

Routes to fairer transit access in the Greater Toronto and Hamilton Area

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A U T H O R S

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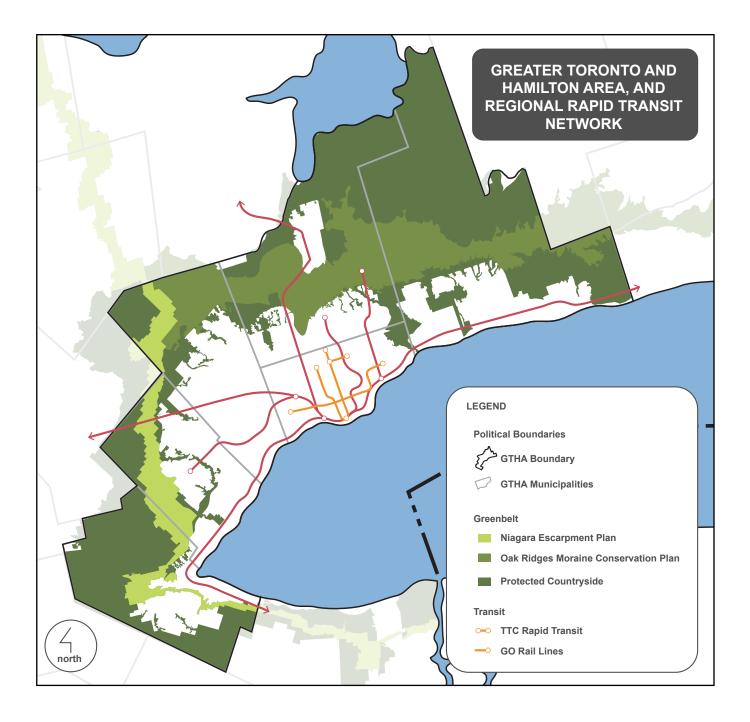
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ABOUT THIS RESEARCH AND WHY IT IS IMPORTANT

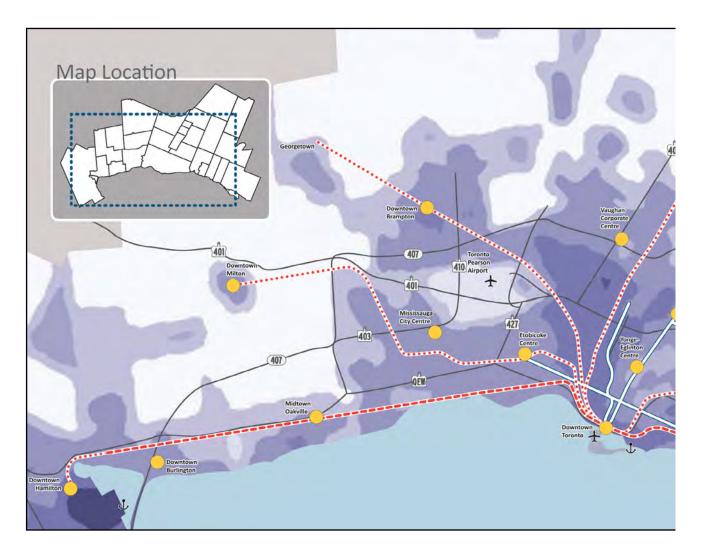
In a fast-growing and varied region like the GTHA, transit discussions rarely capture the full complexity and needs of residents

The planning, funding, operating and building of public transit in the Greater Toronto and Hamilton Area (GTHA) is as complex as the region itself. Yet public debate on the subject, often polarized and simplistic, largely remains fixated on technology – LRT versus subway, for example – and what it will cost and who will pay for it. While these are indeed important considerations in deciding how to make important public investments with limited public money, they do not represent the complete picture of the challenges and opportunities that should be considered by decision-makers, and the technical experts who conduct analyses and develop recommendations.

While this research includes a broad investigation of factors influencing public transit decision-making factors and processes from around the world, the main geographic and policy focus is the Greater Toronto and Hamilton Area (GTHA) and the Province of Ontario's Regional Transportation Plan, "The Big Move."

Equity needs to be an important consideration and outcome of transit planning decisions, to ensure access and opportunity for more people

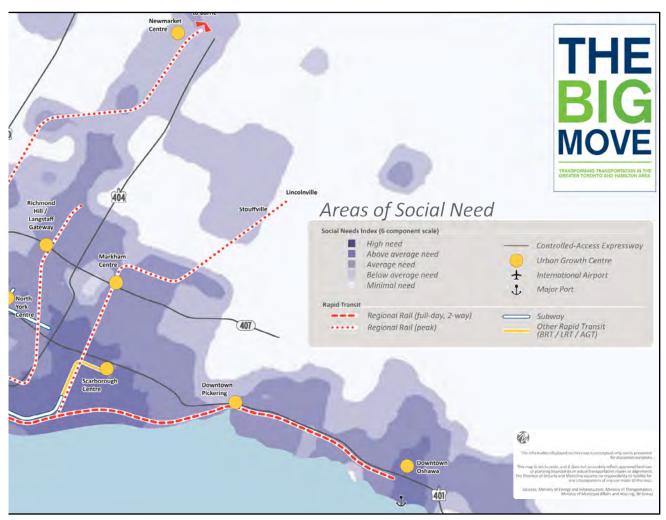
This research provides a broader perspective on the inputs and outcomes of delivering public transit infrastructure and services to serve the people living, working, studying and visiting in the GTHA. Most specifically, we present the concept of transit equity as an important consideration, principle and objective in planning and prioritizing public transit investments. A question central to our investigation is, "What does transit equity mean, and how can it be achieved?" In asking this question, we make the claim that transit inequity, as both a symptom and determinant of other social inequities, does exist.



Transit is more than infrastructure – it is a public good that provides a gateway into society and the economy, especially for residents with low incomes

In aiming to "switch tracks" towards transit equity in the GTHA, this research identifies, begins to explore, and makes recommendations on specific issues and themes that influence the degree to which people are included and integrated into community, and are able to participate more fully in the economy and society overall.

Providing transit that is equitable – that is designed to be accessible to all people and to meet their needs – is critical for reaching higher degrees of social inclusion and for making a fulfilling and productive life possible. This is especially important for people with lower than average incomes, those living in spatially marginalized neighbourhoods (the "in-between city"), women, young and old people, and those who identify with minority ethnic and cultural groups. These users of the transit system have historically not benefitted as much as others from transit investments.



This research is intended to inform public transit investment decisions, as Metrolinx embarks on a review of the Big Move

The findings of this research project, undertaken between September 2014 and October 2015, are contained in the following modules of this Final Report:

- I. Research Summary and Recommendations (Tab I)
- 2. "Switching Tracks: Towards transit equity in the Greater Toronto and Hamilton Area", 9 March 2015, Discussion Paper (Tab 2)
- Greater Toronto Suburban Working Group Roundtable on Transit Equity, 31 March 2014, Discussion Notes (Tab 3)
- 4. "You can't get there from here: Neighbourhood Stories of Transit Inequity" - Case Study (Tab 4)
- 5. Review and Analysis of GTHA Transit Fares (Tab 5)
- 6. Transit-Equity Focused Recommendations for Review of Big Move (Tab 6)
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TRANSIT EQUITY: SITUATING THE GTHA

In a transit context, equity means serving people fairly and appropriately to meet their needs

Equity is often confused with equality. In a transit context, equity is about treating users fairly and appropriately not equally. Fair and appropriate, treatment is based upon the principle – and the reality – that just as people are different (i.e. background, income, etc.), so too are their needs and challenges. In a system based on the equity principle, how transit is planned, prioritized, funded, constructed and operated is responsive to people's abilities (financial, physical, mental) and needs (travel patterns).

Our research has shown that transit equity is impacted by planning and investment decisions in three main areas:

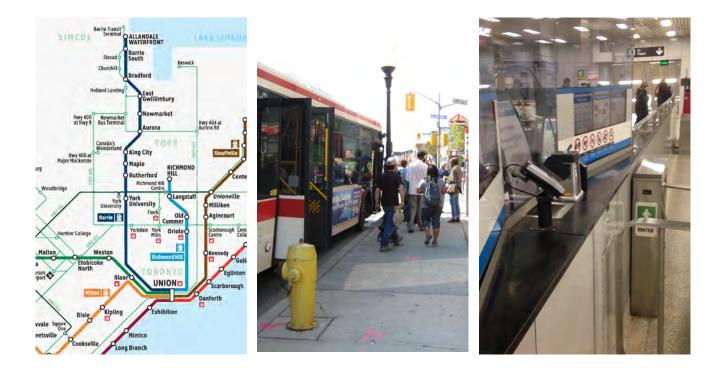
- 1. The **network**, being where the routes and lines go;
- 2. The **service**, including access to stations and the frequency/quality of the trip; and
- 3. The **price** people pay (if they pay) and how they pay.

At the regional level, equity can manifest itself as a connected network that provides a range of travel options to provide the greatest number of choices possible for the greatest number of people, and at a price that all people can afford. At a neighbourhood level, equity can mean that income or physical ability, for example, are not barriers to access (services, amenities, shopping, etc.) or to travel where you need to go conveniently and with dignity.

Conversely, equal treatment – providing a subway within walking distance of every single resident, for example, or building a system on the assumption that everyone travels to the same place at the same time for the same reason– is a simplistic and unattainable objective that will surely deliver the opposite of equity.

Existing transit inequities cannot be ignored, and transit equity must be a policy goal in a region growing by 2.5 million people and 1.5 million jobs, and which is investing \$50-billion in transit under the Big Move, by 2031

Continued growth in this already large and fast-growing region without directly seeking to achieve transit equity, will compound the structural inequities that already exist. Vulnerable populations – low-income earners, racial and ethic minorities, youth and seniors, and people with physical and mental disabilities – are facing a myriad of social and economic challenges that will not improve without deliberately ensuring that transit meets their needs. Not only will this provide a benefit to vulnerable groups and communities, but will serve to support the long-term economic vitality and social cohesion of the region as a whole.



Transit equity is an important public interest objective and cannot be pursued in isolation

Our research has shown that transit equity, on its own, will be difficult to articulate and achieve in a meaningful way. For example, high housing costs and long commutes to work are part of the same challenge. While improving access to transit for more people will have some benefits, the convergence of the housing market and other externalities are over-arching pressures. Still, a transit system that is made more responsive to the needs of more people, and especially the most vulnerable, will provide more opportunities and resiliency in the face of change and challenging social and economic conditions. Transit, after all, is quite literally a vehicle to bring people into the community – to access and to benefit from the economy, culture, public services and other activities essential for a high quality of life.

Vulnerable populations are, increasingly, living in suburban areas with less transit and fewer public services compared to more affluent, core areas

We know that poverty and a constellation of related challenges – ranging from housing affordability to precarious employment to the inability to access vital community services - are on the rise in the GTHA, and at faster rates in the suburbs. What we know less of is how access to transit impacts people with these challenges at street-level. Our neighbourhood site observations, and interviews with residents relying on transit, begins to reveal and illustrate the challenges facing vulnerable populations living in and traveling from the region's socioeconomic and physical peripheries or "in-between" spaces (See Tab 4). Our research has shown that transit is not only transportation, but a gateway into society: a virtual and physical link into the larger community, and to services and amenities. It is quite literally a lifeline to family, friends, employment and opportunities to improve and enrich their lives. While faster and more direct services (not only to downtown, but to other suburban areas) are viewed by transit users to be beneficial, comfort and cleanliness - to travel with dignity and to feel valued - are equally important.

Transit fares across the GTHA are uneven, and should be structured to reflect people's ability to pay

How much transit users pay, and how they pay, has a very real impact on their ability to not only access the transit system but, more importantly, to access the economic and social opportunities within the community and beyond. Our review (See Tab 5) of fares across the 10 GTHA transit agencies, including GO Transit, reveals much unevenness in the price people are expected to pay, how they pay, and the level of service and flexibility (including inter-municipal travel) they receive in return.

Among the obvious gaps are fares based on people's ability to pay. Only five transit systems, for example, provide discounted passes based on income. Another gap is the ability to travel seamlessly – and economically – across the region on more than one system. While many transit providers accept each others' valid transfers, for example, some – including the TTC – do not. Whereas the Presto electronic fare card does optimize the cost and convenience of travel across different systems, it remains to be seen how accessible these benefits are to users most in need of them.

The review of the Big Move is an opportunity to more deliberately address transit equity, and to better integrate its achievement into decision-making

The Big Move is an ambitious 25-year plan to invest \$50-billion in the construction of 1,200 km of rapid transit across the GTHA. While the Plan is appropriately focused on delivering infrastructure – including bus, light rail, and other rail rapid transit facilities – it also considers collateral outcomes including development potential (intensification), the economy (jobs and investment), the environment (clean air) and social impacts (mobility for those who cannot afford a car). Missing, however, is the stated achievement of "social equity" through this investment.

Given the statements in the Plan related to social need – including a schedule showing the planned GTHA rapid transit network with an overlay of social need areas, based on income – it is reasonable to assume that transit equity or justice is an intrinsic goal and objective. However, and given the social

and economic consequences of not achieving it more fully, "social equity" should be explicitly defined and addressed by the Big Move. Furthermore, our Transit Equity Roundtable (See Tab 3) and our literature review (See Tab 2) confirm that transit equity is elusive when not an explicit and deliberate goal of a particular undertaking. This report contains recommendations (See Tab 6) for how the Big Move, through its upcoming review, can better and more deliberately address equity in a transit investment context.



RECOMMENDATIONS ARISING FROM THE RESEARCH FINDINGS

The following are recommendations, by theme, that Metrolinx in collaboration with its government, municipal and community partners could pursue toward the goal of transit equity.

Regarding the goals, objectives and strategies of the Big Move Regional Transportation Plan (See Tab 6):

- Add "social equity" as one of the stated objectives of the Plan, consistent with the "three pillars" of the 2006 Growth Plan for the Greater Golden Horseshoe, which also include "strong economy" and "clean and healthy environment".
- 2. Define equity as "the fair and responsive delivery of transit infrastructure and services to meet people's needs, especially vulnerable populations including low income residents, users in underserved parts of the GTHA including newly-developed areas, visible ethnic and cultural groups, the elderly, and persons with mental and physical disabilities."
- 3. Address the unintended consequences of improved transit services and transit-oriented development in nodes and corridors across the GTHA; specifically increases in land rents and housing costs, and the displacement of lower income residents.
- 4. Broaden the definition and goal of "accessibility" beyond overcoming physical limitations, to also include: affordability; barriers related to race, gender and age; greater travel choice, and; access to important community amenities and services.
- 5. Account for trip destinations (in-bound and out-bound in peak and off-peak periods) and price (affordability) in the goal for 81 per cent of residents to live within 2 km of rapid transit.
- 6. Expand the metrics of cost-benefit analyses (BCA) and alternative financing and procurement (AFP) to include considerations for providing better access for lower income and other vulnerable groups.

Regarding transit infrastructure and service in Toronto's "in-between" and other areas of economic and social vulnerability across the GTHA:

- 7. Public consultations for proposed transit projects within areas of high social need should be more proactive and engaging to generate more inclusive and meaningful feedback. Approaches should include education-focused outreach far in advance of project initiation, and holding meetings in locations and at times easily accessible to most residents.
- 8. Transit planning should include an inventory and analysis of housing and retail/commercial opportunities and price points, and establish targets to maintain a healthy and accessible supply of affordable housing and retail spaces when a new transit line or service comes into operation. Development intensification nearest transit stations, for example, should not result in a net loss of affordable rents or displacement of vulnerable residents.
- 9. Improve the transit riders' experience through better customer service, more reliable operations, improved seating, and better coordination on transit connections and cross-boundary fares. While service frequency is important, the user experience is equally important for transit users with low incomes.
- Promote residents' and riders' knowledge and use of transit services and facilities through specific outreach materials and programs including open houses (e.g. Brampton Transit's "newcomers bus tour").
- 11. Better serve employment destinations, especially those trips made in off-peak hours, through a further analysis of origin-destination pairs including travel-to-work trips that begin and end outside of the Toronto downtown core.

Regarding Transit Fares:

- 12. Develop a GTHA-wide framework for the universal provision of discounted transit passes for low income persons, to be adopted by each transit agency. The framework should include, but not be limited to, the following components and objectives:
 - a. Available to all users of a particular transit system, regardless of residency;
 - b. Universal qualification for those receiving income support through Ontario Works (OW) and/or Ontario Disability Support Program (ODSP);
 - A consistent application of set income thresholds (e.g. Statistics Canada's Low Income Cut-Off – LICO), which could include the application of a lower income threshold based on previous census years;
 - d. Providing a "double subsidy" for passes and other fare media purchased by social service agencies (e.g. shelters, outreach programs) to provide at a reduced rate to clients (i.e. offer the sale of fare media at a discount to agencies, which can be further discounted at the point of sale to qualified clients); and,
 - e. Consideration for how the Presto card can be used as the primary delivery mechanism of discounted fares, with an emphasis of ease-of-use and automatic re-loading by the funding agency.
- 13. Expand the data collected through the Ontario Ministry of Transportation's Transportation Tomorrow Survey (TTS) on personal travel behaviour to include broader socioeconomic information including household income.
- 14. Extend student discounts to full-time students enrolled in programs outside of university and college. For example, students enrolled in full-time language classes (e.g. adult literacy, ESL) and other skillstraining programs.

- 15. Explore, in partnership with transit providers and education institutions, how transit passes (e.g. U-Pass) can be provided to all students enrolled in college and university programs as part of their tuition.
- Encourage the Toronto Transit Commission to introduce systemwide, time-based (2 hours) transfers, as other GTHA transit agencies have.
- 17. Explore how GO Transit services could be included as part of the GTA Weekly Pass.
- 18. Convene a "GTHA transit fare equity working group" to be coordinated by Metrolinx, for the further investigation and implementation of actions to advance transit fare equity, including the above recommendations, through a consistent region-wide approach. This working group should:
 - a. Include front line-focused (i.e. hands-on experience with transit users, operational issues, low income residents including those on government income supports, etc.) representatives from Provincial Ministries, municipalities, transit agencies, and related organizations working in the community including The United Way, Community Foundations and Public Health Units;
 - b. Develop a "GTHA transit fare equity charter" that specifies baseline outcomes and strategies to address transit fare equity across the GTHA, to be implemented consistently by each GTHA transit agency; and
 - c. Attempt to achieve the greatest possible transparency, through the inclusion and meaningful participation of equityseeking groups (e.g. grassroots groups including TTCriders and Fair Fare Coalition), and outreach to transit users who are traditionally not part of the conversation.

2

SWITCHING TRACKS:

Towards transit equity in the Greater Toronto and Hamilton Area

E X E C U T I V E S U M M A R Y

A LARGE AND COMPLEX REGION WITH REGIONAL TRANSIT CHALLENGES TO MATCH. The Greater Toronto and Hamilton Area (GTHA), as we have come to call the Toronto region, is one of the world's preeminent, complex and diverse metropolitan areas. The planning, funding, and building of regional transit in the GTHA, which is overseen by the Province of Ontario's transit agency Metrolinx and directed by the 25-year, \$50-billion plan, The Big Move (2008), is as complex as the region itself.

IF NOT NOW, WHEN, AND HOW CAN THAT BE POSSIBLE? The GTHA, already a large and fast-growing region, is projected to add over 2.5-million people and 1.5-million jobs by 2031. Over this same period, Metrolinx is planning to build 1,200 km of rapid transit to meet current and projected transportation demands across the region. This could very well be the single greatest – and perhaps last – junction of opportunity to complete the regional transit network required for the GTHA, and to counteract the structural inequities that have been created by, and have persisted throughout, past growth-infrastructure cycles.

THE BENEFITS OF PUBLIC TRANSIT INVESTMENTS ARE NOT EQUALLY DISTRIBUTED. Like all metropolitan regions in the world, the GTHA has structural inequities created over decades, if not more than a century, of decisions being made and not made: where growth occurs; the type and density of development; where transit and other infrastructures are constructed, and; where public and private capital is invested and extracted.While the region, as a whole, stands to benefit from public transit infrastructure investments, those benefits are unequally distributed within the region. **WHAT IS EQUITY, AND HOW CAN IT BE MEASURED?** Transit investments, by their very nature, have consequences beyond capital (rolling stock, terminals) and the operations (routes, headways) they support. They also build cities, enable communities, empower individuals to participate in society's opportunities more fully. Correspondingly, we refer to "transit equity" – also called "transit justice" about which there is a large literature, and "fairness" – as the fair distribution of the benefits and costs, and in a manner that is responsive to the social and economic needs of the most number of residents, and especially those most vulnerable.

THERE ARE WINNERS AND LOSERS. Deciding transit infrastructure priorities – lines, technologies, station locations, service frequencies, budgets

- preordains those who stand to win and lose from those decisions. Our international review of jurisdictions and literatures points to historical and politically-reinforced transit path dependencies in Toronto and other major metropolitan centres: investments in lines and stations – almost always rail – tend to favour the influential power elites of the region, and thereby reinforce pre-existing socio-spatial inequities. In short, transit investments have tended to benefit areas that are already doing well, while not changing the prospects for areas that are not.

THE FACES OF TRANSIT INEQUITY. Further compounding the winlose nature of transit investments is gentrification, which redirects transit's economic and social benefits back in favour of those with the means to locate near the best services. Most often, these are white and more affluent residents. This stratification of transit benefits further marginalizes disadvantaged groups, who are most often non-white, and, as our research shows, increasingly "women of colour." More broadly, transit inequity is correlated with, and compounded by: class; location (centre versus suburb); ethnicity and racialization; age, and (dis)ability.

HOW DO WE SHIFT FROM "PICKING WINNERS" TO CREATING EQUITY? Interventions, whether top-down or bottom-up or combinations thereof, are required to more equitably distribute the public benefits of public transit investments – including, but not limited to, improved access to employment opportunities and services. Our review reveals that both government- (e.g. Bogotá, TransMilenio) and citizen-led interventions (e.g. Los Angeles, Bus Riders Union) have begun to bring about some degree of transit equity, or at the very least laid claims to it in an emerging public debate around it.

STRATEGIES, TOOLS AND TACTICS TO BRING ABOUT EQUITY. Strategies to address the "equity issue" are generally focused on the network (where the lines go), access (service), and price (affordability). Tools or levers deployed through various strategies include either, or a combination of, legal action, political action, state intervention, technical innovation, and economic incentives. These can give rise to a number of tactics including, for example, reduced or fare-free structures, the democratization of line and service planning, and the mandated consideration of social equity as a factor in determining new or expanded services.

THINKING ABOUT AND TAKING ACTION TOWARDS EQUITY, TRANSIT JUSTICE. We need begin to identify ways of thinking about transit justice and to ask important, if not uncomfortable, questions. Based on our review, we suggest asking:

- I. What are the indicators for what is just?
- 2. At what spatial scale do we seek equity?
- 3. Who is included and excluded?
- 4. Who are the different publics? How do those people, for example, identifying themselves as "car-drivers" (gridlock), "taxpayers" (value for money), "transit riders" (service) factor into the transit equity equation and its many variables?
- 5. How are these and other publics brought to the table, and into the transit network?
- 6. What are the factors influencing public transit investments, and what are the public impacts?
- 7. What is at stake if public transit is not as equitable as it can or should be?



1.0 INTRODUCTION

The planning, funding, and building of public transit in the Greater Toronto and Hamilton Area (GTHA) is as complex as the region itself. Yet discussions inside and across the plenitude of public spheres of life and experience are often quite simplistic and have, increasingly, given rise to strong and often polarizing positions on the subject. It is at this juncture – where the governance of public transit in the Toronto region meets the people it aims to serve – that we aim to begin to unmask the complexities of providing public transit infrastructure and services for the benefit of the public. More specifically, we seek to isolate specific themes related to social in- and exclusions resulting from public policy and investment decisions, leading up to and through Metrolinx's Regional Transportation Plan – The Big Move, and especially those made or not made in Toronto's more vulnerable and splintered suburban areas.

A question that is central to our investigation is, "What does public transit equity mean, and how can it be achieved?" In asking this question, we make the claim that transit inequity, as both a symptom and determinant of other social inequities, does exist.

I.I REGIONAL PROBLEM CONSTELLATIONS AND THE ROLE OF TRANSIT

The GTHA is one of the world's preeminent, complex and diverse metropolitan areas. It is currently (2011) home over to 6.5-million people and 3-million jobs, and projected (2031) to grow to over 9-million people and 4.5-million jobs. In addition to growth statistics, the region is often described through many superlatives – home to people arriving from virtually every country in the world, hundreds of construction cranes in the sky, one of most livable cities in the world, to name just a few.

Figure 1: Big Move – "Next Wave" Projects



While the region is undoubtedly prosperous – it is the economic engine of Canada, responsible for 20 percent of the country's output – this prosperity is not evenly distributed. There are constellations of social and economic challenges being encountered by an increasing proportion of the population. These have been the subject of a number of recent studies intended to mobilize public awareness about, and interventions upon, issues including the supply and affordability of housing close to transit (Pembina Institute 2013), the economic and social impacts of traffic congestion (Toronto Region

Board of Trade 2013), polarizing income inequality (Hulchanski, 2010), class divisions (Florida et al., 2014; Florida, 2011) and the overall liveability of the region (Toronto Foundation 2013).

Presumably to address such growing regional issues in the GTHA, one goal of the Big Move plan is to have 80 per cent of residents living within two kilometers of rapid transit. Further, the plan states that "equity and social cohesion" are among the challenges to delivering effective transit services across the region. From page 8 of the Big Move:

"There are many people in the GTHA who cannot afford to own a car and many more who stretch their available resources to do so. As energy costs increase, the potential for social exclusion grows, as more people are unable to afford to participate in activities due to the high cost of travel. Access to frequent, fast and affordable transit is therefore crucial for equity and social cohesion." Transit investments, by their very nature, have consequences beyond just the hardware (rails, rolling stock, stations, etc.) and the systemic improvements (unitary pay systems, new and better routes, fare structures, etc.) they support. They also build cities, enable communities, and empower individuals to participate in society's opportunities more fully. Those investments rarely lead to even outcomes and sometimes create new inequities in distribution across an urban area. As the region serviced by Metrolinx is at the cusp of major investments into its transit supply and operation systems, we ask what consequences the proposed funding has for the people, communities, and sub/urban municipalities it is meant to provide with better mobility.

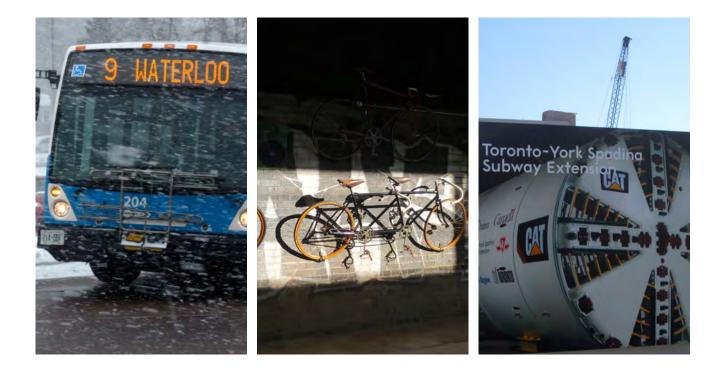
Our review of the literature and international case studies confirms that public transit investment can be an effective and far-reaching public policy instrument to address problems facing large urban regions. It can assist in the redistribution of public and private investment to social (e.g. lowest incomes) and spatial peripheries (e.g. suburbs), decrease commute times between lower-income housing and employment centres, and counteract gentrification by providing enhanced transit services in more neighbourhoods.

1.2 THE URGENCY, OPPORTUNITY

The Big Move plan sets out an unprecedented \$50-billion investment to build 1,220 kilometres of rapid transit across the GTHA by 2031. Over this same time period, the GTHA, already a large and fast-growing region, is projected to add over 2.5-million people and 1.5-million jobs by 2031.

Already funded and/or under-construction are several "first wave" projects under the Big Move, including express rail service between downtown Toronto and Pearson International Airport and bus rapid transit in York Region.While this "first wave" of projects will serve to improve the mobility prospects for some residents, it is the "next wave" of projects – representing 70 per cent of the \$50-billion, but are as of yet unfunded – that is perhaps the better test. These projects (see Figure 1) will bring rapid transit deeper into the GTHA suburbs, including several low income "inner suburbs" within the City of Toronto, the vast "in-between city" where most Torontonians live.

This could very well be the single greatest – and perhaps last – junction of opportunity to complete the regional transit network required for the GTHA, and to counteract the structural inequities that have been created by, and have persisted throughout, past growth-infrastructure cycles.



2.0 A SINGLE BUT VARIED REGION

While the Toronto region is growing by leaps and bounds, we have become aware that such growth occurs increasingly in ways that create more socio-economic and socio-spatial inequalities. Research has found that the share of middle income groups in the region tends to shrink while income polarization is producing more wealthy people at one end and more poor people on the other (refer to Hulchanski 2010). Often, the areas with the fastest rising and most concentrated poverty are also the least well-served by mobility infrastructures including public transit. It is, therefore, important to ask how planned transit investments under the Big Move can serve to stave off additional inequalities, including perceived and actual suburban "transit deserts."

The "in-between city" described by Young and Keil (2014) as neither classical suburb nor traditional downtown is especially vulnerable to, and made further vulnerable by, long-term biases in transportation and other infrastructure investments. These are places that are already disadvantaged through lacking employment opportunities, substandard housing, underfunded educational institutions, limited food retail and nutrition choices and overall disinvestment (Young, Burke Wood, Keil 2011).

2.1 DIFFERENT PUBLICS

Across the physical and political expanse of the GTHA, there is also an imagined and experienced space that is claimed by different publics. Arising from, and also giving rise to, local political movements are several publics: the "905" and "416" area codes, suburbanites, urbanites, downtown elites, bike-riding "pinkos", taxpayers, car drivers, logistics industries, etc. These and other publics were the target of very issue-specific and often polarizing

campaigns (e.g. "Subways! Subways! Subways!") in the Toronto municipal elections of 2010 and 2014 and in local political contests across the region.

The issue or lifestyle that a particular "public" most identified with produced vastly different notions of what public transit is, how it operates and for whom, what should be built, and how it should be funded. While "the public" could, reasonably, agree that "public transit" is important and beneficial, the multitude of interests that comprise the singular public produce vastly different and oft-conflicting values and priorities on the transit planning, funding and building continuum. We are also aware, of course, that many decisions made for local transportation and transit follow a higher scale mobility logic and are not decided by municipal or regional actors alone, if at all: airports, major highways, high speed rail (Keil and Young 2008).



3.0 TRANSIT EQUITY, TRANSIT JUSTICE

The concept of transit justice has attracted considerable attention at national and international scales with considerable debate within North America and abroad, that those suffering economically or who are from a socially disadvantaged community have less access to transit opportunities in comparison with the wider range of transit options available to those residents who are better off (Agyeman, et al, 2003, p.289).

The modern civil rights movement has its root in public transportation, beginning in 1955 with African-American bus boycotts arising from Rosa Parks' refusal to sit at the back of a bus in Montgomery, Alabama. Many regional transportation systems are regional in name only with many comprising "separate and unequal" urban and suburban transit systems built along lines of social disparity (Bullard and Wright, 2010, p.63). An effective regional transportation system is important in connecting people with jobs, serving a rapidly aging population, and reducing traffic congestion. Public transit has positive effects on the environment and is an essential ingredient in moving low-income families from poverty and dependency to self-sufficiency. Transportation investments, if used properly, can invigorate and revitalize disadvantaged urban areas (Bullard and Wright, 2010, p.66).

Following the work on justice by Iris Marion Young (2000) and David Harvey (1997), justice cannot be restricted to redistribution and has to be gauged against the diverse needs of those that have been deprived. There is an affirmative aspect involved. In our context, generally, a person's spatial location in a transit system is differentiated by income, ethnicity, ability, access/ proximity to available work and family-status. This often implies a predictable status in law, educational possibility, occupation, access to resources, political power and prestige (Young, 2000, p.95). But what is more, we will need to

discuss whether we are talking about justice for individuals, households, communities (social), neighbourhoods (spatial) or any other measure or scale along which inequalities are produced and resources are distributed. In any transit related conversation, justice invariably needs to be seen in the context how urban and regional space is produced and access to resources is influenced by that process (Soja 2010).

If justice is the general objective, equity and the equality are the more operative categories for thinking through how to address transit inequalities in a practical manner. It is important to distinguish equity from equality, in the context of public transit. As Fainstein (2010) notes, equity refers to public policies that help those who are not already better off. Equity does not require that each person be treated the same, only appropriately. This implies fairness, which is a more broadly accepted concept than equality. It has the power of gaining wider political support as demands for greater access to public transit have more currency than transportation connections that benefit those who already enjoy access (Fainstein, 2010, p.36).

Transit equity, therefore, is viewed as the outcome of removing structural obstacles from the fair distribution of goods and services by the regional transportation system. Transit equity is an intuitively meaningful concept and forms the basis of socially conscious transit planning (Marcuse et al. 2009, p.93).

In their seminal work on transit and social equity in the United States, Garrett and Taylor (1999) identified a number of the themes connected to transit injustice. Income polarization, and the changing nature of employment and the decentralization of workplaces have not been reflected in government operating and capital subsidies. Funding decisions are skewed to benefit "choice" or non-captive riders through commuter rail and express bus services to outer suburbs. Planning decisions are made that ignore existing socio-spatial inequities in older neighbourhoods. Choice riders are more sensitive to transit costs since they have greater access to alternatives so fares are disproportionately subsidized in their favour to attract them to underused services. Lower income residents have less political clout to advocate for a readjustment of funding or for a realignment of infrastructure investment priorities for their benefit. Together, these themes reinforce transit injustice.

"The allocation of transit services between rich and poor, whites and people of color, suburbanites and inner-city residents, is not happenstance, but is directly connected to social and economic polarization" (Garrett and Taylor, 1999 p.7.)

3.1 DEFINING THE TERM: EQUITY

At an even more practical level, in policy debates, equity has a more instrumental meaning. The existence of different publics, and the resulting multiplicity of values and priorities projected onto public transit, frustrates the definition of what transit equity is, could be, and should be. Conceptually and in actuality, equity manifests differently and to different degrees across the physical and public expanse of the GTHA. In defining equity, as related to public transit in the normative, we refer to Litman (2014):

"Equity (also called justice and fairness) refers to the distribution of impacts (benefits and costs) and whether that distribution is considered fair and appropriate. Transportation planning decisions can have significant and diverse equity impacts..." (p.3)

Litman presents (see Figure 2) a multi-spectrum approach to assessing transit equity that distinguishes between three different types of equity, identifies different impacts, sets out different measurements, and ways to categorize the public. This begins to acknowledge the complexities and interconnectedness of factors influencing, and influenced by, public investments in transit.

Within this wide array of transit-using publics, metrics, and desired outcomes, there are many different ways to define and assess transit equity, and for an investigation into some of the decisions and decision-making processes that promote or hinder its achievement. While the GTHA and the Big Move are the primary subjects of this review, we will identify and compare national and international precedents with the Toronto experience, and point to potential ways forward.

Figure 2: Equity Evaluation Variables (Litman 2014, p. 2)

TYPES OF EQUITY

Horizontal

Equal treatment of equals

Vertical With-Respect-To Income And Social Class

Transport affordability Housing affordability

Impacts on low-income communities

Fare structures and discounts

Industry employment Service quality in lowerincome communities

Vertical With-Respect-To Need And Ability

Universal design Special mobility services Disabled parking Service quality for nondrivers

IMPACTS

Public Facilities and Services Facility planning and design Public funding and subsidies Road space allocation Public involvement

User Costs and Benefits Mobility and accessibility Taxes, fees and fares

Service Quality

Quality of various modes Congestion Universal design

External Impacts

Congestion Crash risk Pollution Barrier effect Hazardous material and waste Aesthetic impacts Community cohesion

Economic Impacts

Economic opportunities Employment and business activity

Regulation and Enforcement

Traffic regulation Regulations and enforcement Regulation of special risks

MEASUREMENT

Per capita

Per adult Per commuter or peakperiod travel Per household

Per Unit of Travel

Per vehicle-mile/km Per passenger-mile/km Per trip Per commute or peakperiod trip

Per dollar Per dollar user fees Per dollar of subsidy Cost recovery

CATEGORIES OF PEOPLE

Demographics

Age and lifecycle stage Household type Race and ethnic group

Income class Quintiles Poverty line Lower-income areas

Ability

People with disabilities Licensed drivers

Geographic location

Jurisdictions Neighborhood and street Urban/suburban/rural

Mode and Vehicle Type

Pedestrians People with disabilities Cyclists & motorcyclists Motorists Public transit

Industry

Freight Public transport Auto and fuel industries

Trip Type

Emergency Commutes Commercial/freight Recreational/tourist

4.0 UNEQUAL DISTRIBUTIONS OF TRANSIT ACCESS

A person's location relative to the transit system is generally determined by financial resources, ethnicity, ability to work, proximity to available work, and their political influence (Young, 2000). In effect, transit access and the lack thereof often compounds social and economic situations. An equitable transportation system is important for connecting people with jobs, serving a rapidly aging population, reducing traffic congestion and as a pathway for low-income families to go from poverty and dependency to self-sufficiency.

Without equity as a determinant of the regional transit system, such a system may be "regional" in name only (Bullard and Wright, 2010).

The problems of transportation inequity are becoming more visible throughout the world because of the work of community activists, researchers and civic leaders. This body of work highlights the importance of understanding how transit inequality is tied to social inequity, and how they are distributed on the ground. Broader socio-economic factors, such as the changing nature of employment and location of workplaces, planning policies that encourage separation of land uses, immigration trends that see new immigrants landing in outer suburban neighbourhoods, and the displacement of vulnerable persons by the loss of affordable housing in inner cities through gentrification, interact in complex ways to reshape the accessibility of the existing transit network. Knowing where the gaps are for the most vulnerable helps to identify where to locate new infrastructure to reduce transit inequity. Los Angeles, CA

STAKING OUT LA'S STREETS FOR TRANSIT JUSTICE

The LA Bus Riders Union is a coalition of community activists and labour groups to challenge an uneven distribution of transit investments from the bottom-up. Rail projects were noted to serve a disproportionate level of white riders in the LA region and consume a disproportionate amount of both the capital and operations budgets. Bus riders, on the other hand, are 90% visible minority, with an average income of \$14,000. They are more likely to have a disability than the general population. Operations funding gaps were filled by cutting bus service and raising fares, which produced a double hit on low income and minority riders. The cuts meant they received less service than before rail projects opened, in comparison to riders benefitting from the new transit investments. Low income riders were also more likely to have multiple jobs at off-peak travel times where cuts were disproportionally targeted. More affluent riders were also in a better position to absorb fare increases that have a relatively lower impact on their disposable income. The solutions they campaign for include:

- I. Creating auto-free / pedestrian only / bus only corridors and centres
- 2. Creating bicycle and pedestrian connectors to transit stops
- 3. Improving night and weekend service
- 4. Improving express service especially for suburb-to-suburb travel
- 5. Consider the spatial element of affordable housing on high pollution corridors through planning policies and how they connect to transit investments
- 6. Reverse service cuts
- 7. Foster safety through respecting bus riders and not criminalizing visible minority riders

4.1 SOCIAL CONSEQUENCES

Researchers and civic leaders in Melbourne and Hobart, Australia are working to identify spatial gaps in the existing transportation network, tie them to social inequity, and develop strategies to address them (Currie, 2010). This work helps to understand that transit injustice has a spatial element, and provides a way to make it visible.

Researchers in the United Kingdom are investigating how the design of transportation networks – both the capital and operational aspects – can contribute to the social exclusion of low-income persons who work outside the traditional 9-5 model, younger and older persons who have

mobility needs not always tied to employment, and persons with disabilities who have specific needs relating to accessing the network. Transit networks that emphasize the needs of the traditional 9-5 worker may inadvertently disadvantage these other publics. Understanding the nature of how and when these different publics use transit and what their specific needs are help to ensure that transit policies and plans do not produce an inequitable result. Researchers are also looking at the social consequences of road pricing on low-income persons and persons with a disability where it has been implemented as a means to address congestion and pollution (Lucas, 2006).

Community activists in Los Angeles, California are actively working to counter inequities in transportation policies that are disproportionately harming visible minorities and low-income residents (Bus Riders Union, 2012). They use a range of tools like civil protests, court challenges, political activism and community awareness campaigns to mobilize popular support for more equitable policies. The Los Angeles experience shows the importance of considering the needs of different types of riders in order to plan and deliver a socially-just transit product.

4.2 CHANGING GEOGRAPHIES

Researchers around the world are engaged with examining social, economic, and demographic changes that are having a profound impact on worsening transit equity in suburban areas (Young and Keil, 2010; Phelps and Wood, 2011; Cidell, 2012; Addie, 2013). Others are connecting the older, radial based transit systems as being out of step with the needs of today, where living in close proximity to a station may not lead to a useful destination for employment or other needs, based on travel patterns that are becoming increasingly decentralized (Thompson and Matoff, 2003). Research is also evolving to measure transit inequality in order to map it spatially (Currie, 2010; Florida, 2011). Important work is also being done to examine the emerging spatial impacts of inter-generational inequity (Moos, 2014).

Residents are increasingly making suburb-to-suburb trips, and making multiple daily trips to sustain part-time and piecemeal employment to

"In the case of Toronto, the existing transportation situation has become a bottleneck for the continued globalization of the region, because global and local circuits of mobility are not well coordinated and various scales of decision making do not visibly interact for the regional good." (Keil and Young, 2008, p. 729) make ends meet. Income opportunities are increasingly shaped by access to higher education, itself an uneven process, and reproducing inequities across generations. Youth are moving to central neighbourhoods to find employment in emerging service and creative industries, but are also more affected by the shift to piecemeal, temporary and contracted out work. Youth are also more likely to rely on public transit and eschew driving (Marzoughi, 2008; Sivak and Schoettle, 2011, 2012; Kuhnimhof et al., 2012). New immigrants are increasingly locating to suburban areas and living in shared accommodation situations to get established and find work. They are also more likely to use public transit than immigrants have in the past (Heisz and Schellenberg, 2004). The convenience of a transit station nearby that only serves to funnel riders to the central business district does not meet all of these different mobility needs.

Finally, there is a growing interest in understanding how complex global forces are producing a local hierarchical structure that privileges some and disconnects other through a splintering of urban realm, both socially and spatially (Graham, 2000; Graham and Marvin, 2001). We can see the social impacts of this in Toronto in the polarization of income levels with the decline of the middle class (Hulchanski, 2010). Another indication is the rise of temporary, short-term, part-time employment which forces some workers to make multiple work-related transit trips. The trips made by these workers in evening hours and on weekends are disadvantaged by a system that is designed for a 9-5, Monday-to-Friday work schedule (Florida et al, 2014).

4.3 MOVING BEYOND AN ECONOMIC CALCULUS

We are no longer in a world where planning decisions are based on a simple notion of equal access. Equal does not necessarily mean equitable. Building transit is, on the surface, a positive element for a number of social, economic and environmental reasons. But doing so without considering some important implications (e.g. Who stands to benefit?) can reinforce structural inequities according to neighbourhood, class and income. We are in a sustained era when government investments have to be justified on a

business case – hindering the ability of transit investments to identify, align with, and support social needs.

Governments are under pressure to ensure transit investment decisions are made on the basis of demography and economic attractiveness. These criteria amount to a strategy of "picking winners" as already successful areas of the city tend to be served first in the building and maintaining of public transit: the well-to-do residential areas (like Toronto's Yonge Street corridor), employment centres (like the downtown) and transportation hubs like the airport (which will soon be serviced by a special rail line). Such "path dependencies" are further reinforced by the movement of governments towards public-private partnerships in the delivery of transit capital and service improvements. Under this model, economic or "value for money" considerations take precedence over social factors or the "public good" (Siemiatycki, 2011).

4.4 GOVERNANCE, AND THE CREATION OF PERIPHERIES

Less attractive areas have historically been neglected in the distribution of transit investment and upkeep. The "in-between city" described by Young and Keil (2014) as neither suburb nor downtown – largely equivalent to the post-war suburbs with their mix of single family homes and tower neighbourhoods – is especially vulnerable to, and made further vulnerable by, long-term biases in transportation and other infrastructure investments. These are places that are already disadvantaged through a lack of employment opportunities, substandard housing, underfunded educational institutions, limited food retail and nutrition choices and overall disinvestment. Prime spaces are supported through investment, but the capillaries of the system that are essential for transit equity – bringing transit to the door – are left to waste away. The biggest problem with the emphasis on picking winners is that, in an interconnected region, transportation flow is constrained by pinch-points where the premium networks intersect with less valued urban space (Keil and Young, 2008).

Because of the permanence of building infrastructure, it is important to ask upfront about how investment and inequity are linked. We need to bring in many voices to understand the myriad of ways in which inequity is produced and how it can be addressed. A central issue is that governance and government, while related, are not synonymous. Ekers, Hamel and Keil (2012) have argued within the context of suburban governance that formal government is just one of three interconnected governing forces. The demands of satisfying capital accumulation is a second form of governance. The third form is private authoritarianism which stems from the devolution or abdication of state power to private actors. This can take the form of public-private partnerships where the public maintains some input, privatized concessions like Highway 407, or even private control of urban space as with gated communities. As privatization of transportation services has increased in the region on a wide spectrum - from taxi services such as Uber to the delivery of suburban bus services through business models such as VIVA - the impact of such a shift on transit equity will surely have to be monitored closely in the years to come.

In an interconnected region that is increasingly tied to global networks, it becomes practically impossible to isolate modes for the benefit of one over another. In an automobile context, this feeds concerns about social justice. As the region is becoming more polarized economically, and governance is more fragmented with competing actors, it becomes paramount to ground public transportation planning in a political framework that acknowledges the inherent unevenness of the distribution of benefits (Young & Keil, 2010).

As Hulchanski has illustrated, income distribution in the City of Toronto is becoming polarized. The increasing polarization, tied to external forces including neoliberalism and globalization, is causing the social fabric of the city to fray, putting the sustainability of the city at risk (Walks, 2010).

Public-private partnerships (P3s) between the public and private sector have been increasing in popularity as means to deliver new public infrastructure. Yet,P3s play a role in increasing the fragmentation on governance. Proponents of P3s argue that these arrangements serve as a way to reduce political interference, promote competitive bidding processes to lower costs, reduce government exposure to project cost overruns, leverage private sector expertise and efficiencies to achieve lower life-cycle costs through technical innovation, and reduce government exposure to debt (Siemiatycki, 2006). "Many of the problems associated with poor transport and accessibility are beyond the capacity of local authorities to resolve as they relate directly to the broader social and economic climate" (Lucas, Grosvenor and Simpson, 2001, p. 41) P3s however, are not guaranteed to result in greater efficiencies, lowered costs, and reduced risk. Contractual agreements can preclude governments from increasing public participation in projects and from prioritizing social need. (Siemiatycki, 2009). Transit inequity could further be reinforced by the fact that P3s, inherently, are positioned by governments to be attractive to private investment. As Siemiatycki points out, private sector partners have "selected the most profitable projects with the lowest risks, reinforcing existing landscapes of uneven geography, timing, and project types" (Siemiatycki, 2011, p. 1720).

While governance fragmentation is taking place, there is a restructuring of the role of public transit as a tool to promote regional economic competitiveness in a neoliberal environment which competes to attract global capital (Addie, 2013). The residents in the "in-between city" are not the beneficiaries, and see such projects as an extension of an elite class trying to entrench their position of power and contribute to the growing social inequities (McFarlane & Rutherford, 2008). The policy conundrum in promoting public transit is that for people living in areas lacking in public infrastructure, policies that are geared towards privatized modes of travel (e.g. cars) are more politically popular (Walks, 2008, 2014).

The economic argument for enhanced workforce mobility and goods transportation is often made without considering the location of the workers and the consumers. Building infrastructure without considering the impact on different residents has the potential for long term negative impacts on large parts of the region. Outdated views of urban-regional transportation dynamics and more or less willful disregard of less vocal and powerful groups in the transportation debate may lead to decisions on network build-out, network design and modal choice that exacerbate inequality. In an environment of inter- and intraregional competitiveness, oriented to market or use-value considerations, "transit as a public service for all" may be less successful without a clear expression of improved equity as an outcome.

5.0 THE FACES OF TRANSIT EQUITY

The concept of transit inequity grew out of the Environmental Justice movement that emerged in the United States in the 1980s, which itself was anchored on the foundation laid by the Civil Rights Movement (Agyeman et al., 2003).

There was an awareness of structural and systematic biases in the economy that have produced an unfair distribution of environmental costs and economic benefits. In essence, those who pay the price do not always share in the benefits. There is an inherently spatial element to this process that can be traced to certain groups – publics – who were systematically burdened with those negative environmental costs. Community leaders in the Environmental Justice movement in the United States saw that an unfair sharing of costs and benefits produces injustice where certain publics – such as persons of a visible minority, women or low-income persons – were bearing a disproportionate share of the costs that can be traced to specific geographic areas. In his study of transit equity in São Paulo, Brazil,

Vasconcellos (2005) found that the lowest income residents bore the highest transportation costs proportionate to their income, experienced the highest degree of "externalities" (e.g. exposure to pollution and rates of injury or death related to mobility), and had the longest travel times compared to the wealthiest residents. Yet, transportation policies were skewed to promoting car use that worsened these conditions of inequity.

5.1 THE PARADOX OF TRANSIT IMPROVEMENTS

Building transit can play an important role in addressing social inequity but it is also important to understand that investing in transit infrastructure may trigger forces that can produce injustice. While building transit is good, it is not necessarily good for all. Somewhat paradoxically, transit improvements

(e.g. mixed-traffic to dedicated lanes) can have the effect of displacing those residents most in need of the service in the first place. For reasons such as convenience and choice in travel, proximity to work and the benefit of reduced travel times, those with financial means and social status are able to relocate into neighbourhoods to access amenities like transit. Once in the neighbourhood, they reshape it for their needs. It has the effect of displacing existing residents where their neighbourhoods are no longer affordable or provide for their needs.

Gentrification is a process that can counteract the equalizing forces of transit investments in lower income neighbourhoods. Private transit-oriented development along new or improved transit lines "threatens less profitable land uses – lower-rent apartments, cheap shops, functional industrial spaces" (Kipfer 2012, N.P.), which displaces lower income residents to neighbourhoods with less transit service and fewer amenities. As Marcuse (2013) argues, "[i]f the concern is with social justice and the housing of those most in need, gentrification is by definition unjust". He could easily be talking about social justice and transit investment.

It is out of the activist legacy of environmental justice that political movements like the Los Angeles Bus Riders' Union found traction. Community activists in Los Angeles saw first-hand how low income residents and visible minorities were far more likely to rely on the local bus network for travel, but investments in transit were being directed to more affluent, white neighbourhoods. When budgetary pressures triggered cuts in service, a disproportionate number of the cuts were targeted to the bus network used by low income and visible minority groups. This is one of the ways by which transit injustice is produced through space, with an uneven distribution of benefits and costs

The practice in Los Angeles was different from earlier efforts at transit activism in Toronto, such as the successful Streetcars for Toronto Committee

Decisions on [public works] investments therefore demand the most deliberate efforts to improve rationality-to help assure one, that the distribution of the benefits and the costs among the city's publics is consciously intended and democratically warranted, two, that levels and priorities of investments are so staged as to induce the desired repercussions in the private markets, and three, that public resources are used for those projects and programs promising the highest social payoffs." (Webber, 1963, p. 233)

in the 1970s. They were concerned about service quality (cutbacks) and spatial access (loss of service), but the notion of disparity between the different types of users was not a top consideration. They were primarily looking at equal access, not equitable access.

Today, transit activism in Toronto continues through the work of community-, rider- and labour-based groups including the Fair Fare Coalition, TTC riders and the Greater Toronto Workers Assembly. In sum, the positions of these groups call for public awareness and action by governments to:

- I. Introduce more and better service to all city neighbourhoods;
- 2. Make transit fully accessible to persons with disabilities; and
- 3. Make fares more affordable up to and including providing transit for free as proposed by the Greater Toronto Workers Assembly, viewing transit as "an essential right, like public education, libraries, water, doctors and hospitals" (Greater Toronto Workers Assembly, 2014).

There are invisible barriers reinforcing transit injustice that are not always apparent. Access to quality public transit is an essential vehicle to facilitate the rights of men, women and children in everyday life of the city. As Levy (2013) argues, transportation reflects the right to participate in a city and allows residents to take advantage of the opportunities the city offers. But she contends from her review of transit options in the global south that transit planning rarely considers the needs of a diverse array users, who have different needs that are formed through age, gender and social relations.

Being blind to users does not mean that the needs of users are reflected equally. The needs of men in the workforce take precedence, whom usually have access to a private vehicle. Women, elderly, children and persons with disabilities each have travel needs that are shaped and defined in the context of broader social, economic, political and environmental factors. By not providing for their needs, the lack of transit options has the effect of denying their right to the city. We also need to consider that space can also shape the person, and that has the impact of further splintering the notion of the public. There is an indication of an emerging political bias in inner suburban areas that can produce more conservative political views shaped by the expectations of private space (Walks, 2008). This sentiment is echoed by Sewell (2014) who argues that suburban residents of Toronto do not find a connection between public space and the public good, because they live a lifestyle that does not engage them in a shared sense of community beyond their own private space. Suburban residents are likely to see themselves as living in a different kind of place than a city, as a way to differentiate themselves and their experiences in the face of forces shaping their everyday lives, including global communication, capital, trade and social flows (Cidell, 2011). There is an emerging field of interest about the changing connectivity patterns at national and global scales, which are affecting equity in mobility at the local scale (Cidell and Prytherch, 2015).

Toronto is not immune from economic, political and social forces that produce transit injustice around the world. In an international comparative study of access to public transit in the Toronto and Frankfurt regions, Christian Mettke (2014: 187-190) has found that the "diversifying processes of postsuburbanization and 'post-suburban realities' in the GTA collide with the inertia of the public transit system." He summarizes the situation in Toronto in these terms: First, there is a system-wide lack of access for transit users with physical disabilities, an important measure of transit access overall; second, there exists significant "by-passing" issues in the Toronto network, predominantly affecting the (inner) suburbs; third, the lack of fare integration hurts people commuting from outside the TTC system; fourth, the timing of connections remains a problem in the system overall putting those in the 'transit deserts' at a disadvantage; fifth, safety is generally not an issue in the Toronto public transit system; sixth, the decision-making process over future network improvements is characterized by a democratic deficit that has plagued the entire region and cemented existing inequities in service.

We are seeing stark spatial patterns emerging where there are clear winners and losers, as illustrated through David Hulchanski's seminal work (2010) on "Toronto's Three Cities". There are numerous issues at play, such as the changing nature of work. From a transit equity viewpoint, we can identify patterns spatially where certain groups lack good access to transit (Florida, 2011). Lower-income residents, new immigrants and visible minorities are increasingly living in areas without access to good transit. Seniors and children, and women as primary caregivers to both groups, have particular issues that make them more vulnerable to transit inequities. Changing demographics and societal preferences are affecting the affordability and desirability of areas with good transit access.

We are living in a splintering urban world, where there are clear bifurcations between upper and lower incomes. The process of splintering works at a global scale but has a direct impact on everyday life. This is apparent in the changes in social structure, where there is a clear polarization in income levels and a sharp rise in precarious work. With transit justice as a goal, not only do strategies have to be considered that reflect the disparities in the urban region, but transit investments need to be made with strategies to mitigate the production of injustice.



6.0 HOW DO WE SHIFT FROM "PICKING WINNERS" TO CREATING EQUITY?

Equity in transit comes from an understanding of the uneven way by which different publics have access, and of the forces that produce such distributions. One approach is to prioritize transit investments to counteract poor access to transit, lack of affordable housing, and poor access to employment. By looking at the existing transit network in relation to socio-economic indicators of inequality, plans and policies can be produced to address the inequalities (Currie, 2010; Martin Prosperity Institute, 2011; Golub and Martens, 2014).

Building new transit infrastructure does not produce a more just transportation network. Once transit plans have been made that address a spatial form of transit injustice, authorities need to provide the policy tools, bylaws and regulations to support it. The gentrification affect is one such example that requires a proactive, top-down approach by government. In Denver, Colorado, where the region is in the midst of building a large, regional transit network, civic leaders are working on ways to protect existing low-income housing along new transit lines. They have implemented planning tools to protect existing affordable housing, and ensuring land redevelopment does not price existing low-income residents out of newlyaccessible neighbourhoods. They are also looking at ways to incorporate affordable housing in new developments (Pendall, Gainsborough, Lowe, and Nguyen, 2012). This top-down approach illustrates the importance Stockholm, Sweden

GATE CRASH NOW! CITIZEN-LED TRANSIT ACTIVISM

Planka.nu is a citizen-led, disruptive approach to promoting transit equity. Reacting to the high cost of public transit fares in Stockholm, Sweden and how increases disproportionately affect youth, the Syndicalist Youth League (a left-leaning youth activist organization) called for a fare-free transit system to address income inequality and climate change. They banded together with other youth and Green Party organizers to form Planka.nu – roughly translated as "gate crash now" – as a membership-based collective to 'go on strike' by evading fares. In exchange for a modest membership fee, members are protected by a form of group insurance to cover fines for fare evasion. The group also engages in more conventional political activism and public awareness, and Planka.nu has supported a global network of activists working for fare-free transit, including a group in Toronto.

of government actors being proactive in a way that considers the wider social impact of building transit. Essentially, planning policies that are crafted with the acknowledgement that infrastructure projects have a tendency to produce winners and losers are able to include ways to address or mitigate inequities.

7.0 STRATEGIES, TOOLS AND TACTICS TO BRING ABOUT TRANSIT EQUITY

7.1 INCLUSIVELY MEETING PUBLIC NEEDS

Levy (2013) has framed transit equity as the ability serve the needs of multiple publics who have different needs and abilities to access transit. But that also extends to the planning side. She calls for a more inclusive, participatory planning process that builds a type of constructive engagement that acknowledges and strives to mitigate the uneven power relationships. There is an important role for bottom-up community actors who are disadvantaged to mobilize together and form a common front. We can bring attention to the Los Angeles Bus Riders Union or the Planka.nu organized fare evasion group in Stockholm, Sweden.

Kaufmann (2000), in a study of public transit usage in French and Swiss cities, concluded that the availability of a high quality public transit network is necessary but not sufficient to encouraging higher public transit usage Public transit investments made without considering the travel patterns and preferences of the potential users will prove to be ineffective at raising the modal share of transit. This is particularly evident in suburb-to-suburb travel that does not benefit from more traditional radial connections to the core. The actual needs of riders – and potential riders – must be a central factorin planning and building transit. That information must come from the riders themselves. The implication, therefore, is that transit investments in isolation do not inherently improve urban mobility.

"Being mobile is not just about geographical space but also, and probably above all, about social space." (Cattan, 2008, p. 86 [in Levy, 2013, p. 61]).

Bogotá, Colombia

TRANSIT EQUITY BY DESIGN

Bogotá is the capital of Colombia, with a population of 6.5 million. It covers approximately 1700 km2. It is located in the Colombian Andes, on a largely flat plateau. Most of the poorest residents live on the outer edge of the urban region. There were 10 attempts between 1947 and 1997 to build a heavy rail (subway) line that, for a number of reasons that include capital costs, competing political visions for lines and opposition from the existing private transit operators, never materialized.

TransMilenio is a bus rapid transit system in Bogotá, Colombia that was introduced in 1997 as a response to poor existing transit options and the inability to build a long-promised subway. It is noteworthy for its high ridership level, cost-effective construction, flexible operation and success at improving transportation options and travel times for low income residents on the outskirts of the city. The first phase opened in 2002. It provide 41km of exclusive rights-of-way with permanent stations. Operations are covered through farebox revenue.

TransMilenio uses 60' articulated buses on the trunk routes, and 40' buses on feeder routes. Ridership in January 2006 was 1,050,000 per day, and forecasted to rise to 1,400,000 upon completion of Phase II. Phase I and II include 82km of dedicated busways. Up to 41,000 passengers per hour per direction (pphpd) ride the busiest part of the network at peak times. Service runs from 5am to 1am. Headways are 2 minute per line at peak, max 10 minutes offpeak. Service is blended with local, express (serving 50% of stations) and 'super' express (20% of stations). Average speed of 21km/h local, 32km/h express. The lines use exclusive rights-of-way in road medians. Construction included improvements to walking and cycling facilities. Stations are spaced on average 500m. The boarding standard is much higher than typically considered acceptable in North America, with 110 standing, 48 seated in a 60' bus. With a North American boarding standard, the system should be able to handle 28,000 pphpd. Fare payment is handled by an electronic fare card used upon entry into stations.

Most aspects of TransMilenio were built and are operated through a myriad of private contractors, including vehicle acquisition, maintenance and operation, fare collection and fare card technology, and maintaining stations and roadways. TransMilenio is responsible for overseeing the contractors and, as directed by the city government, implementing transit policies. A separate branch under the city is responsible for overseeing the construction and

maintenance of the physical infrastructure. The city government oversees the two branches, sets transportation policy and regulations including fares, coordinates projects and plans for future expansion.

TransMilenio has a high satisfaction rate (76%) and it has succeeded in connecting its low-income population to the city centre. The success of the BRT system is partly related to engaging in an objective, mode-agnostic planning strategy:

"The major lesson from Bogotá appears to be that decision-makers need to be encouraged to make public transit planning decisions based on an objective comparison of the different modal alternatives" (Cain et al, p.41).

7.2 OPPORTUNITIES TO SUPPORT MORE EQUITABLE MOBILITY

An important way to improve mobility is to provide options to reduce travel and spread out the peak demand. Cervero (1988) found that mixed-use developments improves mobility in three ways: 1) It reduces private vehicular travel, by spreading out peak travel demand; 2) It provides greater opportunities for carpooling and car sharing, and; 3) It allows for taking care of errands, which are responsible for the car being indispensable for suburban travel (pp. 432-433). Spreading out peak travel happens by allowing for mixed use functions that are not tied to the same peak travel patterns.

Retail, hospitality, entertainment, office, school and residential each have different peak travel times. The combination results in a lower peak than a single use development.

Stone and Mees (2010) investigated the decline in public transit ridership rates in Australia since 1950. They point out that public transit usage rates have dropped faster than the decline in overall urban density and there is ample opportunity to increase ridership in the short term. In order to do so, there must be a recognition that capital investment needs to be supported by operation funding. Building a rail or bus line that provides low frequency service or is not well integrated with the neighbourhood feeder routes will not be an effective solution

Planners must also be aware of and provide solutions which address the increasing prevalence of suburb-to-suburb trips that are not met today. One way to meet that need is for operators and planners to shift away from providing specific trips for targeted riders and adopt a network approach which provides a service mesh across the service area that facilitates flexible travel pattern. In order for the approach to work four components must be in place:

- I. The route structure should be simple and direct
- 2. Service levels must be stable through the service day
- 3. Transferring between vehicles must be easy and convenient
- 4. Fare systems must accommodate free transfers

7.3 PLANNING AND BUILDING TRANSIT WITH EQUITY AS A CENTRAL GOAL

The TransMilenio bus rapid transit system in Bogotá, Colombia has proven to be a very successful model to address transit inequity. They system was designed from the outset to address inequity and bring transit into neighbourhoods poorly served by the existing transportation network. Frequent, all day service, express options and an integrated feeder network have succeeded in connecting Bogotá's low-income neighbourhoods to the city centre and improving the mobility options those residents living within them.

INCOME-BASED TRANSIT FARE PRICING

Gearing the cost of transit to riders' ability to pay, especially for residents in the lowest income brackets, is widely considered as an option to improve transit equity. This approach is not widely implemented by transit authorities, however, due to implementation challenges such as determining who qualifies and establishing a separate payment system. But there are some precedents in North America.

The City of San Francisco in 2005 launched the MUNI Lifeline Fast Pass program, providing reduced fares for qualified low-income residents. For example, being eligible would be a one-person household earning \$22,980 or less, or a four-person household earning \$47,100 or less (2014 dollars). The reduced-cost pass applies to MUNI busses and trains operating within the city, but not BART (Bay Area Rapid Transit) subways.

Sound Transit, serving the tri-county area of Seattle, introduced on March 1, 2015 a discounted fare of \$1.50 for adult riders with incomes at or below 200% of federal poverty level. For example, a four-person household earning \$47,700 or less would qualify under the program. The program is being financed through a 25-cent fare increase for all other riders.

7.4 UNDERSTANDING THE SCALE OF THE PROBLEM

There have always been competing dynamics behind suburbanization, such as the relocation of industry out of the core, the escape from the perceived ills of urban living, and the longing for a romanticized pastoral past. These resulted in a more diverse and dynamic landscape than had commonly been accounted for (Harris 2010, 2014; Keil 2013). Harris (2015) speaks of three competing suburban stereotypes: "the desire to enjoy quiet privacy in a low-density residential environment near the urban fringe. Second, they assume that most suburbs have actually conformed to this ideal. Third, academics and planners alike agree on a stereotypical judgment: suburbs are to be deplored" (p. 30). Considering the complexity of the suburban landscape in a post-suburban world, it is not surprising that the planning, provision and support for public transportation, along with many other forms of civic infrastructures, is also complex. As Keil and Young (2008) have demonstrated, transportation infrastructure in Toronto is becoming polarized with privileged projects, locales and residents being prioritized and others experiencing the brunt of under-investment, disinvestment and fragmented service.

"TransMilenio and the associated nonmotorized transportation improvements have proven to be successful in reducing social exclusion by raising the level of access between the city's centrally located employment centers and its deprived, peripheral areas" (Cain et al, 2007, p. 38)

8.0 TOWARDS TRANSIT EQUITY IN THE TORONTO REGION

While transit equity is a complex and layered concept, its importance is quite clear. Incorporating equity as a central consideration in the planning and building of public transit will serve to correct several structural inequalities – attributed to geographical, economic and social circumstances. Our research has shown that, when equity is an explicit goal, public investments in public transit are made to more appropriately distribute the costs and benefits of the transit system.

Building transit is but one aspect of achieving transit equity. In the GTHA context, there are many factors intersecting beyond the Big Move plan that influence outcomes. Planning decisions stemming from the Provincial

Policy Statement and the Growth Plan for the Greater Golden Horseshoe influence settlement patterns and, in combination with market forces and other external factors, determine the social and economic inclusiveness of communities. The implementation of Provincial growth management strategies by municipalities further influences the prospects for equity. Local politics, for example, can contribute to gentrification and NIMBY effects at the neighbourhood level. The GTHA is faced with important and increasing challenges that transcend the transit system. It is possible, however, for regional transit investments and priorities to begin to counteract the effects of income polarization and the resulting social and economic impacts for the region's most vulnerable residents. Rather than recommending specific strategies and tactics to improve transit equity in the GTHA, we instead see more value in posing some important questions.

- I. What are the indicators for what is just?
- 2. At what spatial scale do we seek equity?
- 3. Who is included and excluded?
- 4. Who are the different publics? How do those people, for example, identifying themselves as "car-drivers" (gridlock), "taxpayers" (value for money), "transit riders" (service) factor into the transit equity equation and its many variables?
- 5. How are these and other publics brought to the table, and into the transit network?
- 6. What are the factors influencing public transit investments, and what are the public impacts?
- 7. What is at stake if public transit is not as equitable as it can or should be?



TRANSIT EQUITY ROUNDTABLE

Attendees and Discussion Notes:

Greater Toronto Suburban Working Group (GTSWG) – Transit Equity Roundtable

31 March 2015

GREATER TORONTO SUBURBAN WORKING GROUP (GTSWG)

Roger Keil (Co-coordinator) [York University]Sean Hertel (Co-coordinator) [Urban Planning Consultant]Sara Macdonald [CITY Coordinator]Jane Wedlock [United Way Toronto & York Region]Glenn Miller [Canadian Urban Institute]Antonio Gomez-Palacio [DIALOG]Craig Lametti [Urban Strategies Inc.]Thomas Bowers [Friends of the Greenbelt Foundation]Marcy Burchfield [Neptis Foundation]Joe Vaccaro [Ontario Homebuilders Association]Ron Richards [R.G. Richards & Associates]Seanna Kerr [City of Toronto]Sony Rai [Sustainable Vaughan]

OTHER PARTICIPANTS

Michael Collens [York University]	Stefan Kipfer [York University]
David Phalp [Metrolinx]	Briana Ingram [Metrolinx]
Linda Weichel [CivicAction]	Judy Farvolden [University of Toronto]
Christian Mettke [GIZ, Germany]	Andre Vallillee [Metcalf Foundation]
Donna Diakun [Ministry of Municipal Affairs & Housing]	Rosalyn Morrison [Toronto Foundation]
Ann-Marie Nasr [City of Toronto]	Sharon Hill [City of Toronto]
Chris Penrose [Success Beyond Limits]	Paul Kulig [planningAlliance]
Matti Siemiatycki [University of Toronto]	Patrick Robinson [OCAD University]

NOTES

There was a rich discussion among all participants, touching on and connecting a number of themes, issues, and questions. Some answers, in the form of suggested actions, began to emerge on how to address and achieve more transit equity. Below are some highlights, across 5 high level themes.

Although very important and necessary, the achievement of transit equity for its own sake is probably not possible. Its achievement should be linked to other goals and bottom lines.

- Transit equity is a worthy, inevitable and necessary objective but it's a political nonstarter if not articulated with other policy concerns.
- While more equity will no doubt improve the economy increasing well-being and productivity across the board – it needs to be associated with parallel and compatible goals and other "bottom lines".
- We need to articulate why transit equity (and social equity in general) is good for the economy, for example.
- Perhaps "transit equity" should be presented within the broader spectrum of "social equity."
- By itself, transit equity will not be a rallying cry.
- Transit equity planning cannot be done on an ad-hoc basis in order to produce tangible improvements region-wide.
- Transit equity must be part of a larger concern for equity in transportation overall.

Governance – how development and transit decisions are made and not made – and public participation processes need to be re-calibrated towards equity.

- The people of Scarborough were not given all the facts (e.g. access points and walking distances to proposes stations) when the decision to extend the subway, rather than converting the line to LRT, was made.
- People should be able to determine how transit decisions will actually impact them (i.e. fact-based as opposed to perception).
- Many people aren't aware of how and where decisions are impacting them (e.g. Jane-Finch community and the extension of the Spadina Subway north to York University).
- Experts need to understand and communicate how the transit system is actually being used, and by whom (e.g. lower incomes and women are most likely to use buses, and the more affluent most likely to use rail).
- Institutional capacity in government for transit planning needs to be strengthened.
- Transit investment is political, so transit equity needs be expressed in a pragmatic way that can be measured and assessed.

The urban/suburban divide needs to be addressed, in order to more fully grasp and address transit equity

- Just because suburban communities (both the inner "416" and outer "905" rings) were not built around transit, this doesn't mean that people living there don't need it.
- There are many people who walk out of necessity (to work, to services) in communities that are not walkable (e.g. along sides of busy arterial roads with no sidewalks, and along sides of ditches).
- While suburbs are auto-oriented, current demographic and economic trends will mean that about only half of the adult population will have a driver's licence.
- There is no longer a "suburban paradise" people need three cars and three jobs.
- Artificial suburban/urban boundaries create breaks in service and in planning that exacerbate transit inequity.
- Municipal transit fare structures are inherently unfair in the suburbs: are higher compared to Toronto and extra fares are required when crossing municipal boundaries. This further penalizes lower income workers and students who cross into, and from, Toronto for work and school.
- Land use where development goes and for whom it's built has a significant impact on transit equity.



- Gentrification is a major, and increasing, barrier to equity: the neighbourhoods with the best transit are those that are the least affordable to those who could benefit the most from it.
- Residential choices for lower income people are typically limited to areas where the housing is affordable but transit options are few.
- The importance of employment cannot be overstated: people, especially in lower income communities in the inner suburbs, are travelling further and further to work.
- The jobs-housing imbalance is creating "commutes of constraint" rather than "commutes of choice" for lower income residents (including students).
- The majority of manufacturing jobs, the classical pool for employment of working class and immigrant people, are now outside of the city, and many people are not able to follow (due, in part, to availability of housing and transportation).
- The "last mile" is very important in creating equity how people arrive to and from home: the quality of the transit connection, the quality of the public realm, safety, sidewalks, bike lanes, etc.
- Fifteen of Toronto's 31 Neighbourhood Improvement Areas NIAs (formerly known as "Priority Neighbourhoods") have some level of transit improvements underway or planned (e.g. Finch LRT).
- A transit line nearby is only useful if it offers an access point to get on and leads to useful destinations.
- Equity needs to incorporate concerns for age-specific issues (both millennials and aging communities have specific transit needs).

Other suggested actions, to move towards creating transit equity:

- Incorporate equity as a core consideration in the Environmental Assessment process for transit projects make equity a part of the conversation.
- There needs to be a "social lens" to capital and service planning.
- Build equity goals into monitoring of transit operations.
- Create "new spaces" for public engagement and information-sharing, outside of or in addition to existing decision-making frameworks.
- Actively engage with different constituencies in the decision-making process: bring the poor, women, the physically disabled, etc. into the conversation to understand their experiences and needs.
- View transit as but one piece of the larger transportation system, and recognize that private services (e.g. carpooling, etc.) can also contribute to delivering equity.
- Building the capacity of activists working for transit equity is an important part in ensuring equity stays on the political agenda.

- Reliable and predictable funding for transit can help alleviate local competition for investment and encourage collaboration.
- Develop a future-oriented perspective that matches the opportunities of emerging lines to the needs of people in adjacent communities (e.g. Highway 7 is emerging as a major east-west transit axis but affordability in certain communities remains an issue).

FOR FURTHER INFORMATION

Visit the City Institute of York University (CITY) <u>website</u> to download a copy of the "Switching Tracks" report and to learn more about the work and findings of the Greater Toronto Suburban Working Group (GTSWG).

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4

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



INTRODUCTION

Background

Socio-spatial inequality in the Greater Toronto and Hamilton Area has been well documented (see, for example: Hulchanski 2010; Keil & Young 2008; Toronto Foundation 2013; and Young et.al. 2011). Decades of political decisions, in combination with market forces, often at work at scales beyond the urban region, have created structural inequalities evidenced by income disparity, social disinvestment, precarious labour, and people living in the physical and social margins, including the "in-between" spaces of the urbansuburban fringe. The Big Move recognizes that areas of social need exist, and that there is an uneven landscape when it comes to the distribution of the existing transit network. There is an explicit recognition that transit plays a role in helping to reduce social need. Missing in the Big Move, however, are goals and strategies to specifically address social need and vulnerable populations in the planning and delivery of transit.

Research Methods

One way to fill this gap is to investigate the needs of particular sites in the transit delivery area. We approached these site investigations – to get a snapshot of vulnerable or low-income neighbourhoods and the people who rely on transit in these areas – through four angles:

- A review of the literature and case studies related to vulnerable populations and neighbourhoods, as contained in the "Switching Tracks" discussion paper (See Tab 2).
- 2. An analysis of **neighbourhood-level economic and social data** (e.g. 2011 Census and 2011 Transportation Tomorrow Survey) to further describe indicators of social inequality in general, and transit equity in particular.
- 3. Visual **site analyses** to observe how transit is used, what clues the streetscape can offer to illustrate and identify signs of transit inequity, and to document visible barriers to transit.

4. **Interviews** with a large range and number of neighbourhood residents, municipal government experts and community organizers to gain an understanding of the lived experiences relating to transit inequity.

Site Selection

Sites were chosen as representative samples of neighbourhoods with physical, social, and economic characteristics indicative of vulnerable "inbetween" communities both within the City of Toronto and surrounding municipalities. Using a preliminary review of the demographic, economic and travel pattern data, a long list of sites was identified where comparable data was available, where transit existed 7-days-a-week and where transit investments were either built or under construction as part of the Big Move. We were interested, in particular, in identifying and reaching out to those groups of people – "different publics" – who are socially and economically disadvantaged, and who may be further disadvantaged by insufficient or a complete lack of transit service.

Summary

Isolation and invisibility might be the hardest concepts to consider in transit planning, precisely because of the need to find what cannot be seen. Someone who cannot access the support they need is made invisible and is left vulnerable to alienation and isolation. An accessible transit system gives a person freedom to more fully participate and engage with family and friends, the economy (i.e. work) and the community (i.e. services and amenities) in a way that provides greater social resilience.

To say that "the suburbs were designed for car drivers" is to ignore the complexity of places where, increasingly, changing social and economic conditions are giving rise to new and varied landscapes of mobility and access. There is a sociological side to car use. The physical environment in most suburban neighbourhoods gives an impression that society does not respect transit riders. Cars and drivers are granted prime spots while transit riders, cyclists and pedestrians are spatially and functionally marginalized. Transit stops and access spaces, for example, are often restricted to the

fringes of vast parking lots in commercial establishments such as malls, or in public amenities such as government offices. Convenient access for car drivers often means a long, circuitous route for pedestrians and transit users. Beyond the physical landscape, there is a degree of social pressure that owning a car is necessary for work, school and to accomplish daily chores. But owning a car brings costs to the individual, to the household and to society that degrade the quality of life for each.

Poverty, precarious employment and unemployment are prevalent, but are often invisible, in the suburban carscape. While better transit could very well serve as a social equalizer in this environment for vulnerable residents, the lack of transit options and limited availability contribute to precariousness. wTransit inequity, then, becomes yet another barrier to upgrading education, accessing affordable childcare, caring for family members, finding stable employment and building a strong social support network. Transit "trip chaining" – such as dropping off children at daycare before work – extend travel times and compound the effects of poorly coordinated and erratic transit. For some riders, and especially shift workers, limited hours of operation are an insurmountable barrier to taking transit.

Housing affordability, employment and transit – too often unattainable or disconnected – are converging issues that are forcing many vulnerable residents out of transit rich neighbourhoods, and into transit deserts because of housing costs. New Canadians, increasingly, are settling in areas with lower levels of transit service and with few employment options in the immediate neighbourhood. The new immigrant experience, once linked to the dense downtown arrival neighbourhoods of Toronto, is now associated with the transit deserts of the inner and outer suburbs. This simultaneously raises the association of car-ownership with belonging and limits options of integration for non-driving new immigrant community members. The lack of transit could therefore become a barrier to successful integration into Canadian life. The complexities of transit – schedules, fares and transfer policies – are especially difficult for individuals who struggle with Toronto's dominant and official language: English. Transit, rather than a help up, becomes an opaque obstruction to access that isolates, frustrates and impoverishes residents.

Recommendations

- Public consultations for proposed transit projects within areas of high social need should be more proactive and engaging to generate more inclusive and meaningful feedback. Approaches should include education-focused outreach far in advance of project initiation, and holding meetings in locations and at times easily accessible to most residents.
- 2. Transit planning should include an inventory and analysis of housing and retail/commercial opportunities and price points, and establish targets to maintain a healthy and accessible supply of affordable housing and retail spaces when a new transit line or services comes into operation. Development intensification nearest transit stations, for example, should not result in a net loss of affordable rents or the displacement of vulnerable residents.
- Improve the transit riders' experience through better customer service, more reliable operations, improved seating, and better coordination on transit connections and cross-boundary fares. While service frequency is important, the user experience is equally important for transit users with low incomes.
- 4. Promote residents' and users' knowledge and use of transit services and facilities through specific outreach materials and programs including open houses (e.g. Brampton Transit's "newcomers bus tour").
- 5. Better serve employment destinations, especially those trips made in off-peak hours, through a further analysis of origin-destination pairs including travel-to-work trips that begin and end outside of the Toronto downtown core.

Case Study I SCARBOROUGH VILLAGE

Description

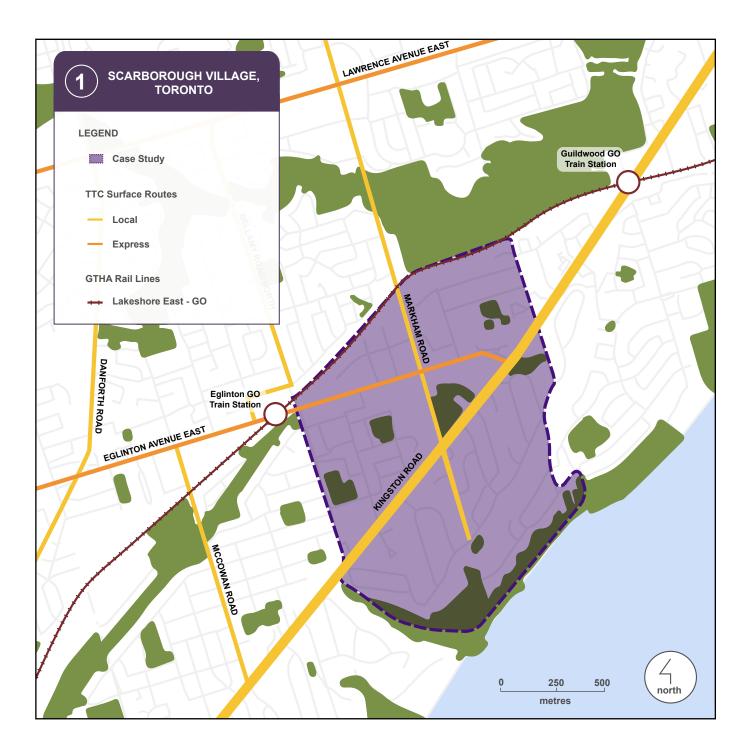
Scarborough Village is a neighbourhood in the City of Toronto, located in the former City of Scarborough. It straddles three city wards: Scarborough Southwest (36), Scarborough Centre (38), and Scarborough East (43). The Village's approximate boundaries take on a triangular shape bounded by Eglinton Avenue East, Markham Road and Kingston Road (formerly Provincial Highway No. 2). Eglinton Avenue East and Markham Roa are a part of, and strongly reflect, the centuries old rural concession grid which forms the "bone structure" of today's modern arterial street network. The former Grand Trunk Railway line, now owned by Metrolinx and used for GO Transit Lakeshore East trains, serves as the northern edge of the neighbourhood. Canadian National Railways (CN), successor to the Grand Trunk Railway, maintains operation rights for local freight service.

The neighborhood saw urban development primarily between the late 1950s and to the 1970s. Eglinton Avenue East and Kingston Road serve as the old "main street" of the neighbourhood, with strip plazas and small highway commercial sites. A Walmart Superstore on Eglinton Avenue East, west of Markham Road, and Markington Plaza on the southeast corner of Eglinton Avenue East and Markham Road, anchored by a Metro supermarket, are the largest commercial nodes. Residential high-rise apartment buildings are the predominant form of housing, comprising 69% of the local housing stock. The highest densities, punctuated by apartment blocks, are concentrated along the frontages of Markham Road, Kingston Road and Eglinton Avenue East. Low density housing, comprised of mostly detached and semi-detached stock, are the predominant built form on lands further away from the main streets.

The neighbourhood appears to have a high degree of community needs, with a Canadian Red Cross drop-in centre, a food- and clothing-bank, harm reduction services, and a public nurse among its supports. There are immigrant settlement services and employment support services as well.

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



Demographics

The population of the neighbourhood was 16,610 in 2011. It grew by 6.5% from 2006. That is higher than Toronto's growth of 4.4% in the same period. This is a young neighbourhood, with a higher proportion of children and youth, and fewer seniors, than the Toronto average. There is a much higher rate of single-parent families at 29.9%, compared to the city average of 21.3%.

A very high proportion – 70% – of neighbourhood residents belong to a visible minority group, and 41% of residents were born in Canada. Languages other the English and French – Canada's official languages – are spoken by 30% of residents at home.

There is a high level of unemployment – 14% of residents – in the neighbourhood, and 33% of residents are below the Statistics Canada Low Income Cut Off After Tax (LIM-AT). There are 922 occupied social housing units in the neighbourhood and 683 people remain on the waiting list.

Travel

Toronto Transit Commission (TTC) bus routes 9, 86, 102 and 116 provide local service. Route 198 provides express service between University of Toronto Scarborough and Kennedy Subway Station. Routes 86 and 116 are trunk routes on the TTC's frequent service network, connecting Scarborough Village to Kennedy Subway Station. Route 334 provides overnight service to the area along Eglinton Avenue East and Kingston Road.

GO Transit Lakeshore East trains, along with VIA Rail intercity passenger service, are available in the neighbourhood. There are GO stations on the west and east end of the neighborhood, at Eglinton Avenue East and Bellamy Road (Eglinton) and at Kingston Road and Livingston Road (Guildwood). VIA trains stop at Guildwood Station. Most Scarborough Village residents live within a 20 minute walk to their nearest station. GO Train service runs 7-days-a-week, which was recently improved to 30-minute frequencies on weekends.

The wide range and frequency of transit options in the neighbourhood contribute to a transit modal share that is comparable to the city as a whole. However, a distinct pattern is evident when comparing top trip destinations between transit riders and private vehicle users. Transit is a preferred mode to commute to downtown, with Trinity Spadina (Ward 20), and Toronto Centre Rosedale (Wards 27 and 28) as the top three destinations by ward via transit. The top destinations via private vehicle by ward are the neighbouring wards of Scarborough Southwest (35), Toronto Beaches (32) and Scarborough Centre (37 & 38).

Stories

Cobbling together trips "often called "trip chaining" – is an important skill for transit riders make an otherwise impossible trip possible. But the transit system in the GTHA is not always conducive to making multiple

"A lot of depending on people for rides"

- Scarborough East resident

Neighbourhood Population and Travel Profile

Scarborough Village City of Toronto Population (2011) 16610 2615070 Change (2006-2011) 1015 6.5% 111800 4.4% Children (0-14 % of Population) 3485 21.0% 400860 15.3% Youth (15-24 % of Population) 2455 14.8% 333510 12.8% Senior (65+ % of Population) 2025 12.2% 377440 14.4% Families (All census types) 4325 690340 5 5 Single Parent Families 12295 29.9% 146985 21.3% Density (people/km ²) 5358 4079 0 047885 Detached & Semi-Detached- 1125 19% 347415 33% Row & Duplex 355 6% 103865 16% Apartment (Under 5 Storeys) 365 6% 163865 16% Social Housing Waiting List 683 57442 76% 5% Transit Mode Share (24h) 23% 24% 35% 77442 33% 19% 10%	-			.	
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-	Immigrated between 2001-2005		12%		8%
Visible Minority 70% 49%	Immigrated between 2006-2011		11%		8%
	Visible Minority		70%		49%

Data Sources: City of Toronto, Statistics Canada, Transportation Tomorrow Survey

trips in a timely manner. Parents with young children, seniors with mobility aids, persons with disabilities and low-income riders are particularly disadvantaged by over-crowded vehicles, poorly-coordinated transfer points, poor accessibility between transfer points, having to pay multiple fares and a lack of coordination in land use to support multiple transit trips. An invisible transit network is developed by leaning on friends and family to get around and take care of errands. But it takes a toll. Relying on friends and family to run errands, to take part in cultural and religious events, and even to spend time with family has costs. It is stressful and frays social bonds. And not everyone has a social network that can step in to provide accessibility for disadvantaged riders.

"Yeah, I feel excluded. I have a nephew. He turned one in June. My mom had gone out of town and I was dog-sitting, so I had the car. I thought 'wouldn't it be cool to go visit my nephew.' So I call my brother and asked if it was OK, and I hadn't made mention of having access to a car but I also didn't ask him to come pick me up or make arrangements to meet me at wherever. I just figured he'd think I'd come for a visit, or whatever. He called me back saying he didn't think it would work, his wife was tired. I was a little put off by it. He was always like 'you have an open invitation.' I was talking to my sister about it. We chatted, and at the end she's like 'did he even know you had a car?' I said 'no, I didn't mention it'. She said it's probably why. He didn't know you were able to get there on your own. I'll be quite frank, it has really left a bitter taste in my mouth."

- Scarborough East resident

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



Figure 1: Canadian Red Cross community hub on Markham Road north of Eglinton Avenue East. Its goal is to reduce social isolation and build community resiliency. Some services it provides includes settlement housing services, harm reduction support, general nurse care, a drop-in centre, and a food and clothing bank.



Figure 2: Eglinton Avenue East looking east from Markham Road. The neighbourhood has access to good bus service north to Markham, west to Kennedy Subway Station and north east to Malvern via Meadowvale Road.



Figure 3: Eglinton Avenue East, looking west at Cedar Drive. Wide roads and long gaps between pedestrian crossings make for a hostile pedestrian environment.

Someone living without transit when they need it leaves them vulnerable to alienation and isolation from their support networks. A harm reduction clinic or a public health nurse are only as helpful as they are accessible to those that need them.. But in a broader sense, an accessible transit system gives the freedom to participate and engage with family, friends and the community in a way that provides greater social resilience.

"[With a car] I'm able to pick up my grandmother. Being able to be there for her if she needs anything. Even this Thanksgiving, having that extra day off and being able to visit my sister, which just wouldn't have happened. It would take more than two hours. She's in Vaughan, and I don't even know the schedules of the buses there."

- Scarborough East resident

Considering the wide range of transit options available in the neighbourhood and the level of poverty and unemployment, it is perhaps surprising that the transit modal share is not higher. Downtown Toronto with the higher costs of parking and the perceptions of severe, chronic congestion make car use less attractive, while the high numbers of commuters make transit more socially acceptable. However, there is a degree of social pressure that owning a car is necessary to accomplish daily chores closer to home. The car also symbolizes a freedom to find opportunities for work and engage in the social and cultural life of the city. But freedom of mobility is often exchanged for the yoke of financial obligations a car brings. It is a very expensive way to travel. Aside from the direct financial hit of car payments, insurance, gas, licencing, maintenance and parking, there are additional negative financial pressures as a household's disposable income is drained to support the car and unavailable for other uses. Costs are also born by society through congestion, pollution, and a myriad of interconnected secondary impacts.

"Not having a car afforded me to do things I otherwise couldn't afford to do, like being able to enrol my daughter in extracurricular things."

- Scarborough East resident



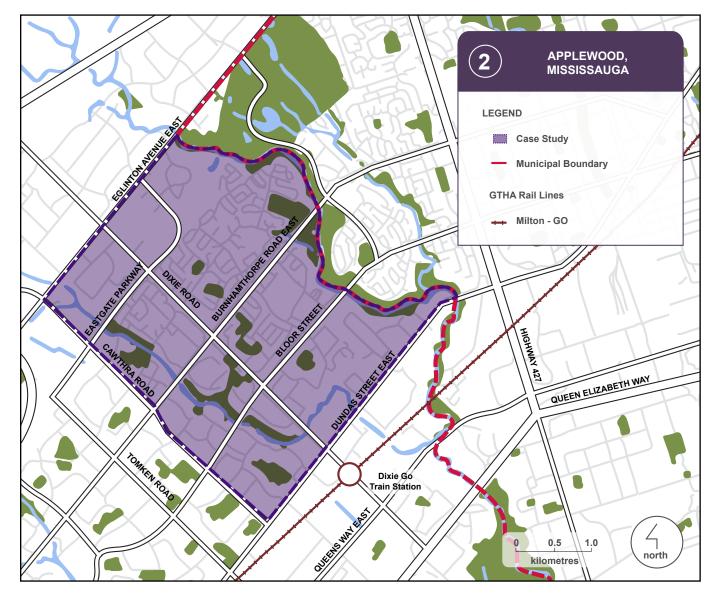
Description

Applewood covers the area bounded by Dundas Street East on the south, Cawthra Road on the west, Eglinton Avenue East on the North, and the Mississauga city limits along the Etobicoke Creek on the east. Prior to urbanization, the area was home to the village of Burnhamthorpe, at the interection of Burnhamthorpe Road East and Dixie Road, and the village of Dixie, at Dundas Street East and Dixie Road. Farms were established in the early 1850s and survived until the 1960s. Applewood was the generic name for the various residential developments phases built by the Shipp Corporation in the east part of Mississauga, south of Burnhamthorpe Road East and east of Cawthra Road. The first Applewood – Applewood Acres – was built in the mid-1950s in the area between The Queensway East and Queen Elizabeth Way east of Cawthra Road. As a condition of financing the initial development, the lender "insisted all the homes be built with attached garages, 'because anybody who would live way out there was certainly going to need a car'," (Brennan, 2012).

The neighbourhood called Applewood today was developed as Applewood Heights and Applewood Hills, beginning in 1967. Most of the "greenfield" development was completed by the early 1980s, although the "Applewood Landmark" highrise condominiums on Bloor Street East were built in the 1990s. The area north of Burnhamthorpe Road was developed as Rathwood, combining Applewood with Rathburn Road.

Rockwood Mall, on the east side of Dixie Road at Burnhamthorpe Road East is the largest retail site, but the neighbourhood has a number of small neighbourhood plazas in the residential areas off the main streets. Dixie Road serves as a north-south retail corridor through Applewood. Dundas Street East, formerly Highway 5, is a major commercial and industrial corridor for the City of Mississauga. All commercial sites feature a large number of parking spaces. There are no continuous street front commercial rows, just a series of small buildings and larger plazas, each set well back from the street and situated behind parking lots.

There are a range of housing types and ages. There are a few structures that date back to the pre-urbanization period but most date from 1966 to 1986. A number of newer infill projects have been constructed along Rathburn Road East and Bloor Street East. Detached and semi-detached housing, and units in apartment buildings each comprise about 40% of dwellings in the neighbourhood.



Demographics

Applewood had a population in 2011 of 59,840. It was an increase of 355 people from 2006. Children and youth are slightly underrepresented compared to Mississauga as a whole. There are 50% more seniors, proportionately, at 10.9%. Renters comprise 46% of households.

Employment levels in Applewood are comparable to the GHTA. Low income households account for 11% of residents. It is a similar level to the City of Mississauga as a whole, but just over half the level reported in the City of Toronto. Education levels are similar to the Mississauga average, but persons with a post-secondary diploma or degree are notably higher in Toronto.

43% of residents were born in Canada. Most immigrants living in Applewood came before 2001. Visible minority persons comprise 40% of the population.

Travel

Mississauga did not have a transit service until 1969, although the TTC operated bus services to Toronto on Lakeshore Road from Port Credit and from Malton on Airport Road. The Mississauga Transitway, still under construction with sections open for service, runs parallel to Highway 403 and Eastgate Parkway along the north side of the neighbourhood. It will be a completely separated bus-rapid-transit corridor crossing the entire east-west length of Mississauga once completed. There are stops at Cawthra Road, Tomken Road and Dixie Road. Future stops are under construction at Tahoe Boulevard and Creekbank Road. Two express routes, branded MiExpress, currently use the Transitway Monday to Saturday. MiWay (as the Mississauga's transit system is branded) carried a record level of 35.8 million rides in 2013). Route 107 connects to Mississauga City Centre and Malton through Pearson International Airport. Route 109 connects Meadowvale in the northwest corner of Mississauga. Route 185 is a limited service express route jointly operated by Mississauga and Brampton, connecting Dixie Transitway Station with Bramalea Transit Terminal, in Brampton. Local routes are branded MiLocal. Routes 3, 20, 26, and 76 travel east-west through Applewood between Mississauga City Centre and Islington Subway Station. Routes 5 and 51 are north-south routes through the area. Routes 3, 5, 20 and 26 are the routes with the highest frequency and operate 7-days-a-week. The GO Transit Milton line runs to the south of Applewood. Dixie GO Station is on Dixie Road, south of Dundas Street East.

Transit connections to the TTC Islington Subway Station in Toronto take approximately 20 minutes from Dixie Road. It is also about 20 minutes to Mississauga City Centre Terminal. In spite of the number of high frequency routes, transit modal share for Applewood is only 13%. It is above the Mississauga average of 11%, but significantly lower than the share in Mount Olive and Scarborough Village which are also 20-30 minutes from the TTC subway. Transit is a popular way to get to downtown Toronto, with Toronto Centre Rosedale (Wards 27 and 28) and Trinity Spadina (Ward 20), as positions one, three and four of the top four GTHA destinations by ward via transit. The second most popular destination is Mississauga Ward 4, home to Mississauga City Centre – an area with a limited supply of costly parking. A private vehicle (either as a driver or a passenger) is the preferred mode to travel around Applewood and connect to nearby neighbourhoods, which is quite understandable considering the entire area was designed around having a car in every garage.

Neighbourhood Population and Travel Profile

	Applewood-Rathwood		City of Mississauga	
Population (2011)	59840		713450	
Change (2006-2011)				
Children (0-14 % of Population)	9665	16.2%	128125	18.0%
Youth (15-24 % of Population)	6865	11.5%	94240	13.2%
Senior (65+ % of Population)	6505	10.9%	54790	7.7%
Families (All census types)	17140		199380	
Single Parent Families	3160	18.4%	32780	16.4%
Density (people/km ²)	3616		2448	
Dwellings	17425		234585	
Detached & Semi-Detached	6880	39%	118150	50%
Row & Duplex	2390	14%	40635	17%
Apartment (5 Storeys & Above)	7110	41%	58820	25%
Apartment (Under 5 Storeys)	1040	6%	16595	7%
Renting (2006)	8030	46%	58875	25%
Spending more than 30% on Occupancy	6855	32%	71920	31%
Transportation				
Transit Mode Share (24h)		13%		11%
Walking and Cycling Mode Share (24h)		5%		5%
Unemployed		10%		10%
Low Income (LIM-AT)		11%		12%
Education				
Post-Secondary		50%		51%
High School		30%		29%
No Certificate		20%		20%
Immigration & Language				
Non-Official Language Spoken at Home		33%		27%
Born in Canada		43%		46%
Immigrated before 2001		38%		34%
Immigrated between 2001-2005		9%		10%
Immigrated between 2006-2011		9%		8%
Visible Minority		40%		53%

Data Sources: City of Mississauga, Region of Peel, Statistics Canada, Transportation Tomorrow Survey

Stories

Transit service, even when the vehicles come frequently, is often much slower than driving a car can be. But outside of the City of Toronto, there are usually much lower frequencies. Chaining trips together is very difficult when longer distances are compounded by typically lower frequencies of service, especially when transfers add additional delays.

For some riders, like shift workers, limited hours of operation are an insurmountable barrier. If one part of the trip must happen when the bus is unavailable, the whole trip is impossible by transit.

"I remember (a specific person), she used to work here. It's literally a 15-20 minute max (trip by car) to get there. She didn't have a car, and she had to take three buses from here to there. Two hours for her, one way. In summer we had summer hours where on Fridays we could leave at one (p.m.). On Fridays at one (p.m.) everyone is rushing to leave, and she was sitting in the lunch room having a sandwich, and I said to her 'what are you doing?' She said, 'Well, I'm having my sandwich because my bus is coming at suchand-such a time and it will take me two hours to get home. I'll get hungry'. We are free - we can go. She was stuck, and that's how she had to plan it."

- Peel Region community leader in the non-profit sector

"YOU CAN'T GET THERE FROM HERE": Neighbourhood narratives of transit inequity



Figure 4: Behind Rockwood Mall on Bough Beeches Boulevard. Pedestrian access leading to the apartments and seniors residences is very poor, and visibly improvised by residents.



Figure 5: Bloor Street, east of Dixie Road. Poor pedestrian access from High Point Mall.



Figure 6: Burnhamthorpe Road East, looking west at Dixie Road. Good transit connections to Mississauga City Centre and Islington Subway Station. Fewer north-south connections to the airport employment areas.

"If you don't have a car in some spaces in Peel (Region) you're done. It's not like Toronto where you can jump on the subway and be at Yonge and Bloor from Broadview and Danforth in 20 minutes. You can't get on a bus on Hurontario in Mississauga and get to the north of Brampton in 20 minutes. It's a barrier - not intentional - that prohibits real community interaction."

- Peel Region community leader in the non-profit sector

People who depend on transit live their lives on a completely different clock compared to people with easy access to a car. What can be a quick 10- minute trip in a car can easily become an hour-long trip by transit. The outer parts of the urban region have been planned over the past 50 years for someone having a car, and there was little effort to consider how important living and working destinations would ever be connected in any other way. A car is granted a prime spot right outside the shop door, while a pedestrian is often not even granted a dedicated, paved walkway. Transit riders are left on the fringe of vast parking lots. Winter weather compounds the inaccessibility. Snow is usually cleared from roads and parking lots quickly. Sidewalks and street crossings are blocked until the main roads are cleared, putting transit riders obviously below car drivers. In-between spaces used by pedestrians and transit riders become impenetrable behind windrows and snow mounds, sometimes for months until the spring thaw turns them into muddy and slushy messes.



Description

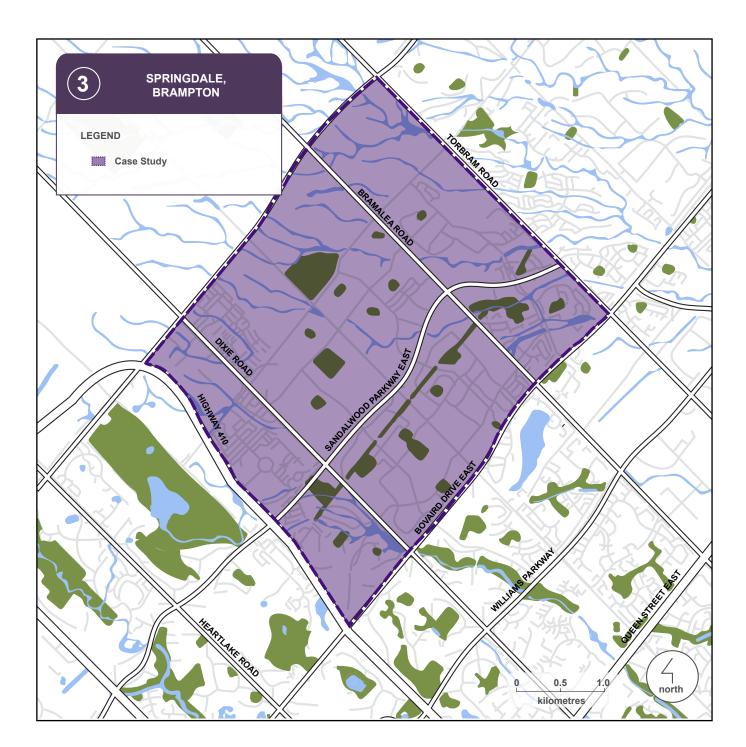
Springdale is designed as a "master-planned" community on a 1,600 ha site comprised of former tracts of agricultural land. Construction began in the early 1990s. Construction is not yet complete, with the northern portion along Countryside Drive still undeveloped. Highway 410 runs in a north-south direction along the western edge of the community. It is bounded by Highway 410, Bovaird Drive East on the south, Torbram Road on the east and the Brampton city limits along Mayfield Road on the north.

There are no industrial sites. The neighbourhood was agricultural until the 1990s. Brampton Civic Hospital is at the corner of Bramalea Road and Bovaird Drive, and there are medical and professional office facilities nearby. There are no high-rise apartments. The housing is predominantly - 79% - detached or semi-detached dwellings, and the remainder of the housing stock is a mix of row housing and other groundrelated forms. There are no subsidized housing units in Springdale. Springdale's density of 3,614 persons/km2 is significantly higher than one could expect for a seemingly – on the outside – low density community. This is especially surprising, given that there are still large tracts of vacant land yet to be developed north of Countryside Drive.

Trinity Common Mall is a large-format or "big-box" retail centre in the southwest corner of Springdale, at Highway 410 and Bovaird Drive East. There are small plazas along Dixie Road and Bramalea Road. None are situated conveniently for pedestrian access, being set back from the road and separated by large parking lots. Each commercial lot abuts a residential street, but are physically disconnected from the surrounding residential area. . Convenient access for car drivers often means a long, circuitous route for pedestrians and transit riders. Trinity Common Mall has a bus terminal, but most of the bus routes in the neighbourhood do not serve the mall, meaning area residents are forced to take two buses.

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



Demographics

In 2011, Springdale had a population of 58,360. It has grown by 37% since 2006. It is a very youthful area, with 24% of the population being 14 or younger. Only 5% are seniors.

The community has a very high proportion of New Canadians: 60% of Springdale residents immigrated to Canada. Of those, nearly a quarter arrived here in within the past 10 years. Overall, 85% of Springdale residents identify as belonging to a visible minority group. This is much higher than the City of Brampton as a whole, although Brampton is becoming an increasingly a popular settlement location for newcomers. National retailers are adapting to serve the needs of New Canadians (see http://chalofreshco.com/, a Sobeys discount chain tailored for desis).

Springdale has a slightly higher employment rate than the national average, at 10%, and 11% of Springdale households are low-income. Renters comprise 9.2% of the neighbourhood households, and 34.5% of households report spending in excess of 30% of their income on housing.

Travel

Express bus service in Brampton is separately branded as Züm with red livery. It is designed to incorporate some elements of a dedicated bus rapid transit (BRT) line, such as protected queue-jumping lanes and priority signalling, but without a completely separated right-of-way. Route 505 provides express service along the south edge of Springdale, connecting Mount Pleasant GO Station in the west and Queen Street East and Goreway Drive in the East. From there, riders can take route 501 eastward to York University in Toronto.

Local routes 5, 12, 14, 15, 17, 18, 19, 23, 32 and 33 serve the neighbourhood. Core service is found on each of the arterial roads which follow the former rural concession roads. Routes 14, 15 and 18 each connect Springdale south to the Bramalea Transit Terminal, and these routes continue southward to Mississauga. Trinity Common Terminal, in Trinity Common Mall, provides a transfer point between the three east-west routes: 5, 23 and 505. There are also limited GO Bus connections to Toronto.

In spite of the large number of connections, the transit modal share is 8%. It is comparable to the City of Brampton as a whole but below the modal share of neighbouring Mississauga. The top destinations by ward via transit are the Bramalea industrial areas in Brampton Ward 8, downtown Toronto in Toronto Centre-Rosedale (Ward 27), York West (Ward 8) - home to York University, Mississauga Ward 5 - home to the Airport Corporate Centre and industrial areas, and Toronto Centre-Rosedale (Ward 28).

The top destinations for car drivers by ward each contain large industrial areas: Brampton Ward 10 (Goreway Drive/Highway 407), Brampton ward 8 (Bramalea), Mississauga ward 5 (Airport), Brampton Ward 7 (Fiat-Chrysler) and Brampton Ward 3 (Steeles Avenue/ Highway 410). Transit service to industrial areas often has the lowest frequencies and limited hours of operation, which may keep transit from being a practical travel option.

Neighbourhood Population and Travel Profile

	Springdal	e	City of Brar	mpton
Population (2011)	58,360		523,910	
Change (2006-2011)	15,830	37.2%	111,800	27.1%
Children (0-14 % of Population)	14,035	24.0%	113,400	21.6%
Youth (15-24 % of Population)	7,425	12.7%	66,080	12.6%
Senior (65+ % of Population)	3,015	5.2%	31,945	6.1%
Families (All census types)	15,930		145,350	
Single Parent Families	2,065	13.0%	25,050	17.2%
Density (km²)	3,614	1	,945	
Dwellings	14,155		149,275	
Detached & Semi-Detached	11,190	79.1%	99,125	66.4%
Row & Duplex	2,690	19.0%	26,185	17.5%
Apartment (5 Storeys & Above)	0	0.0%	17,005	11.4%
Apartment (Under 5 Storeys)	255	1.8%	6,805	4.6%
Social Housing Units	0			
Social Housing Waiting List				
Renting (2006)	1,300	9.2%	27,255	18.3%
Spending more than 30% on Occupancy	4,880	34.5%	48,515	32.5%
Transportation				
Transit Mode Share (24h)		8.0%		8.0%
Walking and Cycling Mode Share (24h)		6.0%		5.0%
Unemployed		10%		10%
Low Income (LIM-AT)		11%		12%
Education				
Post-Secondary		50%		51%
High School		30%		29%
No Certificate		20%		20%
Immigration & Language				
Non-Official Language Spoken at Home		39%		27%
Born in Canada		40%		48%
Immigrated before 2001		38%		33%
Immigrated between 2001-2005		12%		9%
Immigrated between 2006-2011		9%		8%
Visible Minority		85%		66%

Data Sources: City of Brampton, Region of Peel, Statistics Canada, Transportation Tomorrow Survey

Stories

Isolation and invisibility might be the hardest concepts to consider in transit planning, precisely because of the need to find what cannot be seen. The rapid growth in Springdale has led to some intense growing pains. For instance, there are very few social services available, subsidized housing is unavailable, and employment opportunities in the immediate area are few. Accessing these important things requires long trips for Springdale residents – so long that inaccessibility is becoming a growing concern.

Social supports only truly exist when they are accessible. Someone who cannot access the support they need is made invisible by not being at the door knocking for help. Isolation comes from invisibility. How do we include all members of society when they cannot engage with the community?

"We had our holiday party way down in Port Credit. The young woman never actually made it on the bus. It was mid-December. She was coming from north Brampton. Like hours. She finally just gave up and turned around after maybe two and a half or three hours."

- Peel Region community leader in the non-profit sector

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



Figure 7: Looking west from Great Lakes Drive north of Bovaird Drive.



Figure 8: Trinity Common Brampton is a regional, large format shopping centre. There are good bus connections in the neighbourhood, including Brampton Transit express buses and GO Transit connections to Toronto.



Figure 9: Sandalwood Parkway East, looking west towards Dixie Road. Very few destinations are walkable at a neighbourhood scale.

"If you overdevelop outward and avoid the opportunity to intensify (development, such as housing), then you actually create the problems that we're talking about - where people are living in areas that no longer have the things to support them, like public transportation. Then, they become socially isolated."

- Social service provider staff

"There are some (Ontario Works government assistance) clients who aren't able to accept a job offer because they have young children and they can't access childcare. Just because a subsidy is available, if it's located in a place where a family doesn't have a car and you have to navigate two buses in order to get to that centre, is it truly accessible?"

- Social service provider staff



Description

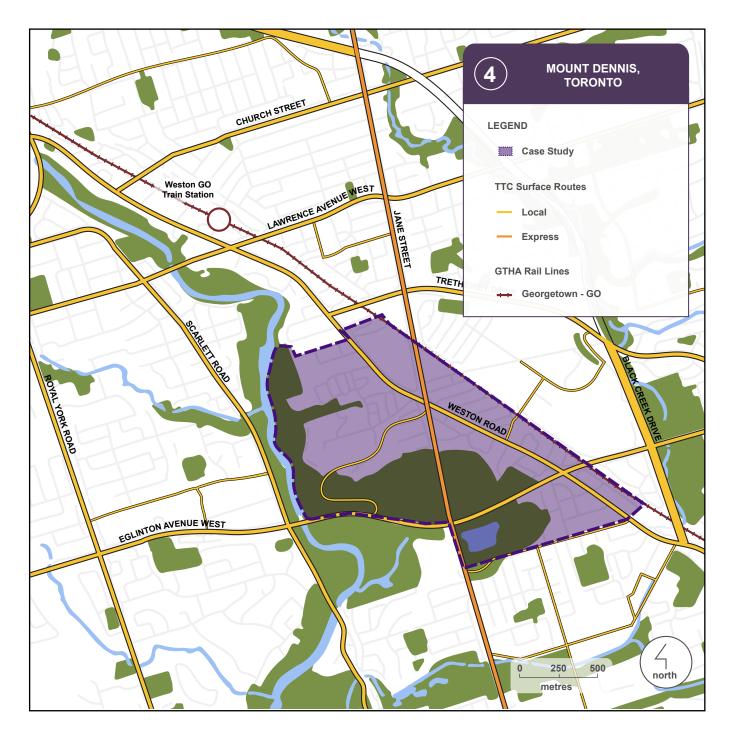
Mount Dennis is located in Toronto in the former City of York. The Humber River valley on the west and the rail corridor on the east effectively restrict Mount Dennis to approximately 500 meters on either side of Weston Road. The main intersection is Weston Road and Eglinton Avenue West.

Transportation has played a long and important role in the history of Mount Dennis. Weston Road, the "main street" through the neighbourhood originated as a Huron-Wendat trail – the "Carrying Place Trail" – prior to European contact. By the mid-17th century, the trail became a key transportation route for the Mississaugas of the New Credit First Nation (MNCFN) between Georgian Bay, Lake Simcoe and Lake Ontario. The land covering the watershed of the Humber River was purchased by the Crown in 1787. A subsequent purchase in 1805 intended to clarify the details of the 1787 transaction was contested. It was subject to a land claim regarding fair compensation by the MNCFN, settled in 2010.

The Trail was first surveyed in 1785. It was widened and opened as a road in 1811. It became a plank toll road in 1841 connecting Toronto with the agricultural communities to the northwest, including what is now Mount Olive-Silverstone-Jamestown. In 1856, the former Grand Trunk opened its main line to Sarnia parallel to the Trail. The line is now owned by Metrolinx and used for GO Transit Kitchener and Union-Pearson Express trains. VIA Rail Canada operates daily intercity trains along the line but they do not stop in the neighbourhood. CN maintains operation rights for local freight service.

The Eastman Kodak Company of Canada (Kodak) established its Canadian manufacturing and office headquarters in Mount Dennis in 1911. The facility closed in 2005. The site is slated to be home to the Eglinton Crosstown maintenance and storage facility. The former employees' recreation building, Building 9, has been retained as a historical structure and will be incorporated into Mount Dennis Station, the western terminus of the Eglinton Crosstown line.

The long history of industrial manufacturing in Mount Dennis continues to the present. The large Irving Tissue complex on Weston Road north of Jane Street produces Royale paper products. However, there is evidence that manufacturing in the area is in a steady



decline, with a number of vacant and underused sites, the largest being the Kodak site. Another large employer is West Park Healthcare Centre. It opened in 1904 as the Toronto Free Hospital for Consumptive Poor on the plateau above Eglinton Flats west of Weston Road. It specializes in long-term care, complex care and rehabilitation. It remains Ontario's only hospital with in-patient tuberculosis care.

As expected there is a mix of age and styles of housing, considering the long history of Mount Dennis and changing land use patterns over the past century. The housing stock, generally, varies from pre-WWII housing to more recent "urban infill" projects. There are a number of apartment blocks dating from the 1960s. Weston Road exhibits continuous, block-long rows of low-rise commercial buildings with upper apartments on both sides of the street, familiar in older parts of the City of Toronto. Detached and semi-detached housing comprise 25% of the housing stock. Apartments make up 63%. Nearly half of all households are renters. The mix of housing and the share of renters is largely representative City of Toronto averages.

Demographics

Mount Dennis had a population of 13,140 in 2011 – up only 320 people from 2006. People who identify as belonging to a visible minority group compromise 64% of the Mount Dennis population, compared to 49% city-wide. About 59% of residents immigrated to Canada, however, the vast majority arrived before 2001. There are slightly higher numbers of children and youth compared to the Toronto average. However, there are many more single family households, comprising 36% of all households with children, compared to 21% for Toronto. While there are 2,455 children aged 14 years and under, there are only 185 licenced and subsidized childcare spaces in the neighbourhood.

There is a substantial low-income population in Mount Dennis, with 24% of households meeting the threshold for Statistics Canada's low income cut off. Unemployment is about 50% higher in Mount Dennis compared to the city as a whole – 14% versus 9%, respectively. Approximately 45% of households report spending more than 30% of their income on housing. There are 864 units of social housing, representing 18% of household dwellings. There are 545 households on the waiting list.

Attaining education credentials appears to be a challenge in Mount Dennis. Only 50% of residents in Mount Dennis report having a post-secondary diploma or degree, compared to 69% for Toronto. This could place the neighbourhood at a distinct disadvantage for finding stable employment in a post-industrial economy, which is further compounded by transportation options and access to other important services

Travel

Mount Dennis is served by localTTC bus routes 32, 35, 71, 89, 161 and 171. There are no routes within the neighbourhood that are part of the 10-minute frequent service network. However, Weston Road, Jane Street and Eglinton Avenue West form the core trunk routes of the neighbourhood and each connects to the subway network. The express route 195 Jane Rocket connects Jane Subway Station with York University. Routes connect to the Keele, Dundas West and Eglinton West subway stations.

Neighbourhood Population and Travel Profile

	Mount Dennis		City of Toronto	
Population (2011)	13,140		2,615,070	
Change (2006-2011)	320	2.4%	111,800	4.4%
Children (0-14 % of Population)	2,455	18.7%	400,860	15.3%
Youth (15-24 % of Population)	1,865	14.2%	333,510	12.8%
Senior (65+ % of Population)	1,515	11.5%	377,440	14.4%
Families (All census types)	3,425		690,340	
Single Parent Families	1,250	36.5%	146,985	21.3%
Density (km ²)	6,230		4,079	
Dwellings	4,865		1,047,885	
Detached & Semi-Detached	1,215	25%	347,415	33%
Row & Duplex	590	12%	105,035	10%
Apartment (5 Storeys & Above)	2,025	42%	429,225	41%
Apartment (Under 5 Storeys)	1,035	21%	163,865	16%
Social Housing Units	864		92,113	
Social Housing Waiting List	545		57,442	
Renting (2006)		48%		45%
Spending more than 30% on Occupancy		45%		35%
Transportation				
Transit Mode Share (24h)		28%		24%
Walking and Cycling Mode Share (24h)		6%		9%
Transit Stops	59		9,969	
Pedestrian Collisions (2009-2011)	59		24,438	
Median Household Income	43,790		52,149	
Unemployed		14%		9%
Low Income (LIM-AT)		24%		19%
Education				
Post-Secondary		50%		69%
High School		27%		21%
No Certificate		23%		11%
Immigration & Language				
Non-Official Language Spoken at Home		32%		28%
Born in Canada		41%		49%
Immigrated before 2001		38%		33%
Immigrated between 2001-2005		9%		8%
Immigrated between 2006-2011		9%		8%
Visible Minority		64%		49%



Data Sources: City of Toronto, Statistics Canada, and Transportation Tomorrow Survey

Figure 10: Rail overpass at Eglinton Avenue West, looking west. The Union-Pearson Express may stop here in the future with an interchange to the Eglinton Crosstown line.

It takes approximately 20 minutes by the posted schedules to reach each subway station from Mount Dennis, although Eglinton Crosstown LRT construction can produce long delays, particularly along Eglinton Avenue West. The 32 Eglinton route connects Weston Road and Eglinton Avenue West with the Airport Corporate Centre in Mississauga in about 30 minutes. There will be a connection with the Mississauga Transitway at Renforth Gateway Station, opening in 2017. TTC routes 332 and 335 provide overnight service along Eglinton Avenue West and Jane Street, respectively.

With a 28% transit modal share, Mount Dennis has one of the highest transit usage rates in the GTHA for a neighbourhood not on the existing subway or streetcar network. A walking and cycling mode share of 6%, lower than the Toronto rate, can be considered in part as a product of the neighbourhood's physical isolation (i.e. bounded by a river valley and rail corridor) and the challenging topography surrounding the neighbourhood. Together, these attributes produce long gaps between street and pedestrian crossings to destinations outside of the neighbourhood, and pedestrian amenities – including sidewalks – are lacking.

The Union-Pearson (UP) Express line and GO Transit Kitchener line run through the neighbourhood but do not presently stop in it. A UP and GO connection is expected as part of the future Mount Dennis Station on the Eglinton Crosstown, projected for 2021. The station will be located on Eglinton Avenue West, on the east side of the rail corridor opposite. While the Crosstown project has the potential to transform transit travel patterns for neighbourhood residents by providing quick connections along Eglinton Avenue to Kennedy Road and provide a local connection the regional rail network, the pedestrian connections to the station will be vital to ensuring the station is truly accessible. Furthermore, Phase I of the Crosstown line leaves a gap in the transit network. Phase 2 would provide a direct connection to the large employment areas around the airport and the Mississauga Transitway.

Story

Despite the large number of transit options currently available, and those under construction or planned, Mount Dennis experiences a number of social challenges. These include high numbers of unemployment, poverty, education attainment, and a lack of affordable housing choices. Transit accessibility to jobs in downtown Toronto or in the Airport Corporate Centre, which is the second largest employment node in the GTHA, is good. However, this does not translate to employment for Mount Dennis residents without a secondary school diploma. The high number of single-parent households make childcare critical, yet there are only three facilities offering subsidized spaces in the neighbourhood. Transit equity is vital for ensuring that residents are able to access opportunities, but there must be a concerted effort to address other factors contributing to social inequities.

Without a concerted, comprehensive approach to reducing inequity in Mount Dennis, improved transit accessibility may actually harm the existing residents. Vacant land, relatively low land prices, demand for new residential units in the City of Toronto and the attractiveness of existing and future transit connections in Mount Dennis are likely to put upward pressure on already untenable housing costs. Low income residents could face displacement without active intervention to support the existing vulnerable population. Displacement would tragically deny them the accessibility needed to help reduce the disadvantages already faced in Mount Dennis.

"YOU CAN'T GET THERE FROM HERE": Neighbourhood narratives of transit inequity



Figure 11: Future Mount Dennis Station on the Eglinton Crosstown line is a former Kodak employees' recreation centre.



Figure 12: Jane Street looking south towards Eglinton Avenue West. The Eglinton Flats straddling the Humber River make accessing Mount Dennis challenging when not using a car. There is good bus service along Jane and Eglinton, but transfers are made in the valley with no amenities or services nearby. Figure 13: Weston Road and Eglinton



Avenue West. Weston Road is the "Main Street" of the neighbourhood.

Case Study 5

MOUNT OLIVE-SILVERSTONE-JAMESTOWN

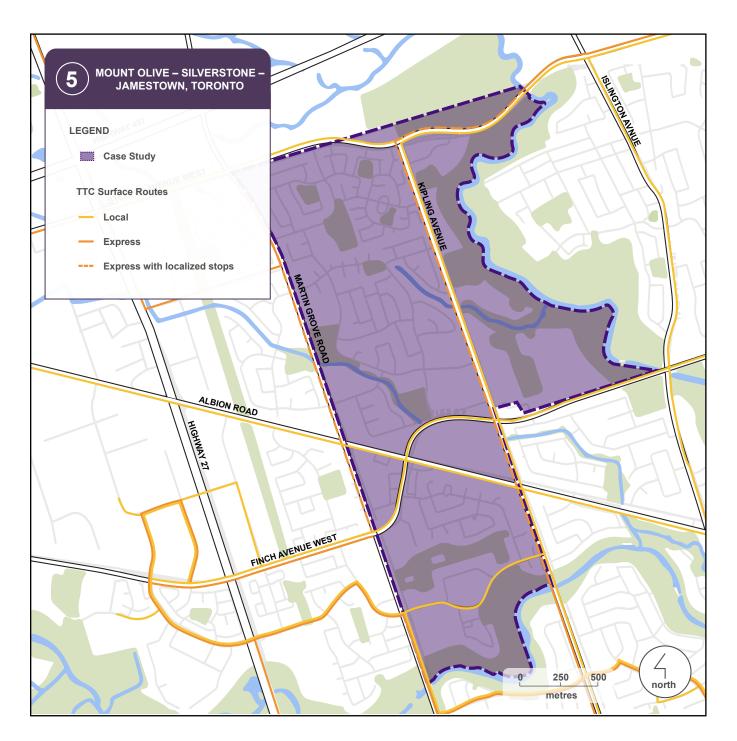
Description

The Mount Olive-Silverstone-Jamestown neighbourhood is located in the northern part of the former City of Etobicoke. It draws its name from three streets in the area: Mount Olive Drive, Silverstone Road and Jamestown Crescent – forming an inverse 'L' shape. The area developed initially as a typical post-World War II, car-centric suburban development in early 1960s. Mount Olive Drive and Silverstone Road are circuitous residential streets north of Finch Avenue West. Most of the neighbourhood's social housing was built by 1967 with a mix of high-rise and low-rise housing. Jamestown Crescent is one of the streets with social housing south of Finch Avenue West. Highrise apartment towers are clustered primarily along the Humber River near Kipling Avenue, and north of Finch Avenue West, between Kipling Avenue and Martin Grove Road. Over 60% of all neighbourhood dwellings are in high-rise buildings.

The small rural village of Smithfield was located at the intersection Martin Grove Road and Albion Road. One of the only signs of its former existence is Smithfield Park, on Mount Olive Drive. Thistletown, at Islington Avenue and Albion Road, was a police village up until 1961, maintaining a degree of autonomy over its administration. It still features its old village "four-corners" street front commercial. A few older homes can be seen interspersed in the area. The main retail area is Albion Centre, an enclosed shopping mall anchored by Canadian Tire and a No Frills grocery store. The mall is home to Albion Cinemas, "your Bollywood movie theatre," reflecting the multicultural social infrastructure in the neighbourhood.

There are a number of community amenities in the area but they are not organized in a coherent way as to form a central core. Some, like the Rexdale Community Hub on Panorama Court next to the Thistledown Centre, are away from the main streets and without transit service to the door. All of the arterial roads are wide with long gaps between pedestrian crossings, reducing accessibility. The mall is a de facto community hub, and the commercial properties around the mall also appear to serve as community gathering spots. There is no visible industrial employment activity. Although there are many industrial facilities along Highway 27, a short distance to the west. Humber College and William Osler Health Centre Etobicoke Site are just over one kilometre west of Mount Olive along Finch Avenue West.

Finch Avenue West, between Kipling and Islington Avenues, was completed in 1989 and is an auto-oriented roadway – with a four-lane cross-section lined by noise walls, with



low density residential behind them. A pedestrian overpass was constructed to connect the north and south sections of Farr Avenue.

The Thistletown Regional Centre, on the north side of Finch Avenue West, between Kipling and Islington Avenues, closed in 2014. It began its existence in 1928 as a convalescent branch of the Hospital for Sick Children. It became Ontario's first psychiatric centre for children in 1958. It offered programs for children with severe and complex mental health needs and behaviour issues, along with supports for children who have experienced sexual abuse. It had on-site residential programs, a day-school, community outreach and parental respite support. Its programs have been transferred to regional non-profit providers with government funding. Its 15 ha site sits unused but with all of its structures intact. It represents an opportunity for the Province to directly support the broader objectives of the Big Move, Places to Grow and Provincial Policy Statements by leveraging the Finch West LRT investment. The site could be redeveloped in a way that supports the transit investment, including significant affordable housing options while improving pedestrian accessibility and the streetscape.

Mount Olive had over 32,000 residents in 2011. The neighbourhood grew 2.1% between 2006 and 2011, a rate less than half of the City of Toronto. This is a young neighbourhood with nearly a quarter of the population aged 14 years and under. Another 15%, are between the ages of 15 and 24. Nearly 8 out of 9 residents belong to a visible minority group. Most of the residents immigrated to Canada, with 30% of residents arriving after 2001. Half of households in Mount Olive do not speak English or French at home.

This neighbourhood exhibits signs of distress. The unemployment rate is 15% and 27% of households are considered to be low income. Both indicators are well above the Toronto average. Education levels are much lower, with 20% of residents without a secondary school diploma which is nearly double the Toronto-wide trend. Just under 40% of households spend more than 30% of their income on housing, slightly above the Toronto average. There are over 1,100 social housing units in the neighbourhood and there are over 1,000 households on the waiting list.

Travel

The TTC offers both express and local service though the neighbourhood. Local routes 45, 46 and 73, and express routes 45E and 191 connect to the Bloor-Danforth Subway. Local routes 36 and 60, and express route 60F connect to the Yonge-University-Spadina Subway at Finch Station. Route 36 is part of the frequent service network, offering 10-minute-or-better service. Route 96 runs in a southeasterly direction to the Wilson subway station. Routes 336, 337 and 396 provide overnight service. The subway is at least 45 minutes away from Finch Avenue West and Albion Road, regardless of travelling east or south. Construction of the Spadina Subway extension is currently increasing east-west travel times along Finch Avenue. The Finch West LRT line, projected to open in 2021, will improve travel times.

Despite being near the boundaries of the Cities of Brampton, Mississauga and Vaughan,

Neighbourhood Population and Travel Profile

	Mt. Olive-Silverstone- Jamestown		City of Toro	nto
Population (2011)	32,788		2,615,070	
Change (2006-2011)	674	2.1%	111,800	4.4%
Children (0-14 % of Population)	7,670	23.4%	400,860	15.3%
Youth (15-24 % of Population)	5,015	15.3%	333,510	12.8%
Senior (65+ % of Population)	2,985	9.1%	377,440	14.4%
Families (All census types)	8,575		690,340	
Single Parent Families	2,285	26.6%	146,985	21.3%
Density (km ²)	7,254		4,079	
Dwellings	9,610		1,047,885	
Detached & Semi-Detached	1,860	20%	347,415	33%
Row & Duplex	1,690	18%	105,035	10%
Apartment (5 Storeys & Above)	5,975	62%	429,225	41%
Apartment (Under 5 Storeys)	85	1%	163,865	16%
Social Housing Units	1,146		92,113	
Social Housing Waiting List	1,049		57,442	
Renting (2006)		52%		45%
Spending more than 30% on Occupancy		38%		35%
Transportation				
Transit Mode Share (24h)		20%		24%
Walking and Cycling Mode Share (24h)		9%		9%
Transit Stops	70		9,969	
Pedestrian Collisions (2009-2011)	224		24,438	
Median Household Income	46,986		52,149	
Unemployed		15%		9%
Low Income (LIM-AT)		27%		19%
Education				
Post-Secondary		49%		69%
High School		31%		21%
No Certificate		20%		11%
Immigration & Language				
Non-Official Language Spoken at Home		49%		28%
Born in Canada		31%		49%
Immigrated before 2001		36%		33%
Immigrated between 2001-2005		12%		8%
Immigrated between 2006-2011		18%		8%
Visible Minority		86%		49%

Data Sources: City of Toronto, Statistics Canada, and Transportation Tomorrow Survey

cross-boundary transit links to the neighbourhood are not well-served by the TTC. Buses from all three cities connect to Toronto, with Humber College being the primary interchange hub. York Region Transit offers limited service northward. Brampton and Mississauga both have local and express service to Humber College.The express services connect to large employment areas along Highway 407 and the Toronto Pearson Airport. However, TTC bus route 36 (Finch West) does not serve the Humber College terminal, which requires riders to make a "long walking transfer" to make cross-boundary connections to other transit services. The City of Toronto only permits external transit operators to drop off when travelling to Toronto and pick up only when travelling back to their home regions, restricting travel options for residents. GO Transit discontinued its route serving Humber College in September 2015.

Transit modal share is 20%, which is somewhat lower than the share for the whole city, despite having both local and express connections to the subway, 24-hour service, and being on the frequent service network. Downtown Toronto and York University are popular transit destinations, placing in three of the top five destinations by Ward. Cross-boundary travel is important for neighbourhood residents, since Brampton, Mississauga and Vaughan each have large employment areas near their boundaries with Toronto. These areas include the large industrial and office areas surrounding Toronto Pearson Airport, the area around the Bramport Intermodal Yard in Brampton and the Vaughan West Business Park. Even though these destinations border Mount Olive, and cross-boundary transit is available, these locations are quite inaccessible by transit. Connections and transfers that fail the needs of riders are indicative of an inequitable system.

Story

Long trips, poor connections and high fares are all factors that reduce the overall accessibility of the transit network. Residents in an area like Mount Olive, with a number of physical and artificial boundaries, are acutely impacted by being stuck in traffic on long routes, having to negotiate different transit systems, unpredictable trips due to delays, high fares as a result of cross-boundary travel and other impediments.

"I'll leave early and still be late for school! By the time you get to school you're tired."

- Mount Olive resident

Trips by transit can often take twice as long on some days compared to others because of traffic, poor weather, missed connections, bunched-up transit service that forces long waits, and short-turned buses that do not reach neighbourhoods at the end of the line. Riders are at the mercy of these vagaries. It forces them to always plan for the worst case scenario or risk being late for work, school or other commitments that may trigger serious personal consequences, like job loss or a failed exam.

"YOU CAN'T GET THERE FROM HERE": Neighbourhood narratives of transit inequity



Figure 14: Albion Road looking southeast, south of Finch Avenue West. Albion Mall is in the background. It is a major community destination for shopping and recreation. It is designed for car access, with no pedestrian connection to the community. Inter-regional transit connections happen here, as illustrated, with a Peel Region paratransit vehicle connecting to the mall.



Figure 15: Rexdale Community Hub, a regional community service and support hub, is on Panorama Court, north of Finch Avenue West off Kipling Avenue. The site is on a cul-de-sac next to the shuttered Thistletown Centre, with limited access to the neighbourhood and no transit service to the door.



Figure 16: Finch Avenue West looking west towards Kipling Avenue. Wider road lanes with turning lanes at the intersections make the roadway more difficult to navigate for children, seniors and persons with disabilities by extending the distances they need to travel and exposing them to more lanes of traffic.

"YOU CAN'T GET THERE FROM HERE":

Neighbourhood narratives of transit inequity



Figure 17: Kipling Avenue and Finch Avenue West, southwest corner. Good pedestrian access at the intersections is not extended by the private retailers into their properties.



Figure 18: Finch Avenue West, looking west from Islington Avenue. High sound barriers line the road between Kipling and Islington Avenues, dividing the neighbourhood and increasing pedestrian travel distances.

"With the subway I know once I get on how long it's going to take. Where (on) the bus you might sit there and say 'Am I going to get there in an hour?' I'll leave early and still be late for school!"

- Mount Olive resident

"If I'm at Martin Grove and Finch waiting and the bus short turns at Kipling, we never see it. I have to wait 20 to 25 minutes for a bus. And by the time it gets to Martin Grove it's full."

- Mount Olive resident

"You have to strategize. You have to start thinking every day, is it faster to go to Eglinton, (or) should I go to Lawrence? Finch?"

– Mount Olive resident

"If I'm going with my friends and we're going downtown. It's not as if we leave late, but if I leave at 12:35 I won't get to my neighbourhood until after 1:35 and I miss the bus."

- Mount Olive resident

The problems of erratic service are particularly acute on the "shoulder hours" of the weekday, when missing a bus can mean a long walk home.

Security and fear are a large concerns that discourage transit use and make the system inaccessible. Personal security, particularly at night and in isolated areas, effectively limits the times when transit is available. The fear of not being able to get home restricts the ability to get out in the first place.

"In the winter time I'll travel less and I'll be more cautious. In the summer, I can always walk."

- Mount Olive resident

"The good thing about the night bus is it's 24-hours, which means I'm always able to get home. But I have to walk a good long block from home. If I come home at 2 am, 3 am in the morning, I would never walk that alone."

- Mount Olive resident

Mount Olive, in particular, is an area where half of the population does not speak English or French at home. The challenge of understanding the complexities of transit and expressing their needs are further complicated by language skills. Connections and schedules, fare and transfer policies, even stop and vehicle signage, are hard enough for a new resident to understand with one system. These challenges could be compounded five-fold for Mount Olive residents needing to travel outside of Toronto on neighbouring systems, and further frustrated by language and other barriers. Transit, therefore, becomes an opaque barrier to access that isolates, frustrates and impoverishes residents. "My friend, she goes from Port Credit to Exhibition to go to work and she would take 20 minutes. I used to go to work from Kipling Station. For me, my house to Exhibition was an hour and a half. She'd ask, 'Why don't you take the GO (rail transit)?' I'd say 'That costs II dollars! It's expensive!"

- Mount Olive resident

"One thing we haven't touched on is literacy. Those who have issues around literacy, those who have language issues, transit doesn't work. If you can't read the website, the timetable, you don't know"

- Community organizer

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COMPARISON OF TRANSIT FARES IN THE GREATER TORONTO AND HAMILTON AREA

INTRODUCTION

The amount of money that users are expected to pay to ride public transit, and the options available to make those payments, have a noticeable impact on the level of equity in the transit system. While adding more lines and providing more convenient service are actions that could contribute to more equity – more access for more people, more options, and alternatives to typically more expensive modal choices such as the automobile – price and payment options remain central to discussions about transit equity.

Consider this: if a new line or service becomes available, equity comes down to the ability of transit users to take advantage of that new line or service. Further, and in addition to "how much", payment options or "how to pay" – by cash, bulk tickets or tokens, passes or any other variety of fair media and payment options – is another factor that could further improve or frustrate equity.

It all comes down to affordability whether in absolute terms or relative to other alternatives. This case study, therefore, takes a closer look how the price people pay to take transit, and how they are able to pay (or having to pay at all), could remove or create barriers to access the public transit system.

RESEARCH METHODS

We approached our study on how transit fares impact people using public transit in the GTHA, and how this may or may not improve transit equity, from three angles:

- Interviews with transit users: who are considered to be "low income" (i.e. Statistics Canada's low income cut-off or LICO); for whom transit is critical for their access to employment, education and other services, and; for whom paying for transit is a significant percentage of regular expenses. Interviews with transit advocates and municipal experts were also conducted, to provide a larger context to the issues being experienced by some transit users, and the larger governance and political structures impacting those experiences.
- 2. **A comparison of fares and payment options** across the 10 the transit agencies, including GO Transit, in the GTHA.
- A review of the literature and case studies related to fares and payment options, as contained in the "Switching Tracks" discussion paper (See Tab 2).

BACKGROUND

This closer look at fares in the GTHA, and how these can support or hinder transit equity, expands on two studies conducted over the past five years. Separately and in combination, these studies identify how low income neighbourhoods and transit are connected (and not), and are indicators of fairness within Toronto and the larger region.



Source: TTCriders

The first is by the Martin Prosperity Institute (N.D.), which overlays the City of Toronto's current rapid transit network onto a map from the seminal work of Hulchanski (2010), showing the emergence of "three cities" within Toronto based on income. Predictably, it is shown that the lowest income neighbourhoods ("Third City" and "Second City") are, generally, the furthest from the highest order transit and have compartatively lower transit scores when compared to higher income neighbourhoods ("First City").

The second is by the Toronto-based transit advocacy group, Fair Fare Coalition (2015). In their report, "Affordable TTC: A Ticket to the City", the Coalition calls for a fundamental change to the way fares are structured and priced. Their main contention is that "(f)ares as a flat fee are 'extremely regressive' because it means that those with lower incomes are paying proportionately more of their income on fares" (N.P.). Among the recommendations made in the report is that the Toronto Transit Commission (TTC) should provide a discounted pass for low income riders (i.e. those at or below Statistics Canada's low income cut-off or LICO).



PRICE AND FARE STRUCTURES IN THE GTHA

We reviewed the fare structures (what you pay for), prices (how much you pay), and payment modes (how you pay) of each of the 10 transit agencies within the GTHA, and assembled this information in a collected table (See Chart) to enable further comparison and analysis. Our observations, and suggested points for further analysis and discussion, are outlined below and are organized according to the way fares are predominantly structured by transit agencies.

CASH FARES

With other alternatives unaffordable, cash fares disproportionately burden low income riders

Cash fares are the base, full-price fares for riding transit. Transit agencies, to promote bulk-buys of their services, offer multi-ride fare media (e.g. books of tickets) and monthly passes at discounts, when compared to the single-fare cash price. We have found that lower income residents tend to pay the cash fare most often, and thereby pay a higher price per trip, compared to those residents who can afford to take advantage of bulk discounts.

"People that can afford it the least are paying the highest rates."

- Transit advocate

While cash fares are the same and higher outside of Toronto (with the exception of Hamilton) – from a low of \$ 3.25 in Milton to a high of \$4.00 for single zone fare in York Region – the surrounding transit agencies (with the exception of Milton Transit) allow riders to complete their journey within a two-hour window on a single fare. These time-based transfers provide enhanced trip flexibility and cost-savings to users, and especially those who most often pay cash fares.

Interviews we conducted with transit riders who have low incomes, many of whom are on government income assistance through Ontario Works, revealed that they are living on between \$5 and \$10 per day after paying for basic monthly expenses including rent. Paying cash for a round trip on transit in Toronto, for example, could represent more than half of a person's daily budget. This could be reduced to a quarter of someone's daily budget, provided that this trip is taken outside of Toronto in two hours or less; taking advantage of transit agencies' free time-based transfer. But rarely is a transit trip a simple point A-to-point-B scenario, especially among lower income groups living suburban areas.

"Pay-as-you-go" transit fares create other challenges to daily routines

In speaking with transit users, especially those reliant on cash fares because of limited budgets, we found that transit was an extremely time-consuming and complex part of people's average day. They, for example, are required to:

- Plan their daily routines in advance to get to and from work, school, daycare, appointments – to minimize the number of cash fares required through "trip-chaining";
- Spend a significant amount of time analyzing bus schedules, in order to ensure that they don't miss the bus at the beginning of their trip. Missing that bus, we were told, impacts the timing of all responsibilities that day. This is especially significant when people are working more than one job in a single day, and rely on transit – most often bus service – to get there; and,
- Find creative ways around cross-boundary trips outside of Toronto to minimize extra fares, including walking or getting a ride "over the border" into an area served by the transit service they need to connect to (for example, we found that many people in the west end of Toronto are making trips into Peel Region to connect to MiWay and Brampton Transit for work and/or training programs).

MONTHLY PASSES AND OTHER BULK TRANSIT FARES

Subsidized fares are still often unaffordable to people with low incomes, and especially those receiving government income assistance

Even though monthly and other bulk-buys of transit fares can provide substantial cost savings for riders, especially compared to travel at the cash fare rate, these can still be prohibitively expensive for many people with low incomes. Even when offered to people with lower incomes at subsidized rates, as many social service agencies do for their clients, passes and other bulk transit fares are out of reach for many people.

We spoke with students and staff of an adult literacy program in western Toronto that offers TTC Metropasses – retailing for \$141.50 – at a subsidized rate of \$100 for any full-time student wishing to participate. In the 12-student class that we spoke with, only 4 people indicated they had ever purchased a subsidized monthly pass. At that time, only one student was participating in the program. Asked about the low participation rate, people in the class responded that:

"Ties up too much of my money."

"I can't afford it, even at a cheaper rate."

"It's going to school or getting food."

One adult student we spoke with opted instead to purchase 20 TTC tokens at a subsidized rate of \$50, also offered by the literacy program. "This gives me 10 days to do what I need to do. This is all I can afford to do," said the student.

FARES FOR CHILDREN

Free rides for children eases financial burdens for parents, but are not based on ability to pay

All of the 10 GTHA transit agencies, including GO Transit, provide discounts for children including free travel. Most commonly, children aged 5 and under can travel free with an adult. In Toronto (TTC), it was introduced in 2015 that children aged 12 years and younger can ride free. Child fare policies on GO Transit are generally more limited and prescriptive: children aged one and under travel free; one child aged 5 and under per rider can travel free; discounted rates apply to children aged between 6 to 12 years, which also apply to additional children per rider aged 5 and under.

Riders we interviewed see child discounts as a "good thing" – especially when regularly taking children to school and daycare on public transit – but most we spoke with said that, if they had the choice, time-based transfers and single-fares between regions would be more beneficial to them.

FARES FOR STUDENTS AND SENIORS

Students and seniors are benefiting from similar discount programs, but are not directly based on ability to pay

Discounted transit fares for students and seniors, as with children, are offered by all GTHA transit agencies. And, like child discounts, the rates and policies vary across the region. In addition to different rates, some transit agencies: require valid identification cards to show proof of age (generally 13 to 19 years for students, and 65 years and older for seniors), including transit agency-issued cards; only offer discounts through the Presto card, and; offer free travel to seniors on specified days and times of the week.

It is important to note that discounts offered to students and seniors are not directly related to the ability to pay. While incomes for these groups are generally lower in comparison to others, discounts are provided solely on the basis of age. Students from families who can afford to pay higher rates benefit from the same discounts provided to children from families who cannot, for example.

"Student" is a limited definition that excludes many riders

Another important consideration is discounts for post-secondary students, and students – often adults with lower incomes – enrolled in education or skills programs outside of colleges and universities. Most transit systems in the GTHA do not provide discounts for college and university students. When offered, these discounts – often significantly-reduced monthly passes – are not available to students enrolled in programs from other institutions.

Student mobility through the transit system and fare equity are currently subject to a large scale survey initiated by the four Toronto universities (York, UofT, Ryerson and OCADU). StudentMoveTO has asked postsecondary students at these four institutions about their typical travel behavior and their transit and mobility needs. Results of this study will be an important keystone in understanding the specific issues related to student life and transit equity (www.studentmoveto.ca).

FARES FOR LOW INCOME PERSONS

Only four GTHA municipalities currently offer discounted passes for low income users, but the City of Toronto may follow

Fares based on a person's ability to pay is a main thrust of equity-related transit advocacy and research by the Fair Fare Coalition and others including the Toronto Board of Health (2013). While there is precedent in North America for an income-based fare structure in many large urban areas including Calgary and San Francisco, this approach is still yet to gain region-wide traction in the GTHA. However, transit systems in the Cities of Hamilton and Mississauga, and the Regions of Halton and York – representing just over 40 per cent of the GTHA's population – are currently offering discounted passes to qualifying low income users. Additionally, the City of Toronto is currently studying the feasibility of, and options for, income-geared transit fares and is expected to table a draft approach in 2016.

It is important to note that, under current municipal transit governance structures in the GTHA, subsidies for low income passes are covered through the municipal tax base and are transferred to the local transit agency. Transit agencies, themselves, do not currently finance, administer or determine the eligibility low income passes.

Programs in Hamilton, Mississauga, and Halton and York Regions

The income-geared transit pass programs being provided through five transit systems operating in these four large municipalities are available to residents receiving government income assistance through Ontario Works (OW) or Ontario Disability Support Program (ODSP). Additionally, residents in Hamilton (Hamilton Street Railway – HSR) and Halton Region (Burlington Transit and Oakville Transit) who meet the Statistics Canada LICO also qualify. High school students and seniors with low incomes in Halton Region may also quality.

The current (2015) pre-tax LICO for a family of four, for example, is \$44,340 per year. To decrease eligibility barriers, some municipalities apply LICOs from earlier census years. The LICO used by Hamilton, for example, is based on 2006 figures and is significantly lower for a family of four.

Investigating transit fare equity in Toronto

Virtually all City of Toronto departments and the TTC, to varying degrees, have long been reviewing the case for (e.g. social and economic benefits) and implications of (e.g. cost) providing a discounted transit pass for low income residents. More recently, the Toronto Board of Health (2013) tabled the report, "Next Stop Health: Transit Access and Health Inequities in Toronto", calling for a strategy to address the transit needs of low income residents.

There are few cities in the world that place so much of the cost of transit operation directly on riders.... people living on a low income are hardest hit by the high cost of public transit in Toronto: as a proportion of monthly minimum wage, the TTC Metropass is among the least affordable in Canada. Arising from this report, the City has most recently struck an interdepartmental committee to prepare "a formal City-wide policy framework for defining, funding, implementing and evaluating transit affordability" (City of Toronto – Social Development, Finance & Administration Division, 2014, p.1).A draft framework is expected to be presented to City Council in mid-2016. In parallel with and to inform this process, the City has also formed a committee of external agencies to discuss and make recommendations regarding transit fares in Toronto. Called the "Toronto Transit Fare Equity Advisory Committee", the external committee is comprised of 16 organizations including Toronto Region Board of Trade, United Way Toronto and York Region, and Fair Fare Coalition.

IMPLICATIONS FOR REGIONAL TRAVEL

Transit users' travel needs are not determined by municipal boundaries as GTHA transit systems are, with the exception of GO Transit

Our interviews with transit users confirm that trips are not confined to municipal boundaries, as many municipal transit systems are. While our analysis of fares (See Chart) does show some level of cross-boundary cooperation among some agencies who, for example, accept each other's valid transfers, the GTHA transit network with the exception of GO Transit is confined by boundaries. Not only does boundary-sensitive service often require transfers between at least two (and sometimes more) systems, additional fares are required. This has financial implications, especially, for lower income users who are already constrained financially and, as our interviews have illustrated, are also constrained for time by virtue of living in peripheries where housing is relatively more affordable.

The "GTA Weekly Pass" for \$61 allows unlimited travel on the local transit systems of Peel Region (MiWay, Brampton Transit), York Region (YRT/ Viva) and Toronto (TTC). However, travel on GO Transit is not included. Otherwise, transit passes are not accepted by neighbouring transit agencies (limited to valid transfers, through reciprocal agreements). None of the users we interviewed reported ever purchasing, or wanting to purchase, the GTA Weekly Pass.

Overcoming governance constraints to put the "regional" in regional transit

The Presto electronic fare payment card, administered by Metrolinx, is universally accepted for travel on each of the 10 transit systems in the GTHA. The TTC is expected to be fully Presto-ready on all routes and modes by 2017. Presto, in addition to GO Transit's extensive inter-municipal commuter rail and bus network across the GTHA and beyond, indicates that regional transit is not merely in name only.

While Presto does not eliminate the need to transfer across multiple systems when crossing boundaries, it does eliminate the need to purchase multiple passes and other fare media for cross-system and cross-boundary trips. Further, Presto enables commuters to easily take advantage of inexpensive "GO Transit co-fares" offered by local transit agencies. These co-fares allow users to transfer from a local bus to a GO Train station, and return, for a fraction of the local fare with a valid GO Transit ticket (or with a tap of the Presto card). Co-fares range from \$0.60 to \$0.80 each way.

Presto and prospects to improve, hinder transit fare equity

Presto is an efficient alternative to conventional fare media, and a convenient way to purchase and automatically re-load bulk purchases (e.g. multiple tickets or tokens) at a discount compared to the cash fare. Most GTHA transit agencies offer a discount on single/cash fares when using the Presto card. For example, a Brampton Transit cash fare is \$3.75 and is reduced to \$2.80 when using Presto – a 25 per cent savings.

Furthermore, Presto can be an efficient and stigma-free way to deliver discounted transit passes to low income users, and other eligible recipients. However, it remains to be seen, based on our research, that Presto will be fully accessible and easy to use (i.e. re-load) by low income and/or older persons, for example. We can assume that not all low income users, for example, would have credit cards or consistent access to technology (i.e. internet and/or smartphones) in order to maintain and reload the cards remotely. Uneven access to technology, therefore, could further frustrate the achievement of transit fare equity.

SUMMARY AND RECOMMENDATIONS

There is a great diversity in price, transferability, and value in transit fares across the GTHA

Our review of transit fares shows a great unevenness in transit fares across the region. This is evidenced by:

- A wide range of prices for cash fares, various passes, and bulk-buys of tickets or tokens;
- Transfers being accepted among some transit agencies, and not others;
- The system with the largest ridership in the GTHA, Toronto's TTC, does not yet have universal roll-out of the Presto card as all other transit agencies do;
- Some fares are based on distance notably in York Region and system-wide on GO Transit – while most others are flat fares (as on the TTC, with few exceptions including crossborder trips);
- Different thresholds or conditions, including age, to qualify for child and student discounts; and
- Five of the ten GTHA systems offer a discounted pass for low income residents.

Based on our findings, we suggest that the following actions be taken to achieve better transit fare equity across the Greater Toronto and Hamilton Area

- 1. Develop a GTHA-wide framework for the universal provision of discounted transit passes for low income persons, to be adopted by each transit agency. The framework should include, but not be limited to, the following components and objectives:
 - a. Available to all users of a particular transit system, regardless of residency;
 - Universal qualification for those receiving income support through Ontario Works (OW) and/or Ontario Disability Support Program (ODSP);
 - A consistent application of set income thresholds (e.g. Statistics Canada's Low Income Cut-Off LICO), which could include the application of a lower income threshold based on previous census years;
 - d. Providing a "double subsidy" for passes and other fare media purchased by social service agencies (e.g. shelters, outreach programs) to provide at a reduced rate to clients (i.e. offer the sale of fare media at a discount to agencies, which can be further discounted at the point of sale to qualified clients); and,
 - e. Consideration for how the Presto card can be used as the primary delivery mechanism of discounted fares, with an emphasis of ease-of-use and automatic re-loading by the funding agency.
- Expand the data collected through the Ontario Ministry of Transportation's Transportation Tomorrow Survey (TTS) on personal travel behaviour to include broader socioeconomic information including household income.
- 3. Extend student discounts to full-time students enrolled in programs outside of university and colleges. For example, students enrolled in full-time language classes (e.g. adult literacy, ESL) and other skills-training programs.

- Explore, in partnership with transit providers and education institutions, how transit passes (e.g. U-Pass) can be provided to all students enrolled in college and university programs as part of their tuition.
- 5. Encourage Milton Transit and the Toronto Transit Commission to introduce system-wide, time-based (2 hours) transfers.
- 6. Explore how GO Transit services could be included as part of the GTA Weekly Pass.
- 7. Convene a "GTHA transit fare equity working group" to be coordinated by Metrolinx, for the further investigation and implementation of actions to advance transit fare equity, including the above recommendations, through a consistent region-wide approach. This working group should:
 - a. Include front line-focused (i.e. hands-on experience with transit users, operational issues, low income residents including those on government income supports, etc.) representatives from Provincial Ministries, municipalities, transit agencies, and related organizations working in the community including local United Ways, Community Foundations and Public Health Units;
 - b. Develop a "GTHA transit fare equity charter" that specifies baseline outcomes and strategies to address transit fare equity across the GTHA, to be implemented consistently by each GTHA transit agency; and
 - c. Attempt to achieve the greatest possible transparency, through the inclusion and meaningful participation of equityseeking groups (e.g. grassroots groups including TTCriders and Fair Fare Coalition), and outreach to transit users who are traditionally not part of the conversation.

AGENCY	SINGLE/CASH FARE	MONTHLY PASS OTHER BULK	CHILD	STUDENTS	SENIOR	OTHER DISCOUNT	NOTES	
City of Hamilton								
Hamilton Street Railway (HSR)	\$2.75 (\$2.15 Presto)	\$94.60/mo. (same with Presto)	Free < 5 years	\$1.80 single or \$79.20/mo.	\$2.15 (ticket) \$1.80 (Preston) \$23.50/mo. or \$235/yr.	Affordable Transit Pass Program (ATPP) GO Transit co-fare discounts with Presto Travel is good for 2 hours (time-based transfer)	 Only those <19 yrs. are eligible for student discounts. Presto card required for student and senior discounts. ATPP available only to: Hamilton residents; 18-64 yrs of age; receiving OW/ODSP or meet Statistics Canada Low-Income Cut-Off, based on household size and income. Valid transfers are accepted on, and from, Burlington Transit 	
Halton Region								
Burlington Transit Milton Transit	\$3.50 (\$2.70 Presto only) 10 tickets for \$27.50 \$3.25	\$97.00 \$70.00	Free < 5 yrs 6-12 yrs 10 tickets for \$18.50 or \$1.85 single fare (Presto only) Free < 5 yrs	\$71.00/mos. 10 tickets for \$19 or \$1.85 single fare (Presto only) \$50.00/mos. Or	\$59.25/mos. 10 tickets for \$19 or \$1.85 single fare (Presto only) \$50.00/mos. Or	Subsidized Passes for Low Income Transit (SPLIT) GO Transit co-fare \$0.70 Travel is good for 2 hours (time-based transfer)	 SPLIT is a program administered by Halton Region to provide a minimum 50% subsidy for monthly passes in each of the Region's three (independent) transit systems. High school students, seniors and adults are eligible for program, based on a combination of age and income. Valid transfers are accepted on, and from, HSR, Oakville and MiWay. 	
	φ 3. 23	\$70.00 10 tickets for \$26.00	11ee < 5 yrs	10 tickets for \$19.00		\$7.50 day pass for all ages Persons with vision loss are free (with CNIB card) GO Transit co-fare \$0.65		
Oakville Transit	\$3.50 (\$2.85 (effective Jan I) Presto Only)	\$115/mo.	Free < 5 yrs	\$70/mo. for 6-19 yrs attending full- time primary or secondary school \$15/mo."Student Freedom Pass" (valid after 4 pm weekdays and all weekend)	>65 yrs \$1.80 (Presto only) Free all-day Monday	SPLIT Persons with vision loss are free (with CNIB card) GO Transit co-fare \$.075 Travel is good for 2 hours (time-based transfer)	Valid transfers are accepted on, and from, Burlington Transit and MiWay.	

AGENCY	SINGLE/CASH FARE	MONTHLY PASS OTHER BULK	CHILD	STUDENTS	SENIOR	OTHER DISCOUNT	NOTES
Peel Region							
MiWay (Mississauga)	\$3.50 (\$2.90 Presto only)	\$125/mo. 10 tickets for \$29.00 5 tickets for \$14.50 GTA VVeekly Pass \$61	Free < 5 yrs 6-12 yrs \$1.65 (Presto only) 6-12 yrs 10 tickets for \$16.50 5 tickets for \$8.25	High School students 15-19 yrs \$2.25 (Presto only) 10 tickets for \$22.50 5 tickets for \$11.25 Public school students \$2.65 (Presto only) U-Pass for students of University of Toronto Mississauga (UTM)	>65 yrs \$1.00	GO Transit co-fare \$0.80 Travel is good for 2 hours (time-based transfer) Under 2014 Peel Region pilot program, qualifying low income residents can purchase monthly pass for one-third of the cost. City of Mississauga extended program participation into 2016.	GTA Weekly Pass good for travel on MiWay, TTC, Brampton Transit (including Züm), and York Region Transit (including Viva) Valid transfers are accepted on, and from, HSR. Burlington Transit, Oakville and YRT/Viva. U-Pass is a transit pass included as part of students' tuition at UTM.
Brampton Transit	\$3.75 (\$2.80 Presto)	Adult Presto fares: \$31.00 weekly; \$118.00 monthly	Free < 5 yrs 6-12 yrs \$2.50 (Presto)	High school students 13-19 yrs Presto fares: \$2.50 single; \$27.00 weekly; \$105.00 monthly		GO Transit co-fare \$0.75 Persons with vision loss are free (with CNIB card) Travel is good for 2-hours (time-based transfer)	Valid transfers are accepted from HSR, Burlington Transit, Oakville Transit, MiWay.YRT/Viva, DRT, and TTC (contracted routes only)

York Region							
York Region Transit/Viva (YRT/ Viva)	\$4/\$5 (\$3.40/\$4.40 Presto)	\$136/\$181 for monthly pass \$34/\$44 for 10 tickets GTA Weekly Pass \$61	Free < 5 yrs \$2.10/\$3.10 6-12 yrs. (Presto only) \$57/\$87 for monthly pass	Elementary school students +13 yrs. \$2.60/ \$3.60 \$102/\$147for monthly passes High school Students 13-20 yrs \$102/\$147 for monthly pass	pass	GO Transit co-fare \$0.75 Travel is good for 2-hours (time-based transfer) Subsidized monthly passes are available to OW/ODSP clients.	 Two-zone fare system GTA Weekly Pass good for unlimited zone I travel in the GTA, including TTC Valid transfers are accepted from HSR, Burlington Transit, Oakville Transit, MiWay, Brampton Transit, DRT, and TTC (contracted routes only). Fare increases will come into effect July 1, 2016, including a: \$1 increase to 10-ticket bundles; \$4 increase to adult monthly passes, and; \$3 increase to student monthly passes. Cash fares will not change.

AGENCY	SINGLE/CASH FARE	MONTHLY PASS OTHER BULK	CHILD	STUDENTS	SENIOR	OTHER DISCOUNT	NOTES
Durham Region							
Durham Region Transit (DRT)	\$3.50 (\$3.00 Presto)	\$112 monthly pass \$30 for 10 tickets	Free < 5 yrs 6-12 yrs \$2.00 (ticket/Presto) or \$2.25 cash \$20 for 10 tickets \$63.50 for monthly pass	 13-19 yrs \$2.70 ticket or Presto \$27 for 10 tickets \$91 for monthly pass U-Pass for students of Durham College, UOIT, and Trent University (Oshawa). 	2.00 (ticket/Presto) or \$2.25 cash \$20 for 10 tickets \$45 for monthly pass	\$0.75 GO Transit co-fare Travel is good for 2-hours (time-based transfer) Persons with vision loss are free (with CNIB card)	U-Pass is a transit pass included as part of students' tuition at the participating schools. This pass includes some GO Transit bus routes, and prices vary according to distance.
City of Toronto							
Toronto Transit Commission (TTC)	\$3.25 (\$2.90 Presto)	\$141.50 monthly pass (\$129.75 for 12-mo. bulk buy) \$2.90/token GTA Weekly Pass \$61	Free < 12yrs	 13-19 yrs. \$2.00 cash fare \$9.75 for min. 5 tickets \$112 monthly pass (\$102.75 for 12- mo. bulk buy) 	 >65 yrs. \$2.00 cash fare \$9.75 for min. 5 tickets \$112 monthly pass (\$102.75 for 12-mo. bulk buy) 		Cash fares increased from \$3.00 to \$3.25 on January 3, 2016. Tokens also increased in price 10 cents to \$2.90. GTA Weekly Pass good for travel on TTC, MiWay Brampton Transit, and York Region Transit. City of Toronto has convened an inter- departmental committee to prepare a "formal City-wide policy framework for defining, funding, implementing and evaluating transit affordability." Policy is expected in the first half of 2016.
GTHA-wide							
GO Transit	Fares vary, according to distance	Day passes are available for travel between 2 specific fare zones Group Pass is available for up to 5 people, provided no more than 2 are aged >18 yrs.	<1 yrs ride free One child aged I to 5 yrs per rider can ride free (child rates apply for each additional child) Rates available for >6 to 12 yrs. Day passes not discounted.	Discount rates for elementary and secondary students with valid school-issue ID. Discount rates for full-time university and college students with valid GO-issued Student ID	Single rates available for >65 yrs. Day passes not discounted.	A person with a disability can travel with an attendant on a single fare.	

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TRANSIT-EQUITY FOCUSED RECOMMENDATIONS FOR REVIEW OF THE BIG MOVE

The following are recommendations to enhance the description of equity, and how it can be assessed and achieved, as a more specific goal and objective of the Regional Transportation Plan for the Greater Toronto and Hamilton Area (GTHA), The Big Move. The review of the Plan by Metrolinx in 2016 is a timely opportunity to more directly address, and incorporate, equity in the Big Move.

"Social equity" as a stated objective, or pillar

1. The Big Move implements Provincial Plans and related policies regarding transportation and land use planning to improve the movement of people and goods, and most directly the Growth Plan for the Greater Golden Horseshoe (2006). The Growth Plan articulates a growth vision for 2041 that is to be supported by the pillars of a "strong economy", "clean and healthy environment" and "social equity."

Correspondingly, the three broad goals articulated in The Big Move at the beginning (p.13) of Section 2.0 - A Vision for the Future, should be revised to more closely align with the Growth Plan's "three pillars"; more specifically to describe "social equity."

Going beyond car ownership to measure "social need"

2. The Big Move in Section 1.3 lists challenges facing the GTHA. Included on page 8 is the "lack of options in areas of higher social need." It is suggested that "access" and "affordability", in a transportation context, be described beyond those who can afford to own a car, and those who cannot.

It would be helpful to describe that transit-rich neighbourhoods (and those that offer mode choice that include cycling and walking, through the combination of appropriate infrastructure, land use mix and density) are becoming increasingly unaffordable to lower income groups (which often include residents with physical and/or mental disabilities). Further frustrating this issue is that, as better transit (most commonly rail) is extended into neighbourhoods, the uplift in surrounding property values tends to displace transitdependent (by virtue of low incomes) residents.

Broaden the definition of "accessible" to include non-physical attributes

3. The Big Move in Section 3 – Goals and Objectives lists as goal 'A' to provide a range of transportation choice "regardless of age, means, or ability...". By "means", it is assumed that this relates to the ability to pay. The corresponding objectives, therefore, should be expanded (i.e. under objective no. 2) to include improved accessibility for able-bodied people with low incomes, as well as those with special needs.

It is suggested that The Big Move characterize "accessibility" as not only access for seniors, children and those with special needs but also for low income residents. The literature on transit equity, accordingly, most often describes the target group as both "low income and other vulnerable populations."

4. The Big Move in Section 4.0 – Strategies describes as Strategy #8, "Plan for Universal Access." As with the description of "access" in the goals and objectives of Section 3.0, the definition of "universal access" on p. 52 is limited to physical (dis)ability. "Access" should be more broadly defined to include the ability of residents, especially low income and vulnerable (e.g. elderly, physically and mentally disabled) residents, to afford transit and to also afford to live in neighbourhoods well-served by transit and other mode choices (e.g. active transportation).

Transit provides access to opportunities (e.g. employment, public services, shopping, etc.) within the community. Quite literally, transit is a vehicle for people to access their community, and to live a fuller and more productive life. It is for this reason that recent scholarship on transit equity (see Grengs, 2015) finds that accessibility (related to people), not mobility (related to infrastructure), is the better and more meaningful measure of how successful a transit system is.

Broaden targets and performance measures to include social indicators

5. The Big Move in Section 5.0 – Looking Forward describes in Table 4: Modelling Forecasts several targets that are aimed to be achieved under the Plan within 25 years. Under the heading "Transportation Choice", it is the aim for 81% of residents to live within 2 km of rapid transit. Consistent with earlier suggestions and comments regarding a broader definition of "access", it is suggested that a fuller measure be explored.

Proximity (i.e. distance) to rapid transit does not guarantee access to rapid transit. While an individual may live within the target distance of 2 km to rapid transit, for example, one's (in)ability to pay to ride the service also may still prohibit access. Additionally, consideration should also be given to the destination of trips. Living near a rapid transit service that does not go where you need it to go (e.g. destinations outside of downtown Toronto in peak a.m. periods) also limits access.

6. The Big Move in Section 7.0 – Implementation outlines several considerations for the planning, prioritization and funding of new rapid transit investments. Such should also include measures of "public benefit" beyond traditional value-for-money considerations that include projected ridership, revenue, and transit-supportive development.

While such metrics are important, also important are quantifiable improvements to the social and economic prospects of the region's low income and vulnerable populations. It is therefore suggested that cost-benefit analyses (BCA), alternative financing and procurement (AFP) and performance standards be revised to consider such metrics as, but not limited to:

- The proportion of low income and vulnerable populations living within a 2 km distance of existing and proposed rapid transit projects;
- Price structures and subsidies (e.g. Presto credits) to improve affordability for a larger population; and
- Travel destinations, including large and emerging employment clusters outside of downtown Toronto.

7

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