

Toronto City Summit Alliance

Transportation & Other Infrastructure Working Group Context Paper

TRANSPORTATION: MAKING THE RIGHT CHOICE

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“The traffic and transportation problems in our urban communities are already barely under control; the daily journey from home to office and return is becoming longer and more time-consuming and more frustrating to the individual traveler. Why reduce the air time from Montréal to Toronto to 30 minutes and do nothing about the hour it takes you to go from the airport to your home?”

Prime Minister Lester B. Pearson, December 1967

1. INTRODUCTION

Few urban policy issues generate more conversation than transportation and traffic. And why not? Everyone has a need to move around, and everyone wants to move quickly and economically, whether it's to get to work, home, a doctor's appointment, or a hockey game. For businesses, a good transportation system can mean the difference between perpetually late and stressed-out employees, and an efficiently run office. Furthermore, many businesses depend on a reliable, efficient transportation network for moving goods around and through the urban area.

This issue is not new. Sixty years ago, robust urban growth after WWII prompted widespread demand for more houses, more roads, and more transportation choices. Perhaps more significantly, the rising popularity of the automobile facilitated the development of suburbs, creating new opportunities for affordable living but at the same time generating unprecedented demand for new roads and highways. In Toronto, this gave rise to the creation of Metropolitan Toronto in 1954 with the City and suburbs joined through a two-tier governance system designed to manage the distribution and financing of transportation (and other) infrastructure. A new agency, the Toronto Transit Commission, was born and just a few months later, the TTC opened its first subway line.

By 1967, Canada's fast-growing metropolitan areas had caught the attention of the Prime Minister. When Lester Pearson came face to face with provincial politicians at the Federal-Provincial Conference on housing, he urged them to come to grips with the congestion in Canada's fast-growing urban areas. At that time, the population of Metropolitan Toronto was about 2 million people. Today, the population of the greater economic region around Toronto is just over 6 million, and forecast to grow to 8.6 m by 2031.

Birth of a Subway System

“Three months after its reorganization, the TTC opened Canada's first subway. Running down Yonge Street from Eglinton Avenue to Union Station, it was an overnight success, and plans were drawn up for expansions. Although the first subway was paid for almost completely from the farebox, the TTC's ability to pay for extensions to that subway flagged as bus service quadrupled, and the TTC was called upon to establish unprofitable service to the suburbs. Development was outpacing the TTC's ability to service it, and the automobile was turning out to be the average citizen's first choice for his or her transportation needs. Metro Toronto had to step in with additional capital subsidies, and then the Province followed suit, until the TTC's entire capital budget ended up paid for exclusively by taxpayers. Toronto did get the subway expansion it needed however.”

- from “A Brief History of Transit in Toronto”,
<http://transit.toronto.on.ca/spare/0012.shtm>

Within the Toronto region, concerns about crippling congestion and inefficient public transit have escalated over the past several years, accompanied by a rising chorus of community leaders calling for better coordination of transportation issues. This prompted the Ontario government to establish the Greater Toronto Transportation Authority (GTTA) in 2006 with a mandate for coordinating transportation planning and delivery in the Greater Toronto and Hamilton area

(GTHA). The GTTA, subsequently known as Metrolinx, has prepared a 25-year regional transportation plan rooted in the need for a coordinated, efficient, and user-centred transportation system. *The Big Move* (2008) includes policies for all modes of transportation affecting people and goods movement, as well as an investment strategy and implementation plan¹. The future success of *The Big Move's* regional strategy is, in turn, linked to individual municipal transportation plans and actions involving numerous stakeholders throughout the GTHA.

2. GROWTH IN THE GREATER TORONTO AND HAMILTON AREA

Population and employment growth are the key drivers of transportation demand. Forecasts for growth in the GTHA are set out in Ontario's Growth Plan for the Greater Golden Horseshoe (GGH), in accordance with *The Places to Grow Act, 2006*. The GTHA will continue to account for about 75% of the total population and employment within the GGH. Population within the GTHA is expected to grow by 25% between 2011 and 2031, to 8.62 million, while employment is projected to increase by about 18%.

The Greater Golden Horseshoe is one of the fastest growing regions in North America. Over 80% of Ontario's population growth between 2001 and 2031 will come from this region.

- *Places to Grow – Better Choices, Brighter Future*, Government of Ontario, 2006.

If past travel trends continue, all this population and employment growth will throttle an already-stressed road network. Consider that the number of car trips on the GTHA's roads has been increasing faster than the population: between 1986 and 2006, the number of daily car trips grew by 56%, compared to a population increase of 45%. Transportation forecasts for 2031 project a 58% increase in automobile kilometres of travel during the morning rush hour if current trends continue. This would put three million car trips on the region's roads during the peak period

of morning travel – one million more than in 2006. For people driving to work, more than 20 minutes would be added to their already-grinding 82 minutes of daily commuting time².

On the other hand, more modest increases of 15% in automobile kilometres of travel can be expected if there is implementation of the Ontario Growth Plan (allowing for denser, more transit-friendly communities) and transit/transportation improvements as prescribed in *The Big Move*³. An increase of 15% in automobile kilometres of travel is well below the projections for population and employment growth in the region, and could be supported by a fiscally and more environmentally sustainable transportation system.

Employment growth also brings with it an increase in goods movement, putting more pressure on the road system. Forecasts are based on the continuation of a solid manufacturing sector in Ontario, with the GTHA continuing to be at the centre of this activity (notwithstanding the recent recession). A successful manufacturing sector is particularly reliant on the efficient movement and delivery of goods; traffic congestion is a costly externality. In a similar vein, Toronto's retail sector depends on goods arriving on time, in order to keep their shelves stocked to meet consumer demand.

¹ Greater Toronto Transportation Authority, *The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area*, Nov 2008.

² Toronto Board of Trade, "The Move Ahead: Funding the Big Move", p. 5.

³ "Modelling", Background Report to *The Big Move*, Metrolinx, 2006.

2.1 A Closer Look at Who Lives in the GTHA

Population forecasts provide a solid foundation for transportation planning in the region, but viewing them only in the aggregate masks dozens of important considerations about the people living and working in the region. Three key trends merit a closer look: 1) increasing numbers of international immigrants; 2) the aging of the population; and 3) increasing concentration of people living in poverty.

IMMIGRANTS AND NEWCOMERS

Population projections in the GTHA rest heavily on the assumption that international immigration will continue to propel growth. Historically, Ontario has received about 55% of Canada's total newcomer population each year, with the GTHA overwhelmingly the destination of choice. With 46% of its population foreign-born, Toronto is widely acknowledged for its diverse, multi-cultural communities. Few (if any) metropolitan regions in the world can boast the same degree of diversity.

Given the population forecasts for the GTHA, the travel choices of immigrants will be a critical factor in transportation planning. In a recent Statistics Canada study, recent immigrants were found to be much more likely than Canadian-born residents to use public transit to commute to work. This was proven to be true even after controlling for age, gender, income, and distance to work. In 2001, over 36% of all newcomers in Toronto used transit to get to work, compared to 20.7% of their Canadian-born counterparts. In this case, newcomers included all those who had settled within the previous ten years⁴.

This should be good news for transit planners, with the prospect of increasing demand from a population characterized as both "choice" and "captive" riders.

AGING POPULATION

We may well be over-exposed to the notion that we are on the verge of a demographic "tsunami"; specifically that, some time this century, the number of people in the world over age 59 will surpass the number under the age of 15. In Canada, much of this may be attributed to the aging of the baby boom population, but the phenomenon is reinforced by increased longevity and low fertility rates. The shifting age distribution will have an effect on personal mobility and transportation choices, particularly as many seniors shift from driving to other forms of transportation. Improving access to public transit, for example, will require: more accessible stations and bus stops, better snow-cleared sidewalks, more low-floor vehicles, and more wheelchair-accessible service.

PEOPLE LIVING IN POVERTY

Clearly, not all urban citizens have the same access to community services and amenities – whether due to personal circumstances, such as health or poverty, or to the failures of public policy, such as poor planning.

Recent work undertaken at the University of Toronto (David Hulchanski, Centre for Urban & Community Studies) describes the "three cities of Toronto", underscoring the constraints

⁴ Andrew Heisz and Grant Schellenberg, "Public Transit Use Among Immigrants", Statistics Canada Catalogue Number 11F0019MIE — No. 224 2004.

experienced by individuals and families in low-income neighbourhoods. “City #3” comprises neighbourhoods in the northernmost part of the city of Toronto, west and east of the central corridor of Yonge Street and just beyond the Yonge Subway. More than 60% of the area’s residents are immigrants and have incomes well below the average for the City. Living at the edges of the City of Toronto, residents of “City #3” must travel farther to find employment; yet they are in neighbourhoods much less well-served by rapid transit. Only 16 of the system’s 68 subway stations are within or near “City #3,” compared to more than 40 stations within each of the wealthier areas described as “City #1” and “City #2”⁵.

The suburbanization of poverty is unlikely to be a sociological “blip”, but rather a phenomenon which may well exacerbate in the coming years. This is not unique to Toronto. Researchers in the United States are also observing the rise in working poor living on the edges of suburbs, driven by the search for more affordable housing. With poor access to public transportation, these suburban residents now find themselves spending more of their household income on transportation than they do on housing. Furthermore, researchers found that the percentage of income spent on transportation fell from 30% to 9% for households living in walkable, transit-friendly communities⁶.

Looking ahead, it will be important for transportation planners and decision-makers to adhere to the objectives for an equitable transportation system. Viewing travel choices through the lens of a low-income worker, or disabled parent will help establish a transportation system that works for everyone.

3. LAND USE AND TRANSPORTATION: ONE SYSTEM

The importance of integrating land use and transportation planning is rarely in dispute, yet the path to achieving it often is. The effects of mixed use and higher density in supporting transit usage or encouraging walking and cycling have long been established. More recent evidence points to the health (lower incidence of obesity) and environmental (reduced GHG emissions) benefits of compact communities and reduced automobile dependency. More and more Torontonians understand the value of active transportation choices as central to healthy living and a high quality of life.

Furthermore, transportation infrastructure consumes a lot of land that in most urban areas could be put to more efficient use. According to the Victoria Transport Policy Institute, roads and parking lots account for about 20% to 30% of all land in urban areas; or put another way, most development uses much more land for transportation facilities than for buildings. In addition to increasing the amount of land required for roads and parking facilities, automobile-oriented transportation is widely acknowledged as the cause or “enabler” of sprawl, leading to:

- lower development densities
- dispersed destinations
- single-use development patterns
- streetscapes that are less attractive for walking;
- or worse, unwalkable streets

⁵ J. David Hulchanski, “The Three Cities within Toronto: Income Polarization among Toronto’s Neighbourhoods, 1970-2000”, Centre for Urban & Community Studies, University of Toronto, Dec 2007.

⁶ Jonathan Rose, “Creating the Planning and Infrastructure Framework for Mixed Use Mixed Income, Transit-Oriented and Urban-Infill Development”, Green Community edited by Susan Piedmont-Palladino and Timothy Mennel, APA, 2009.

3.1 Regional

Supported by the Province's Growth Plan for the Greater Golden Horseshoe, we now have a unique opportunity to carry out the inter-linked visions of the Growth Plan and Metrolinx's Transportation Plan, *The Big Move*. The Plans are mutually-reinforcing, relying as they do on achieving key elements of a sustainable region rooted in the need to reduce dependency on the automobile, including:

- Making better use of land and infrastructure through intensification of existing areas, and planning for new communities at higher densities that support transit;
- Planning for a balance of jobs and housing within communities to reduce commuting times and increase opportunities to walk, cycle, or use transit;
- Planning for *complete communities* that include a diverse mix of commercial and recreational uses to increase travel choices beyond the automobile;
- Making better use of land around transit stations ("mobility hubs") by increasing residential and employment densities; and
- Directing growth away from prime agricultural lands, the Greenbelt and other natural areas, thereby concentrating urban development in a more compact way.

The Big Move sets out a regional strategy focusing on the big picture elements that can build a transportation system with many travel options for residents and workers in the GTHA. It embraces a vision that depends on accommodating 50% more people in the region with less congestion, relying on measures to increase cycling lanes, increase transit ridership, and to facilitate more walking. Indeed, a core strategy calls for building communities that are pedestrian, cycling and transit-supportive. Accomplishing this will require a close working relationship with land use planners in regional and city halls throughout the GTHA.

3.2 Local

The links between land use and transportation planning are perhaps even more pronounced at the local, neighbourhood level. Local streets are viewed as an extension of the neighbourhood. This is the battleground where decisions on how and where to intensify development are made. And often, decisions rest on how well the local streets can accommodate the additional traffic from the proposed new development. In a neighbourhood well-served by transit, sidewalks, and/or cycling lanes, an infill development has greater chances of success. Here, residents will be less reliant on the automobile, thereby generating less traffic. In turn, it is important to ensure that there is adequate existing or planned capacity in the public transport system to accommodate the new residents.

And where the neighbourhood includes a mix of residential and non-residential uses, many more opportunities exist for short journeys, often more easily done on foot or by cycling. Not only does this reduce the need for automobile travel, but it can also contribute to long-term health benefits. Consider, for example, the benefits to children from walking or biking to a neighbourhood school -- a phenomenon increasingly under threat as school boards seek greater efficiencies through school closures and consolidations.

4. MORE AND MORE TRANSPORTATION REQUIREMENTS

“... Changing the supply of transportation choices is only part of the equation. We also need to change the way people use the system. In other words, it is not just about having better choices, it is also about making better choices.”

- Rob MacIsaac, Chair, Metrolinx

With the expectation that the GTHA will add two million people within 25 years, the demand for more and better transportation infrastructure will necessarily grow. How to meet the demands of a growing population is the conventional starting point for most transportation plans.

Sophisticated transportation modeling marries population and employment forecasts with geographic information from land use plans to generate a series of transportation system improvements and additions. In other words, traditional transportation plans are supply-oriented, with recommendations to address demand by adding or expanding roads or extending transit service to low-density areas. All too often, the end result is a suite of capital improvements that are too expensive to build, prompting local and regional councils to recalculate their transportation priorities each year.

Now, the approach of “building our way out of congestion” seems hopelessly out of date. Instead, what if transportation plans looked first at ways to reduce the overall demand or more realistically, to shift the demand for more roads into demand for more transit? Studies have shown that about 20% of car trips are within comfortable walking or cycling distance. Why not aim to divert some of this demand for capital-intensive and land-consuming forms of transportation to inexpensive modes like cycling and walking?

Transportation Demand Management (TDM) is increasingly finding favour with transportation engineers and planners as a way to reduce the need for expensive and less sustainable infrastructure. More specifically, transportation demand management uses policies and programs to influence not only *how* people travel, but *whether, when, where, and how much* people travel. Examples of TDM initiatives include: employer incentive programs to encourage car-pooling, pricing and regulatory mechanisms (higher parking rates, for example), flexible work hours or teleworking opportunities to reduce peak hour travel.

TDM is an important feature of *The Big Move*, which concludes that “the most efficient and cost-effective trip to service is the trip that never happens in the first place.” In the background work leading up to *The Big Move*, researchers estimated that, if every commuter in the GTHA decided to leave his or her car at home just one day a week, there would be a 20 per cent reduction in commuting traffic, saving millions in healthcare costs and reducing the impacts of traffic congestion⁷.

One of the ten key strategies in *The Big Move* calls for the creation of an ambitious transportation demand management program. Priority actions directed at both public sector and private sector employees encourage the creation of TDM programs and incentives. Furthermore, there is a requirement for a TDM strategy to accompany all major commercial, employment or institutional development applications.

⁷ Metrolinx, “Background Paper #4: Transportation Demand Management,” Feb 2008, p.4.

5. REALITY CHECK

Evidence is mounting that we need to create greener, more efficient and balanced transportation systems. Metrolinx has responded with a balanced regional transportation plan with measures to address supply shortages and incentives to shift consumer demand. It is becoming increasingly more obvious that we need to pay more attention to changing behaviours — that is, we need to shape demand to make the best use of the infrastructure we already have.

It would seem that the opportunity is ripe for such a change. Some recent poll results suggest that Canadians, and Torontonians in particular, care strongly about the environment generally and the need for better public transit more specifically. In the week leading up to the G8 meeting, a poll of Canadians showed that climate change was identified as the number one issue for discussion at the meeting of world leaders. And in polling Torontonians about local issues, 25% named transit or urban congestion as the most important issue facing the city of Toronto, making transit the third most important issue after the deficit and taxes.

Therefore, we can assume that if Canadians value the environment and feel strongly about public transportation, they are willing to do something about it. Or are they?

Pollsters and researchers have identified a conundrum: Canadians value sustainability and are worried about climate change, yet make personal choices that are inconsistent with these concerns. A 2007 public opinion survey carried out for Infrastructure Canada illustrates this vividly, as summarized below:

“A second interesting and important finding was the widely held core belief about space. The participants expressed a fundamentally contradictory view about the larger issue of sustainable development. The majority understood the concept, and were very supportive of positive action on environmental issues. They also clearly understood - it should be stressed that this was at a theoretical level - the importance and effectiveness of such policy options as urban intensification, brownfield development and pricing tools such as tolls and congestion charges. There were also strong levels of support for large scale investment in public transportation.

However, the participants held perhaps even stronger views that contradict their views above - it was as if the former views about sustainability were held at a conscious, rational level while their contrary views are stronger, more sub-conscious and emotional. It was clear that larger houses and open spaces are highly valued and are viewed as part of the Canadian birthright. Participants, while understanding intensification have no interest in participating in it. A common reaction was the comment that "we have lots of space in Canada, so why can't we use it?" This is almost a bedrock belief, and is indeed why many people decide to emigrate to Canada in the first place.

This dichotomy of expressed interest in sustainable development coupled with a desire for large houses and spread out communities is a challenge for policy-makers looking to reconcile market-place desires and sustainable infrastructure priorities. Understanding this dichotomy will help local and regional decision-makers make the right investment choices and choose the right revenue-raising tools⁸. This challenge is compounded by

⁸ For more information on financial tools, refer to: Toronto City Summit Alliance “Time to Get Serious: Reliable Funding for GTHA Transit/Transportation Infrastructure”, prepared by Neal Irwin and Andrew Bevan, July 2010.

two other strongly held opinions. While Canadians do not object to commuting to work from bedroom communities through traffic or by public transit, there is a strongly held view that commuting times of thirty minutes each way, door to door, is an acceptable benchmark and that any time longer than this is a failure of public planning and infrastructure.”⁹

In light of this dissonance between belief and behaviour, transportation and land use planners face an additional challenge: what can be done to shift people’s travel choices to align not only with the goals of *The Big Move* but also with their own personal values?

6. PUBLIC ENGAGEMENT

All of the above suggests a need to find new ways to talk about transportation choices with residents of the GTHA, and to learn more about what might persuade people to drive less and walk or cycle more. Transportation planners, for their part, need to take into account the travel requirements generated by each household, with multiple destinations at different times of day.

Fortunately, we are not starting from scratch. Organizations like Pollution Probe, Community Bicycle Network, and the Toronto Coalition for Active Transportation among others have been engaged with Torontonians on promoting multi-modal transportation for years. Recently, Transport Futures has focused on the demand side of the transportation problem, seeking ways to divert as well as reduce the demand for automobile travel. “Smart Commute” - an initiative of Metrolinx and the municipalities in the GTHA - facilitates a variety of commuting choices in order to ease gridlock and improve air quality while improving the commuting experience.

With *The Big Move’s* commitment to transportation demand management and building communities that are pedestrian, cycling and transit-supportive, the opportunity to offer more and better transportation choices is promising. The timing couldn’t be better for engaging the public on what will move them to change their habits, and what they’re willing to pay to make it work.

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⁹ Strategic Counsel, Public Opinion Survey, Infrastructure Canada, 2007.