

# **(In)Equity in Active Transportation Planning: Toronto's Overlooked Inner Suburbs**

by  
Mohammed Mohith

Supervised by  
Professor Liette Gilbert

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## **Abstract**

Active transportation modes in North America are often accounted as ‘white strips of gentrification’ as advocacy for walking and bicycle infrastructure is characterized as a manifestation of privilege (Mirk, 2009). Such concerns usually arise from complex cultural, historical and political currents influencing urban politics and policies. Policies and investments make the urban amenities and facilities easier or harder to access and have a huge impact on the lives of the city’s population depending on their social and spatial status. Unequal distribution of transportation investments due to lack of fair access to participate in the planning process is not uncommon in Canadian cities -- and in almost all cases lead to inequality in mobility benefits. Decisions of transit infrastructure priorities in Toronto historically and politically tend to favour affluent and influential communities. The goals, preferences and strategies of active transportation planning for Toronto, therefore, is worth a critical discussion and engagement. If the benefits of active transportation investments are to be fairly distributed across the city and among all users, equity will have to be comprehensively addressed in the planning process. The goal of this research paper is to evaluate Toronto’s current initiatives in active transportation planning in terms of social and spatial equities and to bring forward discrepancies in practices to outline relevant strategic directions. The study area compares Toronto’s downtown and inner suburbs.

## **Foreword**

This Major Paper has been submitted to the Faculty of Environmental Studies (FES) in partial fulfilment of the requirements for the Master in Environmental Studies degree and reflects my knowledge and skills accumulated through this program to become a successful planner and planning researcher. The proposal of this paper has been developed through different courses and workshops, observation of recent activities in planning sector at municipal, provincial and federal level as well as discussion with academics, professional planners and fellow students. The objectives of my planning studies are fulfilled through the three major components of this research paper: equity, active transportation planning and community development. Through the review of various planning policies, initiatives, staff reports and study of governance framework of the decision making process in planning matters I have been able to obtain the knowledge and skills necessary to meet the candidacy requirements of the Ontario Professional Planners Institute for candidate membership. I have gained a solid knowledge of the political process, planning and planners' contributions, social advocacy with particular focus on active transportation planning. I specifically gained a good understanding of urban governance and the complex conundrum of politics, power, participation and investment that influence planning (especially transportation planning) in a few North American cities. I also developed a better understanding of 'equity' perspective in planning and its social and spatial implications in the distribution of land-use and transportation planning benefits. This research embodies the knowledge and skills accumulated from the various courses and from the free and diverse learning environment of the Faculty of Environmental Studies.

I dedicate this paper to my parents.

## **Acknowledgements**

I would like to thank my Supervisor Professor Liette Gilbert for her continuous help and support, not only for this particular paper, but also for her guidance throughout the whole period of my study at York University. It all began with my email informing her that I would be arriving late in Canada to start the MES program and still being carried out through the advices, references and career directions I get from her. I was given enough opportunity to leverage my thoughts, yet at the same time navigate to my focus. I was not always in time with my papers, but she managed to arrange time to have a look, no matter how busy she was. I am grateful to her.

I must mention my advisor, Professor Ute Lehrer, who is the first person I met at FES. Her course and of course the principles she shared with her students, created a particular dimension in my thinking process and shifted my thoughts toward the social disparities in urban environment resulting from the power imbalances.

The learning environment at the FES has been liberal and diverse. At this occasion I thank all my course instructors for their carefully drafted courses. Special thanks to Professor Luisa Sotomayor for giving me the opportunity to complete the planning requirements by supervising an individual directed study. I will remember my group-mates from different projects and my classmates for delivering a vibrant and cooperative ambience.

I like to thank my wife Sylvia Mahmood for bearing with me in my hard times, especially in the past two years. It was not easy of us as newcomers to Canada, with hardly any friends or relatives in Toronto, to find accommodation, settle and carry on with a work-study balance. Thanks to my parents and other family members for being there, though remotely, for the mental support. All these wonderful persons helped to complete my program in due time.

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## Introduction

Active transportation refers to all human-powered forms of travel, such as walking, cycling, skating, skateboarding, skiing, canoeing, kayaking and more. According to the Ontario Ministry of Transportation's (2012) Transit Supportive Guidelines sidewalks, on-road bicycle lanes, off-road trails, multi-use pathways, bike parking facilities, and crosswalks are all part of the active transportation planning. Walking and cycling are among the most accessible and feasible means of mobility – and are often combined with other modes of transportation, e.g., with public transit. Considering the health, well-being and environmental benefits of active transportation, significant initiatives have been considered over the last 15 years by the federal, provincial and municipal governments in Canada to support active transportation modes.

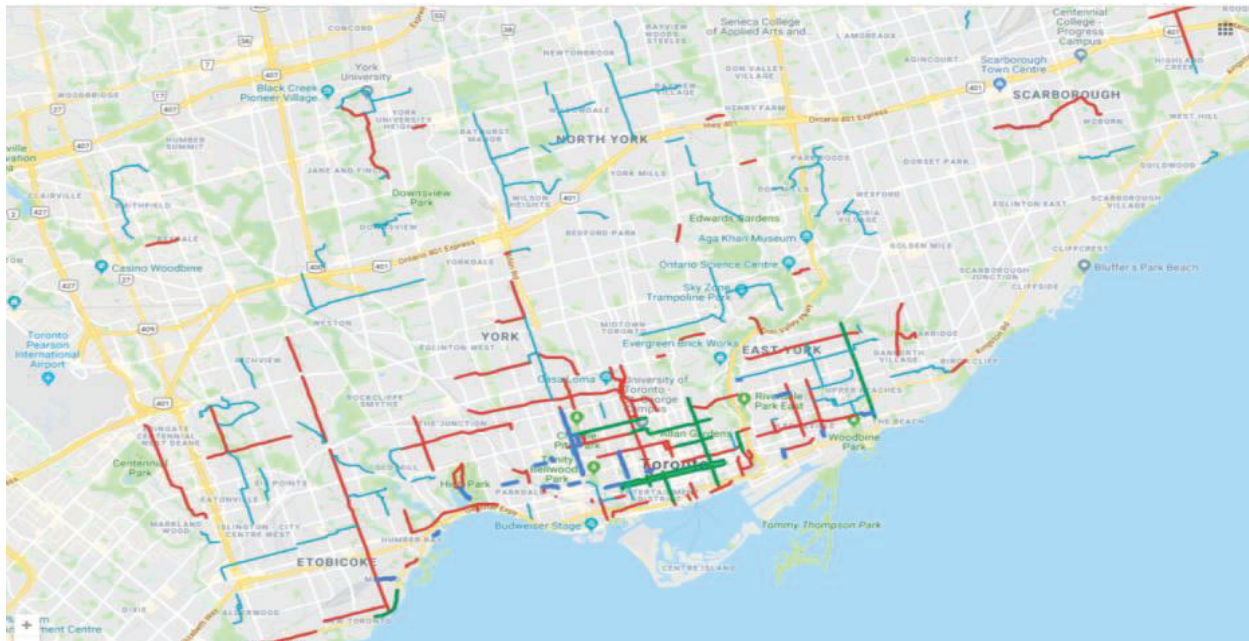
Walking become predominant in cities through a system of sidewalks. Cities increasingly view cycling as part of the solution to worsening traffic congestion and health, inequity and climate change challenges. While not necessarily accessible to all, cycling is nevertheless accessible to many. Cycling can fill an important transportation gap particularly for people living in inner-cities areas without access to a car and with infrequent transit service (A Call to Action, 2012). Health benefits of active transportation as a utilitarian means or way of living is immense. From a pollution point of view, a 5 km trip by bicycle give 20 minutes of zero emission exercise, whereas the same trip by car emits an average of 1.25kg of carbon dioxide into the atmosphere (Environmental Protection Agency, 2018). Many cities have therefore targeted active transportation as an alternative to cars which (the second highest contributor to greenhouse gas emissions) in their climate change action plan (Environment and Climate Change Canada, 2018; The Atmospheric Fund, 2018). In Toronto, the appeal of active transportation translates into having 75% of all trips under 5 kms be walked or cycled by 2020 (TransformTO, 2017). Considering many of these trips will occur outside of the downtown area, change is needed in inner suburban neighbourhoods in order to meet this goal and ensure that the health and transportation benefits of active transportation are available to communities throughout the city (Ledsham and Verlinden, 2019).

Programs and policies establishing pedestrian and bicycle facilities greatly vary between the Metropolitan Toronto and the six local municipalities before amalgamation. The creation of

the new City of Toronto in 1998 granted the scope to develop a compatible and comprehensive strategy for promoting active transportation across all parts of the City. The Toronto Bike Plan adopted by Toronto in 2001 was based on the primary assumption that there had been broad public support for better cycling conditions and that increasing bicycle use would contribute to the health and livability of the city. The plan proposed to build a 1,000-km network, of which 495 kms would be on-road bike lanes by 2011. Between 2001 and 2016, the City of Toronto intended to build 571 kms, of which only 114 kms were on-road bike lanes (Pagliaro 2014). The fact that the City was seriously lacking behind their active transportation aspirations to provide a comprehensive system forced it to adopt another 10 years plan in 2016 with the budget of \$153.5 million (CBS News, 2016). The federal government agreed to provide about \$42 million to Toronto cycling projects through the new Public Transit Infrastructure Fund in August 2017. The same year, the provincial government announced that it would invest up to \$42.5 million in municipal cycling infrastructure across the province (Spurr, 2017).

The question remains as whether the large amount of investment and efforts are being spent in the areas where active transportation infrastructure and relevant public awareness activities are most needed. The bicycle lane map of the City of Toronto shows that the network built in the last 18 years mostly serves the core Toronto downtown where there is already bus and subway services. The City's bike share facilities and bicycle parking infrastructure are also concentrated in the downtown areas. The backgrounder for Cycling Network 10 Year Plan 2016 by the City of Toronto (2018) reiterates this fact by stating that "most of the downtown Cycling Network Routes recommended in the 2001 Bike Plan has been installed" but "most of the routes recommended in 2001 for Scarborough, North York and Etobicoke have not been installed." It is not to say that a bicycle network is not needed where there are other forms of public transportation options available, rather it is supported by the concept of transport-oriented development. The idea is to draw attention to the Toronto's inner suburbs where such infrastructure is not present, where buses are not frequent, and where subway stations are not located in neighborhood catchment areas. Evidence shows that immigrants and low-income communities in Toronto depend mostly on public transit despite settling in peripheral neighborhoods of the city, usually away from subway stations (Amar, 2015). People in such locations might not work usual working hours and might have less transportation affordability issues compared to downtowners, which make them even more likely to depend on cycling and

walking as alternative modes of mobility. Planning for active transportation infrastructure for Toronto needs to guarantee resource allocation to the inner suburbs where low-income, immigrant and racialized communities live and commute to downtown or outer suburbs. The current trend, however, is far from that.



**Figure 1: Present Bicycle Lanes Concentrated in Downtown Toronto**



Besides the growing interest for cycling as an active transportation mode, Toronto City Council adopted the Toronto Walking Strategy in 2009. The program promised to build a “physical and cultural environment” that promotes walking. Even though the existing situation is better than that of bike lanes, walking infrastructure also seems to have been properly installed and well serviced in the affluent downtown neighbourhoods. The outcome is obvious; neighbourhoods with better cycling and walking facilities feature higher activity index rating.

My research proposes to evaluate the actors, processes and outcomes of active transportation planning in Toronto from a transport equity perspective. It does not undertake a

technical evaluation of the plans created by the City to incorporate active transportation in the public transit mode. Considering that bicycle infrastructure has been in the forefront of active transportation planning and historically one of the most decisive factors in the discussion of investment provisions with large impacts on urban neighbourhoods, the emphasis is given to the political debates, investment decisions and rising inequity around bike lanes in Toronto.

My research examines the inequity problem of active transportation facilities from two broad perspective taking Toronto downtown and inner suburbs as study areas using a social justice and spatial justice lens. I understand social justice as the differentiation of availability and accessibility between socio-demographic groups such as high income and low income, white, racialized, or immigrant communities, etc. Spatial justice refers to the availability and accessibility and distribution of active transportation, and more specifically cycling infrastructure, in different localities such as downtown or inner suburban neighbourhoods. The research concentrates on social and spatial inequities to evaluate disparity between the main central business district of Toronto referred to as ‘downtown’ and Etobicoke, Scarborough and North York known as ‘inner-suburbs’.

My argument is that active transportation planning acts as a catalyst to increase already existing disparity between downtown and inner suburbs in Toronto. Therefore, my research investigates how public investments and benefit rationales in active transportation planning mobilize and contribute to increasing disparities between the downtown area and inner suburbs in Toronto. My major research investigation is based on the following questions:

1. What and where are the public investments made in active transportation planning in Toronto? How are such investments decided? How do such investments overlap with existing disparities?
2. What are the rationales of benefits linked to such investments? How/why are such benefits inclusive or exclusive or particular populations? Who benefits from such investments and active transportation infrastructure?
3. How can active transportation equity be achieved by reconfiguring the power dynamics between decision makers and the parties involved in planning in Toronto?

## Equity and Transportation

Equity and transportation planning equity are topics anchored in different subject areas, including economics, law, health and various branches of social science. The way the idea of equity is comprehended differs across disciplines and among scholars. From an economics perspective, Field and Olewileras (in El-Geneidy et al. 2016) describe equity as a notion of "how the economic 'pie' is divided up". The Oxford English Dictionary characterizes equity as the quality of being fair and impartial. Equity relates to the allocation of benefits to individuals or groups and is evaluated based on the fairness of this allocation.

Identifying transportation inequities are typically based on the two broad concepts of social and spatial equity. Social equity in transportation generally deals with vulnerable or disadvantaged populations along socio-demographic lines, such as income, race, gender, or age. Disadvantaged population often refers to low-income and racialized immigrants, who have traditionally been deprived of economic and social benefits by policy decisions (Sanchez, Stolz and Ma, 2003; Richard et al., 2016). On the other hand, spatial equity is based on distributional effects in relation to geographic locations. The objective of the spatial equity approach is to locate where inequities are occurring instead of evaluating who is winning or losing from a policy or project (Richard et al., 2016).

However, when it comes to cost and benefits distribution, transportation analyses generally build on three common types of equity: horizontal equity, vertical equity, and intergenerational equity (El-Geneidy et al., 2016). Some researchers termed 'horizontal' and 'vertical' equity respectively as 'equality rule' and 'needs rule' (Cook and Hegtvedt, 1983; Richard et al., 2017). Horizontal equity refers to the fair distribution of investments and benefits among individuals or groups without favouring one individual or group over any other (Litman, 2002). On the other hand, vertical equity requires that benefits should intentionally target socially or economically disadvantaged groups who need them most to achieve equity rather than distributing equally (Murray and Davis, 2001; El-Geneidy et al., 2016; Litman, 2002). In the field of transportation planning, Martens (2012: 1971) subscribes to vertical equity and suggests that "the evaluation of transportation equity should be based on Rawls' Theory of Justice." This approach has two primary considerations where access to transportation should be maximized by (a) maintaining a certain minimum for all and (b) containing the range of access (maximum gap)

in order to prevent excessive disparities (El-Geneidy et al., 2016). In this paper ‘equity’ refers to both horizontal and vertical equity. Issues relevant to intergenerational equity are not considered directly. While the discussion in the paper is based on disparities produced by the lack of horizontal equity, it appears that establishing vertical equity is important where existing distribution mechanism is failing to bring a fair outcome.

## **Research Design**

Transportation planning issues are conventionally examined through statistical modelling and technical solutions (Rodrigue, 2006). This paper explores the socio-political and community benefits of active transportation planning of Toronto in the lens of equity implications – and a qualitative approach is deemed to be more appropriate. My methodology is three-fold: a review of active transportation literature and cases, secondary data/key reports, and media analysis and interviews.

## **Review of Existing Active Transportation Initiatives**

My research analyses the existing active transportation planning strategies and initiatives as well as planning tools used by the City of Toronto. To contextualize the impacts of investments and benefits of active transportation infrastructure, literature on equity in transportation with evidence of cycling infrastructure investment producing gentrification or asserting privilege are evaluated. Social and physical planning mechanisms as well as political implications that influence active transportation cost and benefit disparities in the City of Toronto are also examined in order to formulate a way forward. Case studies specifically help to evaluate the relationship between active transportation and gentrification in North American context as well as provided important tools to suggest strategies to move forward.

## **Secondary Data Review**

Transportation data relating bicycle use among different communities based on locations within the city is limited. To acquire first hand data requires time, funding and technological expertise. Available data from different sources like Statistics Canada, Transportation Tomorrow Survey, StudentMoveTO and other reports and surveys produced by the City of Toronto and other notable sources are used to analyse the current situation. Data played an important role to reveal

transportation investments patterns, transportation mode preferences, transportation habits, availability of options, cost and accessibility, etc. Relevant data sources include but are not limited to investment data related to active transportation plans released from the City Council meetings and Public Works and Infrastructure Committee meetings agenda, commuters using sustainable transportation in 2017, 2016 census data on mode of commuting, commuting duration, time, gender, and age in private households; and 2011 Transportation Travel Summaries (TTS) by wards (in downtown, Etobicoke, Scarborough and North York), among others.

### **Media Analysis and Interviews**

An analysis of daily newsprint provides record investments announcements, stated benefits of active transportation, and rationales used to promote such investments and activities. The analysis focuses on the most detailed articles and the evolution of such rationales over time. Analysing media content paved the way of bringing support to discussions with instant reactions from involved stakeholders such as planners, municipal officials, politicians and social advocates. Newsprints also allowed to track progress, measure outcome and record reactions from the users' end. Media analysis enables this paper to include comments from persons usually hard to access personally within limited time or resources.

Eight interviews were conducted with planners, bicycle advocates and politicians. Due to time and resource limitations, the sample size was small but the aim was to supplement any shortcomings of literature review and data evaluation. The objective of these interviews was to learn about the complex conundrum of politics, power, participation and investment regarding active transportation planning in the context of Toronto. Planners have first-hand experience dealing with power relationships in the participation process which is one of the catalysts of the win-lose situation. Also, planners are directly involved in the development and implementation process and have a clear perspective of why they are doing what. Interviews also included representatives from local cycling associations of residents of localities within the study area as well as advocates working for the city as a whole. Their insights shed light on the difficulties and obstacles preventing the benefits of investments for concerned populations. The interviewees also included a veteran politician who had been a councillor for many years, worked as a deputy

mayor for the City of Toronto, and also served as the chairman of the City's development and transportation committee.

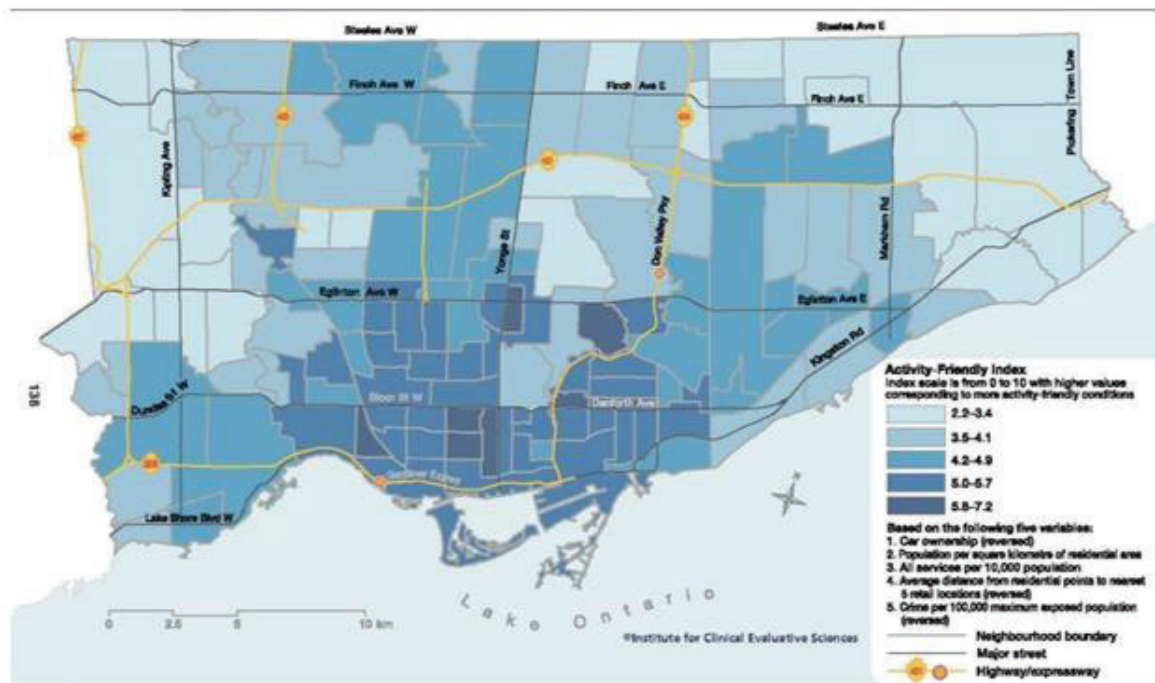
My research paper first presents an analysis of how equity implications in active transportation planning might give rise to other concerns such as intentional or passive gentrification in urban setting. Follows a discussion on the related plans or initiatives by the City of Toronto and the place of 'equity' in these manifestos. By drawing on the analysis of case studies, interviews and literature review, some considerations for generating objectives and measures to achieve a more equitable active transportation planning decisions are later discussed.

## **1. Active Transportation and Gentrification**

Transit investments in North America often contribute to gentrification and redirects transit's economic and social benefits to those with the means to locate near the best services (Hertel, Keil and Collens, 2015). Affluent communities being in the upper tier of social power structure, can better influence transit decisions that will benefit them. If we look at the bicycle map of Toronto and compare it with the concept of David Hulchanski's (2010) 'Three Cities within Toronto,' the present infrastructure overwhelmingly coincides with the area of City #1, which is a predominantly high-income area of central Toronto and close to the subway lines. By contrast, the area that is most deprived of active transportation infrastructure is City #3, a generally low-income area consisting of northeastern and northwestern parts of Toronto with limited public transit access. Therefore, the discussion of 'equity' is incomplete without considering the potential threat of gentrification, a phenomenon which is unfortunate, yet obvious.

Available and affordable public transit increases access to social, economic and community resources and contributes to decrease poverty. The City of Toronto's (2018) Transportation Equity Backgrounder suggests that the economic and social gains of transportation investments in the city have not been up to the mark due to the inability of many Torontonians to access public transit. This phenomenon is not new in major metropolitan cities across the world. Referring to the historical transportation equity struggles in United States, Bullard and Johnson (1997) assert that while transportation benefits in the United States has been accumulated by privileged population of the society, burdens such as pollution, displacement or lack of safety fell disproportionately on socio-economically disadvantaged people. As Flanagan,

Lachapelle and El-Geneidy (2016: 5) suggest, “regardless of mode, American transportation systems and development trends systematically place undue burden on marginalized communities by forcing them to travel using less safe, more costly or inconvenient transportation networks.”



**Figure 2: Activity Friendly Index by Neighbourhoods in Toronto**

Neighbourhoods with better cycling and walking facilities feature higher activity index rating.  
(Source: Active City: Designing for Health, City of Toronto, May 2018)

Active transportation modes have, however, been gaining popularity over the years for their individual, economic and societal benefits. As a result, investments for walking and cycling infrastructures in Canada (among other places) have increased in recent years. Still, equity impacts of relevant infrastructure provisions often fail to catch the attention of planners and policy makers, which result in an inequitable distribution of investments and outcomes (Lee, Sener and Jones 2016). Pucher, Buehler and Seinen (2011) argue that the major extent of cycling renaissance is taking place in gentrifying neighbourhoods, yet the mechanism relating cycling and gentrification lacks thorough investigation. Referring to the United States context,

Day (2006) and Aytur et al. (2008) note that the middle class suburban neighbourhoods generally benefit from active transportation planning initiatives and that the land use plans for affluent localities are more supportive of active transportation objectives than they are for marginalized communities.

In many North American cities, urban revitalization efforts often appear with investment of cycling infrastructure, a tendency which has created a pronounced idea about the people who ride bicycles and their status in the society. Active transportation initiatives are sometimes capitalized by politicians to boost the local image and create an attractive environment for the creative class or for the demand of utilitarian or recreational bike lanes. To illustrate this point, case studies from Minneapolis and San Francisco are discussed below. In one case bike lanes were used to motivate investment in an area and in the other investments was used to justify bike lanes.

Between 2007 and 2012, Minneapolis used a popular off-street bicycle path to allegedly ‘clean up’ areas of the city in order to promote prime real estate development. The Midtown Greenway is a 5.5 mile network of off-street bike lane located south of the Mississippi River. The bike path runs parallel to major roads and sits in a former railway corridor. The rail corridor used to connect several low-income American Indian communities, one of which is the adjacent diverse and poor Phillips neighbourhood. Residents of the Phillips neighborhood have historically used the rail corridor as a place for recreation and as a (necessary) transportation corridor for walking and cycling. Cycling advocates and city officials have proposed bicycle infrastructure plans for years in the corridor, which were being tracked and promoted by the volunteer-run Minneapolis Bicycle Coalition. The rail corridor went through revitalization between 2007 and 2012 and now considered a centerpiece of Minneapolis’ alternative transit accomplishments. The Greenway seems to be a welcoming zone for different social groups rather than an apparent attempt of environmental gentrification. But by attracting what city officials call ‘desirable users’ with community gardens and murals, the Greenway has become a less desirable place for the people of the adjacent Phillips neighbourhood and other low-income communities. With police interventions in the corridor in 2009 to eliminate ‘inappropriate’ use, many American Indian men who gathered (smoking and drinking) in the area without necessarily causing any trouble were eliminated from that the revitalized rail corridor even though they were

using the corridor for transportation by cycling. It seems that through the construction of the Greenway, authorities laid claim to community space that had been populated by marginal populations and, in doing so, vacated it to be used by a more ‘desirable’ citizens. Officials did not hide their intention to use bicycle infrastructure to allure the ‘creative class’ to Minneapolis as the City mayor openly claimed that “our very public bike culture has been an enormous asset in attracting talented people here. Not just in the bike fields but in advertising, in financial services, the arts, politics” (cited in Hoffmann and Lugo 2014: 55). As to be expected, the adjacent areas saw the rapid development of condo towers along the Greenway providing the amenity and vibrancy middle to higher income millennials are looking for. This transformation took place in less than ten years. Minneapolis Bicycle Coalition played an important part in advocacy to promote this cycling amenity.

Valencia Street in San Francisco has become a center for cycling activity and investment shifting from a “primarily working-class Latino population who cycled out of necessity to a more affluent and white population” (Flanagan et al., 2016: 5). The changes took place over a long period of time and bike lanes are not deemed to be a cause but an after-effect. As San Francisco became the preferred bedroom community for Silicon Valley, the Mission District with its urban edginess was a preferred location for young high tech and dot.comers to reside. Close to the center of the city known for its notoriously high rents, the Mission District was home to many Mexican and Central American families living in small apartments in narrow Victorians buildings. However, powered by information technology professionals and a demand of Airbnb, gentrification occurred slowly in this neighborhood but at a faster rate than elsewhere in San Francisco. Pogash (2017) writing for the *New York Times* observes “[l]uxury condominiums, organic ice cream stores, cafes that serve soy lattes and chocolate shops that offer samples from Ecuador and Madagascar are rapidly replacing 99-cent stores, bodegas and rent-controlled apartments in the Mission District, the city’s working-class Latino neighborhood.” The aspiration of millennials’ trendy lifestyle of the high paid Silicon Valley workers resulted in attracting substantial investment for bike lanes on Valencia Street, the most important street in Mission District. Cyclists on Valencia Street are both long term residents and incoming high-tech and dot-comers, but the latter in course of time overwhelmingly outnumbered the former and started advocating for a protected bicycle lane (Pogash, 2017). As a result of advocacy, the City of San Francisco approved a protected bike lane for Valencia Street between Market and 15th

streets in December 2018. Back in September of the same year, Mayor London Breed directed the San Francisco Municipal Transportation Agency to fast-track the project. San Francisco Bicycle Coalition played an important role in advocating for the Valencia Street bike lane despite protests by local residents, shop owners and school children's parents (Hammerl, 2018). This is a classic case of a bike lane developing after the neighborhood is gentrified.

In both the cases of Minneapolis and San Francisco, similarities should be noted. We witness official support and advocacy of coalition groups with strong political and financial back up. But most importantly what requires critical examination is that the rail corridor and Valencia Street were already used by local residents. Yet the dedicated bike lanes occurred at the expense of their displacements and benefited only the incoming affluent residents. Gentrification was an outcome in the case of the Midtown Greenway in Minneapolis and a cause in the case of Valencia Street in San Francisco.

In Toronto, the reasons for the consolidation of dedicated bike lanes in downtown areas are manifold and complicated. There are coalition groups, politicians and residents working to promote cycling in the downtown areas by advocating for dedicated bike lanes and so-called complete streets. But we should also consider that downtown fetches more 'Section 37' revenues and development charges than any other jurisdiction in the city. For example, in the first quarter of 2018 Councilor Kristyn Wong-Tam (Toronto Centre) and Councilor Lucy Troisi (Toronto Centre-Rosedale) respectively had \$66 million and \$16 million while Scarborough councilors Michelle Holland (Scarborough Southwest) and Norm Kelly (Scarborough-Agincourt) respectively only had \$66,000 and \$230,000 (Hardy, 2018). Downtown areas and local councilors have therefore more money to invest in infrastructure projects. Councilors are constitutionally authorized to do so and residents demand to spend development charges and 'section 37' benefits on active transportation.

To this point, the recent news of an expansion of Toronto's bike share program can be quoted. The province and the City of Toronto have allocated \$7.5 million for the expansion of the bike share program. The provincial program to promote cycling will provide the bulk of the investment, i.e., \$6 million with the City granting \$1.5 million, conditional to securing provincial funds (Pagliaro, 2019). A report from a bike share parking authority staff shows that the City's \$1.5 million contribution will be arranged from reserve funds acquired through development

charges collected in downtown neighbourhoods (Pagliaro, 2019). The expansion program addresses the increasing number of bikes in downtown areas. However, while one could argue that Section 37 development charges provide much needed infrastructure in downtown areas, programs, initiatives and money distribution could be developed in a way that not only benefit central areas where such development charges are generated.

There is another trend worth mentioning. Developers in downtown areas recently became very interested in active transportation infrastructure and increasingly providing facility for bike parking and maintenance -- in few cases more than the required amount stated in municipal zoning by-law 230.5. For example, Kalovida Canada Inc and Scott Shields Architects are building a 15-storey condominium tower 'Bungalow on Mercer' at 24 Mercer Street near King Street West and Blue Jays Way featuring 12 units with no space for cars but a 30-bicycle parking. The project is aimed to be completed by 2020. Similarly, Alterra Group of Companies' 36-storey, 360-unit building at the southwest corner of Wellelsey Street and Sherbourne Street is scheduled for completion in October 2019, and will have only 80 car parking spaces but each unit will have a personal bike locker. The building will also cater a bike repair facility with full-set toolkits and will allow owners to take bikes into their units. Fieldgate Urban and TACT also have a proposal to build a 16-storey mixed-use project at 572 Church Street. The project comprising 98 condominium units will have no parking space for cars but instead will provide 117 bicycles spots (Karl, 2017).

This new trend shows that developers in the downtown area are increasingly interested in active transportation and advocating for bike lanes or vibrant sidewalks simply because they cannot afford required car parking spaces and therefore tap into bike provisions to relax parking requirements. For example, the developer of the 572 Church Street mixed-use project provided a parking justification analysis to justify no parking in their development. The staff report of the project do indicate that City officials opposed the idea of zero parking but it also stated that staff were willing to consider a reduced parking supply if not zero parking (City of Toronto, 2017, October 27). A reduced parking provision is of course a great win for a developer. There are strong possibilities that developers are increasingly playing a vital role in bike lane decisions in downtown and since they pay Section 37 charges, they have some (active or passive) power with politicians to propose new bike lanes or better maintenance of existing ones where they build. Or

developers might select areas to build new condos where there are already protected bike lanes in operation and therefore have an impact on the gentrification of that particular neighborhood. The trend in Toronto is not different from other North American cities and the more affluent newcomers tend to move into neighbourhoods with better active transportation facilities. In the case of Toronto, it is safe to say that bike lanes are following gentrification and not the opposite. In the words of Darnel Harris (in Babin, 2018), community and sustainability advocate: “I have seen this situation before, but I would not say that bike lanes lead to gentrification, as much as they form part of a package and long-term plan of improvements that leads to gentrification... You have to intentionally design policies and programs to support equity.” Toronto, with its complicated but democratic political framework, has the opportunity to take initiative to distribute the benefits of active transportation infrastructure citywide. Although, racialized and lower income populations along with older and less educated groups are underrepresented in ridership, the unavailability of bike share stations in disadvantaged neighbourhoods has been one of the key reasons for such lack of access. Evidence also shows that cost implications, limited payment options such as bank or credit cards accounts, and lack of awareness are potential barriers for equity in public bike share systems (McNeil, 2017).

Literature on bike share system planning provides an understanding of why docking stations are usually concentrated in certain locations of the city. Variables that are used to test the viability of a bike share system include population density, job density, locations of tourist attractions, proximity to rail stations, and proximity to streets with bicycle lanes. The areas that have all these features are in almost all cases city cores - places that have high property value, higher rent and usually residence of affluent white population (Ursaki, 2015).

However, this approach of providing bike share services in the city cores has raised concerns in many cities. Along with bike lanes, bike share programs also create concern about gentrification. Bike share programs are geared towards young professionals, hipsters and tourists and are considered a pathway to trendy coffee shops, retail and urban landmarks. In recent years, bike-share programs have raised some controversy in cities across the United States, especially when they are installed in areas that traditionally lack proper city services and now face rapid displacement. There are concerns that authorities often use such programs to convey the image of an environmentally friendly city while serving only the downtown population and tourists

(Levin, 2017). Recent studies that worked with spatial access to bike share facilities in United States found that bike share stations were not equitably distributed across the population. A comprehensive study that evaluated bike share programs in 35 locations in United States found that the largest share (53%) of the docking stations was located in affluent neighbourhoods close to city cores, whereas only 5% were located in areas where economic hardship was prevalent. In a survey conducted among the lower income communities in four US cities, 56% of respondents would like to use bicycle share amenities more often if available and 44% wanted to know more about the programs. Many other studies reported similar findings which establish the fact that there is demand for bike share programs all over the city and not only in the city core (Hosford, 2018). Many bike share programs in US cities now include equity as a concern in their business model. An example of such integrated program is Chicago's public bicycle share program. The program launched a campaign in 2015 titled 'Divvy for Everyone' which included strategies such as establishing new station in low income neighbourhoods, low priced annual membership, and waiver of credit card requirements (Hosford, 2018).

However, Canadian cities remain far behind. Among the five Canadian cities that host bike share programs, only Hamilton has an explicit equity initiative. The program titled 'SoBi' subsidizes membership for low income residents and is expanding to deprived neighbourhoods (Hosford, 2018). However, while Hamilton's initiative is appreciable, it is not appropriate to compare it to Toronto's bike share program. The scale and patterns of urban and economic development in Toronto is very different from Hamilton. In this regard, Montreal, which has similar economic concentration and was the first to adopt a bike share program in 2009 shows more steady progress among the Canadian cities. Since its implementation, Montreal's program expanded in a way that more disadvantaged areas now have access to it. The percentage of the total population that live within the bicycle share service area is 46.6% in Montreal whereas in Toronto it is only 18.1% (Hosford, 2018). Between 2009 and 2017, Montreal also increased its bike path from 400km to 750 km (Bliss, 2017). According to Bike Share Toronto, the ridership of bike share in Toronto was 1.9 million in 2018 but in Montreal, 5.3 million rides Bixi bicycles. Expanded coverage clearly increases accessibility. Barriers such as cost and pricing structure, credit card ownership, limited access to a computer or Smartphone, and a lack of awareness about how bicycle share programs work need to be considered in addition to spatial distribution to establish vertical equity.

## **Planning for Equity**

Planning is a technical process that demands professional expertise related to land use, transportation, governmental structures and power relationships. It is a professionally driven, top-down process. Planners also hold a fundamental commitment to ‘equity’ and therefore have to deal with the dilemmas of development and displacement. Their decisions ideally should include public participation opportunities and strategic initiatives that can channel benefits for the least advantaged residents. But in a democratic governance framework, while planners can inform policy changes through their technical models, such change is only possible by political forces and community pressures (Pastor and Benner, 2011).

Equity planning and the need for fair access, distribution and representation has long been debated in the planning field. Until the 1960s, North American city planning was mostly concerned with the physical aspects of planning such as streets, parks, and boulevards and was devoted mostly to regularize land uses. In many cities of the United States, street protests and social mobilization in the 1960s against displacements caused by urban renewal and the interstate highway program challenged the belief of traditional top-down planning practice and created a demand for more ‘social planning’ based on public involvement at the grassroots level. The civil rights movements added to this urbanization outcry and a notion of advocacy or equity planning emerged. Equity planning is a framework in which planners use their research and professional skills to influence opinion, mobilize disadvantaged communities, and implement policies and programs that ensure public and private resources are directed to the poor and working class (Metzger, 1996). Equity planners deliberately redistribute resources, influence political power, and motivate public engagement to attain their goal. These planners are labelled ‘advocacy’ or ‘equity planners’ because of their intention to achieve equity among different groups through their activity. According to Krumholz (2001), an equity planner works towards a more just and democratic society.

Addressing the traditional top-down approach of planning, Sotomayor and Danieri (2017) assert that planning has historically been associated with attempts of social manipulation through the reordering of the built environment in an autocratic process. Accordingly, planners are often accused for covering up gentrification and displacement by advocating for economic benefits of urban renewal projects (Roy, 2009). These views uproot planners from their

impression as politically unbiased subjects and leave them with less opportunities to navigate the current challenges of increasing disparity. Equity planning emphasizes the utilization of professional capacity and social position of planners to strategically engage with larger bottom-up struggles against systemic exclusions (often created by previous planning processes). Equity planners benefit from their technical skills, access to politicians and public engagement training to encourage reform and to oppose projects that might create or increase disparities. They might use their professional experiences to predict hidden agendas of powerful coalitions and defend public interest(s). Furthermore, in adverse political context, planners can take a ‘critical planning’ approach and act as agents of reflexive criticism (Krumholz and Forester, 1990; Brooks, 2002; Sotomayor and Danieri, 2017). Therefore, the ambiguous nature of planning at this age and time calls for planners to create and implement equity oriented initiatives by examining experiences with a critical social perspective (Sotomayor, 2017).

It is therefore a steep challenge for the city planners to operate planning tools in a way that planning decisions can counter rising inequities in the city. Based on the analysis of literature review, interview and media content, the following challenges have been identified that planners might face while distributing active transportation benefits in Toronto:

- uncertainty among transportation staff whether a project would be approved or not by the City Council; they might have to work with the political current;
- current transportation services priorities often shift focus from expanding infrastructure to particular neighbourhoods and divert resource elsewhere;
- concern about the cost of implementing projects which might have been identified through community engagement but for which there is no current budget; and
- projects suggested by community advocates might not fit within the existing transportation policies and engineering guidelines, and therefore planners might not able to work on such projects.

Apart from these technical challenges, Sean Hertel, a professional urban planner who specializes in policy and programs related to transit, summarizes the political and investment challenges as follows, when asked about influencing public transit investment:

Politics unfortunately. Despite expert advice and analysis, many decisions are made based on political opportunism. Accommodation of politics and finance and lack of meaningful public engagement mean that infrastructure isn't always made for the benefit of all people and all publics. Secondly, a lot of decisions are made in terms of return on investment, which is often calculated in terms of tax revenue, development revenue, and development uptake. Lost in that calculus are some of the social benefits, the environmental benefits (cited in Leach, 2016).

However, the City of Toronto (n.d.) created a tool to implement equity in planning decision titled 'Equity Lens' which suggests that planners ensure "all significant policy and program reports to Council are required to include an Equity Impact Statement, a statement that summarizes an equity analysis based on the Equity Lens questions. In addition, the reports' analysis and text should demonstrate that equity issues have been considered." The City of Toronto's most recent staff report confirms that the Equity Lens tool has been used to evaluate the Cycling Network Plan for any impact on traditionally deprived groups and "vulnerable residents of Toronto." The report also promises to mitigate the adverse effects of cycling infrastructure on equity through meaningful engagement with various stakeholders and by incorporating additional tools to address access to existing and planned infrastructure (City of Toronto, 2019, June 13).

To conclude this section, it is probably appropriate to say that all the cases reviewed portray the fact that active transportation planning is associated with gentrification but a definite answer of which comes first remains and the "chicken or egg" problem of active transportation and gentrification remains unsolved. Careful considerations have to be made to prevent such phenomenon.

## **2. Planning for Active Transportation in Toronto**

With their diverse population, social institutions, physical infrastructure and economic activities, cities are places of opportunities and success. Cities offer programs for residents to benefit from its institutions such as health, education, recreation, financial and social services in order to optimize their quality of life. At the same time, uncontrolled development and resource deficit in certain neighbourhoods and the increasing gap between the rich and the poor create social, health

and environmental challenges that make it difficult to uphold equity and quality of life (Toronto Public Health, 2011). This tensivity is common to many North American cities and Toronto is no different. Often these challenges are not experienced at the same threshold across residents and disadvantaged groups such as low-income population, immigrants and racialized communities, children and elders are more likely to sustain the adverse effects (Toronto Public Health, 2011).

The Greater Toronto and Hamilton Area (GTHA) is undergoing rapid population growth and unprecedented development. In order to cope with the current and anticipated growth, the region's transportation network has to evolve. Active transportation, prominently cycling and walking, is fundamental to healthier communities and sustainable city regions while equalizing transportation accessibility gap due to its low infrastructure cost and affordability.

To that end, the City of Toronto needs to build a safe, efficient, convenient, equitable active transportation network based on good policy and planning principles. However, policies and practices established by the City through official plans, transportation plans, design guidelines and engineering standards often highlight the importance of equity (in access, accessibility and affordability) in active transportation planning but too often lack implementation tools. To take active transportation equity from policy to action requires a transportation system with diverse modes integrating “hard” (infrastructure) and “soft” (programs) interventions (A Call to Action, 2012). To examine the relevant strategic initiatives and planning tools, I review how the City of Toronto's view its active transportation planning. My review focuses on how ‘equity’ as a concept is embedded directly or indirectly in the policies and strategies for fairness and whether planning tools have turned out to be effective enough. An analysis of progress and possible reasons for lagging behind are discussed.

### **Preliminary Initiatives and Reports by the City of Toronto**

Over the last decade, with the progress of active transportation infrastructure in almost all parts of the world, the City of Toronto also created and implemented several proposals with the goal to improve public health, traffic efficiency, and climate change mitigation. The report *Healthy Toronto By Design* was released by Toronto Public Health in October 2011 and was the first in a series of reports to study how local community infrastructure and neighbourhood culture influence the health of their residents. The report stresses the importance of creative vision,

strategic decision-making and thoughtful implementation of plans and policies that respect the necessities of its population regardless of social, economic and racial status. As it is to be expected, this report particularly emphasizes active transportation for healthy living from a community health perspective (Toronto Public Health, 2011). This report was followed by a series of reports by the City of Toronto and its partners on the planning for active transportation in the city.

The report *Road to Health: Improving Walking and Cycling in Toronto* by Toronto Public Health (2012) evidences the health benefits associated with physical activity such as walking and cycling, as well as an economic rationale and strategies to extend the use and safety of active transportation in Toronto. This is a very comprehensive report where equity issues were given weight and discussed. The report states that the urban core has three times higher active transportation mode share than North York, Scarborough and Etobicoke combined. It asserts that “[s]afe walking and cycling opportunities can reduce inequity by enabling individuals without motor vehicles to more easily access goods and services” and “there is evidence that high levels of walking and cycling in low-income and high-risk neighbourhoods may help to address health disparities” (Toronto Public Health, 2012). While analysing the deterrents of cycling in Toronto’s suburbs, the report states that suburban streets are “characterized by high traffic volumes and speeds, wide roadways, narrow sidewalks, nonexistent bicycle lanes, and highway on- and off-ramps” (Toronto Public Health, 2012). However, the report introduces very few policy level strategies and is quite limited in terms of implementation plan.

Around at the same time, the report *The Walkable City: Neighborhood Design and Preferences, Travel Choices and Health* by Toronto Public Health (2012) summarizes residential preferences while depicting public demand for walkable neighbourhoods contrary to auto-oriented ones and linking this information with travel choices accessibility. Three quarters of population surveyed in the City of Toronto showed a strong preference for walkable neighbourhoods and between 21% and 32% of Toronto residents living in car-centric neighbourhoods opined that friendly walking features are missing in their neighbourhoods. But what is most notable and relevant to this research is that walkability mapping conducted in Toronto as part of this report concludes that while downtown Toronto is deemed highly walkable, many other areas outside the core city are not. The report also indicates that

neighbourhoods with low income residents particularly show a low walkability index. The results provide important first hand data to support increased active transportation investment in all parts of the city, not only in the downtown core.

A third report, *Toward Healthier Apartment Neighbourhoods* (Toronto Public Health, 2012), synthesizes zoning barriers and opportunities to promote healthy neighbourhoods, particularly in the lower income, inner suburbs of Toronto where residential apartment towers built in clusters are prominent. This report notes that apartment neighbourhoods have the potential to integrate cycling as a convenient and prevalent mode of transportation. The report also stresses that informal circulation networks made up of temporary trails in local parks and ravines, casual routes between apartment properties and parking lots, sidewalks and shoulders along primary and secondary streets could be formalized by introducing dedicated bike lanes or multi-use paths. A more formal network of cycling paths could provide safe and efficient access to local destinations such as schools and shops, and to other neighbourhoods and city districts.

These three 2012 reports by Toronto Public Health include instructions to incorporate other city departments to realize their recommendations. Transportation Services Toronto in a separate survey in 2009 found that if proper infrastructure was to become available, 44% of recreational cyclists could be converted to cyclists with practical purposes (City of Toronto 2017). Considering some of these reports are a little dated, the progress does not seem to be anywhere near to achieve the active transportation goals of the inner suburbs. Therefore, it is important to look at the implementation strategies and planning tools used by the City of Toronto to spread its active transportation network.

## **Implementation Strategies**

Based on relevant reports and recommendations, city wide advocacy, citizen demand and political stand, the City of Toronto produced two bike plans over the last two decades and incorporated policy instructions in its Official Plan, Secondary Plans as well as in its neighborhood development strategies.

*City of Toronto Bike Plan: Shifting Gears* (June 2001) was the first cycling master plan for the newly amalgamated City of Toronto. It recommended, among other things, a long-term, city-wide ‘bikeway network’ consisting of bicycle lanes, signed routes and trails. The network’s

objective was to create a grid of bikeways spaced approximately two kilometers apart so that all residents would be no more than one kilometer from a designated bikeway. The plan aimed at an ambitious 1000 km of bike lanes. By 2016, 579 kilometers of bike lanes were actually realized of which only 114 kms was on-road bike lanes.

To overcome the short fall of the 2001 plan and deliver a connected, efficient bicycle network, *The Ten Year Cycling Network Plan (2016)*, approved 5 years later by City Council, proposed new dedicated and connected cycling facilities across the city and called for approximately 560 kms of painted and protected bike lanes at the investment cost of \$153.5 million by 2025. The plan includes a very wide coverage map consisting of cycle tracks and bike lanes, contraflow lanes, off-street multi-use trails, sharrows or shared lane markings and quiet on-street routes. However, the plan did not include ‘equity’ as a key component to be addressed, but the physical coverage did include many areas that now lack facilities. The dominance of sharrows (only the lane marks without any additional safety consideration) in this plan nevertheless raised safety concerns among the experts. The lack of safety has been determined as one of the key components that discourage certain populations from cycling. The report *Vision Zero: Toronto Road Safety Plan 2017-2025* provides additional safety enhancement programs addressing safety issues present in unprotected bike lanes as well as potential improvements to existing bike routes infrastructure using collision data that involve cyclists to identify high risk corridors and intersections. The best part of this plan is the recognition of the need, by City officials and planners, to devote separated cycling facilities, such as buffered bike lanes, cycle tracks, bike trails, bike boxes, signage and pavement markings, and to provide better direction and safety for cyclists from vehicular traffic than bare lane marks indicating shared road spaces.

*Toronto Complete Streets Guidelines* is developed by the City of Toronto to provide an integrated approach to design city streets building on relevant municipal policies, design guidelines and successful precedents. By concept, complete streets are designed to be convenient for all users whether pedestrians, cyclists, drivers, and people with various abilities. The City ensured that complete streets, when implemented will protect social, economic and environmental priorities of the neighbourhood and will complement the current 10-year bike plan.

*Official Plan Review - Draft Official Plan Changes 2019* is the most recent policy document and includes a new direction to form a cycling policy framework strengthening the existing policy that promotes cycling (Bringing the City Together: A Progressive Agenda of Transportation Change, Section 2.4 of the Official Plan). The draft policies focus on “options to expand the cycling network, enhance the convenience and attractiveness of the cycling network, make cycling a safer travel mode, and provide convenient high-quality short term and long-term bicycle parking facilities at key locations throughout the city” (City of Toronto 2019, January 27: 3). The finalized policies, as part of the Official Plan Review, are expected to be reported to Council later in 2019. However, the new revised texts do not directly talk about equity issues but plans to expand bicycle facilities to all parts of the city are mentioned in few instances which might relate to spatial equity (City of Toronto, 2019, January 27). Still, this research found that the progress of the *Ten Year Cycling Network Plan (2016)* is stalling like its previous 2001 plan after three years of approval.

### **The Place of ‘Equity’ in Policy and Implementation Strategies**

If we critically look at how equity is incorporated into transportation initiatives and strategies relevant to active transportation in the city, we generally observe that social equity goals are not interpreted into attainable objectives. Suitable measures for assessing their achievement in a purposeful manner are often lacking. In general, the plans show a stronger focus on traffic efficiency or micro-environment than on social/spatial equity.

While different impacts affect various groups in terms of accessibility, mobility, travel time, safety, affordability, and transportation investments as mentioned discreetly in reports and plans, these differential impacts are not fully addressed in a comprehensive manner in any of these documents. Equity as a primary goal was mentioned in only one of the reports (*Road to Health*) produced by the Toronto Public Health (2012), and the following reports did not utilize the potential of such theme. In the report related specifically to healthier apartment neighbourhoods (*Toward Healthier Apartment Neighbourhoods*), the need for active transportation infrastructure in Toronto’s inner suburbs was clearly stated, but this report did not provide any instructions for the equitable implementation.

The City of Toronto transportation backgrounder agrees that the inability of many Torontonians to easily move throughout the city decreases the economic and social returns on transportation investments. The document acknowledges that inequity hinders economic growth and prosperity, reinforces social isolation, and contributes to health inequities in Toronto's communities. The backgrounder also recognizes that active transportation options such as cycling are not readily available for lower income residents and in all areas of the city, therefore restricting mobility and public health benefits (City of Toronto 2018). Unfortunately, none of the policy documents or plans discussed include any measure or a prioritization policy for establishing social equity. Spatial equity (though not termed as such) is vaguely present in the form of providing instruction for a seamless, connected network among neighbourhoods in the whole city -- but that is not enough as the expansion of infrastructure does not always confirm equitable access or affordability. Therefore, generating objectives and measures to better integrate social and spatial equity into Toronto's active transportation plans should be given more importance in both policy level and operational plans.

### **3. Active Transportation Investment and Planning Tools**

How are active transportation investment decisions taken in Toronto and which planning tools and implementation strategies are being used? Transportation infrastructure investment decisions are made in different ways. The City of Toronto's Official Plan has several maps and policies that guide decision making and capital budget planning. Some of the decision making tools that shape the active transportation infrastructure locations and services are discussed here.

The Official Plan generally encourages transit priority, active transportation and land use patterns which support transit use. Some of the key Official Plan maps (see Appendix A) that have determining influence on location and investment of active transportation infrastructure are discussed here to shed some light on the decision making process involving planners. The Official Plan Map 1: Regional Connections of Official Plan shows potential GO Lines. Although GO is planned, built and maintained by the province, the City of Toronto is responsible for land use planning around new stations. Similarly, the Official Plan Map 4: Higher Order Transit Corridors shows where most transit volume is expected in future development. Toronto City

Council gives priority to achieving expansion elements such as the transit corridors, GO/TTC interchanges and new GO stations. As per the Official Plan, different transportation modes need to be incorporated with future growth and expansion directions. Therefore, active transportation infrastructure should follow these development maps to ensure efficient transport-oriented development. The Official Plan Map 3: Right of Way Widths Associated with Existing Major Streets shows planned right of ways. Road widenings are guided by this map when there is a development application. The road widening is often used to achieve sustainable transportation goals such as wider sidewalks and cycling routes. It is appropriate to say that the availability of sufficient right of ways facilitate the building active transportation infrastructure. The Official Plan Map 5: Surface Transit Priority Network indicates transit priority segments which also guide the installation of cycling infrastructure with the aim of modal integration (City of Toronto, 2019, June 25).

In support to the Official Plan, Secondary Plans secure the alignment of new streets and have more detailed instruction about active transportation related installations. The City of Toronto has 34 Secondary Plans scattered all over the city offering an area specific agenda. As a result, if the proposals incorporated in the Secondary Plans are not synchronized with the city-wide network, missing links might possibly occur (City of Toronto 2019, February 22).

The City also aims to implement active transportation goals through the approval of development applications. For example, it might require a Transportation Management Plan as part of a development application in order to demonstrate strategies to reduce vehicular parking requirements and secure pedestrian public realm improvements, bicycle parking, bike share stations, etc. Such plan also helps city planners to determine the need of any site specific expansion of infrastructure (City of Toronto 2019, July 08).

However, one of the most prominent tools that planners might use to develop equitable transportation decision or for that matter active transportation decision is the Toronto Strong Neighbourhood Strategy 2020 (City of Toronto, 2011). Toronto City Council approved Toronto Strong Neighbourhood Strategy 2020 in 2011 identifying 31 neighbourhoods in need of improvements. The Strong Neighbourhoods Strategy aims to provide an avenue to municipal planners to guide investments in local active transportation infrastructure. This document could be an effective tool as its core focuses on looking at and achieving equity. Specifically, the

Strategy aims to develop local investment portfolios in line with provincial strategies and programs to advance equitable outcomes across five key areas: economic opportunities, social development, healthy lives, participation in decision-making, and physical surroundings. Investments in active transportation projects might open possibilities to address multiple parameters of equity in Toronto neighbourhoods. This Toronto Strong Neighbourhood Strategy recommends that Toronto Public Health works with other municipal departments to consider incorporating active transportation as key investment priority. Also, as part of this strategy, the communities determine their preferences for neighbourhood improvements. Funding proposals are thus developed by community groups and partners which ensure more public participation (City of Toronto 2019, May 09). Even though the process differs from traditional public participation process, some common problems such as a small group of people in the community taking the lead and directing the decision may occur as well. However, whether city officials actually use the tool to invest in active transportation planning is not clear.

In spite of all these strategic reports and tools that support equitable active transportation investment (even though not all of those have equity as a considerable point), what is the actual outcome? Is the development of a comprehensive active transportation network progressing enough? If not, then why?

#### **4. The Progress is Not Enough**

This section concentrates on the measure of progress in cycling infrastructure based on the most recent bike plan *Cycling Network 10 Year Plan 2016* replacing the first ever bike plan approved in 2001. The backgrounder of the 2016 plan emphasizes that the goal of the new plan is to learn lessons from the (lack of) progress of the previous plan about what did or did not work and why, and to re-evaluate what could be done now to create a bike friendly city. The report admits that while most of the downtown cycling network routes recommended in the 2001 Bike Plan have been installed, most of the routes recommended for Scarborough, North York and Etobicoke have yet to be installed. The expansion of bike lanes into inner suburbs was among the primary objectives (City of Toronto, 2001). In June 2016, the new plan committed to building up to 560 kms of new bike lanes and cycle tracks (lanes physically separated from cars), as well as up to 110 kms of sidewalk-level boulevard trails that allow people to cycle along busy streets (Warren,

2018). According to the City's Transportation Service Department, from 2016 to 2018, approximately 60 kms of new cycling routes were installed consisting of:

- 15 lane kms of cycle tracks (such as Lakeshore Boulevard West and Woodbine Avenue);
- 18 lane kms of bike lanes (such as Renforth Drive and Grenoble Drive);
- 13 lane kms of shared lane pavement markings (such as the neighbourhood wayfinding sharrows from Lakeshore Boulevard and cycle track to the Waterfront Trail); and
- 12 centreline kms of multi-use trails (such as Keele Street north of Sheppard Street and the Gattineau Trail from Victoria Park Avenue to Eglinton Avenue) (City of Toronto, 2019).

In terms of safe and dedicated infrastructure, the City installed only 32 kms of bike lanes and cycle tracks in the first three years, representing about 5% of what was initially promised. Of these lanes, only 15 kms are physically separated cycle tracks while 18 kms are painted bike lanes, the kind of infrastructure needed to encourage cycling in the car-centric suburban streets (City of Toronto 2019, June 20). For example, around York University there are only some sharrows (shared lane marks with no separation) visible with no additional safety features in crossings. Also, the lanes do not have connections to arterial routes or to other bike lanes, or for that matter to any particular destination. Cycling advocates have long raised concerns about the lack of safety relating to sharrows and the missing links in the suburban bike network (Warren, 2018). According to the Transportation Services Department, more than 100 kms of cycling routes were upgraded and enhanced, and bicycle signals were installed at nine locations, but these are mostly downtown locations. Many of the enhancements, Transportation Services claim, were along "Vision Zero corridors" (locations prioritized by staff for safety upgrades) (City of Toronto 2019, June 20). While the same safety plan and preoccupations are applicable for the suburban locations, the investment in suburban locations has been minimal and limited only to sharrows.

Between 2019 and 2021, the City of Toronto is expected to conduct pre-feasibility studies of the following Major City-Wide Cycling Routes (City of Toronto, 2019, June 20): Danforth Avenue (between Broadview Avenue and Victoria Park Avenue), Bloor Street West (between

Shaw Street to High Park Avenue), Bloor Street East (between Church Street to Sherbourne Street), Warden Avenue (from the Gattineau Hydro Corridor to Finch Hydro Corridor), Yonge Street/Avenue Road/Mount Pleasant Road, University Avenue/Queen's Park Crescent (Bloor Street West to Front Street West).

Following the slow progress and considering that new routes remains at the study stage, cycling advocates opined that Toronto is not doing anywhere near to what is needed for a 21st century global city in terms of active transportation infrastructure and equity. In an interview with *The Toronto Star*, local cycling advocate Albert Koehl called the pace of the plan “dismal” especially in the face of continued accidental deaths on Toronto's streets. To Koehl, the reason is not the lack and unavailability of funding noting the City Council already committed \$16 million a year, but rather a lack of positive effort from municipal authorities. While some improvements have been made through the master plan, what is really needed, according to Koehl, are links along major roads north-south and east-west across the city to serve as the backbone of a comprehensive cycling infrastructure covering the entire city (Warren, 2018).

### **What is Preventing Investment in Suburbs**

From the media analysis, interviews conducted, recent literature and general observations, some of the key obstacles preventing active transportation investment and benefits to reach inner suburbs are political will, planning ‘red tape’ and the lack of safety in suburban streets linked to public awareness.

#### ***Political Will***

To understand the state of cycling infrastructure in Toronto, a clear idea of the political landscape is required. Regardless of public demand and city planners' support, projects require City Council's approval with a majority of votes. City Council has recently been reduced to 25 wards (by the Ford government). Therefore, ultimately it is up to elected politicians to decide whether a particular project goes forward or not.

Almost everyone in Toronto, from the general public to professional planners to politicians, including the Mayor, would agree that Toronto needs to be a bike-friendly city. But often bicycle advocates express dissatisfaction that City Councilors love bike lanes in the

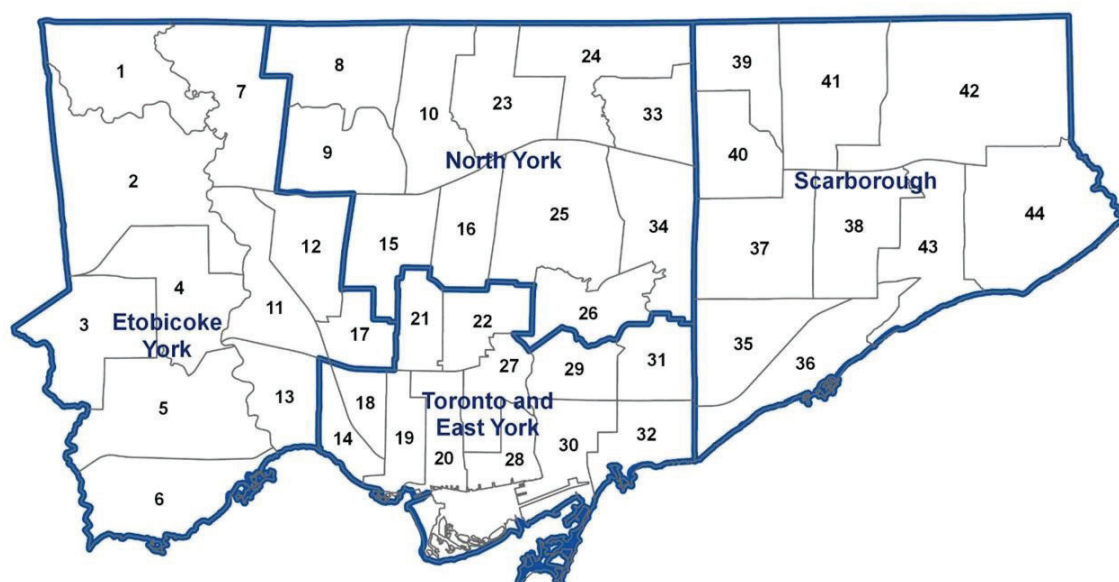
abstract but feel different when it comes to decision and voting time. For many councilors, the possibility of inconveniencing those who enjoy current road privileges is considered to have a detrimental effect on their votes. In this regard cycling advocate Nancy Smith Lea (2019) argues that the idea that people in inner suburbs generally own a vehicle is having somewhat of a damaging effect in decision making as politicians might often want to satisfy a fraction of the constituent population.

The June 2016 10-year Bike Plan came to the Public Works and Infrastructure Committee accompanied by a straightforward recommendation from staff "that City Council adopt *in principle* the Ten Year Cycling Network Plan... *excluding the proposed Major Corridor Studies* except those currently underway, with implementation of individual projects in this plan subject to future City Council approval, as appropriate" (City of Toronto 2016, June 6; Goldsbie, 2016). The Committee's members supported the "*basic idea*" of the bike plan minus most of its backbone components i.e., studies of eight major corridors. Also, all proposed developments remain subject to future approvals if and when deemed appropriate by the City councilors (City of Toronto 2016, June 6; Goldsbie, 2016). This skeptic mindset of councilors are actually affecting the inner suburbs in a greater proportion considering these areas are looking forward to new infrastructure. Large parts of the downtown core already boast bike lanes even though few links are missing and safety features require improvements. But the inner suburbs are the most setbacked as they do not have much existing infrastructure and if the bike plan 2016 does not deliver what it promises, the situation could even worsens.

The mindset of City councilors is clearly a key factor in the decision making process. Joe Pantalone (2019), former deputy mayor and long term city councilor indicating the bewildering approach from the councilors, mentioned that there are councilors who are pro-bike lanes, some are extremely opposed to bike lanes and few others are somewhat confused. Pantalone (2019) suggests that there are even councilors who are publicly in favour of bike lanes but often oppose bike lanes when voting in Council. According to Pantalone (2019), this lack of political focus in the active transportation infrastructure is creating confusion among both planners and the public. The only way out of this impasse is to ensure active participation of the general public in relevant matters, because, as Pantalone (2019) argues, downtown people get the better share because they are more vocal. Pantalone (2019) suggests that cycling advocates and journalists

should focus more on building public support and awareness in the inner suburbs communities which then eventually make the politicians believe in the active transportation (as at the end politicians are elected and require vote to win elections).

Table 1 draws from a noteworthy newspaper report that shows the stance of the councilors at the time of 2016 Bicycle Plan launch (Lorinc, 2016). This table shows how councilors voted on past bike lane installation projects, ranging from the installation of bike lanes on Bay Street during David Miller’s term (2003-2010) to the approved pilot project on Bloor Street. The report did not provide any comment on politicians’ mindset, but only depicted who voted for what. The table shows how councilors from inner suburb wards are mostly “confused” or have a negative position about the bike lanes (Lorinc, 2016). Considering that there were 44 councilors at that time (see Figure 3), every councilor voted a total of 220 instances on particular projects. Downtown councilors voted ‘No’ (marked as light gray) for proposed bike lane projects in 28 instances while suburban councilors voted ‘No’ in 71 instances (marked as darker grey). Absence and Not in Office (NIO) votes in both cases are taken as ‘No’ for the sake of this observation as these means respective councilors were less or not interested in the projects.



**Figure 3: City of Toronto Ward Map (2014-2016)**  
(Source: City of Toronto Community Council Area Profile 2016)

While Table 1 is for illustrative purposes only, projects are usually considered based on their merit and benefit to the public and councilors (ideally) take unbiased decision. But this chart shows that in general the support for bike lanes are not as strong as it appears often in the political notes and manifestos. Also, suburban councilors have less interest in bike lanes which explains the absence of cycling infrastructure in the inner suburbs.

City Councilors (Ward)	Bloor St Bike Lanes Pilot Project (May 2016)	Adelaide St and Richmond Ave Bike Lanes Pilot Project (July 2015)	Motion to maintain the Jarvis bike lanes (October 2012)	Motion to maintain existing bicycle lanes on Birchmount Rd (October 2012)	Installation of bike lane on Bay St, Lansdowne Ave, Rathburn Rd, Spadina Cr, York Mills Rd, Westhumber Blvd, and Ellis Ave (May 2010)
Paul Ainslie (43)	Yes	Yes	No	No	No
Maria Augimeri (9)	Yes	Yes	Yes	Yes	Yes
Ana Bailao (18)	Yes	Yes	No	No	NIO
Jon Burnside (26)	Yes	Yes	NIO	NIO	NIO
John Campbell (4)	Yes	Yes	NIO	NIO	NIO
Christin Carmichael Greb (16)	Yes	Yes	NIO	NIO	NIO
Shelley Carroll (33)	Yes	Yes	Yes	Yes	Absent
Josh Colle (15)	Yes	Yes	No	No	NIO
Raymond Cho (42)	Absent	Yes	Yes	Yes	Absent
Gary Crawford (36)	Yes	Absent	No	No	NIO
Joe Cressy (20)	Yes	Yes	NIO	NIO	NIO
Vincent Criscanti (1)	Absent	Absent	No	No	NIO
Janet Davis (31)	Yes	Yes	Yes	Yes	Yes
Glen De Baeremaeker (38)	Yes	Yes	Yes	Yes	Yes
Justin Di Ciano (5)	Yes	Absent	NIO	NIO	NIO
Frank Di Giorgio (12)	Yes	Absent	No	No	Absent
Sarah Doucette (13)	Yes	Yes	Yes	Yes	NIO
John Filion (23)	Yes	Yes	Yes	Yes	Absent
Paula Fletcher (30)	Yes	Yes	Yes	Yes	Yes
Mary Fragedakis (29)	Yes	Yes	Yes	Yes	NIO
Mark Grimes (6)	Yes	Yes	No	No	Yes

Michelle Holland (35)	Yes	Yes	No	No	NIO
Stephen Holyday (3)	No	Yes	NIO	NIO	NIO
Jim Karygiannis (39)	No	Yes	NIO	NIO	NIO
Norm Kelly (40)	Yes	Yes	No	No	Yes
Mike Layton (19)	Yes	Absent	Yes	Yes	NIO
Chin Lee (41)	Yes	Yes	Yes	No	Absent
Giorgio Mammoliti (7)	No	Absent	No	No	Absent
Josh Matlow (22)	Yes	Absent	Yes	No	NIO
Pam McConnell (28)	Yes	Absent	Yes	Yes	Yes
Mary M. McMahon (32)	Yes	Absent	Yes	Yes	NIO
Joe Mihevc (21)	Yes	Yes	Yes	Yes	Yes
DenzilMinnan-Wong (34)	Yes	Absent	No	No	Yes
Ron Moeser (44)	Absent	Absent	No	No	Yes
Frances Nunziata (11)	Yes	Yes	No	No	Yes
Cesar Palacio (17)	Yes	Absent	No	No	Yes
James Pasternak (10)	Yes	Absent	Absent	No	NIO
Gord Perks (14)	Yes	Yes	Yes	Yes	Yes
Anthony Perruzza (8)	Yes	Yes	Yes	Yes	Yes
Jaye Robinson (25)	Yes	Yes	No	No	NIO
David Shiner (24)	Yes	Absent	Absent	No	Absent
Michael Thompson (37)	Yes	Absent	No	No	Absent
Kristyn Wong-Tam (27)	Yes	Absent	Yes	Yes	NIO
John Tory (Mayor)	Yes	Absent	NIO	NIO	NIO
RESULT	Approved	Approved	Failed	Failed	Approved

**Table 1: Toronto City Council Voting on Bicycle Infrastructure Projects (2010-2016)**

(Source: Lorinc, 2016. Does Your City Councillor Support Bike Lanes? From Torontoist.com)

Some of the suburban councilors are often categorically against bike lanes. For example, when the 2016 bike plan was conditionally approved, Etobicoke Centre Councilor Stephen Holyday argue for maintaining spending at \$8 million a year as opposed to the \$16m a year as proposed in the staff recommendation. Holyday also wanted to reject any bicycle expansion where staff indicated that motor vehicle traffic might be impacted. Holyday argued that bike lanes often robbed motor vehicles of road capacity (Nickle, 2016). York Centre Councilor Giorgio Mammoliti backed up Holyday on another amendment (ruled out of order) to license

cyclists like cars. According to newspaper reports, Mammaloti (quoted in Nickel, 2016) argued that “[t]here are a lot of psycho cyclists out there, and the majority are becoming psycho cyclists.” This mindset is unlikely going to bring active transportation investment to inner suburbs.

Former Mayor (2010-2014) Rob Ford (Etobicoke North) was widely known for his pledge to end what he dubbed the “war on cars”. Ford argued that bike lanes were taking away space for cars. He was criticized during his tenure for not only halting new cycling infrastructure projects but also for removing few existing bike lanes (Matgolis, 2012). Although Ford (2010) seems to agree that downtown situation was different given the increasing number of cyclists, he saw no feasibility to have bike lanes on suburban streets like those of Rexdale. In other words Ford showed no interest in the inner suburb bike lanes.

It is hard to find any councilor in the downtown wards who might possess such intention towards inner suburbs. Downtown councilors Joe Cressy and Mike Layton have been working for decades on establishing protected bike lanes in their wards. Their efforts have gone beyond bare political agenda and they worked with local and city level advocacy groups for establishing the much needed Bloor Street bike lane. Cressy and Layton convinced the local authorities in the Bloor Annex and Koreatown Business Improvement Areas to get their support for an economic impact assessment to show viability of the project. Both councilors worked relentlessly to bring support of fellow councilors for the approval of the Bloor Street pilot project in 2015 which eventually became permanent in 2017. The Bloor Street bike lane clearly demonstrates how some of the downtown councilors are contributing to bring changes in their neighbourhoods in terms of active transportation infrastructure (Romeril, 2007). All in all it might not be appropriate to put all politicians under the same umbrella but surely cycling culture in suburban politics is a lot weaker than it is in downtown politics.

### ***The Red Tape: Planners in Focus***

Since 2016, the City's 10-year Cycling Infrastructure plan delivered only a few kilometres of separated bike lanes. A significant addition has been the 2.4 kms strip of Bloor Street between Shaw and Avenue Road, which has gained rapid growth in ridership and a notable decline in fatalities according to a city study (Mok, n.d.). Most Torontonians seem to support the idea of

having separate bicycle lanes. A poll of 800 residents in 2018 showed that both drivers and bikers expressed concern about the record-breaking number of road deaths in the city in 2018 and were interested to see more protected bike lanes (Pelley, 2018). Yet, in suburban areas like Scarborough where the absence of proper infrastructure has resulted in an excessive number of pedestrians and cyclists' accidents, there has been no addition of protected bike lanes.

As stated by City spokesperson Eric Holmes (in Mok, n.d.), "[g]enerally, installing cycle tracks involves a reduction in the number of motor vehicle travel lanes which may result in increases to motor vehicle travel time... Installing cycle tracks can also require a reduction or removal of on-street parking spaces". Thus, in order to move forward with any new projects, Holmes suggests that planning and designing undergo a complicated process including traffic analysis, engineering design, stakeholders' consultations, and finally city council's approval. Acting director of Transportation Infrastructure and Management at the City of Toronto Jacquelyn Hayward Gulati considers that the 2016 10-year Cycling Infrastructure plan was not at a "detailed design level," and that by-law amendments are required for each and every bike lane. According to Gulati (cited in Warren, 2018), "[t]he process to design and consult and get council approval on cycling infrastructure is quite extensive, as you see in some of the political discussions that happen on these projects." But according to bicycle advocate Sarah Bradley (2018), long-drawn bureaucracy does not justify the slow uptake of better bike lanes since "[i]n the same number of years since Toronto implemented its 10-year plan, Montreal has already built 90 kilometres of painted and protected bike lanes in its \$15 million investment to improve bike culture" (cited in Mok, n.d.). According to Nancy Smith Lea (2019), director of Toronto Centre for Active Transportation (TCAT), the City of Toronto has limited human resources and planners, due to political pressures or other reasons, have to prioritize between competing interests and therefore bike lanes often get a setback. Smith Lea (2019) illustrates this point with the removal of two bike lanes in Scarborough at Birchmount Road and Pharmacy Avenue in 2011 as strongly advocated by councilor Michelle Holland. Despite a staff report from planners indicating that neither bike lanes provided any significant impediment to motor vehicle traffic, the Council voted those lanes down. According to Smith Lea (2019), this sort of evidence of political opposition in the suburbs discourage planners to go along with implementing new bike lanes specially when they know there are going to be met by politicians' resistance and their followers advocating against the plans.

Senior planner at the City of Toronto Francis Kwashie (2019) took a completely different perspective on the matter. Kwashie (2019) rather argues that to ensure equitable outcomes in planning decisions, equity has to be first established within the planning system. According to Kwashie (2019), the underrepresentation of planners of color in the planning profession and in the municipal sector has a negative impact in the decision making process which effects inner suburbs. People from racialized and low income communities in disadvantaged neighbourhoods often fail to convey their needs to planners, partly due to their absence in public participation events. Therefore, if planners do not have a proactive attitude or have experience to live and work with such communities, inappropriate decisions are inevitable. This phenomenon generally translates into a lack of interest among planners to expand infrastructure (including bike lanes) in the inner suburbs.

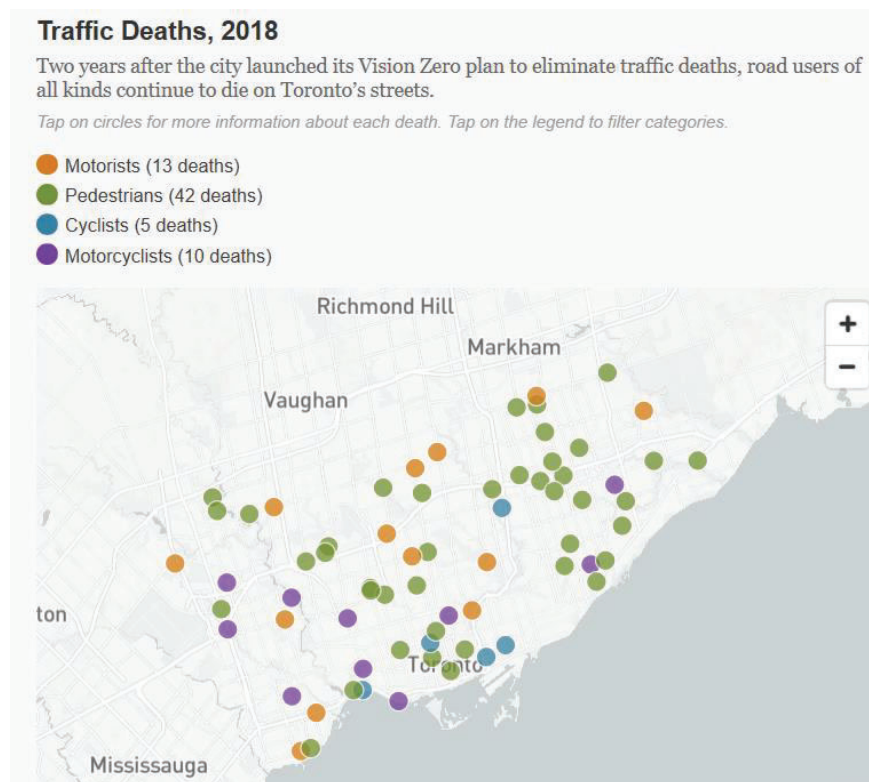
According to former deputy mayor Joe Pantalone (2019), the City of Toronto should not be blamed solely for the slow progress of cycling infrastructure. The provincial government has a say over municipal governments and cities often do not have the authority to allocate funding. Sometimes municipalities have to prioritize objectives based on the broader intention of the province and distribute resources accordingly.

### ***Lack of Safety in Suburban Streets and Public Awareness***

Traffic safety considerations are a major restraint on cycling. Anticipated traffic danger to cyclists is an important deterrent, particularly for women, beginner cyclists, and potential new cyclists (Pucher et al., 2011). The road in the suburbs of Toronto, with the speed limit of 60km/hr in most cases, are generally designed for motor vehicles. Wide, high-speed roads and a lack of separated bike lanes can make cycling uninviting and unsafe. At the same time, it is difficult for municipalities to build bike lanes that require the redistribution of road space away from motor vehicles when very few people are cycling.

As seen in Figure 3 below, road safety in Toronto was its worse in 2018 with the death of 46 pedestrian/cyclists, 40% of whom were in Scarborough (Spurr, 2018). According to the City of Toronto website, in the last five years 190 pedestrians and 16 cyclists were killed in collisions with vehicles on its territory (City of Toronto. 2019, June 26). Bicycle advocate Marvin Macaraig (2019), coordinator of the Scarborough Cycles program, stresses that the lack of safe

infrastructure is the most deterrent factor for cycling in the inner suburbs. According to Macaraig (2019), people in the suburbs are far more aware of healthy living, climate change and smart way of commuting than they were ten years ago, but the fear of safety is preventing them from riding a bike. Macaraig (2019) argues that, as the statistics of traffic fatalities unanimously establish the need of proper infrastructure, planners should aim to follow the best practices such as protected bike lane. Macaraig (2019) also believes that the introduction of protected bike lanes would have a positive effect on the overall road safety with vehicles lowering their speed and providing a barrier between the road and the sidewalk for children or people with mobility issues.



**Figure 4: Traffic Deaths in Toronto in 2018**

(Source: Spurr, 2018)

Even with these statistics, the City of Toronto is apparently following a general trend of North American cities to minimally address road safety in marginalized neighbourhoods by adding only minimal safe elements such as painting sharrows or bike lane markings next to curbs

or between on street parking and traffic. Protected bike lanes separated from traffic by curbs, posts or rows of parked cars are generally limited to affluent neighbourhoods (Lusk, 2019).

While interventions in physical infrastructure often receive more attention, “it is also critical to consider other barriers to active lifestyles that are rooted in people’s attitudes and habits” (Lavizzo et al., cited in Toronto Public Health, 2012: 61). In Toronto, cycling is considered largely a downtown activity. This framing excludes the mass of people living in the inner suburbs without a car. It also denies the fact that biking could be an effective way to commute within and between inner suburbs’ neighbourhoods. Research shows that “in Toronto’s suburban communities of Etobicoke, Scarborough, and North York, 1.5 million trips made each day are 5 km long or less. In fact, the majority of short trips in the city are made outside of the downtown” (Ledshamand and Verlinden 2019: 6). Poor active transportation infrastructure in those areas is far from justification. The result is obvious. People living in Toronto’s suburban neighbourhoods face poorer health outcomes than those living downtown (Toronto Public Health, 2012). To break this cycle, capacity among organizations and individuals needs to incubate and grow cycling culture. Marketing and education programs to promote active transportation can play an important role in overcoming barriers to cycling and walking that go beyond the physical environment (Pooley et al., 2010; Pucher et al. in Toronto Public Health, 2012). As more people bike, support for cycling grows and local community advocates can work with city staff and politicians to constructively address infrastructure gaps.

## **5. Moving Forward**

The current push by the City of Toronto and the province of Ontario to expand a bike infrastructure can offer an opportunity to bridge some of the spatial and social divisions. There is, however, no clear-cut vision or strategy in the relevant proposals on how active transportation provision can act as social and spatial equalizer (Amar, 2015). At the municipal scale, there are competing preferences and limited adherence to an effective active transportation vision on the part of politicians. The discussion generated in this research confirms that a multi-stakeholder perspective is necessary. As highlighted before, the current focus on congestion alleviation and traffic efficiency through providing basic infrastructure does not adequately address the concerns of unequal distribution of investment and benefit in communities outside of downtown areas.

Political will can play a key factor. But politicians will act only when there will be an impact on their public support, which means a motivator might be increasing public awareness in the inner suburbs for safe infrastructure. However, that does not mean that politicians are relieved from their responsibilities and duties toward democracy and public good and they should only react (instead of acting) on equitable distribution of active transportation benefit when there is social or institutional pressure.

Equity in active transportation planning is actually a part of transit equity as a whole. Equity in transit generally comes from “an understanding of the uneven way by which different publics have access, and of the forces that produce such distributions” (Hertel, Keil and Collens 2016: 29). One approach to tackle this issue is to prioritize transit investments to particular target population in order to counteract poor access to transit, the lack of affordable housing, and poor access to employment. According to Hertel, Keil and Collens, (2016: 23), “[b]y looking at the existing transit network in relation to socio-economic indicators of inequality, plans and policies can be produced to address the inequalities.” A more just transportation network cannot be produced just by providing new transport infrastructure. Authorities need to provide policy tools, bylaws and regulations to support transit plans that address transit injustice. The gentrification effect is one such example that requires a proactive, top-down approach by local governments. In this regard, Pendall et al. (2012) describe the case of Denver, Colorado “where the region was in the midst of building a large, regional transit network, [and] civic leaders were working on ways to protect existing low-income housing along new transit lines. They implemented planning tools to protect existing affordable housing, and ensured land redevelopment had not price existing low-income residents out of newly accessible neighbourhoods. They also looked at ways to incorporate affordable housing in new developments” (Hertel, Keil and Collens 2016: 23). This top-down approach emphasizes the significance of government actors in considering broader social impacts of building transit infrastructure. Infrastructure projects often tend to create rather than mitigate inequities.

In the case of active transportation infrastructure in Toronto, a proactive approach from planners and politicians is needed. Social equity advocates and cycling advocates need to ensure grassroots level support for healthy living and active transportation as well as mobilizing people with the knowledge to prevent their ‘right to the city’ by fighting gentrification.

Rather than outlining generic strategic suggestions, this research examines some case studies to see how these issues have been dealt previously in similar circumstances. One case study depicts the role of politicians in Bogotá to protect the right of ordinary citizens in creating active transportation opportunities and to overcome administrative red tape to deliver equitable active transportation infrastructure. The case of New York shows how bicycle advocates took the forefront to save a bike lane fighting against few overpowering politicians which ultimately changed the way people looked at such infrastructure. A recent research and poll survey show the scopes that improving active transportation safety might establish transportation justice by creating equal opportunities. Two very specific suggestions are made below to show how existing planning tools might be used to bring social and spatial equity in active transportation in inner suburbs. All these, together, address the issues which are deemed to be preventing equity in active transportation benefits as discussed previously.

### **Democratizing Urban Space: The Case of Bogotá**

By the 1990s, a fifth of Bogotá's population live in peripheral informal settlements (Cervero, 2005). Average daily commutes reach up to two hours to make it to the city core from peripheral locations, requiring multiple transit services with cost implications. The streets were clogged by cars owned by only 22 percent of Bogotá's population (Torres, 2012). Cars were parked without restriction on sidewalks. Only a small part of the population used bicycles to commute. Confronting that situation, "a pair of young Bogotano politicians began to make an interesting argument: if everyone is equal under the law, then public road space should be distributed to everyone equally" (Building Equity, 2015: 17). One of the politicians, Enrique Peñalosa (cited in Building Equity 2015:17) argues that "[a] bus with 80 passengers has a right to 80 times more road space than a car with one." Peñalosa and his contemporary Antanas Mockus, as Mayors of Bogotá, attempted the radical idea of "democratizing space" and gave birth to two initiatives that transformed mobility in the city: the TransMilenio bus rapid transit system and integrating with this, a 180-mile web of protected bike lanes named *Ciclorutas*. Bogotá increased its fuel tax, confined pick-time car use, forbid sidewalk parking, and widened bike lanes (*ciclovías*). The popularity of the new rapid bus lines rose nearby land prices but the city defended it with *Metrovivienda*, a program that produced transit-oriented, low-income housing for working-class residents. In the following years, biking rose to 4 percent of total trips of the city (one of the

highest rates in Latin America). Citywide commute times and traffic fatalities fell 34% and 88% respectively (Torres, 2012; Building Equity, 2015; Cervero, 2005). While Bogotá's inequalities have not been all eradicated, principles introduced by Peñalosa and Mockus became popular models around the world for "[a] citizen on a \$30 bicycle," as Peñalosa argues, "is equally important as one in a \$30,000 car" (cited in Building Equity, 2015: 17).

### **Prospect Park West Bike Lane**

Park Slope, Brooklyn's Prospect Park West bike lane, was once one of the most contested strips of pavement in the United States. Strings of media coverage were dedicated to the struggle for this disputed traffic lane—in part because Iris Weinshall, wife of US Senator Chuck Schumer, headed a fight for its removal backed by nearby influential property owners. Meantime, the case was being defended by the collective force of America's largest urban bike advocacy circles, led by Transportation Alternatives and its 100,000 supporters across the city.

The Prospect Park West bike lane was a protected bike lane of about 400 kms that New York City implemented between 2007 and 2012 in Brooklyn. The added protection of a row of parked car that separated the bike lane, converted the usual traffic-congested street into one of the best streets for cycling. According to the New York City Department of Transportation, the bicycle lane diminished speeding rates from 74% to 20%, and accidents dropped by 63%. Most importantly, the lane did not increase travel times for motorists nor did it add to congestion. A New York City Department of Transportation (2011) survey showed more than 70% of neighborhood residents supported the improvement. Yet, a particular group of politicians were adamantly against it (Schmitt, 2016). The dispute ultimately climaxed in a court case for the bike lane's elimination. In the end, New York City's cycling community prevailed. The Prospect Park West bike lane remains a key component of the expanding network of cycling infrastructure that has helped New York to become one of the most bike-friendly cities in North America (Schmitt, 2016). Cycling advocates in New York City understood they were not only defending a bike lane but also were claiming the right of local residents against developers backed by the politicians.

## **Study of Safe Bicycle Infrastructure**

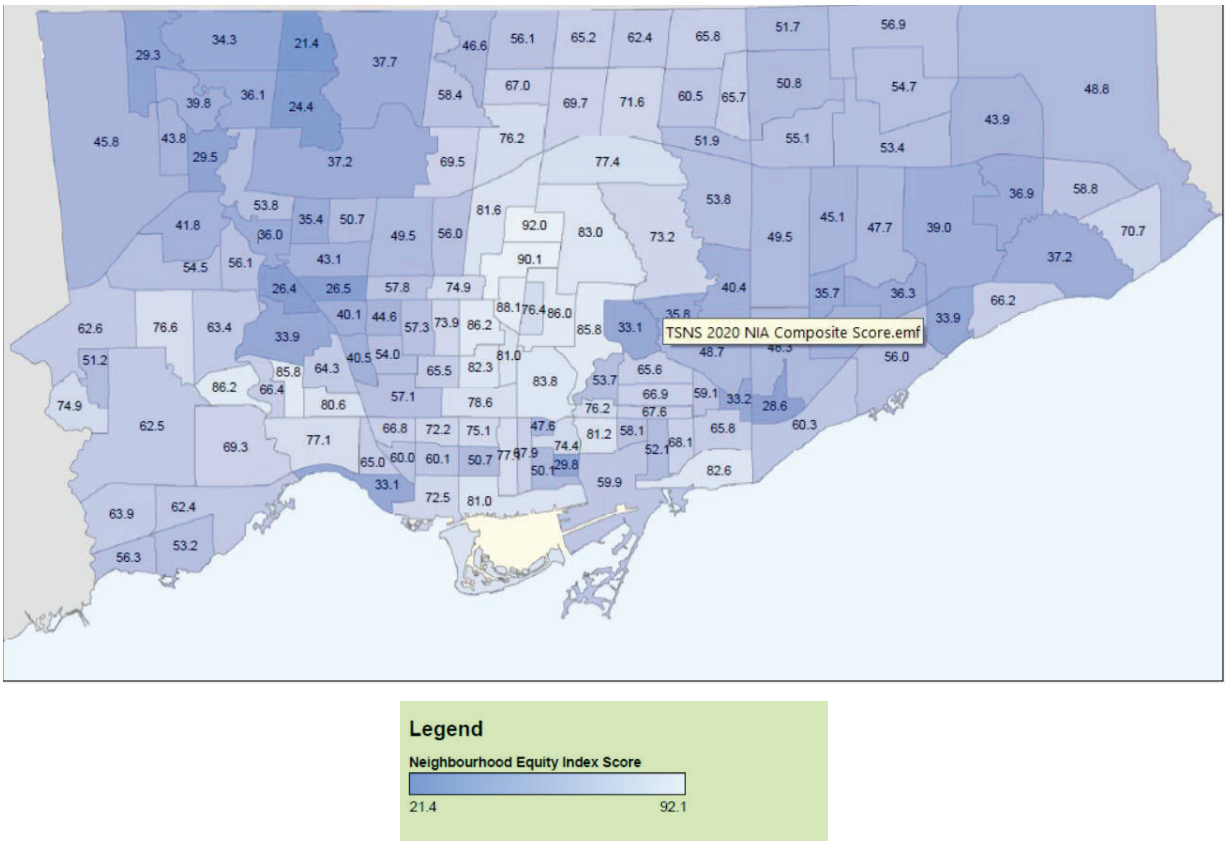
Conducted by researchers at the University of British Columbia (Teschke et al., 2012), a study examined the conditions around the injuries of 690 cyclists who landed in hospital emergencies in Vancouver and Toronto during a six month span in 2008 and 2009. The research is considered one of the most compelling research on this topic in Canada because of the methodology followed. Based on cyclists' interviews and accident descriptions, researchers plotted the injury location on each cyclist's route. The injury site and a randomly-selected control site were categorized for each route in one of 14 different street types. Researchers thus controlled other factors and kept only the safety features as variables. The result showed that wide streets with roadside parking and with no bike lane were the most dangerous for cyclists. Compared to that type of road, streets with bike lanes had 50% lower rates of injuries, while the probability of injury on protected bike lanes was a significant 90% lower. Interestingly, multi-use paths or off-street trails where cyclists share road space with pedestrians and other non-motorized modes were found to reduce injury by a comparatively modest 60%. This result unquestionably establishes the need for protected bike lanes. Toronto's inner suburbs unfortunately are getting the bare minimum sharrows in most cases which are strategically considered a deterrent for expansion of cycling by cycling advocates.

A recent EKOS survey on road safety was conducted in July 2018 among 800+ Toronto residents from all parts of Toronto (Forman, 2018). Almost 90% of the respondents stated being concerned about road safety. The proportion was highest in Etobicoke and Scarborough with 91%. The survey indicated that 75% of central residents wanted lower speed limits compared to 68% in North York. While speed reduction was mostly favored by cyclists, it was also supported by 59% of car drivers. As much as 82% of the people surveyed opted for bike lanes, which separate cyclists from cars using curbs, posts or planters. Most residents supported bike lane construction irrespective of location, age and income. The findings are consistent with a 2017 Angus Reid survey that found 80% of Torontonians support a "safe network of bicycle lanes." The most significant finding was that 75% of those whose main mode of transport was listed as automobile supported bike lanes. This poll result shows the support for protected and safe active transportation infrastructure in the city, regardless of what mode of transport people use. Politicians, be in the downtown or suburbs, therefore, might not have much to lose standing for

cycling infrastructure. It appears to be a win-win situation. The stereotypical car-oriented mindset of some suburban politicians requires a change, as public support and data evidence are there. The primary assumption that car drivers considers the bike lanes as an inconvenient feature is evidenced otherwise. Polling suggests motorists and cyclists are now finding common ground (Forman, 2018).

### **Extending Cycling Network Facilities based on the Equity Index of Toronto Neighbourhoods**

Toronto Strong Neighbourhoods Strategy 2020 suggests that investment can be directed intentionally to neighbourhoods which are said to lacking behind in services. In 2014, the City of Toronto also assigned equity scores to find which neighbourhoods were deprived of various services compared to others. This equity index map (see below) can be used to identify and direct active transportation investment to disadvantaged neighbourhoods (City of Toronto, 2019, May 9). The scores unsurprisingly show that many neighbourhoods in Etobicoke and Scarborough do not even satisfy minimum benchmark (42.89) of equity, let alone scoring somewhat standard. Many of their downtown counterparts score more than 100 at the same index. This suggestion is very specific and subject to study of various other parameters but it is stated here as an effort to see how existing planning tools can be utilized with the concept of ‘vertical equity’ to deliver intended outcome. Strategies initiated by the City of Toronto such as the Toronto Strong Neighbourhoods Strategy 2020 automatically fall in line with federal, provincial and municipal planning framework and, therefore, is easier to implement and should be able to avoid much ‘red tape.’ Planners and researchers need to develop proactive initiatives to solve equity problems and should look forward to utilising all available resources.



**Figure 5: Equity Index Map of Toronto**

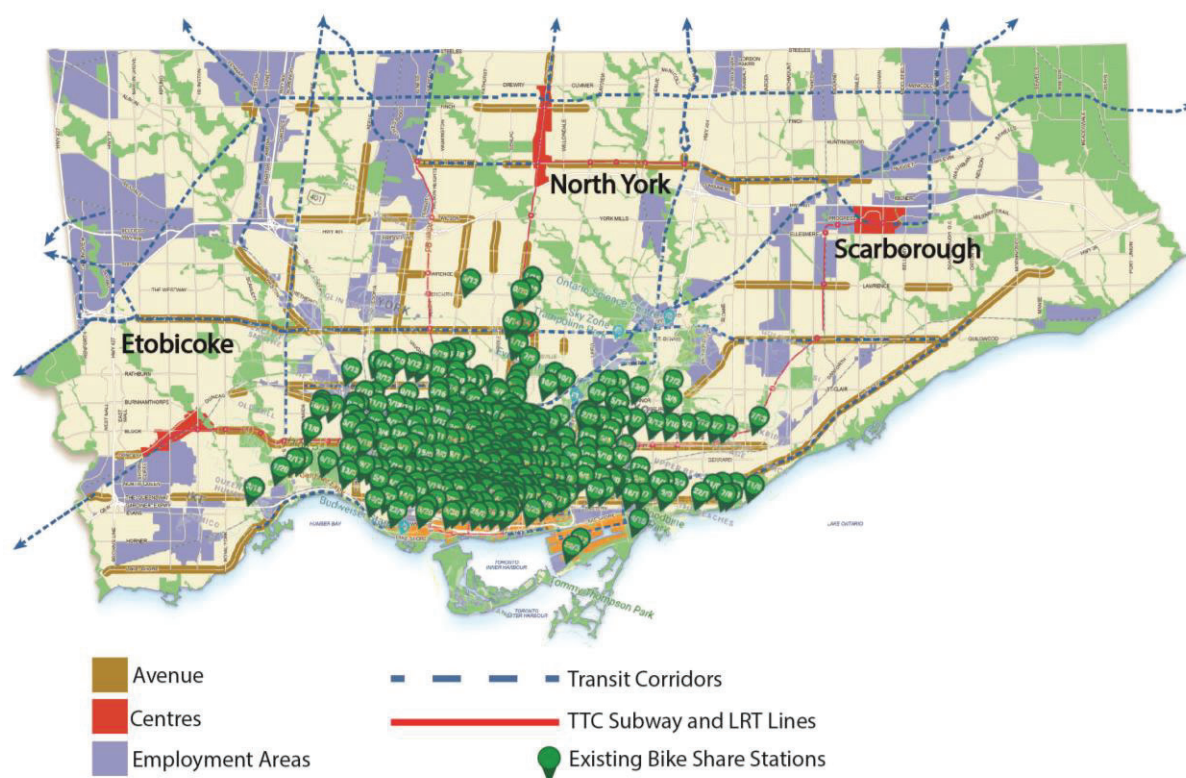
(Source: Toronto Strong Neighbourhoods Strategy 2020 by Social Policy Analysis and Research City of Toronto)

### **Extending Bike Share Facilities to Toronto's Inner Suburbs**

The City of Toronto's Official Plan proposes a new transit infrastructure to be planned along transit corridors and future growth centers. It also encourages new infrastructure considering existing and future transit nodes. Therefore, initiatives can be taken to extend the bike share facilities operated by Bike Share Toronto to Toronto's inner suburbs along the avenues, corridors, and centers observing maximum growth in Toronto. Spatial equity issue relating bike share program in Toronto can thus be addressed in way that align with local planning policies.

In 2018, Bike Share Toronto saw a 32% increase in ridership across the city. The City aims to implement an additional 105 stations to the system (in addition to the existing 360 stations predominantly located in downtown areas) in 2019 to make bike share a more viable option with

better coverage across the city. The expansion of Bike Share Toronto is rendered possible as the organization recently received \$7.5 million funds from the Ontario Municipal Commuter Cycling Program and the City (Pagliaro, 2019). This proposal might ensure an equitable utilization of the funds if the new bike stations are located in the areas where they are most needed.



**Figure 6: Existing Bike Share Stations in the Downtown and potential along avenues, centres and transit corridors in inner suburbs**  
(Source: City of Toronto Official Plan Maps; Bike Share Toronto)

## Conclusion

Positive impacts of investing in mobility infrastructure are immense and range from empowering individuals and communities to building healthy and sustainable cities. Yet, the literature relevant to transit investment almost inevitably shows that the outcomes are not always even and in cases contribute to even more inequities. My review of various policy documents and literature relevant to active transportation investment reiterates this point. Historically, greater pedestrian and cycling activities have had significant influence in the increase of retail

performances (Clean Air Partnership, 2009). A survey published by Toronto Centre for Active Transportation (2009) of Toronto's Annex neighbourhood in 2009 showed that customers who arrived by bike or on foot spent more money in the street retails than their motor driving counterparts. It also showed upward trend in property values near bike lanes, recreational trails, and other active transportation infrastructure. At the same time, one cannot deny that active transportation infrastructure can be a tool to address prevalent social and special disparities between city core and peripheries or between affluent and disadvantaged neighbourhoods as it is more affordable by any means compared to all other forms of transports. Active transportation has enormous potential to redistribute public and private investments, reduce commuting times in inner suburbs and between neighborhoods, while engaging in a carbon-free transition. It is, therefore, important that stakeholders such as the planners, politicians, advocacy groups, researchers and the general public build a larger more connected network of activists who can indeed get into serious conversation with the governance entities to ensure equitable outcomes.

The primary objective of my research was to investigate the reasons that prevent the expansion of cycling infrastructure to inner suburbs of Toronto through an equity lens. The review of the relationship between active transportation and gentrification provided a broader context to situate my research with greater attention to investments and benefits distribution. The review of policy and planning documents examined how 'equity' is positioned in both strategic and implementation approaches. It was important to have a close look in the planning and decision making mechanisms to find out possible deterrents. Tracing the progress of relevant projects was critical as the progress scenario established the hypothesis that enough is not being done in the inner suburbs, which led to the complex yet inevitable discussion of stakeholders. This is where tracing media contents provided the most useful information through shedding light on concurrent events and responses from stakeholders right from where it is happening. While discussing possible ways to move forward, a case study approach was taken intentionally to avoid generic recommendations based only on ideal approaches. However, building on the information derived from policy and planning documents and with the analysis of involved stakeholders' approaches, it is deemed necessary to incorporate examples of how already existed planning tools can be utilized to distribute benefits if a better 'equity' perspective could be established.

The findings show that, while key responsibilities fall on politicians in terms of rolling out the projects, planners cannot deny their role on the fact that there are significant gaps in policy documents, where equity as a key concept is not given proper weight. There are many public awareness programs in Toronto as well as many advocacy groups. But they often lack coordination and often fail to convey the message to politicians in a manner which might affect final decisions. Planners and politicians should also take proactive responsibilities to ensure public participation on the matter taking to count the awareness among low income and racialized populations living in the inner suburbs who have generally less power into investment decisions. Yet, as the successful stories of Bogotá and Brooklyn cautiously show, both political will and people mobilization are necessary in order to secure safe active transportation infrastructure.

While my research remains inevitably limited in terms of findings and recommendations, it clearly makes the point that when speaking about active transportation infrastructure in Toronto, clear differences between amenities in downtown and inner suburbs exist. Active transportation in Toronto in the form notably of cycling lanes require attention and expansion, but that attention and expansion must be directed in particular to inner suburbs in order to create a comprehensive and equitable network across the city.

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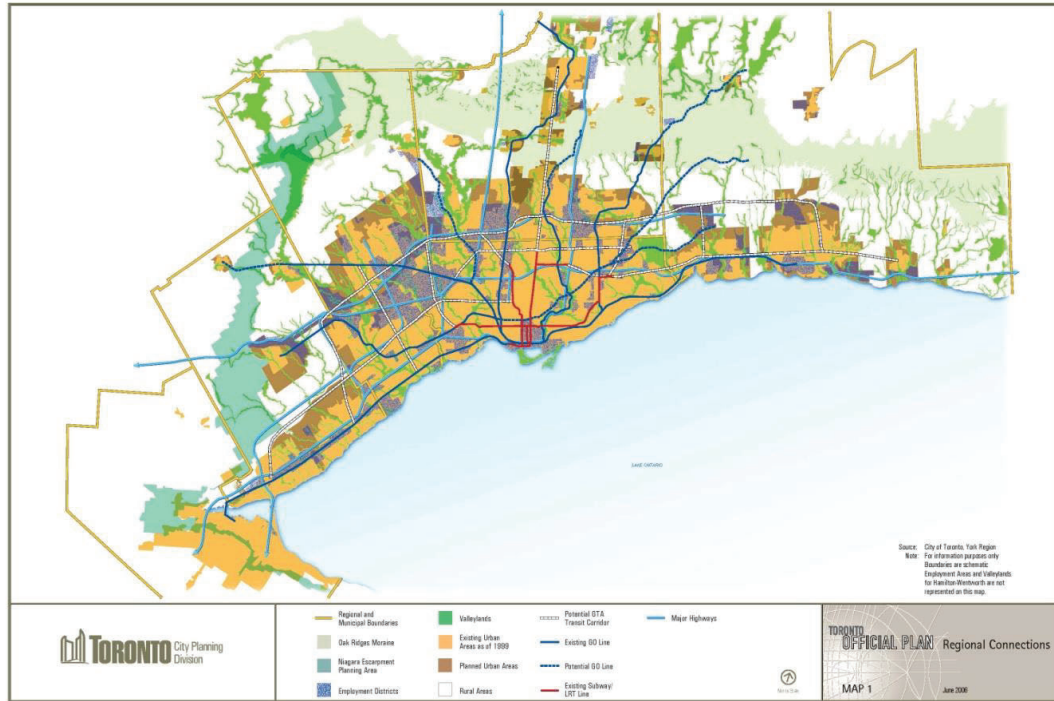
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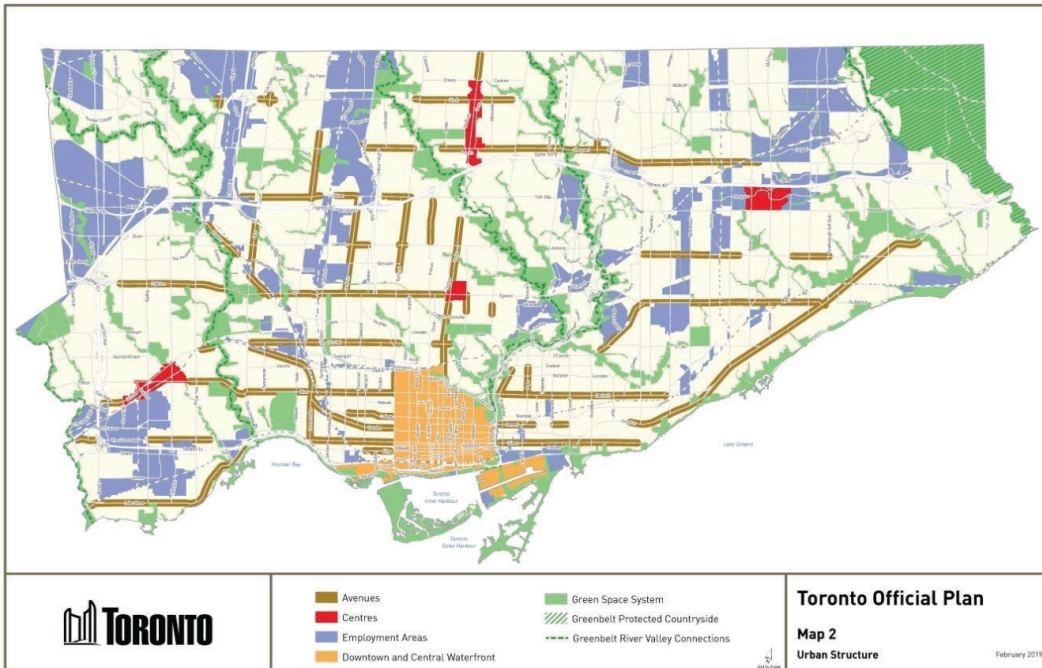
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**Appendix A:**  
City of Toronto Official Plan Maps 1-5

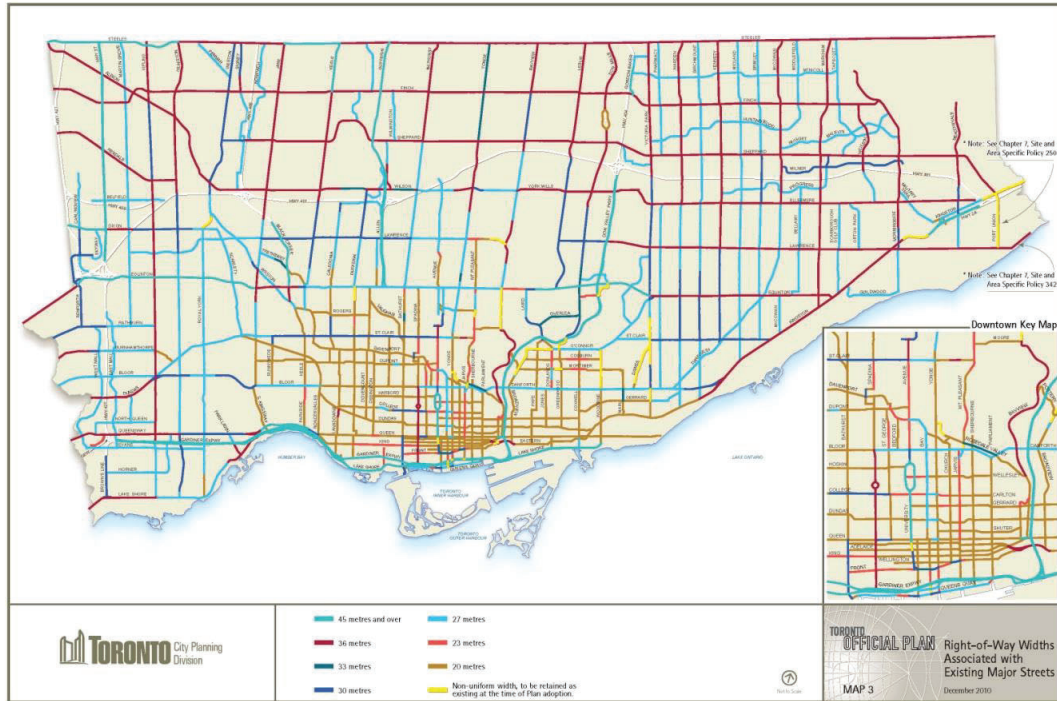
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