day-to-day life. We say "forced" car ownership because the current state of public transit combined with her working hours requires her to own a vehicle. Insurance and rising fuel costs take up a considerable amount of her monthly budget. Unexpected repairs have the potential to push her budget over the tipping point for several months. This forces her into a balancing act of difficult decisions such as drawing on expensive credit or choosing which expenses get paid each month.

Marcy would benefit from fare-free public transportation, which would alleviate a number of her budgetary concerns and provide her and her son with additional mobility options. This would create opportunity for them to leave the car at home or abandon it altogether. Fare-free public transit

also presents an opportunity for her son to get part-time work or participate in after-school programs that he currently cannot, due to mobility and financial constraints.

### **Solution Details**

The solution we'd like to see implemented is fare-free public transit for all. The call to action is to petition regional council and/or GRT leaders to embrace the vision of free mobility for the citizens of the region. There are numerous global examples<sup>3</sup> that can be held up as successful leaders in the free mobility movement. Beginning with investigating the process these cities followed would be a great start, as would fully glean any stumbling points they faced along the way as well as any unexpected successes they encountered during their process.

There are a number of communities within Southwestern Ontario that currently offer fare-free rides for older adults in some form, whether it's certain days of the week, or during off-peak hours. These cities include Barrie, Burlington, Hamilton, Oakville, and Ottawa. A larger number of communities throughout Canada offer fare-free transit for youth aged 12 and under – Barrie, Brantford, Burlington, Guelph, Kingston, London, Niagara Region, Oakville, St. Catharines, Toronto, and Windsor, and all of British Columbia, as well as certain regions in Alberta, Nova Scotia and Quebec. There are various reasons why these communities embark on this path – building future ridership, encouraging climate-friendly transit, and reducing congestion on roads. These are all relevant to Waterloo Region's goals and would be advanced by offering fare-free public transit.

This would likely be a great project to leverage our academic leaders in the region to help with data collection, budgeting, report development and in general, lending their credence to the initiative.

### **Intended Outcomes**

**Stress Reduction:** Our hope is that this solution will take one budget worry off the mind of those with lower incomes. The weight of financial burden takes a huge toll on people and knowing that there is a free mobility option to allow ease of access to employment, social services, friends/family etc. could alleviate that stress from daily life.

**Budget Relief:** As was the case with Marcy, many folks could reduce or eliminate their personal vehicle use which would free up a considerable amount of their monthly budget that could go toward other essentials such as healthier foods, better housing, continuing education and many other items.

**Environmental Improvement:** We hope that the region would experience reduced air pollution as more people choose public transit and reduce their personal vehicle use. This is a benefit to everyone in the region and could lead to better overall health for citizens and reduced health care costs. Further, reduced vehicle use would hopefully slow down the need for additional highways. Every time we pave more of the planet, we increase temperatures as well as affect the drainage and movement of water, both of which have negative impacts on our environment.

**Seniors:** Free public transit could improve the lives of those that feel or are isolated such as senior citizens. Fare-free transit could allow for more visits from family or for the isolated person to make

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<sup>3</sup> [https://en.wikipedia.org/wiki/Free\\_public\\_transport](https://en.wikipedia.org/wiki/Free_public_transport)

trips out into the community without the financial worry. Para-transit would also be covered allowing those with limited mobility/disabilities to also have access to free transit.

**Community Conviviality:** With more people using transit, we would like to think that people will be social and talk to each other traveling around the region. Further, free transit could promote people to get out and explore neighbourhoods they wouldn't normally go to. These types of activities lead to more interactions between community members and hopefully to more social pleasantness and positive relationships being formed.

**Diverted Spending:** For those that see an improvement in their budget by saving funds on vehicle ownership or gaining access to employment, they may now have some allowance of funds to spend in the community each month. Be it a dinner out every once in a while, enrollment in a community program or a visit to the museum, there would be more dollars being spent around the region.

**Traffic Reduction:** Of course, getting any number of cars off the road will help with the growing traffic congestion the region is experiencing.

**Equity:** Fare-free public transit would be a small step to allowing those with limited finances to feel as though they're viewed as equal members of the community. This would make transit free to all, so all folks are treated equally with respect to access a mobility option within the community. This would also remove the current practice of low earners having to prove they're in need of a handout in the form of a reduced-cost bus pass. The sole practice of having to prove your need is a degrading exercise in itself with the current system in place.

### **Potential Unintended Consequences**

We could see such an acceptance of transit use that the current system may not have the capacity to handle the demand. This could lead to increased costs to add service or to overcrowded transit vehicles which would negate some of the intended outcomes above such as positive social interactions on transit or leisure travel for exploration. It could also mean that added demand means that not everyone can get on transit due to capacity issues which would drive people back to needing a personal vehicle as transit would be unreliable.

There could also be a scenario where fare-free transit is implemented for a few years and then rolled back. This could mean the re-purchase of a vehicle (at a higher cost) for some families or the resumption of paying higher monthly fees for others, both of which could have traumatic effects on low earners.

Fare-free transit would mean the loss of some jobs at GRT. Currently, there are a handful of folks holding positions where their employment relies on transit collecting fares. These folks count the fares collected and prepare it for transport to the bank install and repair the fare collecting and dispensing machines around the region.

Taxpayer anarchy could make an appearance as this is the most likely method of soliciting the funds needed to offer fare-free transit. Even if it's not 100% funded via local taxpayers, there is a very high degree of likelihood that the funds would come from the provincial and federal tax base. There is a scenario where taxpayers say "enough is enough" on tax hikes.

### Financial Implications

Based on pre-pandemic service levels are GRT, the annual cost of offering fare-free transit would be approximately \$40 million. Below is a summary of annual GRT fare income and fare-related costs<sup>4</sup>:

<b>Fares</b>	
<b>2019 Fares:</b>	<b>2019</b>
Cash	6,130,436
Stored Value	6,537,108
E-Rides	723,622
E-Passes	18,405,556
U-Pass	9,930,816
Other	-
<b>Total current assets</b>	<b>41,727,538</b>

**Total assets 41,727,538**

<b>Fare-related Liabilities</b>	
<b>Operating liabilities:</b>	<b>2019</b>
Hosting & Software/Hardware Support	935,000
Secure Money Collection	30,000
Parts & Ad-Hoc Maintenance	150,000
Staff (5)	330,000
Commission to Partner Agencies	125,000
Other	-
<b>Total current liabilities</b>	<b>1,570,000</b>

<b>Equipment liabilities:</b>	<b>2019</b>
Equipment Debt - Annual	322,383
<b>Total long-term liabilities</b>	<b>322,383</b>

**Total liabilities 1,892,383**

**Balance 39,835,155**

These fare collection totals are based on 2019 income from July – December as this is the only timeframe where GRT ran full service with the ION light rail and new bus network before the pandemic impacted service. A detailed breakout of the financials is provided in Appendix A.

<sup>4</sup> Data collected from various internal staff and documents at GRT

## Who We Spoke With

Members of the group spoke with Councillor Erb, and a variety of staff at GRT including those in the technology, finance, scheduling and planning departments. We also spoke with members of the Waterloo Region Age-Friendly Network, and local seniors and individuals on ODSP.

One of the “Ah-Ha” moments came when we were beginning to calculate some rough projections on what a tax increase would look like to fund the ~\$40 million annually to provide fare-free transit. As we worked through this scenario, it resulted in about \$125 annually per household – about the cost of 1 cup of coffee a week...**per household!** The entire prospect of fare-free transit for a major urban area such as the Region of Waterloo sounds daunting, but when distilled down to a relatable trade-off such as every household giving up 1 Tim’s coffee a week so that everyone in the community can have free access to mobility services, well, it gives a spark that this idea could become a reality.

## Suggested Partners

This initiative could have a number of partners. First and foremost, would be the Region of Waterloo, most notably those at council level as well as the Director of Transit. Obviously, these are the key local players to implement such an initiative.

It would also be prudent to enlist partners from the universities to aid in research and local non-profit groups working to increase regional mobility to help lobby on behalf of local citizens. On a larger scale, the provincial and federal governments would be logical partners both for existing public transit monies but also to tap into the funds available for green/environmental initiatives. Both of these tiers of government have funds available for green projects which makes it even more important to extol the environmental benefits of fare-free transit to tap into these funds. Any additional funds that can be secured from outside of regional boundaries mean we have to burden our local partners and taxpayers less.

Taxpayers would most likely be the leading financial contributory partner group, but only if directed by local government.

Private industry is one area that hasn’t been touched on much, if at all, to this point. We believe that there is a role for the private sector in this initiative. It can be argued that transportation to/from work is essential to the employer in managing work hours, so financing public transit should be of great interest of private businesses. While we won’t go so far as to suggest public transit should be fully funded by employers, we believe that private sector employers can be involved in funding fare-free public transit. This could be in the form of donations, fundraising efforts or purchasing naming rights for transit facilities around the region. This is something the region would have to explore as an alternate means of generating funds, but it certainly is something that is viable given them multi-national businesses located within the region.

## Lessons Learned

There were several significant lessons learned for us over the course of the project. Primarily, this year’s Leadership Waterloo program has had a focus on affordable housing, yet our report touches on housing only indirectly. Affordable housing is such a large and multi-faceted topic, that spans across so many areas of life, that we could focus on mobility issues and know that it would still come back to housing location and/or affordability for those in our community.

Another big eye-opener for the group was how limited government assistance was for programs like ODSP and Ontario Works, where individuals are provided less than \$1,200 per month to make all their ends meet. Even with rent-controlled living, this leaves exceedingly little after bills to survive on, and it seemed imbalanced that university students paid less for their monthly transit passes than these individuals.

A significant learning was how many people would benefit in a meaningful way from fare-free transit inside the region – the significant percentage of the population made up of seniors, youth, individuals on government assistance, and lower, and even mid-income earners – being able to help provide for the needs of so many different demographics inside of Waterloo region through one solution makes it particularly compelling.

It was encouraging to learn about the many forms of reduced-fare, or fare-free public transit already present within Canada, and somewhat surprising to find that Waterloo Region lags behind many of our closest neighbours in this regard.

Further to this, it was eye-opening to learn just how much traction this idea already has globally. One group member works in the public transit field and knew of a couple of cities that embarked on fare-free transit, but as our research developed, we discovered that many cities - almost 100 globally! - are either already offering or on the cusp of offering fare-free transit.

This was a surprise to the group and somewhat made us feel like we were somewhat “late to the party” with what we thought was a relatively progressive idea. Having said that, we’re glad we were able to do a little more local research to elicit data that gives up hope that the region of Waterloo could become a member of the fare-free transit society for a modest investment from the community.

## Appendix A - Regional Spending on Collecting Transit Fares

### Debits

Equipment	Units	Cost	Total
Fareboxes	258	\$9,950	\$2,567,100
Receiving Vault	3	\$25,170	\$75,510
Garage Base Stations	2	\$37,030	\$74,060
Ticket Vending Machines	32	\$49,400	\$1,580,800
Platform Fare Transaction Processor	38	\$2,870	\$109,060
Handheld Fare Transaction Processor	38	\$2,930	\$111,340
Handheld Card Reader	8	\$2,930	\$23,440
Attend Value Add Machine	60	\$3,100	\$186,000
Customer Service Terminal	6	\$9,650	\$57,900
Mobile Customer Service Terminal	2	\$9,730	\$19,460
Admin Assignment Workstations	1	\$9,730	\$9,730
System Test Environment	1	\$21,350	\$21,350
Equipment Sub-total			\$4,835,750
Annual Equipment Cost Based on 15 Year Lifespan			\$322,383
<b>Operating</b>	<b>Units</b>	<b>Cost</b>	<b>Total</b>
Hosting & Software/Hardware Support - Annual	1	\$935,000	\$935,000
Brinks Collection from TVMs - Annual	12	\$1,000	\$12,000
Brinks Collection from GRT Vault - Annual	12	\$1,500	\$18,000
Spare Parts and Ad-hoc Maintenance - Annual	1	\$150,000	\$150,000
Commission to Partner Agencies - Annual*	1	\$125,000	\$125,000
Staff - 2x Technologists to Maintain Equipment - Annual	2	\$70,000	\$140,000
Staff - Coin Room - Annual	1	\$55,000	\$55,000
Staff - Customer Service Sales Agents - Annual	1	\$55,000	\$55,000
Staff - 1 Ad-hoc Position**	1	\$80,000	\$80,000
Operating Sub-Total			\$1,570,000
<b>Debits - Annual Total</b>			<b>\$1,892,383</b>

### Credits (July - December 2019)

Fares Collected	Units	Value	Total
Cash Fares	2	\$3,065,218	\$6,130,436
Stored Value	2	\$3,268,554	\$6,537,108
E-Rides	2	\$361,811	\$723,622
E-Passes	2	\$9,202,778	\$18,405,556
U-Pass	2	\$4,965,408	\$9,930,816
Fare Collection Sub-Total			\$41,727,538
<b>Credits - Annual Total</b>			<b>\$41,727,538</b>
<b>Net Fare income - Annual Total</b>			<b>\$39,835,155</b>

\* Approx. between 100-150k annually

\*\* 1 annual salary to account for various part duties (ie. Service Attendants, Treasury, Social Service, Legal who all contribute small % of their time to transit fare duties)