Planning for Transit Equity:

A Comparative Study of Warsaw and Toronto

by

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Abstract

Investment into public transit is attractive to governments to reduce congestion that a high volume of private vehicles creates. However, investments tend to be politically driven which affects the growth of the transit network and does not take into consideration if investments are equitable. In an increasingly neoliberal society, transportation planning must recognize the diverse needs of the public and plan equitable transit. Equity is often mistaken for equality. Equitable transit allows users to access opportunities and participate in out-of-home activities; regardless of their social, economic, or physical abilities. Equity acknowledges a variety of users and creates policy that allows for transit disadvantaged users to participate. This paper will analyze Warsaw and Toronto and examine if their respective transit planning policy, methods, and physical networks serve their residents equitably. Two projects will be specifically examined: the Eglinton Crosstown from Oakwood to Mount Dennis and the Metro in Warsaw's Praga-Północ neighbourhood; within the scope of transport justice and transit equity.

Foreword

This Major Paper has been submitted to the Faculty of Environmental Studies (FES) in order to satisfy all of the Master in Environmental Studies (MES) Planning program requirements. The topic of my research was developed through the Plan of Study in Year 1 of the MES program. Although the Plan of Study has evolved throughout my enrolment in the MES program, my interest in transit equity in relation to land use, governance, and social justice have all grown over my studies. The literature for my Major Research Paper has stemmed from a combination of course work and field research throughout my time in the MES program. Component 1, Planning has been the central subject throughout my studies. Through course literature, field experience, and workshop abroad I have satisfied the learning objectives set out in my plan of study in the planning component. I have gained the knowledge and skills necessary to meet the program requirements for candidate membership into OPPI and CIP. I learned about land use planning and gained a knowledge of the planning process in Ontario through the land use planning law and introduction to planning courses. These have all contributed to my understanding of planning. Component 2, Transportation Equity, has been my focus within the scope of planning. Using literature from Litman, Martens, Hertel, Keil and Collens I have built upon many definitions of transit equity and transport justice for a comprehensive understanding of the topic, satisfying the third learning objective of this component. Through my research, I have a better understanding of Toronto's demographics and how transit planning can affect these populations which is what

I set out to learn in objective 1 and 2 of this component. Although Component 3, Sustainability, is not mentioned in depth, the work of Litman was consulted to establish the connection between the concepts of sustainability and equity. Sustainability has many definitions, for the purposes of my research it was explored as a component of transit planning to increase longevity. The objectives of this component revolve around transit finance planning, governance, and economic decision making. Toronto transit planning is challenged in these three different objectives, it was the intention to gain a greater understanding of why this occurs and how these constraints affect transit planning.

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Chapter 1: Introduction: Why Toronto and Warsaw?

As cities grow, so do the demands of mobility. Mobility is an important component of urbanized areas. There are several factors that influence mobility such as density, growth, land-use, and accessibility; it is important to address these factors equitably. Sheller and Urry (2006) argue that mobility is all places that are tied to a network of connections, meaning that nowhere can be an 'island' as these connections stretch beyond each place (p. 209).

Planning means to look ahead, to make decisions and informing actions in socially rational ways; it is meant to serve the public, such as: growing the economy, invest in selected public projects, safeguard the population at large, redistribute income on grounds of equity, and to protect individual people and businesses from market uncertainties. (Friedmann, 1987, p. 47). Transportation in an urban area can be seen in the form of buses, subways, cars, and in active transit such as walking and/or cycling. Using Friedmann's definition, transportation planning encompasses more than the planning of a physical network. Cities contain networks or systems of transit to navigate the city. Public transit is shared transport available to the public and is usually maintained through collected fares from its users and subsidies from the government. Public transit is a less expensive alternative to private vehicle ownership. Investment into public transit is attractive to governments to reduce congestion that a high volume of private vehicles creates. However, investments tend to be politically driven which affects the growth of the transit network and does not take into consideration if investments are equitable.

Transportation equity or transit equity is increasingly important as market based planning tends to favour those already socially and economically advantaged. Equity is often mistaken for equality; transit equity redistributes costs and benefits appropriately to users, recognizing their varying ability to participate (Litman 2013, p. 8). Transit equity is not only dependent on the size of the network but also considers the speed, comfort, and dignity of riders. Equitable transit allows users to access opportunities and participate in out-of-home activities. Inequitable transit does not consider the needs of less mobile users who are physically, socially, and economically disadvantaged.

Transport justice is two-fold: “transport” is the form in which people navigate an urban area, this includes hard infrastructure items such as cars and buses on roads, streetcars on rails, and sidewalks and bike paths for non-motorized methods of transport. With the inclusion of the word “justice” this means the ability to participate in transport: whether one has the economic means, the physical ability to board a bus or walk the distance to the public transit stop, and the social means to understand how to participate in transport. This means it not only refers to the method (the physical object doing the transporting), but also one’s ability to participate in the city.

Planning equitable transit is integrated with sustainable planning because sustainable planning reflects an integrated analysis of impacts and objectives that

often interact. Litman (2006) argues that narrowly defined sustainability overlooks opportunities for coordinated solutions. Therefore economic, social, and environmental impacts must be acknowledged as integrated components that affect one another in planning.

The rise in individualistic and neoliberal methods of planning has created a poor environment for public transit to flourish to meet the demands of growing cities. Current transportation planning methods favour market based planning in increasingly neoliberal cities. It is important to plan transit equitably as economic and social disparity increases in cities. This paper seeks to understand how transportation can be planned equitably. Although the focus will be upon public transit, varying modes of transit will be discussed including private vehicles, buses, subways, and active transit because these modes share city space. The decision to prioritize certain types of transit reveals a myriad of planning and political priorities. Transportation reflects the complexity of neoliberal territory by polarizing people to reveal premium network spaces such as toll roads, privatized express trains etc. and creating nodes of premium space and connecting them with strategic investment of infrastructure; bypassing others to ensure social reproduction continues in a neoliberal society (Addie, 2015). The discussion of transit equity is an important topic in an increasingly neoliberal society.

This paper will compare Warsaw and Toronto and examine if their respective transit planning methods and physical networks serve their residents equitably.

The paper will also explore the concepts of transport justice and transit equity and build upon prior literature. Two projects will be specifically examined: the Eglinton Crosstown from Oakwood to Mount Dennis and the Metro in Warsaw's Praga-Połnoc neighbourhood; within the scope of transport justice and transit equity. Although both cities are different, there are similarities and policies reflective in city planning methods worth research and discussion.

The first case study is the Eglinton Crosstown project. Although it is still in construction, this paper will explore this project and discuss why transit equity is important when new transit infrastructure is built. The Crosstown will create an east-west connection via Light Rail Transit, connecting Scarborough to Etobicoke. Eglinton Avenue has always been identified as an important corridor through midtown Toronto, it passes through many varying neighbourhoods. For the purposes of this paper the focus will be on communities west of Allen Road: Oakwood Village to Mount Dennis. These are predominantly lower income neighbourhoods with minority and immigrant populations. The area from Oakwood to Mount Dennis is a landscape of sprawling single family homes and some high-rise apartments amongst green parks. Access to essential services is difficult without a private car because of the lack of adequate transit services in these areas and low spatial distributions found in post-war Toronto suburbs. Transit equity is an important topic to discuss within city of Toronto planning because poverty in Toronto is an increasingly suburban problem (Mettke 2015). In David Hulchanski's study (2010) of the Three Cities within Toronto, Hulchanski visually

compares census tract data of Toronto from 1970 to 2005 (Figure 4.9). The results show that those of lower income in Toronto once lived closer to the downtown but now live in the peripheries of the city. As these populations move away from downtown, they also move further away from rapid transit. Disinvestment in the TTC (Toronto Transit Commission) in 1996 restricted service improvements and expansion of the transit network in Toronto. Investment into private vehicle movement, the creation of new roads, widening of highways, and less restrictive parking all contributed to an increase in the necessity of private vehicle ownership.

The Eglinton Crosstown will create connectivity to these neighbourhoods and provide rapid transit to higher order transit such as the subway. However, if these low-income communities are left to market-based planning, an increase in residential and commercial rents will begin to displace the users rapid transit purported to better connect. Therefore, the recognition of transit equity is important as Toronto expands rapid transit services.

The second case study is the construction of Line 2 of the Metro in Warsaw, Poland. Warsaw was chosen as a case study because it is comparable to Toronto, there are many similarities and differences. Both cities are democratic, equipped with modern technology, have a variety of residential and commercial geographies, and similar principles of sustainability. Neoliberal economics rule after Communism and Socialism in Warsaw and after Fordism in Toronto. Both cities, however, have differently organized transit; the ZTM (Zarząd Transportu

Miejskiego) in Warsaw is a private company that negotiates contracts with different transit operators under one fare. ZTM receives a subsidy from the city of Warsaw and the EU. In Toronto, the TTC is a publicly funded transit system with a subsidy provided by the city of Toronto. Metrolinx, the provincial body has taken over regional planning, including Toronto. Although Metrolinx is a creature of the province, these two public bodies work with investors to attract investment into transit projects.

With the progressive planning of ZTM, Warsaw's transit is fast, affordable, and efficient. The development of Warsaw's transit network is intended to demonstrate Warsaw as the capital city of Poland and to maintain its competitiveness in the EU. During ZTM's 25 years of management of Warsaw's transit, there have been significant improvements to service. Streetcars are fast, efficient, and operate on designated lanes with priority signalization through busy roundabouts and intersections. Public transit users are prioritized through various initiatives led by ZTM, for example, during construction of the Metro road closures only affect private car users, public transit can pass through, some users I interviewed even citing their commute was faster during construction. The progress of ZTM in Warsaw has improved access to transit which is why it was chosen for the purposes of a case study in this paper.

Although access to transit has improved in Warsaw, there are arguable transit planning problems as a result of recent projects. The most recent large

infrastructure project completed in 2015 is Line 2 of the Metro. It provides service in an East-West alignment, with the eastern terminus in the Praga-Północ (Praga North) district. This district could be argued to be less economically viable compared to other districts of Warsaw, some statistics citing that over half of families in this district live off social assistance. With Warsaw's revitalization plans and new Metro station, Praga-Północ is rapidly changing. As the development of the transportation network continues, the economic demands of a powerful west bank Warsaw are expanding into the east bank. Praga has become an increasingly desirable place to live for "new" Praga residents who choose to live in cheaper homes in Praga and use the Metro to access attractive downtown.

Based on my interviews, a recognition of class differences is not well defined in Warsaw's city policies or documents as it is considered reminiscent of Marxist theory. Marxism and Leninism were the basis for the Communist state in Poland after World War II. Warsaw still struggles to define itself as a city separate from the previous era of Communism. After World War II, rebuilding of the city was at first led by Polish architects who had artistic freedom to dictate what would be reconstructed and how it would look. However, the influence of the Communist government intervened and the style of Social Realism was present in reconstruction projects as of 1949; this became the definitive style of Warsaw. The most well-known building of this style is the Palace of Culture located in downtown Warsaw (Figure 1.1).

Figure 1.1: The Palace of Culture, ca. 1955, photo: Władysław Sławny / Dom Spotkań z Historią
Source: culture.pl/en/

Warsaw city policy avoids repeating Communist ideals which directly relates to the topic of equity: “In Poland, however, the concept of equity is still associated with the approach used in socialistic and communistic regimes, which makes its understanding difficult or controversial.” (Zakowska & Pulawska, p. 68). Poland, and specifically Warsaw have market oriented planning to participate in the global economy especially to close the gap between itself and the EU. Warsaw was rebuilt after World War II to be a new Socialist capital (Gliński 2015). Current city policy in Warsaw seeks quick neoliberal advancements in infrastructure projects such as new buildings, the metro, and skyscrapers to remain competitive in the EU and to shed the influences of prior communist city planning.

1.1 Research Background

This research paper identifies two projects: The Eglinton Crosstown in Toronto, Canada and the Metro extension in Warsaw, Poland. I examine both projects

through the lens of two conceptual topics: transit equity and transit justice. As cities grow so do inevitable inequalities. This paper discusses how transit in cities like Toronto and Warsaw can be barriers or pathways in order to participate in out-of-home activities. This research uses statistical data and existing literature to identify vulnerable users who are transit disadvantaged. Through academic research and interviews conducted by the author, the paper discusses what transit equity is and why it is important when planning transit. By examining Warsaw, the paper identifies different planning policies that empower equitable transit planning while drawing comparisons to Toronto's transit planning.

The two case studies are meant to provide comparative discussion related to transit planning and whether city policies and transit projects are equitable or not. The decision to pick Warsaw and Toronto stems from the author's ability to speak Polish and build upon experience traveling to Warsaw over several years. Each visit provided the opportunity to use the public transit in Warsaw and observe its growth.

The Metro in Warsaw was chosen as it has recently expanded into an economically poorer neighbourhood in Warsaw: Praga. This district has a history of housing some of the poorest people in Warsaw. The author had the opportunity to visit Praga during the Metro construction in 2013, and then to visit again for research purposes in 2017 to observe the changes the district experienced. As is written in the observations, Praga has become trendy for the creative class and

developers have bought up properties near the Metro construction. As a result, original residents of Praga are slowly retreating away as new shops and bars open, and essential services become scarce.

The Eglinton Crosstown is an LRT project that will connect across midtown Toronto and travel underground and over-ground where possible. Eglinton Ave has been recognized in several previous transit planning initiatives as an important opportunity to connect Toronto's east and west ends. It was once projected to be a subway line, which was later filled in after tunneling began. The Crosstown will pass through several different types of neighbourhoods in Toronto. Yonge and Eglinton is a designated urban growth centre and the condominium development rate is high. The west end of the Crosstown will connect Eglinton West subway station and continue to Mount Dennis, the second poorest riding in Toronto.

As was observed in Praga after the development of rapid transit, displacement and gentrification of this neighbourhood occurred. How can new transit projects protect access to its most vulnerable users? What does equitable transit look like? What can we learn from international cities like Warsaw? These are some of the questions that will help guide the discussion on equity.

1.2 Methodology

The research conducted for this major research paper was subject to the approval of a risk assessment and to the approval of a research protocol for interviewing human participants. Both were approved by FES (Faculty of Environmental Studies). Consent was obtained for English speaking participants via a letter that was approved by FES and given to participants prior to interviewing. For Polish speaking participants, many interviews were not recorded as there were several interviewees at once or there was accompanying documents such as a powerpoint or printed materials. For those who were recorded, consent was obtained via communication by email prior to meeting with the participant.

In Toronto, participants ranged from planners, equity advocates, community leaders, and city councilors. In Warsaw, to gain a better understanding, more interviews were conducted, these included: a professor of sociology, a PhD student, city of Warsaw planners, directors of the Museum of Praga, a ZTM architect, and several other ZTM staff. The interviews conducted in Warsaw, allowed me to understand the city and its public transit planning, from a variety of perspectives. Interviews are an excellent way to gain insight on a topic by understanding it from an expert's experience, however, interviews also run into the problem of individual biases.

In addition to interviews, first hand observations were important and these are written about in the Observations chapter. These were helpful to lead discussion with interview participants in Warsaw, as my time abroad was limited.

A case study analysis, to loosely compare Toronto and Warsaw, was selected for this paper because there are parallels between both cities that are worth researching, especially related to the development of transit. Robinson's (2010) definition of a case study was helpful in shaping this research: "Perhaps the most common and valuable method for comparison in the field of urban studies is that of 'individualizing' comparison, or the detailed case study. Here the researcher seeks to explain the distinctive outcomes in one city (or more than one city) through implicit or explicit (usually qualitative) comparison with other cases that might confirm hypotheses concerning causal processes and outcomes generated in the specific case study." (Robinson, p. 6). Conducting an individualistic analysis of both Toronto's and Warsaw's goals and outcomes in city planning will help identify where density, growth, land-use, and accessibility have been planned for and how these have been planned equitably or not.

Visuals were also an important component of my initial interests in researching these topics. In my research, I came across a developer's website with an image of the future intersection of Oakwood and Eglinton Ave. The artist's rendering shows a modern and desirable neighbourhood and looks aesthetically similar to affluent urban areas. This type of visual begins to sell a lifestyle near transit, that

does not include the current residents. I photographed my community in Toronto (Oakwood, located West of Eglinton West Station) and Praga. I sought to visually capture these neighbourhoods because of how quickly development changes communities. I also found it important to understand what planning policy is appropriate in these communities to create equitable neighbourhoods.

I have prior experience researching topics of transit equity and social justice through the classes taken in the MES program, and individual directed reading courses. I presented my initial research at the OPPI conference in Hamilton on October 5th, 2016 and through the discussions with professional planners, it was clear transit equity was a poorly understood topic in the planning field. During my time in Warsaw I had the opportunity to attend the 11th annual City and Transport (Miasto i Transport) conference in Warsaw. This was very helpful as a wide range of topics were covered and showcased how the City of Warsaw plans to continue its development of public transportation.

This paper will first discuss what transit equity and transport justice are through literature review. Each case study chapter will begin with the author's observations of Warsaw and Toronto respectively and then move into an analysis of each city through the lens of transit equity. The conclusion will summarize the concepts explored in this paper.

Chapter 2: Transit Equity and Transport Justice

In transportation planning, equity is often mistaken for equality. Transit equity is the distribution of costs and benefits as is considered fair and appropriate (Litman 2013, p. 8). Transit must best suit the character of not only spatial distributions and densities, but in addition be adequate to the residents who live in the community. A planning consultant in Toronto argues that transit is more than just infrastructure, it is a public good that connects people to destinations such as work, family members, job opportunities, and provokes community amongst residents. Acknowledging the public and their different needs is important when creating equitable transit. Transit riders are a diverse group, equity recognizes the different needs of riders and plans for their needs appropriately. Transit equity not only encompasses the size of the transit network, it includes the comfort and dignity of riders. Therefore, expanding a network to further reaching neighbourhoods will not achieve equity if service is infrequent, slow, or unreliable.

Equity is commonly thought to be addressed by closing an income gap: when transit becomes unaffordable and strains the pockets of lower income individuals, the easiest solution appears to be to lower costs for those who cannot afford it. However, there are more dimensions to equity than adjusted fare prices. Equity needs to address the issue of distance travelled and time spent per journey. It is beyond the monetary status of families and individuals, yet this criteria is most commonly used to compare transit users. Modal mismatch as argued by Foth, Manaugh & El-Geneidy (2013) is a growing problem:

> These…refer to the difficulty of reaching desired destinations without a car. While arguably already implicit in spatial mismatch theory, transportation and modal mismatch explicitly capture the fact that two areas in a city may not be separated by a great distance but may not be connected by reliable or viable public transit. Therefore, those reliant on public transit may not be able to access certain areas easily while car drivers can. This disparity can have a profound effect on life choices for those who do not own a car. (p. 2)

Similarly, Martens (2017, p. 26) writes that a lack of accessibility cannot be solved by monetary compensation or discount that reduces the cost of participating in out-of-the-home activities. He explains that there are other factors that contribute to lack of accessibility such as: low in-vehicle speeds, multiple transfers, and concerns for safety while traveling.

2.1 Why is transit equity important?

Transit equity is important because as cities grow, so do inevitable inequalities. As cities aim to compete in global markets and create better spaces for businesses to profit, social needs such as accessibility by transport network become less dominant in policy. Especially coupled with neoliberal individualistic ideals such as private vehicle ownership and the prioritization of private roads. A lack of accessibility is strongly correlated with social exclusion from opportunities. “Providing transit that is equitable – that is designed to be accessible to all people and to meet their needs – is critical for reaching higher degrees of social inclusion and for making a fulfilling and productive life possible.” (Hertel, Keil & Collens, 2015. p. 2).

Infrastructure is expensive and in a capitalist society, government spending is most often justified on a business case (Hertel, Keil, & Collens, 2015, p. 14-15). Investments into infrastructure are linked with a business case or a Cost Benefit Analysis (CBA) structure. However, CBAs run into the problem of being utilitarian and picking winners who are already well represented: “Utilitarianism is strongly related to CBA: a CBA lists all pros and cons as much as possible in monetary terms and compares alternatives using indicators like benefits minus costs, benefit to cost ratio, and return on investments.” (Van Wee, & Geurs, p. 356). Monetary pros and cons exclude social benefits of improved transport.

Addressing transit needs and acknowledging populations from a variety of incomes, ages, abilities, and locations, aids to give access to the same opportunities in cities such as employment, education, and leisure. One participant interviewed stated that, transit equity is regarded to as fairness, an understanding of the public as a diverse group with varying needs. Transit equity is especially important in an increasingly individualistic neoliberal society that favours private vehicles use, and places emphasis on premium services such as express buses, for economically advantaged users.

2.2 Understanding Transit Equity

Litman (2006) identifies two types of equity: horizontal equity and vertical equity. Horizontal equity follows egalitarian means of establishing equity among users. It assumes everyone is equally advantaged. Program costs are borne by the beneficiaries and users should ‘get what they pay for and pay for what they get’ (p. 341). Vertical

equity addresses users who are socially, economically, and physically disadvantaged, focusing on improving access for these individuals as the basis of policies in transportation planning. Progressive policy allows transit disadvantaged users to benefit the most, while paying minimally, regressive policy places higher costs on disadvantaged users (Litman 2013 p.8). Litman (2013) argues that transit provides varying benefits to users, internal benefits (the result of service improvements), and to society, external benefits (reduction in automobile travel or compact development) (p.8).

Equity is defined by Van Wee & Geurs (2011) as a level of access: “A basic level of access implies that people can obtain goods, services and activities that are considered valuable to society, such as emergency services, medical care, education, employment, food and clothing.” (p. 354). This argues that the better the access one has, the more services one can utilize. Van Wee & Geurs (2011) also argue that there are four components of accessibility that contribute to social exclusion. These four components are:

1) The land use component – the spatial distribution of activities
2) The transportation component – this includes the cost, the distance, comfort, and travel time the individual must account when using transit
3) The temporal component – the availability of opportunities at different times of the day (e.g. what time shops are open, when the individual must begin to commute to arrive to work on time) and;
4) The individual component – the ability, needs, education level, income, physical condition, and opportunities (based from travel budget, education level etc.) of

individuals. e.g. the ability to drive or speak the native language changes ones ability to participate in transit.

The components identified by Van Wee & Geurs (2011) emphasize the multi-dimensionality of transit equity. Using external factors like land use and transportation as well as internal factors such as an examination of the individual's ability to participate. Van Wee & Geurs (2011) argue that equity is closely related to words like fairness or justice, and implies a moral judgement. Whereas equality refers to the distribution of goods irrespective of moral judgement therefore: "a situation can be equitable, yet unequal." (p. 351) These four components can assist one another if one is lacking. For example, if the temporal component is lacking in an area where shops and services close earlier, then the transport component can assist to bring individuals to areas where shops are open longer and services are accessible. Knowing that a lack of accessibility results in social exclusion, we can use Van Wee & Geurs (2011) four components to directly address what components are lacking, and which components can mitigate this.

There are two groups of transit users: captive riders and choice riders. Captive riders are not able to use other transit options because of one or several factors that hinder their access. These factors can include: financial barriers, physical or mental disability, age, education etc. These users rely on public transit to complete everyday tasks such as grocery shopping, medical appointments, and running errands. Choice riders are users of public transit who have chosen to use public transit out of cost or convenience. According to Garrett & Taylor (1999) transit options for choice riders are significantly

subsidized to attract these users, therefore the threshold to participate in public transit is skewed for one type of user. This is evidenced in the investment of express bus and rail services and disinvested in local inner city transit services: “Capital spending is skewed toward rail development and away from bus investment” (Garrett & Taylor, p. 14). A combination of heavy subsidizing for choice riders to attract them to under used services and the weak political power of lower income residents purports inequity (Hertel, Keil, & Collens, 2015, p. 8). Transit equity recognizes the needs of various users and allows for appropriate access for each type of user.

2.3 Transport Justice

“Justice is not blind-folded egoism, but open-eyed and informed objectivity.”
(Kolm 1996, p. 20)

In order to understand why transport justice is important to transit planning, we will use Lefebvre’s ‘right to the city’ concept as discussed by Purcell (2013): “So Lefebvre sees the right to the city as a struggle to ‘de-alienate’ urban space, to reintegrate it into the web of social connections.”(p. 149). This de-alienation is why Martens (2017) argues that: “…a transportation system is fair if, and only if, it provides a sufficient level of accessibility to all under most circumstances.” (Martens, p. 215). The accessibility that Martens writes about works within Lefebvre’s understanding of social life within the urban:

> One way he [Lefebvre] tried to do this, as we will see, was to foreground the question of space in general and the city in particular. He hoped that an analysis of space, and specifically of the ‘lived spaces’ that people actually experience, would be able to apprehend human life as a complex whole and avoid reducing our understanding of experience to small fractions of life, such as class status,

> gender, race, income, consumer habits, marital status, and so on. Similarly, Lefebvre sought to open up an understanding of the city as a complex whole, as a teeming multitude of different desires and drives that are not reducible to economic imperatives (1970; 1972). (Purcell, M. p. 145)

Purcell argues that Lefebvre summarizes the city as an impoverished manifestation of an urban world reduced to its economic elements. This ability to participate in the city, is dictated by planning a just transport network, one that removes isolation and allows for social connections; determined by several factors, not only infrastructural: “Lefebvre, as we will see, imagined the right to the city entirely differently: as a cry that initiated a radical struggle to move beyond both the state and capitalism.” (Purcell, M. p. 142).

Marten’s philosophical exploration in *Transport Justice* (2017) discusses different approaches to the term. He argues that transit networks planned around principles of transport justice must consider accessibility and potential mobility, rather than transit demand. Accessibility is one’s potential for interaction with locations dispersed over space and potential mobility is the ease with which a person can move through space. He expands that potential mobility is not only the speed of the links of the network, but of the density of the network as well (Martens, p. 26). Accessibility is more important than income and wealth as Martens (2017) argues, because accessibility is a prerequisite for obtaining income and wealth. Therefore accessibility is a social good, the product of human cooperation and its distribution is determined by the rules of major institutions and organizations of society (p. 69). He critiques that traditional transportation planning methods aimed at being equitable become pervasively inequitable because these methods are blind to the differences in accessibility and

potential mobility, and translate these differences in revealed mobility as *a representation of choice* (p. 31). This is better illustrated in the Figure 2.1 below.

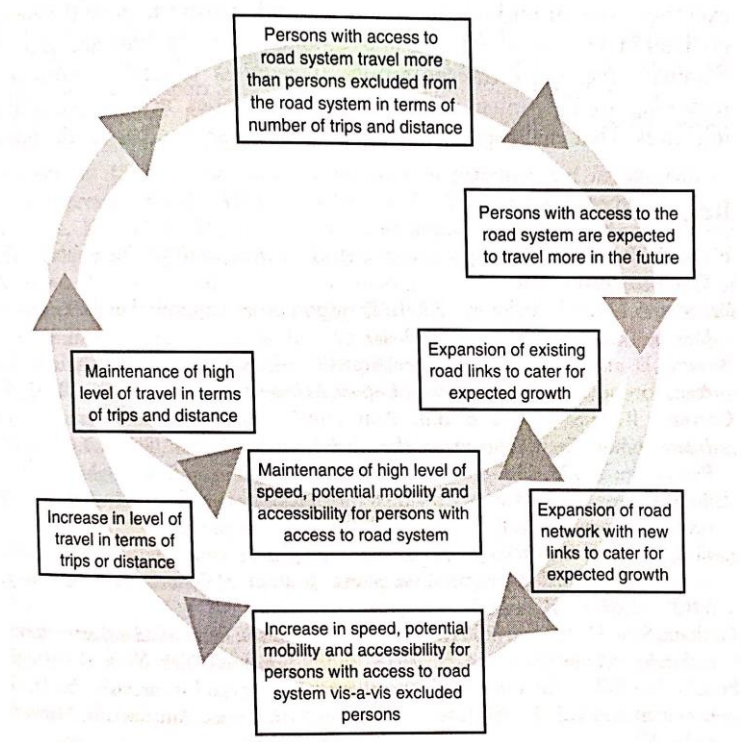


Figure 2.1
The vicious circle embodied in traditional transportation planning
Source: Martens 2017

David Harvey (1992) writes: “Egalitarian views, for example, immediately run into the problem that ‘there is nothing more unequal than the equal treatment of unequals’…” (p. 594) therefore transport justice cannot be handled in the traditional approach as Martens (2017) critiques. If one looks at early methods of planning highways as a network to connect major cities to one another, this is reflective of modernist planning

practices of providing basic resources such as water, sewage, and electricity. Then Martens (2017) argues early transportation planning is reflective of egalitarian tendencies. However, the growth of these highway networks was made under the assumption that everyone would have access to a vehicle. Living in the modern world, we know this is not an assumption that transit planners can now make. Martens (2017) notes that the early methods of transportation planning were for free-flowing highways and roads rather than accessibility and potential mobility, which comes from the engineering roots of the discipline of planning. Transit planning is compared to a network carrying water molecules: "…in a water or electricity system it is irrelevant where a particular element, like a water molecule, would 'travel' to. The main issue is guaranteeing that each link of the network has enough capacity to cater for the demand as manifested across the network, so that an unhindered flow in the entire network is guaranteed." (p. 27). However, if one plans for transport justice, this free flowing method does not account that each molecule is diverse and simply creating wider "roads" will not allow for adequate movement of all molecules to reach their "destination". Cities and roads cannot be compared to electricity or water systems because of the simple fact that planners plan cities for diverse people. Planners should predict future growth to encourage economic development as well distributing access to the city in a just manner. Transport is argued by Martens (2006) to have a significant impact because without access to adequate transport, one truly does not have access to the city. Martens (2006) further writes that an important component of planning transit through the lens of social justice is measuring accessibility:

> The accessibility standards will have to be defined in terms of travel time and costs, as well as in terms of the number of opportunities that are within reach of

> a specific area or transport activity zone. The latter condition is of key importance as the availability of alternatives (e.g., in terms of employment locations or educational opportunities) is a major element in ‘a life of choice and value.’ (p. 8).

If accessibility standards are not a part of the benefits considered when planning transit, the network will cater to already well represented populations with larger economic merit.

In a capitalistic model of city planning, economic growth and investment are used to support the future growth of already well represented populations. Capital investment plans support developer projects rather than improve access to the city. Therefore who protects justice in a capitalist city? One can argue it is civil servants elected into power however, in Fainstein’s book *The Just City* (2010) she quotes Mark Purcell’s rejection of democratic decision-making as he argues this method does not plan for the common good. He advocates for a social-movement model where underrepresented groups come together to pursue democratic outcomes (Fainstein, p.34). Purcell argues that justice, equity, and democracy should be separate as they are pursued differently with different goals. Even though the public participation process is meant to be equitable, our cities are continually growing more inequitable. Cities are places of economic prosperity and transportation, and reflect the complexity of neoliberal territory by polarizing people to reveal premium network spaces such as toll roads, privatized express trains etc. (Addie, 2015). Creating nodes of premium space and connecting them with strategic investment of infrastructure bypassing others to ensure social reproduction continues in a neoliberal society. “Privileged products, people, and

symbols are brought together at the same time that dissident or undesirable elements are peripheralized." (Addie, 2015).

Enright (2015) argues that transportation in Grand Paris reveals a myriad of social, economic, environmental, political, and ethical objectives because infrastructure holds an economic asset and merit in planning. It is the gateway for goods and services to be transported and therefore contribute to the economic prosperity of a city or region: "Transportation is never merely a technology to move people or goods from one point to another, but is a system that is mediated through existing social worlds and that gives rise in turn to particular types of society." (Enright, p.174). It is argued therefore, that transit is not simply about serving the people in a just and ethical manner, but is tied to political agendas and economic success of an urban region. Therefore, justice must be an active lens in transit planning. There is a lack of consideration otherwise for those who rely on transit as their only means of experiencing the city because these populations generally lack economic merit.

> "Perhaps most importantly, the ideology of mobility embedded in the transit network displays a willed ignorance of patterns of uneven development and especially of the way in which the production of ground rent—perhaps the defining feature of the contemporary metropolis—is itself tied to the inequality and sprawl that mass transportation purports to address." (Enright, p. 181).

As Enright writes, ground rent is an indicator of the inequality that is produced when transit is built. Policies are not in place to protect the original residents, leading to sprawl and gentrification.

Enright (2015) in her observations of Grand Paris discusses metromobility against automobility which has been the dominant trend for over 50 years across the world. She argues that transit is not simply a technology of moving people from point to point but it is a "…system that is mediated through existing social worlds and that gives rise in turn to particular types of society." (p. 174). Therefore, transit is not only a means of economic gain and power but of segregation; infrastructure decides who has access to the city. Infrastructure projects are highly contested as Young and Keil (2010) argue, they contain political artifacts, symbolic and cultural materials and are usually not the decision of rational planning but of "congealed social interests". These social interests could be the combination of planning, neoliberalism, and of the combined public input process. Enright also argues that transit infrastructure fractures or "splinters" urban space by separating people by class.

Neoliberalism places a higher value on those who bring more economic value to the city because their time is valuable and their economic merit is expressed by their place of employment. The commute exposes an important role of transit as it reveals who is paid what wages based off what type of transit they choose (Aldred, 2014). Those who use heavy rail transit are more affluent and their journeys are prioritized. Aldred uses statistics from the United Kingdom: "The official statistics contain a small minority for whom time spent is much longer: 5 per cent of workers spend over an hour travelling from home to work. Given the importance of London as an employment centre within the UK economy, alongside its high house prices, many of those people will live in the London commuter belt and travel in by rail and Underground, or by a mixture of car and

public transport.” Martens (2017) makes similar observations by writing that travel time savings is the most common way to justify transport investment, and these time savings are linked to wage rates. Martens then asks that the key is to determine which wage level to use in the calculation. David Harvey (2013) writes:

> For the most part the concepts circulating are individualistic and property based and, as such, do nothing to fundamentally challenge hegemonic liberal and neoliberal market logics and neoliberal modes of legality and state action. We live in a world, after all, where the rights of private property and the profit rate trump all other notions of rights one can think of. (p. 3)

Neoliberalism predominantly in North American planning places a higher value on individualistic modes of travel as a form of freedom in a capitalistic market space. Anything opposing the ability to use a private vehicle begin to encroach on ones freedom. As Harvey (2013) argues individual property value and profit are placed above individual rights. This poses a threat when planning transit justice because public transit can be interpreted as a violation of freedom if the individualistic method of travel is challenged. Justice itself is not closely linked with private property as it is operated by one owner or group with disregard for others; for example, the privatization of previously public space could remove a central gathering area for community members, a single interest outweighs that of the public. Finally, Harvey argues that profit margins trump all other rights, of course cities must plan within budget; however, transit projects fall within cost-benefit analyses and social planning is edged out as economic investment claims higher priority.

Transportation planning falls into cost-benefit analyses because there must be merit to improving connections via roads or methods of public transit. This applies to all forms of

transit, for example a more affluent neighbourhood will receive better infrastructure to a large retail area because projected trips from this area will be higher with a car, therefore, road infrastructure will be built to support this movement. As compared to a less economically viable neighbourhood with less potential trips will receive less investment these decisions are based of economic merit. However, Marten (2017) writes why cost-benefit analyses are detrimental to justice: “The application of cost-benefit analysis is thus likely to lead to systematic bias in investment priorities, especially in societies with a strong spatial segregation of population groups by income, as this spatial segregation is likely to be replicated, at least to some extent, in their use of particular infrastructures.” (p.30). This is directly reflective of Hulchanski’s (2010) The Three Cities within Toronto which is discussed in another chapter.

Planning theory needs to consider the following: what background conditions facilitate or constrain planning for a just city? how does planning affect its users, residents, and visitors?, and what principles should guide formulation, content, and implementation? (Fainstein, 2010, p. 57) It is not only a political redistribution but a conscious effort must be made to change planning theory to include all residents.

Harvey’s propositions of just planning and policy lists six propositions that just planning and policy should achieve:

> All of which leads to my first proposition: that just planning and policy practices must confront directly the problem of creating forms of social and political organization and systems of production and consumption which minimize the exploitation of labour power both in the work place and the living place.

> …second principle: that just planning and policy practices must confront the phenomenon of marginalization in a non-paternalistic mode and find ways to organize and militate within the politics of marginalization in such a way as to liberate captive groups from this distinctive form of oppression.
>
> …third principle: that just planning and policy practices must empower rather than deprive the oppressed of access to political power and the ability to engage in self expression.
>
> …fourth principle: that just planning and policy practices must be particularly sensitive to issues of cultural imperialism and seek, by variety of means, to eliminate the imperialist attitude both in the design of urban projects and modes of popular consultation.
>
> …fifth proposition: that just planning and policy practice must seek out non-exclusionary and non-militarized forms of social control to contain the increasing levels of both personal and institutionalized violence without destroying capacities of empowerment and self-expression.
>
> The final proposition is then: that just planning and policy practices will clearly recognize that the necessary ecological consequences of all social projects have impacts on future generations as well as upon distant peoples and take steps to ensure a reasonable mitigation of negative impacts. (1992).

The first proposition directly challenges neoliberal methods of planning earlier discussed; just planning and policy must neutralize the capitalistic trends of picking premium network spaces. Just planning must confront income disparity by acknowledging and identifying marginalized areas to find a measure of inequality and seek non-paternalistic methods of planning. The third principle calls to empower marginalized groups to express themselves; this is similar to Mark Purcell's rejection of democratic planning in favour of underrepresented groups coming together to better represent their needs. The fourth and fifth proposition addressed the inclusivity that planning and policy in both top-down and bottom-up approaches. The final proposition

states that planning and policy should consider long term impacts on future generations and should be prepared to mitigate possible negative impacts. Harvey's propositions can be used in just transit planning and must be stressed when deciding where to build transit and what method of transit is most fitting outside of cost-benefit analyses.

In the following chapters, we will apply the concepts of transit equity and transport justice to Warsaw and Toronto through the identified case studies.

Chapter 3: Warsaw and the Metro into Praga

Figure 3.1 – Warsaw Spire. *Photo by Adrian Grycuk.*

3.1 Observations

(April 27, 2017)

My cousin and I walk to Rondo Daszyńskiego station there are many new developments surrounding this new station. A large office park is located here including the new

Warsaw Spire. Cranes in the skyline indicate there is more development to follow. Redevelopment has sprung up around the new Metro station pre-emptive of its opening less than two years ago. The streetcars and buses have been integrated to create easy connections for transit users.

Figure 3.2 – Kamienica in Praga. *Photo by the author*

Upon our arrival to the final Metro stop on the East side of Warsaw: Dworzec Wileński, the station is as modern as any of the others with bright blue entrances in the shape of a large “M” visible on the street (called butterflies by locals because of their shape, Figure 3.3). The blue entrances to the Metro are easy to see from a distance. My cousin explains there is a reclaiming of the buildings here: either they belong to the city (an agreement made after World War II) or former owners are to present valid documents with proof of ownership or mortgage, reconnecting their property to their name. It is easy to spot a building that has not undergone revitalization yet (called “Kamienica” by

locals, referring to the red brick they were made of) and there are still many in Praga. These Kamienica buildings are either left with protective mesh that hangs over sidewalks (because the buildings are literally crumbling away everyday) or blown up and replaced with a new building. These new buildings are built at the same height as the former building in a similar style to match others. There are no tall towers on the East side of Warsaw's Vistula river.

We walk a few metres from a Metro station entrance in to a new building that was once a Kamienica, it is the new Praga Centre of Creativity. What is most interesting is its lack of openness to the public as a centre of creativity. When we walk in we are met with a security guard who cannot identify if we are tourists, locals from the West bank, or worse: locals from the East bank. Maybe if we had walked in with a camera strapped around our neck and speaking English we would have been received differently. Luckily, he determines we mean no harm and we are allowed to look inside. There is a large hall with office spaces for rent and a large space to host corporate events, the walls are clean, the architecture inside and out matches the landscape outside. Revitalization thus far looks very attractive.

Figure 3.3 – "M" Shape of new Metro Stations. *Photo by the author*

Figure 3.4– Praga Centre of Creativity. *Photo by the author*

We walk down Ząbkowska street and we see a few Kamienica buildings beside newer midrise apartments. When we walk past the newly painted buildings I look into the gates and I can see that people still live in the Kamienica buildings. In this particular gate, a large statue of Mary in a small blue hut to keep her safe from weather is visible from the street. My cousin says that it marks where someone died, he guesses from alcohol poisoning given its location. We stop in front of the former vodka factory on Ząbkowska street. It is guarded as it is being redeveloped into apartments. There is an attractive billboard on the property showing what this area will look like in future. The neighbourhood is changing here so quickly that when my one cousin suggests a visit a little further east into Praga, my other cousin responds saying there is nothing there, to which he is proved wrong by a quick search on my smartphone. We decide since it will get dark soon we will visit another day.

My cousins offer that while there is still daylight to get a drink in Praga, we feel brave today. We walk into one bar: “łysy pingwin” (bald penguin) I suddenly recognize the name because I have read about it in a book prior to my arrival. One of the first bars to arrive on Ząbkowska street pre-emptive of the Metro station’s construction completion. We decide to move on and we enter another bar that is full at 5 pm in the afternoon and then finally find an empty cafe with delicious cakes and lattes at the standard price of 10 zł (about 3$ Canadian). As we sit and look outside my cousins notice a group of African Americans and quickly say it is probably the least safe for them here in Praga. Warsaw is a city divided by the current political state of the country, a very strong nationalism dictates the political agenda. The party in power PiS (Law and Justice; in Polish: Prawo i Sprawiedliwość) instills a strong platform of nationalism and a desire to abandon the EU. The party is also very heavily influenced by the Catholic Church. Laws on abortion, same sex marriage etc. follow a very regressive form of politics. The strong nationalism has also resulted in Poland being one EU country that has refused to accept any Syrian refugees. I’m told that quite recently a Polish university professor on a bus speaking German over the phone was beaten up by nationalists. My cousin also told me there was a pro-Fascist protest in the city centre prior to my arrival and those who came to peacefully protest opposite the fascist display were forcibly removed. She says people feel more justified in their racist actions because the government supports them.

Ironically, when one looks at the newer low floor street cars, there is a label on them that recognizes the European Union’s contribution to public transit in Warsaw. The

current nationalistic government is in opposition to Poland's participation in the EU, however, ZTM has visibly credited the EU as one of its primary supporters.

(May 6th, 2017)

My cousin, his wife and myself participate in a free tour through Praga's neighbourhood called Szmulowizna named after Szmul Zbytkower who was one of the richest Jews in Warsaw making deliveries to Russians. Our group learns about the factories in Praga such as the vodka factory on Ząbkowska street which was listed as the meeting point for our tour. The guide also informs us that Praga does have a less favourable reputation stemming from a large loss of jobs in particular in this neighbourhood in the 1990's. Poverty, hunger, and theft began to occur and thus began to give the neighbourhood a bad reputation. Szmulowizna (nickname: Szmulki) is surrounded by streetcar tracks, its limited police access gave it an ideal area for criminal acts to occur. Although Praga is changing, it might still be a while until it is considered as safe as the west bank.

The group huddles together when walking through Szmulowizna, my cousin (who has lived in Warsaw all his life) said he would not be brave enough to walk here by himself. Residents in Szmulowizna sit out on their balconies and watch as a group of 50 people invade their otherwise undisturbed neighbourhood. My cousin notes teenagers not once, but twice, drinking alcohol in public and says: "that does not happen on the West side anymore!". We are brought back to Ząbkowska street and are told that when the neighbouring Kamienica across the street was taken apart a miscalculation in the

demolition resulted in damage to the building across the street from it. Buildings are being taken down so quickly and replaced.

Figure 3.5 – Kamienica in Praga-Połnoc, seen during our tour.
Photo by the author.

Eventually we are brought to the side of a long apartment building and across from it is a streetcar barn separated by some large trees and a small green space. There are

some people lounging on the grass, the streetcars only produce minimal noise, the tracks are well maintained to stop any loud screeching sounds. The guide tells us an anecdotal story how after World War II there was a large boom in children being born and often times the streetcars were so full people would hang on like grapes on a vine, trying to hold onto whatever part of the streetcar they could. This was not safe for children so parents would put their children on the extra streetcar car attached and would be taken care of by a nurse on this streetcar car while parents climbed onto the busier streetcar car at the front. It is interesting to hear how the needs of post-war Warsaw were adapted by the city's transit.

Figure 3.6 – Streetcar barn on the left, large housing block on the right.
Photo by the author.

(May 18, 2017)

City and Transport Conference in Warsaw

I attend the City and Transport (Miasto i Transport) conference in Warsaw with my great uncle who is a retired engineer. We are given a conference bag containing an annual

report from ZTM, information from tramwaj Warszawskie (streetcars in Warsaw), the Metro annual report, and even Warsaw's pedestrian and cycling plan.

The agenda is divided up into three parts: the first celebrating ZTM's 25th anniversary, the second is the recognition of the 60th anniversary of the office of projects and studies of public transport in Warsaw, and the final session is focused on cyclists, pedestrians and vision 0. Before the day begins the President of Warsaw, Hanna Beata Gronkiewicz-Waltz, is present and says a few opening remarks about the importance of transportation in Warsaw and how it has grown over the years ZTM has been in charge. Nearing the end of her comments, she highlights the importance of transit as a means of accessing Warsaw:

> Not everyone can afford to live in the city, especially young people who sometimes do not have money from grandma and grandpa left in their will. People can choose to live further and this is important to make sure that they can use transit to commute in. Warsaw's lands are not all built up yet but it is important to connect new developments to the city. We should also ensure that schools are well-connected to transit. (Gronkiewicz-Waltz, 2017) Translated by PJ.

I note this part of her opening remarks as they allude to Warsaw's physical outward growth and how the importance of good transit to every part of the city will be important for users of different incomes and lifestyles.

A session that stands out to me is presented by Dr. Eng. Marek Bauer, a PhD graduate from Cracow. Although his presentation is not about Warsaw transit, he describes some challenges in Cracow, and they are similar to those of Toronto. He states that car

ownership is on the rise and the aging population is also rising. In his presentation, he asks: “Should we build transit for the amount of people in the day going to work? or should we plan for others too? How do we encourage others to use transit?” (Bauer, 2017).

Two concepts he highlights which I believe can be directly related back to Toronto are: 1. Access vs time and speed of the journey using public transit, and 2. avoiding mutual competition between public transport, cyclists, and pedestrians. Dr. Mauer says that access and time spent in transit are equally important, one is not more important than the other. I have had my own personal ideas about Toronto and how often transit competes with cars for road space. I think about the King streetcar that has been chosen for a new pilot project recently that will prioritize transit. City of Toronto studies have highlighted staggering numbers of users versus the road space given: “75% of King users travels by streetcar, foot or bicycle. King is moving only 16% of its users by car, yet cars get 64% of the space.” (City of Toronto, 2017). My own personal experience on King street has been nothing but different modes fighting for space, often I opt to walk because it is faster. These competing interests that Dr. Mauer argues hinder transit movement, is vividly being played out on King Street.

The final session concerning pedestrians and cyclists, indicates progressive transit planning in Warsaw. One presentation studies the types of “incidents” that occur between cyclists and cars, how often then happen and at what intersections. These are accompanied by surveillance videos from city planning that gain reaction from the

audience every time a cyclist and car almost collide. This presentation concludes that there need to be pilot projects to study how to better protect cyclists on the road to reduce the number of “incidents”.

When I last visited Warsaw in 2013, bike lanes were rare, especially in the city centre. There is a noticeable increase in their presence during my visit this year. The Vertuilo bike share service is also very prominent and spoken about several times in conference presentations. The commitment to improve the bicycle lane network in Warsaw is admirable when comparing to my personal opinions of the political hoops that bike lanes in Toronto undergo. The topics discussed and the conference overall leaves a positive impression on me. Although the topic of equity is not discussed, there are a high frequency of progressive policy that privilege transit users over private cars. I also note that accessibility is very important to transit planning in Warsaw. Setting appropriate price points for fares, making fares easy to understand and accessible, and ensuring transit is physically accessible by low-floor vehicles are spoken about frequently as positive initiatives by ZTM.

Figure 3.7 – The Warsaw Polytechnic University, the location of the conference
Photo by author.

(May 30, 2017)

I am meeting with my cousin who lives in Praga for some promised delicious pizza. I take the streetcar and within 20 minutes I am at her front door. Before we leave, my cousin tells me her building is undergoing renovations and next week there will be city workers installing central heating in her unit. She says she is getting her father to come and apartment-sit her cats and also she worries about giving her key to “strangers”. As we leave her apartment to the street she says hi to one of her neighbours, an elderly gentleman who hold the door open for us. She tells me that many times she has found

this man passed out in a drunken state at the bottom of the staircase in her building (there is no elevator). She also tells me the story of when she was apartment hunting, coming across a building where upon entry there was blood all over the walls, the apparent result of someone who had gotten into a fight while intoxicated and was finding their way back to their apartment. She did not look further into this apartment after this first impression.

We go to a small bar with amicable tables set outside and I sit as she orders for us inside. All the other tables are taken, we are within walking distance to the Metro, I can see the copulas of the church directly at one of the Metro's entrances from where we are sitting. The food is good, the atmosphere is quaint, however, this takes a sharp turn as a group of young men walk past, one sits at the table behind ours, and soon a fight between one of the young men in this group emerges with someone else on a cellphone passing by and brushes his shoulder. Both parties are intoxicated, as is evident in their slowed movement and lack of coordination. No one from within the establishment we are at comes out to try and break up the fight, no one calls the police, except my cousin, maybe in an attempt to calm me down as we are narrowly missed in the brawl. One of the men who sat behind us tells my cousin not to bother calling the police the main reason being no one will come in time, the second is that he would not advise calling the police on his friend. I did not catch this in their exchange originally, my Polish is limited in cultural slang, until my cousin later told me when we found somewhere quieter and friendlier to have a beer. After this ordeal one man is bleeding from his head, nose, and arm, and uses the ripped shirt of the other individual to clean himself off, he picks

up his cellphone, and heads into the other direction, with the help of a friend. The atmosphere changes back to the way it was before the fight emerged. I even over hear one new patron (who did not witness the fight) say to her friend “this place is really cool”. My cousin apologizes.

I only write about this experience not to frighten readers for my own safety, but mainly of the comments that came after this incident, it was blatant acceptance of the situation: “This happens in Praga.” “The police won’t come for 30 minutes because they do not want to deal with this.” “This is Praga.” I also begin to wonder why alcohol stores are open 24 hours, it seems that one can get alcohol at any time, but not groceries. I start to wonder if blaming pathology really makes sense.

My cousin and I then get into a discussion of policing in general in Praga. She said her car has had its windows broken in once and that nothing was stolen. She also told me the Vertuilo bike share station under her apartment constantly has broken bikes from teenagers who sit there and purposely break them. She says she has never confronted them because she fears for her safety as some can be quite intimidating. I start to wonder what the city can do, if anything, without making Praga look like a project worth fixing. Maybe revitalization is meant to reintegrate Praga back into what the West bank of Warsaw looks like, including removing of unwanted residents, or pricing them out.

3.2 Analysis

3.2.1 Planning Variable Urban Areas

Warsaw, in its Transportation Strategy (2010) plans for not only urban areas but has categorized the city of Warsaw into three distinct zones as can be seen in Figure 3.8. The Transportation Strategy (2010) recognizes the needs of different zones and through this graphic demonstrates what transit priorities best suit the type of landscape present in these zones.

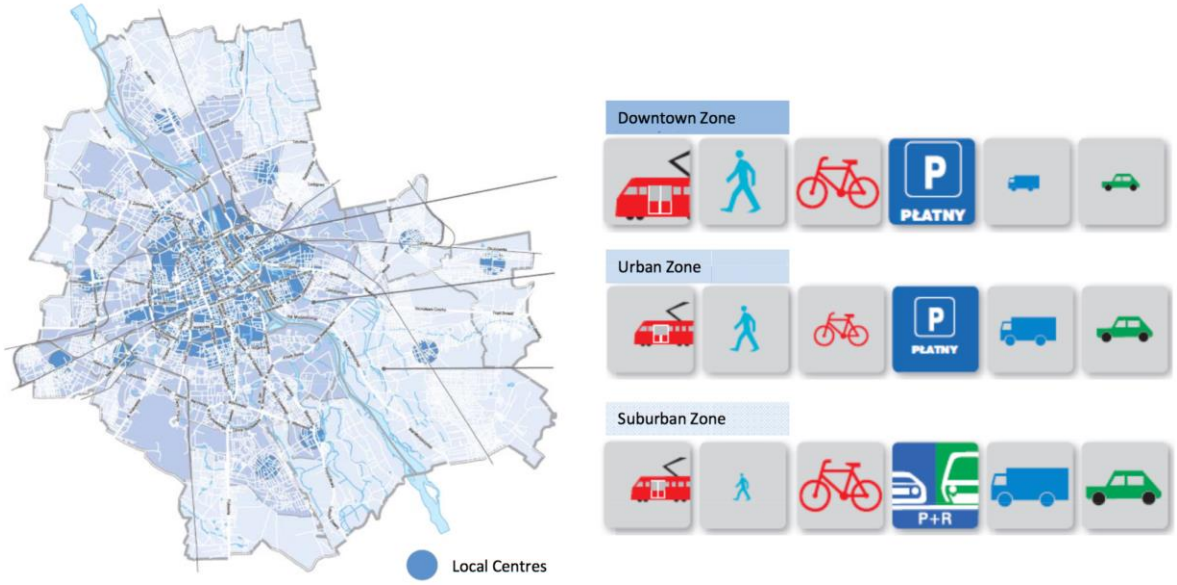


Figure 3.8 – The different city zones. “P Płatny” means Paid Parking. P+R is Park and Ride. Source: The Warsaw Transportation Strategy (2010) p. 8

Mettke (2015) writes about what this infographic directly addresses:

> “The significant function of public transit is the formation of mobility options for people. In modern societies, (access to) mobility is a basic urban necessity (Bonß et al. 2004). The constitution of ‘mobility spaces’ through public transit can be understood as the spatial manifestation of human activity and the need for spatial exchange. In this sense, the existence or absence of mobility options within (urban) societies can be directly linked to the ‘right to the city’ (Lefebvre

> 1970; Harvey 2008). Public transit provides one significant, sustainable option for individuals, the young and the elderly alike, to be physically mobile within city spaces.” (p. 230)

The Warsaw Transportation Strategy (2010) acknowledges the types of landscapes present within the city. The most progressive policy outlined is the large focus on bikes in the downtown and suburban areas. Although cars will predominantly be used in the suburban zone, the Transportation Strategy (2010) aims to give suburban users the option of biking because the car will not always be accessible or the most affordable. The city of Warsaw has identified these three zones and plans for users to have mobility options in variable urban regions thereby granting them the ‘right to the city’.

Figure 3.9 – Densities surrounding a Metro station in Warsaw with a low floor streetcar in foreground. The older design of the Metro entrance is pictured here. *Photo by author.*

3.2.2 Access and High Approval Ratings

The director of finance in ZTM explained that it is an a-political body, meaning it is not dependant on who is in political power. This is justified by the good services that ZTM he claims ZTM provides to Warsaw. Their high approval rating in the 2015 Annual Report of the Metro was broken down as: 36% Very Good, 53% Rather Good, and 11% with Average or less. He claims this keeps political interest out of the affairs of transportation planning as ZTM has gained the trust of Varsovians. If ZTM continues their good work, then politics do not get involved as it appears to be a positive reflection of their leadership. In ZTM's 2010 Sustainability Development Strategy, a high level of social acceptance for granting privileges to public transit was cited as an opportunity for ZTM (p. 27).

A participant working in the planning and engineering department at ZTM explained one of the challenges ZTM faces is working within communities where the developer has created narrow right of ways and overall poor access for future infrastructure. In speaking with this ZTM staff member she stated that narrow road widths make it impossible to fit a bus with a bus stop shoulder. This makes it difficult to achieve a 5-15-minute walking distance for residents in new communities. She points to the lack of land-use zoned by the City of Warsaw in certain areas and plots of land. This grants the developer the opportunity to build freely and not be responsible to create access to transit. ZTM staff are committed to the measure of 5-15-minutes walking distances as they also follow up with residents to understand where bus stop placement can be fine-tuned. For example, she cited an instance where the bus stop placement seemed

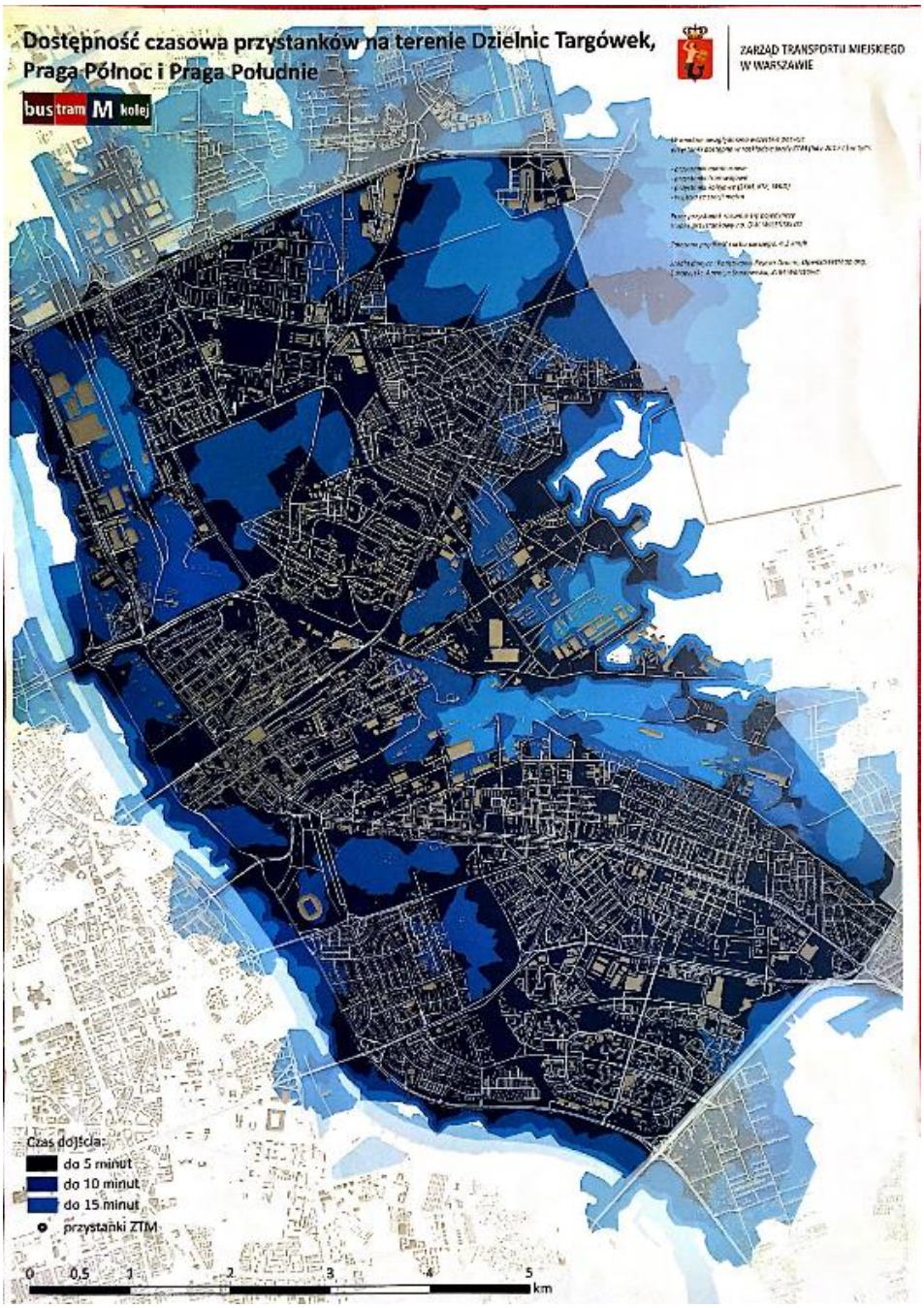


Figure 3.10– Time-based accessibility to transit stops in Targówek, Praga Północ and Praga Południe (Bus, Streetcar, Metro, and Rail)
Map provided by ZTM.

Legend (Bottom Left Corner):
Distance Measured in Walking Times:
in 5 minutes
in 10 minutes
in 15 minutes
ZTM transit stop

Translations by the author.

appropriate from a data or evidence based planning method, however, after some feedback, residents claim the bus stop is difficult to access because of limited pedestrian crossings. ZTM used this feedback to create easier access by moving the stop closer to a designated walkway in this example. It was said many times by ZTM

staff that their goal is to serve the people of Warsaw and provide them with good transit they want to use because it is the most convenient and efficient way to travel. ZTM is also highly committed to keeping cars out of the city centre, an initiative in partnership with city planning goals. In Figure 4.9 time-based accessibility to public transit stops are mapped and overlaid with shades of blue, the darker the shade of blue the better the access. This map depicts that many residential areas in Praga are in the darkest blue

Figure 3.11 – An older streetcar at a station in Warsaw, the digital display shows arrival times. *Photo by author.*

shade.

In addition to ZTM's commitment to creating a physically accessible network, ZTM takes great pride in the technological advances that create better access to information. This

is done through a series of initiatives. Every transit stop has a visible display of the routes serviced by the stop and timetables of these routes including if one must wave to

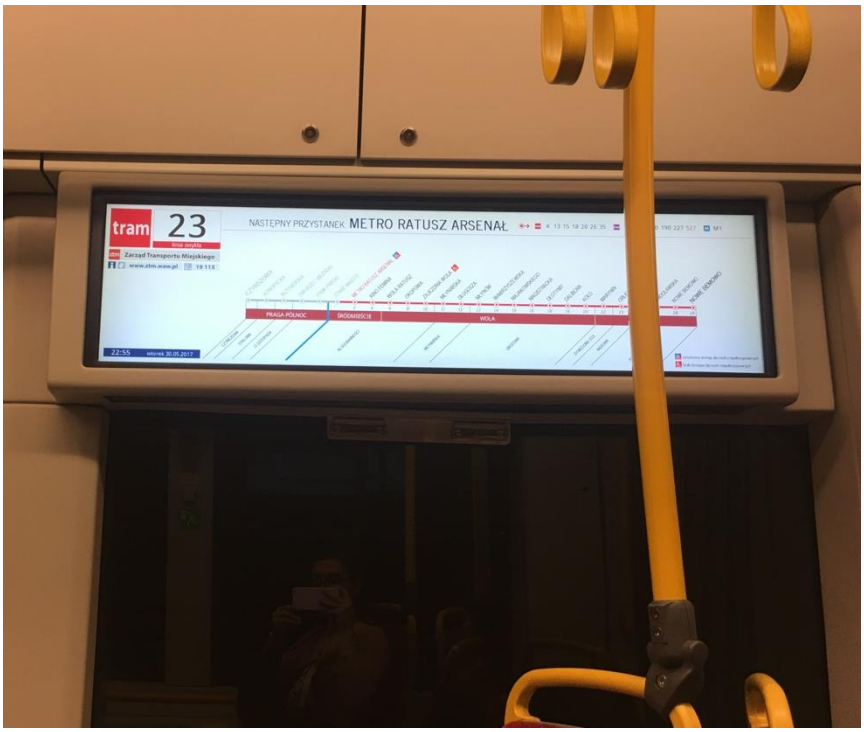


Figure 3.12 – A digital display on a modern streetcar. In the top left the number of the route, the next stop is the title at the top of the display (Metro Ratusz-Arsenal) in the infographic the stops are listed and updated as the streetcar completes its route (along with predicted time until the stop). The red bar is what district the stop is in. Underneath this red bar is the street the stop is on. The blue line perpendicular to this red bar is the Vistula River.
Photo by the author.

hail the bus to stop. Most streetcar stops have digital displays and arrival times (Figure 3.11). On vehicles, there is either a printed list of stops and what streets they are on, or a digital display that updates with each stop (Figure 3.12). Every stop is announced on new streetcars and buses including if the stop must be requested or not. ZTM boasts of these initiatives because modernizing transit is perceived as one method of closing the

gap between Warsaw and the EU. Greater access of information to Varsovians is a result of these technology advances.

3.2.3 Tariff Initiatives

Ticket distribution has received heavy upgrading in recent years. All surface routes rely on the honour system (streetcars and buses), in the metro you must tap in or scan your ticket. Ticket checks by ZTM staff are done on surface routes and even when waiting at a metro platform one may be asked to provide proof of payment as some entrances are barrier free, however, these checks are infrequent. ZTM in their annual report admitted to wanting to hire less ticket checking staff in exchange for better access to purchasing tickets. When asking staff about this they said the most common reason that people were caught without tickets was because they could not purchase one where they began their journey. ZTM has been actively installing more ticket machines (600 machines) on contract with two private companies to achieve this; on newer streetcars and buses (1800 vehicles), ticket machines are located inside in vehicle, and they are always labelled so customers know before boarding if a ticket can be purchased. The final method is to buy a ticket from the driver however, tickets are sold at a higher price through this method. ZTM is also constantly trying to modify their fare scheme to better serve the public. Currently there are several fare options: 20-minutes, 75-minutes, 90-minutes, 24 hour pass, weekend pass, group pass, 30 day pass, 90 day pass etc. There are several options in ticket type, based on the trip one takes. On June 1st, 2017, fares decreased in price, family passes improved to include smaller families, and a 72-hour pass was introduced. Every fare listed has a discount entitlement. These discounts

range between 39% and 100%. Students, children, blood donors, and seniors are included in these discounts and there are many more. Seniors above the age of 70 receive a 100% discount on transit. Of all tickets sold, ZTM reports that 78% of people use long-term tickets such as 30 or 90 passes (ZTM Warsaw Annual Report 2016, p. 16) this indicates the public's trust to invest into transit and confirms its affordability compared to other means of mobility in Warsaw.

3.2.4 Cars in Warsaw

Approximately half a million cars enter the city of Warsaw on a workday and ZTM recognizes some users will still need to use their car to access transit. New Park and Ride facilities are located at certain stations further from the city centre to accommodate this. The cost of parking includes a day pass for the user. Kiss and Ride facilities are slowly being integrated as well at certain stations, outside of the city core. These are designated spots painted brightly for the sole purpose of a two-minute drop off. There are several initiatives to make an easier transition to transit.

The city of Warsaw has combined two progressive policies: an expansion of public transit service that will be an adequate replacement for a private vehicle, and increased pricing for car users to reduce car congestion in the city centre. The city avoids widening roads, and lowers speed limits to calm car traffic especially in residential areas. Trucks are not permitted in the city centre over a certain tonnage and only allowed at certain hours.

3.2.5 Public Trust in ZTM

Constant improvement and growth in the public's trust in ZTM is reflective in ridership growth. In 2008, there was an estimated 940 million passengers, in 2016 this number is now at 1.136 billion (ZTM Warsaw Annual Report 2016, p. 22). The city of Warsaw has unravelled into open areas requires adequate transportation planning. President Hanna Beata Gronkiewicz-Waltz admits, not everyone can afford to live in the city, especially young people whose inheritance from grandparents – a common practice in Poland – might not suffice to support their housing choice. People can choose to live further out and which makes it important to ensure that people can use transit to commute into the city (City and Transport Conference 2017).

3.2.6 Re-privatization of Warsaw

The City of Warsaw is in a unique spatial policy dilemma. World War II destroyed 75% of Warsaw's buildings, in areas of the Ghetto it was 100% destroyed. There were even talks to move the capital of Poland to Łódź because Warsaw was in very poor condition (Śpiewak, 2017). In 1945, the Polish Workers Party, backed by Stalin, recognized a need for basic infrastructure, housing, and institutions to re-establish Warsaw as Poland's capital. The president of Warsaw at the time, Bolesław Bierut, decreed all land in Warsaw to be nationalized at the expense of Varsovian's property rights to rebuild Warsaw (Dymek, 2016).

After the fall of the communist government, Warsaw had to now address the many private owners coming forward demanding their property returned to them that was

illegally seized. To manage this, a commission was established to legally examine claims to property in the City of Warsaw. These members are appointed by the president and prime minister and should have a law degree or real estate experience. There are many critiques of this process however:

> The fact that the commission is vested with powers normally vested to the courts, and that it ignores the rules of administrative proceedings and yet may issue decisions depriving citizens of property, may give rise to serious doubts as far as the constitutionality of the new piece of legislation is concerned. (Swiecicki, & Wnukowski, 2017).

In addition to this critique, others point out that the lack of clarity regarding what powers the commission has and whether an appeal on the commission's decision is possible allows the commission to work in between the lines as its own body. Re-privatization has returned around 37,000 addresses to their former owners and about three thousand applications are still in process (Swiecicki, & Wnukowski, 2017).

3.2.7 The problems with re-privatization

ZTM relies on the city for proper zoning of these properties. If zoning is too lenient or is absent, it limits ZTM to properly provide accessible transit when developers create narrow right of ways. A ZTM architect cited a scenario where ZTM was given the lands surrounding a future Metro station. During construction, a former owner claimed property rights to an address that was given to ZTM. This legal dilemma slowed down the construction of the Metro. Ultimately the property was given to ZTM and compensation was given to the former owner. The legal processes of this can be lengthy, slow down construction, and create costly compensation demands from former owners. Although re-privatization appears to be a liberal policy meant to allow former

residents property rights, issues with the commission selection process makes the process appear to be ad-hoc in nature.

3.2.8 Revitalization Programme in Warsaw

The City of Warsaw defines revitalization as:

> "encompasses a process whereby spatial, technical, social, and economic changes are conducted in the interests of the community, the purpose of which is to get an area out of a crisis situation, while recovering its previous functions or finding new ones, as well as creating conditions for its further development with the use of its endogenous qualities." (Warsaw View on Revitalization, p. 3)

Revitalization programmes in Warsaw focus on selected areas within districts. This multi-year programme is organized by city planning and coordinated by a commune; it is to be respectful of space, society, and economic budgets. The programme is to take an area out of a "crisis situation" and create conditions for further development in accordance with the Integrated Regional Development Programme (IRDP). An area deemed to be in a "crisis situation" is defined as an area that has a detrimental and destructive process of space, society, and economy, which results in the degradation of a given area. (Warsaw View on Revitalization, p. 3)

Revitalization was voted on by the Council of Warsaw in 2005 to pass a regulation related to the Local Simplified Programme of Revitalization of Warsaw (LSPR) for the years of 2005 – 2013. The goals of revitalization in Warsaw should replace tenement housing and address crisis areas as follows:

- Socio-economic enlivening by raising the quality of the commune space, in accordance with the principles of spatial order and aesthetics, and by promoting entrepreneurship
- Developing tourism and culture based on cultural heritage
- Increasing the safety of residents and improving transportation opportunities within housing estates
- Integrating residents, preventing and counteracting social exclusion

(Warsaw View on Revitalization, p. 8)

The City of Warsaw identifies a crisis area as meeting all three criteria of social, economic, and infrastructural at "crisis" level. In November 2005 six projects applied for structural funding from the European Regional Development fund in the Marshall's office. Four projects by external partners were also filed in the Marshall's office. Of these projects three were chosen:

1. Modernization of the Warsaw Archdiocese's Care Centre in Warsaw located in the tourist area on Krakowskie Przemiescie Street including Kazanowski's Palace.
2. Renovation of Praga's tenement housing of historic significance and adaptation of its premises for public purposes. The project assumed social changes within the suggested urban changes.
3. The revitalization of the remaining portions of the Warsaw Ghetto Wall as outlined in important city objectives to increase tourism based on cultural heritage.

(Warsaw View on Revitalization, p. 4)

3.2.9 Praga within Warsaw

Praga, on the East bank of the Vistula river, is physically close to the most viably economic and expensive Śródmieście district. In the minds of Varsovians however, Praga is not close at all. Many Varsovians continue to not feel safe in Praga because of

the reputation this district has gained over time. This reputation that Praga has, is rooted in the history of the district. Before World War II Praga was a rich

Figure 3.13 – Difference between old (right) and new (left)
Photo by the Author.

neighbourhood, Targowa street was at the heart of this economic wealth. Once war broke out, all of these residents left. The efforts of revitalization are meant to invite new wealthy residents, rather than having to build the city out because this is more expensive.

In the 1990's Praga was plagued by factories closing and unemployment. Many of the buildings that are emerging as apartments and condos today in Praga were once old factories. As residents could not find work, violence and petty crime began to rise. This is where the reputation of this district began to grow as an unsafe one. In addition to

this, many of the buildings are in poor condition, many do not have central heating, their foundations are very old, and some resemble tenement housing as they were not renewed after World War II. Praga has remained relatively untouched after the war, it was not systematically destroyed by Nazi Germany in World War II like the West bank because it was occupied by the Red Army. After the war, all rebuilding efforts were directed to west bank redevelopment. In fact, films like The Pianist have taken advantage of Praga's historical appearance and used it as the backdrop of pre-war Warsaw: "Praga's grim state proved a visual boon for film directors Steven Spielberg and Roman Polanski, who filmed Schindler's List and The Pianist on the architecturally significant Zabkowska Street" (Saltzman, 2010). Travel websites and newspapers even recommend Praga as the new trendy place to visit:

> Never mind Praga's reputation as the haunt of Warsaw's lowlifes. It is worth crossing the Vistula River to experience Poland's artistic and intellectual milieu. Long derelict after decades of neglect, Praga is regaining respect for its architectural heritage and shedding its notoriety as a wild zone, thanks to the artists and musicians who have migrated to the neighbourhood. (Saltzman, 2010)

The historical buildings in Praga are being commodified into a trendy neighbourhood albeit forgetting the true social problems within Praga. Alcoholism, violence, and theft are still a problem within Praga. During my interviews and visits to Praga, many participants, especially those in transit planning and city planning believe that the problems of alcoholism and violence in Praga are hereditary. The revitalization programme aims to fix the structural urban character of Praga, however, a recognition of social change must be a part of this programme that could benefit current residents.

Figure 3.14– Zabkowska Street in Praga. The apartment building in the middle has not undergone revitalization. The building on the right is revitalized. *Photo by the author*

3.2.10 Social Revitalization or Gentrification

"Social marginalization within cities is mainly defined by one factor: poverty."

(Khün, p. 371)

The Warsaw Revitalization programme reveals in its preliminary document that drastic changes to the urban areas will lead to social change. However, revitalization is not meant to be a secret word for gentrification, the aim is for degraded municipal, post-industrial, and post-military areas to receive funding from the European Regional Development fund. The need for revitalization is necessary for residents who live in some of Warsaw's oldest buildings. The situation of the pre-war buildings in Praga is explained to be substandard by the Warsaw city planning department: lack of insulation and central heating, often times one washroom for an entire housing complex on the first floor (communal living), no access to hot water, and residents using coal to cook

and heat homes with. Warsaw has also had problems with smog most recently in December 2016 and January 2017 when cold temperatures prompted residents without central heating to burn anything to keep their homes warm, including garbage. Although public transit within the City of Warsaw was free for several days, the largest contributor to smog is the lack of home heating standards in Poland, not cars. In Warsaw's Transportation Strategy (2010), several policies are recommended to focus on reducing car use as well as upgrading older buses to electric or hybrid to reduce emissions (p. 7). In addition to these goals, the revitalization programme states initiatives to reduce social exclusion and address growing concerns of safety. Some of these include the creation of social rooms for young people and community members, upgrading staircases and lighting, and upgrading doors with secure entry. One observed renovation rented several rooms to municipal police and a noticeable increase in safety occurred.

> After carrying out the overhaul, some rooms were devoted to social and cultural initiatives. Currently these are: the 'Scena Lubelska' theatre, the 'Komuna Otwock', and 'Meuma-Lo' associations, as well as numerous art studios. The first floor of the building is rented be the Warsaw-Prague divisions of Caritas. The premises include a canteen for the needy. Also planned is [the] opening of a heating room [warming shelter] for homeless people. in the rented cellars a club for the unemployed could be created, where they could get help to finding [sic] work. (Warsaw View on Revitalization, p. 23)

In 2014 the most important changes in the revitalization programme according to the city of Warsaw in Praga district were: the installations of 40 playgrounds, 8.2 km of bike paths along the Vistula with three free beach areas near the National Stadium, 27 Veturilo (bike share) stations, the creation of the Praga Museum, and 38 outdoor parks with workout equipment. City policy highlights that revitalization is essential to improve the standards of living for Praga, but also to increase tourism, culture, sport and the

economy to support residents. Included in these additions was the Centre for Creativity on Targowa street meant to hold conferences, workshops, a public reading room etc. and activate the inhabitants of Praga (Olszewski, 2017).

ZTM staff explained that in the tunnelling of the Metro some of these buildings began crumbling, especially in Praga. Therefore, Warsaw's revitalization programme is also in place to raise the standard of buildings that have become structurally weakened over time. This is especially important on the Eastern bank as the buildings here are very old, some over 100 years. The substandard living conditions also contribute to Warsaw's poor air quality in extreme weather conditions. Revitalization plans include the installation of central heating in older buildings, that will improve air quality overall in Warsaw. The environmental positive outcomes listed in these revitalization plans are why they are supported financially by the EU.

3.3 Transit Equity in Warsaw

The Warsaw revitalization projects appear to have positive outcomes from a policy perspective as an inclusive and beneficial document to under funded and neglected area of Warsaw. However, several critiques of the project have emerged. In interviews conducted, Participant D, a Professor at the University of Warsaw critiques the Centre for Creativity as a method to perpetuate Praga's artist image which is not reflective of actual residents. In personal experience, the space is inviting as a community space however, it is open to certain individuals in possession of a method to participate. The Centre for Creativity is meant to attract those who live in Warsaw and outside of

Warsaw as a tourist attraction. Participant I said that in Warsaw, Praga is geographically close to the centre but in the minds of Varsovian's, Praga is not a part of the centre of the city and distant. This participant also pointed out that connections from Praga to the downtown were only improved by five minutes, prior to the Metro completion Praga was already well-connected via streetcars. In discussions with transportation planning staff at ZTM, I was interested in how transit assists in accessibility to the city and how it changes communities in the surrounding areas. The staff interviewed at ZTM focused on evidence based planning and working within the sustainability goals of Poland and the EU. To address accessibility needs, initiatives to ease the access to the point-of-sale of tickets, an increase in the variety of tickets sold, and ensuring that vehicles were low-floor for less able-bodied passengers. ZTM chose to address these accessibility needs after analyzing users' responses to service. The number one reason for an unpaid fare was a lack of ticket point of sale at the customer's journey. Altering ticket tariffs and types was done to encompass a greater variety of journeys that ZTM customers make. As time-based tickets were the most expensive type of ticket but also one of the most popular, ZTM reduced the prices of these tickets in June 2017. Low-floor vehicles have been a priority in ZTM policy since 1992, because users over 70 years of age can use ZTM service for free, they frequently use transit. Reducing the physical barrier of entering a public transit vehicle, allows not only elderly, but also parents with strollers or those with physical disabilities an ease of access. These initiatives, paired with a lengthy list of users eligible for a fare discount creates a higher level of access for vulnerable users in Warsaw. In response to transits effect on the surrounding areas, a natural increase in service by the Metro would increase the price

of homes near transit stations, usually about 10% initially. The market and developers can set their own prices once the land is purchased and do not need a consultation process. There are guidelines on development to prevent developers from over-stepping. The Intercontinental hotel in Warsaw can attribute its odd shape to this to accommodate a minimum of three hours of sunlight to neighbouring residential as seen in Figure 3.15

Figure 3.15 – Intercontinental Hotel in Warsaw as seen from the Palace of Culture.
Photo by Michel Zacharz.

ZTM's main focus is to provide Warsaw with accessible public transit and build it within a frame of environmental consciousness. Whether it enriches the lives of the community in the surrounding area is for another department to write policy for. When asking many participants about Praga and how the increase in transit accessibility would benefit the residents, most agreed it would. The revitalization projects would improve living conditions, public space, and increase safety in the area. However, from the information gathered from interviews, it was accepted by several participants that alcoholism and drug use were a problem specific to Praga. One participant after being asked if the social problems could be addressed by city planning stated that "Praga people will always have this problem, there is no helping them, it is paternal. The grandmother is an alcoholic, so is the son, and their kids will be too. That's why they sit outside and do nothing, they do not want to do anything about it." The fate of Praga residents is unclear in city planning as more apartments and mid-rise buildings are built advertising the easy access to the future Metro. A sociology professor from the University of Warsaw also stated that residents of Praga are tired of being studied "like they are in a zoo" and tend to treat outsiders with hostility, she cited this from personal experience where she experienced hostility for owning a leather purse, an item that most residents cannot afford.

3.3.1 Praga-Połnoc and Equity

If we analyze Warsaw's Praga-Połnoc neighbourhood through the four components that Van Wee, B. & Geurs, K. (2011) identify: the transport

component, land use system, individual component, and time component. Praga-Połnoc's transport component has always been very well connected with west bank Warsaw. The growth of the Metro into the east bank is catering to the individual uses of "new" Praga residents. These residents are those who have recently moved in to the affordable district and use Praga more of a bedroom as Chełmiński, J (March 11, 2017) writes. They are of the poorer middle class and usually work on the left bank and send their children to school in other districts, taking advantage of the proximity of Praga-Połnoc. The land use component has been subject to intensification in relation to the building of the Metro, which is positive to provide homes to more people however, catering to "new" Praga residents, these homes are often unaffordable to long time Praga residents. The temporal component not only includes access to shops but also access to work and recreation. There is a general lack of parks and green space in Praga which has been identified by city planning. Developers must now provide green space in developments as stipulated by the City of Warsaw, the lack of open space in Warsaw has created a need for places for residents to relax outside of the home. The closing of old factories and replacement with higher class apartments, removes the ability for lower income residents to participate in the work force. These factors if unmonitored, will remove old Praga residents. This process is evidenced by the small bars and coffee shops being the first signs of gentrification. Paired with the development of high profile living such as Port Praski in Praga, which advertises living close to nature and offers its residents use of kayaks in the Visula River.

The DIVERCITIES project and Institute of Geography and Spatial Organization of the Polish Academy of Sciences examined Praga from 2013 – 2017. This project admitted the inevitable gentrification of Praga as local services disappear that served “old” Praga residents and new developments like Port Praski apartments catering to the “new” Praga. These new services contribute to the social exclusion experienced by old residents who lose their social circles where were once places to gather.

Praga is a very well-connected district via public transit. The City of Warsaw’s revitalization programme, sometimes referred to urban regeneration, is an attempt to intervene to improve parts of the city that have been deemed “crisis areas”. Most times these areas provide essential services to Praga residents. The Centre for Creativity is the first step into the new Praga that will emerge once this district’s revitalization is complete. According to the sociology professor at University of Warsaw, Old Praga residents oppose revitalization projects because they are concerned of being removed. Once they return to their newly revitalized home, rents start to rise, and essential services leave. She critiques the revitalization programmes as a method to remove original Praga residents, that are masked as a positive project necessary to the city.

The negative reputation of Praga can be slowly changed through policy however, projecting how long this shift will finally change Praga’s reputation is difficult to predict and not guaranteed. The revitalization programme seeks to invite Varsovians and

tourists to occupy this district as a means of cultural rehabilitation as outlined in the programme. However, the fate of current residents may be lost in attempts to create a better revitalized Praga for new residents of Praga.

3.4 Warsaw Conclusions

In Warsaw, transit equity as a concept is not discussed in policy, as mentioned in the introduction chapter of this paper. The reminder of communist and socialist planning regimes prevent an acknowledgement of different social classes, as this concept too closely related to Marxist theory and Leninism. This also applies to the term “equity” being too closely related to concepts of Communism and is generally not used in policy. However, among the several interviews conducted with city

Figure 3.16 – Photo of a display in the Museum of Praga. It highlights the Kamienica’s, revitalized buildings, the history of Praga’s poor working class, and present day tourists.
Photo by Author.

planning and with ZTM in Warsaw, when asked about **access** to public transit, there was a unanimous agreement that access to public transit was of paramount importance. ZTM in Warsaw has many accessibility and policy initiatives that grant this agency a high level of political and public trust. Their central focus is to provide residents of Warsaw with accessible public transit and to reduce the number of cars entering the city to meet environmental standards set by the EU. ZTM employees cited that every Varsovian should have the ability to walk to a transit stop within 15 minutes or less, ideally 10 minutes or less. ZTM is also a property owner, owning the land around future stations with the ability to create a planned public realm around major hubs. This helps to create seamless access to public transit. This agency does not concern itself with political motives or the social good of the areas they build in, their aim is simple: to create access to as many residents as is possible.

Dr. Marek Bauer presented on the challenges of planning in Cracow, an increasingly car-oriented city. Most public transit trips are for work purposes and the city faces challenges investing into more efficient transit for every day use. He highlights one concept that can be closely related to equity: access vs time and speed of journeys via public transit; he states that both concepts must be invested equally, one does not outweigh the other. He argues that finding the ideal placements for users to access public transit must also be coupled with initiatives that allow transit to run on time e.g. bus lanes, and streetcars separated from vehicle traffic. He also spoke about prioritizing a few methods of transit rather than

attempting to give priority to all, where appropriate. In Warsaw's Transportation Strategy (2010) the separation of different zones (downtown, urban, and suburban) help to create policy catered to the possible mobilities appropriate for the varying landscapes. Warsaw has given priority to public transit users by building dedicated lanes and prioritizing traffic signals to allow transit to pass first. Dr. Bauer claims this is important because transit vehicles make more frequent stops, therefore, they should be given priority to faster movement through the city, rather than private vehicles.

Development in transportation infrastructure is one method that Warsaw attempts to close the gap between itself and other successful European cities in the EU:

> In Poland it is public transport that plays the predominant role, while in the most developed capitalist countries the share of private transport, especially in passenger traffic, is much bigger. Nevertheless, in public passenger traffic in terms of the number of passenger-kms, Polish buses and coaches carry more people than British buses and coaches. (Zbigniew, p. 190).

Having a strong public transport policy aligns with the EU's goals of environmental sustainability, as well as attempts to make Warsaw a strong European city comparable to others in the EU.

The acknowledgment of the spatial differences between east bank and west bank Warsaw are outlined in the 2007 Warsaw Spatial Policy:

> There is a lack of balance in Warsaw's spatial structure visible in the development of its right- and left-bank sections. A priority is the targeting of actions to supplement and modernize building tissue on the Praga side as well as to create a system of efficient transportation links for both parts of

the city. (City of Warsaw, p. 3).

Warsaw targets the Praga-Połnoc neighbourhood in policy because it has lacked investment to improve living conditions of its residents. This district is centrally located in Warsaw yet has some of the smallest living spaces which are old with little to no modern amenities. This has been especially problematic as Warsaw has recently seen an increase in smog and poor air quality from home owner burning coal and other harmful materials to heat homes. The decision to revitalize and modernize current living conditions alongside progressive transportation policy are inline to achieve EU goals and to obtain funding from the EU. However, revitalization paired with lenient developer restrictions increases desirability, especially near new public transit. In interviews with ZTM staff it was commonly acknowledged that the Metro increased housing prices by at least 10%, other examples cited private developers quickly buying up land adjacent to future Metro stations and then building with advertisements of its close proximity to transit.

Warsaw's physical transit network is expansive and is served by one unified transit authority. The current tariffs are varied in price and allow for easier participation in the transit network. There are many discounts that may be applied to many users, one of the most progressive is free transit to users over the age of 70 years old. This allows these vulnerable users to keep their independence and participate in out-of-home activities, such as medical appointments. Others included in 100% discounts within the ZTM system are: persons with disabilities, unemployed persons living in Warsaw, persons on social assistance living in Warsaw, and

schoolchildren from a family of up to 4 children until they turn 21. There are many more discount entitlements within ZTM including many student discounts that entitle users to 50% off the regular fare. Mettke (2015) notes that accessibility is beyond one's physical ability: "Accessibility hereby does not only include the physical access to such networks, but also the political and planning dimension of transit or the question of financial restrictions for individuals due to pricing strategies." (p. 230). ZTM directly addresses income disparity of its users by providing discounts a variety of vulnerable users. These discounts target vulnerable users and allow them the ability to participate in out-of-home activities, preventing social exclusion.

The current transit planning regime by ZTM is focused on accessibility (dostępność), to encourage as many users to participate in transit and not private car ownership. Similarly to equity being mistaken as equality as a concept in transit policy in Toronto, in Polish policy there is a similar confusion. "Równość" (equality) is a word commonly associated with communist practices and is avoided in policy. However, by focusing on accessibility and making transit comparable to car travel times by giving transit priority, Warsaw's transit gives users the opportunity to participate in the city fairly.

Chapter 4: Toronto: The Eglinton Crosstown to Mount Dennis and Oakwood

4.1 Observations

(October 4, 2016)

I bike to Dufferin and Eglinton to run some errands, as I near the intersection, the construction of the Crosstown makes it impossible to continue by bike. My options are to join pedestrians on the sidewalk where I should walk my bike, or to enter the road which is narrow and drivers are looking to pass through as quickly as possible. I opt to walk my bike. I arrive at my destination and there are no ring posts to lock up my bike, this is a huge inconvenience. There is a metal bar outside of the shop and I have no choice but to lock my bike on it. As cars speed by this intersection, I notice how many people at this intersection have mobility challenges. Maybe it is because I'm out in the middle of the day doing my own errands but there are several senior citizens, with walkers or motorized wheelchairs. The sidewalks are narrow here and cut curbs are more convenient for drivers, my bike seemed too large for this sidewalk at

Figure 4.1 – Dufferin and Eglinton during construction of the Crosstown. *Photo by the author.*

times. In particular, the south-east corner of this intersection has a separate right turn for cars and pedestrians are left to negotiate when to cross. There is a small island of pavement after this where pedestrians wait to cross. This whole intersection is difficult to navigate without a car and I already feel stressed and unwelcome as a pedestrian.

In addition to this many people walk or use transit frequently here. Often when I grocery shop or run errands many people use a buggy to collect their shopping in. Compared to the Loblaws in Forest Hill where more people drive, I see less buggies. There is a line-up to take the Dufferin bus southbound at Dufferin and Eglinton. My mother told me that when we used to live at Dufferin and Bloor when I was a child, the Dufferin bus traumatized her especially as a mother of a small child. She said it was always full and she avoided taking it if she could. Although she said sometimes the subway was no better if there were no elevators and she had a stroller. As I see the Dufferin bus pick up the crowd of people and drive south, it appears as if nothing has changed since I was a child, the bus is very crowded. I cannot imagine what rush hour must be like.

(November 10, 2016)

I am traveling south to meet for a class trip in Corktown Commons and Regent Park, I am shocked there are no hiccups during rush hour and I arrive on time. After the walking tour of the area, I head to the Toronto reference library, it is a nice day so I walk. After I am done my errand, I begin looking for my PRESTO card and I realize I have lost it. I remember having it not too long ago but I have a class at the University and do not have time to retrace my steps. I have a few tokens in my purse so luckily, I

will not have to wait in line to purchase them at the station. I do a quick search on my phone and determine that I may be able to pick up a new card at Bloor-Yonge station. I descend into the small shopping area under an office tower attached to the station, and I cannot figure out what store will sell me a PRESTO card. I go to the Gateway Newsstand convenience store across the hall from the station, where I'm told they do not sell them. I ask the clerk if she knows where I can purchase one, she says maybe in the station itself. Upon entering the station and seeing the line to the one collector at the booth, I decide I will just use a token and sort this out later when I have time. On the subway, I am searching vigorously to determine where I can buy another card. I think about locking my old one, but I see online that no one has used it yet. I'm hesitant about locking it as I have lost a card before and then later found it several months later in a jacket pocket. During my online searching, Downsview station is listed as another point of sale for PRESTO cards.

At the station, I go to the Gateway Newsstand store located inside the station and am told by the clerk that she only has Senior PRESTO cards available. I feel deflated. Losing my PRESTO card has created a massive inconvenience for me today, and I feel hopeless about obtaining another one. I use transit almost daily to get to school and around the city. I count my tokens, realizing I have enough to get home later tonight and for one more day of travel. I continue my journey to school.

This experience for me, highlights the difficulty of obtaining a PRESTO card. Of course, the ability to login and lock my balance is a useful feature, compared to losing a TTC

Metropass and having to purchase a new one. However, I thought the replacement of a card would be easier, especially because I was attempting to purchase one at a major transit hub.

I later find out that someone in my class found it on the sidewalk and since it was signed, she could return it to me.

Figure 4.2 – Oakwood Ave and Eglinton Ave. West
Photo by the author.

(January 11, 2017)

I'm waiting for the bus at Eglinton West subway station, it is rush hour and I am debating walking home or just waiting for the 63 bus to take it four stops. I check my app which uses GPS tracking to locate buses and predict arrival times and it says the bus will be at the station in six minutes. I decide to wait, it is only faster to walk if the bus is eight or more minutes away.

From the bus platform, I can see cars lining up waiting to turn left or right onto Eglinton Ave from Allen Road, the former Spadina Expressway. As a car driver, I like the convenience of the Allen, as a transit user and pedestrian I would like to see it converted into a park. Every time I bring up this idea to my car commuting roommate he protests that he needs the Allen to get to work.

Ten minutes pass by and now there are more people on the platform waiting for the 63 bus. Several 32 buses that run their route along Eglinton Ave come and go. My roommate described the 32 Eglinton bus concisely when I moved in: "The best part about Eglinton is the bus comes every five seconds, the worst part is that it's on Eglinton." What she alludes to is the endless traffic and construction that buses wait in, therefore bunching them at congested intersections.

There are now many people waiting for the 63 to Liberty Village. It finally arrives after 20 minutes and the crowd boards the bus. The bus is not full, but when it arrives at the second stop where the bus turns onto Oakwood Ave there are so many people waiting

that half are left behind and told by the driver to wait for the next bus. The bus is very crowded now and I wonder if I will be able to get to the door of the bus at my stop.

There is one gentleman on the bus complaining about waiting for so long and that the bus is crowded. He makes a comment loudly that service is getting slower and worse and that no one cares about this area to make it better. Being cramped on this bus I feel this way too. There are notices circulating at bus stops that service to the 63 is being affected, ultimately meaning less buses will be running north of St. Clair where I live. In addition to this, bus timetables are no longer posted at stops. Instead there are several apps listed that one can use. This is convenient for me, as I have a smartphone and pay for a data plan service. However, I'm unsure if everyone has this type of access.

Luckily when it is my stop I part my way through the crowd and am able to disembark the bus.

(Jan 30, 2017)

I am going to school, it usually takes at most an hour, however I always leave to allow myself an hour a half of commuting time in case in takes longer. I open my app on my phone, the 63 bus arrives in two minutes or eight minutes. I decide to walk casually and catch the bus in 8 minutes instead of running. As I walk to Oakwood from my street, I see the first 63 pass and if I ran I could catch it, I decide to let it go. I open the app again the next bus is in 5 minutes. I walk to the stop and I begin waiting. I'm waiting for over 5 minutes now, I check the app again, 2 minutes. I should have just ran for that other bus.

I left early and now I'm worried I'm in danger of being late because the bus sits in traffic towards the subway. Finally, after another 5 minutes the bus arrives and it heads north towards Eglinton, the line of cars turning right to get onto Eglinton is longer than normal today. As I sit on the bus I wonder what living in one of these single-family homes on Oakwood must be like with a line of cars outside your doorstep 80% of the day. We are moving slower than normal. The driver finally announces that he is informed that traffic is very bad this morning and it might be faster if we walked to the station. I feel cheated, I just waited almost 15 minutes for my bus, and now I am told to walk, something I could have done this entire time. I disembark the bus, but I see an elderly woman and her groceries stay on the bus. I should be thankful that I still have a high level of mobility and I am able to walk. I speed walk through the suburban neighbourhood and finally get to the station. Even though it is January, I wish I had biked and not spent the last 25 minutes trying to get to the subway. Once at the platform I have to let the first subway heading north pass me because it is going out of service at the next station. Finally, a subway going to Downsview station arrives. My friend and I have a long going joke about the "crawl" that subways heading north experience. Usually we are in communication about how awful it is that day as a way of informing one another. Today I send him a text stating: "the Glencarin crawl". My friend responds and says he is not coming to school because he does not have time to spend two hours commuting one way. He lives near Union station downtown. I'm about 45 minutes into my commute and I am only less than 5 km away from my home. It is infuriating.

Not every commute is like this, and I know I have the option and means to use my car,

Figure 4.3 – An increasingly common site, a brand new home amongst older homes. *Photo by the author.*

but others in Toronto do not. I chose to live geographically closer to school but I wonder now if it was worth it considering my commute to school is still relatively slow and I had the option of living in a trendier neighbourhood downtown.

(Feb 18, 2017)

Today is an unusually warm day and I decide to bike for the first time this year. I find that by bike I discover my neighbourhood differently than when I drive in my car. I bike south on Vaughan Road and take a shortcut to get to Bathurst and St. Clair. The rapid change from affluent neighbourhood to average neighbourhood is bordered by Vaughan Road. If I turn left, the neighbourhood is suddenly filled with people walking their dogs,

joggers, and manicured lawns. Turning right, leads me back to Rogers Road and Oakwood Ave, I usually pass through this area either in a car or by bike. I usually do not feel safe walking here. Although I have not lived in my neighbourhood very long, one of the first observations I had was this rapid change from unsafe, uncool neighbourhood, to one of the most desirable neighbourhoods in Toronto. This is also evident when I bike to Eglinton West station. I purposefully chose a route through the suburban neighbourhood where I would avoid Eglinton Ave as the car congestion is constant and drivers are more aggressive than normal. Nearing the end of my route to the station I turn left onto Everden Road, which is also where Cedarvale park begins if I were to turn right. It is as if Everden Road is another road in this area that has beautiful large single family homes in Toronto's most affluent neighbourhood on it, yet one street to the west, and there is a rapid change, with smaller homes on small lots. I usually tell people I live

next door to Forest Hill, and then quickly follow up that where I live looks nothing like Forest Hill.

4.2 Toronto Analysis

4.2.1 Toronto Transit

Toronto opened its first subway in Canada on March 30th, 1954 replacing the Yonge Streetcar. The subway ran 7.4 kilometers from Eglinton Avenue to Union Station (Bow, 2017 July 23). The new line was an initial answer to the congestion on Yonge Street and an indication that Toronto was progressing to become a global leader in public transit. In 1966, the Bloor-Danforth line opened replacing the Bloor streetcar (Bow, 2017 July 23). The public transit network expanded as

Figure 4.4 – Local business on Eglinton Ave W.
Photo by author

funding was steady and population growth continued (Bow, 2017 July 23). In 1990, the New Democratic Party (NDP) was elected in Ontario, and funding for the Sheppard Subway was approved along with three other subways; this decision was eventually heavily criticized for over spending provincial money. This gave political campaign power to the Conservative Party to promote their platform as "common sense". The newly elected Conservative government downloaded costs of transit and other social services onto municipalities in 1995 (Morrow, 2012 Nov 16). The Conservatives provided funding only for the Sheppard Subway and brought about two critical changes: amalgamating Toronto from six municipalities to one "Mega City" and then downloading previously provincially funded services onto the new amalgamated municipality. This hindered Toronto as a growing city to provide public services.

As Toronto continued to grow outwards from the core, transit was an underfunded area in municipal spending. This lack of funding throughout the system prevented repairs of the TTC and stopped any improvement in the core, where the TTC was already over capacity. Mel Lastman, mayor of Toronto from 1998 to 2003, believed providing a subway in the suburbs would help to relieve congestion downtown by moving urban growth somewhere else in Toronto. The Sheppard Subway was built but has not achieved the projected ridership since its opening in 2002 (Morrow, 2012 Nov 16). The Sheppard Subway experience has encouraged transit expansion in Toronto in the form of Light Rail Transit (LRT). LRTs are less expensive to build and would be justifiable in areas that are less densely

populated, such as suburbs. The Sheppard Subway has been criticized as an example of what occurs when political egos prevail over planning (Morrow, 2012 Nov 16).

4.2.2 Toronto Spatial Distribution

The City of Toronto consists of different housing patterns, these vary from suburban single family homes to high rise condominiums. This is dependent on the Provincial Growth Plan and what is stated in Toronto's Official Plan, e.g. the Yonge-Eglinton area has been labeled as an urban growth center, therefore allowing for higher density.

The rise in post-war suburbs created a sprawling landscape that shapes Toronto presently and the regions surrounding it. Filion (2013) concludes that post war suburbs made it possible to dramatically increase land consumption, and suburbs encouraged decentralization. Compared to pre-war cities that were built radially and relied more on transit and walking; suburbs today are largely car dependent, which also contributes to decentralization. Young and Keil (2008) argue that the existing transportation in Toronto has become a "bottleneck" due to global and local circuits that are poorly coordinated and decisions that do not interact for the regional good. Suburban means neighbourhood homes offered in a peripheral location, located "close to nature", and relatively newly built homes and communities (Young, 2013, p. 63). Mettke (2015) writes about the growth of Toronto's suburbs:

> This amalgamation brought together two very different urban settings (Filion 2000) and lifestyles. The old city of Toronto has a high-density core and a grid of streets that provide a mix of uses, and the inner suburbs (amalgamated municipalities) were the first ring of post–World War II suburbs built around the old city of Toronto. In a later wave of construction, throughout the 1970s and 1980s, high-rise apartment buildings were added along arterials and at the major intersections that now define the hybrid character of the inner suburbs. (p. 233)

The communities this paper focuses on are these inner suburbs where single family homes are adjacent to high-rise towers. These towers arose from the "Towers in the Park" concept by Le Corbusier and were constructed to provide housing that was affordable and close to open areas. However, over time these towers became predominantly occupied by new immigrants and low income families. The towers' lack of proximity to amenities also make those who live here dependent on public transit, isolating these residents.

4.2.3 Economic Disparity in Toronto

Mettke (2015) writes that poverty in Toronto is seen predominantly as a suburban vertical phenomenon and that many of Toronto's Neighbourhood Improvement Areas are located in suburban wards (Figure 4.5), not within the old City of Toronto. In 1970, according to Hulchanski's (2010) data (Figure 4.9), many of the poorest in Toronto were living in the downtown, where there was better access to transit. In 2005, the poorest lived further away from rapid transit. This has also

created a financial strain in Toronto revolved around a lack in transportation investment:

> Many of these [high rise in inner suburbs] neighborhoods have higher than average rates of these modes and lower than average car ownership and the spatial adaptability of the transit network, has led to an unsustainable trajectory within the city region. The current situation has not only influenced the daily life of the inhabitants, but has also become a major burden on the local economy. Without significant investments (and especially in public transit), the transport infrastructure will become increasingly dysfunctional over the next years. (Mettke, p. 234-235)

The growing income disparity in Toronto is not only a social challenge for the city of Toronto but also poses a challenge to plan adequate transit. With densities low in the suburbs, it is difficult to justify transit initiatives that will not fit within the business case planning methods of city council.

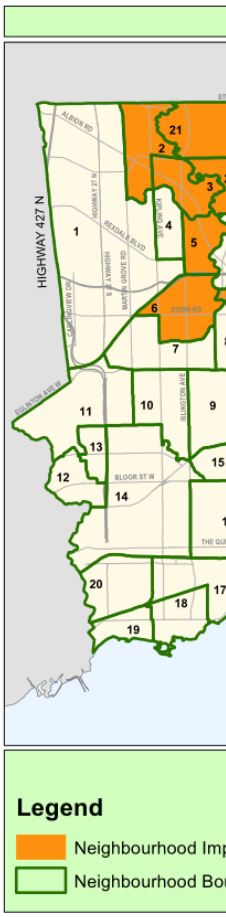


Figure 4.5 – Toronto's identified 31 Neighbourhood Improvement Areas (NIAs)
Source: City of Toronto, 2014

4.2

.4

Transit City

One of the first major attempts to address the lack of new transit infrastructure was Transit City in 2007. This project, led by Mayor David Miller, predominantly targeted low income neighbourhoods in the city of Toronto. It consisted of several LRT lines that would create links between neighbourhoods in Toronto that primarily run on bus services. This project aimed to create access to local neighbourhoods and higher order transit such as subways. Transit City proposed LRTs as they were argued to be appropriate for the projected ridership and are less expensive to build than subways.

With the TTC on a limited budget, the project was approved as can be seen in Figure

Figure 4.6 – Transit City LRT Plan
Source: transit.toronto.on.ca

4.6.

Significant progress was made with the announcement of provincial funding in 2007 from Premier Dalton McGuinty to begin construction of the Eglinton Crosstown and Finch West LRT. Funding for Sheppard West LRT followed after this announcement, promising a third of the costs covered. Design work and public consultation processes began for all three lines with shovels in the ground by 2009.

The blame of the cancellation of Transit City often times falls on David Miller's successor Rob Ford who publicly announced that: "Transit City is dead, ladies and gentlemen" and "it's time to stop the war on the car." (CBC Dec 1, 2010). Mettke (2015) writes of the three phases that contributed to Transit City's demise:

> The political battle over Transit City was a messy, conflicting, and disruptive process that could be split into three phases. The first period can be directly linked to the introduction of Transit City by David Miller and the funding by the provincial government. The second phase had its political start with the election of a new mayor in 2010, Rob Ford, who cancelled Transit City… The third phase of Transit City can be seen in the city council actions in 2012/2013. By the time the vote came to council in early 2012, the council voted in favor of motions to resume work on the reduced Transit City plan, defeating Rob Ford's campaign for subways. After a long and complicated decision-making process, Transit City as an extension plan survived with the intended lines and technology (LRT), but died as a political program. (p. 238)

In Rob Ford's announcement to cancel Transit City he alluded to new policies that would redistribute transportation policies for cars, subways, LRTs, cyclists, and pedestrians (CBC Dec 1, 2010). Yet the car has been the winner in transit policy for many years in Toronto. David Miller critiques the use of Ford's language when addressing potential transit users: "Others, including my successor [Rob Ford], are speaking to car drivers. They're not speaking to transit users whatsoever.'" (2017) Although Mayor Ford may have promised to have a plan that addressed every mode of transit, during his term as mayor, hardly any transit plans were realized. Toronto's relationship with the province became strained as Metrolinx did not hire the TTC to run the Eglinton Crosstown in the future. In addition, Mayor Ford was in favour to remove bike lanes on Jarvis by a justified two minutes of saved time for drivers (Visser, Oct 3, 2012); costing $300 thousand to remove and a step backwards in providing equitable transit options. These mismatched transit initiatives are what Enright (2015) points out

as conflicts over the essence of the metropolis.

The significance of Transit City's cancellation was expressed by David Miller in a recent interview. He places the blame of political priorities on cost benefit analysis planning or using a business case within planning as opposed to planning transit with social benefits in mind:

> So, we have to put the blame where it starts, which is with Premier McGuinty's decision, in the 2010 budget, to defund Finch. That specifically undermined the transit potential for several of the lowest income communities in this city. Because the Finch line ran through Rexdale, Jane and Finch, and was going to connect Humber College into the fabric of the city. It's a real tragedy. (Costello, 2017)

In this interview, David Miller identifies several neighbourhood improvement areas with high bus ridership that would have benefitted from new rapid transit. Mettke (2015) views Transit City as an example of the disparities between different Toronto neighbourhoods and priorities within transit planning: "Transit City as a case study illustrated the interwoven and conflictual relationship within the mobility space of post-suburban Toronto." (p. 242).

4.2.5 The Toronto Transit Commission (TTC)

The TTC provides public transit services in the form of streetcars, LRT, buses, and subways to the City of Toronto exclusively, with the exception of some bus routes extending beyond city limits.

The TTC is managed by an 11 member board consisting of some members of city council and members of the public. The board is responsible for presenting a balanced

budget to council. Since 1996, the TTC has not received funding from the provincial government, this funding was removed and has not been reinstated. The TTC has faced years of financial hardship. In 2007, the City of Toronto Council voted in a portion of taxes to be used to subsidize costs for the TTC to prevent service cuts. The TTC uses 70% of fare revenue into operating costs and continues to receive this subsidy from the City of Toronto.

This lack of funding has significantly stunted the TTC's growth over time to maintain adequate public transit service in Toronto. This financial strain is not aided by Toronto's sprawled suburbs which are difficult to service without the costs being too high.

In addition to this, public trust in the TTC has been declining, ridership between 2015 and 2016 did not increase as projected, which resulted in further budget cuts. The lower ridership in 2016 affected the projected service improvements scheduled for the following year (Spurr). These budget cuts have a direct effect on lower income users as service in suburban neighbourhoods decreases, increasing commuting times, and creating further social isolation.

The TTC has been raising fares consistently to maintain operating costs. In 2009, the adult cash fare on the TTC was 2.75$, a token cost 2.25$, and an adult monthly Metropass cost 109$. In 2017, these costs have dramatically increased: 3.25$ for an adult cash fare, 3$ for a token, and the Metropass costs 146$, a 34% increase over six years. Constant fare increases strain low income transit users as they must allocate

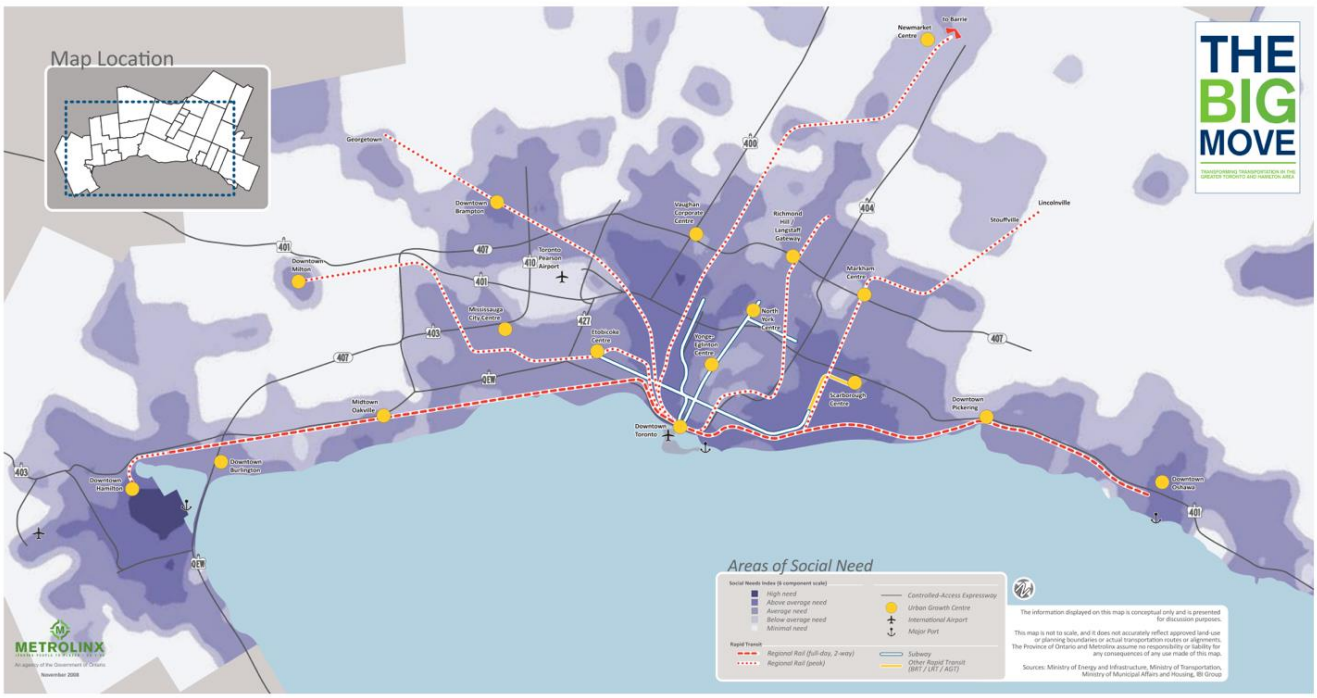
more funds for their mobility. The lack of fare discounts hinders the ability for vulnerable users to access transit and participate in out-of-home activities.

4.2.6 Metrolinx and The Big Move

Metrolinx is the provincial body responsible for long term transit planning in the Greater Toronto Hamilton Area (GTHA). It was established in 2007 to provide leadership, planning, and financing for multi-modal coordination of roads and public transit infrastructure for the GTHA (Metrolinx, 2008). In 2008, *The Big Move* was published as a long-term goal setting document to begin improving regional movement in the GTHA. Although *The Big Move* set clear goals for the GTHA, many questions arose of its implementation and feasibility within the timelines provided. Many of the initiatives in *The Big Move* appear to have missed the deadline set in the document, e.g. the PRESTO card implementation was projected to be complete across the GTHA in 2012 however, the TTC only completed PRESTO card readers at all subway stations by 2017. Metrolinx's 2008 document also lacked an equity lens to prospective transit planning solutions. The language used is broad and lacks an end goal as critiqued by Hertel, Keil & Collens (2015). This was then re-examined in a 2016 Discussion Paper by Metrolinx to reconsider measurable goals of transit planning in the GTHA.

Figure 4.7– Areas of Social Need in the GTHA. *Source: Metrolinx, The Big Move 2008.*

APPENDIX B: AREAS OF SOCIAL NEED IN THE GTHA



4.2.7 PRESTO Card

The PRESTO Card was introduced by Metrolinx as the method of payment throughout the GTHA. It would eventually replace all fare methods in the GTHA, as it would have the technology to integrate fares when crossing municipal borders. It was first implemented on GO rapid transit as a convenient way of paying for one's fare within the GTHA. The card promised to integrate fares between multiple transit providers and in future could function as a debit card, library card, and parking pass (Metrolinx, 2008). It is currently used amongst most transit systems in the GTHA, however, the implementation of the PRESTO card into the TTC has been difficult. The TTC was one of the last transit systems to implement all vehicles and subway stations with PRESTO card readers, most stations still lack readers at all entrances.

4.2.8 The Eglinton Crosstown

The one surviving LRT project from Transit City, is the Eglinton Crosstown project now taken on by Metrolinx. According to the NDP government's original plan in the 1990s, Eglinton Ave was to be the location for one of four funded subways lines. Subsequently, the Eglinton line was cancelled by the Conservative government in favour of the Sheppard subway. There was always a recognition that Eglinton Ave was an important mid-town milestone: it cuts across the entire city of Toronto, from Scarborough to Etobicoke. In addition to this, Eglinton Ave is in proximity to justify a connection to Pearson International Airport, one of the largest employment areas in the GTHA.

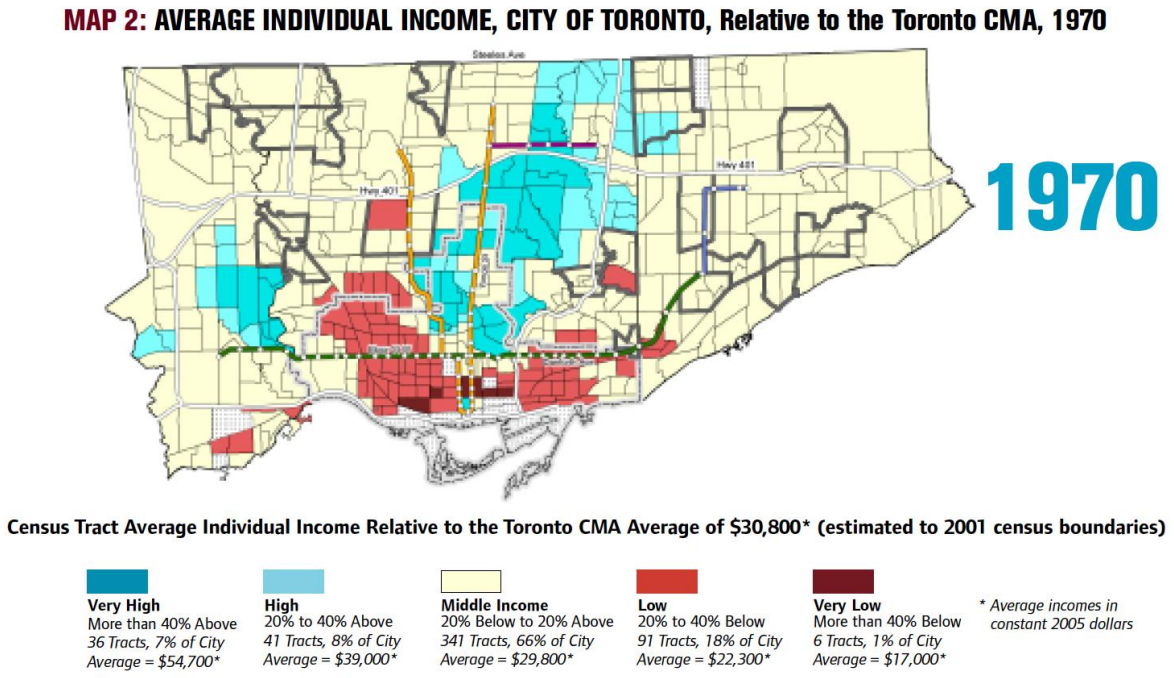
Participant A, a planning consultant, said that Eglinton is the appropriate place to create this transit project as it is not redundant to the Bloor-Danforth subway. As seen in Figure 4.8 the Crosstown will contain 25 stations across 19 kilometers in Toronto. It will connect 54 bus routes, three subway stations and several GO stations (Metrolinx, 2017) LRTs will be used as they are higher capacity vehicles than buses. The Crosstown promises to be a quick method of transportation across midtown Toronto according to Metrolinx.

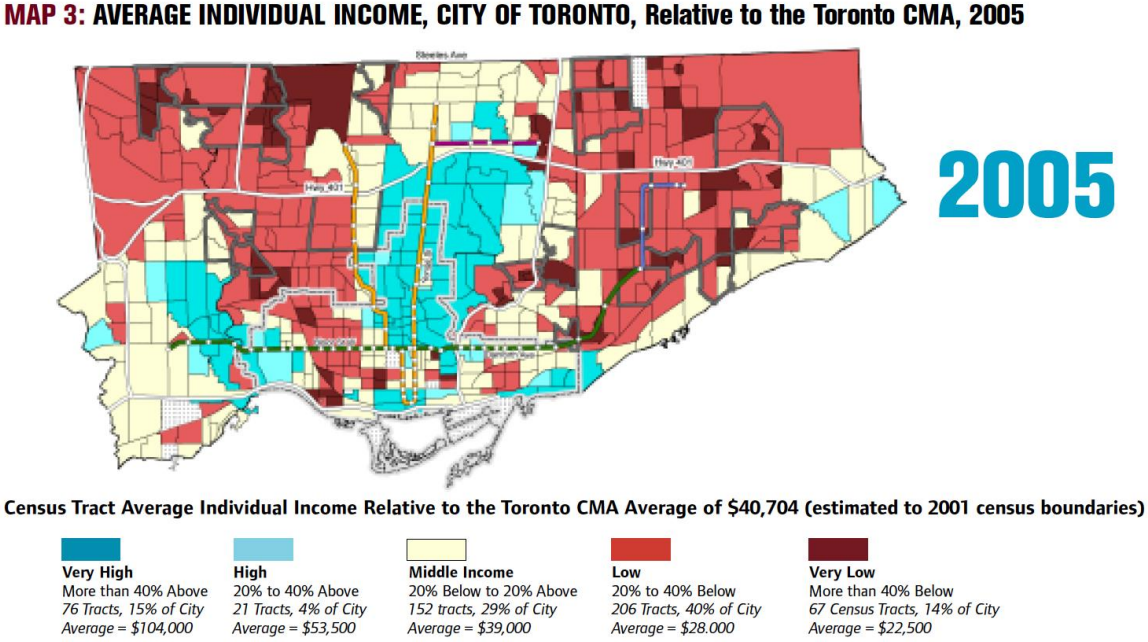
Figure 4.8 – The Eglinton Crosstown, Source: thecrosstown.ca

The Eglinton Crosstown is scheduled to open in 2021, bringing rapid transit access to

neighbourhoods varying in density and income. In Figure 4.9 David Hulchanski's 2010 study of the Three Cities in Toronto indicate the changing income levels in Toronto over time. In 1970, the Eglinton Crosstown would have served predominantly middle class neighbourhoods. The Crosstown will now pass through some of the most affluent neighbourhoods and some of the poorest (Hulchanski, 2010). Transit infrastructure is frequently contested because it is expensive and government spending must be justified economically (Hertel, Keil & Collens, 2015, p. 14-15). With the Crosstown to serve a range of Torontonians, equity must be reflective in city planning policy to protect those who are most vulnerable.

Figure 4.9 – David Hulchanski's Three Cities in Toronto (2010)





4.3 Toronto and Transit Equity Discussion

The concept of transit equity in Toronto is not well reflected in policy documents which may be partly a function of a lack of definition. There is an admitted recognition of its importance in plans made by Metrolinx in Discussion Paper: for the Next Regional Transportation Plan (August 2016), however, it is not adequately planned with measureable goals. Regional plans by Metrolinx have mentioned equity, however, equity is not explicitly a lens like environment or sustainability initiatives. This mirrors a more general trend. Martens (2006) writes: “The efforts to address environmental aspects in transport modeling have not been matched by similar attempts to address equity impacts. This oversight is remarkable, as demand-based models…have direct social justice implications.” (p. 4). Martens criticizes transport planning that is based on already existing demands and patterns because this reinforces groups to certain modes of transit. “Switching Tracks: Towards transit equity in the Greater Toronto and Hamilton Area” (Hertel, Keil, Collens 2015) comments on Metrolinx’s *The Big Move* and calls attention to the lack of consideration for equity in the long-range plan for the GTHA region. Hertel, Keil, Collens define equity not as treating everyone the same, but planning for a variety of needs that would create equity. However, the broad language in *The Big Move* document does little to identify who will benefit from new transit projects.

4.3.1 The TTC, Metrolinx, and Equity

The TTC receives operating subsidies from the city of Toronto and the Province of Ontario. Most of this money from the province is from the Ontario Gas Tax, however, over the years, the city of Toronto has funded a large portion of the TTC

operating subsidy (Munro, 2016). This has affected the TTC's ability to grow and match the needs of all its users.

Participant A identified Metrolinx to prefer regional transit planning movement of users rather than local, therefore, bypassing areas where social need is greatest. This observation is paralleled by Mettke (2015): "On the regional level, the internal governance structure of Metrolinx can be characterized as highly vertical or top-down, with little political representation of local municipalities, in combination with the strong influence of the provincial government." (p. 240). Transit planning in Toronto has tensions between the planning outcomes of Metrolinx and the TTC. Metrolinx's regional transit planning lens is focused on moving people quickly over long distances; as compared to the goals of the city of Toronto which tries to plan communities around transit hubs. These two transit planning perspectives contrast with one another.

4.3.2 PRESTO Card and Fares

The PRESTO card is a card that enables users to load their fare and pay it by tapping onto card readers. It was introduced by Metrolinx to create a streamlined method of payment across several different municipalities within the GTHA. The TTC's integration into PRESTO has been difficult, its implementation has been pushed back several times. In 2016, users were expected to keep tokens or cash fare available in the instance where a bus or station entrance was not equipped with a card reader.

The initial fee to purchase a PRESTO card is 6$ that is charged from the user's first

purchase of funds for the card e.g. if one loads 20$, the fare available for use will be 14$. The purchasing of a PRESTO card also allows for auto-reloading, an extremely convenient service for users who use transit everyday and may not remember to reload. The PRESTO card however, assumes users have the ability to pay with a credit card and to continue to pay by credit card for the auto-reload feature. This is a large barrier to vulnerable users who may not have access to funds continuously or a credit card. The initial cost of 6$ for a PRESTO card is also very high. In an interview with Participant C, a local councilor, he states that 3.25$ is sometimes too expensive for these users. Obtaining a PRESTO card without access to the internet to order one is difficult in Toronto. Consulting the TTC website, the listed methods of purchase are as follows: the internet, by phone, the customer service center at Davisville station, or a Gateway newsstand convenience store at several subway stations. An asterisk is used as a disclaimer, stating that selected stations have a limited quantity of PRESTO cards. In my observations, I write about my experience losing my PRESTO card and being unable to replace it at two separate subway stations, they are both listed as having limited quantities. The ability to purchase a fare without a PRESTO card is limited if one does not live close to a major hub or subway station.

The alternatives to PRESTO in the City of Toronto are declining. The new fare gates with PRESTO readers lack the ability to accept fare methods other than the PRESTO card. This limits the use of tokens or tickets for infrequent users, or for those who cannot invest into a PRESTO card or monthly pass. There are still many questions that are unanswered by Metrolinx regarding the limited accessibility of vulnerable users.

4.3.3 Social Need in Toronto

Toronto's current transit planning method relies on CBAs and market demand to dictate what transportation projects take priority. This type of planning does not consider transit equity and ignores the realities of its most vulnerable users. Mettke (2015) identifies several transit planning challenges in Toronto. He attributes varying spatial and infrastructural needs present in Toronto and the increasing demands of transit dictating the physical network's growth. In addition to this, the transit network in Toronto is shaped by path dependencies, capacity problems, and a lack of government responsibility that has failed to meet the demands of Toronto's spatial dynamics (p.228). Current transportation planning policy in Toronto caters to 'choice' riders, who have been the winners in policy making decisions for many years. Planning for social and economic inclusivity is more complex, because as Murray & Davis (2001) note, there is a focus on economic "efficiency" in transit planning:

> However, there is a tendency to focus on issues of economic efficiency in which projects priorities are determined on the basis of cost-benefit analysis. This fails to consider service need and equity as suggested by the use of terms such as social justice and fairness. Given this, there is a need to evaluate transportation services in terms of distribution equity. (p. 579).

Growth policies promote positive outcomes of economic development and global competitiveness but these policies result in the greatest good for those who are better represented (Fainstein, 2010, p. 1). This is the traditional transit planning scope that

Metrolinx plans within, which lacks consideration to give better access to those in social need.

Transit planning creates winners and losers, long range planning policy must consider the needs of transit disadvantaged users to minimise inequity. Economically driven transit planning is justified by the projected return of investment. Alternatives to this type of transit planning are difficult to support when governments are pressured to create economic growth. Mettke (2015) identifies that the responsibility of transit planning is closely tied to municipal government, rather than the regional authorities seen in Europe or the United States (p. 235). Infrastructure is a direct reflection of the political and economic struggle within the city. Transit projects bear a large expense because of infrastructure costs and this creates pressure on governments to make smart economic decisions. Enright (2015) argues that transportation reveals a myriad of social, economic, environmental, political, and ethical objectives, because infrastructure holds economic asset. Infrastructure is the gateway for goods and services to be transported and therefore contribute to the economic prosperity of a city or region. Well-developed neighbourhoods along the Yonge Street corridor have received a large amount of investment because these areas hold economic merit. Other areas in the city, generally in the periphery, lack investment because these areas are not considered a good business investment; value for money is considered over social factors. Hertel, Keil & Collens (2015) summarize the historically fraught relationships of the Toronto's transit system with the region's suburbs:

> First, there is a system-wide lack of access for transit users with physical disabilities, an important measure of transit access overall; second, there exists

> significant “by-passing” issues in the Toronto network, predominantly affecting the (inner) suburbs; third, the lack of fare integration hurts people commuting from outside the TTC system; fourth, the timing of connections remains a problem in the system overall putting those in the ‘transit deserts’ at a disadvantage; fifth, safety is generally not an issue in the Toronto public transit system; sixth, the decision-making process over future network improvements is characterized by a democratic deficit that has plagued the entire region and cemented existing inequities in service. (p. 21).

The focus in transit planning is often placed upon the types and forms of transit and the connections made for specific trips and individuals rather than mobility as a whole. “What is unusual is to begin from the complex patterning of people's varied and changing social activities. The developing and fulfilling of such activities then mean that travel is necessary for social life, enabling complex connections to be made, often as a matter of social (or political) obligation” (Sheller & Urry, p. 213). Focusing on the type of transit, rather than the potential trips made by varying users, begins to reveal preferences for certain types of travel prioritized over others. This type of planning is what Martens (2017) identifies as transit demand planning. Transit demand planning falls into a cycle of planning only for users who have the means to access and participate in transit. This creates skewed outcomes in traditional transportation planning methods because it does not allow for others to participate.

Streetscapes become important areas determining what mobility has better access: “When mobile bodies and vehicles enter the street, they thus enter a legal arena where competition for space and mobility is framed by a clear set of rules establishing and defining streets’ spaces, potential users, and rights to proceed or duties to yield.” (Prytherch, p. 52) The landscapes of roads, whether there is

access to a sidewalk, bike lane, or dedicated bus lane, determines what kind of users are given priority in these areas. Suburbs in Toronto were planned for car use and have lacked innovation to accommodate other users, giving the impression that suburbs lack respect for transit riders. This is problematic because it is in the inner suburbs where an increase number of marginalized low-income people live (Hulchanski 2010). Without an acknowledgement of the needs of lower income residents, social isolation occurs and effectively excludes these residents from participating in the city.

> The two distinctions often made from the perspective of equity and accessibility are those between income classes (social equity) and regions (spatial equity). This may be particularly relevant politically if low income categories or poor regions 'lose' and high income categories or regions 'win'. In fact, it could even be a barrier for the implementation of related policies. (Van Wee & Geurs, p. 354)

Toronto is facing barriers of policy implementation as Van Wee & Geurs (2011) write. Although a low income Metropass was approved and will be slowly introduced; the lack of overall understanding of what equity is beyond monetary barriers prevents adequate policy implementation. If one examines the streetscapes of Toronto suburbs, many lack sidewalks, safe bicycle infrastructure, and bus lanes; and instead provide large roadways for cars allowing for higher speeds between areas of commercial activity and residential neighbourhoods. This prioritizes car users and policies that aid their movement in Toronto over transit users.

Martens (2006) argues car ownership which is accompanied by sprawling urban development has made motorized mobility a necessity rather than luxury (p.7). The ownership of a car in Toronto is an essential piece of mobility for predominantly suburban areas.

4.3.4 Weston 2021

Weston 2021 is a report that was developed by City of Toronto staff in 2012 as a response to Metrolinx's mandate to increase redevelop existing lands around GO stations, provide infrastructure for the Union Pearson (UP) express, and developing the GO Regional Express Rail (RER). The report identifies this area in Toronto for redevelopment, revitalization, and capital improvements (City of Toronto, 2012). The neighbourhood at Weston Road and Lawrence Ave is adjacent to Mount Dennis. The report outlines that the Weston area has not had any new private development although Toronto experienced one of the largest private development increases recently. Through infrastructure improvements and increasing the desirability of the neighbourhood through a cultural/creative hub, the city of Toronto hopes to attract future development to the area. McLean, Rankin, & Kamizaki, (2015) critique the Weston 2021 project as it is specifically aimed at attracting artists and creative workers who have been priced out of Toronto's gentrified and expensive downtown core and are being encouraged to live in Weston-Mount Dennis. Interviews with revitalization advocates revealed that the entire area is considered empty and blighted because it does not contain the same qualities as the downtown core, making it a blank slate for

redevelopment (p. 1295). Van Wee & Geurs, (2011) write that this practice is common, most often only monetary benefits indicated in travel time savings are included in long range policy and accessibly is not (p. 351). Fainstein writes a pro-equity plan would need to break down what programs benefit whom and to what extent; it would need to redistribute not only economically but politically, socially, and spatially. Neighbourhoods adjacent to new transit projects are perceived as benefitting from access to better mobility, however, without acknowledging equity and social good, these initiatives encourage private development and community benefits become secondary to the success of development success. Pro-equity policy would recognize the role of accessibility and incorporate vertical equity, giving transit disadvantaged people access to education and employment.

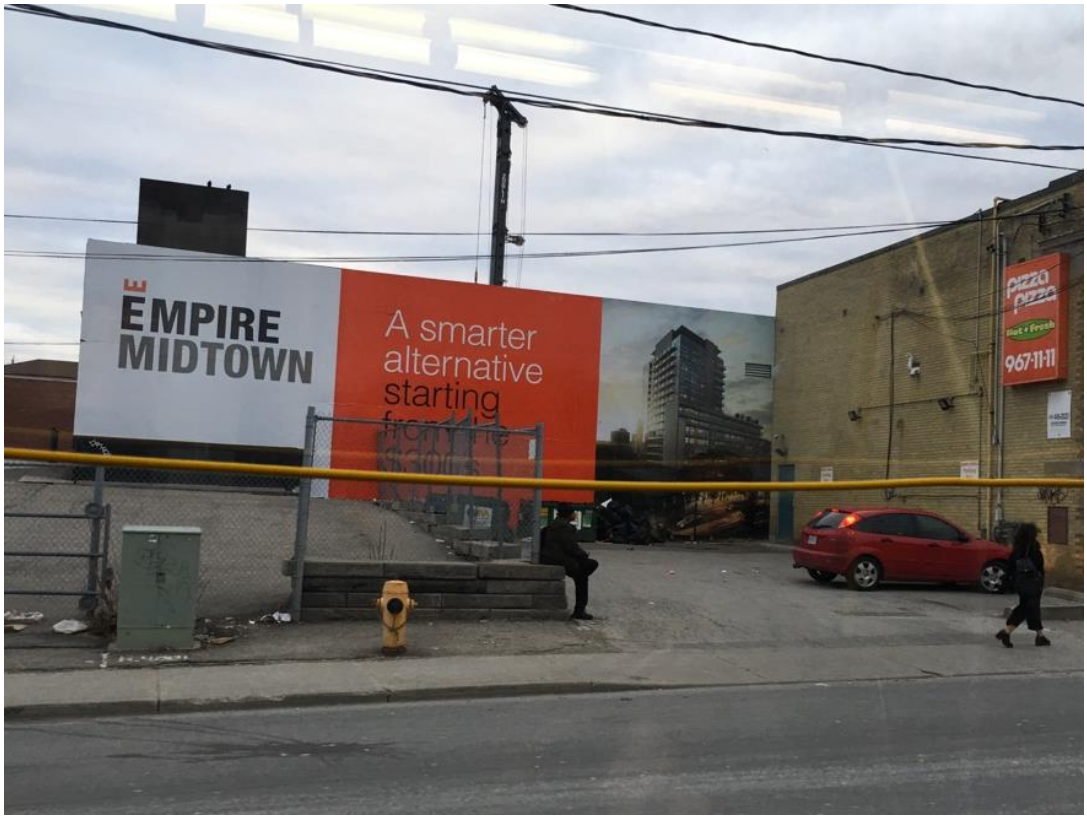
Weston 2021 is a recent example of city planning policy in Toronto. We can use the conclusions and analysis by McLean, Rankin, & Kamizaki, (2015) to better inform the discussion of the Crosstown.

4.3.5 The Crosstown and Eglinton Ave West

The Eglinton Crosstown project will bring public transit infrastructure to alleviate congestion in Toronto by providing new rapid transit along Eglinton that spans from Etobicoke to Scarborough, passing through all six former municipalities. The focus in particular to this paper is Eglinton Ave West beginning from the Allen Road ending in Mount Dennis, the final stop of the Crosstown in the West. This area along Eglinton Ave includes areas of marginalized, immigrants, and low

income residents, and has several Neighbourhood Improvement Areas (NIA) highlighted by the City of Toronto as seen in Figure 5.5. The initiative to improve public transit is related to improve residents' access to participate in out-of-home activities such as work, education, and leisure. However, the danger of the Crosstown transit project is capitalizing the desirability of improved mobility. Low income residents and smaller businesses are subject to displacement as community economic development strategies are being built upon this large-scale infrastructure project.

4.3.6 Oakwood to Mount Dennis



In analyzing 2011 national household survey data of Oakwood to Mount Dennis, most of the

Figure 4.10 – Future condominium development at Oakwood Ave and Eglinton Ave W. *Photo by the author.*

homes were built between 1949-1970 and are predominantly single family dwellings or apartments above 5 storeys. On average half of the homes are owned and half are rented. Mount Dennis is the second poorest riding in Ontario according to Participant C, a local city councillor. He also identified Oakwood and Eglinton as previously immigrant receiving neighbourhood but has increasingly become appealing to young professionals. He states that housing costs are already rising in this area.

Mount Dennis is a community that formerly relied on manufacturing industries. The former Kodak facilities are now being integrated into the Mount Dennis LRT station. Participant A, informs that it is difficult to reach members of the community in these areas because of several factors. He identified that immigrant populations are challenged with language barriers and sometimes do not understand the planning process. Transit disadvantaged groups often times cannot attend meetings because of the nature of their work or if there are dependent individuals at home. Participant B, a local community leader, expressed the importance of community led activism in order for these users to be participants in the planning process.

Although Mount Dennis appears to be well connected by several bus routes, there are many social challenges within the community. Unemployment, lack of childcare services, lack of affordable housing, and education attainment are some of the major struggles faced by this community (Hertel, Keil, & Collens 2016,

p.30). Without an approach to reduce the inequity in Mount Dennis, improved transit accessibility could harm the existing residents. The desirability of new rapid transit, vacant land, and demands for affordable housing in the city of Toronto all contribute to the potential for displacement in Mount Dennis (Hertel, Keil, & Collens 2016, p. 30). Transit policy must acknowledge these contributing factors and work to protect vulnerable users who are most affected.

Figure 4.11– Screenshot from a condominium development with a condominium proposed on Eglinton Ave W. and Oakwood Ave. The image is an artist's rendition of what is desirable in city living. None of the former qualities of the community at this intersection are kept in the rendition.
Source: Empire Communities

4.3.7 Oakwood Ave

In Oakwood, development is already planned near the future Crosstown station. In Figure 5.11 an artist's rendition of the future neighbourhood block at Oakwood and

Eglinton Ave is used on a condo developer's website. The image projects an urban and affluent lifestyle with walkable attractive streetscapes and transit oriented development. The text in the image:

> This stretch along Eglinton [Oakwood Ave.] is anything but boring. It already has loads of personality, but there's a major neighbourhood intensification plan and a comprehensive streetscape plan underway. This entire corridor will benefit from intensive street level investment, including state of the art LRT stations, retail, sidewalks & walkways. And the best part is, when you open your door, the LRT will be right there. Conveniently at your doorstep. (Empire Communities, 2016)

The language used alludes to the eventual gentrification of the neighbourhood to match the lifestyle that is projected in the developer's rendering. In an interview, Participant A suggested that planners look at ugly strip malls and consider them bad urban design, in need of redevelopment. The participant pointed out, however, that most times these strip malls contain the essential businesses that vulnerable residents frequent. Encouraging development brings economic investment into new neighbourhoods. McLean, Rankin & Kamizaki (2015) argue that this redevelopment is catered to a different class of users calling it: creative class planning. Creative class planning at its essence ignores the needs of low income neighbourhoods by measuring the success of communities based of attractiveness to individuals with disposable income (p. 1294). New transportation infrastructure presents an exciting opportunity for private development and economic investment in a neighbourhood that has not previously been invested in. However, the investment into the types of services and businesses catered towards individuals of disposable income, undermine the importance of social relations that occur in immigrant-owned businesses (McLean, Rankin & Kamizaki,

p.1285). This brings up important questions regarding how benefits will be distributed among residents, and what ideas of community have not been included in planning. Understanding who is being is planned for in transit projects will assist to create appropriately policy to prevent complete displacement of original residents.

The condominium development at Oakwood and Eglinton is an example of creative class planning. This image sells a lifestyle to those with disposable income, selling convenient transportation connections and new economic investment. Although developers are not responsible to ensure transit equity, planning policy can require affordable rental units or other policy interventions to prevent original residents from becoming priced out.

4.3.8 Access & Equity

If we use the understanding of equity as a level of access, divided into four components (temporal, land use, individual, and transportation) as argued by Van Wee & Geurs (2011); the varying spatial distributions within Toronto would rank differently. The land use component consists of two elements: i) the spatial distribution of destinations and their characteristics e.g. offices, schools and their attractiveness and ii) the spatial distribution of the demand of these destinations and their characteristics e.g. dwellings and their inhabitants (Geurs & Ritsema van Eck, p. 41). The post-war suburbs in Toronto encourage decentralization and land consumption as Filion (2013) argues. Therefore, the spatial distribution of these

areas in Toronto are different from ‘urban’ areas where there are higher densities of dwellings and destinations, such as offices, schools etc. Post-war suburbs of Toronto have lower densities and fewer destinations within walking distance. Van Wee & Geurs (2011) argue that if one component lacks, then an increase in another can make up for this deficiency. Longer operating hours of shops and services and improved transportation can mitigate the challenges that lower spatial distributions place upon accessibility.

Fainstein (2010) defines equity as: “…a distribution of both material and nonmaterial benefits derived from public policy that does not favour those who are already better off at the beginning. Further, it does not require that each person be treated the same but rather that treatment be appropriate.” (p. 36). Transit equity therefore, does not favour those who are already well off and able to participate in transit. Transit equity accounts for the different abilities of its users and through policy and planning accommodates them appropriately. However, pressures to become an economically global competitive city have placed investment in already successful areas. Disparities between these already successful areas and less successful areas grows over time.

The Crosstown will bring better connectivity to residents of Oakwood to Mount Dennis, increasing the transportation component, to mitigate the poorer land use component. Current policy encourages gentrification of areas considered blighted by prior planning methods, as is exemplified in the Weston 2021 report. Although

economic development and investment are beneficial to previously disinvested neighbourhoods, the listed benefits of redevelopment should be distributed amongst all groups. Weston 2021 is criticized to cater to users with disposable income as a measure for a successful community. Through this report regarding an adjacent neighbourhood in Toronto, we can draw conclusions about planning policy initiated by transportation infrastructure. The UP express project by Metrolinx, commenced the vision of Weston 2021, a document that caters to potential users with disposable incomes. However, the current demographics of this area, are arguably not the same users who will benefit from this type of creative class planning in Weston 2021.

The Eglinton Crosstown will inevitably encourage redevelopment as can be seen in the new condominium development in this paper. Redevelopment projects should embrace the realities of low income, immigrant neighbourhoods, and create inclusive plans for all users. These types of initiatives must be taken on by city of Toronto to protect its vulnerable users.

4.4 Toronto Conclusions

Toronto has several challenges in recognizing transit equity: a lack of understanding of what transit equity is in planning, catering to ‘choice’ riders, conflicting regional and local planning, and a history and future of underfunded transit projects.

The Eglinton Crosstown will provide better access to communities such as Mount Dennis and Oakwood. However, with future development already projected to radically change the neighbourhood, policy makers, political leaders, and community activists should work together to understand how these areas will change. One planner interviewed said there should be a neighbourhood profile created via census data and a process to monitor residential and commercial rents before, during, and after construction of transit projects. The needs of the vulnerable users sometimes rely on local businesses such as mom and pop shops or private daycares. These commercial areas appear ugly to planners from an urban design perspective, however the services provided are sometimes essential because they are affordable to the local residents. They are providing the services that planners promise transit will deliver. A method of acknowledging, measuring, and ensuring the preservation of these local businesses after intensification must be developed. Keeping businesses that support local residents is essential to prevent displacement of vulnerable users of transit.

An evaluation of the current fare structure would reveal the limited mobility vulnerable users experience because transit does not meet their basic mobility needs. The rigidity of the fare does not allow for trip chaining, and the discounts are too few too provide equity to vulnerable users. If equity is about treating users appropriately rather than equally, the lack of fare discounts for vulnerable users is a direct lack of equity in Toronto's transit. Transit inequity becomes an obstacle to education, work, affordable childcare, or healthcare:

> Transit inequity, then, becomes yet another barrier to upgrading education, accessing affordable childcare, caring for family members, finding stable employment and building a strong social support network. Transit “trip chaining” – such as dropping off children at daycare before work – extend travel times and compound the effects of poorly coordinated and erratic transit. (Hertel, Keil & Collens, 2016 p.3)

Transit equity allows transit disadvantaged users to break out of a cycle of continually being transit disadvantaged. The ability to navigate a city efficiently and allows for users to participate in education, access healthcare and childcare, and access a greater selection of job opportunities. Access to reliable and affordable transit could be the gateway to allow low income and vulnerable users the right to the city.

Understanding the uneven distribution of transportation resources across space in Toronto and the GTHA aids in planning of physical form and infrastructure; and helps to create long range planning policies, by-laws and regulations that will support transit equity in the future. Bringing transit to populations in need does not protect them from policy and by-law changes. Planners and politicians are responsible to ensure equity is addressed. Toronto has been highly influenced by neoliberal and capitalistic markets goals to create a “good business climate” as David Harvey (1992) argues. Therefore Hertel, Keil & Collens (2015) argue that government actors must be socially responsible and be proactive to consider the wide range of social impacts of building transit (p. 24). Participant A calls on those in power to focus on transit projects as a social benefit to its users. He critiques the current method, comparing transit projects to being voted on like popularity

contests within the City of Toronto. Government actors have a responsibility to represent those who may be excluded in the planning process and protect vulnerable users. The interviewee also blamed listening to car drivers or choice riders over time has led to an imbalance in the planning process in public consultations. “Funding decisions are skewed to benefit ‘choice’ or non-captive riders through commuter rail and express bus services to outer suburbs.” (Hertel, Keil & Collens, 2016, p. 8). Reaching out to captive riders is more difficult as these users face many barriers. They may work outside of the 9-5 Monday to Friday work week, have dependents in their household who rely on them, or face a language barrier or misunderstand the planning process.

A sustainable funding mechanism outside of the term of current city council or provincial government is needed through a reliable tax base in Toronto, as was argued by Participant A. Relying on CBAs (Cost Benefit Analyses) will inevitably exclude users and areas that do not have potential economic merit. CBAs run into the problem of following a top-down approach that is no socially responsible. Metrolinx must be responsible in future development to understand the needs of all its users. This provincial entity has focused on regional movement and bypassed intercity movement within Toronto. The City of Toronto and the TTC must work to make its demands clear to Metrolinx through evidence based planning. In a continually growing population, transit and infrastructure are only one piece in the equity gap in Toronto.

Chapter 5: Conclusion

Through the research in this paper, one gains an understanding of what transit equity and transport justice are. The case studies presented are an in-depth analysis of these concepts through the observations made in both cities and interviews with selected participants.

An analysis of Warsaw transit policy led the discussion of how Warsaw takes progressive initiatives to provide access to the city. The Metro is only the physical infrastructure of a larger transit plan in Warsaw. The expansive network of streetcars, buses, and subways is made possible with progressive transit policy. Of course, it is not only the size of the network that determines if transit is equitable or not. ZTM has fair and accessible tariffs, recognizing many users who vary in ability to use transit. There are discounts for students, the elderly, and disabled users. ZTM has also improved the ease of obtaining tickets, providing more outlets to purchase tickets. The goals of ZTM are to provide transit to Varsovians that is convenient, fast, and accessible. Transit planning in Warsaw, is aided by higher density land use patterns in which as Litman (2006) argues creates sustainable transit within cities. Warsaw transit planning has proved to meet the demands of its users and aims to continue to provide more service as the city grows.

The research in this paper focused on Praga-Polnoc an economically poorer neighbourhood with a historically fraught reputation within Warsaw. Praga's recent

surge in attractiveness has highlighted it as an artist's paradise, with cheap rents and close proximity to downtown. Through the observations made, we gain an understanding of the reputation of Praga in relation to downtown Warsaw. The Metro station in Praga has slowly changed the neighbourhood, inviting the "new" Praga residents to dictate what amenities and services will be located in the neighbourhood. Through interviews with varying professionals in the field, a better understanding of the social troubles within Praga emerge. Although transit does provide better access to the downtown, "old" Praga residents are affected by the revitalization projects and displaced. This case study clarifies progressive transit policy but is also an example of how rapid transit's desirability affects the surrounding neighbourhood. When left to market demands, as exemplified in Praga, developers buy and build on lands close to rapid transit and sell a lifestyle. The Port Praski project in Praga is located by the Vistula river and markets a "close to nature" lifestyle, it is one of the most desirable and expensive developments in Warsaw.

Toronto transit policy is challenged with multiple levels of government dictating the expansion and direction of transit planning. However, these mismatched goals, coupled with a lack of adequate and sustainable financing have led to a stalemate in progressive policy making. Transit equity has not been addressed and is not used as a lens in long-term planning goals. Current long-term transit policy focuses on sustainability and environmental impacts which are important as well. However, through the literature of Litman (2006), we understand that sustainability and transit equity are intertwined, as long-term planning directly affects outcomes related to social justice.

Toronto is composed of an urban core surrounded by low density suburbs containing generous parking supply, and wide roads for auto-oriented movement. This rise in auto-dependency has led to a decline in travel alternatives such as transit (Litman 2006). This paper has identified through literature that Toronto suburbs contain some of the poorest and most transit disadvantaged populations. The Eglinton Crosstown will pass through these varying landscapes and bring rapid transit to neighbourhoods with a poor level of access to reliable transit. Although this project expands the transit network in Toronto, the lack of recognition of equity as an important lens in transit planning will continue to exclude vulnerable users. By analyzing the marketability of rapid transit in Warsaw, we can begin to understand how transit, without effective city policy, displaces existing residential and commercial.

Through the observations, literature review, and interviews conducted, transit equity and transport justice are better understood concepts within the scope of transportation planning. The case study research is meant to highlight the importance of transit equity and discuss the policies in place that make Warsaw's transit arguably more equitable than Toronto. If current policy in Toronto poorly understands the topic of equity, as was stated by Participant A. Then Warsaw's policies can assist in understanding what the final product of equity looks like. It is not only an expansive network, it is the acknowledgment of varying user's needs and adjusting policy to accommodate them.

Toronto and Warsaw both demonstrate that is its difficult to contain inequities in city growth – spatial inequities and areas of concentrated poverty such as the district of Praga or Mount Dennis. Transit helps to redistribute these inequities however, policy must acknowledge transit disadvantaged users to give these users the ability to participate in the city. Equitable transit policy is essential to address the growing inequalities that challenge modern cities.

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Interview Participants:

Informant A, Planning Consultant, Toronto, March 31, 2017
Informant B, Community Activist, Toronto, April 11, 2017
Informant C, City Councillor, Toronto, April 11, 2017
Informant D, Sociology Professor from University of Warsaw, Warsaw, April 24, 2017
Informant E, PhD Student in Spatial Planning, Warsaw, May 7, 2017
Informant F, Director of Public Transit Planning, Architecture and Spatial Planning Department, Warsaw, May 9, 2017
Informant G, ZTM Architect, Warsaw, May 24, 2017 & June 1, 2017
Informant H, ZTM Director of Finance, Warsaw, May 24, 2017
Informant I, Praga Museum Adjunct, Warsaw, June 1, 2017