January 10, 2014

Development Charges Consultation
Ministry of Municipal Affairs and Housing
Municipal Finance Policy Branch
777 Bay Street
13th Floor
Toronto, ON
M5G 2E5

E-Mail to: DCAConsultation@ontario.ca

Dear: Ministry of Municipal Affairs and Housing,

In May, 2013, Metrolinx released its Investment Strategy which contained 24 recommendations, including four proposed revenue tools to raise $2 billion annually. The $2 billion annual total included a proposal to raise $100 million annually through development charges in the GTHA to fund regional transportation infrastructure.

The four revenue tools selected by Metrolinx, including development charges, were judged to best embody the following key principles adopted by Metrolinx to guide our selection of the most appropriate revenue tools:

1. The dedication of revenues to specific outcomes
2. Fairness
3. Equity across the Region
4. Accountability and Transparency

In light of our Investment Strategy proposal and region-wide transportation mandate, Metrolinx sees itself as a key stakeholder in MMAH’s review of development charges.

As a key stakeholder, Metrolinx believes that a notable shortfall with the existing development charge regime is that it does not appropriately address the regional transportation costs associated with GTHA development. For instance, the current GO Transit development charge in place in some parts of the region suffers from a lack of effective enforcement mechanisms, insufficient municipal support, and legislative shortcomings that limit the ability of this mechanism to collect adequate funds to contribute to GO's region-wide transit growth resulting from GTHA development. Together with a variety of other factors, this has contributed to a shortfall of $521 million in municipal contributions to GO Transit since 2006/07.

A fundamental recommendation of Metrolinx is that the existing approach to GO Transit development charges in some municipalities be reformed or replaced by a GTHA-wide charge
on new developments to collect the $100 million/year for regional transit as proposed in the Investment Strategy. The fairest and most transparent way to apply such a charge is on a basis which reflects the increasingly regional travel patterns within the GTHA. For instance, one in five trips in the GTHA crosses a regional municipality's border, with commuters – people getting to or from their place of work – making up half of these inter-regional trips. The attached paper presents more analysis to support the case for an effective and transparent GTHA-wide development charge to fund a portion of Metrolinx's regional transit investments.

In addition, and consistent with the Investment Strategy, Metrolinx also recommends technical reforms to the Development Charges Act, 1997 that would increase municipal capacity to use development charges to fund local transportation needs and also support regional growth and transit investments and policies. This includes creating an integrated transportation services category so municipalities can efficiently allocate how they spend transportation-related development charges (accounting for 40% of all development charges collected in Ontario in 2011) to meet local and regional multi-modal policy goals. This also includes the removal of the 10% discount on the assessed charges for transit and the 10-year average historical service level cap. The attached paper discusses these measures in more detail.

Metrolinx also recognizes that development charges can play a helpful role in increasing the efficiency of our infrastructure by encouraging the location of new development nearer to transit, thereby reducing overall GTHA transportation costs. Also consistent with our Investment Strategy, Metrolinx recommends various approaches that can leverage development charges to encourage greater integration of land use policies with investments in transit and transportation infrastructure. The attached paper discusses these measures in more detail as well.

These recommendations would strengthen the ability to use development charges to address growth-related capital infrastructure costs. Consistent with other recommendations of the Investment Strategy, Metrolinx is committed to implementing such measures in a manner which is transparent and based on evidence, as part of the overall implementation of The Big Move.

Thank you in advance for considering this Metrolinx submission to the Development Charges Consultation process.

Sincerely,

Bruce McCuaig
President and Chief Executive Officer

cc. Andrew Posluns, Director, Transit Policy Branch, Ministry of Transportation
Metrolinx Submission to the
Development Charges Act, 1997 Consultation Process

January 10, 2014
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Executive Summary

Development charges (DCs) are key funding tools to pay for the infrastructure investment needed to support growth in Ontario. Transportation comprised 40% of the infrastructure funded by DCs in Ontario in 2011. As a result, it is an important input into the type of transportation expansion that can take place. Other services funded through DCs also play an important role in shaping the location, type and density of development in the region. This in turn affects the kind of transportation system that can be efficiently supported and the level of congestion.

As the Greater Toronto and Hamilton Area welcomes more than 100,000 new residents each year, $16 billion of transit expansion is underway to provide new, attractive options to accommodate the growth in travel. Yet the form and location of growth as well as the infrastructure funded to serve new growth has financial implications for Metrolinx investments by influencing travel decisions and service costs. If Metrolinx is to change the way the region travels, DCs must also shift to help contribute to a sustainable infrastructure investment program.

In forming this submission as part of the Ontario Ministry of Municipal Affairs and Housing’s review of the Development Charges Act, 1997, Metrolinx was guided by the following principles:

- That development charges more accurately reflect the infrastructure costs induced by the location, type and density of the development
- That development charges be consistent with the Province’s planning and growth policies to shift growth away from infrastructure-intensive greenfield development towards more compact and efficient forms in existing urbanized areas
- That development charges be used to support Metrolinx transportation goals by facilitating and encouraging transit-supportive development patterns, sufficiently investing in local transit services to feed and connect with regional transit investments and enabling alternative, more cost-effective transportation modes to become increasingly competitive with car travel.
- That the mechanism to fund regional transportation investments be consistently applied across the Greater Toronto and Hamilton Area and reflect the transportation impacts of new development and existing land use and transportation policies.

There has been significant public discussion on DCs and their role in funding transit. In May, 2013, Metrolinx released its Investment Strategy recommending, in part, reforms to the Development Charges Act, 1997 to facilitate greater local transit investment and generate $100 million annually for regional transit investment, which would be equivalent to a 15% increase on the annual amount of DCs collected. The reforms proposed built on, and were subsequently followed by, similar recommendations from the Environmental Commissioner of Ontario, the Canadian Urban Transit Association, Environmental Defense and others who proposed similar reforms. The amendments needed to the DCA, 1997 to facilitate funding the Toronto-York Spadina Subway Extension was an implicit endorsement of the DCA, 1997’s limited ability to fund rapid transit. This proposal builds upon the Investment Strategy’s recommendations.

There is an increasing shift in the GTHA towards the use of user pay mechanisms that reflect development patterns to fund services. The most high profile example is Mississauga recently passing new fees to fund water and wastewater infrastructure based on the amount of
impermeable surfaces on a property owner’s lot. Municipalities are making incremental reforms to the way they assess development charges for transportation to take into account the true costs developments impose on infrastructure. In the City of Markham, trip generation and whether there will be transportation demand management programs in place are considered when they assess development charges for road. In the City of Ottawa, the roads portion of development charges can be reduced by 50 percent if the development is within 500 metres of rapid transit and parking restrictions of a maximum of one space per unit are met.

Metrolinx is an important stakeholder in the Development Charges Consultation process due to its transportation mandate and Investment Strategy submission to government. This submission builds upon the Investment Strategy recommendations and draws on analysis of transportation patterns and development charge mechanisms in the GTHA by focusing on three key areas with the following recommendations:

1. **GO Transit DCs and the Investment Strategy’s proposed $100 million/year from DCs – restructure or replace the existing GO Transit DCs to reflect the transportation impacts of development.**

   A. That the existing GO Transit Development Charge in place in some municipalities be reformed or replaced by a GTHA-wide charge on new developments based on the total amount of vehicle kilometres travelled added to the regional network structured to collect $100 million/year as proposed in the Investment Strategy.

   B. That this charge be applicable for discounts based on special policy areas (i.e. location near to transit investment) and participation in Smart Commute or other transportation demand management (TDM) programs.

   C. That Metrolinx work with the Ministry of Municipal Affairs and Housing to provide the utmost transparency in demonstrating how funds raised through a regional charge are used.

2. **DCs for transportation (including transit) – reforms to the methods municipalities use to assess development charges for all forms of transportation infrastructure.**

   D. Removal of the 10% reduction and 10-year average historical service level cap on development charges levied for transit.

   E. Introduction of an “integrated transportation service” category that combines various transportation modes and mandates that charges be determined based on forward-looking targets premised on increased people throughput per laneway kilometre or per right-of-way width/length (to incorporate off-street bike trails, subways, etc.).

   F. Mandatory limits on the historical service level ratios of asset values to people and jobs used for justifying road expansion, with the difference between the limit and the combined integrated transportation historical service average transferred to other transportation service level ratio caps (transit, sidewalks, bicycle infrastructure, etc.) to increase their allowable capital funding envelopes.

3. **DCs impacting the form and location of growth – reforms to the method municipalities apply development charges to influence more efficient location, type and density of growth.**

   G. The Ontario Ministry of Municipal Affairs and Housing (MMAH) pursue further study of the impact of development type, density and location on infrastructure costs for the purposes of more accurately assessing the growth-related costs of new development.
H. Following Recommendation G, that MMAH undertake in collaboration with Metrolinx a study of transit service costs for different types, densities and locations of development in the GTHA.

I. That there be greater flexibility for developers and consumers to reduce their exposure to the variable cost components of DCs, and that these variable costs be clearly communicated to developers and consumers.
1. GO Transit DCs and the Investment Strategy’s proposed $100 million/year from DCs

Since 2000, Greater Toronto and Hamilton Area regional municipalities have been responsible for one third of GO Transit’s capital growth budget. A formula was devised in 2000 to allocate a portion of the costs to each regional municipality, with that portion made eligible for DCs funding. However, from the start this funding arrangement has suffered from the lack of an enforcement mechanism, insufficient municipal support and provisions in the Development Charges Act, 1997 that limit collecting funds for transit:

- $521 million in municipal contributions to GO Transit are outstanding since 2006-07. This is the result of a variety of factors, including limitations in the DCA, 1997 that limit the amount that can be collected for transit (see Figure 1).

- Where applied, GO Transit DCs have only been capable of recovering 25% of capital costs due to key provisions in the DCA, 1997 such as the benefit to existing population.

- Since 2001, the expected annual municipal contribution to GO Transit capital growth has increased from $17.7 million to $232 million. As municipalities lack control over the size of the GO Transit capital growth budget, these cost increases are difficult to plan for, can lack municipal support and impact a municipality’s development costs differently depending on their levels of growth.

- The formula for allocating the GO Transit growth costs to municipalities has not been updated since it was created and uses GO Transit passenger on/offs, the number of stations/stops and size of a tax base in each municipality from 1999 that do not reflect current realities. A lack of consensus on how to update the formula has prevented attempts to reform the formula since its implementation.

- GO Transit DC rates vary dramatically across the GTHA, with new single detached homes in Halton Region charged $1,032 in 2012 compared to $224 in Durham (see Figure 2). The City of Toronto does not charge GO Transit DCs as they would fall entirely on non-residential development and run counter to their economic development policies. These variations in charges lack policy benefits and can be perceived as unfair.

Figure 1: GTHA Contributions to GO Transit Growth, 2006-2012
In 2009, the four regional municipalities and two cities in the GTHA jointly proposed that the Province allow for a region-wide GO Transit development charge to be imposed, however no steps were taken at that time. In May, 2013 the Metrolinx Investment Strategy called for $100 million to be generated by Development Charges to dedicate to funding Metrolinx’s Next Wave program. Based on current trends of GO Transit DC amounts collected, the expected 2013-14 municipal contribution outstanding will be approximately $80 million after the City of Toronto’s $20 million contribution. Metrolinx believes that there are better ways to assess GO Transit development charges that better take into account the regional transportation impacts of different developments and could facilitate the collection of $100 million annually for Metrolinx regional transit investment.

The Case for Regional Transportation Development Charges

Regional Transportation Patterns

The Greater Toronto and Hamilton Area is a unified metropolitan region in large part due to its transportation network and travel patterns. Some facts:

- Since 1996, approximately one in five trips made every weekday in the GTHA crosses a regional municipality’s border.

- In 2011, interregional trips (trips that cross a regional municipality’s border) made up nearly two-thirds (60.6%) of all auto vehicle kilometres travelled in the GTHA and therefore disproportionately contribute to congestion and the consumption of valuable space on the provincial highway system in the region.

- The share of interregional trips made on transit (15.7%) is higher than the share of local trips made on transit in all GTHA regional municipalities except the City of Toronto.

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In 2011, 36% of all commutes in the morning peak period (6am-9am) cross a regional municipality’s border, with 49.1% of commutes from Durham, York, Peel and Halton crossing a regional municipality’s border.

On average, GTHA interregional trips are 33.74km, significantly more than the average GTHA trip length of 13.1km. These regional trips require expensive regional infrastructure currently not funded by the DC regime.

Approximately half (49.3%) of all interregional trips are between home and work, yet these trips make up more than half of all interregional travel (64.9%) meaning that they are longer than the average interregional trip. Job trips are critical to the success of the GTHA economy.

These figures demonstrate that regional transportation is a major contributor to GTHA congestion and that GO Transit is serving these trips more successfully outside the City of Toronto than local transit providers are serving local trips. The data also points to the importance of interregional travel for commute trips and therefore the region’s economy.

**Case Study: GTHA Shopping Malls**

Developments place regional demands on the transportation network depending on their location, type and density. For instance, major GTHA shopping malls draw trips from across the region, with approximately one in five trips ending at Vaughan Mills and Square One starting from outside of the regional municipality the mall is located in (see Figure 4). However, despite only one in five trips to Square One originating from outside Peel, these trips comprised 57% of total kilometres travelled of all trips to Square One.

While DCs are a good tool for municipalities to recover the costs induced by growth on their local transportation networks, developments with regional transportation impacts are not currently being accounted for in the development charge framework, despite the disproportionate impact – kilometres travelled, congestion, etc. – interregional trips have on the network. The location, type and density of new developments play an important role in the regional transportation impacts of new developments and can be used to measure impacts, suggesting that a new regional transportation DC could be created.
Precedents for Regional Charges related to Transportation

The existing GO Transit DC in place in some municipalities provides a precedent for a new fee collected for regional infrastructure to reflect the reality that travel and transportation costs of travel are not confined to one municipality. Another precedent is the Ontario Provincial Land Tax, which explicitly looks to address the problem of taxpayers using infrastructure and services located in adjacent municipalities. This tax was a focus of the 2013 Ontario Fall Economic Statement. Development charges levied for education, while different, present a third precedent of a focused DC levied by a non-municipal party (the Ministry of Education) on a specific component of a development – the land.

The GO Transit DC lacks the local support, policy rationale and structural capacity to raise the funds originally intended. Furthermore, there are better, more equitable ways of growth paying for growth that align with both transportation policy and land use policy as described in The Big Move and the Places to Grow: Growth Plan for the Greater Golden Horseshoe. Metrolinx proposes a new method to replace GO Transit DCs that supports the proposal outlined in the Metrolinx Investment Strategy to generate $100 million through development charges.

New Method for Transportation Assessments

The transportation network impacts of new developments are fundamentally tied to three factors:

A. Trip generation (the number of trips induced by the land use)
B. Mode share (the percentage of trips made by different travel modes)
C. Trip length (the number of kilometres traveled per trip)

Trip Generation

Trip generation is a key way to measure the impact a development has on the transportation network as certain land uses will result in more trips being made than others. As previously

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mentioned, a fast food restaurant will generally induce many more trips than a storage facility or warehouse. There are standard ratios of trips to the floor area of different land uses produced by the Institute of Transportation Engineers that are a good starting point for understanding the variable impacts. Depending on the vehicle (car, vanpool, bus, truck, etc.) used for the trip, the wear and tear on the roads, not to mention congestion, will vary. These should be taken into consideration in DC assessments. The City of Markham has already taken steps to doing this and has found that accounting for trip generation often supports their economic development strategies of reducing employment/industrial development charges.

Mode Share

Mode share, understood as the percentage of trips made on different forms of transportation (walking, cycling, transit, carpool, single occupancy vehicle, etc.), is another important consideration when measuring the transportation impacts of new developments. Mode share varies substantially by location and differs depending on the origin and destination of the trip. For new residential developments, mode share should focus on trips originating from the residence (home-based origins). For new non-residential developments, mode share should focus on the destination of trips ending at the development (non-home based destinations). Mode share can be used to show the estimated induced demand on different transportation infrastructure as a result of the development. Data for both types of mode share (residential-origin; non-residential-destination) can be derived at a neighbourhood level for the year 2011 using the Transportation Tomorrow Survey.

Mode share is also influenced by features of the development, in particular off-street parking. Off-street parking is required by all municipalities in the GTHA, although internationally there is an increasing movement to reduce or eliminate minimum off-street parking requirements due to their adverse impacts on housing affordability\(^3\) and contribution to auto dependence.\(^4\) As is already the case in the City of Toronto, parking provision could be isolated and unbundled from the cost of housing, allowing residents— and consequently, developers— to make informed choices about how much parking should be provided to meet the demand. Reductions in parking supply could justify reductions in the estimated auto-related transportation impacts of a development and any charge associated with these impacts.

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Trip Length

The length of the trip is an important input for assessing transportation impacts as it reflects the network impacts new developments have on infrastructure. The longer the trip, the larger the impact on the transportation network, irrespective of the mode. For instance, longer auto trips will impact the use of roadways not necessarily near to the trip’s origin or destination. Average trip length by mode for residential trips (origin-based) and non-residential trips (destination-based) can be derived at the neighbourhood level using 2011 data from the Transportation Tomorrow Survey.

Calculating a development’s regional transportation impact

Using the three factors listed above – trip generation, mode share and trip length – a more accurate assessment of the transportation impacts of new developments can be calculated. It is suggested that the most important mode for transportation impact assessment purposes is car travel as more and longer car trips will impose greater burdens on the road network but also on transit and other modes of transportation, as there is less regional non-auto transportation infrastructure in place to service these trips.

Using the mode share of car trips and the average kilometres travelled of car trips, a hybrid metric can be created to show the average vehicle kilometres travelled added to the network for every additional trip generated by location across the GTHA. The formula could work as follows:

\[
TZ \text{ MODE SHARE}_{\text{Car}} \times TZ \text{ AVG TRIP LENGTH}_{\text{Car}} = \text{AVG VKT/new trip in TZ}
\]

where:

- \(TZ \text{ MODE SHARE}_{\text{Car}}\) = existing car mode share in traffic zone of development
- \(TZ \text{ AVG TRIP LENGTH}_{\text{Car}}\) = existing average car trip lengths in traffic zone of development
- \(\text{AVG VKT/new trip in TZ}\) = Average vehicle kilometres travelled/new trip in traffic zone

Using this metric, maps can be created for residential (home-origin) trips and for non-residential (non-residential-destination) trips showing the variation in impact for trip developed (see Figure 6 and Figure 7). These maps allow for an estimate of the amount of vehicle kilometres of travel (VKT) that will be added to the regional network based on the location and amount of trips generated by a development. In essence, it is a measure of the amount of new vehicle travel that will result from a new development. A charge could then be calculated for each development by multiplying the average VKT/trip in the zone of the development to the amount of trips estimated to be generated by the development itself.
Total VKT added to the region’s transportation network is an appropriate method to structure a regional development charge as it accurately reflects the development’s use of the regional transportation network and contributes funding to the expansion of interregional transit services that will help to facilitate those trips. It also sends a price signal to developers to locate in efficient areas that place less strain on the regional network or can be accommodated on alternative modes. Interestingly, this map aligns well with the Urban Growth Centres in the Places to Grow Act (see Figure 8) and would also likely align well with maps showing the existing urbanized area where intensification is intended to occur. A new regional development charge for funding regional transit infrastructure could then target those longer trips, with a higher rate for longer trips.

**Potential Regional Charging Structure**

Many types of charging structures could be used depending on the nexus required to regional transportation costs, the policy considerations and revenue required. If incurred regional transportation costs are the priority, a charge structured to target longer vehicle trips could be devised (see Figure 8). Alternatively, a charging structure that targets all vehicle kilometres travelled irrespective of the trip length could be devised. This method could also be used by individual municipalities to structure their own rates so as to reach a predetermined revenue goal (i.e. based on a funding formula).

*Figure 5: Demonstrative Regional Transportation Development Charge*

<table>
<thead>
<tr>
<th>Potential Charging Structure (to be scaled to generate $100 million/year)</th>
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<tbody>
<tr>
<td>Annual trips between 10-15km &gt; $10/trip</td>
</tr>
<tr>
<td>Annual trips between 15-20km &gt; $15/trip</td>
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<tr>
<td>Annual trips over 20km &gt; $20/trip</td>
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</table>

**Further supporting land use and transportation policy**

To further align policy considerations to the proposed regional development charges scheme, discounts could be applied to specific areas or for developments that take action to reduce their transportation impacts.

**Special Policy Areas to support Transit-oriented development (TOD)**

To encourage development in areas receiving significant transit investment that currently are auto-dependant, ‘Special Policy Areas’ could be designed where developments could have their GO Transit/Metrolinx DCs discounted. These areas should be designed using best practices in measuring, for instance, the distance people are willing to walk to different orders of transit and should generally be less than 1km from the station. Furthermore, developments should meet certain criteria that facilitates transit-oriented development, such as reductions in the supply of off-street parking.
Figure 6: Average Vehicle Kilometres of Travel added per trip from a residence, (source: TTS, 2011)

Figure 7: Average Vehicle Kilometres Travel added per trip to a non-residential destination, (source: TTS, 2011)
Developments that agree to measurably participate in programs that reduce auto travel should also be applicable for GO Transit/Metrolinx DC discounts. One such program is Smart Commute, a TDM program of Metrolinx and GTHA municipalities. Smart Commute encourages carpooling, discounted transit passes, travel planning, teleworking and active transportation at over 300 companies in the GTHA, representing 700,000 commuters. Working on a fee-for-service basis, employers can sign up for Smart Commute services to help reduce employee and employer auto costs. If employers sign up for these types of programs and can meet measures of success, they could be eligible for GO Transit/Metrolinx DC discounts.

_Hatch Ltd, an engineering consulting firm in Mississauga helped to address a parking shortage at its office by rewarding employees who carpool ($5/day) or cycle ($2/day) to work, including converting convenient parking spaces to carpool-only. The program has reduced single occupancy vehicle travel by 16% since 2008._
The Region of York also is a leader in offsetting DCs for roads through the use of Transportation Demand Management programs.

**Affordable housing near to Transit**

Transit services are particularly attractive for individuals on lower incomes due to the affordability of travel. Providing transit services to areas with affordable housing is financially attractive to transit providers as it can boost ridership and improve the share of operating costs recoverable through fares, supporting further service increases. Yet land values in areas near to rapid transit often make affordable housing scarce near to attractive transit services. To facilitate affordable housing provision near to transit, developers wishing to build affordable housing units within ‘Special Policy Areas’ immediately surrounding existing or future rapid transit stations could be eligible for a GO Transit/Metrolinx DC discount.

**Increased Transparency**

To demonstrate money raised through a GTHA-wide charge on new developments is spent on regional transit, Metrolinx would commit to working with the Ministry of Municipal Affairs and Housing to create an adequate mechanism to transparently report on the use of these funds. This action is consistent with Metrolinx’s Investment Strategy Recommendation 5 that:

“...Metrolinx enhance its public engagement processes to model best practices and its reporting systems in order to establish robust and transparent public reporting on the delivery of projects, related to budget and schedule, the rationale or basis for any changes, and the concrete, specific results that are experienced as a result of the implementation of programs as a whole and specific projects.”

These processes could include building off of the Ministry of Municipal Affairs and Housing’s already robust Financial Information Return website and could be linked to existing communications efforts at Metrolinx.

**Economic Impacts**

In preparing the Investment Strategy, Metrolinx commissioned AECOM to review the economic impacts of 26 revenue tools under consideration. Regarding development charges, the report found that:

“The only efficiency impacts arising from additional development charges are the costs of economic distortions to the extent that the level of development charges overestimate (or underestimate) the true cost of the infrastructure provided to the users (or to the extent that the charges levied across different municipalities of the GTHA distort the pattern of demand for commercial or residential ownership).”

In other words, additional development charges would have negative economic distortions to the extent that they increase the variation in charges across the region or stray away from a

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development’s actual use of the infrastructure it is being charged for. The regional charge proposed in this report would have the opposite affect; by linking the charge to the demand a development is actually expected to place on regional travel infrastructure, it more closely reflects the true cost of that development. Furthermore, applying this method consistently on a regional basis will help reduce distortions in real estate by lessening the variation in development charges currently resulting from the existing GO Transit development charge.

Other studies cited in the Investment Strategy report include an economics report by Dr. Harry Kitchen and Dr. Robin Lindsey from January, 2013, which states that “a development charge corresponds best to the benefits-received principle when the costs and benefits of the infrastructure for each property can be determined.” Furthermore, any negative impacts on housing and commercial development prices could be offset through complementary policy measures. These measures are listed above and include working with Smart Commute to receive discounts and improve multi-modal access options. These measures will reduce the need for high parking requirements for developments – a significant cost highlighted by the Ontario Home Builders’ Association that can “discourage intensification and significantly increase the cost of medium-and-high density projects.”

These studies and submissions point to the fact that a reformed regional charge to fund regional transit investment structured similar to the proposal above is not expected to have significant adverse economic impacts on the GTHA.

**Recommendations**

A. *That the existing GO Transit Development Charge in place in some municipalities be reformed or replaced by a GTHA-wide charge on new developments based on the total amount of vehicle kilometres travelled added to the regional network structured to collect $100 million/year as proposed in the Investment Strategy.*

B. *That this charge be applicable for discounts based on:*
   - i. special policy areas (i.e. location near to transit investment)
   - ii. participation in Smart Commute or other transportation demand management (TDM) programs

C. *That Metrolinx work with the Ministry of Municipal Affairs and Housing to provide the utmost transparency in demonstrating how funds raised through a regional charge are spent.*

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2. Development charges for transportation (including transit)

The Importance of Local Transportation for Metrolinx

Municipalities in the Greater Toronto and Hamilton Area are responsible for funding local transit and transportation services. The amount and form of these services are crucial for the success of regional transit infrastructure. Municipal sidewalks, bike lanes, bus services and roads are the ties connecting at a minimum the ‘first-mile’ or ‘last-mile’ of every trip made in the region. The level of these services directly impacts the cost for Metrolinx to attract ridership and consequently increase services. For example, improvements to local transit and alternative transportation access to regional transit reduces the demand for station parking expansion, which costs Metrolinx approximately $35,000 per structured space to construct. This allows Metrolinx to more affordably attract ridership through service increases alone rather than also relying on parking expansion (see Figure 9 for case studies).

Figure 9: Ridership Growth and Access Modes for GO Transit

<table>
<thead>
<tr>
<th>GO Train Ridership Growth</th>
<th>GO Bus Ridership Growth</th>
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<tr>
<td>In 2011, 60% of all GO train passengers parked a car at a GO station. In contrast, only 19% walked, took local transit or bicycled to the station. To accommodate GO train riders accessing stations by car, GO Transit spent over $27 million in 2013 to expand car parking at rail stations. If municipalities improved walking, bicycling, local transit and other alternative access modes to GO stations, this would reduce the need for parking expansion to grow ridership.</td>
<td>Between 2011 and 2012, GO bus weekday ridership increased by 19.8%, or 8,440 riders – more than double the daily GO Train ridership increase during the same period. In 2010, only 22% of GO bus passengers parked their car at a station or stop, with 45% of riders either walking (25%) or taking local transit (20%) to access GO buses. Because less GO bus riders driver to their stations or stops, Metrolinx has more funds available for service increases as there is less of a need to invest in parking expansion to grow ridership.</td>
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</tbody>
</table>

The Development Charges Act, 1997 is a key tool for municipalities to fund transportation, including access to regional transit infrastructure. In 2011, 40% of all DCs in Ontario were dedicated to growth-related transportation infrastructure (roads and structures, local transit, GO Transit and parking), totalling $518 million. The vast majority of this transportation funding goes to ‘roads and structures’, totalling $432 million, compared to local transit, GO Transit and parking which collected $74.4 million, $9.7 million and $1.9 million, respectively. In 2011, DCs for roads collected more than the second and third highest service categories – water and wastewater – combined (see Figure 10).

The disparity between the amounts collected for different transportation categories is in part a direct result of provisions in the existing DCA, 1997. These provisions are outside the control of municipalities and unfairly advantage collecting DCs for non-transit related forms of transportation. As a result, while a significant amount of funding is being collected for
transportation through DCs, little of it supports Metrolinx’s ability to affordably grow ridership and compete with auto travel to accommodate GTHA growth.

**Limiting Provisions in the Development Charges Act, 1997**

Specific provisions in the DCA, 1997 are responsible for the limited amount collected for transit and the large amount collected for roads.

**10% discount for ‘Soft Services’**

Section 5.(1)8 mandates that the capital costs of all soft services (which include transit but not roads) eligible for DCs must be reduced by 10%. This has the effect of reducing the transit costs municipalities can recover through development charges. As the Environmental Commissioner of Ontario has pointed out, in the City of Brampton this reduced transit funding by $42 million between 2004 and 2009, and in the City of Ottawa by $26 million between 2004 and 2007.\(^8\) Tellingly, in the agreement to fund the Toronto-York Spadina Subway Extension, this provision was lifted.

Removing the 10% discount would increase municipal funds available for transit, putting it on a more level playing field with roads funding, which is not subject to the discount. But more importantly, removal of the discount would enable municipalities to combine their transit, roads and other transportation categories into an “integrated transportation services” DC category, facilitating a more balanced and mutually supportive approach to transportation planning (see section below on ‘integrated transportation service category’) that considers all modes in relation to one another as a single network. Alternatively, creating a new exemption to the discount

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similar to how “services related to a highway” are exempt from the discount (s.5.(5)4.), such as for “services related to regional transportation infrastructure” could also be employed.

s. 5.(1)4. – Ten-year Historical Service Level Cap

Assessments for new services must not exceed the average level of service provided in the municipality over the previous ten years. This provision constrains municipalities from increasing or even maintaining transit services levels at existing levels as the average level of service is in almost every municipality lower over the past decade for transit than service today. This is particularly true in suburban areas of the GTHA where transit was formerly not offered or continues to not be offered. As a result, years with levels of service of ‘zero’ are included in the 10-year historical average.

By contrast, the 10-year average service level for roads is often calculated by:

A. Dividing the total value of roads and related capital infrastructure assets by the number of people and jobs.
B. The 24-hour average number of vehicles per lane
C. The number of lane kilometres per 1,000 people and employment

In municipalities with constrained land supply where development is increasing the density of population and employment, these metrics for road service levels will invariably show that the existing level of service on roads declines in the future. As a result, funding road expansion projects can almost always be justified through growth projections or computer modeling, which generally extends today’s mode shares and travel behaviours into the future with few changes.

In the Development Charges Act, 1989, the historical service level cap for transit was the highest attained annual level of service over the past year – an improvement on the existing standard used, but still limiting for suburban municipalities looking to significantly grow local transit. The roads level of service metric is both inappropriate for an urbanizing region with limited land and works at cross-purposes to Metrolinx’s goals by making it increasingly difficult for transit, walking or cycling to compete with cars. An “integrated transportation services” category could allow for new mode-agnostic metrics to measure levels of service that are more forward-looking while still reasonably capped.

New Metrics for Measuring Level of Service Performance

Rather than using metrics that focus on vehicle throughput or lane kilometres per capita, the people-moving capacity or person throughput of transportation infrastructure could be used to measure levels of service. Similar to the transportation assets per capita measure, metrics that are mode agnostic and incentivize municipalities to track how efficiently their existing infrastructure is being used would be preferable than the existing mechanisms. These types of metrics could also be forward looking without being open-ended – in fact, they may even allow for reducing assessments over time – if they are premised on achieving increased efficiency. One example could be to use forward-looking targets premised on increased people throughput per laneway kilometre or per right-of-way width/length (to incorporate off-street bike trails, subways, etc.).

Metrolinx could help develop these metrics in partnership with municipalities on an individual basis or could work with MMAH to set mandatory metrics for measuring transportation infrastructure levels of service. This would support Recommendation 15 of the Metrolinx Investment Strategy to create common approaches to reporting on transportation performance across the GTHA.
Integrated Transportation Service Category

Removal of the 10% discount on transit and removal of the existing 10-year average historical service level cap could facilitate the creation of an integrated transportation service category. A service category that combines all transportation would support the recommendations above for mode-agnostic level of service metrics. It could also more effectively increase funding for transit and alternative transportation modes (similar to removing the 10% discount) by allowing funding envelopes for transit capital expansion to utilize a portion of the funding envelope used to justify road expansion. Below is an example of how this could work through the creation of an integrated transportation service category.

Rebalancing the Funding Envelope for Capital Expansion

The amount of transportation infrastructure to be funded through DCs is determined by two factors: the size of the capital budget for transportation approved in the municipality’s official plan and the average level of service provided over the previous ten years. Only capital projects that accommodate growth and maintain an equal or lesser level of service as the average provided over the previous ten years can be funded by DCs. For this reason, level of service metrics play a crucial role in determining what portion of a municipality’s capital budget can be funding through DCs.

GTHA municipalities outside the City of Toronto generally have high levels of service for roads and low levels of service for transit. This is most apparent in the service level metric that looks at the ratio of a municipality’s existing transportation assets to its population and employment. In the City of Toronto, the situation is reversed as Toronto’s legacy transit system provides a historical level of service that allows for significant transit expansion to be applicable for DCs funding. The City of Toronto is allowed to collect a maximum of $7,901.68/person or job for transit expansion whereas its maximum for roads and related infrastructure is $2,177.87. This differs drastically from suburban municipalities in the GTHA, many of whom collect more through DCs for municipal parking than for local transit. In the City of Oakville, the maximum allowable DC for roads is $12,131.00/person or job (this does not include the funding envelop which allowed the Region of Halton to justify charging an additional $4,151.33 in the 2012 DC Background Study for roads) whereas for transit it is $312.00 – less than the $359.00 allowed to be charged for municipal parking. Figure 11 shows the variation in levels of service across the GTHA that are used by municipalities to justify capital expansion.

The high historical levels of service for roads – often reinforced with other performance metrics such as vehicle volumes to road capacity (V/C ratios) or lane-kilometres/capita – provide suburban municipalities with an impossibly high level of service to maintain as these municipalities urbanize and increase in density. Consistently, municipal background studies use these metrics to project that the level of service provided by roads will decline over time, which justifies collecting the maximum amount of roads funding allowed (the 10-year average level of service) through DCs. This contributes to making ‘Roads and Structures’ the largest component of DCs collected in Ontario as municipalities attempt to retain road service levels of a low level that are often lower, particularly for transit.
density municipality despite their increasing density, particularly in the GTHA where land use policies encourage high density infill.

**Figure 11: Maximum Funding Envelops (Levels of Service [LOS] by asset value per person/job) for Roads and Transit**

<table>
<thead>
<tr>
<th>Municipality (10-year average)</th>
<th>Roads and related infrastructure</th>
<th>Municipal Parking</th>
<th>Local Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toronto</strong> (2003-2012)</td>
<td>$2,177.87</td>
<td>N/A</td>
<td>$7,901.67</td>
</tr>
<tr>
<td><strong>Mississauga</strong> (1999-2008)</td>
<td>$3,817.64$^{10}</td>
<td>$77.65</td>
<td>$335.78</td>
</tr>
<tr>
<td><strong>Town of Milton</strong> (2001-2010)</td>
<td>$8,488.00$^{11}</td>
<td>$194.00</td>
<td>$25.00</td>
</tr>
<tr>
<td><strong>City of Hamilton</strong> (1999-2008)</td>
<td>$9,083.35</td>
<td>$165.52</td>
<td>$84.05</td>
</tr>
<tr>
<td><strong>City of Oakville</strong> (2003-2012)</td>
<td>$12,131.00$^{12}</td>
<td>$359.00</td>
<td>$312.00</td>
</tr>
</tbody>
</table>

By separating transit and roads in the calculation of DCs through the 10% discount, municipalities are prevented from balancing these historical imbalances in the levels of service for different transportation modes. By creating an integrated transportation service category that combines road and transit asset values into a single category, the overall level of transportation services (as defined by the ratio of assets to people and employment) could remain the same while the individual amount dedicated to roads and to transit could be shifted. For an example of how this could work, see Figure 12:

**Figure 12: Proposed Use of Integrated Transportation Services Category to Rebalance Capital Funding Envelopes**

Rebalancing the funding envelopes used for transit and roads through an integrated transportation services category would better align with Provincial Planning Policy Statements that support increased transit use. They also would not impact municipal borrowing as the total amount of DC revenues collected could remain the same. Should the Province wish to ensure that such shifts take place, a mandatory service level cap could be placed on the road assets per capita level of service for GTHA municipalities, which would have the effect of encouraging

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$^{10}$ Does not include DC envelope used by Region of Peel to assess for roads, which is calculated separately and uses a volume/capacity and lane-kilometres/capita measure and facilitated a regional road charge of $2,616.26/capita in the 2012 Background Study for the Region of Peel.

$^{11}$ Does not include DC envelope used by the Region of Halton to assess for roads, which is calculated separately and uses a volume/capacity and lane-kilometres/capita measure and facilitated a regional road charge of $4,151.33/capita in the 2012 Background Study for the Region of Halton.

$^{12}$ Ibid.
municipalities to rebalance their transportation funding or reduce their road expansion to levels more appropriate for urbanized areas. These caps could reflect the level of urbanization being experienced by each municipality, be phased in or could be consistently applied across all GTHA municipalities outside the City of Toronto.

A shift of one quarter of the funding envelop for roads to transit could raise up to $108 million per year if existing rates of growth (2011) continue and performance metrics for levels of service are reformed to encourage more efficient infrastructure usage.

As transit investment increases the amount of transit services in municipalities with high ratios of road asset values to people and jobs, there is less reason for these ratios to be maintained. If greater flexibility were allowed within the Development Charges Act to modify these ratios for future time periods when justifying municipal capital projects that can be funded through DCs, more money could be redirected from roads to transit or other transportation services such as pedestrian infrastructure (used by the City of Toronto), if these services were combined into an “integrated services category.”

**Recommendations:**

In order to better fund local transit services, reforms to the Development Charges Act, 1997 could include

D. Removal of the 10% reduction and 10-year average historical service level cap on development charges levied for transit.

E. Introduction of an “integrated transportation service” category that combines various transportation modes and mandates that charges be determined based on forward-looking targets premised on increased people throughput per laneway kilometre or per right-of-way width/length (to incorporate off-street bike trails, subways, etc.)

F. Mandatory limits on the historical service level ratios of asset values to people and jobs used for justifying road expansion, with the difference between the limit and the combined integrated transportation historical service average transferred to other transportation service level ratio caps (transit, sidewalks, bicycle infrastructure, etc.) to increase their allowable capital funding envelopes.
3. Development Charges impacting the form and location of growth

Transit and alternative modes of transportation rely on compact development patterns to be cost-effective and competitive with auto travel for mode share. For this reason, the Metrolinx Investment Strategy proposed several recommendations related to land use, including that the Minister of Transportation develop a Transportation Planning Policy Statement under the Metrolinx Act to encourage the greater integration of land use policies with The Big Move and investments in transit and transportation (Recommendation #9). Compact development patterns, which often reduce the non-transportation related infrastructure costs required to facilitate growth, also support transit services by making investments more cost effective and competitive with auto travel. If the location, type and density of a development were considered rather than simply an average per capita figure for different development sizes when assessing the cost imposed by a new development on infrastructure, regional and local transit expansion becomes more affordable and better aligned with the DC principle that ‘growth must pay for growth.’

Development charge cross-subsidies for inefficient development

When the location, type or density of a development is ignored, DCs can have the adverse effect of subsidizing developments more costly to service by infrastructure, including transit (see Figure 13). One example of these cross-subsidies through DCs is road costs. Most municipalities in the GTHA assess road costs on a per capita basis, which generally ranges from 1.5 persons per unit for a small apartment to 4 people for a single or semi-detached home. However, depending on the location, lot width, type of use and density, a development’s use of the road will vary. For example:

- The Region of York and City of Markham take into account that different non-residential uses will generate different amounts of trips in their DCs. For instance, retail will generate far more trips than a warehouse or even an office building. As a result, developments with higher trip generation rates are assessed higher transportation charges.
- For residential developments, a single-detached home on a greenfield development requires far more road-related costs.

Figure 13: Demonstration of Development Charge cross-subsidies (source: Environmental Defense re: Blais, 2010)

13 Figures derived from the City of Brampton’s 2009 Development Charge Background Study, p.103. See link.
(cleaning, snow clearance, maintenance and repair) than a higher density apartment within the existing built-up area on an already existing roadway. The provision of parking will also determine the use of the road network.

Transportation is not the only infrastructure cost that varies depending on the type, location and density of development. If all services assessed by DCs take these three factors into account, the resulting built form encouraged through true cost pricing will be far more efficiently served by transit, making transit investment and expansion more affordable. Some examples of services that could be assessed differently to support true cost pricing and transit are presented below.

**Mechanisms to Achieve True Cost Pricing and More Affordable Transit Expansion**

*‘Linear’ and ‘Point’ Infrastructure Costs*

Most infrastructure is made up of both ‘point’ and ‘linear’ costs. ‘Point’ costs are tied to the population, jobs or non-residential uses served and includes facilities like water filtration plants that scale based on demand. ‘Linear’ costs relate to the form, location and density of the demand and include things like pipes connecting developments to the water treatment plants. These linear costs will vary depending on the length and diameter needed to serve certain locations, land use types and densities. As most DCs for services are charged on a per capita basis, the variable linear costs are rarely taken into consideration. As a result, developments with lower infrastructure costs that require less linear infrastructure are overcharged while developments that require more linear infrastructure costs due to their location, type or density are undercharged.

In general, a shift to using true cost pricing when assessing for DC by taking into account the variable costs of linear infrastructure required by developments will produce more compact development patterns easier to serve by transit.

*Making more efficient use of existing capacity*

There is also likely to be excess capacity in certain parts of the network where new development can occur without incurring the need, for instance, for wider pipes. Increasing the density of development up to the level supported by existing infrastructure capacity would further reduce the linear costs of infrastructure services.

There are likely other infrastructure and services included in DC assessments that have a variable cost component currently being charged on a per capita basis that may be more accurately assessed using new metrics. Each service should be studied for its ‘linear’ and ‘point’ costs to ensure developments are being charged based on the true costs imposed by their type, density and location.

*A better way to assess DCs for transportation*

Like other services, transportation infrastructure have ‘linear’ and ‘point’ costs. For instance, lot width, parking supply, density and the location of a development have direct impacts on the provision and use of the roads and associated services (snow clearing, street lights, traffic lights, etc.). Likewise, the type of vehicle used for certain trips has different impacts on the level of road
maintenance required. In order to more accurately charge new developments for the true cost of growth-related road infrastructure, the following factors should be considered in DCs:

**Lot Width and Density**

The frontage of a development adjacent to a road impacts the ‘linear’ costs of road services as a narrow lot will require less roadway to be paved, fewer streetlights and less snow-clearing than a wider lot. Similarly, the density of the lot reduces the ‘linear’ costs of roads as more people and jobs are able to use the same road space. Municipalities can take these two factors into consideration in their DCs by shifting their charges from a per capita basis to a capita per hectare or for non-residential uses, square meter per hectare basis.

**Usage-based metrics for residential and non-residential development**

Different development types will use transportation infrastructure at different levels, and these levels should be taken into consideration in assessments of growth-related infrastructure costs. For instance, trip generation rates vary substantially depending on the type of non-residential development. York Region and the City of Markham already take trip generation into account when assessing DCs. Taking trip generation one step further, the average per axel weight of the vehicles making trips to the development could further refine non-residential transportation costs.

On the residential side, developments that locate closer to rapid transit, supply less parking or provide affordable housing will likely use the road network less by taking alternative transportation modes more frequently. The difference in residential use will differ by municipality and would require further study to estimate these costs.

**Transparency, communication and flexibility needed to encourage transit-supportive development**

Development charges are already marked by a high degree of accountability and transparency for municipal finance professionals and researchers. Background studies are readily available online, as is data on the amounts of DCs collected and spent thanks to the Ministry of Municipal Affairs and Housing’s Financial Information Returns website. However, as most DCs are assessed on a per capita basis rather than on a marginal cost basis that takes into account ‘linear’ costs, there is little flexibility for developers or consumers to make informed decisions regarding how to reduce their costs by changing their development location, density or type. If more cost-efficient development is to be encouraged through true cost DCs, the variable costs must be clearly communicated to developers and consumers to influence supply and purchasing preferences.

Municipalities must also ensure that developers have the flexibility to reduce the variable infrastructure costs tied to the development. Reducing requirements for minimum parking, increasing the density permitted under the zoning code in existing urbanized areas and reforming fire and building codes to encourage alternative transportation modes and densities that are both safe and efficient are examples of how municipalities can support affordable transit investment.
**Recommendations**

G. *The Ontario Ministry of Municipal Affairs and Housing (MMAH) pursue further study of the impact of development type, density and location on infrastructure costs for the purposes of more accurately assessing the growth-related costs of new development.*

H. *Following Recommendation G, that MMAH undertake in collaboration with Metrolinx a study of transit service costs for different types, densities and locations of development in the GTHA.*

I. *That there be greater flexibility for developers and consumers to reduce their exposure to the variable cost components of DCs, and that these variable costs be clearly communicated to developers and consumers.*
Appendix

Comparison of Daily Trips that remain within Jurisdiction (internal) vs those that end outside jurisdiction (external), 2011

<table>
<thead>
<tr>
<th>Location</th>
<th>Internal - All</th>
<th>External - All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td>82.3%</td>
<td>17.7%</td>
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<tr>
<td>Durham</td>
<td>84.6%</td>
<td>15.4%</td>
</tr>
<tr>
<td>York</td>
<td>71.9%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Peel</td>
<td>78.0%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Halton</td>
<td>74.2%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>88.8%</td>
<td>11.2%</td>
</tr>
<tr>
<td>GTHA Total</td>
<td>79.9%</td>
<td>20.1%</td>
</tr>
</tbody>
</table>

Weekday Trips (all modes)

Origins and Destinations of GTHA Trips, 2011

(source: TTS)
External vs Internal Commuting in the GTHA, 2011 (source: TTS)

<table>
<thead>
<tr>
<th>Regional Municipality of Origin</th>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td>80.8%</td>
<td>19.2%</td>
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<tr>
<td>Durham</td>
<td>51.9%</td>
<td>48.1%</td>
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<tr>
<td>York</td>
<td>46.2%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Peel</td>
<td>58.9%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Halton</td>
<td>40.2%</td>
<td>59.8%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>64.7%</td>
<td>35.3%</td>
</tr>
</tbody>
</table>