RE:EX16.3 **Appendix C**

City of Toronto

Revenue Options Study

KPMG LLP

June 2016

City of Toronto - Revenue Options Study - FINAL.docx

Contents

1 Executive Summary

Taxes are necessary to fund public services, infrastructure and social benefits, and governments around the world implement them in many different ways to suit local revenue requirements and economic circumstances. When assessing the net revenue potential of various options for raising revenue, policymakers must weigh a variety of trade-offs, including:

- the time and cost for consumers and/or businesses to comply with an option;
- the time and cost for government departments to implement, administer and enforce the option;
- changes in economic incentives as a result of a revenue option that may produce a shift in consumption from one good, service, sector or location to another; and
- the potential for unintended consequences, such as growth in the "underground economy".

Given Toronto's ongoing growth, numerous demands for investment in public services and infrastructure will continue. For these reasons, the City of Toronto (the "City") requires a stable and secure foundation upon which to make continued public investments. Accordingly, the City must continually reassess its current revenue mechanisms and analyze options for new sources of revenue.

1.1 Background

The City retained KPMG LLP ("KPMG") to provide a revised assessment of revenue options permitted under the *City of Toronto Act*, 2006 ("COTA") and to review additional revenue mechanisms that the City does not yet have legislative authority to implement.

The revenue options reviewed in this report that are currently permitted under COTA are:

- Alcoholic beverage tax;
- Entertainment and amusement tax;
- Motor vehicle ownership registration tax;
- Parking levy;
- Road pricing (specifically downtown cordon charges);[1] and
- Tobacco tax.

[1] The City's Transportation Services Division has commissioned a separate study to focus on the potential tolling/ road pricing of the Gardiner Expressway and Don Valley Parkway. For more information about this study, please refer to: Executive Committee report 2015 EX8.14, entitled "Tolling Options for the Gardiner Expressway and Don Valley Parkway", dated September 10, 2015.

The revenue options reviewed in this report that are not currently permitted under COTA are:

- Development levy;
- Hotel tax;
- Parking sales tax;
- Municipal income tax (including business income and personal income); and
- Municipal sales tax.

1.2 Key Findings

Exhibit 1.1 presents a summary of key findings.

Exhibit 1.1 – Summary of Findings

Revenue Option	Net Annual Revenue Potential ($ millions)	Permitted Under COTA	Estimated Time to Implementation[2]
Alcoholic Beverage Tax *(1 – 10% rate)*	20 – 151	Yes	12 months
Entertainment and Amusement Tax *(1 - 10% rate)*	3 – 35	Yes	12 months
Motor Vehicle Registration Tax *($20 to $100)*	18 – 94	Yes	6 months
Parking Levy *($0.50 to $1.50 per spot / day)*	171 – 535	Yes	18 months
Road Pricing (Cordon Charges) *($5 to $20 per day)*	89 – 377	Yes	36 months
Tobacco Tax *(1 – 10% rate)*	5 - 46	Yes	12 months
Development Levy *(2 – 10% rate)*	17 – 87	No	12 months
Hotel Tax *(2 – 14% rate)*	21 – 126	No	12 months
Municipal Business Income Tax *(0.5 – 2%)*	145 – 580	No	24 months
Municipal Personal Income Tax *(1%)*	580 – 926	No	24 months
Municipal Sales Tax *(0.5 – 2% rate)*	125 - 515	No	24 months
Parking Sales Tax *(5 – 20% rate)*	30 – 121	No	12 months

[2] Each revenue option could be implemented in different ways, potentially requiring legislative approval or cooperation from the Province of Ontario, cooperation or agreement from the Government of Canada and/or approval from City Council. The estimated time to implementation refers to the approximate length of time from when City Staff receives the requisite approvals and direction to proceed until the revenue option is fully implemented. Since it is inherently difficult to gauge these external factors, the projections included in this report should be read as rough order of magnitude estimates only. Further study will be required depending on how the City seeks to proceed for each revenue option.

2 Introduction

In recent years, the City of Toronto (the "City") has announced a number of large-scale infrastructure projects and public initiatives. These announcements cover a variety of economic and social sectors and seek to address the City's growing needs for housing, transportation infrastructure, rehabilitation of existing infrastructure assets, and ongoing municipal development. A significant constraint on the City's ability to address these priorities, however, is sufficient long-term revenue sources for financing its share of capital project funding. In addition to project-specific costs, the City will continue to be responsible for providing municipal services to its residents, including transportation, waste management, and water and wastewater services. It can be expected that as Toronto's population continues to grow and age, so too will the cost to provide public services. These requirements are detailed in the City's 2016 Staff Report entitled "The City of Toronto's long-term financial direction[3].

During a February 2016 deliberation on the City's 2016 operating and capital budgets, City Council directed City Staff to commission an external consultant to perform an update to a March 2007 report delivered by Hemson Consulting Ltd., entitled "Assessment of Potential New Tax Measures under the *City of Toronto Act*, 2006" (the "Hemson Report"). The Hemson Report undertook a review of various options for generating revenues under the *City of Toronto Act*, 2006 ("COTA") enacted by the Government of Ontario (the "Province").

The Hemson Report included a number of sales taxes, road and vehicle related revenue options, and an option related to the transfer of residential and non-residential property. The Hemson Report also provided commentary on how each tax, fee or charge could be structured (including an overview of how the revenue option has been implemented in other jurisdictions), revenue potential, the costs of implementing and administering the option and the implications of the tax for various businesses and stakeholders.

In response to Council's direction, the City retained KPMG LLP ("KPMG") to provide an updated assessment of the revenue options permitted under COTA and to review other revenue options that the City does not currently have legislative authority to implement. The revenue options reviewed in this report that are currently permitted under COTA are:

- Alcoholic beverage tax;
- Entertainment and amusement tax;
- Motor vehicle ownership registration tax;
- Parking levy;

[3] City of Toronto. 2016. The City of Toronto's long-term financial direction. Available at: http://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-92968.pdf

- Road pricing (specifically downtown cordon charges);[4] and
- Tobacco tax.

Revenue options that were included in the scope of this analysis but which the City does not have legislative authority to implement are:

- Development levy;
- Hotel tax;
- Parking sales tax
- Municipal income tax (including business income and/or personal income); and
- Municipal sales tax.

2.1 Revenue Profiles

For each of the eleven revenue options listed above, KPMG developed "revenue profiles" that outline key characteristics of each option. Each profile includes a summary of the revenue option structure, assumed approach for implementation, a qualitative and quantitative assessment, and an overview of how the revenue option has been implemented in other jurisdictions. Specifically, the scope of review for each revenue option addresses the following topics:

- *Overview of the Revenue* – This section describes the assumed application of the revenue option for the purposes of the analysis, summarizes the design scheme and identifies any potential issues associated with the implementation of the revenue option. This includes a discussion of whether the option is permitted under COTA and what legislative changes would be required if the revenue option is not permitted under COTA. Similarly, the profiles identify whether the Ontario or Federal governments currently implement the revenue option (including current rate/structure) and, if so, whether the City could potentially "piggy-back" on existing mechanisms for administration. The overview also includes a summary of relevant jurisdictions where the revenue option has been implemented and provides details on option structuring, revenue generation and lessons learned, where available.
- *Quantitative Assessment* – This section describes the basis for the key assumptions used in the calculation of revenue potential, including factors for demand reduction or consumer/vendor avoidance, and identifies limitations of available data. This section also provides estimates for implementation costs and ongoing administration, as applicable.

[4] The City's Transportation Services Division has commissioned a separate study to focus on the potential tolling/ road pricing of the Gardiner Expressway and Don Valley Parkway. For more information about this study, please refer to: Executive Committee report 2015 EX8.14, entitled "Tolling Options for the Gardiner Expressway and Don Valley Parkway", dated September 10, 2015.

Lastly, the section discusses factors that should be considered when assessing the option as a sustainable, long-term source of revenue, including whether the proposed implementation impacts revenues generated by other levels of government.

- *Qualitative Assessment* – This section assesses the potential impacts of the revenue option on stakeholders and businesses, including identifying the groups targeted and potential concerns over fairness. The section discusses the economic impacts of the revenue option in terms of its potential impact on the sale of goods and services and in shifting the location of economic activity. A key focus of this section is on Toronto's competitive position and whether the implementation of the revenue option would be a significant factor in driving existing or potential new business away from Toronto or in discouraging tourists from visiting.

Following the revenue profiles, this report presents a summary of findings from a jurisdictional review of other specific revenue options including carbon taxes and Uber registration fees, as well as municipal land transfer taxes and property taxes, which have already been implemented by the City.

This report is intended to be used by City Council and City Staff in support of deliberations regarding the City's Long Term Fiscal Plan and in discussions with other governmental bodies. Due to budget and schedule constraints encountered during the development of this report, it is recommended that the City perform more detailed reviews of any specific revenue option it determines warrants further consideration prior to its implementation. The analysis contained in this report is intended for use as a basis for further discussion. Additionally, before any new revenue option is further considered, a more extensive policy and legal review should be undertaken. This report does not contain recommendations.

In this report, KPMG uses the term "City of Toronto" or "City" to refer to the municipal government responsible for providing municipal public services to Toronto residents. The use of "city of Toronto" or simply "Toronto" refers to the geographic and economic region of Toronto. The Toronto Census Metropolitan Area ("Toronto CMA") refers to the geographic and economic region defined by Statistics Canada. Toronto CMA includes the city of Toronto, as well as surrounding municipalities such as Mississauga, Brampton, Markham, and Vaughan.[5] A complete glossary of key terms and acronyms used in the report has been included at the back of the report.

2.2 Structure of Report

The report is divided into the following sections:

- Sections 3 to 8 present the profiles for revenue options for which the City is currently permitted to implement;

[5] For a full list of municipalities included in Toronto CMA, refer to Statistics Canada's National Household Survey Profile, Toronto, CMA, Ontario, 2011.

- Sections 9 to 12 present the revenues options for which the City currently does not have legislative authority to implement;
- Sections 13 to 15 present, as requested, high-level jurisdictional reviews of a Carbon Tax, an "Uber Tax", and a Municipal Land Transfer Tax as additional options for potential consideration. A full revenue option analysis is not within the scope of this study.
- Section 16 profiles the municipal funding models of New York, Chicago and Philadelphia;
- Section 17 profiles the revenue options against the City's existing property taxes;
- Section 18 provides a comparative analysis of the revenue options;
- Section 19 provides a summary of the revenue options, including a discussion of the strengths, weaknesses, opportunities and threats;
- Appendix A provides a summary of elasticity, avoidance deduction, and administrative cost assumptions;
- Appendix B is the City of Toronto's cordon charge map; and
- A Glossary of common terms used throughout the report has been included at the back of the report.

3 Revenue Profile: Alcoholic Beverage Tax

3.1 Overview of Revenue

Alcoholic beverage taxes generate revenue by placing a product-specific tax on the sale of alcohol and can take a variety of forms, such as a sales tax at the final point of sale, a volume-based tax embedded in the price consumers pay or as a direct mark-up. While there is no precedent for alcohol taxation by municipalities in Canada, alcohol taxes are well-established sources of revenue for the federal and provincial governments. Many large cities in the United States levy taxes on alcohol, and these taxes are used by all levels of government in many other jurisdictions around the world.

Since an alcoholic beverage tax in the form of a sales tax is permitted under COTA, this form of alcohol tax has been assessed herein. Alcohol sales at retail point of sale in Ontario are made through two primary channels: store sales and licensee sales. Store sales are made through the LCBO, agency stores, The Beer Store, various small breweries, distilleries and wine retailers. The Province has also announced the expansion of beer and wine sales in grocery stores across Ontario, including Toronto locations. Licensee sales mainly occur at bars, restaurants, nightclubs and entertainment venues (e.g., sporting events, theatres).

Alcoholic beverage taxes in the form of a sales tax can be applied to either store sales, licensee sales or both. For the purpose of this analysis, the annual revenue potential has been provided for each source, as well as for the combination of the two options. Potential substitution effects that may occur if alcoholic beverage taxes were levied on only one of the two categories of alcohol sales were not taken into account in the analysis. For example, a tax on licensee establishments may encourage consumers to increase store-bought consumption, and vice versa.

3.1.1 Revenue Structure

An alcoholic beverage tax in Toronto would take the form of a product-specific sales tax on personal use or consumption. If the City were to implement a sales tax on alcohol, an initial key policy decision would be where to tax consumption: store sales, licensee sales or both. As mentioned, both are addressed in this analysis.

3.1.2 Legislative Requirements

The City's authority to levy an alcoholic beverage tax is limited under COTA to a sales tax on:

- liquor, as defined in section 1 of the *Liquor Licence Act*, for personal "use or consumption";[6] and
- beer or wine, as defined in section 1 of the *Liquor Licence Act*, at "a brew on premise facility", as defined in section 1 of that Act, for personal use or consumption.[7]

3.1.3 Implementation Issues

As a consumption tax, an alcoholic beverage tax would be applied at the final point of sale on the price of alcoholic beverages before HST. Implementing and administering this type of sales tax would require thousands of retailers and licensees to submit remittance forms to the City, or potentially a third-party administrator on behalf of the City.

Determining those businesses required to collect and remit the tax could be straightforward since they must already be licensed by the Alcohol and Gaming Commission of Ontario and therefore the Province could provide the information. As part of the licensing process, alcohol retailers and licensees submit a Municipal Liquor License Clearance Form or Municipal Clearance for a Retail Store Authorization form through the City.[8]

Reaching an agreement with the two largest retailers of alcohol – the LCBO and The Beer Store – would greatly reduce administrative complexity. In contrast, there are far more independently owned bars and restaurants in Toronto, and these establishments are often small businesses with basic accounting systems. The cost of compliance would therefore likely be much higher for licensees. Reaching an agreement with large-scale licensees, such as those organizations that host professional sports, could help to reduce some administrative costs as those types of organizations typically have high volumes of alcohol sales.

The Canada Revenue Agency ("CRA") could potentially be engaged through a service agreement to collect the sales tax on behalf of the City for an annual fee. This would significantly reduce implementation timelines and ongoing administrative costs. However, there may be significant barriers to implementation if the CRA does not currently track tax receipts by local postal code. Additionally, provincial support and facilitation may be required as well, further contributing to administrative complexity.

[6] *City of Toronto Act*, 2006 – Part X: Power to Impose Taxes
[7] Ibid.
[8] City of Toronto Online Portal, City Clerk's Office, Municipal Liquor License Clearance

Initial analysis suggests that it would be very challenging to add an alcohol tax component to the existing HST. Thus, it has been assumed that the alcohol tax would be implemented and administered by the City as a separate tax regime.

If the City were to administer the alcoholic beverage tax itself, it would need to establish a dedicated department or division with additional staff, who would have to be hired and trained prior to the implementation of the alcohol tax. A City-administered system would also require IT and other services (e.g., compliance, audit) to support its collection and enforcement efforts. Given the many thousands of locations that sell alcohol within the city of Toronto, this would be a substantial undertaking requiring further study and stakeholder consultation.

3.1.4 Other Jurisdictions

Philadelphia

Philadelphia's Liquor Tax was established in 1995 and raised USD $60.5 million in 2015. All tax collections support the school district of Philadelphia.

The Liquor Tax is a 10% sales tax on every retail sale of liquor or malt and brewed beverage with few exceptions. Hotels, restaurants, clubs and other persons holding a license or permit to sell or dispense alcoholic beverages must file the tax. The Liquor Tax is filed and paid monthly, and the Department of Revenue issues a "Monthly Retail Liquor Sales Tax Coupon Book" to simplify tax payments. An annual reconciliation of Liquor Tax is also due.

Washington, D.C.

Washington, D.C.'s Alcoholic Beverage Tax is levied on alcoholic beverages manufactured by a holder of a manufacturer's license and on beverages brought into D.C. by the holder of a wholesaler's license. Manufacturers and wholesalers pay the tax monthly.

The tax is levied as a fixed amount per unit volume rather than on an "ad valorem" basis (i.e., based on the value of the transaction). Different tax rates apply to different types of alcoholic beverages[9] (presented in USD):

- Beer = $2.79 per barrel
- Champagne/sparkling wine = $0.45 per gallon
- Distilled Spirits = $1.50 per gallon
- Light wine (alcohol content 14% or less) = $0.30 per gallon

[9] DC.gov, 2016, Tax Rates and Revenues, Sales and Use Taxes

- Heavy wine (alcohol content above 14%) = $0.40 per gallon

Chicago

Chicago's Liquor Tax applies to businesses that sell alcoholic beverages. The tax is applied to the end purchaser and collected through the supply chain. It is then remitted to the Chicago Department of Finance through its Electronic Tax Filing and Payment site. The ultimate incidence and liability for payment of the tax is borne by the retail purchaser of alcoholic beverages.

Different tax rates apply to different types of alcoholic beverages (presented in USD):

- $0.29 per gallon of beer
- $0.36 per gallon of liquor containing 14% or less alcohol by volume
- $0.89 per gallon for liquor containing more than 14% and less than 20% of alcohol by volume
- $2.68 per gallon containing 20% or more alcohol by volume

3.2 Quantitative Assessment

3.2.1 Key Assumptions and Limitations

Alcohol sales data were drawn primarily from The Beer Store and the LCBO's 2014-15 Annual Report.[10] As the LCBO's financial information represents data for the province of Ontario, these available figures were scaled down using Toronto's share of Ontario's population. It is assumed that sale of alcohol per capita is consistent throughout Ontario.

As there were limited data available on licensee sales in Toronto, an indirect estimation approach was used. Based on 2015 Environics Analytics data provided by the City,[11] it appears that roughly 72% of alcohol expenditures by Toronto residents were made in stores, while 28% were made in licensed premises and restaurants. Therefore, using estimated store sales data for Toronto, the sales data for licensed establishments was inferred based on the channel shares noted above.

Self-brew wine and beer establishments, estimated to be approximately 1.5% of the total market in Toronto, were not considered.[12] Toronto does, however, have the authority to tax sales of self-made alcohol.

[10] LCBO. Annual Report 2014-2015, available at: http://www.lcbo.com/content/dam/lcbo/corporate-pages/about/pdf/LCBO_AR14-15-english.pdf

[11] Environics Analytics, 2015, City of Toronto Consumption data

[12] LCBO Annual Report 2015, Ontario Sales Channel Summary

3.2.2 Revenue Potential

3.2.2.1 Gross Revenue Potential

Tax rates of 1%, 2%, 5%, 8% and 10% are presented in Exhibit 3.1. These rates reflect the range of municipal liquor tax rates observed in the United States. These rates are presented here for comparative purposes. It should be noted that a sales tax rate of 8% to 10% would have a noticeable impact on retail sales prices. Such rates of increase could result in significant levels of avoidance, such as through a shift in sales to outlying jurisdictions.

Exhibit 3.1 – Alcohol Price Impact by Tax Rate ($)

	Sample Prices (pre HST)	Toronto sales tax Rate (% of pre HST)				
		1%	2%	5%	8%	10%
Case of Beer purchased at Beer Store[13]	31.51	0.32	0.63	1.58	2.52	3.15
Bottle of Liquor purchased at LCBO[14]	24.14	0.24	0.48	1.21	1.93	2.41
Bottle of Wine purchased at LCBO[15]	9.75	0.10	0.20	0.49	0.78	0.98
Drink at bar[16]	6.5	0.07	0.13	0.33	0.52	0.65

Exhibit 3.2 below indicates potential annual alcohol tax revenue for the City before deductions for demand elasticity, consumer avoidance and administrative and implementation fees (discussed in the following sections). This revenue has been categorized based on retail sales and licensee sales.

[13] LCBO Annual Report 2014 – 2015, Financial Overview
[14] Ibid.
[15] Ibid
[16] Numbeo, 2016, Cost of Living in Toronto, available at: http://www.numbeo.com/cost-of-living/city_result.jsp?country=Canada&city=Toronto

Exhibit 3.2 – Potential Annual Gross Revenue ($ millions)

	Estimate of Toronto Alcohol Sales (pre HST)	Toronto sales tax Rate (% of pre HST price)				
		1%	2%	5%	8%	10%
Stores	1,573.9	15.7	31.5	78.7	125.9	157.4
Licensees	608.4	6.1	12.2	30.4	48.7	60.8
Total	**2,182.3**	**21.8**	**43.6**	**109.1**	**174.6**	**218.2**

Total alcohol sales in the city of Toronto are estimated to be $2.2 billion. The range of annual revenue potential for the above rates varies between $22 million and $218 million, assuming the tax is levied on both retail and licensee sales.

3.2.2.2 *Demand Reduction*

Numerous studies on the price elasticity of alcohol have concluded that the price sensitivity to consumers depends heavily on the type of alcohol being consumed. Nevertheless, most studies conclude that price elasticity for alcohol is approximately -0.5 in developed countries.[17] An elasticity of -0.5 implies that a 10% tax on alcohol would decrease sales by 5%. This elasticity value is applied below in Exhibit 3.3 to both store and licensee sales. It would also be reasonable to expect that alcohol price elasticity may vary across population groups by age and disposable income, among other factors.

3.2.2.3 *Consumer and Vendor Avoidance*

Consumer Avoidance

An alcoholic beverage tax would be difficult for consumers to avoid paying, particularly in restaurant, bar and night club type establishments, given that once the consumer has chosen the location, they are a "captive audience". To the extent it would influence consumer behaviour, some consumers would purchase alcoholic beverages outside Toronto city limits to avoid paying the tax. For further discussion on this topic, see section 3.3.3 below.

Vendor Avoidance

Vendor avoidance (i.e., the act of vendors not collecting or not remitting taxes collected) would likely be higher for licensee establishments than for retail sales. Retail sales in Toronto take place primarily through the LCBO and The Beer Store (owned or highly

[17] Price Elasticities in Alcoholic Drinks, Euromonitor Research, August 2014

regulated by the Province and well-known businesses). These businesses can be expected to comply with any change in tax regime. However, the large number and range of types of licensee establishments in Toronto – from small bars and family-owned businesses to professional sporting events – may contribute to vendor avoidance. This may justify educating registrants about the new regime and any associated penalties. Doing so could help improve poor accounting controls and reduce unreported sales; however, some degree of non-remission and delinquent accounts will be inevitable, simply given the number of licensee establishments.

3.2.2.4 Implementation and Administration Costs

In section 12.2.2.4 of this report, the administrative cost of a general City of Toronto sales tax has been estimated at approximately $18 million per year. This figure has been used as a basis for estimating the administrative costs associated with an alcohol tax.

A general sales tax applies to a defined set of goods and/or services sold within a specific jurisdiction. The alcohol tax, in this case, is a subset of sales taxes specifically for alcohol purchases at retail stores and licensees. Based on 2015 Environics data, the share of alcohol expenditures on total consumption of sales tax-applicable goods in Toronto was 2.64%. This percentage was applied to the $18 million estimate to determine an approximate administrative cost for the alcohol tax. Recognizing there are economies of scale in the administration of a general sales tax that would not be realized in the administration of an alcohol tax alone, a multiplier of 2x has been applied to the estimate to arrive at an administration cost of approximately $1 million.

3.2.2.5 *Net Annual Revenue Potential*

Exhibit 3.3 – Net Annual Revenue Potential ($ Millions)

Type of Sale		Toronto sales tax Rate (% of pre HST)				
		1%	2%	5%	8%	10%
Stores	Revenue Potential Before Deductions	15.7	31.5	78.7	125.9	157.4
	Elasticity Deductions (-0.5)	0.1	0.3	2.0	5.0	7.9
	Avoidance Deduction (-1.5)	0.2	0.9	5.9	15.1	23.6
	Revenue Potential After Elasticity/Avoidance	15.4	30.2	70.8	105.8	125.9
Licensee	Revenue Potential Before Deductions	6.1	12.2	30.4	48.7	60.8
	Elasticity Deductions (-0.5)	0.0	0.1	0.8	1.9	3.0
	Avoidance Deduction (-2.0)	0.3	1.3	7.9	20.1	31.5
	Revenue Potential After Elasticity/Avoidance	5.7	10.8	21.8	26.6	26.3
	Administration Costs	1.0	1.0	1.0	1.0	1.0
Total	**Net Annual Revenue Potential**	20.4	40.1	91.7	131.4	151.3

3.2.3 Sustainability of Revenues

Research regarding alcohol consumption did not identify any relevant studies or other evidence to suggest that alcohol consumption will change significantly for the foreseeable future. Alcohol taxes are generally considered a reliable, long-term source of revenue. For example, the LCBO has reported consistent sales growth over the past 10 years and net sales in 2015 were up 4.3% from 2014.[18]

[18] LCBO Annual Report 2015

3.3 Qualitative Assessment

3.3.1 Impact on Stakeholders

An alcoholic beverage tax on retail stores would likely be borne largely by Toronto residents and residents of the GTA working within the city who consume alcohol. The burden for a tax on licensee sales, on the other hand, is more likely to be shared with tourists and residents from neighbouring jurisdictions. This reflects the role of the city as an entertainment hub for the region.

In general, taxes on alcohol are viewed favourably as a revenue option that not only generates significant revenue for governments but also acts as a means for reducing alcohol consumption and abuse. Additionally, alcohol is often viewed as a "luxury" item, as opposed to a necessity. To the extent that higher-income residents consume larger amounts of alcohol, particularly in higher price categories, they may bear more of the tax. However, lower income consumers without a car may have less opportunity to evade an alcohol tax by shifting retail purchases to neighbouring jurisdictions.

A tax on retail sales may be much more visible to the consumer than a tax on alcohol sold in licensed establishments. In bars and restaurants, consumers may pay less attention to the components of the bill, even if taxes are clearly itemized.

3.3.2 Impact per Affected Toronto Consumer Base

The portion of the alcoholic beverage tax that will affect consumers residing in Toronto can be determined by adding back administrative costs to net revenue and by reducing licensee sales for alcohol that was purchased by visitors. For the purposes of this calculation, it is assumed that all alcohol purchases at retail stores and two-thirds of alcohol sold at licensed establishments are made by residents of Toronto. The adjusted revenue balance is approximately $85.4 million at a tax rate of 5%. The consumer base in this case can be approximated using the total number of households in the City.[19] As a result, it is estimated that every Toronto household will see an increase of $73 per year on its total alcohol bill with the introduction of a 5% tax on the sale of alcohol.

The assumption that only 66.6% of licensee alcohol sales in the city are made by Toronto residents implies that 33.3% of the tax on licensee sales is exported to non-residents of the city. At a 5% tax rate, approximately $7.1 million of the potential tax revenue is from non-residents.

[19] This calculation implicitly assumes that some alcohol is consumed by each household. While this assumption does not hold (since some households will not consume any alcohol), it is a reasonable approximation for calculating tax burdens.

3.3.3 Impact on Economic and Business Activities

A municipal alcoholic beverage tax may result in some shift in retail purchasing behaviour. Residents near city limits and/or those purchasing large volumes of alcohol may travel to retail outlets just outside the City. The incentive to do so will be greater at higher tax levels. To the extent that these shifts occur, there may be some impact on employment in the City.

Restaurants and bars may be adversely affected by a tax in the event that they cannot fully pass the costs of the tax on to consumers. This may be a particular concern for establishments that are only marginally profitable or at the outskirts of the City, where competition from bars in neighbouring jurisdictions is greater.

3.3.4 Competitiveness and Avoidance

Consumers may exhibit different avoidance patterns at licensed establishments than at retail stores. More specifically, consumer avoidance from behavioural shifts is likely to be less for bars and restaurants, particularly those located in the downtown core. The location and ambience of licensed establishments is often an important component of their attractiveness to patrons. Hence, alternatives in nearby jurisdictions are an imperfect substitute. For retail sales, the underlying product purchased is the same across outlets, although there may be convenience benefits from a Toronto location.

As noted earlier, retail sales may shift to neighbouring jurisdictions. Tax avoidance may become a particular problem at higher tax rates, such as 5% or greater.

Alcohol availability is an integral part of the City's world-class cultural activities, including sports and entertainment events, bars and restaurants, and nightlife. An alcoholic beverage tax will likely have a minimal impact on tourism in the City, as Toronto is considered a cultural hub with many attractions.

3.3.5 Other Considerations

Revenues from an alcoholic beverage tax would need to be collected with remittance forms. The amount of regulation would impact compliance with the tax, so an enforcement program may have to be written into the draft of any such tax. Any such enforcement program would increase the annual administration cost of the revenue option.

3.4 Summary Evaluation

An alcoholic beverage tax has the potential to raise meaningful amounts of revenue for the City (between $20 million and $151 million annually) and can be considered a mainstream revenue option with substantial precedent in municipalities across the United States.

Disadvantages of an alcoholic beverage tax include: a majority of the potential revenue is related to a tax on retail sales, which – relative to a tax on licensee establishments – are subject to more consumer avoidance, are more visible to the end consumer and are more likely to be borne by Toronto residents than out-of-town visitors. At rates of 5% on both retail and licensee sales, net annual revenue raised would be approximately $92 million. At this tax rate, public opposition and avoidance are likely to be more sustained.

4 Revenue Profile: Entertainment and Amusement Tax

4.1 Overview of Revenue

An entertainment and amusement tax is a form of sales tax, whereby taxes are applied to consumption, measured by the price paid for goods or services. In other jurisdictions, an entertainment and amusement tax has been applied to amusement admission prices.

This type of tax is generally justified because:

- It is a tax on discretionary spending, often by disproportionately higher income earners, and
- It raises the possibility of "exporting" a portion of the burden tax to non-residents who spend money at entertainment events in the City.

An advantage of applying this tax is that prices tend to rise with inflation and volumes often expand with the scale of the economy, meaning there is little need to adjust the tax rate on an annual basis. On the other hand, because the tax is tied to consumer discretionary spending, it is much less predictable than some other revenue options.

4.1.1 Revenue Structure

Under COTA, the City has the authority to impose a sales tax on the purchase of admission to a place of amusement as defined in the *Retail Sales Tax Act*.[20] For simplicity, places of amusement, as defined in the *Retail Sales Tax Act*, have been understood in past studies[21] to encompass movie theatres, live performances, sporting events and night clubs. An entertainment and amusement tax would be imposed on the price of admission before HST.

Based on the experiences from other jurisdictions, there are three primary dimensions to consider in the design of a specific tax regime:

1) The subset of places of amusement that are taxed;
2) The tax rates imposed on places of amusement; and
3) The potential of implementing a "retailers' discount".

In determining the subset of places of amusement that are taxed, the City may want to address the following considerations.

First, an amusement tax may adversely affect organizations and activities generally considered beneficial to the City. These would include organizations and activities that

[20] City of Toronto Act, 2006, S.O., C11, Sched A. Part X – Power to Impose Taxes. Available at: https://www.ontario.ca/laws/statute/06c11
[21] Hemson Consulting Ltd., Assessment of Potential New Tax measures Under the City of Toronto Act 2006, March 2007.

promote the arts, or organizations that operate with financial support from public bodies (e.g., non-profits). Providing exemptions for these types of activities and organizations is possible, but could make administration more difficult.

Second, if an amusement tax is applied at places of entertainment that are not unique to Toronto (e.g., movie theaters), it may encourage customer avoidance through a shift in demand to neighbouring municipalities. This is particularly relevant for the city of Toronto, which is surrounded by densely-populated municipalities that can offer the same experience at a lower overall price, within close proximity.

To determine the tax rate to be imposed on places of amusement, the City will need to balance reduced demand due to elasticity of demand and customer avoidance, with the need to ensure that sufficient revenue is collected by the tax to justify any associated administrative costs and contribute to the City's revenues in a meaningful way.

Finally, the City might consider implementing a "retailers' discount" which provides the remitters of the sales tax with a small percentage share of the tax (generally in the order of 0.5% to 1.0%) to help defray a portion of the compliance costs. This approach is used in a number of U.S. cities.

4.1.2 Legislative Requirements

Under COTA, the City is authorized to impose a direct sales tax "…for the purchase of admission to a place of amusement as defined in the *Retail Sales Tax Act*". The *Retail Sales Act* defines a place of amusement as:

> "an amusement park or a premises or place, whether enclosed or not, where a projector or similar equipment is operated, or where a theatrical performance, carnival, circus, side show, menagerie, concert, rodeo, exhibition, horse race, athletic contest or other performance or entertainment is staged or held or where facilities for dancing are provided to the public with the service of liquor, beer or wine and to which admission is granted upon payment of a price of admission through the sale of tickets or otherwise"; ("lieu de divertissement").22

An amusement tax would therefore be limited to the entertainment activities listed above.

Toronto is currently the only municipality in Ontario to have this authority. To date, this authority has not been exercised.

4.1.3 Implementation Issues

Currently the 13% HST applies to places of amusement in Ontario. However, exemptions do apply to most goods and services provided by charities, and certain goods and services

[22] Retail Sales Act, R.S.O. 1990, c. R.31, Definitions. Available at: https://www.ontario.ca/laws/statute/90r31/v1

provided by non-profit organizations, governments, and other public service bodies. This effectively results in a tax decrease on places of amusement since HST was implemented in Ontario on July 1, 2010. Prior to HST implementation, the provincial tax rate on admission to places of amusement included a 2% surcharge to the 8% RST. (GST was charged in addition, with a rate of 5% prior to harmonization.) The provincial sales tax on entertainment only applied to admission over $4.00 and had several exemptions, listed below:

- Live performance or dance where 90% of the performers were Canadian;
- Live-entertainment theatre shows with 3,200 seats or fewer (comedy clubs, plays, concerts, etc.)
- Events held by registered charity groups and athletic associations;
- Trade shows' and
- Fund raising events.

At the time of the Hemson Report, the Province had not expressed interest in providing a sales tax administrative service for the City. Given the Province is no longer collecting the 2% surcharge tax on places of amusement and has implemented the HST in conjunction with the federal government, it is unlikely the Province would express interest in providing such services now. The Province no longer has a sales tax administration regime, reflecting the fact that the federal government has assumed administrative responsibility for the new joint tax regime.

While there was potential that the federal government would be interested in providing these services in 2007, the CRA had indicated that it would be less interested in providing services if the sales tax were limited in scope. Combined with the implementation of HST, it is less likely that the federal government would be interested in providing a sales tax administrative service for the City. Thus, it has been assumed in the analysis that the amusement tax would be implemented and administered by the City as a separate tax regime.

If the City were to administer the amusement tax itself, it would need to establish a dedicated department or division with additional staff, who would have to be hired and trained prior to the implementation of the revenue option. A City-administered system would also require IT and other services (e.g., compliance, audit) to support its collection and enforcement efforts. Compared to an alcohol tax regime, there are significantly fewer movie theatres, sports stadiums, and live entertainment venues in the city. Hence, the scope of administration and implementation is much narrower. If the City were to make an arrangement with large sporting arenas and stadiums such as the Air Canada Centre, the Rogers Centre, and BMO Field, this could significantly reduce administrative complexity.

4.1.4 Other Jurisdictions

In Canada, there are relatively few examples of the application of an entertainment and amusement tax, whereas the practice of applying a municipal tax on these products is common in the United States. In Canada, where municipal amusement taxes have been applied, they are generally limited to movie theatre admissions at a rate of 9 to 10%. Conversely, in the United States, amusement taxes have been applied to a broader range of activities and organizations (which may be prohibited by COTA in Toronto), but generally at a lower tax rate – ranging from approximately 1% to 5%.

Regina

The City of Regina has had the authority to tax amusement sales for more than 80 years. However Regina currently limits the tax to commercial movie theatres. In the past, the tax was applicable to professional football, university athletics, live theatre and opera, and events held on exhibition grounds.

The City of Regina charges a 10% tax, remitted to the municipality, with 1% retained by the theatre as an administrative fee for collecting the tax.[23] In 2015, the City of Regina anticipated collecting $700,000 from the amusement tax applied to theatre tickets.[24]

Saskatoon

The City of Saskatoon repealed Bylaw No. 8618, effective at the time of the Hemson Report, on June 25, 2007, and replaced it with Bylaw No. 7978.[25] This Bylaw revised the City's amusement tax to exempt cinemas from paying amusement tax, and required every person attending the midway at the Saskatoon Prairieland Annual exhibition to pay tax on each admission to an amusement ride, menagerie, sideshow or other amusement on the midway. Taxes vary with the amount of the entrance/admission fee, and are shown in Exhibit 4.1. Taxes owed are remitted directly to the municipality.

Exhibit 4.1 – Saskatoon Amusement Tax Amounts

Admission or Entrance Fee Range (Incl. Tax)	Amusement Tax
$0.26 - $0.35	$0.02
$0.36-$0.50	$0.03
$0.51 - $1.04	$0.05
$1.05 - $1.59	$0.10
$1.60 - $2.14	$0.15

[23] City of Regina. Strengthening Our Foundation: City of Regina 2015 Operating Budget and 2015-19 Capital Program.
[24] Ibid.
[25] City of Saskatoon. Bylaw No. 7978: The Amusement Tax Bylaw, 2000. June 25, 2007.

Admission or Entrance Fee Range (Incl. Tax)	Amusement Tax
$2.15 - $3.00	$0.20
$3.01 - $3.25	$0.25
$3.26 and over	9%

The Saskatoon Prairieland Exhibition Corporation is also entitled to a commission of 5% of the amount of tax collected.

Winnipeg

The City of Winnipeg levies a 10% Entertainment Funding Tax[26] on any venue hosting a performance with a ticket price of $5.00 or more for the following venues:

- Entertainment facilities with a fixed seating capacity of 5,000 seats or larger; and
- Cinemas to view films.

The City has specifically listed four taxable venues: the MTS Centre, the Canada Inn Stadium, the Canwest Global Baseball Park and Movie Theatre Cinemas. However, the City of Winnipeg also refunds the 10% entertainment tax for events held at the MTS Centre, under a 25-year agreement which came into effect in 2004.[27]

The stated purpose of the tax is "to provide a source of funding for the arts and culture in the City of Winnipeg."[28] Taxes owed are remitted directly to the City of Winnipeg's Assessment & Taxation Department.

Philadelphia

The City of Philadelphia charges a 5% amusement tax on the admission fee for attending concerts, movies, athletic contests, night clubs and convention shows. A number of organizations qualify for exemptions from this tax, which are generally intended for non-profit organizations where proceeds from the event solely benefit the non-profit.

The amusement tax is filed and paid monthly for the prior month's activity. The Department of Revenue issues a "Monthly Amusement Tax Coupon Book" to simplify tax payment. The operator/provider of any amusement or the promoter of any show located in Philadelphia is responsible for collecting and remitting the tax to the city. The amusement tax generated $19 million in revenues in 2015.

[26] City of Winnipeg. Simplified Entertainment Funding By-law No. 125/2006. November 2015.
[27] Winnipeg MetroNews. True North in line for $7 million in tax breaks for 2016. March 3, 2016. Available at: http://www.metronews.ca/news/winnipeg/2016/03/03/winnipeg-jets-true-north-tax-breaks-seven-million.html
[28] City of Winnipeg. 2015.

Pittsburgh

The City of Pittsburgh charges 4.76% on admissions at amusement venues, and 10% on the price paid for refreshments, service or merchandise when "entertainment or amusement is conducted at any roof garden, night club, cabaret or other place where the charge is wholly or in part included in the price paid for refreshments, service or merchandise." Additionally, the bylaw provides exemptions for performing arts and non-profit charitable events.[29] The tax is administered through remittance forms submitted by commercial operators to the City. The amusement tax generates approximately $14 million USD annually representing 3% of the City's general fund tax revenues .[30]

Phoenix

The City of Phoenix charges municipal amusement tax at a rate of 2.3% (effective January 1, 2016), which has been named the Privilege License (Sales) tax. When combined with State & County taxes, the tax rate amounts to 8.3%. This tax is levied on amusement activities including: video/game centers, theaters, amusement parks, batting/driving ranges, circuses, fairs/carnivals, bowling, golf, skating, tennis, sports events, exhibitions, dance halls, pool halls, shooting ranges, car/motorcycle races, etc.[31] The tax is administered through remittance forms and "differs from a sales tax in that the tax is imposed on the business, not the purchaser. While a business may pass the tax on to the consumer in the manner of a sales tax, the business is responsible for reporting and remitting the appropriate tax on their business activity."[32] Similar to other jurisdictions, non-profits have been exempted from the Privilege License tax. The Privilege License tax generates $324 million USD annually.[33]

Chicago

Chicago levies an amusement tax on a wide range of amusement activities, including: exhibitions, performances, presentations or shows, entertainment or recreational activities in which a person may participate (e.g., sightseeing boat rides), and paid television programming. This 9% tax is levied on charges paid for most activities, however a 5% tax is levied on charges paid for certain live theatrical, musical and other live cultural performances held in a space with a maximum capacity of 750 persons or less. Chicago has also provided exemptions for certain live cultural performances and certain amusements sponsored by religious, charitable, and not-for-profit organizations for fund raising purposes,

[29] City of Pittsburgh, Form AT 2015 –Amusement tax-City of Pittsburgh (Rev 09/14), 2014, Available at: http://apps.pittsburghpa.gov/finance/2015_AT.pdf
[30] City of Pittsburgh, Comprehensive Annual Financial Report for the year ended December 31, 2014
[31] City of Phoenix, City of Phoenix-Privilege License (Sales) Tax, June 2013, Available at: https://www.phoenix.gov/financesite/Documents/d_037807.pdf
[32] City of Phoenix, 2016, What is Transaction Privilege (Sales) & Use Tax? Available at: https://www.phoenix.gov/finance/plt/taxes
[33] City of Phoenix, Arizona Comprehensive Annual Financial Report for the fiscal year ended June 30, 2015,

provided that these events are restricted to two events per calendar year and do not exceed a total of 14 calendar days.

In 2016, the City of Chicago is forecasting revenues of $139 million USD, and in 2014, it collected $112.9 million USD in revenues from its amusement tax.

Cook County

Cook County, Illinois imposes a 3% amusement tax on the admission fees or other charges paid "…for the privilege to enter, to witness or to view…" an amusement which takes place within the County.[34] Rates for live entertainment are:

- 1.0% for any live theatrical, musical, cultural experiences in any auditorium, theater, other space in the county with a capacity of between 750-4,999 persons, and
- 1.5% for all events with a capacity greater than 5000 persons.[35]

It is the responsibility of the owner/operator of the amusement to collect from each patron the tax imposed and then remit it to the County on a monthly basis.[36] The amusement tax generated revenues of $29.9 million USD in 2014 or approximately 1.5% of annual county revenues.[37]

4.2 Quantitative Assessment

4.2.1 Key Assumptions and Limitations

Toronto sporting admission for 2012 were estimated using Forbes gate receipt estimates for Toronto's three largest professional sports teams: the Maple Leafs, Blue Jays and Raptors. It should be noted these figures do not include playoff ticket sales and that, in general, admissions to professional sporting events can fluctuate considerably from year-to-year. The estimate for Toronto sporting admissions revenues is conservative, as revenues associated with other leagues (e.g., professional soccer, football, lacrosse) were not included.

Movie theatre admissions for Ontario were determined using the 2012 Statistics Canada motion picture theatres survey. This figure was then scaled down to 25%, the percentage

[34] Cook County, November 2015, 15-6024 Ordinance-Amusement Tax Ordinance, Available at: http://www.cookcountyil.gov/wp-content/uploads/2014/06/Amended-Amusement-Tax.pdf
[35] Ibid.
[36] Ibid.
[37] Cook County Council, Cook County Comprehensive Annual Financial Report for the year ended November 30, 2014

of the Province's admission receipts allocated to Toronto. This ratio is equal to that used in the Hemson Report.

Live entertainment expenditures in 2012 for Ontario were provided on a per household basis by Statistics Canada.[38] These expenditures were scaled for Toronto based on the relative recreational spending of Torontonians vs. Ontarians in 2005,[39,40] and on the estimated number of households in Toronto in 2014 (which were developed based on the number of housing units in the city of Toronto in 2011[41] plus housing completions in the city of Toronto from 2012-2014[42]). In keeping with the Hemson Report, an additional $50 million was added to account for non-Toronto resident spending in the city of Toronto, and the spending was also reduced by 35% to account for possible exemptions (e.g., non-profits, etc.).

No allowances were made for nightclub admissions due to lack of data. Generally, the annual revenue estimates for an amusement tax for the City of Toronto should be considered conservative estimates.

4.2.2 Revenue Potential

4.2.2.1 Gross Revenue Potential

To simplify comparison, the analysis assesses the same potential tax rates as used in the Hemson Report: 1%, 2%, 5%, 8% and 10%. These generally reflect the tax rates applied in other municipal amusement taxes. Exhibit 4.2 provides the estimated annual revenue from an amusement tax by type of amusement, before adjustments for demand elasticity and customer avoidance.

[38] Statistics Canada, CANSIM, Table 203-0021 and Catalogue no. 62F0026M

[39] Statistics Canada. Table 203-0010 - Survey of household spending (SHS), household spending on recreation, by province and territory, annual

[40] Statistics Canada. Table 203-0001 - Survey of household spending (SHS), household spending, summary-level categories, by province, territory and selected metropolitan areas, annual

[41] City of Toronto. Toronto city Planning. 2016 Housing Report. 2016. Available at: http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/SIPA/Files/pdf/H/Housing%20Occupancy%20Trends.pdf

[42] CMHC. CMHC Housing Starts and Completion Survey, City of Toronto. Available at: https://www03.cmhc-schl.gc.ca/hmiportal/en/#TableMapChart/3520005/4/Toronto%20(C)

Exhibit 4.2 – Estimated Annual Amusement Tax Revenue ($ Millions)

Type of Amusement	Estimate of Toronto Amusement Sales (2012, before HST)	Toronto Sales Tax Rate (% of pre HST price)				
		1%	2%	5%	8%	10%
Movies	107.3	1.1	2.2	5.4	8.6	10.7
Sporting Events	164.0	1.6	3.3	8.2	13.1	16.4
Live-Performing Arts	119.3	1.2	2.4	6.0	9.6	11.9
Total	**390.7**	**3.9**	**7.8**	**19.5**	**31.3**	**39.1**

Based on these assumptions, between $3.9 million and $39.1 million in annual revenues could be generated from an amusement tax.

4.2.2.2 Demand Reduction

Although not well publically researched, admission revenues to live entertainment are generally considered to be price elastic. This is due in part to the fact that entertainment is considered a luxury good. Based on information provided by a standard economics textbook, the price elasticity for movie theatres is assumed to be -0.87 while that of live sporting events and shows is assumed to be -0.23. Another study cited that the elasticity of performing arts tickets is between -0.3 and -0.6;[43] the average of this range (-0.45) was used for the analysis. These figures mean that a 10% increase in movie ticket prices will reduce demand by 8.7% but the same 10% increase in the cost of live performing arts tickets will reduce demand by only 4.5%. Similarly, the same increase in live sports entertainment tickets will reduce demand by only 2.3%. These differences in demand impact are due in part to the fact that there are not many substitutes to the unique experience that live entertainment provides, whereas one could wait for a movie to stream online instead of going to the cinema. Competition for movie theatres from internet streaming services is likely increasing given the advent of services such as Netflix.

It should be noted that the elasticity of live sporting events was based on that of Major League Baseball games.

4.2.2.3 Consumer and Vendor Avoidance

Of the three types of amusement taxes examined, it is likely that movies are most susceptible to consumer avoidance because movies are identical regardless of where they are viewed. Therefore, Toronto residents, particularly those around the periphery of the City, could go to movies just outside the city (for example in Vaughan or Mississauga) to avoid

[43] Levy-Garboua, Louis. 1996, A Microeconometric Study of Theatre Demand, *Journal of Cultural Economics 20: 25-250. Kluwer Academic Publishers*

the entertainment tax. However, unique screening events such as the Toronto Film Festival are likely to be unaffected.

Consumer avoidance for sporting events is likely to be extremely low, given that these events are generally specific to Toronto, and that the majority of live sporting event admissions revenue is accounted for by the Maple Leafs, Raptors, Blue Jays, Toronto FC and the Argos. There are few large scale sporting events that occur outside the city of Toronto, but still within the GTA.

The majority of the major venues within the GTA for live-performing arts are located in the city of Toronto. It can be assumed that the majority of revenues generated from live-performing arts would be from events held at these large venues, and therefore it is unlikely that avoidance would play a significant role.

Vendor avoidance is not expected to be a major issue for these three types of entertainment given:

a) there are about 30 commercial movie theatres in Toronto,[44] which are primarily owned by Cineplex;

b) MLSE and Rogers own the majority of major sporting events and live entertainment venues in the city and the number of promoters who handle the events is quite small; and

c) There are few large live entertainment venues in the City, and like sporting events, the number of promoters is also quite small.

Following the Hemson Report, avoidance for movies, sporting events and live entertainment is assumed to be -0.5, -0.3, and -0.4, respectively.

4.2.2.4 Implementation and Administration Costs

Ongoing administration costs for the entertainment and amusement tax have been estimated at one million dollars. It is assumed the City would be required to administer this tax, and would therefore need to engage with those market participants to which the tax applies. The City would need to collect, account for, audit and potentially enforce the application of the tax. Given the specific nature of the tax and industry, the City could potentially minimize the number of individuals they engage by working with parent companies (e.g. Cineplex, MLSE, Rogers) versus individual locations.

[44] Cinemaclock, 2016, Movies Theatres in Toronto

4.2.2.5 *Net Annual Revenue Potential*

Exhibit 4.3 illustrates the potential revenue generated annually from an amusement tax in the City of Toronto, after accounting for demand elasticity, consumer avoidance, and implementation and administration costs.

Exhibit 4.3 – Net Annual Revenue Potential from an Amusement Tax ($ Millions)

Type of Amusement		Toronto Sale Tax Rate (% of pre-HST price)				
		1%	2%	5%	8%	10%
Movie Admission	Revenue Potential Before Deductions	1.1	2.1	5.4	8.6	10.7
	Elasticity Deductions (-0.87)	0.0	0.0	0.2	0.6	0.9
	Avoidance Deduction (-0.5)	0.0	0.0	0.1	0.3	0.5
	Revenue Potential After Deductions	1.1	2.1	5.0	7.6	9.3
Sports Events	Revenue Potential Before Deductions	1.6	3.3	8.2	13.1	16.4
	Elasticity Deductions (-0.23)	0.0	0.0	0.1	0.2	0.4
	Avoidance Deduction (-0.3)	0.0	0.0	0.1	0.3	0.5
	Revenue Potential After Deductions	1.6	3.2	8.0	12.6	15.5
Live Performing Arts	Revenue Potential Before Deductions	1.2	2.4	6.0	9.5	11.9
	Elasticity Deductions (-0.45)	0.0	0.0	0.1	0.3	0.5
	Avoidance Deduction (-0.4)	0.0	0.0	0.1	0.3	0.5
	Revenue Potential After Deductions	1.2	2.3	5.7	8.9	10.9
	Total Revenue after Avoidance and Elasticity deductions	3.9	7.7	18.7	29.1	35.7
	Administration Costs	1.0	1.0	1.0	1.0	1.0
Total	**Net Annual Revenue Potential**	**2.9**	**6.7**	**17.7**	**28.1**	**34.7**

Based on the assumed demand elasticity, consumer avoidance and administration costs, total revenue from an amusement tax in the city of Toronto would range from approximately $2.9 million to $34.7 million annually.

4.2.3 Sustainability of Revenues

Because the tax would be levied on the retail price of the ticket, which will generally grow with the economy, revenues from an entertainment and amusement tax are likely to grow in the long term.

An amusement tax, however, is also a tax on discretionary spending; revenue is thus more likely to fluctuate with local economic conditions. In addition, revenues generated from an amusement tax vary significantly based on local sports teams' performance and on popular culture trends (e.g., music artists' popularity and ability to sell-out a given venue). So while revenue growth is expected, it is unlikely to occur in a smooth and stable fashion.

4.3 Qualitative Assessment

4.3.1 Impact on Stakeholders

Impacts will likely vary by the type of entertainment:

- Demand for movies has a higher price elasticity and exhibits greater potential for consumer avoidance. This may mean that businesses will pass less of the price increase to consumers and will ultimately pay more of the tax (by lowering net ticket prices).
- Demand for live sporting events and performing arts shows lower price elasticity and the potential for avoidance is lower. As a result, more of the cost may be passed on to consumers.

This distribution of impacts by type of consumer may also differ by the nature of entertainment. Relative to the population at large, live sporting events and performing arts shows may have a relatively higher proportion of attendees who are:

- High-income earners, and/or.
- From out of town.

This reflects the fact that entertainment spending is a discretionary activity and Toronto has a high concentration of sporting and arts activities. Since the tax burden will therefore tend to fall on higher-income individuals, an entertainment tax may be considered to be less regressive than other potential types of tax. Since some of the tax burden can also be transferred to out of town residents, the tax has relatively high exportability.

Lower income residents are more likely to attend movie theatres than live sporting or arts events. Hence, it is likely that a tax on movies will be more regressive.

4.3.2 Impact per Affected Toronto Consumer Base

The portion of the amusement tax that will affect Torontonians can be determined by adding back administrative costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the purposes of this calculation, it is assumed that 66.6% of the amusement tax is paid by Torontonians, and the remaining 33.3% is exported to visitors of the City. The adjusted revenue balance is approximately $12.5 million at a 5% tax rate. The consumer base in this case can be approximated using the total number of households in the city as it is assumed that all households participate in some level of entertainment offered by the City's amusement establishments. As a result, it is estimated that every Torontonian household will see an increase of $11 per year on their total entertainment bill with the introduction of a 5% entertainment tax. At the same tax rate, approximately $5.9 million of the potential tax revenue is exported to non-residents.

4.3.3 Impact on Economic and Business Activities

While it is expected that consumers would bear the majority of the tax, there may be some resistance from businesses who collect the tax, resulting of a fear that they will lose business. Given that the live sporting and live entertainment "big ticket" events are unique to Toronto, lost revenues are not likely to be significant.

Lost revenues are more likely to be an issue for entertainment businesses where more alternatives outside of city limits are available, such as movie theatres and perhaps also bars, and clubs.

Before an amusement tax is implemented, policy decisions must be made to determine any exemptions the City would like to grant. These exemptions would likely be implemented to avoid harming the small local art and athletic community as well as non-profit organizations. The City may also consider impacts on small businesses. For simplicity and to reduce any negative stakeholder perceptions, the City may be best served by mirroring the exemptions of the former provincial amusement tax. These exemptions may have continued political support.

4.3.4 Competitiveness and Avoidance

It is unlikely that an amusement tax would have major implications for Toronto's competitiveness given:

a) The majority of large-scale sporting and live-entertainment venues are located within the city, and therefore the events will likely continue to be held within the city;

b) The sporting and live-entertainment events that take place within the city are unique, and not easily replaced with alternatives; and

c) Non-residents of Toronto will likely still want to participate in the unique events held within the city (for example, Raptors or Leafs fans residing outside the city but within the GTA will likely still purchase tickets).

The obvious exception is the competitiveness of movie theatres within Toronto that offer the same experience as movie theatres outside the city.

The other scenario the City should consider is the possibility of new major event (sporting or live entertainment) venues being constructed outside the city of Toronto limits, which could provide more direct competition to venues existing within the city, and change the competitive landscape.

4.3.5 Other Considerations

An increase in tax may provide incentive (particularly for smaller establishments that can "fly under the radar") to underreport tax revenues.

4.4 Summary Evaluation

Given that an entertainment and amusement tax affects discretionary, recreational spending, it can be argued that it is preferable to revenue options that affect other goods and services where consumers may have less choice in paying. An entertainment tax is less regressive in nature. In Canada, there are several jurisdictions (e.g., Regina, Saskatoon, Winnipeg) that have existing municipal frameworks in place for collection that Toronto could further study and potentially adopt.

A shortcoming of this revenue option, however, is the relatively low (as compared to other revenue options assessed) potential for net revenue generation annually. There may also be demands from the arts and entertainment sector to earmark a portion of these funds for promoting Toronto's cultural attractions more broadly, or to compensate entertainment venues for collection and remittance costs.

5 Revenue Profile: Motor Vehicle Ownership Registration Tax

5.1 Overview of Revenue

5.1.1 Revenue Structure

The motor vehicle ownership registration tax is an annual tax that would be charged to owners of cars, motorcycles, and mopeds if their registration addresses are in the City of Toronto. This tax was previously enacted by the City under the name of the "Personal Vehicle Tax" in September of 2008, and was repealed in early 2011. Conceptually, the revenue option can be customized to price discriminate across different types, ages, and classes of vehicles to help drive policy objectives such as encouraging the use of fuel efficient vehicles.

Currently, vehicles in Toronto are subject to a provincial registration fee, which is collected annually or bi-annually by the Province. A municipal vehicle registration fee could be collected through the Province's existing administrative infrastructure to reduce the administrative costs associated with municipal tax collection and the municipal portion of the fee could be remitted to the City by the Province. For the purposes of this analysis, it has been assumed that the tax would be implemented in the same structure as it was in 2008. This means that a flat rate has been assumed to be levied on all personal vehicle registration events and that the fee would be cut in half for the registration of motorcycles and mopeds. The enforcement of this revenue option would be on personal vehicles, with corporate or commercial vehicles being exempt (similar to how the revenue option was implemented previously).

5.1.2 Legislative Requirements

Section 267 of COTA permits the collection of a vehicle registration tax as it is not listed as one of the exclusions in Subsection 2 of the relevant paragraphs.[45] Further, Section 271 of the Act allows the City to enter into agreements with another person or entity, including the Province to assist in collection of the imposed taxes.[46]

As noted above, a similar tax under the name of the "Personal Vehicle Tax" was implemented in the City of Toronto in 2008, but was later repealed in 2011 when new City officials were elected. During the tenure of the tax, the City leveraged the mechanisms that the Province had in place to assist in the collection of fees.

[45] Province of Ontario, 2006, City of Toronto Act
[46] Ibid

5.1.3 Implementation Issues

When the Personal Vehicle Tax was first implemented in 2008, the City did not have an existing regime for collecting a vehicle tax. To minimize implementation and administrative costs, the City piggy-backed off of the Province's existing infrastructure for registering vehicles and collecting fees for vehicle ownership and operation.

Currently, the Province collects annual vehicle registration fees through ServiceOntario service centres or via the ServiceOntario website. If the City were to reinstitute the motor vehicle registration tax, the Province's collection processes should be able to once again be modified to facilitate the collection of the City's additional fees.

The costs of administration and collection of a vehicle registration tax outside of the Province's existing collection and enforcement mechanisms will likely be much higher. Given that the City has already implemented this once through the Province, it is likely that the City could once again partner with the Province for the collection and remission of the tax.

5.1.4 Other Jurisdictions

Southern Ontario

In Southern Ontario, the annual registration fee of $108 is charged by the Province to both passenger and commercial vehicles weighing less than 3,000 kg.[47] The fee has increased from $74 in 2011 to $108 in 2016.[48] Motorcycles and mopeds are currently charged $42 and $12 respectively.[49]

[47] Service Ontario, 2016, Register a vehicle (permit, license plate and sticker), Available at: https://www.ontario.ca/driving-and-roads/register-vehicle-permit-licence-plate-and-sticker
[48] Chittley, J, 2015, Ontario hikes vehicle sticker renewal cost again, Globe and Mail. Available at: http://www.theglobeandmail.com/globe-drive/news/trans-canada-highway/ontario-hikes-vehicle-sticker-renewal-costagain/article26191507/
[49] Service Ontario, 2016, Register a vehicle (permit, license plate and sticker).

Exhibit 5.1 – Ontario vehicle registration fee ($)

Effective date	Annual rate
September 2011	74
September 2012	82
September 2013	90
September 2014	98
September 2015	108

Source: Chittley, J. 2015. Globe and Mail. Ontario hikes vehicle sticker renewal cost again. http://www.theglobeandmail.com/globe-drive/news/trans-canada-highway/ontario-hikes-vehicle-sticker-renewal-costagain/article26191507/

Quebec

In Quebec, most large cities charge an additional $30 annual fee in addition to the Province's $114 fee for vehicle registration.[50] This fee is collected centrally by the province and distributed to municipalities specifically for the purpose of funding public transit.

British Columbia

Most municipalities in British Columbia, including the City of Vancouver, charge a commercial vehicle license fee on top of the provincial registration fee. The license is required to operate a commercial vehicle within or between participating municipalities. The fee ranges between $25 and $40 depending on the weight of the vehicle, and can be paid at any participating municipal city hall.[51] There is no equivalent fee for personal vehicles.

United States

In 2015, cities in 27 states collected some form of vehicle registration tax either centrally through the state or locally through their counties.[52] The exhibit below provides a sample of registration fees in major U.S. cities. In cities such as Nashville and New York City, the states collect the vehicle taxes on behalf of the city, whereas in cities such as Chicago and Dallas, the city or county collects only their portion of the fees directly at municipal offices.

[50] Societe de l'assurance automobile, 2016, Rates and Fines, Available at: https://saaq.gouv.qc.ca/en/saaq/rates-fines/vehicle-registration/cost-registration-renewal/passenger-vehicles/
[51] Union of BC Municipalities, 2015, Commercial Vehicle Licensing Program, Available at: http://www.ubcm.ca/EN/main/services/commercial-vehicle-licences.html
[52] Wallethub, 2016, 2016's Property Taxes by State, Available at: https://wallethub.com/edu/states-with-the-highest-and-lowest-property-taxes/11585/

Exhibit 5.2 – American cities vehicle taxes (rounded to the nearest $)

City	City Rate	State Rate	Collected by
Chicago, IL[53]	86	101	City
Nashville, TN[54]	81	22	State
New York, NY[55]	15	24	State
Dallas, TX[56]	10	51	City

5.2 Quantitative Assessment

5.2.1 Key Assumptions and Limitations

As a version of the vehicle registration revenue option has already been implemented in the City of Toronto within the past decade, the basis of the revenue estimate is the actual revenue data found in the City's historical annual financial statements. Although vehicle registration revenue data is available for the three year period between 2008 and 2010, only 2009 data was used for the purpose of the estimate. 2008 data was skewed by the revenue tool's mid-year implementation, and 2010 data contained registration fee deferral refunds as a result of the repeal of the tax in 2011. Exhibit 5.3

Exhibit 5.3 – Gross revenue from Toronto PVT between 2008-2010 ($ Millions)

Year	Gross Revenue
2010	42.8
2009	51.7
2008	15.0

Source: City of Toronto, 2010, Financial Reports & Statements

A cumulative annual growth rate for vehicle registration was calculated using the Province of Ontario's vehicle registration count between 2004 and 2014. This annual growth rate for the province of 1.4% was applied to the known number of vehicles registered within the City of Toronto in 2004 to approximate the number of vehicles registered within the City of

[53] City of Chicago Office of the City Clerk, 2016, Chicago City Vehicle Sticker FAQs, Available at: http://www.chicityclerk.com/city-stickers-parking/about-city-stickers
[54] Davidson County Clerk, 2016, Registration Renewal, Available at: http://www.nashvilleclerk.com/motor-vehicles/
[55] New York State Department of Motor Vehicles, 2016, Passenger Vehicle Registration Fees, Available at: https://dmv.ny.gov/registration/registration-fees-use-taxes-and-supplemental-fees-passenger-vehicles
[56] Texas Department of Motor Vehicles, Texas Registration Fees, 2016

Toronto in 2016.[57] The 2004 City of Toronto vehicles registration count was provided in the Hemson Report.

Exhibit 5.4 – Vehicle count in Ontario in 2004 and 2014

Year	Cars (less than 4,000 kg)	Motorcycles and mopeds	Vehicles (calculated as cars + motorcycles and mopeds /2)
2004	6,679,102	119,633	6,738,919
2014	7,710,424	213,283	7,817,066
Cumulative Average Growth Rate: 1.4%			

Source: Statistics Canada, 2016, Table 405-0004 Road motor vehicles, registrations, http://www5.statcan.gc.ca/cansim/a26

5.2.2 Revenue Potential

5.2.2.1 Gross Revenue Potential

When the personal vehicle tax was introduced in the City of Toronto in 2008, the fee was set at $60 for personal vehicles (excluding vintage vehicles) and $30 for motorcycles and mopeds.[58] Of the jurisdictions reviewed as a part of this study, the highest municipal fee was $86 in Chicago, and the lowest was $10 in Dallas. Taking into consideration these benchmark values, and also taking into consideration the fact that $60 was the actual fee charged by the City of Toronto in its prior implementation, a lower bound of $20 and an upper bound of $100 was established for the purposes of evaluating the annual revenue potential of a vehicle registration tax.

The revenue potential calculation for this revenue option is different when compared to the calculations performed for other revenue options in this report, as actual historical revenue data from the City are available for this analysis. Using gross 2009 revenue figures from the City's Personal Vehicle Tax and the estimated vehicle count in Toronto for the same year, an effective rate of $42.50 was calculated as a proxy for annual gross revenue per vehicle registered in Toronto. Given that this rate was calculated using actual revenues generated from the Personal Vehicle Tax, it effectively takes into consideration any vehicles that were exempted from the tax, and provides some insight into potential elasticities or avoidance factors at a specific price point ($60 in 2008-2010 dollars per personal vehicle, half that for motorcycles and mopeds). Examples of exemptions from the City's previous tax that contribute to the difference between the $60 fee and the estimated $42.50 effective rate include all the commercial vehicles and vintage vehicles that were not taxed. Effective rates under each potential fee scenario are calculated as a percentage of the fee's deviation from the $60. It should be noted that the effective rate is purely a mathematical calculation to be applied to the total number of vehicles registered in the city, and does not affect the actual

[57] Hemson, 2007, Assessment of Potential New Tax Measures Under the City of Toronto Act, 2006
[58] City of Toronto, 2008, Personal Vehicle Tax – Administrative Design Features and Implementation Authorities Staff Report for Executive Committee

rate that is paid by taxpayers. The analysis sensitizes for different fees that might be charged ranging from $20 to $100. The sensitivity analysis is performed by calculating the percentage deviation from $60 which was used to calculate the peg for the effective rate.

Estimated gross revenue in 2016, presented in Exhibit 5.5, was calculated by multiplying the estimated effective rates under each fee amount by 1,337,980, which is the estimated number of registered vehicles in the city of Toronto in 2016.

Exhibit 5.5 – Gross Annual Revenue Potential ($ Millions)

Fee amount	$20	$40	$60	$80	$100
% deviation from $60	33%	67%	100%	133%	167%
Effective rate (revenue per registered vehicle)	14.2	28.3	42.5	56.6	70.8
Annual gross revenue	18.9	37.9	56.8	75.8	94.7

5.2.2.2 Demand Reduction

Although a $60 fee represents a 55.6% increase to the current $108 annual registration fee Torontonians have to pay to register their vehicles, it is only a small percentage of an owner's annual cost of owning and operating a vehicle. The Canadian Automobile Association estimated that in 2013, the average annual cost of owning and operating a vehicle was $10,457.[59] Assuming an annual inflation factor of 2%,[60] the cost of owning and operating a vehicle in 2016 is estimated to be $11,097. Based on an annual vehicle registration fee of $60, the fee accounts for less than 1% of the annual cost of owning and operating a vehicle.

Given that the new levy will account for a very small percentage of an owner's total annual cost of ownership, it is assumed that vehicle ownership will be inelastic to the registration fee based on the range of fees presented in the table above. It is unlikely that the residents of Toronto will give up car ownership or move out of the city as a result of the introduction of this new levy. Analysis done by the Victoria Transport Policy Institute suggests that elasticity of such a tax is approximately -0.04 to -0.08.[61] For the purposes of this analysis, an elasticity of -0.06 (the midpoint of this range) has been used in the analysis below.

[59] Canadian Automobile Association, 2013, CAA 2013 Driving Cost Report, Available at: http://www.caa.ca/wpcontent/uploads/2012/06/CAA_Driving_Cost_English_2013_web.pdf
[60] Bank of Canada, 2016, Inflation Control Target, http://www.bankofcanada.ca/rates/indicators/key-variables/inflation-control-target/
[61] Victoria Transit Policy Institute, 2013, Understanding Transport Demands and Elasticities, Available at: http://www.vtpi.org/elasticities.pdf

5.2.2.3 Consumer and Vendor Avoidance

To avoid the payment of the vehicle registration fee, a Toronto resident could register ownership of their vehicle to an address outside the city such as their cottage home or an investment property in a neighbouring municipality.

Consumer avoidance would likely become a material consideration if the registration fee was implemented by the City in the absence of cooperation with the Province. For example, high rates of non-compliance (40%) were seen by a locally administered vehicle tax in unincorporated areas of Cook County, Illinois in the early 2000s.[62] Given that the Province already has a system in place and already requires vehicles to be registered annually or bi-annually, it would be difficult for vehicles with a registration address in the city of Toronto to avoid paying the tax.

Vendor avoidance is not expected to be a problem as the City can leverage the existing infrastructure currently used by the Province and the fees would be collected directly by the Province.

An avoidance elasticity equal to the magnitude of the demand reduction elasticity of -0.06 has been used for the purposes of this analysis since both consumer and vendor avoidance is expected to be very low.

The calculation for the effects of demand and avoidance elasticity takes into consideration the inherent impact of elasticity in the $42.5 effective rate on the $60 fee price. As such, the base price used in the elasticity calculation includes a fee of $60.

Exhibit 5.6 – Gross Annual Revenue Potential with Adjustments ($ Millions)

Fee amount	20	40	60	80	100
% deviation from $60	33%	67%	100%	133%	167%
Effective rate ($ revenue per registered vehicle)	14.2	28.3	42.5	56.6	70.8
Gross revenue	18.9	37.9	56.8	75.8	94.7
Elasticity adjustment	0.006	0.006	-	(0.012)	(0.029)
Avoidance adjustment	0.006	0.006	-	(0.012)	(0.029)
Revenue after elasticity and avoidance adjustments	**19.0**	**37.9**	**56.8**	**75.8**	**94.7**

5.2.2.4 Implementation and Administration Costs

Implementation and administration costs for a vehicle registration tax can be estimated using the City and Province's financial projections from when the tax was first implemented in 2008. At that time, the Province estimated that a one-time system development and

[62] Cook County Illinois, 2001, Fiscal Strategies for Cook County.

project management cost of approximately $1.8 million would be required.[63] Ongoing operations by the Province to collect, administer, and enforce the tax were estimated to cost approximately $650,000 annually.[64] These costs would be incurred by the Province on behalf of the City, and as such would need to be recovered from the City. In addition to provincial administrative costs, the City estimated an annual $350,000 in administrative charges would be incurred at the municipal level to oversee the administration of the tax.[65]

If the City reintroduced the vehicle registration tax, it is expected that the initial implementation costs would be lower than when the tax was first introduced in 2008. The Province and the City should be able to leverage the previous blueprint for the implementation of the tax, and the changes to the existing system infrastructure should be well understood.

In order to estimate the annual net revenues that could be generated by the vehicle registration tax, the analysis assumes that the administration costs incurred at the provincial and municipal levels (as outlined above) would continue to be applicable. These amounts have been adjusted for inflation at a rate of 2% per year.

5.2.2.5 Net Annual Revenue Potential

Exhibit 5.7 – Net Annual Revenue Potential ($ Millions)

Fee amount	20	40	60	80	100
% deviation from $60	33%	67%	100%	133%	167%
Effective rate ($ revenue per registered vehicle)	14.2	28.3	42.5	56.6	70.8
Gross revenue	**18.9**	**37.9**	**56.8**	**75.8**	**94.7**
Elasticity adjustment	0.006	0.006	-	(0.012)	(0.029)
Avoidance adjustment	0.006	0.006	-	(0.012)	(0.029)
Revenue after elasticity adjustments	**19.0**	**37.9**	**56.8**	**75.8**	**94.7**
Annual City administrative costs	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)
Annual provincial administrative costs	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Net annual revenue potential	**17.8**	**36.7**	**55.7**	**74.6**	**93.5**

[63] City of Toronto, 2008, Personal Vehicle Tax – Administrative Design Features and Implementation Authorities Staff Report for Executive Committee
[64] City of Toronto, 2008, Personal Vehicle Tax – Administrative Design Features and Implementation Authorities Staff Report for Executive Committee
[65] Ibid

5.2.3 Sustainability of Revenues

It can be assumed that Toronto residents' desire to own cars will slowly decline with the introduction of autonomous vehicles, ridesharing, and transit investment in the city over the next decade. However, the decline of personal vehicle ownership may be partially offset by increased commercial vehicle ownership as businesses continue to offer ridesharing services. The City could consider charging commercial vehicle registration fees to help sustain this revenue option. Overall, the vehicle registration fee should be a viable long-term source of income over the next ten years if the City is willing to include commercial vehicles in the taxable pool.

5.3 Qualitative Assessment

5.3.1 Impact on Stakeholders

In contrast to other revenue options that tax transportation-related activities such as road pricing or parking, the vehicle registration tax would only impact vehicle owners who reside in Toronto. Owners of vehicles would bear the entire burden of the tax, and the portion of the population who rely on other methods of transportation such as bicycles and public transit would not be directly affected by the levy.

A related consideration is that residents of suburban areas in the outskirts of the city, where residents are generally more dependent on the automobile, may perceive the tax more negatively than residents of the inner city. Perceptions of unfairness could also arise because commuters into the city can use the city road network without having to pay the tax. Thus, it may be appropriate to combine this mechanism with other revenue options targeted at non-residents.

When compared to other property taxes such as the city's home property tax, the vehicle registration tax is not proportional to the base value of the asset. All vehicles within the same weight class are taxed at the same rate, no matter the value of the car. It could be argued that higher income families on average own more expensive cars than those families with lower income. Given that the vehicle registration fee is a flat fee, the tax is slightly regressive in nature. However, this is somewhat mitigated by the fact that higher income families on average own a higher number of cars than those with lower income.

5.3.2 Impact per Affected Toronto Consumer Base

The portion of the vehicle registration tax that will affect Torontonians can be determined by adding back administrative costs to net revenue. It is assumed that 100% of the tax will be borne by Torontonians as only vehicles with Toronto registration addresses will be taxed. Consequently, no portion of this revenue is exported to non-residents. The consumer base that would be affected by this tax can be approximated using the total number of Toronto

households that own at least one vehicle. As a result, it is estimated that every Torontonian household with at least one vehicle will see an increase of $63 per year to their annual total cost of owning a vehicle.

5.3.3 Impact on Economic and Business Activities

Given that the proposed tax is applied based on the owner's address rather than where the car is purchased, and given that the proposed tax is less than 1% of a car owner's annual total cost of ownership, it is unlikely to affect a consumer's vehicle purchasing decision. As such, the introduction of the vehicle registration tax is not likely to have a visible effect on the purchase and sale of new and used cars in and around the city. For the same reason, the tax will likely not have a significant impact on a resident's preferred mode of transportation given the minimal impact on the cost of car ownership. However, the fee should still be set within a reasonable range that is supported by comparable precedents to ease taxpayer acceptance.

5.3.4 Competitiveness and Avoidance

Given that the revenue option would only affect residents of Toronto, it should not have any direct impact on neighbouring municipalities or tourists visiting the city. As discussed previously, the impact of the tax is very minimal compared to the total cost of owning a vehicle, and as such should not induce any change in taxpayer behaviour that would materially affect the real economy.

Residents may seek to avoid the payment of the tax by registering ownership of their vehicle to an address outside of the city such as a cottage home or an investment property. However, such circumvention is not expected to affect any real economic activity within the city.

5.3.5 Other Considerations

Given that the concept of a municipal vehicle registration tax has already been implemented in Toronto and has been met with strong opposition from taxpayers, the City may want to consider the resistance it could face when reinstituting a tax that was repealed only a few years ago. City officials may want to consider attaching a specific purpose to the tax to garner taxpayer support if it were to be reintroduced in Toronto. For example, Quebec collects a municipal vehicle registration fee which is then redistributed to municipalities to be spent specifically on local transit systems.

5.4 Summary Evaluation

Overall, the motor vehicle registration tax is a common revenue stream in major metropolitan cities across North America, such as Montreal, New York, and Chicago. In

such cities, the tax is seen as an integral part of local revenue, and is used in some cases to specifically fund municipal transit.

Benefits of the tax include its limited impact on economic activity, minimal effects on existing revenue tools, and very low demand and avoidance elasticities. Given that the City has already implemented such a tax by leveraging the Province's existing infrastructure, the risk of failure and the cost of implementation, administration and enforcement of the tax should be relatively low when compared to other revenue options.

Despite the 2011 repeal of the Personal Vehicle Tax due to unpopularity of the tax, the levy remains a practical and sustainable method to increase annual revenue for the City. Policy makers will however need to overcome unpopularity associated specifically with the vehicle registration tax to ensure the revenue option's longevity.

6 Revenue Profile: Parking Tax

6.1 Overview of Revenue

6.1.1 Revenue Structure

A parking tax is typically implemented in one of two ways:

- As a parking sales tax; or
- As a parking space levy.

A parking sales tax operates like any other sales tax and is a fixed percentage that is applied to the cost of all paid parking, in addition to any general sales taxes already charged.

There are two different ways a parking space levy on non-residential, off-street parking within a specific region can be implemented:

- As an annual charge levied against all paid parking spaces; or
- As an annual charge levied against all paid and unpaid parking spaces.

Calculation of the parking space levy is typically based on the size of the parking area rather than the number of parking spaces. This helps to reduce disputes and tax avoidance, as the number of parking spaces for a given parking area can vary and can be adjusted. It also allows the levy to be applied in a similar fashion to a property tax, which would be allowed under COTA.

Background: While there are currently no parking sales taxes/levies applied in Toronto, in 1990 the Province of Ontario implemented the Commercial Concentration Tax ("CCT"),[66] which was a tax applied to all commercial properties throughout the Greater Toronto Area ("GTA").[67] The CCT applied a tax rate of $10.75/m^2 to all commercial property land area over 18,600 m^2 and all commercial parking lots regardless of land area. CCT revenues were used to fund road and transit programs across Ontario. The introduction of the CCT was met with widespread opposition and after three years, the CCT was repealed.

For the purposes of this analysis, both a parking sales tax and a parking space levy have been assessed.

[66] Hemson Consulting Ltd, 2007, Assessment of Potential New Tax Measures Under the City of Toronto Act, 2006-City of Toronto

[67] At the time of the CCT implementation, the GTA was defined as the Regions of Halton, Peel, York, Durham and Toronto.

6.1.2 Legislative Requirements

Under COTA, the City does not have the ability to charge a parking sales tax on commercial parking revenues. While parking sales taxes are common across several jurisdictions in the United States, Europe, and now Vancouver, amendments would need to be made to COTA to allow for a parking sales tax to be implemented. By comparison, the City does have legislative authority under COTA to implement a parking levy on a per stall or area basis as this is more representative of a property tax.

6.1.3 Implementation Issues

Under the parking space levy, the fee would likely be added to the annual commercial property tax bill. This should result in only limited additional administrative costs because of the ability to leverage existing City of Toronto staff/resources to collect the associated revenues. The biggest challenge associated with implementation, however, would be the increased effort required to create and continually update a detailed parking inventory listing within the geographic scope of the levy. In order to develop this listing efficiently, the City could allow parking lot operators to self-assess the size of their parking lots and then perform audits to verify the existence, accuracy, and completeness of operator-reported figures.

As mentioned previously, COTA would have to be amended to allow the City to implement a parking sales tax. The City would also likely need to put in place a separate agency to collect the additional taxes from parking lot operators ensuring that there is sufficient reporting and collections support.

6.1.4 Other Jurisdictions

From the detailed research performed, it has become clear that there is a greater preference for cities to implement a parking sales tax as opposed to a parking space levy.

6.1.4.1 Jurisdictions that Apply a Parking Levy on Paid Parking Spaces:

Montreal

In 2010, the City of Montreal introduced a new tax for paid off-street parking facilities with graduated rates based on the location of the parking facility in the city and whether or not it is indoor or outdoor. The levy is much more expensive for outdoor operators due to the increased amount of space required and the fact that the land is space that "the city, urban planners and environmental groups like the Conseil régional de l'environnement de

Montréal would far rather see used for gleaming new condo towers."[68] The tax was implemented based on the area of the facility rather than a per space basis as shown below in Exhibit 6.1 and charged on an annual basis:

Exhibit 6.1 – Montreal annual parking levy rates by sector (in $/m2)

Sector	Indoor	Outdoor
Sector A-Montreal business district	10.10	40.40
Sector B-Downtown Montreal; excluding the Montreal business district	5.05	30.30
Sector C-Enclosed in Sector B; farther away from the business district	5.05	15.15

The average parking stall size identified in the Hemson Report was 30m^2.[69] Using that factor, the annual parking levy per stall in Montreal ranges from $303 to $1,212 per year in the downtown core (Sector A) and $152 to $909 per year elsewhere in the City of Montreal (Sectors B and C). Based on these rates, the amount of the levy per day can vary from $0.41 to $3.32/day per stall. Revenues are approximately $23.5 million[70] annually, which has been specifically designated for transit infrastructure.[71]

Sydney

In Sydney, a parking space levy was implemented on July 1, 1992.[72] The levy applies to all privately owned, non-residential, off-street paid parking and the structure is very similar to that of Montreal where there are graduated rates based on the different districts within Sydney. The rates range from $2,310 AUD annually per space within the central business district and North Sydney and Milsons Point districts to $820 AUD annually per space in all other business districts.[73] Based on the rates established, this represents a levy of between

[68] Montreal Gazette, January 2013, Montreal parking lots: when a tax is just a tax, Available at: http://montrealgazette.com/business/montreal-parking-lots-when-a-tax-is-just-a-tax?__lsa=2727-d1ce

[69] Hemson Consulting Ltd, 2007, Assessment of Potential New Tax Measures Under the City of Toronto Act, 2006-City of Toronto.
The Hemson Report indicates that the revenues of the Vancouver parking tax were $23.40/stall and were calculated at a rate of $0.78/m^2, therefore the average parking space is 30m^2 ($23.40 per stall/$0.78m^2).

[70] City of Montreal, Budget-Budget de fonctionnement 2016, Available at: http://ville.montreal.qc.ca/pls/portal/docs/PAGE/SERVICE_FIN_FR/MEDIA/DOCUMENTS/2016_budget_final_20151125_15h.pdf

[71] Victoria Transport Policy Institute, December 2010, Evaluating Seattle Parking Tax Options, Available at: http://www.vtpi.org/seattle_parking_tax.pdf

[72] NSW Government-Transport for NSW, July 2015, Parking space levy, Available at: http://www.transport.nsw.gov.au/professional-drivers/parking-space-levy

[73] NSW Government-Office of State Revenue, March 2016, Parking space levy, Available at: http://www.osr.nsw.gov.au/taxes/psl

$2.24 and $6.32/day. The levy generates approximately $105 million AUD annually and is dedicated for transportation projects.[74]

Melbourne

Melbourne introduced a parking levy in 2005 and has called it a congestion levy. Similar to the rationale for implementing the tool in Sydney, Melbourne is trying to incentivize citizens to use alternative forms of transportation. The congestion levy is an annual charge that is levied each calendar year on non-exempt, off-street paid parking spaces within the boundaries established. Category 1 spaces in the downtown core have an annual levy of $1,340 AUD and category 2 spaces are $950 AUD.[75] Based on the rates established, this represents a levy of between $2.60 and $3.67/day. The tool generates approximately $100 million AUD annually.[76]

6.1.4.2 Jurisdictions that Apply a Parking Levy on both Paid and Unpaid Parking Spaces

Vancouver

In January 2006, a parking tax was levied in the Greater Vancouver Area on both paid and unpaid parking spaces within a specified transit zone with revenues generated being used for road/transit expansion. When initially introduced, the tax was based on $0.78/ m^2, which equated to approximately $23/stall and was included in the municipal property tax notice. Vancouver had implemented the parking tax using the area basis for rates as it was their assumption that parking lot sizes are less likely to change over time than the number of spaces, which can change based on the size of the spaces used and the shift towards designated small car parking spaces in British Columbia.[77] Using the parking levy approach, the City of Vancouver generated average revenues of $22.2 million.[78]

---

[74] NSW Government-Finance & Services, October 2015, Annual Report 2014/15, Available at: https://www.finance.nsw.gov.au/sites/default/files/OFS_AnnualReport_201415-Complete.pdf
[75] Victoria State Government, 2016, Common FAQs about the congestion levy, Available at: http://www.sro.vic.gov.au/videos/congestion-levy
[76] Urbis Think Thank, May 2013, Parking tax hike to harm CBD retailers and business, Available at: http://www.urbis.com.au/think-tank/general/parking-tax-hike-to-harm-melbourne-cbd-retailers-and-business
[77] Hemson Consulting Ltd, March 2007, Assessment of Potential New Tax Measures Under the City of Toronto Act, 2006-City of Toronto,
[78] Independent report provided for the "No Translink Tax Campaign", Revenue analysis of Metro Vancouver municipalities, TransLink, and the Congestion Improvement Tax. Available at: http://divestor.com/wp-content/uploads/2009/11/RevenueAnalysis-TransLink-CIT.pdf
Revenues were: 2005 $11.5M, 2006 $31.8M, 2007 $36.5M, 2008 $15.4M, and 2009 $15.6M

6.1.4.3 Jurisdictions that Apply a Parking Sales Tax

Vancouver

In January 2010, the method of taxation changed from an area basis (as described above) towards a tax based on paid parking sales in the form of a PST, collected by the commercial parking vendor and remitted to TransLink. The PST on parking in the jurisdiction is currently 21% and is charged prior to the GST, which is then applied on top of both the base parking charge and the PST.[79] Revenues generated since the change to a regime that is more in line with a parking sales tax have been $50 to 58 million annually.[80]

Pittsburgh

In the city of Pittsburgh, parking sales taxes are the second highest source of revenues after property taxes and typically generate about $50 million annually. The tax was introduced in 2005 at a rate of 33%, increased to 50% in 2007, reduced to 40% in 2008, and has remained stable at 37.5% since 2008 and is based on gross collection.[81]

Miami

The parking sales tax in Miami was introduced in 1999 as a 20% surcharge on all paid parking transactions to raise general revenue. The implementation of the tax caused a reduction in parking and business activity in the city. In 2006, the rate was reduced to 15% and remains in place today.[82]

Los Angeles, California

The parking sales tax in Los Angeles was introduced in 1990[83] and has remained stable at 10% and is based on all parking lot revenues.[84] Given the car oriented nature of the city, the tax has had little impact on consumers' consumption of paid parking. Revenues generated are approximately $85.4 million USD; however, the city has conducted audits of

---

[79] Tanslink, June 2014, Translink Tax Bulletin-Motor Vehicle Parking, Bulletin 105, Available at: http://www.translink.ca/-/media/Documents/about_translink/parking_tax/105_motor_vehicle_parking.pdf
[80] AECOM KPMG, March 2013, Metrolinx Big Move Implementation Economics Revenue Tool Profiles,
[81] City of Pittsburgh, September 2013, Parking Tax (PT 2014), Available at: http://apps.pittsburghpa.gov/finance/2014_PT.pdf
[82] City of Miami's Parking Facilities Surcharge Program, June 3, 2011Welcome to the Miami Parking Surcharge Website, Available at: http://www.miamisurcharge.com/
[83] Victoria Transport Policy Institute, December 2010, Evaluating Seattle Parking Tax Options, Available at: http://www.vtpi.org/seattle_parking_tax.pdf
[84] City of Los Angeles Office of Finance, 2011, POT Collection Bond Requirement FAQ, Available at: http://finance.lacity.org/content/POT%20bond%20FAQ.htm

parking tax revenues and found that the listing of lots is not complete with a potential $21-25M USD in lost revenues annually.[85]

Seattle

In 2007, a parking sales tax was implemented in Seattle and applied to all commercial parking within the city limits at a rate of 5% in 2008, 7.5% from July 2008-June 2009, and at 10% from July 2009 onwards. The tax has generated approximately $21 million USD annually.[86]

6.2 Quantitative Assessment

6.2.1 Key Assumptions and Limitations

It should first be noted that data pertaining to parking inventory in the city of Toronto is quite limited. The annual revenue estimates below should be taken as a rough order of magnitude only. It is highly recommended that better parking inventory data be obtained prior to any decision regarding this revenue option.

The 2007 Toronto Parking Authority Report on Parking Taxes: Options for Toronto was used to estimate the total number of off-street paid parking spaces. This source provides the following information on different operators and the number of spaces in their inventory:

Exhibit 6.2 - Estimate of Total Off-Street Paid Parking Spaces

Operator of paid parking	# of spaces
TPA off-street spaces	20,500
TTC spaces	14,500
Commercial facilities	100,000
University operated	20,000
Hospital operated	20,000
Destination based (zoo, racetrack, etc.)	20,000
Total	**195,000**

The results of a geographic information system analysis commissioned by Metrolinx are used to estimate the total number of parking spaces in Toronto (both paid and unpaid). This

[85] 89.3 KPCC, August 2012, Audit: Los Angeles officials don't know how many parking lots are in the city (updated), Available at: http://www.scpr.org/blogs/news/2012/08/09/9349/audit-los-angeles-officials-dont-know-how-many-par/

[86] Victoria Transport Policy Institute, December 2010, Evaluating Seattle Parking Tax Options, Available at: http://www.vtpi.org/seattle_parking_tax.pdf

work was undertaken in support of KPMG and AECOM's 2013 report titled "Big Move Implementation Economics: Revenue Tool Profiles". The GIS analysis estimated that there are a total of 1.05 million parking spaces in Toronto, both paid and unpaid. Given the information on paid parking spaces above, it can be inferred that there are 855,000 non-residential off-street unpaid parking spaces in Toronto.

Other key assumptions are as follows:

- The levy will be applied on off-street parking spaces, both paid and unpaid.
- A parking sales tax could be implemented as a City sales tax on paid parking spaces, requiring a new collection mechanism to be developed.
- A parking levy could be implemented as a form of a property tax on both paid and unpaid spaces and could be collected through the existing City of Toronto property tax administration, resulting in potentially lower collection costs. While the implementation of the levy would likely be charged on an area basis ($/m^2), the estimates included here were done on a per space or stall basis for ease of quantification.
- The average parking revenue per transaction for commercial parking spaces throughout Toronto is assumed to approximate average parking revenue observed from the Toronto Parking Authority's transactions.

Limitations:

There is not a precise listing of commercial paid/unpaid parking lots within Toronto and no estimate of spaces by district within Toronto at this time. The most recent data that could be obtained was from a 2007 Toronto Parking Authority Report and from a geographic estimate developed by Metrolinx in 2013, but it was not possible to accurately quantify the number of spaces by geographic location. As a result of the fact that there is not a detailed listing of commercial parking spaces, the number of spaces available for taxation/levy could be found to be different when a more formal assessment is conducted. Additionally, this limited the ability to analyze and estimate the revenue impact of having graduated rates for parking levies that were dependent upon the geographical location within Toronto. The use of graduated rates has been the method used in other jurisdictions to equitably implement a parking levy throughout the city without adversely impacting businesses/consumers in outlying areas.

6.2.2 Revenue Potential

6.2.2.1 Gross Revenue Potential

Parking Levy

To estimate the gross annual revenue potential of the parking levy, an estimate of the parking space inventory was used and then applied to daily levy rates to establish a range of revenue estimates. A gross inventory of 1.05 million spaces was used, including the assumed 195,000 paid spaces as per the Metrolinx and TPA information. While it is possible that institutional parking may be exempt from the levy, they have been included here for completeness. It is assumed the levy would have to apply to TPA and TTC lots to maintain a fair and competitive pricing environment as in the case of paid parking space the cost of the levy is likely to be passed on to the consumer.

Exhibit 6.3 below presents the estimated annual revenues from a City of Toronto parking levy at a number of different rates. The rates chosen are at the lower end of the range observed above, but are probably more reflective of the average achievable rate for a levy applied city-wide, versus one applied only in the downtown core.

Exhibit 6.3 – Gross Annual Revenue Potential by Daily Levy Rate ($ millions)

	# of spaces	$0.50	$1.00	$1.50
Paid spaces	**195,000**	**35.6**	**71.2**	**106.8**
TPA off-street spaces	20,500	3.7	7.5	11.2
TTC spaces	14,500	2.6	5.3	7.9
Commercial facilities	100,000	18.3	36.5	54.8
University operated	20,000	3.7	7.3	11.0
Hospital operated	20,000	3.7	7.3	11.0
Destination based (zoo, racetrack, etc.)	20,000	3.7	7.3	11.0
Unpaid spaces	**855,000**	**156.0**	**312.1**	**468.1**
Total	**1,050,000**	**191.6**	**383.3**	**574.9**

Based on the above analysis, the parking levy could generate significant annual revenues for the City of Toronto given the inventory assumptions. While it is assumed a graduated levy rate would be used, so that downtown spaces are levied at a higher rate than those farther from the core, the estimates assume an average rate for all spaces. Applied to only paid spaces, at a levy of $0.50-$1.50 per space per day, the revenue potential ranges from $35.6 to $106.8 million. If unpaid spaces are also included as per the above exhibit, the revenue potential from a levy increases dramatically, with the total ranging from $191.6 to $574.9 million annually at the described rates.

Through the jurisdictional review for this revenue option, it was found that there are typically significant variations in the parking levy charged within a city based on geographic location using a graduated rate scheme. Also, levies are typically applied only to paid commercial parking spaces, although Vancouver introduced a levy on both paid and unpaid spaces (albeit at much lower rates).

From review of the Toronto City Council minutes, it appears that the City is considering the implementation of a parking levy on both paid and unpaid commercial parking spaces.

Parking Sales Tax

The assumption used for the quantification of the parking sales tax is that only paid spaces will have the tax applied against them. (Under a sales tax regime, unpaid spaces have no clear transaction value upon which to base the tax.) On this basis, the most accurate estimate of the amount of paid parking has been assumed to be that given by the Toronto Parking Authority's 2007 report, whereby there were 195,000 commercial paid parking spaces. While there is potential that institutional spaces (university, college, hospital) will be exempt, they have been included here for completeness. Similar to the case of the parking levy, it is assumed that any sales tax placed on privately operated parking would also have to be applied to TPA and TTC spaces to maintain a fair competitive pricing environment. As noted earlier however, the figure includes paid spaces outside of the downtown core.

Rates per Parking Transaction:

The rates from the jurisdictions reviewed have been presented in Exhibit 6.4 with a low, high, and average rate shown in Exhibit 6.5.

Exhibit 6.4 – Rates per Parking Transaction

Jurisdiction	Vancouver	Pittsburgh	Miami	Los Angeles	Seattle
Rate	21.0%	37.5%	15.0%	10.0%	10.0%

Based on the above analysis, there is a low rate of 10.0%, average rate of 18.7%, and a high rate of 37.5%, as presented in Exhibit 6.5.

Exhibit 6.5 – Rates per Parking Transaction

	Rate
Low	10.0%
High	37.5%
Average	18.5%

Commercial Paid Parking Market in Toronto:

To estimate the total annual revenues earned by commercial parking operators in Toronto, it has been assumed that they earn on average the same revenue per spot as the Toronto Parking Authority ("TPA"). Using data from TPA's 2014 financial statements, average revenues per spot per year have been estimated as follows:

Total Parking Revenues per 2014 Report:	A	$128.7 million[87]
Total Parking Spaces (on and off street) per 2014 Report:	B	38,296[88]
Average Revenue per Space per Year:	A/B	$3,362/space

Below, using the average revenue per parking space per year and the parking inventory of 195,000 parking spaces city-wide, an estimate of the gross annual revenues associated with the parking sales tax has been developed in Exhibit 6.6.

Exhibit 6.6 – Gross Annual Revenue Potential Parking Sales Tax

	# of spaces	Revenue per year per space	Annual Revenue at different rates (millions)		
			5%	10%	20%
TPA off-street spaces	20,500	3,362	3.5	6.9	13.8
TTC spaces	14,500	3,362	2.4	4.9	9.7
Commercial facilities	100,000	3,362	16.8	33.6	67.2
University operated	20,000	3,362	3.4	6.7	13.5
Hospital operated	20,000	3,362	3.4	6.7	13.5
Destination based (zoo, racetrack, etc.)	20,000	3,362	3.4	6.7	13.5
Total	**195,000**		**32.8**	**65.6**	**131.1**

Based on the above analysis, the parking sales tax could generate $32.8 to $131.1 million annually implemented across Toronto at the rates reviewed. There is potential for the tax to only be implemented in the Downtown Core (bordered by Bathurst Street, C.P Rail Subdivision at Dupont, Bayview Avenue), and it is assumed that approximately 75 to 80 thousand of the paid parking spaces are located in this area. This is supported by data provided by the City for use in the Hemson Report. Implemented in the Downtown Core only, parking sales tax revenue would range between approximately $13 million to $54 million annually at the same rates.

Through the jurisdictional review for a parking sales tax, it was noted that there was a high variation in parking sales tax rates across jurisdictions, with observed values ranging from 10% to 37.5%. Prior to implementing any parking tax, the City may wish to undertake

[87] Toronto Parking Authority, 2014 Annual Report, June 2015,
[88] Ibid.

additional analysis to determine an optimal rate, taking into account its desire to raise revenue and reduce traffic congestion, while not undermining business and retail productivity.[89]

6.2.2.2 Demand Reduction

Research suggests that for every 1% increase in parking prices either through a parking tax or a parking levy flowed through to the consumer in the form of increased prices, there will be a -0.2 to -0.4% change in demand, a relatively inelastic change. Therefore for every 10% increase in parking fees, parking demand would be reduced by 2 to 4%.[90] The revenue estimates assume a 3% demand reduction per 1% increase in price. This is expected to impact the revenue realized from the parking sales tax only, as the owner of the property would be held accountable for the levy independent of consumer sales.

6.2.2.3 Consumer and Vendor Avoidance

Consumer Avoidance:

The revenue estimates do not contain an explicit assumption of consumer avoidance. Reduction in demand for paid parking spaces as a result of a sales tax is accounted for through price elasticities of demand as noted above. Revenues from a parking levy will not be directly affected by changes in consumer demand, since a levy would be applied on a per spot basis and will not vary with revenues collected. Any reduction as a result of a levy in the number of spots, whether paid or unpaid, is accounted for by our estimate of vendor avoidance noted below.

Vendor Avoidance:

Some free parking spaces would likely be converted to alternative uses to generate additional revenues for parking lot operators upon implementation of a parking levy. These alternative uses could be expected to improve property values, and eventually improve the municipal property tax assessments and associated revenues. For the purposes of this estimate, and aligned with a similar study for the City of Calgary,[91] it is assumed that up to 10% of current unpaid, underutilized parking space inventory could be converted to either paid parking or other uses. Assuming that half of this converted inventory becomes paid parking, the net reduction in total parking space inventory could be 5%.

---

[89] Canadian Parking Association (CPA-ACS), September 2014, Applying the Law of Demand to Parking Pricing: Fixing Infrastructure Budget Shortfalls, Available at: http://canadianparking.ca/applying-the-law-of-demand-to-parking-pricing-fixing-infrastructure-budget-shortfalls

[90] AECOM KPMG, March 2013, Metrolinx Big Move Implementation Economics Revenue Tool Profiles,

[91] AECOM KPMG, May 2015, The City of Calgary-Comprehensive Analysis of Shortlisted Funding Mechanisms,

For paid commercial spots however, there is expected to be limited vendor avoidance as the additional costs will likely be passed on to the consumer, whose activity will likely be relatively stable for small price increases given the above analysis.

6.2.2.4 *Implementation and Administration Costs*

Parking Levy

Given that there is already the municipal property tax system in place which could also potentially collect the parking levy, it is anticipated that there will be low administrative costs as there will be no new infrastructure required and simply the variable increase in labour and direct costs. The inventory of parking spaces will need to be developed and maintained resulting in significant upfront implementation costs and extended timelines for implementation, along with minor additional administrative costs. Administrative costs equal to 3% of revenues at the levy rate of $1/day have been assumed for the analysis, which is consistent with other studies performed. Ongoing administration costs may decrease over time following initial implementation, but this has not been estimated due to the number of unknowns involved.

Parking Sales Tax

The analysis assumed that a parking tax system will have administrative costs of approximately $2.5 million annually. This reflects the fact that the City will need to set up and operate a new administrative system to collect this tax but have fewer points of contact than the parking levy and require less effort in terms of inventory management. Costs might be reduced to the extent that the City sets up other sales taxes (for example on alcohol or amusements) and can share some of the associated administrative overhead.

6.2.2.5 *Net Annual Revenue Potential*

Parking Levy

Exhibit 6.7 presents the estimated annual revenue potential of a tax levy across Toronto, including the avoidance reductions and administrative costs discussed above.

Exhibit 6.7 – Net Annual Revenue Potential Parking Levy ($ Millions)

	$0.50 levy per day per space	$1 levy per day per space	$1.50 levy per day per space
Gross Revenues	191.6	383.3	574.9
Avoidance Reduction @5% of parking inventory	(9.6)	(19.2)	(28.7)
Administrative Costs	(10.7)	(10.7)	(10.7)
Net Annual Revenues	171.3	353.4	535.4

Therefore, based on the above analysis, it is expected that the parking levy could generate net revenues of $171.3 to $535.4 million annually at the rates illustrated.

Parking Sales Tax

Exhibit 6.8 presents the estimated annual revenue potential of a parking sales tax across Toronto using the parking inventory of 195,000 commercial parking spaces and the avoidance and administrative costs discussed above.

Exhibit 6.8 – Net Annual Revenue Potential Parking Sales Tax ($ Millions)

	Low Rate (5%)	Mid Rate (10%)	High Rate(20%)
Gross Revenues	32.8	65.6	131.1
Demand Reduction (0.3)	(0.5)	(2.0)	(7.9)
Administrative Costs	(2.5)	(2.5)	(2.5)
Net Annual Revenues	29.8	61.1	120.8

Based on the above analysis, the net revenues anticipated with the parking space tax are $29.8 to $120.8 million annually.

6.2.3 Sustainability of Revenues

Parking sales taxes or levies are expected to be fairly sustainable over the medium-term; however, as noted in the Vancouver experience, some parking space operators may convert unused space to other uses (storage or parks) to reduce the tax exposure.[92] This would negatively impact the continued revenue sources for the City. Based on experiences in Vancouver, it appears that when parking taxes increased from 7% to 21%, there were

[92] Vancouver Observer, March 2011, New life for unused parking lots, Available at: http://www.vancouverobserver.com/city/2011/03/12/new-life-unused-parking-lots?page=0,3

reductions in parking revenues downtown of between 10 and 20%. This resulted in lower property tax assessments and revenues for the City of Vancouver.[93]

It should also be noted that long-term goals and trends could have an adverse impact on parking tax revenues. For example, if transit in Toronto sees substantial improvement, use of ride-sharing continues to grow and there continues to be a focus on development that increases population density, the total number of parking spaces in the city could decline over time.

6.3 Qualitative Assessment

There must be consideration made specifically to the qualitative aspects of the application of the parking sales tax or levy. Specifically, the geographic region where this tax/levy will be charged within Toronto, whether a similar tax is levied outside the city, and if there will be different taxes for different regions.

6.3.1 Impact on Stakeholders

The parking sales tax and levy would initially be borne specifically by the parking space operators and likely flowed through to impact all parking space users who pay for parking. As mentioned previously, the demand reduction is expected to be relatively low; however, some drivers may shift to alternative modes of transportation in an effort to save costs. It is also expected that some parking lot operators may convert existing under-valued or under-used parking spaces to other uses (particularly if the parking tax takes the form of a levy). For a parking levy, however, the greater impact will be to the free parking space inventory, with some supply being removed or converted to paid parking.

A survey of Toronto residents indicated relatively high support for a parking levy as a revenue option, which may indicate that consumer avoidance would be low following its implementation. A study for Metrolinx noted:

> "Results from the City's public consultations indicate that a parking levy was selected most often by respondents as one of their top five revenue sources. Approximately 61% of respondents indicated their support for a parking levy. Results to the Ipsos Reid survey are similar, as 58% of respondents selected a parking levy in their top five."[94]

[93] Vancouver Sun, March 2012, If parking tax kills its golden goose, others will feel the pain, Available at: http://vancouversun.com/news/staff-blogs/if-parking-tax-kills-its-golden-goose-others-will-feel-the-pain
[94] City of Toronto, April 9, 2013, Metrolinx Transportation Growth Funding-Dedicated Revenues, Available at: http://www.toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-57594.pdf

6.3.2 Impact per Affected Toronto Consumer Base

The portion of the parking levy that will affect Torontonians can be determined by adding back administrative costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the purposes of this calculation, it is assumed that only the levy on paid parking spots will be transferred down from businesses to consumers. It is further assumed that 75% of the parking levy will be paid by Toronto residents, and the remaining 25% is exported to visitors of Toronto. The adjusted revenue balance from paid parking levy is approximately $38.3 million at a rate of $1 per space.

It is assumed that businesses will take on the full burden of the levy on unpaid parking spots, and as such the impact on Torontonians was not quantified.

The portion of the parking sales tax that will affect Torontonians can be determined by adding back administrative costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the tax, the entire burden will be placed on consumers. It is assumed that 75% of the parking levy will be paid by Toronto residents, and the remaining 25% is exported to visitors of Toronto. The adjusted revenue balance from a parking sales tax is approximately $47.7 million.

The consumer base in this case can be approximated using the total number of households in Toronto that owns at least one vehicle. As a result, it is estimated that every Torontonian household that owns at least one vehicle will see an increase of $43 per year on parking expenses as a result of the levy, and an increase of $53 as a result of the sales tax.

6.3.3 Impact on Economic and Business Activities

Unpaid spaces:

The implementation of a parking levy would be expected to have the largest economic impact, especially in regard to unpaid spaces. At a levy rate of $1/day or $365/year per space large shopping malls, often having 4 to 8 thousand parking spaces, would be impacted in the range of $1.5-$3 million annually. Small businesses would also feel the impact, often having their own small parking lots. This increased cost could either be passed onto consumers by charging for parking, or absorbed by businesses. Charging for parking where it was previously free could decrease economic activity in the area, making shopping outside Toronto more desirable. The absorption of costs by businesses could potentially decrease employment or increase the cost of their goods sold as they attempt to maintain their bottom line.

Paid spaces:

Generally, it is assumed spaces that currently charge for parking would fully pass the cost (of either a levy or a sales tax) onto the consumer in the form of higher parking fees. However, the extent of the cost passed through to the consumer will depend on the strength of the demand for charged parking in the specific area of Toronto. The additional

costs that are passed on to the consumer will likely lead to some increased usage of alternative forms of transportation and lower congestion.

6.3.4 Competitiveness and Avoidance

A parking tax or levy may have some impact on the costs of doing business in Toronto. However, at the same time, a parking levy or tax may encourage greater use of transportation modes other than the car and greater consideration of using underutilized parking space more efficiently. To the extent that this helps reduce traffic congestion and increase efficient development, there are benefits to these options.

The parking tax/levy would not likely be a major factor in discouraging tourists from visiting, as parking costs are probably not a major factor in their decision-making.

6.3.5 Other Considerations

The successful implementation of a parking tax/levy will require clear policies and regulations, sound timing, and transparency with the public.

Policies will need to clearly articulate the scope of the levy or tax, compliance and reporting requirements, rates applied, and geographical boundaries. The City will also need to establish and maintain a parking inventory listing and to monitor compliance.[95]

The timing and transparency of the implementation of the parking tax/levy is also of critical importance as noted during the implementation of the CCT. The CCT was launched during a recession, which caused widespread opposition and removal after only three years.[96] By launching the parking tax/levy at an appropriate time and being transparent about how it will work and why it was selected, the City can increase the likelihood that the parking tax/levy will be accepted by affected stakeholders.

The City could implement a parking levy rather quickly if it decided to forego the initial inventory count and required property owners to self-report the annual parking levy. This would allow the revenue option to be implemented rather quickly as part of the municipal property tax collection system, but the City would need to establish a detailed set of guidelines for reporting and remitting the fee. It is possible that this type of implementation could have higher non-compliance or non-reporting from property owners, but these figures could be audited as the City performs a complete parking space inventory for the municipality.

Another consideration for the parking levy is to establish it using a tiered fee structure, similar to the jurisdictions reviewed in this chapter. The City could charge a higher daily fee

[95] Toronto Parking Authority, March 2007, Discussion Paper-Parking Taxes: Options for Toronto, Available at: http://parking.greenp.com/documents/pamphlets/pa_00000005.pdf
[96] Hemson Consulting Ltd, March 2007, Assessment of Potential New Tax Measures Under the City of Toronto Act, 2006-City of Toronto.

for parking spaces located within the downtown core and gradually lower the rate as it moved to the municipal boundaries. Typically, the parking spaces located downtown are either paid or have a higher value than those in the suburbs and the City could potentially structure its parking levy rates accordingly. The challenge with this approach is deciding the boundaries where the parking levy will be reduced and it disproportionately impacts the property owners in the downtown core (or wherever the higher parking levies are applied).

6.4 Summary Evaluation

Overall, a parking sales tax or levy could have a positive impact on the City's ability to generate sustainable revenue streams. Recent studies have shown general support from the public when it comes to parking taxes and levies if the revenue raised is used to fund investments in transit and transportation. In principal, a parking levy could generate substantially more revenues than a parking sales tax, particularly in the event that it is applied outside of the downtown core and to unpaid as well as paid parking spots. There is good logic and precedent for having differentiated rates by geographic area, based on jurisdictional benchmarking. However, there should be close consideration of how the parking levy would affect businesses, especially small businesses, offering unpaid parking and therefore without an immediate method to recover the increased costs.

Additionally, it is likely that this revenue option will shift consumer behaviour towards alternative forms of transportation, improving congestion on roads, contributing to greenhouse gas emission reductions, increasing efficient land development and potentially improving the quality of life for residents.

7 Revenue Profile: Road Pricing

7.1 Overview of Revenue

Road pricing is a term used to describe a variety of road related taxes and charges. These include road tolls, cordon charges (sometimes referred to as congestion charges) and vehicle user fees. The City has recently commissioned a separate study to analyze tolling options for the Gardiner Expressway and Don Valley Parkway and has indicated that the scope of that study should be excluded from this analysis. As such, the analysis of road pricing for the purposes of this study will focus on cordon charges. A cordon charge is a fee applied to a vehicle that enters and/or exits a pre-determined area.

7.1.1 Revenue Structure

There are a number of different ways to structure and implement a cordon charge. Some key factors that can be adjusted based on the design of the scheme include:

- The method of application of a charge: upon entry to the cordon zone, upon exit of the cordon zone, or based on the time spent inside the cordon zone.
- The time period for which the cordon is in effect: peak travel times only, standard working days (morning to evening), 24 hours, weekends, etc.
- The geographic extent of the cordon: Toronto Centre, all of Toronto, etc.
- The treatment of through traffic.
- Variation in charges dependent upon the point of entry.
- What exemptions apply (if any): buses, taxies, high occupancy vehicles, electric/hybrid vehicles, local resident, etc.
- How vehicles are detected: video licence plate detection, transponder, GPS.

For the purposes of this analysis, a number of information sources and assumptions have been used. Key assumptions used in this analysis include:

- The cordon zone will be defined as the Toronto Central Area, i.e., Bathurst Street to the west, CP Rail North Toronto Subdivision to the north, Bayview Avenue/Don River to the east and Lake Ontario to the south. A map of the cordon zone is shown in Appendix B.
- The cordon charge will be applied only upon entry into the cordon zone between the hours of 6:00 am and 10:00 am on weekdays. This time period aligns well with Toronto's peak travel period and other jurisdictions peak charging times. This window also allows individuals to shift their travel time to decrease periods of congestion.

- The cordon will apply for 250 days. 250 is the average number of business days in Ontario from 2015 to 2016.
- The cordon charge will be a flat fee and applied to all motor vehicles entering the cordon zone. The 2011 cordon count information provided a distinction between large vehicles (such as trucks or buses) and small vehicles (such as cars or taxis), but did not distinguish further than that. Thus, the same fee has been applied for all vehicles entering.
- An electronic tolling system similar to the Highway 407 ETR will be used, which combines a transponder and licence plate recognition system. The analysis has assumed that any revenue from monthly account fees, administration fees, transponder license fees, video toll surcharges or any other surcharges associated with the toll collection system is included within the base charge.

7.1.2 Legislative Requirements

The tolling of highways by the City is permitted under COTA; however, the highway or portion of road being designated as a toll road must first be approved by the Province. While the implementation of cordon charges are not directly identified in COTA, it is likely that the City would be required to obtain approval from the Province prior to implementation. COTA may need to be amended for Toronto to have the required authorities.

7.1.3 Implementation Issues

A cordon has been assumed to be implemented using cameras mounted over the road to track licence plates entering the zone. As vehicles enter the cordon, the licence plate will be photographed. While transponders could be used, Stockholm, Milan and London have all shifted to using only a video licence plate recognition system due to the high degree of accuracy of video technology.[97] Vehicle entries are tracked and on a monthly basis drivers are billed based on the number of entries and exits they make to the cordon. Various technology choices and implementation methods exist for establishing a cordon, which could drastically change the cost of a system. Privacy concerns also exist depending on the implementation method, as drivers may raise privacy concerns of having their driving patterns monitored.

The City would be required to construct or affix the necessary infrastructure and technology, including overhead gantries, communication devices, and overhead cameras. Depending on the installation, it may be necessary for the City to acquire land for the installation of gantries, which may require the City to expropriate land. Additionally, given the density of the downtown core, and the mix of highways, arterial and residential roads that provide entry points to the cordon zone, a combination of overhead gantries and cameras affixed to posts along the road may be required.

[97] PBS&J, June 2008, BATA Video Tolling Demonstration Project – Video Tolling Concepts Review, page 16

The City does not currently operate and administer this type of system. It is likely that the City will need to establish an operations and oversight department for that purpose. It may be possible for the City to contract with the owners of Highway 407ETR (407 ETR Concession Company Ltd.) to operate and administer the City's cordon charge program. This could achieve operational savings, by sharing overall costs and leveraging existing systems and technologies. Cordon charges in Stockholm and Gothenburg are both operated by the National Transport Agency, allowing for operational savings.[98] Additionally, if the City were to pursue tolls on the Gardiner or DVP, the operations and administration of a cordon charge could be included in the responsibilities of that operator.

7.1.4 Other Jurisdictions

London (U.K)

London first introduced a congestion charge in 2003 to reduce traffic and raise revenue for investment in transportation infrastructure. The original charge was £5 ($9.15 CAD[99]), and later increased to £11.50 (approximately $21.04 CAD). Drivers who sign up for automatic payments are eligible for a reduced rate of £10.50 ($19.20 CAD). The congestion charge applies between 7am and 6pm Monday to Friday. The congestion charge area covers 21 km^2 of downtown, including 150,000 inhabitants, and is monitored by 170 access points.[100] London uses video cameras mounted on traffic signal poles and structures to monitor vehicle licence plates as the vehicle enters the cordon. Drivers pay once daily, regardless of how many times they drive in or out of the congestion zone throughout the day. Drivers who do not set up an auto pay account are required to pay by the end of the day of travel. They can pay online, by phone or through a smartphone application. Drivers can also prepay for travel and have subsequent trips deducted from their account. Drivers who do not pay by the end of day of travel, face a £65 charge ($118.90 CAD) if the charge is paid within 14 days and £130 charge ($237.80) if paid after 14 days.

Residents within the cordon area are eligible for a discounted congestion charges. Residents apply online and upon approval receive a 90% discount of congestion charges. Ultra low emission vehicles qualify for a 100% discount. Congestion was reduced by 30% in the short term; however, congestion has steadily increased more recently to approximately 10% below pre-cordon levels.[101] London received £257M ($471M CAD) in revenue in 2014/15 from the cordon charge.[102] Expenses totaled £85 ($156M CAD),

[98] Jonas Eliasson, October 2014, Stockholm's Congestion Pricing
[99] Exchange rates as of April 25, 2016
[100] Edoardo Croci and Aldo Ravazzi Douvan, February 2016, Urban Road Pricing: A Comparative Study on the Experiences of London Stockholm and Milan
[101] Claire Timms, February 2013, Has London's congestion charge worked?
[102] Transport for London, 2015, Annual Report and Statement of Accounts 2014/15

resulting in net revenue of £172 ($315M CAD).[103] Expenses are approximately 33% of total revenues.

Stockholm

Stockholm first introduced a congestion charge in 2006, with an initial trial period of seven months. Following the trial period, charges were removed for two months to allow citizens to compare the impacts of a congestion charge. A referendum was then held, where the majority of Stockholm citizens voted in favour of a congestion charge. Charges are applied on weekdays from 6:30am to 6:30pm and range from 11 SEK ($1.70 CAD) in off peak periods to 35 SEK ($5.45 CAD) in peak periods. The charge aimed to reduce congestion during peak hours and to improve the environment. The congestion charge area covers 30km^2, including 280,000 inhabitants, and is monitored by 18 access points.[104] Stockholm uses overhead gantries affixed with video camera technology to monitor vehicles entering into the cordon area. Downtown Stockholm is made up of a number of islands, reducing the number of potential access points to the city centre.[105] Drivers pay each time they enter or exit the congestion zone, with a maximum daily charge of 60 SEK ($9.35 CAD). Stockholm increased transit frequency and extended service times a year before the trial was implemented to ensure commuters had travel options available. Daily traffic has seen a reduction of 20% since the charges were adopted.[106] Users are sent a bill monthly and are able to pay by mail, credit card, or pay automatically from their bank account. Stockholm received revenues of 850M SEK ($132M CAD) in 2013 from the cordon charge.[107] Expenses totalled 250M SEK ($39M CAD), resulting in net revenues of 600M SEK ($93M CAD).[108] Expenses are approximately 29% of total revenues.

Milan

Milan implemented a congestion charge, called Area C, as a pilot program in June 2011 and fully implemented it in 2013. The charge aims to reduce congestion in the downtown area and reduce smog and pollution within the city. Milan had the second highest car ownership rate in Europe and the third highest smog level.[109] Standard vehicles are charged €5 ($7.20 CAD) for entering the zone, while residents are charged €2 ($2.90 CAD). The zone is in effect from 7:30am to 7:30pm Monday to Wednesday and Friday and from 7:30am to 6:00pm on Thursday. The congestion charge area covers 8.2km^2, including 77,000

[103] Ibid.
[104] Edoardo Croci and Aldo Ravazzi Douvan, February 2016, Urban Road Pricing: A Comparative Study on the Experiences of London Stockholm and Milan
[105] Ibid.
[106] Ibid.
[107] Jonas Eliasson, October 2014, Stockholm's Congestion Pricing
[108] Ibid.
[109] Marco Bertacche, January 2008, Milan Introduces Congestion Charge to Cut Pollution

inhabitants, and is monitored by 43 access points.[110] Milan uses overhead video cameras above the roads to monitor the licence plates of vehicles entering and exiting the cordon. In order to reduce pollution, Area C has exemptions for environmentally friendly vehicles. Vehicles such as electric vehicles, motorcycles, and hybrids are all exempt from the charge. The Area C congestion charge saw a 28% decrease in overall traffic, while usage of cleaner vehicles (which are exempt from the charge) increased by 6.1%.[111] Milan received revenues of €30M ($43M CAD) in 2013 from the cordon charge.[112] Expenses total €14M ($20M CAD), resulting in net revenue of €16M ($23M CAD).[113] Expenses are approximately 47% of total revenues.

Singapore

Singapore first launched a congestion charge in 1975 with the Area Licensing Scheme, where drivers purchased colour coded licences in advance to enter the Central Business District (CBD). The Area Licensing Scheme was replaced by Electronic Road Pricing (ERP) in 1998, where overhead control gantries are placed over each of the access points. It is mandatory for domestic vehicles to have an In-vehicle Unit (IU) if they will be entering the cordon zone. The IU communicates with the gantries and deducts the payment from an inserted credit card or stored-value card. By 2020 Singapore is aiming to make ERP based on GPS through a new on-board unit. The new system will include value added services such as electronic payment for parking and real time traffic information. Charges range from $0.50 SGD ($0.47 CAD) to $6.00 SGD ($5.60 CAD) depending on the time of day and entry point. The size of the cordon has steadily increased, with 33 gantries in 1998, 66 gantries in 2010 and 77 in 2016. The cordon is monitored by large overhead gantries. Cars are required to have their IU at all times if they are entering the cordon. The CBD covers 17.84 km^2 and has approximately 60,520 inhabitants.[114] Rates are reviewed quarterly with the goal of having an optimal traffic speed of 20-30km/h on arterial roads and 45-65km/h on highways. Singapore does not publish revenue or expense information for their cordon charge.

[110] Ibid.
[111] C40 Cities, March 2015, Milan's Area C reduces traffic pollution and transforms the city center
[112] Edoardo Croci and Aldo Ravazzi Douvan, February 2016, Urban Road Pricing: A Comparative Study on the Experiences of London Stockholm and Milan
[113] Ibid.
[114] Ibid.

7.2 Quantitative Assessment

7.2.1 Key Assumptions and Limitations

Key assumptions used in the analysis were:

- Cordon traffic data from the City of Toronto 2011 cordon analysis undertaken by various Regional Governments and the Province of Ontario was used and included all vehicles entering the cordon, including cars, trucks, buses and taxis.[115] The same charge was applied to all vehicle types.
- A price elasticity of -0.3 was used and compares similarly to London and Singapore's elasticity.[116]
- An annual commuting cost of $3,954 was used for price elasticity calculations.[117]
- There are 49 entry points into the cordon, based on the City of Toronto 2011 cordon analysis.

Some limitations to this analysis include:

- Capacity of other transportation methods (e.g. GO Transit and TTC) was not analyzed to determine if capacity exists for travel pattern changes.
- Public transit agencies may gain additional revenue from these new customers; however, any additional revenue was not included in this analysis.
- The most recent publicly available cordon traffic data was from 2011. It is possible that traffic volumes and patterns have changed in the five years following the data collection.
- A detailed traffic forecast model was not used to project traffic flows.

7.2.2 Revenue Potential

7.2.2.1 Gross Revenue Potential

Exhibit 7.1 presents the estimated annual revenue potential of a central cordon charge, before adjustments such as elasticity, implementation costs and operating costs. The rates were selected based on a range of those used in other jurisdictions. The $1 charge is

[115] Data Management Group – University of Toronto, 2011, Cordon Count Reports
[116] Edoardo Croci and Aldo Ravazzi Douvan, February 2016, Urban Road Pricing: A Comparative Study on the Experiences of London Stockholm and Milan
[117] Stuart Foxman, Commuting Accounting

comparable to the charge used in Stockholm or Milan during off-peak times, while the $20 charge is comparable to London's all day charge.

Additional revenue could be incurred through penalties and fines for late payments. This revenue has not been included in the analysis, but could be substantial. For example, London receives 27% of its overall revenue through fines and penalties.[118]

Exhibit 7.1 – Estimated revenue potential of central cordon charge ($ Millions)

	Vehicles entering cordon (AM rush)	Cordon charge				
		$1	$2	$5	$10	$20
Daily revenue	145,827	0.1	0.3	0.7	1.5	2.9
Annual revenue	36,456,750	36.5	72.9	182.3	364.6	729.1

7.2.2.2 Demand Reduction

As illustrated in other jurisdictions, the implementation of a cordon charge will have an impact on consumer demand. Demand elasticity reductions have ranged from -0.3 in London, -0.3 in Singapore, -0.4 in Milan, to -0.85 in Stockholm.[119] The higher elasticity of Stockholm is most likely due to the structure of the charge and increase in public transit availability. Exhibit 7.2 illustrates how the annual revenue would change based on varying levels of reduction in traffic volume. The final row shows the reduction in revenue based on a -0.3 elasticity. The elasticity represents the change in demand based on each percentage point of price increase. For the -0.3 elasticity, a 1% change in price results in a -0.3% change in demand. The different reduction in traffic volumes are shown to illustrate the potential change in revenues based on different changes in traffic volumes. The change in revenue based on the elasticity will be used for the final net revenue analysis as it best represents the change in demand based on various charge amounts.

[118] Transport for London July 2008, Central London Congestion Charging Sixth Annual Report
[119] Edoardo Croci and Aldo Ravazzi Douvan, February 2016, Urban Road Pricing: A Comparative Study on the Experiences of London Stockholm and Milan

Exhibit 7.2 – Annual revenue potential of central cordon charge based on traffic reductions ($ Millions)

% Reduction in traffic volumes	Cordon charge				
	$1	$2	$5	$10	$20
0%	36.5	72.9	182.3	364.6	729.1
-5%	34.6	69.3	173.2	346.3	692.7
-10%	32.8	65.6	164.1	328.1	656.2
-15%	31.0	62.0	154.9	309.9	619.8
-20%	29.2	58.3	145.8	291.7	583.3
-25%	27.3	54.7	136.7	273.4	546.9
-30%	25.5	51.0	127.6	255.2	510.4
-35%	23.7	47.4	118.5	237.0	473.9
-40%	21.9	43.7	109.4	218.7	437.5
-0.3 elasticity	**35.8**	**70.1**	**165.0**	**295.4**	**452.5**

7.2.2.3 Consumer and Vendor Avoidance

Drivers may look to avoid the cordon charge by adjusting their travel times or switching to different travel methods, such as public transit. These changes in behaviour are assumed to be captured through elasticity rates described in the previous section.

7.2.2.4 Implementation and Administration Costs

Operating costs for a cordon charge can range substantially. Operating cost as a percentage of revenues for London, Stockholm and Milan cordon zones ranged from 29% to 47%, with an average of 36%.[120] Costs can vary substantially based on a number of factors including the size of the cordon, number of transactions, and level of enforcement. Operations and administration cost have been estimated on a per entry point basis. Operations and administration costs cover all costs associated with the system after implementation including maintenance costs associated with maintaining the overall system, enforcement, and customer service. Operating costs for a congestion charge have typically been higher at the start of a cordon program, before decreasing over time. This indicates that it takes a few years of full scale operations before a steady state is achieved. Operations and administration costs are approximately $900,000 per entry point for London and $2,200,000 per entry point for Stockholm. An average cost of $1,550,000 per entry point has been

[120] National Cooperative Highway Research Program, 2011, Costs of Alternative Revenue-Generation Systems

assumed for Toronto. As Milan has a substantially lower number of vehicle entries into the cordon than Toronto, it was excluded from this analysis.

Installation of gantries would be a main implementation cost. Gantry cost estimates for the Maryland I-495 highway had a cost of $320,000 USD ($401,000 CAD) per gantry.[121] In the Toronto Cordon Count program 49 stations were used to collect cordon information. Assuming these are the only entry points into the cordon, the cost of constructing the 49 gantries is estimated at $19.65M CAD. Depending on the configuration and final implementation, these costs may vary substantially. Costs for establishing an entry point in other jurisdictions are not available.

It is likely that back office technical systems will also need to be acquired or developed. The Massachusetts Department of Transportation procured a back office technical system for their All Electronic Tolling System Project at a cost of $6.9M USD ($8.65M CAD) in 2015.[122] The City may also need to acquire technologies such as optical character recognition software, network connections, web payment platform, and a smartphone payment application. Additionally a customer service centre will need to be established to handle customer questions, complaints, or billing disputes. This service could be delivered by Toronto's existing 311 service; however, additional staff and training will most likely be necessary. A public information campaign will most likely be necessary to inform and educate citizens about the charges.

Start-up costs for London were £200M ($367M CAD) when the system launched in 2003.[123] Stockholm's start-up costs were 1,900M SEK ($300M CAD) when the system launched in 2006.[124] Start-up costs for Milan are estimated to be between €27M and €33M ($38.5M and $47.0M CAD).[125] The lower start-up costs correspond with a lower volume of vehicles entering the cordon in Milan.

7.2.2.5 Net Annual Revenue Potential

Exhibit 7.3 demonstrates the potential annual revenue of a central cordon charge after cost deductions and demand changes.

[121] Joshua Crunkleton, 2008, Congestion Pricing for the Capital Beltway
[122] Thomas J. Tinlin, 2015, All-Electronic Tolling Update
[123] Tom Rye, 2006, Congestion and Road Pricing
[124] Jonas Eliasson, 2014, The Stockholm congestion charges: an overview
[125] Cosimo Chiffi, August 2014, ECOPASS, the traffic pollution charge of Milan

Exhibit 7.3 – Estimated net annual revenue potential of central cordon charge ($ Millions)

	Cordon charge				
	$1	$2	$5	$10	$20
Revenue before deductions	36.5	72.9	182.3	364.6	729.1
Elasticity deduction (-0.3)	(0.7)	(2.8)	(17.3)	(69.2)	(276.6)
Revenue potential after elasticity	**35.8**	**70.1**	**165.0**	**295.4**	**452.5**
Operation costs	(76.0)	(76.0)	(76.0)	(76.0)	(76.0)
Net annual revenue	**(40.2)**	**(5.8)**	**89.0**	**219.5**	**376.6**

Exhibit 7.3 shows that total operating costs stay relatively constant depending on the number of transactions. Although some costs vary with the total number of transactions, due to the early lack of definition in a final implementation scheme, costs are assumed to remain constant and be more closely linked to the number of entry points to the cordon. The result is that scenarios with a higher cordon fee show a higher proportion of revenue flowing to the City after taking into account administration costs.

An implication of the above cost structure is that it may not be worthwhile to implement cordon pricing at a low cordon charge. At lower charges, a relatively larger proportion of revenues are used simply to cover operating costs. These operating costs are a "deadweight" cost in terms of the net revenue raising ability of this revenue option.

7.2.3 Sustainability of Revenues

The revenue from cordon charges should have a high degree of stability in the long-term. Driving patterns do not vary substantially from year-to-year, allowing the City to project and forecast traffic volumes into the future. As demonstrated in the jurisdictional review, the initial implementation of the cordon charge will likely have a negative impact on traffic levels within the first year following implementation, with traffic levels stabilizing beyond this (with potential for it to increase as was the case in London). Charges can be re-evaluated over time to achieve the desired results in regard to both revenue and traffic levels.

A cordon charge may have an impact on revenues generated through the federal gas tax. As drivers either shift to public transit or reduce the number of driving trips they take, the amount of fuel used will be reduced, potentially impacting gas tax revenues received. However, the cordon charge should have a positive impact on revenue generated by the TTC and GO Transit. If individuals shift away from driving, transit agencies will likely capture some of these diverted commuters.

7.3 Qualitative Assessment

7.3.1 Impact on Stakeholders

Cordon charges would primarily target residents of Toronto and surrounding municipalities who live outside of the downtown core and who drive into the central cordon. Using a morning rush hour cordon charge would primarily target commuters who are entering the downtown area for work. Commuters could choose to shift their travel into off-peak times to avoid the charges or choose to take public transit. Considering the TTC's existing capacity challenges, the public transit system may be unable to absorb all of the additional demand, potentially leaving commuters with limited options.[126] Metrolinx's current plan to have 15 minute all day service across the GO Transit rail network could provide excess capacity to carry an additional passenger load created by a cordon charge.[127] Additionally, commuters with limited access to public transit would also be impacted negatively as they may not have viable alternatives. Drivers may argue that they already are charged for their driving through gas taxes and municipal taxes.

Businesses will also be impacted by the charges. Businesses that reimburse employees for the cost of travel will have an additional cost to bear for employee travel. The cordon charge may also create an additional expense for employees commuting to work, potentially limiting an employer's ability to hire and retain staff.

Cordon charges have failed to be adopted in numerous cases due to lack of public support. For example, Manchester, UK voted against a congestion charging zone in 2008.[128] In contrast, Stockholm successfully implemented its congestion charge by running a trial period to demonstrate the impact of a congestion charge. Stockholm conducted surveys to identify desired outcomes of citizens and used these outcomes to develop system objectives.[129]

Although drivers may look to take public transit rather than pay the charge, capacity constraints on the TTC could become an issue. Many TTC routes see over-crowding during rush hours at existing ridership numbers and it may be challenging to accommodate additional ridership with current service levels.[130] Stockholm for example, added additional transit capacity and extended service times one year before the cordon charge trial period began.[131]

In general, a cordon charge would have a positive impact by reducing traffic, decreasing greenhouse gas emissions and increasing transit ridership. The magnitude of these changes

[126] Metrolinx, June 2015, Yonge Relief Network Study
[127] Oliver Moore, April 2015, Pledge of 15-minute commuter rail service for Toronto faces early friction
[128] James Sturcke, December 2008, Manchester says no to congestion charging
[129] Jonas Eliasson, October 2014, Stockholm's Congestion Pricing
[130] Metrolinx, June 2015, Yonge Relief Network Study
[131] Jonas Eliasson, October 2014, Stockholm's Congestion Pricing

is reliant on the size of the congestion charge and availability of alternatives for businesses and individuals.

Drivers into the city core are likely to have higher incomes, on average, than travellers using other modes such as transit. Hence, there is less concern that this revenue option may be regressive (i.e., unduly targeting low income residents). Some of the burden will be borne by residents living outside of the city, meaning that some of the tax burden is exportable. These features are favourable considerations in the assessment of this option.

7.3.2 Impact per Affected Toronto Consumer Base

The portion of the cordon charge that will affect Torontonians can be determined by adding back operating costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the purposes of this calculation, it is assumed that 65% of the cordon charge is paid by Torontonians, and the remaining 35% is exported to visitors of the city. The adjusted revenue balance is approximately $107 million based on a $5 tax rate. The consumer base in this case can be approximated using the total number of households in Toronto that own at least one vehicle. As a result, it is estimated that every Toronto household that owns at least one vehicle will see an increase of $120 per year in their annual transportation-related expenditures. At the same tax rate, approximately $58 million of the potential tax revenue is exported to non-residents.

7.3.3 Impact on Economic and Business Activities

In regards to the impact on the sale of goods and services, there has been a neutral, and in some cases a positive impact in jurisdictions that have implemented a congestion charge. London has seen a positive increase in business activity within the cordon area and an independent review of economic and business impact found a neutral impact on the broader London economy due to the congestion charge.[132] Businesses within the cordon area have stated that the decongestion has created a better working environment and easier commute for employees through enhanced public transit and more efficient road networks.[133] Stockholm saw a 4% increase in business activity within the cordon area, partially attributable to the reduced likelihood of cordon zone residents to travel outside of it to purchase goods.[134] Additionally, businesses benefitted from the ability to make 25% more deliveries during charge hours due to reduced congestion.[135]

[132] Transport for London, June 2008, Central London Congestion Charging Sixth Annual Report
[133] Ibid.
[134] San Francisco County Transportation Authority, November 2010, Mobility, Access, and Pricing Study
[135] Ibid.

7.3.4 Competitiveness and Avoidance

Cordon charges could deter businesses from locating in Toronto due to the additional costs of driving. However, case studies have shown that cordon charges have not limited business activity and have, at worst, a neutral impact on businesses in the cordon area. Tourists who visit Toronto by automobile or rent a vehicle would be impacted by the charge, which could reduce the amount of visitors to the city's downtown core. However, tourists would most likely have other options to avoid the charge, such as public transit or adjusting their travel times.

Drivers may attempt to avoid or reduce the charge by taking public transit, carpooling, or adjusting travel times. However, these avoidance activities would have positive externalities through reducing congestion and limiting environmental impacts.

7.3.5 Other Considerations

The City would need to develop numerous operating functions in order to implement a cordon charge. An administrative group needs to be established to handle billing, inquiries, disputes and other administrative activities. The City may also need to establish a group to monitor and adjust charges depending on congestion, environmental impact, revenues or other City metrics. Some of these functions may already fall within the City's existing capabilities; however, others may need to be developed or expanded.

The implementation of a cordon charge is expected to be a lengthy and intensive process. A pilot program may be worthwhile in studying the impacts of a congestion charge on the City. In addition, it would allow residents of Toronto to see the congestion charge in action and better understand the benefits of a congestion charge. Stockholm and Milan both initiated pilot programs before making a congestion charge permanent through a referendum. London underwent extensive public consultation before implementing a congestion charge. Hong Kong also underwent a pilot program between 1983 and 1985, before it failed due to public opposition.

The City will need to work with various stakeholder groups, such as driving associations, public transit agencies, tourism groups and business groups to ensure stakeholder buy-in. Additionally, due to the high visibility of the toll, a strong public consultation effort will need to be undertaken to ensure the public is aware, informed and involved in the tolling process.

Extensive technical testing will be required to ensure that billing and plate identification is completed accurately. Despite this, as evidenced by case studies around the world, cordon charges can have strong benefits to many groups. Those who are willing to pay are able to get to work quicker and with reduced stress. Transit riders are able to have improved service (if revenues are invested in transit). All citizens benefit from improved environment impacts.

While a cordon charge has many attractive features, it should also be noted that similar benefits may be achieved at lower implementation cost by applying a levy to commercial parking spaces in the downtown core. Assuming that the costs of a levy are passed through

to users in higher parking charges, a parking levy would have a similar impact in increasing the cost of commuting by car.

7.4 Summary Evaluation

A cordon charge is becoming a more common revenue stream in metropolitan cities around the world that are dealing with congestion. Cities such as London, Stockholm, Milan and Singapore have all effectively implemented cordon charges. Despite mixed consensus prior to implementation, cordon charges now have positive public support where implemented.

Benefits of the charge include the potential to generate large amounts of revenue for the City. Cordon charges also have positive benefits outside of revenue, including reduced pollution, reduced commute times for drivers, increased public transit usage, reduced delivery times for businesses, and in some case studies positive economic benefits.

Despite these benefits, substantial challenges exist in implementing a cordon charge. Drivers may argue that they are already paying for roads through municipal and gas taxes. A cordon charge is challenging to implement and would require substantial testing, consultation, review and analysis. Additionally, this revenue option can be costly to implement due to significant start-up costs (e.g., construction of gantries and systems) and the ongoing administration costs can be quite high (approximately 35% of total revenues). Lastly, it is likely that citizens would want to ensure that they are getting value for their money and understand where the revenues from this charge are being directed. Cordon charge revenue is typically invested into transit to ensure this transparency.

8 Revenue Profile: Tobacco Tax

8.1 Overview of Revenue

8.1.1 Revenue Structure

In Canada there are currently no tobacco taxes at the local level. However, as tobacco is roundly considered a harmful product, many local governments in the United States tax it heavily to fund public services.

U.S. cities and counties primarily apply tobacco taxes as an excise tax through the purchase of stamps that are affixed to individual packages of cigarettes or small cigars. These tobacco taxes are paid by licensed agents (e.g., wholesalers, distributors) prior to distribution of the tobacco products to retail locations. Fines and other penalties are levied on retailers caught selling unstamped packages. The tax is collected either at the state level or by the municipality itself.

Tobacco taxation could also take the form of a product-specific sales tax at the retail level. In Ontario, tobacco is already subject to the 13% Harmonized Sales Tax. As a sales tax, tobacco tax could be applied to a broader range of nicotine products than a tax stamp structure. Additional products, such as e-cigarettes, cigars and smokeless tobacco, could be subject to a tobacco sales tax on the pre-HST price.

8.1.2 Legislative Requirements

Toronto's authority to levy a tobacco tax is limited under COTA to a sales tax on "the purchase of tobacco", as defined in section 1 of the *Tobacco Tax Act*, for personal "use or consumption".[136] Legislative change would be required to introduce a tax stamp at the wholesale or distributor level, such as the kind in use in New York City, Philadelphia, Chicago and Washington, DC, and other U.S. cities. Unlike these jurisdictions, Toronto currently has the authority to level a tobacco tax only at the retail level on the final consumer.

8.1.3 Implementation Issues

As a consumption tax, a tobacco tax would be applied at the final point of sale on the price of tobacco products before HST. Implementing this type of sales tax would require significant policy design and implementation planning, corresponding IT infrastructure, and administrative and enforcement personnel.

The CRA could potentially be engaged through a service agreement to collect the sales tax on behalf of the City for an annual fee. This would significantly reduce implementation

[136] *City of Toronto Act*, 2006 – Part X: Power to Impose Taxes

timelines and ongoing administrative costs. However, similar to the alcohol and amusement taxes, there may be significant barriers to implementation if the CRA does not currently track tax receipts by local postal code. Also if additional provincial support is required, this could further contribute to implementation and administrative complexity.

Initial analysis suggests that it would be very challenging to add a tobacco tax component to the existing HST. Thus, it has been assumed that the tobacco tax would be implemented and administered by the City as a separate tax regime.

Determining those businesses required to collect and remit the tax could be straightforward. The City's Municipal Licensing and Standards Division issues licenses to retail points of sale permitting the sale of tobacco products, and this information is tracked in the licensing computer system and could be used to identify locations responsible for collecting and remitting the tax.

With nearly four thousand retail points of sale in Toronto,[137] effectively communicating and enforcing the tobacco tax could be a substantial undertaking for the City to administer. The City would need to establish a dedicated department or division with additional staff, who would have to be hired and trained prior to the implementation of the revenue option. A City-administered system would also require IT and other services (e.g., compliance, audit) to support its collection and enforcement efforts.

8.1.4 Other Jurisdictions

According to the Campaign for Tobacco-Free Kids, there are more than 600 local jurisdictions (i.e., counties and cities) in the United States that have their own cigarette tax rates.[138] These rates are often in addition to state-level tobacco taxes and issued as tax stamps prior to retail distribution. For example, the highest combined rate in the United States is Chicago's at a total of USD $6.16 per package: broken down as Chicago's local rate of (all figures USD) $1.18 per package, which is in addition to Cook County's rate of $3.00 per package, which is on top of Illinois's rate of $1.98 per package. The federal rate of USD $1.01 is in addition to these rates, as well as any state or local sales taxes.

Exhibit 8.1 presents a selection of local cigarette tax rates for illustrative purposes. The application of local tobacco taxes varies considerably across the United States. Some states, such as New York and Pennsylvania, only have one municipality that levies a local tobacco tax (New York City and Philadelphia respectively). Other states, such as Alabama, Missouri

[137] City of Toronto, September, 2009, Staff Report, "Tobacco Retail License Fees," Licensing and Standards. As of 2009, there were 3,812 business licenses with an endorsement to permit the sale of tobacco, cigars and cigarettes, and another 103 licensed Smoke Shops.
[138] Campaign for Tobacco-Free Kids, January 2016, Top Combined State-Local Cigarette Tax Rates, Available at: https://www.tobaccofreekids.org/research/factsheets/pdf/0267.pdf

and Virginia, have many cities and counties with local tax rates on cigarettes: Alabama (343 cities, 54 counties), Missouri (128 cities, 2 counties) and Virginia (96 cities, 2 counties).[139]

Exhibit 8.1 – Selection of Local Cigarette Tax Rates ($USD)[140]

Jurisdiction	Tax
Washington, D.C.	2.50
Anchorage, Alaska	2.39
Matanuska-Susitna Borough, Alaska	2.28
Philadelphia, Pennsylvania	2.00
Cuyahoga County, Ohio	1.945
New York, New York	1.50
Chicago, Illinois	1.18
Evanston, Illinois	0.50

8.2 Quantitative Assessment

8.2.1 Key Assumptions and Limitations

In Canada, federal and provincial governments levy tobacco taxes on cigarettes, cigars, fine cut tobacco and other tobacco products (e.g., pipe tobacco, chewing tobacco). Given that cigarette sales represent approximately 95% of the Ontario tobacco market, only cigarette sales have been considered for the purposes of this analysis.[141] Ontario tobacco tax revenues for 2015 have been based on data reported by Physicians for a Smoke-Free Canada.[142] Using federal and provincial cigarette markup rates, total cigarette sales in Ontario were estimated for the analysis. These estimates do not account for black-market or reserve sales, which are estimated to account for approximately one fifth of the Ontario market.[143] To determine the cigarette sales attributable to Toronto, the Ontario figures were scaled to take into account:

- The population in Toronto versus Ontario, and

[139] Ibid.
[140] Ibid.
[141] Statistics Canada Survey of Household Spending 2014
[142] Physicians for a Smoke-Free Canada, December 2015, Tax Revenues from Tobacco Sales
[143] Ontario Convenience Store Association, 2013, Contraband Tobacco Butt Study

- The percentage of the population that are smokers in the City (15.6%) compared to that in the province (17.4%). [144]

8.2.2 Revenue Potential

8.2.2.1 Gross Revenue Potential

For illustrative purposes, tax rates of 1%, 2%, 5%, 8% and 10% have been examined herein. These tax rates are within the range of U.S. local cigarette taxes and are comparable to the current federal and provincial portions of the HST. Exhibit 8.2 presents the price impact for these various rates based on average 2015 cigarette prices in Ontario.

Exhibit 8.2 – Cigarette Price Impact by Sales Rate ($)

	Current cigarette prices (2015, provincial and federal tax included)		Toronto sales tax rate (% of pre HST price)				
		Pre HST price	1%	2%	5%	8%	10%
Per cigarette	0.49	0.43	0.00	0.01	0.02	0.03	0.04
Pack of 20	9.70	8.59	0.09	0.17	0.43	0.69	0.86
Pack of 25	12.13	10.74	0.11	0.21	0.54	0.86	1.07
Carton of 200	97.04	85.88	0.86	1.72	4.29	6.87	8.59

Toronto cigarette sales are estimated to be worth approximately $664 million. Based on tax rates ranging from 1% to 10% of the pre-HST retail price of cigarettes, potential gross revenue ranges from $6.6 million to $66 million annually, as displayed in Exhibit 8.3.

Exhibit 8.3 – Estimated Annual Toronto Taxation Revenue before Deductions ($ millions)

Estimate of Toronto Cigarette Sales 2015	Toronto sales tax Rate (% of pre HST price)				
	1%	2%	5%	8%	10%
664.2	6.6	13.3	33.2	53.1	66.4

8.2.2.2 Demand Reduction

While nicotine is an addictive substance, tobacco products are generally considered to respond to price signals.[145] This could be because of leakage, as smokers choose to purchase tobacco in other locations, in other forms or in the black market, or because of

[144] Toronto Foundation's Annual Report on the State of the City 2015
[145] Propel Centre for Population Health Impact, 2015, Tobacco Use in Canada: Patterns and Trends, University of Waterloo; and The Ontario Tobacco Research Unit, June 2012, Tobacco Taxes: Monitoring Update

the continuing decline in the proportion of the general population that smokes. The World Health Organization (WHO) has concluded that "evidence from countries of all income levels shows that price increases on cigarettes are highly effective in reducing demand."[146] Other WHO research indicates that cigarettes have a price elasticity of demand of -0.4 in high income countries like Canada.[147] This means that, for example, a 10% increase in the price of cigarettes translates into a 4% decrease in the demand. Not all demographics have the same price elasticity of demand. The same study by the WHO found that youth have price elasticity up to two or three times higher than adults, and that responsiveness to price increases is higher among low-income consumers than high-income.

8.2.2.3 Consumer and Vendor Avoidance

International experience indicates that raising cigarette taxes to higher levels than in neighbouring jurisdictions increases smuggling from lower tax jurisdictions and tax exempt sources, such as native reserves.[148] If Toronto were the only municipality in the GTA or Ontario to implement a tobacco tax, many consumers could easily avoid the tax by purchasing cigarettes elsewhere. The higher the sales tax, the greater the incentive for consumers to cross municipal boundaries to buy tobacco products at lower prices.

The large number of retail outlets for tobacco in Toronto could lead to vendor tax avoidance as well. Tobacco is sold at a variety of retail outlets, including: convenience stores, gas stations, grocery stores, smoke shops, bars, billiard halls, eating establishments and night clubs. The City, or its agent, would need to be vigilant in enforcing retail compliance. The Province has increased its Ontario Provincial Police efforts to combat contraband tobacco and tax avoidance.[149] In implementing a tobacco tax, Toronto may want to consider a specialized task force within the police department.

8.2.2.4 Implementation and Administration Costs

A tobacco tax would require significant administrative effort since Toronto does not currently collect taxes on tobacco products.

In Philadelphia, the tobacco tax is administered by the State of Pennsylvania and applied at the local level (i.e. tobacco sales in the City of Philadelphia). In 2015, the state's cost of administering the tobacco tax was $700,000 annually.[150] Recognizing there are economies

---

[146] World Health Organization, Tobacco Free Initiative, Available at: http://www.who.int/tobacco/economics/taxation/en/

[147] Anne-Marie Perucic, February 2012, The demand for cigarette and other tobacco products, Tobacco Control Economics – Tobacco Free Initiative, World Health Organization

[148] Tobacconomics, March 2015 , Understanding and Measuring Cigarette Tax Avoidance and Evasion – A Methodological Guide

[149] Ontario Ministry of Finance, 2010, Contraband Tobacco

[150] Vargas, C, July 2015, Enough smokers for school funding, Available at: http://www.philly.com/philly/blogs/heardinthehall/Enough-smokers-for-school-funding-.html

of scale in administering a tobacco tax at the state level that would not be realized by the City, a multiplier of 2x has been applied to the estimate of administration costs for a tobacco tax, which has been calculated at approximately $1.4 million.

8.2.2.5 Net Annual Revenue Potential

Exhibit 8.4 presents estimated net annual revenue potential by sales tax rate, adjusting for elasticity deductions, avoidance deductions and administrative costs.

Exhibit 8.4 – Net Annual Revenue Potential ($ Millions)

	Toronto sales tax Rate (% of pre HST price)				
	1%	2%	5%	8%	10%
Revenue Potential Before Deductions	6.6	13.3	33.2	53.1	66.4
Elasticity Deductions (-0.4)	0.0	0.1	0.7	1.7	2.7
Avoidance Deduction (-2.5)	0.2	0.7	4.2	10.6	16.6
Revenue Potential After Elasticity and Avoidance	6.4	12.5	28.4	40.8	47.2
Administration Deduction	1.4	1.4	1.4	1.4	1.4
Net Annual Revenue	**5.0**	**11.1**	**27.0**	**39.4**	**45.8**

8.2.3 Sustainability of Revenues

Tobacco use, especially consumption of cigarettes, is steadily declining, and it is the public policy of the Province of Ontario to achieve a "Smoke-Free Ontario". Between 2000 and 2014, smoking rates in Ontario declined from 24.5% to 17.4%.[151] This trend has been further supported by the introduction of vaporizers which are often seen as a replacement for traditional cigarettes. This suggests that tobacco tax revenues may decline over time as fewer people use tobacco products.

8.3 Qualitative Assessment

8.3.1 Impact on Stakeholders

Retail outlets that rely on tobacco sales will be adversely affected by any decrease in demand that results from the imposition of the tax. As noted above, reductions in demand could reflect decreases in usage, a shift in sales to other jurisdictions, or an increase in black market transactions.

[151] Province of Ontario, Budget 2016, page 122.

The burden of the tax is borne directly by consumers who smoke; this represents less than 20% of the population. Hence, costs of the tax are borne by a fairly narrow subset of the population.

Within the population that smokes, a tobacco sales tax may be somewhat regressive. Lower-income smokers may spend a larger proportion of their income on tobacco products, and hence be relatively more impacted by the tax, than higher-income individuals.

Because most tobacco products are likely to be purchased and used locally by residents, a tobacco tax has low exportability. It will primarily be borne by Toronto residents.

8.3.2 Impact per Affected Toronto Consumer Base

The portion of the tobacco tax that will affect Torontonians can be determined by adding back administrative costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the purposes of this calculation, it is assumed that 100% of the tobacco tax is paid by Torontonians, and no portion of the tax is exported to non-residents. The adjusted revenue balance is approximately $28.4 million. The consumer base in this case can be approximated using the total number of smokers in the city of Toronto. As a result, it is estimated that every smoker in Toronto will see an increase of $65 per year on top of their current expenditure on tobacco products.

8.3.3 Impact on Economic and Business Activities

Businesses that rely on tobacco sales for a large share of their revenue would be most negatively affected by a new tobacco sales tax, as consumers seek out lower-priced cigarettes and other products elsewhere in the GTA or in the black market, leading to tax leakage. Tobacco retailers located near municipal boundaries are likely to be affected more than those in the downtown core.

However, if the sales tax rate is set low, the effect may be limited as the transaction costs of purchasing cigarettes from another jurisdiction could outweigh the increase in price. A 2% sales tax may increase the price of a pack of 20 cigarettes by only 17 cents, while a 5% sales tax would increase the price by 43 cents. Higher rates increase the likelihood that price differentials will exceed a "tipping point" where shifts in purchasing behaviour are worthwhile for individual consumers.

Additionally, with the growth of online shopping, consumers may order their tobacco products online from retailers outside of Toronto. This would affect retailers throughout Toronto and may occur regardless of the introduction of a sales tax.

8.3.4 Competitiveness and Avoidance

Overall, a Toronto-only tax on tobacco products is likely to have limited effect on the overall competitiveness of Toronto as a business location. A tobacco tax is unlikely to reduce tourism in Toronto due to the appeal of Toronto's cultural and entertainment sectors and the limited role that tobacco prices play in travel decisions.

8.3.5 Other Considerations

Any increase in tax that provides an additional incentive for underground or black market transactions may result in additional costs for policing and enforcement.

8.4 Summary Evaluation

Tobacco taxes at the local level are a mainstream revenue tool in place across the United States. Since Canadian tobacco taxes are currently collected solely at the provincial and federal level, a municipal sales tax on tobacco products would be the first of its kind in Canada. With the potential to raise $27.0 million annually with a 5% sales tax on tobacco products (or $45.8 million annually with a 10% tax rate), a tobacco tax has the potential to generate moderate revenues. No legislative change would be required to implement the tax, though administration and enforcement would be complex and require additional investment. The potential for changes in consumer behaviour is a key unknown, given the densely populated GTA region and the thousands of retail outlets for tobacco products in close proximity to Toronto.

9 Revenue Profile: Development Levy

9.1 Overview of Revenue

The purpose of a development levy is to capture a portion of gains in land value at the time of development. Currently, the City generates revenues from real estate through:

- fees paid by developers (development charges);
- unit purchasers (the municipal land transfer tax); and
- owners/occupants (property taxes).

The City's current real estate revenue tools do not generate any revenues for the City directly from the gains made on land held for development, even though improved service offerings (e.g., public transit) or other initiatives implemented by the City may have generated an increase in the value of the land. For example, a land aggregator that buys land and chooses to develop the land when it is sufficiently profitable will only incur land transfer taxes at the time of acquisition (based on the value of the land when the developer purchases it) and will subsequently pay development charges at the time of development (which are not based on the value of the land). Increases in the value of the land during the time it is held for development accrue all to the developer. The intent of the proposed levy is to tax developers based on the value of the land at the time of development in order to capture a portion of the gains in land value during the time it was held.

9.1.1 Revenue Structure

Briefing notes prepared by the City suggest that the development levy could be applied based on one of the following rate structures:[152]

- a percentage rate on land value at the time of development;
- a variable rate on land value at the time of development based on location; or
- a rate on land value at the time of development based on the expected land value appreciation.

The levy would be payable at the time of building permit issuance or zoning approval and collected by City divisions using the current revenue collection mechanism.

City briefing notes further indicate that potential design features for a development levy have not been fully explored. Certain design approaches may ultimately be deemed infeasible. For example, although the City briefing note indicates that the rate could be based on expected land value appreciation, it is not clear how such an approach would be

[152] City of Toronto, January 2016, 2016 Operating Budget Briefing Note – Revenue Tools under the City of Toronto Act, 2006

implemented in a fair and defensible manner for the large variety of sites and uses that would be involved. Thus, there are likely practical challenges to implementing the development levy in a form that will meet its underlying objectives.

There are a number of potential issues with the structure of the development levy. In particular, the levy may largely overlap with existing mechanisms under certain circumstances. For example:

- The levy could be seen as overlapping with development charges. Development charges ("DCs") are fees currently collected by the City from developers at the time a building permit is issued. These fees help pay for the cost of infrastructure required to provide municipal services to the new development (e.g., roads, transit, water and wastewater infrastructure). The development levy would be another charge to developers at the same time. However, it would be based on land value rather than on specific estimates of the cost of supporting infrastructure which are used to set DC rates across the City on a periodic basis.
- The levy could be seen as overlapping with the Municipal Land Transfer Tax. The City's Municipal Land Transfer Tax ("MLTT") is charged on properties purchased in Toronto at the time of transaction. The rate levied is a percentage rate of property value at the time of purchase. The development levy would be an additional charge to the land owners when they choose to develop the land, based on the value of the land at the time of development. If a developer purchases a parcel of land and immediately chooses to develop it, the MLTT could overlap with the development levy. The MLTT will be based on total property value, while the development levy would be based more narrowly on land value.[153]
- The levy would not necessarily address its intended purpose. City staff suggested that the development levy could be applied based on a percentage rate of land value at the time of development, ignoring the original purchase price that the developer paid for the land. This suggests that the same charge would be applied in all comparable instances, regardless of how long the land had been held prior to being developed. If the purpose of the development levy is to capture the gains in land value while it was held, this design option does not necessarily directly address the levy's intended purpose.[154]

9.1.2 Legislative Requirements

The development levy faces a number of challenges within the City's current legal framework:

[153] For land being developed, however, total property value generally is equal to land value. Developers may intend to demolish any buildings. They would therefore make no contribution to property value or may even reduce it because of net demolition costs.
[154] As an alternative, however, trying to implement a system that focused more narrowly on the increases in land value since a developer had purchased a property could result in significant additional complexity.

- The Development Charges Act. The DC Act section 59(1) prohibits supplemental development taxes as permitted under other legislation.
- The City of Toronto Act. Part X of COTA allows the City to impose directs taxes (subsection 267(1)) subject to a list of Exclusions (subsection 267(2)) such as income, wealth and sales taxes. A development levy could be construed as a wealth tax, which is an excluded/prohibited tax.

City staff proposed amending COTA by providing an exception to the wealth tax prohibition for a development levy by regulation, or providing authority to create exceptions to the excluded taxes set out in subsection 267(2) by regulation.

9.1.3 Implementation Issues

A significant implementation issue associated with a development levy, aside from amending COTA, is valuing the land. The value of land is a function of its location and how it will be used upon permit issuance. In practice, however, the land valuation would need to come from professional judgement based on a range of information, including the market value of land and buildings in the neighbourhood, assessments of reconstruction costs and existing planning permissions.[155] Thus, the determination of land value at the time of development would need to be assessed by an independent evaluator, similar to Municipal Property Assessment Corporation, and establishing such an entity may be difficult.

Theoretically, it might be desirable to link land value appreciation more specifically to approvals for zoning amendments, since these approvals might be what are required to facilitate property development. Some increases in land value may then be linked to these zoning amendment approvals. This could, however, result in further complexity.

Collection of the development levy would be relatively straight forward. Currently, the City collects DCs at the time of permit issuance. Once the land is valued and an appropriate development levy is determined, the City could collect the levy along with DCs.

If the City decides to collect the development levy along with its existing DCs, the City may also wish to consider if certain developments will face the same DC exemptions. This includes:

- development for Industrial uses (as defined in the DC Bylaw);
- buildings approved for a grant under the Imagination, Manufacturing, Innovation and Technology Property Tax Incentive Program (subject to an agreement with the City); and
- buildings owned by and used for a college and university.[156]

[155] Ibid.
[156] City of Toronto. Business Incentives: Development Charges. Available at: http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=824d4b5073cfa310VgnVCM10000071d60f89RCRD&vgnextchannel=6e4032d0b6d1e310VgnVCM10000071d60f89RCRD

9.1.4 Other Jurisdictions

The use of a "development levy" – where charges are based on the increase in the value of land at the time of development – was not observed in the review of other jurisdictions. Instead, in this section, the jurisdictional review focuses on other forms of revenue options similar to the proposed development levy that have been employed in other jurisdictions.

New York City

New York's Real Property Transfer Tax ("RPTT") is similar to Toronto's Municipal Land Transfer Tax. It is paid on sales, grants, assignments, transfers or surrenders of real property in New York City. It is also paid for the sale or transfer of at least 50% of ownership in a corporation, partnership, trust or other entity that owns/leases property and transfers of cooperative housing stock shares. RPTT applies whenever the sale or transfer is more than $25,000.

The tax rate and amount of tax depends on the type of sale or transfer of property. For residential properties valued at $500,000 or greater, the rate is 1.452% of the price paid. For all other property types that are valued at $500,000 or greater, the tax rate is 2.625%. The tax is usually paid as part of closing costs at the sale or transfer of property.

Vancouver

Vancouver's Development Cost Levy ("DCL") is similar to Toronto's current Development Charge. A DCL is paid by property developers based on square footage of the development. The City of Vancouver has 10 DCL areas, where the DCL collected must be spent within the area boundary.[157] Vancouver's DCL by-laws establish the boundaries, set the rates, and describe how to calculate and pay the levy. Payment of the levy is upon building permit issuance.

Portland

Land Value Capture ("LVC") is designed to capture a one-time gain in property values directly associated with public infrastructure projects. This is similar to the development levy proposed by the City, although the LVC is tied to a specific public infrastructure project.

A common example where LVC can be used is with public transit investments. The Portland Streetcar project in 2001, for example, was partially funded through LVC. At the time of development, the local government was expected to fund $56 million, or 55% of total capital costs ($103.15 million).[158] Two Local Improvement Districts ("LIDs") were identified as areas where property owners would receive the greatest financial benefit from their proximity to the Streetcar. The property owners in the LIDs were assessed and charged a

[157] Housing projects can be funded by DCL outside of the DCL area.
[158] The Office of Transportation and Portland Streetcar Inc., April 2008, Portland Streetcar

one-time levy after substantial completion of the project. The levy amount was based on distance to the Streetcar and principal use of the property (e.g. residential, commercial, etc.).

The revenue generated from the LIDs, combined with development and density increases, raised $9.52 million, or 17% of the $56 million required by local governments. The Streetcar project and the new intensified zoning transformed the area into one of the most in-demand real estate markets in the city.[159]

9.2 Quantitative Assessment

Assuming that the City's intention in implementing a development levy is to target large developments, the potential revenues of the development levy were calculated by estimating the land value of large developments (greater than 10,000 square feet) in Toronto between 2013 and 2015. Large developments were identified using the City's Building Permit Data, and the land values of those developments were estimated based on recent Toronto land transactions that were at or near development stage.

9.2.1 Key Assumptions and Limitations

9.2.1.1 Data

The value of land is a function of its location and how it will be used upon permit issuance.[160] For this analysis, the value of land at permit issuance was calculated using two data sources:

- RealNet was used to attain the latest Toronto land transactions in 2015 for the purpose of residential and/or commercial development. RealNet is widely recognized by real estate professionals as a comprehensive data source on property market information across North America.
- City of Toronto Active and Cleared Building Permit Data were used to attain data on building permits that were issued between 2013 and 2015. This is a comprehensive data source; allowing users to observe building permit type (e.g. new building, demolition, and inspection), the proposed use of the property after completion of work, and the occupancy area covered by permit work in square metres. Occupancy area is further broken down into building type (e.g. residential, office, and retail).

[159] Metrolinx, August 2013, Land Value Capture Discussion Paper
[160] Wightman, A., October 2010, A Land Value Tax for Scotland

9.2.1.2 Methodology

Price per Buildable Square Foot

Land transaction data from RealNet was filtered for transactions where time to development was in the short term (i.e. less than three years to development) in order to capture the land values that are at or near development. This source shows land value in terms of the price of land per buildable square foot, differentiated by the building type that is intended to be developed.

Data on land transactions for the purpose of residential development were more abundant in 2015 than data for office and retail development. Consultations with industry experts at KPMG suggest that land price per square foot buildable for office and retail purposes is slightly lower than the price of land for residential development. Exhibit 9.1 presents the average price per buildable square foot used for this analysis.

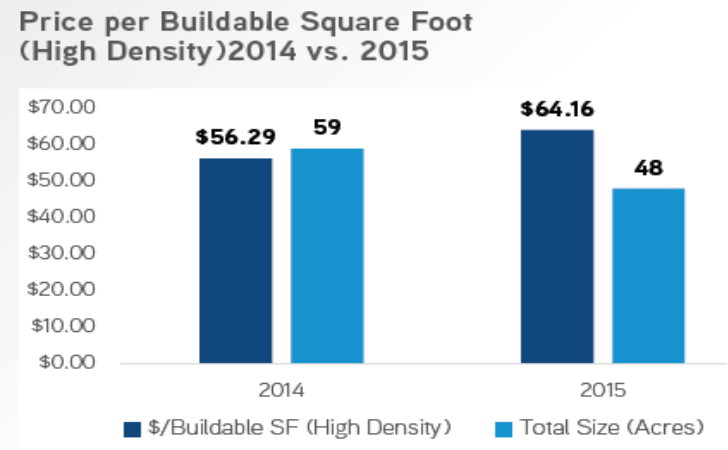
Exhibit 9.1 – Average Toronto Price per Buildable Square Foot ($/buildable sq. ft.)

Residential	Office	Retail
65	60	60

Source: RealNet and KPMG Calculations

As presented in the table, the average land price per square foot buildable for the purpose of residential development was $65. This value is slightly lower ($60) for office and retail development. These values also align with Colliers International (2015) findings on land values in Toronto, as presented in Exhibit 9.2.

Exhibit 9.2 – Toronto Land Values per Buildable Square Foot



Source: Colliers International (2015). Greater Toronto Land Area Land Report: Fall 2015

Development Activity

The City's Active and Cleared Building Permit Data file was used to attain data on building permits that were issued between 2013 and 2015. This file includes data on building area for permits issued.

From this data source, the total building area of individual residential developments larger than 10,000 square feet was extracted.[161] Similarly, the total building area of office and retail buildings larger than 10,000 square feet was also extracted. Based on these data, Exhibit 9.3 presents the total number of building permits issued and the total amount of square foot covered by permit work, for permits issued between 2013 and 2015.

[161] Single family detached homes were not considered in this analysis.

Exhibit 9.3 – Total Number of Permits Issued and Square Foot Covered for New Buildings

Building type		2013	2014	2015
Residential	Total Square Footage (thousands sq ft.)	18,294	15,400	11,098
	Number of Issued Permits (No.)	73	74	52
	Average Permit Size (thousands sq ft.)	250.6	208.1	213.4
Office	Total Square Footage (thousands sq ft.)	2,216	296	1,892
	Number of Issued Permits (No.)	11	8	8
	Average Permit Size (thousands sq ft.)	201.4	37.1	236.6
Retail	Total Square Footage (thousands sq ft.)	805	531	595
	Number of Issued Permits (No.)	21	19	19
	Average Permit Size (thousands sq ft.)	38.3	27.9	31.3

Source: City of Toronto Active and Closed Building Permits

In 2015, 52 building permits were issued for new residential buildings, covering 11.1 million square feet. Thus, the average permit size of new residential buildings was 213,000 square feet. Eight building permits were issued for office buildings, covering 1.89 million square feet, for an average permit size of 236,000 square feet. Lastly, 19 building permits were issued for retail, covering 0.595 million square feet, for an average permit size of 31.3 thousand square feet.

Land Value of Development Activity

The aggregate land value of development activity from 2013 to 2015 was calculated by multiplying land values per buildable square foot (presented in Exhibit 9.2) by the total square footage covered by permit work (presented in Exhibit 9.3).

The table below summarizes the resulting land values for residential, office, and retail development between 2013 and 2015. Land values in 2013 and 2014 were based on 2015 land prices but 2013 and 2014 development activity.

Exhibit 9.4 – Land Value of Toronto Development Activity, 2013-2015 ($ Millions)

	2013	2014	2015
Residential	1,189.1	1,001.0	721.4
Office	132.9	17.8	113.5
Retail	48.3	31.9	35.7

9.2.2 Revenue Potential

9.2.2.1 Gross Revenue Potential

The estimated total revenue potential of the development levy, based on the average price per buildable square foot, has been presented below. For the purposes of this analysis, it was assumed that rates could vary from 2 to 10%. By comparison, the current MLTT rate for purchases greater than $400,000 is 2%.

Exhibit 9.5 – Gross Revenue Potential of a Development Levy by Year ($ Millions)

	2%	4%	6%	8%	10%
2013	27.4	54.8	82.2	109.6	137.0
2014	21.0	42.0	63.0	84.0	105.1
2015	17.4	34.8	52.2	69.7	87.1

Recall from Exhibit 9.3 that the total number of building permits issued and the total amount of square footage covered by permit work declined between 2013 and 2015. The impact of this decline on the annual revenue potential of the development levy is evident in the table above. With a 10% development levy, revenues would have dropped by 36% from $137.0 million in 2013 to $87.1 million in 2015. This 36% drop is consistent across all of the assumed rates; it reflects volatility in the pace of real estate development. CMHC predicts that total housing starts in Toronto will edge lower over the next two years,[162] further eroding the future revenue potential of the development levy.

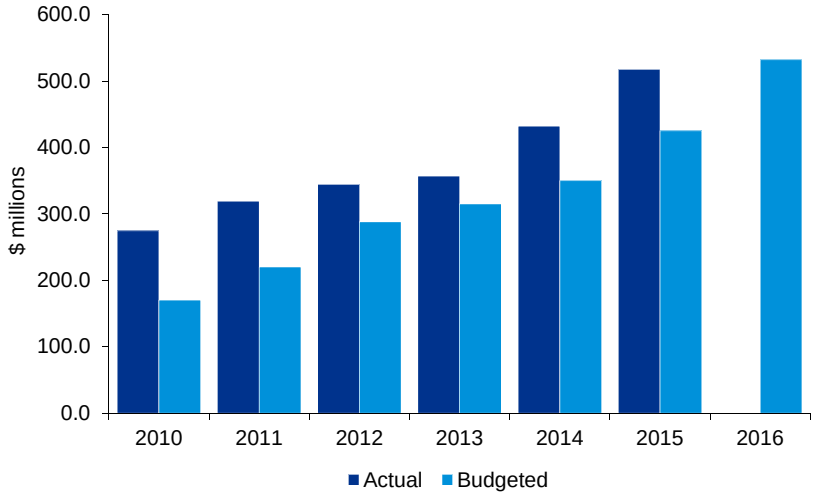
As indicated previously, examples of jurisdictions that use a development levy of this kind were not found as part of the jurisdictional review. As such, demand reduction, vendor avoidance and implementation and administration costs were not quantified as part of the analysis due to limited external data points.

In comparison to the development levy, the Municipal Land Transfer Tax is budgeted to raise $532 million in 2016.[163] The following exhibit presents budgeted and actual revenue

[162] Canada Mortgage and Housing Corporation, Fall 2015, Housing Market Outlook: Greater Toronto Area
[163] City of Toronto, 2016 Budget

generated from MLTT in Toronto between 2010 and 2016. The City has noted that increases in revenues are primarily a result of increased average home prices and, to a lesser extent, an increased number of home sales. Even at the high end of the rate and revenue estimate for the development levy (based on 2013 development activity and a 10% rate), the potential annual revenue of the development levy is small ($137.0 million), relative to the MLTT.

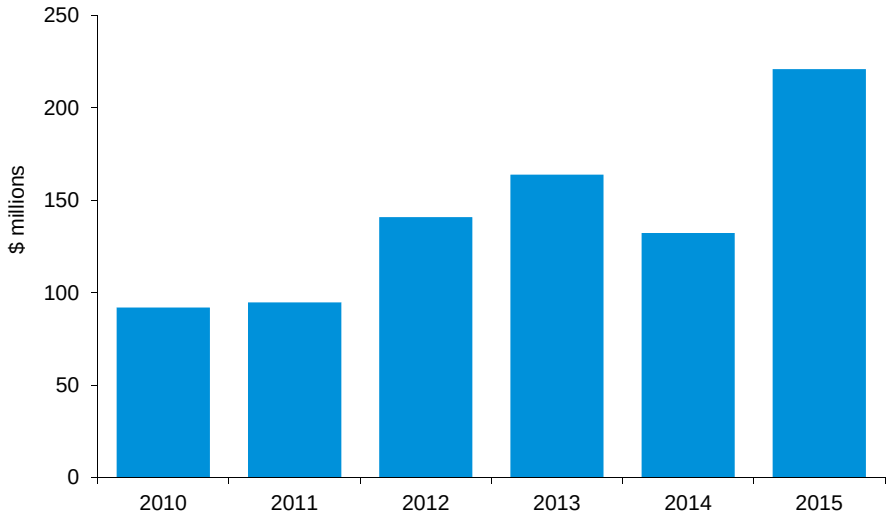
Exhibit 9.6 – Municipal Land Transfer Tax Revenue ($ Millions)



Source: City of Toronto. (2016). Municipal Land Transfer Tax Revenue Summary

Another point of comparison is Development Charge Revenues. In 2015, these revenues totaled $221 million, which is more than double the development levy revenues estimated for 2015 using a 10% rate assumption ($87.1 million).

Exhibit 9.7 – Development Charge Revenues ($ Millions)[164]



Source: City of Toronto. (2014). 2014 Financial Report; 2015 Development Charge Revenue from City staff

9.2.3 Sustainability of Revenues

The development levy would be collected when developers are issued building permits. The volume of building permits submitted and issued in any given year are subject to macroeconomic factors (e.g. interest rates, economic activity, and population growth) and may not necessarily provide a consistent revenue stream. The potential impact of this variability in annual revenue can be seen in Exhibit 9.5, where projected development levy revenues dropped significantly in 2015 compared to 2013 due to decreases in building permits issued and the total square footage being developed.

9.2.4 Impact per Affected Permit

The impact of the development levy on each building permit can be estimated by dividing the total potential revenue by the number of permits in the most recent calendar year. As there were 79 building permits issued in 2015, average financial impact per development permit approximates $660,000. It should be noted that given the value of the land for each development property can vary significantly depending on its location and zoning, the actual

[164] Development charge revenues are not recognized until the funds are spent for the intended purposes, and may be lower than the gross receipts for the years in question.

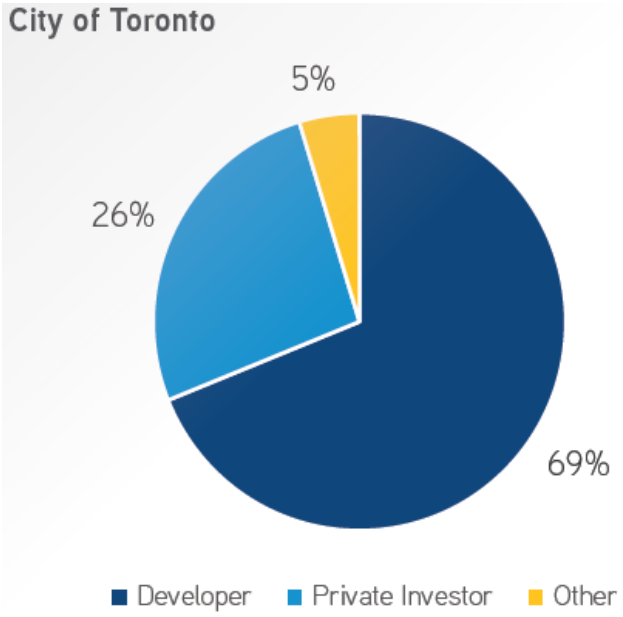
levy per permit will also vary significantly. Given that the levy is charged to land development companies, a portion of the levy can be exported to non-Toronto companies.

9.3 Qualitative Assessment

9.3.1 Impact on Stakeholders

Developers of high density real estate, such as condominiums and office buildings, will bear the initial burden of this revenue option. However, it may ultimately result in some combination of a decrease in land value and/or an increase in the cost of office and residential space. Throughout 2015, developers continue to be the most active purchasers of land in the city of Toronto, representing 69% of transactions, as shown in Exhibit 9.8.

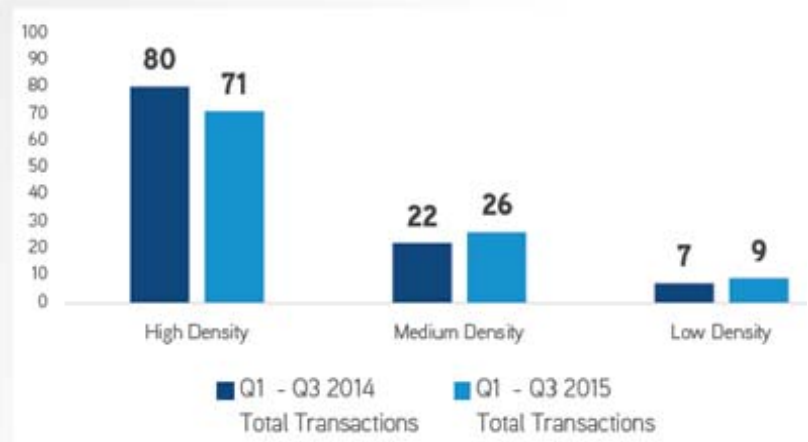
Exhibit 9.8 – Distribution of Land Transactions in the city of Toronto



Source: Colliers International (2015). Greater Toronto Land Area Land Report: Fall 2015

A Colliers International (2015) study found that the majority of land purchases in the downtown Toronto area were for high density developments, as shown in Exhibit 9.9. The intended usage of the lands purchased in the recent past was mainly for mixed-use developments, comprising private condominium units and retail space on the lower levels.

Exhibit 9.9 –Toronto Land Sale Transactions (2014 vs. 2015)



Source: Colliers International (2015). Greater Toronto Land Area Land Report: Fall 2015

Developers will bear the cost of any development levy in the first instance. Costs could be passed on to individual homeowners (for condominium units) and building tenants (for office and retail developments and for rental apartment units). As such, a development levy could result in additional cost pressures for the housing, office, and retail markets. Alternatively, there may be a decrease in the value of land used for development.

Because a development levy will be applied to new development, it will by definition not generate revenues from existing residential and office properties. This means that the burden of a development levy would be borne by a relatively narrow economic base.

To minimize administration costs and to make it practical to implement, it is possible that the development levy would be applied only to developments above a certain threshold in size. This could result in some distortions in the marketplace in the event that development activity is shifted to occur below the threshold. It may also disadvantage lower income residents, to the extent that they are more likely to live in large, high-density apartment developments that attract a development levy. Single-family dwellings, which are affordable only by higher-income residents, may be exempted.

9.3.2 Impact on Economic and Business Activities

A concern with the development levy is that it could dampen future development activity. Since the development levy is incurred at permit issuance (when revenues are yet to be generated), developers would need additional financing to pay for the development levy. Such financing may not be readily available and may result in a deferral of the development until such time as the profitability outlook for the project increases.

It may also discourage business location within the city by increasing the cost of office space. However, the impact on business location is likely to be small given the small impact that this is likely to have on the cost of space.

9.3.3 Competitiveness and Avoidance

It would be relatively difficult to evade payment of any development levy, since its implementation could be tied to existing building permit approval processes.

Developers of high density real estate, such as condominiums and office buildings, will not have many alternatives to avoid the development levy, other than moving their development activities outside of the City.

Colliers' International (2015) found the focus area for the land purchases in Toronto was in the west side of the downtown core, near King St. W and Queen St. W areas and as well as around the Yonge and Bloor area. Both areas are in high demand for millennials and young professionals because of their proximity to restaurants, shops and public transit. Developers who move their development activities outside of the city due to the development levy would no longer have the competitive advantage of proximity to the downtown core.

9.4 Summary Evaluation

While a development levy is intended to capture a portion of the value that is associated with land development, it is challenging to identify an implementation approach that does not result in a mechanism that overlaps with other existing revenue options, such as conventional property taxes, the Municipal Land Transfer Tax, and Development Charges.

Further disadvantages are:

- The base of activity for this tax is small, and hence its annual revenue potential is limited.
- Revenues will be closely linked to the volume of real estate development activity, and hence revenue levels may be relatively volatile.

10 Revenue Profile: Hotel Tax

10.1 Overview of Revenue

10.1.1 Revenue Structure

For the purpose of this analysis, it is assumed that a hotel tax would be imposed on anyone staying in any form of commercial accommodation, such as a hotel, motel, and bed and breakfast. The tax could take the form of a fixed charge per room per night (hotel levy), or as a percentage of the cost of a room night sold (hotel tax). For simplicity, the analysis is focused on the implementation of a hotel tax.

It is important to note that any introduction of a hotel tax would be in addition to the 13% HST rate. The benchmarking exercise performed as part of this analysis found that hotel taxes ranged from 2 to 14%; while combined hotel tax and sales tax rates in comparable jurisdictions was roughly 14 to 17%. Therefore the reader should keep this context in mind when assessing the applicability of a hotel tax to Toronto's context. It is likely that a rate of 1 to 5% would be the range of practical application. However, the full range of a 2 to 14% hotel tax is presented in this section in keeping with the findings of the jurisdictional review.

A key issue with the application of hotel taxes is its impact on the competitiveness of Toronto hotels. The implementation of a hotel tax may cause visitors to use accommodations in other jurisdictions, or use alternatives to commercial accommodations (e.g., room sharing, Airbnb). However, the magnitude of the adverse impacts is likely to be low if the hotel tax is set at a modest level.

10.1.2 Legislative Requirements

The City currently does not have legislative authority to levy a hotel tax. Subsection 267(2) of COTA expressly prohibits a large number of taxing possibilities, including "c) tax on lodging, such as hotel, motel, apartment house, boarding house and club". In order to implement a hotel tax, the City would need to request an amendment to COTA from the Ontario government.

10.1.3 Implementation Issues

If the City attains legislative authority to apply a hotel tax, implementation could occur in short order without significant additional implementation or administration costs. The fee would be combined with the collection of other fees and taxes at the time of payment for accommodation. Collection of the tax could be carried out by hotels on behalf of the City.

Currently, hotels in Toronto, Brampton and Mississauga voluntarily participate in Destination Marketing Programs ("DMPs"), for the purpose of supporting regional tourism marketing

and development. Participating hotels voluntarily remit these contributions (typically up to 3% of room revenues) to the Greater Toronto Hotels Association, which then transfers funds to Tourism Toronto. Sometimes a hotel includes the fee on its bill (in the form of a Destination Marketing Fee) and sometimes it makes the contribution from its general accounts.

The City would have to weigh the trade-offs of implementing a hotel tax within the context of the DMP. This would require further consultation with individual accommodations providers and the Greater Toronto Hotels Association. Given the objective of the DMP, it is likely that some of the revenue collected by the City through a hotel tax would need to be earmarked for Tourism Toronto in order to secure stakeholder buy in (e.g., with a 5% hotel tax, 2% could go to industry promotion efforts and 3% to the City). Circumstances like these should be taken into account when considering the potential annual revenue estimates from a hotel tax. Additionally, the City estimates that revenues generated by a 2% mandatory tax would be close to what the voluntary 3% currently generates. This reflects the greater coverage of a mandatory levy.

10.1.4 Other Jurisdictions

There are several examples of cities in Canada and the U.S. that use hotel taxes as a general revenue option and / or specifically for tourism promotions.

Vancouver

The City of Vancouver applies a 3% Municipal and Regional District Tax ("MRDT") to sales of short-term accommodations in the City. The MRDT is a provincial sales tax on accommodations and distributed to Tourism Vancouver for the purposes of tourism marketing, programs and projects. In addition to this, Vancouver hotels can voluntarily contribute to its DMP though a 1.5% Destination Marketing Fee.

The 3% MRDT is in addition a 5% General Sales Tax and 8% provincial sales tax, for a total tax rate of 16% applied to hotel accommodations in Vancouver.[165]

Halifax

The City of Halifax charges a 2% municipal marketing levy on hotel accommodations. This levy is in addition to Nova Scotia's 15% Harmonized Sales Tax, for a total tax rate of 17% applied to hotel accommodations in Halifax. Hotel operators collect the levy from customers and remit the amount to the municipality (i.e., Halifax Regional Municipality).[166]

[165] Province of British Columbia. What's Taxable Under the PST and What's Not?. Available at: http://www.mlwaccounting.ca/resources/whatistaxable.pdf
[166] Halifax Regional Municipality Marketing Levy Act, Chapter 51 of the Acts of 2001

New York City

New York City applies a Hotel Room Occupancy Tax of 5.875% to hotel room occupants. The tax is collected by hotel operators and then collected by the New York City Department of Finance. New York's Hotel Room Occupancy Tax is in addition to an 8.875% sales tax,[167] for a total tax rate of 14.75%, plus a flat fee of $3.50/day, applied to all hotel accommodations in New York.

San Francisco

In recent years, regulatory fees such as the hotel tax have made it increasingly difficult for commercial hotels to compete with online, non-hotel accommodations such as Airbnb. However, more and more cities are working with "sharing-economy" platforms to apply the same tax regime as is applied to commercial hotels. In San Francisco, a 14% Transient Occupancy Tax ("TOT") is charged to both hotel and Airbnb occupants. The TOT was applied to Airbnb occupants beginning in October 2014 and was expected to yield as much as $11 million in additional revenues annually.[168] Similar arrangements between North American cities and Airbnb can be seen in Chicago, Washington DC, Oakland, and San Diego. [169]

Hotel occupants are also charged 1 to 1.5%[170] for a Tourism Improvement District ("TID"), depending on the location of the hotel. The purpose of the TID is to provide funding for the San Francisco Travel Association and to fund capital improvements and upgrades for the Moscone Convention Center.[171] San Francisco's 8.75% sales tax is not applied to hotel accommodations. Thus, the total tax rate applied to hotel accommodations in San Francisco is 15 to15.5% (14% TOT plus 1 to 1.5% TID).

10.2 Quantitative Assessment

10.2.1 Key Assumptions and Limitations

The most recent data available on Toronto's tourism industry estimates 24 million visitors came to Toronto in 2012.[172] Of these, 9.4 million visitors stayed overnight and 4.4 million

[167] The breakdown of New York's sale tax is further discussed in the "Municipal Sales Tax" revenue option profile.
[168] Said, C., September 2014, Airbnb to collect SF hotel tax Oct. 1. *SFGate*
[169] For a more extensive overview of jurisdictions where Airbnb facilitates Occupancy Tax Collection and Remittance, refer to Airbnb's Help Centre.
[170] Guests who book Airbnb listings in San Francisco are charged a 14% TOT but are not charged on TID.
[171] City and County of San Francisco. San Francisco Tourism Improvement District. http://sftid.com/
[172] Ontario Ministry of Tourism, Culture and Sport, 2012, City Tourism Data, CD20 (Toronto Metropolitan Municipality)

used commercial accommodations.[173] Overnight visitors using commercial accommodations stayed a total of 10.5 million room-nights in Toronto and spent $1.090 billion on accommodations in 2012.[174]

This analysis uses the Ministry of Tourism, Culture and Sport's 2012 Toronto tourism data to estimate the annual revenue potential of a hotel tax. Specifically, the $1.090 billion spent on accommodations in Toronto during 2012 has been used as the revenue base for a hotel tax.

10.2.2 Revenue Potential

10.2.2.1 Gross Revenue Potential

The hotel tax could be implemented in the form of a fixed charge per room per night (levy) or as a percentage of the cost of a room night sold (tax). The analysis is focused on the implementation of a tax (or percentage based fee).

Exhibit 10.1 presents the annual revenue potential of a hotel tax, based on 2012 accommodation expenditures of $1.090 billion.

As noted in the introduction of this section, the hotel tax range presented below was based on the findings from the jurisdictional scan. Tax rates varied widely between jurisdictions, from 2% in Halifax to as high as 14% in San Francisco. However, when additional sales taxes are considered, the total tax rate applied to hotel accommodations ranged from 14 to 17%. The reader should keep this context in mind when assessing the applicability of a hotel tax to Toronto's context, where a 13% HST is also applied to hotel accommodations. Thus, it is likely that a rate of 1 to 5% would be the range of practical application.

As demonstrated below, potential revenues generated from the hotel tax could range from $21.8 to $152.6 million annually.

Exhibit 10.1 – Annual Revenue Potential of a Hotel Tax ($ Millions)

2012 Accommodation Expenditures	Hotel Tax Rate				
	2%	5%	7%	10%	14%
1,090.0	21.8	54.5	76.3	109.0	152.6

10.2.2.2 Demand Reduction

Numerous empirical studies have attempted to estimate the price elasticity of demand of international tourism and, not surprisingly, the elasticity depends on tourists' origin,

[173] Ibid
[174] Ibid

destination, and purpose of travel. Tourists who travel for business, for example, are less sensitive to price changes. This is because business travelers have little to no flexibility to postpone or cancel trips. Holiday tourism and tourism related to visiting friends and relatives are more price sensitive markets. Exhibit 10.2 presents the average price elasticity of demand for tourism by purpose, as estimated by one study:

Exhibit 10.2 – Average price elasticity of demand for tourism by purpose

Tourism purpose	Average price elasticity
Personal	-1.23
Visiting Friends / Relatives ("VFR")	-0.93
Business	0.18

Source: Konovalova et. Al. (2013). Elasticity of Demand in Tourism and Hospitality. European Journal of Economic Studies

The Ministry of Tourism, Culture and Sport's 2012 Toronto tourism data provides information on the purpose of visitors' trip. It has been assumed that the purpose of all trips (and associated visitors' price elasticity of demand) were either personal, VFR, or business. This is summarized in Exhibit 10.3.

Exhibit 10.3 - Purpose of Toronto Visitors' Trips and Assumed Elasticity

Main Purpose of Trip	No. Person Visits	% share	Assumed Elasticity
Pleasure	6,331,753	26.4%	Personal
Visiting Friends / Relatives	10,427,638	43.5%	VFR
Shopping	1,301,071	5.4%	Personal
Conventions (Personal)	234,989	1.0%	Personal
Study	84,424	0.4%	Personal
Business	4,136,381	17.3%	Business
Meetings	515,418	2.2%	Business
Conventions (Business) & Conferences	1,424,121	5.9%	Business
Other Business	2,196,843	9.2%	Business
Other Personal	1,456,365	6.1%	Personal
Total	**23,972,622**	**100.0%**	

Source: Ontario Ministry of Tourism, Culture and Sport. (2012). City Tourism Data, CD20 (Toronto Metropolitan Municipality); KPMG assumptions

In 2012, 43.5% of visitors to Toronto came to visit friends and relatives. This is followed by 39.2% who visited for personal reasons and 17.3% who visited for business purposes. Based on these inputs, a weighted average price elasticity of demand was calculated and used in the analysis (-0.86). This means that a 10% increase in the price of hotels would result in an 8.6% decrease in demand.

10.2.2.3 Consumer and Vendor Avoidance

Visitors to Toronto often choose accommodations close to where they will be working and/or visiting. Hence, hotel tax avoidance is expected to be low.

Total avoidance is estimated to be -0.4, similar to live entertainment. This implies that a 10% increase in the price of hotels would result in a 4% decrease in demand.

10.2.2.4 Implementation and Administration Costs

Incremental costs associated with the implementation of a hotel levy are expected to be minimal as various fees and taxes are already charged per room night. There may be a small incremental cost associated with separating the hotel tax from other nightly charges and remitting the funds to the City but this is not expected to be material.

10.2.2.5 Net Annual Revenue Potential

Exhibit 10.4 presents the net annual revenue potential of the hotel tax, upon consideration of the price elasticity and potential avoidance of the tax.

Exhibit 10.4 – Net Annual Revenue Potential of the Hotel Tax ($ Millions)

Hotel Tax	2%	5%	7%	10%	14%
Revenue Potential Before Deductions	21.8	54.5	76.3	109.0	152.6
Price Elasticity Deduction (-0.86)	-0.4	-2.3	-4.5	-9.2	-18.1
Avoidance Deduction (-0.4)	-0.2	-1.1	-2.1	-4.4	-8.5
Net Annual Revenue Potential	**21.3**	**51.1**	**69.6**	**95.3**	**125.8**

10.2.3 Sustainability of Revenues

A hotel tax is likely to provide a sustainable revenue source because it is tied to the global tourism market. As Toronto continues to be recognized as a world-class city internationally, it is likely that the city of Toronto will continue to attract tourists from around the world, as long as there are continued investments in destination marketing. However, tourism numbers and associated revenue amounts fluctuate year-to-year depending on economic cycles and, in particular, on exchange rates. There may be concerns that the tax could reduce Toronto's relative attractiveness for leisure visitors if a tax were introduced at a high level. At rates of 5% or less, impacts in reducing demand should be less of a concern.

10.3 Qualitative Assessment

10.3.1 Impact on Stakeholders

The implementation of a hotel tax would impact all visitors to Toronto staying overnight in commercial accommodations, such as hotels and motels. Visitors to the city often choose accommodation close to where they will be working and/or visiting. Unless this location is close to the outer edges of the city, or visitors have friends/family to stay with, there are limited alternatives for overnight accommodation.

From an equity perspective, the hotel tax performs poorly for horizontal equity since it targets visitors to the city who may not reap the benefits of city improvements (from the hotel tax revenues generated) beyond the length of their actual stay in the City. The use of a hotel tax, where charges are based on a percentage of accommodations costs, promotes vertical equity since all visitors will pay the same proportion of their accommodation costs in taxes.

10.3.2 Impact per Affected Toronto Consumer Base

Given that the hotel tax is expected to only affect visitors to the city, it is not expected to have a direct impact on residents of Toronto. As such, the direct impact on Toronto households is estimated to be $0. Further, it is assumed that the entirety of the tax revenue is exported to non-residents.

10.3.3 Impact on Economic and Business Activities

A hotel tax would likely have a small adverse impact on the overall economic activities of the city. This adverse impact would be to the extent that a hotel tax would make the city a marginally less attractive destination for leisure tourism, while also noting most comparable urban destinations have hotel taxes in place. This effect may be most relevant for holiday tourism, which tends to be more price-sensitive than business travel. The magnitude of the adverse impact is likely to be small if the hotel tax is set at a modest level.

10.3.4 Competitiveness and Avoidance

The implementation of a hotel tax may cause visitors to use accommodations in other jurisdictions. For example, a visitor who planned to stay in the outer edges of Toronto (e.g. Etobicoke, North York, or Scarborough) may choose to stay in hotels outside of the city to avoid paying the tax and still be within a relatively short commuting distance to the city. Visitors who plan to stay in the downtown core, close to the city's entertainment, restaurants and shops will have limited ability to avoid the hotel tax.

Visitors may also choose alternatives to commercial accommodations. In recent years, regulatory fees such as the hotel taxes have made it increasingly difficult for commercial hotels around the world to compete with online, non-hotel accommodations such as Airbnb. Toronto hotels will likely face similar issues if visitors chose to use alternative accommodations to avoid the hotel tax. However, as discussed in the jurisdictional review, more and more cities are working with Airbnb to apply the same tax regime applied to commercial hotels. If Toronto initiates a similar initiative, visitors will have limited ability to avoid the hotel tax while staying in alternative forms of accommodation.

10.3.5 Other Considerations

Destination Marketing Program

As previously discussed, hotels in Toronto, Brampton, and Mississauga currently participate in Destination Marketing Programs on a voluntary basis, for the purpose of supporting regional tourism marketing and development. These programs have been in place in different parts of the Province since 2004.

The City would have to weigh the trade-offs of implementing a hotel tax within the context of the DMP. This would require further consultation with individual accommodations providers and the Greater Toronto Hotels Association. If the hotel tax replaced the DMP administered by the Greater Toronto Hotels Association, part of the tax revenues generated would need to be remitted back to Tourism Toronto. Given the importance of international marketing for the City's hotel industry, it would be difficult for the City to impose a hotel tax without also ensuring a tourism marketing program, such as Tourism Toronto, is funded.

It is estimated that the DMP contributed $19-20 million towards Tourism Toronto's budget in 2014.[175] This represented 59% of Tourism Toronto's 2014 budget. Exhibit 10.5 presents the annual revenue potential of the hotel tax if it replaced the DMP and contributed $20 million to Tourism Toronto annually.

Exhibit 10.5 – Annual Hotel Tax Revenue after Tourism Toronto Contribution ($ Millions)

	2%	5%	7%	10%	14%
Hotel Tax Revenue Potential	21.3	51.1	69.6	95.3	125.8
Contribution to Tourism Toronto	20.0	20.0	20.0	20.0	20.0
Net Annual Revenue to the City	**1.3**	**31.1**	**49.6**	**75.3**	**105.8**

If the hotel tax is added in addition to the DMP, this combination may erode the competitiveness of Toronto hotels. Destination Marketing Fees have already met with public opposition. In December 2014, Merchant Law Group LLP, a law firm, launched a class-action lawsuit on behalf of Canadians who paid Destination Marketing Fees. The class

[175] City of Toronto, January 2016, 2016 Operating Budget Briefing Note, Destination Marketing Program.

action is still ongoing. The hotels named include Best Western, Hilton, Radisson, Delta, Fairmont, Hyatt, Intercontinental, Marriott, Sheraton, Ramada, Super 8, Travelodge, among others.[176] If a hotel tax is charged to customers, in addition to a Destination Marketing Fee, this may further entice visitors to use alternative forms of accommodation or stay in hotels outside of the city.

Ontario's Regional Tourism Organizations Funding

The Government of Ontario's Regional Tourism Organizations ("RTO") funding program provides annual tourism funding to the province's tourism regions. The Province's 2014/15 funding allocation for the Greater Toronto Area (RTO 5) was $9.905 million.[177]

If the Province gives the City legislative authority to apply a hotel tax under COTA, this may have an adverse impact on the Province's RTO funding allocation to the Greater Toronto Area.

10.4 Summary Evaluation

Overall, the hotel tax is estimated to generate revenues between $21 and $126 million annually, depending on the tax rate applied. Generally speaking, hotel taxes are common among internationally recognized, North American cities such as New York City, Chicago, Los Angeles and San Francisco. As Toronto continues to be recognized as an international city, it is likely that Toronto will continue to attract tourists from around the world, regardless of the hotel tax. Although the hotel tax will generate only modest revenues for the City, it is likely to be sustainable over the long term.

[176] Ibid
[177] Ministry of Tourism, Culture and Sport. Support for Ontario's Tourism Regions. Available at: http://www.mtc.gov.on.ca/en/regions/funding.shtml

11 Revenue Profile: Municipal Income Tax

This section examines the potential role of income taxes as a revenue option for the City of Toronto. Income taxes can be levied either on businesses or on individuals. Both options have been identified and discussed in this section.

In considering the potential role of income taxes, it is useful to identify the broad options available and then consider the conceptual framework that policymakers might use to select among these options. This can provide a structured approach to selecting among the options available.

In this analysis of income taxes as a possible revenue option, it has been assumed that the City would reach agreement with the Canada Revenue Agency (CRA) to have it administer tax collection on the City's behalf. This would be similar to the role that the CRA plays in collecting income taxes on behalf of all but one of the provinces. Use of the federal regime for administration would considerably reduce the costs for set-up and ongoing operation. It would also considerably reduce the costs of compliance for individual tax filers. However, joint administration would require agreement with other levels of government and this might take extensive negotiation, delaying the City's ability to implement these options swiftly. Further, even with CRA cooperation, implementation of a municipal income tax regime may involve a large implementation cost for the City.

11.1 Overview of Business Income Taxes

A business tax could be implemented as an additional levy on the taxable business income allocated to the City. The analysis of business income taxes contained herein initially focuses on business income earned by corporations and then addresses other forms of business (e.g., partnerships, proprietorships, etc.).

Assuming that the aforementioned agreement with the CRA is reached, the simplest approach to structuring the municipal income tax is to apply, for affected corporations, a flat tax rate to the amount that the CRA assesses as "taxable income". Thus, the City would simply accept CRA definitions with respect to all of the components of taxable income.

For corporations whose operations are located entirely in the city of Toronto, the tax could apply to the entirety of the corporations' taxable business income. For corporations whose operations are located both within the city and outside of it, some mechanism would need to be used to allocate the corporation's overall taxable income between the two jurisdictions (e.g., to the city and elsewhere). This could parallel the process through which corporations operating across Canada allocate taxable business income among the provinces.

In general, the proportion of taxable income allocated to any province is the average of:

- the percentage of wages paid in the province (of total wages paid across Canada); and
- the percentage of gross revenue attributable to the province.

For certain types of businesses, the gross revenue metric under bullet two above is replaced by other indicators.[178] Of particular relevance for the City of Toronto:

- For banks, the measure of gross revenue is replaced by the amount of loans and deposits.
- For insurance corporations, the metric of gross revenue is replaced by net premiums.

For businesses, there will be some administrative burden in calculating these metrics (i.e., with respect to the City's share of values for the Province of Ontario). However, the process has precedents:

- As noted above, corporations across Canada currently allocate income among provinces.
- Business income taxes are charged by certain municipalities in the U.S. Hence, methods for allocating taxable income to municipalities have been developed there.

Based on these precedents, it has been assumed that it would be possible to set up the city of Toronto as a separate taxable jurisdiction and, for any corporation to apportion business income within the Province of Ontario between the City and the remainder of the Province.

A potential alternative to a business income tax is a Gross Receipts tax. These apply in a small number of jurisdictions, including Los Angeles, San Francisco, Atlanta and Philadelphia.[179] Such a tax, which is based on gross rather than net income, raises the potential for a tax liability even if the company is in a net loss position. A Gross Receipts tax has not been assessed in this study.

It should be noted that the City is currently prohibited from imposing income taxes under COTA, and therefore the implementation of such would require legislative approval by the Province.

11.2 Quantitative Assessment of Business Income Taxes

11.2.1 Potential Rates

It has been assumed that a business income tax would be levied at a flat rate set somewhere between 0.50 and 2.00% of taxable income. These assumptions are arbitrary but reflect the belief that any rate would be set at a relatively low level in order to minimize the negative impacts of a tax in discouraging business activity.

[178] Other industries that are separately identified include railway corporations and pipeline corporations among others. Banks and insurance companies are probably the most relevant to discussions for the City of Toronto.
[179] KPMG, September 2015, Tax Burden on Residents and Businesses in the City of Chicago, U.S. Peer Cities, and Regional Municipalities – FINAL REPORT, page A-7.

As summarized later in this section, certain U.S. cities charge a much higher rate of tax: New York City levies a business income tax at a nominal rate of 8.85% and Philadelphia levies a tax at a nominal rate of 6.45%. These cities, however, are anomalies. Among a group of 10 "peer" cities to the City of Chicago, a KPMG study found that eight cities, in addition to Chicago, do not charge a business income tax.

Because a municipal income tax would be paid in addition to federal and provincial income taxes and assuming the senior levels of government do not lower their tax rates to offset the impacts of the City's tax, the City would need to keep overall tax burdens in mind when setting its rate. Data from the CRA indicate that corporations paid $8.9 billion in Ontario provincial income taxes on $125.2 billion of taxable income. This implies an overall effective provincial tax rate of 7.1%. Nominal provincial income tax rates can be as high as 11.5%, but lower rates apply to certain classes and tiers of income. Based on a 7.1% effective provincial rate, a 1% flat municipal income tax rate would represent about a 15% increase in taxes relative to existing provincial burdens. (The effective federal tax rate has not been calculated, although these taxes represent an additional burden.)

11.2.2 Revenue Estimates

Revenue estimates have been based on data for 2012, which are the most recent available, and have not made adjustments for economic growth since that date. Key inputs are as follows:

- Total taxable income earned by corporations in Ontario in 2012 was $125.4 billion.[180]
- Toronto's share of GDP in Ontario in 2015 was 24.7%.[181]

Toronto's share of GDP in 2015 was used as a proxy for the share of Ontario taxable income that would be allocated to the City of Toronto under any regime. As discussed earlier, the share could be based on a formula similar to that used to allocate income among provinces. For most industries, this formula uses the share of employment and revenue in any jurisdiction. Based on the city's share of GDP, it has been estimated that the taxable income allocated to the City of Toronto would be $31.0 billion.

Exhibit 11.1 below presents the estimated annual revenue of a City of Toronto corporate income tax at varying rates, using taxable income data for 2012.

[180] As reported by Canada Revenue Agency, Table 5, Taxable Income by Jurisdiction, 2008 to 2012, Corporate Income Tax Statistics.
[181] Invest Toronto, 2010, Toronto Economic Model, Available at: http://www.investtoronto.ca/Business-Toronto/Business-Environment/Economic-Overview/Total-GDP-of-the-City-of-Toronto,-Toronto-CMA-and-.aspx

Exhibit 11.1 – City of Toronto Corporate Income Tax Revenue Estimate by Rate
($ Millions)

Effective Tax Rate	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%
Revenue Estimate - Gross	155.1	232.7	310.2	387.8	465.3	542.9	620.4
Avoidance Deduction (5.0%)	(2.3)	(3.5)	(4.7)	(5.8)	(7.0)	(8.1)	(9.3)
Administrative Costs (1.5%)	(7.8)	(11.6)	(15.5)	(19.4)	(23.3)	(27.1)	(31.0)
Net Annual Revenue Potential	**145.0**	**217.5**	**290.0**	**362.6**	**435.1**	**507.6**	**580.1**

Gross revenue amounts have been arbitrarily reduced by 5.0% to account for changes in the level of economic activity as a result of the tax and for tax avoidance strategies. An additional deduction of 1.5% has been made to account for costs of administration and collection.

It should be noted that corporate taxable income can be fairly volatile. Corporate taxable income in Ontario was only $75 billion in 2009, or only 60.4% of the amount observed in 2012. The results in 2009 were likely affected by the fall-out from the 2008 financial crisis and associated economic downturn. Accordingly, it should be noted that annual corporate income tax revenues could be subject to significant fluctuation.

11.3 Overview of Personal Income Taxes

As noted above, the City could elect to charge income tax on individuals. The initial assumption used in the analysis was that this income tax would be levied on residents of the city (as opposed to people who simply work within the city).

There are two broad options for taxing residents:

- Applying a tax on residents' taxable income.
- Applying a tax on residents' employment income.

Both options could theoretically be implemented under a regime in which CRA administers a municipal income tax on the City's behalf. Within any such system, the City could make its own decisions as to which data inputs it would use in calculating the municipal tax liability.

A potential rationale for limiting a tax to employment income (versus total taxable income) is that the tax is intended to compensate the City for costs associated with supporting business activity and employment in the city. For example, costs for providing services to offices and manufacturing facilities and for supporting transportation infrastructure. If the tax is intended to support employment activity, it might appear desirable to also levy the tax on commuters into the city as well as on residents. This will be discussed further below.

Alternatively, an argument for applying the tax on total taxable income would be that this will expand the tax base and therefore allow for more revenue to be collected for a given tax rate. Further, a tax on total taxable income would more closely parallel the structure of existing federal and provincial tax systems, and therefore may be simpler to understand and implement.

11.3.1 Distribution of tax burdens

The decision on the base of the tax would have impacts on the allocation of the tax burden amongst the population. Retired persons, high-net worth individuals, and investors and entrepreneurs are likely to have a higher proportion of their total taxable income represented by non-employment earnings (e.g., investment income and capital gains) than do low-income workers. Hence, limiting the tax to employment income may result in relatively more of the tax burden being applied to low- and moderate- income residents.

As noted, the City may wish to levy a tax on commuters into the city. However, it would likely be more difficult to apply a personal income tax to individuals who work in the city but are resident elsewhere, than it will be to apply a tax to residents. Individual taxpayers are identified by the CRA first by their primary place of residence and/or filing address. Additional information would need to be collected on their place of work. For individuals who have held, or hold, jobs both within the city and without in any given year, employment income would need to be segmented so that only the income earned within the city attracts a tax.

It has been assumed that any income tax levied on residents outside the city would be limited to income earned on employment within the city. The alternative is to suggest, for example, that an individual's investment income would become taxable by the City as a result of the individual earning some employment income within Toronto. This appears unworkable and unreasonable.

In the event that the City applies a tax on income to residents of Toronto (whether on total income or just on employment earnings), this creates a potential inequity: individuals living and working within Toronto will face a tax on their income, while co-workers at the same location and commuting into the City will face no tax. This situation may be at odds with any intent to use the tax as a mechanism for recovering costs associated with infrastructure to support business activity and commuting requirements.

11.3.2 Potential integration with a tax on employment income collected through business

An alternative approach, or one that could be applied to complement an income tax focused on residents, is to collect a tax on employment earnings paid to employees working within Toronto through business. Such a tax could help ensure that the City collects revenue in connection with employees who are working within Toronto but not resident within it.

The rationale for implementing a tax on employment income through businesses is that it may be more administratively efficient than seeking collection from individual employees who are resident outside of Toronto. There are fewer businesses than employees and hence fewer points of collection.

The analysis of this scheme design has assumed that such a tax would be paid by employees (i.e., deducted from their gross earnings). The effect of such a tax in the first instance would be similar to a tax paid directly by employees on employment earnings through the income tax regime.

An alternative approach is to structure the tax so that it would be paid by employers. It may at first appear that a tax paid by employers would be paid by employers and corporations rather than individuals. However, in the long-run, wages and salaries paid to employees may be adjusted to compensate for employer-paid taxes.[182] Hence, the distinction in the actual burden of the tax is not as clear cut as may first appear.

In the event that a tax on employment earnings, collected through business, is designed to complement a personal income tax applied to residents, mechanisms exist for reducing the extent of overlap in revenue collected from or on behalf of Toronto residents who also work within Toronto, such as:

- Resident's income tax liability could be reduced by any taxes paid by their employer on their behalf in connection with employment earnings.
- Taxes deducted by the employer could be different (e.g. lower or zero) for residents versus non-residents.[183]

Potential approaches for structuring a tax on employment earnings in parallel with a City income tax would need to be subject to considerable further analysis, if the City wishes to proceed with this option.

For ease of exposition, any reference hereafter to a tax on employment earnings collected through business will be referred to as a payroll tax. It should be understood that the assumption is the tax would be paid by employees. It would be deducted from gross earnings as a tax that is visible to the employee (unlike employer-paid taxes).

---

[182] Employers may try to reduce wages by the amount of any payroll taxes, in order to keep their net cost of labour unchanged. However, employers' ability to reduce wages in the short run may be in practice limited by a variety of factors, including minimum wage laws, existing labour agreements, and competition from employers in adjacent jurisdictions. The net outcome in the long-run is unclear.

[183] Where payroll taxes are applied in the U.S. and a differential is observed, the reverse is typically observed: i.e. payroll taxes are higher for residents versus non-residents. A likely rationale is that residents use more services than non-residents. Thus the differential is not associated with potential overlaps between payroll and income taxes. For example, Philadelphia currently levies a tax of 3.928% on residents and 3.4985% on non-residents.

11.4 Quantitative Assessment of Personal Income Taxes

11.4.1 Potential Rates

The annual revenue projections presented in this analysis assume that any income and/or payroll tax would be applied at a fairly low, and flat, rate. Thus, a tax could be applied at a rate of 1.0% of taxable income. (For a payroll rate, it could be applied as 0.5% or 1.0% of employment earnings.) To produce equivalent revenues, a tax applied to employment earnings rather than to taxable income will generally need to be higher, since taxable income includes earnings from other sources, such as capital gains, interest and government support payments, and will therefore tend in aggregate to be higher than employment earnings. (Because taxable income also includes the effect of certain deductions, such as pension contributions and expenses associated with investment, the relationship between taxable income and employment earnings will vary by individual. Taxable income may thus be lower for many people than employment income.)[184]

Provincial and federal income taxes are calculated using tiered tax rates. Thus, higher levels of income are taxed at progressively higher tax rates. Income below a certain threshold is not taxed at all. Current federal tax rates range between 15.00% and 33.00%. Ontario provincial income tax rates range between 5.05% and 13.16%, but certain surcharges are applied in addition. As a result, the maximum total combined federal and provincial rate for Ontario residents is now 53.53% for interest and regular income.

Because of the impact of thresholds, the average effective tax rate, as a percentage of taxable income, for residents of Ontario appears to have been about 20% in 2013, based on published income tax statistics from the CRA.[185] Thus, a flat tax of 1.0% would increase the tax burden by about 5% in addition.

Based on Ontario returns filed in 2013, the average taxable income per filer in the province was about $40,700. For a Toronto resident with a similar amount of taxable income, a flat income tax levy of 1% would thus cost about $400. In practice, the City could choose to implement a progressive income tax regime, similar to those used by the federal and provincial governments, although this would require higher rates at higher levels of income to achieve the same overall level of revenue. Higher tax rates at higher income levels would magnify the distortions associated with the resulting incentives to move employment or residential location outside of Toronto.

---

[184] In practice, the average taxable income per filer with taxable income is lower than the average employment income per filer with employment income. However, this is offset by the fact that there are more filers with non-zero taxable income than with non-zero employment income.

[185] The total taxable income on personal income tax returns filed in Ontario in 2013 was $416.5 billion. Total net federal and provincial taxes payable were $79.2 billion.

Data for 2009 compiled from Statistics Canada by the Conference Board suggests that employment income for Toronto residents was about 63% of taxable income.[186] This was lower than in all adjacent municipalities. (For example, employment income represented 73% of taxable income for residents of Mississauga.) For Toronto residents, a payroll tax levy based on employment earnings would therefore collect only about 63% of the revenue as a similar levy on taxable income.

11.4.2 Incidence of Tax

As noted earlier, a key issue in applying any income and/or payroll tax regime will be the treatment of residents versus non-residents and, in particular, employees working within Toronto but who reside elsewhere. As noted earlier, a payroll tax (or a tax on employment earnings collected through business) may be considered specifically to collect some taxes from commuters.

Exhibit 11.2 shows commuting patterns in the GTA, based on data from the 2011 National Household Survey ("NHS"). The first column in the graph shows the place of residence of employees working within Toronto. The second column in the graph shows the place of work for residents of Toronto. Exhibit 11.3 shows the same data in tabular form. The data represent figures available from the NHS for employed members of the labour force, age 15 and over, with a usual place of work.[187] Figures will be as at the survey date in 2011.

Relevant highlights from these figures include the following:

- More employees work in Toronto (1,287,520) than are resident within in it (1,032,300). (For ease of exposition, we will use present tense although numbers are for 2011.)
- The number of employees who both work and live in the city of Toronto is 837,470. These employees represent 65% of the labour force employed within the city, and 81.1% of the residents of the city who are working.
- Looking specifically at Mississauga, 81,905 residents are employed in the city of Toronto. Conversely, 58,435 residents in the City of Toronto are employed in Mississauga. This pattern, in which inflows to the city of Toronto exceed outflows from the city is common for all of the adjacent municipalities. Some smaller municipalities, such as Whitby and Ajax, have very large ratios of inflows (to the city) to outflows.

[186] Conference Board of Canada, Winter 2016, Economic Insights Into 13 Canadian Metropolitan Economies, Metropolitan Outlook 1, page 7

[187] The figures exclude people who work from home and who have no usual place of work. The latter group includes tradespeople who are dispatched from location to location.

Exhibit 11.2 – Geographic Distribution of Employees and Residents

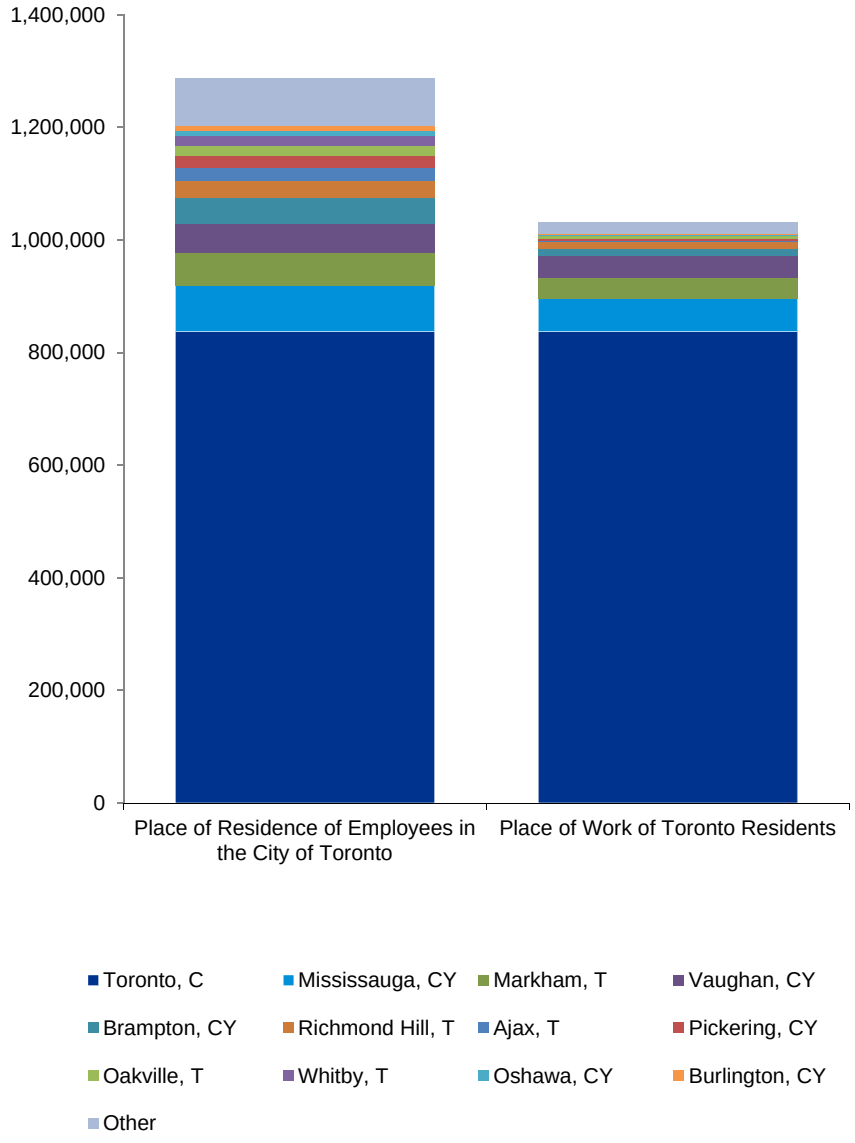


Exhibit 11.3 – Geographic distribution of Employees and Residents – 2011 NHS[188]

	Place of Residence of Employees in Toronto		Place of Work of Toronto Residents		Net Inflow	Ratio: Inflow / Outflow
Toronto, C	837,470	65.0%	837,470	81.1%	0	1.0
Mississauga, CY	81,905	6.4%	58,435	5.7%	23,470	1.4
Markham, T	57,725	4.5%	36,440	3.5%	21,285	1.6
Vaughan, CY	52,180	4.1%	38,680	3.7%	13,500	1.3
Brampton, CY	45,015	3.5%	14,090	1.4%	30,925	3.2
Richmond Hill, T	31,025	2.4%	11,300	1.1%	19,725	2.7
Ajax, T	23,860	1.9%	2,085	0.2%	21,775	11.4
Pickering, CY	20,115	1.6%	4,035	0.4%	16,080	5.0
Oakville, T	18,880	1.5%	4,095	0.4%	14,785	4.6
Whitby, T	16,585	1.3%	1,350	0.1%	15,235	12.3
Oshawa, CY	9,965	0.8%	1,510	0.1%	8,455	6.6
Burlington, CY	9,085	0.7%	1,485	0.1%	7,600	6.1
Other	83,710	6.5%	21,325	2.1%	62,385	3.9
Total	**1,287,520**	**100%**	**1,032,300**	**100%**	**255,220**	**1.2**

11.4.3 Revenue Estimates

By making a number of simplifying assumptions, it is possible to develop estimates of the employment income and taxable income that might be accessible from various sources under a City income and/or payroll tax regime.

Key assumptions with respect to earnings are as follows:

- Individual taxpayers within the GTA have an income and earnings profile equivalent to that for individual taxpayers overall in Ontario. (Data for 2013 show that taxpayers in the Toronto CMA have total taxable income per capita that is about 4% higher than for Ontario taxpayers overall. Hence, the assumption that earnings profiles are similar is reasonable as a first approximation.)
- Similarly, it has been assumed that earnings profiles of individual taxpayers within the GTA are similar. (Data compiled by the Conference Board for 2009 suggest that the taxable income of Toronto residents is only slightly higher, or 1.3% more on average,

[188] Data are reported for various Census locations. In Statistics Canada reference materials, "C" and "CY" both stand for City, and "T" stands for Town.

than the taxable income of residents of the Toronto CMA. So, again, as a first approximation this assumption is reasonable.)

To quantify the number of potential taxpayers, a number of additional adjustments and assumptions were required. Key issues are noted below:

- Taxable income has been estimated using data from CRA for 2013. Adjustments could be made to account for population and income growth in the interim, but as a first step these adjustments have not been made.
- The number of income tax filers has been estimated using taxable income in the city of Toronto in 2013 as 2.34 million. This was achieved by multiplying the average monthly population for Toronto of individuals aged 15 and over by 90.8%. The 90.8% ratio is the ratio of filers with taxable income to the population aged 15+ for Ontario as a whole, based on 2013 CRA data and data from the Statistics Canada Labour Force Survey (LFS).[189]
- Data from the NHS for 2011 were used to estimate the number of Toronto residents with employment income. An overall adjustment factor of 10% was then applied to account for the fact that NHS data likely under-reported actual activity (based on the fact that the NHS was voluntary) and to account for likely job growth between 2011 and 2013. Each factor likely contributes about 5% to under-reporting if using 2011 NHS results. The adjustments result in an estimate of 1.388 million residents with employment income. These figures include residents working at home and with no usual place of work. (These two groups represented, respectively, 87,790 and 140,480 residents in reported NHS data for 2011.)
- The 1.388 million residents in Toronto with employment income have been assumed to split between jobs in the city and outside of it in the same proportion as suggested by NHS data.[190] Similarly, it has been assumed that the number of filers from outside the city with jobs in the city is in the same proportion as found in the NHS survey. Based on this approach, it was estimated that in 2013 there were 498,900 workers commuting into the City.
- For all of the different groups of workers noted above, it was assumed that average employment earnings in 2013 were $44,634. This figure is equal to the provincial average for filers with employment earnings in 2013. (As noted, Toronto and GTA residents may have slightly higher income in practice.)
- For Toronto residents, it was assumed that average taxable income was $42,273. Similar to the estimate of per capita employment income, the average figure was taken from the provincial average. Taxable income is relevant if it is assumed that any tax will

[189] LFS data are taken from data compiled by the City of Toronto Economic Development and Culture department

[190] Residents with no usual place of work are treated as if they work in the City.

be applied to taxable income, while employment income is relevant for an assessment of some form of payroll tax.

In Exhibit 11.4 following, these inputs have been used to develop annual revenue estimates from the various pools of taxpayers (and associated amounts for employment earnings or taxable income) by assuming that a 1% tax rate is applied to each segment. It should be noted that the revenue amounts associated with a levy on taxable income should be assumed to be an alternative to amounts raised by a levy (or payroll tax) on employment earnings. It has been assumed that the City would apply a tax on one or the other (employment earnings or taxable income) but not to both at the same time.

Highlights of the results are as follows:

- The City would earn net annual revenues of $580 million by taxing the employment income of residents (at a 1% rate). Alternatively, it could earn revenues of $926 million by applying a similar levy on taxable income.
- With some form of payroll tax, the City could earn an additional $208 million from inbound commuters (on top of the $580 million from residents). Thus, total potential net revenues from a payroll tax are shown as $788 million annually.
- Looking just at Toronto residents, the gains from levying a tax on taxable income, rather than just employment earnings, are $346 million (calculated from figures in the first bullet above). The gains from levying a 1% tax on employment earnings from non-resident commuters is less, at $208 million (as noted in the second bullet). This may suggest that applying a broad tax base to existing residents has more revenue impact than seeking to tax commuters (notwithstanding potential equity concerns with not taxing non-resident commuters).
- It has been assumed that the City would not have the opportunity to apply a levy on the taxable income of in-bound commuters, so no additional revenues are shown from "commuter" traffic, beyond those raised by a tax on employment earnings (assumed to be collected through businesses).

Other points to note:

- It has been assumed that the City would incur costs of 1.5% of revenues for administration of the tax. Most likely, this would consist of payments to the CRA to administer the tax on its behalf. The 1.5% allowance is arbitrary but appears reasonable in light of the reported costs of administering tax systems generally. For example, the OECD reports that tax administration costs in Canada amount to about 1.3% of the net revenues collected.
- Net annual revenues have been reduced by 5% to account for avoidance and behavioural change. This value is also arbitrary.

These adjustments reduce, for example, the accessible income from a payroll tax from $843 million to $788 million. The figures are intended to be estimates of the potential order of

magnitude of the revenues that could be raised annually. As noted earlier, no adjustments for growth in population and income since 2013 have been made.

Exhibit 11.4 – Net Annual Personal Income or Payroll Tax Revenue Potential, Based on 2013 CRA Data

Potential Personal Income or Payroll Tax Revenues Based on 2013 CRA Data						
		Residents of City		Total City	Commuters Into City	Total
		Employed In City*	Employed Outside City			
Number						
Employees based on 2011 NHS		1,065,735	196,660	1,262,395	453,590	1,715,985
Adjustment for Growth and NHS Under-reporting				10.0%		
Est'd Filers with Employment Income		1,172,309	216,326	1,388,635	498,949	
Est'd Filers with Taxable Income				2,342,505		
Amount per non-zero return						
Employment Income	($s)	44,634	44,634	44,634	44,634	
Taxable Income	($s)			42,273		
Gross Amount						
Employment Income	($ Millions)	52,325	9,655	61,980	22,270	
Taxable Income	($ Millions)			99,024		
Percent Rate						
Employment Income		1.0%	1.0%	1.0%	1.0%	
Taxable Income				1.0%		
Gross Revenue						
Employment Income	($ Millions)	523	97	620	223	843
Taxable Income	($ Millions)			990		990
Administration						
Employment Income	1.5%	(8)	(1)	(9)	(3)	(13)
Taxable Income	1.5%			(15)		(15)
Avoidance / Activity Shifts						
Employment Income	5.0%	(26)	(5)	(31)	(11)	(42)
Taxable Income	5.0%			(50)		(50)
Net Revenue						
Employment Income	($ Millions)	489	90	580	208	788
Taxable Income	($ Millions)			926		926

** Includes those employed at home and with no usual place of work.*

The City could have considerable flexibility in the design of a taxation system. In this context, the following considerations should be reviewed:

- The City could conceivably try to combine approaches. For example, it could target the taxable income of residents as well as the employment earnings of both residents and commuters (in-bound employees). In applying levies on taxable income, there could be deductions or credits for residents to recognize any payroll taxes (on employment income) already applied. The specific potential design features would need to be subject to further study. The rationale for applying a tax both on employment income and on taxable income would be to:
  - Capture some tax revenue from inbound commuters, which would be lost if the focus was on applying a levy only on taxable income.
  - Obtain the benefits of a broader tax base. Taxable income results in a broader tax base than does a tax simply on employment earnings because there are taxpayers who have no employment earnings but nevertheless earn income from investments and through their ownership of businesses.
- The City would incur administration and compliance costs, although these would be reduced to the extent that any system "piggy-backs" on the framework used by the federal government to administer federal personal income taxes. Integration relates not only to the use of the federal Government to administer and collect the tax, but also the adoption of similar inputs and definitions so as to minimize the number of additional data points and calculations required.
- There are some theoretical advantages of introducing both a business and personal income tax regime in parallel. If one or the other were introduced, but not both, then residents may have an incentive to change the structure of their compensation to earn income through an untaxed source. For example, if only a personal income tax regime were introduced, self-employed individuals may have an additional incentive to collect business income via a corporation rather than operating as a proprietorship or paying themselves a salary.

11.4.4 Demand Reduction

A concern with income or payroll tax levies is that they will discourage employment and residential location within Toronto:

- Levying an employee-paid payroll tax will encourage employees to look for employment outside of Toronto.
- Levying a payroll tax on businesses will encourage them to locate employees outside of Toronto and/or move their operations to a location outside the city limits and/or to reduce pay to employees within the city to offset the costs of the tax.
- Levying income taxes on residents will encourage them to move outside the city limits.

For these reasons, payroll taxes are referred to by some economists as "a tax on jobs".

As noted earlier, a 5% reduction in gross revenues has been assumed to account for avoidance and changes in behaviour as a result of an income tax. The degree of impact is highly uncertain.

Some commentators have suggested that much higher reductions in reported taxable income will occur in response to increases in the marginal income tax rate (which would effectively result with the introduction of a municipal income tax rate). One recent U.S. paper references work by a number of economists; this work concluded that reasonable estimates of the elasticity of taxable income with respect to marginal changes in the tax rate could range from 0.12 to 0.40. Based on the "preferred" midpoint elasticity of 0.25, a 1.0% increase in the top marginal tax rate would result in a loss of 27.7% of the revenue that would otherwise be gained if there were no change in behaviour.[191]

Potential challenges in collection include:

- Toronto residents' may use locations outside of Toronto as their filing address for taxes. For example, they may use a second property such as a cottage. Higher-income householders, who are more likely to have multiple property holdings, may have more opportunity to use this strategy than lower-income households.[192]
- To the extent that any tax applies only to employment income or payroll amounts, individuals will have an incentive to restructure their affairs to earn business income instead. For example, an employee may choose to become an independent contractor and seek remuneration through an incorporated business. This may be a larger issue if a business income tax is not introduced in parallel.

Various rules and regulations could be introduced to reduce this leakage, but this will increase costs of administration and compliance. Avoiding tax leakage will also depend on co-operation with federal and provincial authorities.

Because municipal income taxes have no recent precedent in Canada, it can be expected that their introduction would generate considerable public resistance.

11.4.5 Implementation and Administration

As noted previously, COTA currently prohibits the implementation of an income tax and therefore legislative authority would be required. Once given authority to implement, it has been assumed that the City of Toronto would reach agreement with the CRA to have it administer the system on the City's behalf. This would parallel the way in which the CRA

[191] A. Fieldhouse, April 2013, A Review of the Economic Research on the Effects of Raising Ordinary Income Tax Rates, Economic Policy Institute. This paper itself references:
E. Saez, J. Slemrod and S Giertz, 2012, The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review, Journal of Economic Literature, Vol 40, no. 1, page 3-50

[192] One potential strategy to reduce this problem would be to require filers to declare their filing address as their principle residence. Since only the principle residence qualifies for a capital gains exemption on resale, this could counter some of the incentive to declare a property outside of the City as the filing location.

takes responsibility for the administration and collection of income taxes on behalf of various provinces. Such a shared approach is the most practical manner in which income taxes could be implemented; otherwise the City would have to incur very high costs of compliance and reporting for individual taxpayers, in addition to substantial costs of setting up a new administrative apparatus. Further, without shared administration, problems with avoidance and evasion are likely to be a major concern.

Even assuming CRA administration, the costs of implementing such a new income tax regime are likely to be large. Systems and procedures would have to be set up to accommodate the tax and considerable effort required to educate affected taxpayers.

11.5 Other Jurisdictions

11.5.1 Taxes on Employment Earnings

Although municipal income taxes are not currently applied in any Canadian jurisdiction, they are found within many U.S. jurisdictions.

KPMG in the U.S. undertook a study for World Business Chicago in which it compared the overall tax burden for businesses and individuals in Chicago relative to a number of its "peer" cities.[193] In Exhibit 11.5 below, state and local taxes for individuals and businesses in each of the major jurisdictions reviewed have been summarized. The exhibit shows nominal tax rates for businesses and "effective" tax rates for households. Tax rates for households assume a family with four people and an annual income of $100,000.[194]

[193] KPMG, September 2015, Tax Burden on Residents and Businesses in the City of Chicago, U.S. Peer Cities, and Regional Municipalities – FINAL REPORT

[194] KPMG included a number of other household profiles in its analysis. With respect to local income taxes, effective tax rates across the household types were either the same or within the narrow range, which implies that the nominal tax rates are flat and/or have few thresholds.

Exhibit 11.5 – State and Local Income Tax Rates – Selected U.S. Municipalities

	Business Income Tax Rates		Personal Income Tax Rates	
	State (Nominal)	Local (Nominal)	State (Effective)	Local (Effective)
Chicago	7.75%	-	3.75%	-
New York City	8.93%	8.85%	5.64%	3.37%
Los Angeles	8.84%	-	3.98%	-
Boston	8.00%	-	5.15%	-
San Francisco	8.84%	-	3.98%	-
Atlanta	6.00%	-	5.69%	-
Dallas	0.95%	-	0.00%	-
Denver	4.63%	-	4.63%	-
Indianapolis	7.00%	-	3.30%	1.77%
Milwaukee	7.90%	-	5.77%	-
Philadelphia	9.99%	6.45%	3.07%	3.91%

With respect to this exhibit, some of the key highlights include:

- Only New York City and Philadelphia, among the "peer" cities, levy a local income tax on businesses. Both also levy an income tax on individuals, as does Indianapolis.
- State tax rates are generally lower than provincial taxes in Canada. (For example, the Ontario tax rate on income earned by a General Corporation ranges from 10.5% to 11.5%, in comparison to the nominal rates of 0.95% to 9.99% noted in Exhibit 11.5.)

As noted earlier, some jurisdictions levy a Gross Receipts tax. Within the group above, this applies to San Francisco, Denver, and Atlanta.

Exhibit 11.6 provides a summary of local income taxes on individuals across the United States, as compiled by the Tax Foundation. Data are reportedly for 2011, so some rates may have changed in the interim. The table shows the range of local income tax rates observed in each of the 17 states where such taxes can be found.

Exhibit 11.6 – Local Income Taxes – States and Municipalities with Local Income Taxes

State	Number of Local Income Tax Jurisdictions	Resident Tax Rate Lowest	Resident Tax Rate Highest	Comments
Alabama	4	1.0%	2.0%	
California	1	1.5%	1.5%	San Francisco – paid by employers
Colorado	3	n/a	n/a	Flat charge per week
Delaware	1	1.25%	same	Wilmington
Indiana	91	0.30%	3.13%	
Iowa	297	1.00%	same	Rates for one county. 297 school districts impose a surcharge on state income taxes
Kansas	535	0.25%	2.25%	On interest and dividends. County tax in addition.
Kentucky	218	0.80%	2.50%	
Maryland	24	1.25%	3.05%	
Michigan	22	1.00%	2.50%	
Missouri	2	1.00%	same	
New Jersey	1	1.00%	same	
New York	4	2.91%	3.88%	New York City
Ohio	774	2.00%	2.75%	
Oregon	2	0.0067%	0.69%	On employers
Pennsylvania	2,961	1.00%	3.93%	
West Virginia	3	n/a	n/a	Flat charge per week

Source: J. Henchman and J. Sapia, "Local Income Taxes: City- and County-Level Income and Wage Taxes Continue to Wane" Tax Foundation, August 31, 2011.

Some observations are as follows:

- Municipal income taxes on employment earnings are widespread in only four states: Indiana, Kentucky, Ohio and Pennsylvania. In other states, the number of municipalities with such taxes is much smaller.
- Rates are generally low (around 1.0% to 2.0%), although they may approach 4.0% in a few cases.
- The 33 states not included in the table do not have jurisdictions charging local income taxes. Hence, such taxes are found in only a minority of states.

11.5.2 Taxes Paid by Employers

The discussion so far has focused on taxes on employment earnings that are paid by employees (and which are therefore deducted from gross earnings). In a few instances, including as noted in Exhibit 11.6 above, municipalities levy taxes directly on employers. In

many cases these taxes are linked to support for transit or transportation infrastructure. For example:

- The New York City Metropolitan Transportation Authority (MTA) levies a 0.34% payroll tax.
- In Oregon, the Tri-Met Transportation District in Portland levied a 0.6918% payroll tax on employers. Similarly, the Lane County Mass Transit District in Eugene, Springfield and surrounding communities levied a 0.0067% payroll tax.[195]

The payroll tax levied by the MTA, first introduced in 2009, has been the subject of significant controversy. Employers with payroll less than $1.25 million were exempted from paying the tax in 2011 as a result of political pressure. The tax was also subject to a constitutional challenge filed by communities on Long Island. This challenge was initially upheld but later overturned.[196] The tax is still in place and proceeds are being used to fund a long-term capital plan for system expansion.[197]

11.6 Qualitative Assessment

In this section, qualitative issues in connection with an income tax regime have been addressed, drawing on the analysis provided above.

11.6.1 Impact on Stakeholders

An income tax focuses more directly on the income and earnings of individuals and businesses than a property tax regime. While property ownership is highly correlated with income for individuals, there are exceptions. In particular, seniors and retirees will generally have a smaller share of income than they do of property ownership. Thus a shift to the use of income taxes may benefit seniors.

For businesses, income tax liabilities may vary widely, depending on their profitability. Variance may be observed both over time and between businesses. Rates of property ownership are likely to be more constant. Thus the allocation of income tax liabilities within the business sector may be very different than the allocation of property tax burdens. One potential advantage of relying more on income taxes is that it shifts the burden to profitable companies. Companies with no taxable income will not pay an income tax.

Another issue for consideration relates to relative property tax burdens. Businesses generally pay much higher property tax rates per dollar of assessed value than do owners of residential properties. (For residential properties, the 2015 municipal tax rate is 0.5081190%, while for general commercial properties, the rate is 1.5361843%.) The fact

[195] J. Henchman and J. Sapia, August 2011, Local Income Taxes: City- and County-Level Income and Wage Taxes Continue to Wane, Tax Foundation,
[196] Railway Age, January 2014, Court holds MTA payroll mobility tax
[197] Joseph Spector, September 2014, MTA payroll tax could last another 30 years, Poughkeepsie Journal

that businesses pay property taxes at a higher rate could be an argument against introducing a business income tax in addition, since they already face a higher relative tax burden through the property tax regime. On the other hand, access to a business income tax could allow the municipality to reduce its reliance on property taxes as a source of revenue and possibly decide to lower the property tax rates to redistribute the burden. As noted, property taxes place a relatively higher burden on businesses than on residential property owners (as measured through the taxes relation to underlying property value). In the event that personal income taxes are introduced, another rationale for introducing business income taxes is that, as noted earlier, implementing both a business and personal income tax regime in parallel may reduce opportunities to shift tax burdens by changing the vehicle through which individuals earn income.

11.6.2 Impact on Economic and Business Activities

Income taxes are, by nature, broadly based and thus should not unduly favour one type of activity over another. The extent of impact on business competitiveness overall will depend largely on the magnitude of the tax, although even a small levy will result in some administrative and compliance burden.

11.6.3 Competitiveness and Avoidance

The obvious concern is that the introduction of income taxes will lead to the departure of residents and businesses from Toronto. There does not appear to be a clear basis for identifying the magnitude of this risk. For businesses, location decisions are driven by a large number of factors, taking into account relative input costs, including salaries and wages, office rents, and transportation costs, among other factors. If a municipal income tax burden were offset by reduced property tax burdens or by an increase in transportation efficiency, the net impact of a business income tax on the attractiveness of Toronto as a business location may be minimal. Impacts may vary by sector and depending on competitive pressure. However, it is true that few North American jurisdictions levy a municipal income tax on businesses and this suggests that some caution is warranted.

11.6.4 Policy Considerations

Because municipal income taxes, whether on personal income or on business income or on both, would represent a major new revenue option, it is worth comparing this revenue option to property taxes from a policy perspective.

A municipal income tax focuses on residents' earnings, while property taxes focus on businesses' and residents' ownership of real property.

There are two potential components to the rationale for property taxes, which are currently based on assessed value. Both components may apply to some degree. They are as follows:

- Property taxes are a mechanism to recover the costs of services provided to properties. Property value could be considered as a proxy for (or indicator of) the value of services that are delivered to properties, although it is an imperfect one. The value of services is not directly or not only correlated to the value of a property but will also be influenced by other factors (lot size, building use and density, location, etc.).
- Property taxes could be considered as a form of wealth tax. In that property taxes are directly linked to assessed value, the link between property taxes and gross real estate holdings (i.e. one measure of wealth) is quite strong. Property taxes, however, are not a perfect wealth tax on an individual for the following reasons:
    - Property taxes do not take into account the amount of debt outstanding on a property. To the extent that an individual homeowner has a large mortgage outstanding, their own personal wealth as reflected in their real estate position may be much smaller than the total value of the property. (An alternative perspective, however, is that gross property value is nevertheless a measure of any individual's exposure to property value changes and of the real estate value that is collectively held by the owner and any mortgage holder in combination.)
    - Property taxes do not access other sources of personal wealth, such as financial investments.

Whatever their advantages or disadvantages, Canada appears unique among countries in its very extensive use of the property tax system. One author noted in 2003 that, as a share of GDP, property taxes in Canada are "among the highest" in the world. It further noted that property taxes yield "virtually all" of the revenues collected by local governments in Canada.[198]

11.7 Summary Evaluation

An income tax, whether on individuals or business or both, has considerable potential to generate revenue for the City. The implications of imposing income taxes would, however, need to be further explored if this revenue option is of interest to City policy makers.

[198] J. Mikesell, July 2003, International Experiences with Administration of Local Taxes: A Review of Practices and Issues, Indiana University, page. 27.

12 Revenue Profile: Municipal Sales Tax

12.1 Overview of Revenue

This section reviews the potential role of a general municipal sales tax as a revenue option for the City of Toronto.

A sales tax applies to a defined set of goods and/or services sold within a specific jurisdiction. A general municipal sales tax, while having no precedent in Canada, is a widely used source of revenue for local governments in the United States and is the source of approximately 7% of all general revenues at the local government level across that country.[199]

The use of a municipal sales tax would be one method of diversifying the revenue sources available to the City, and has strong annual revenue potential. The drawbacks include the costs and time required to establish the infrastructure and monitor such a revenue option, as well as potential avoidance behaviour, which could drive sales outside city borders – particularly for "big ticket items" like appliances, electronics, furniture and vehicles.

12.1.1 Revenue Structure

A municipal sales tax could be levied as either:

1 A non-refundable tax to the final consumer on the sale of defined goods and/or services, from here on referred to as a Retail Sales Tax ("RST"); or

2 A refundable value added tax ("VAT") similar to the HST.

In general, sales taxes at the local level are applied as a non-refundable tax. There is little precedent for a specific incremental VAT within a local or municipal jurisdiction and discussions with tax subject matter experts indicated that this a much less viable option due to the complexities involved. This section will focus on the concept of a non-refundable sales or RST, a tax administered separately from the HST.

It is assumed that the implementation of the RST would take the form of a flat rate and apply to a basket of goods and services as defined by the City.

Goods and services can be broken down into various categories for taxation consideration. The base set of categories would include those that reflect Canadian retail sales as reported by Statistics Canada:

- Motor vehicles and parts

[199] Jeffrey L. Barnett, Cindy L. Sheckells, Scott Peterson, and Elizabeth M. Tydings, December 2014, 2012 Census of Governments: Finance— State and Local Government Summary Report, Available at: http://www2.census.gov/govs/local/summary_report.pdf

- Furniture and home furnishings
- Electronics and appliances
- Building material and garden equipment
- Food and beverages
- Health and personal care
- Gasoline
- Clothing and clothing accessories
- Sporting goods, hobby, books and music
- General merchandise
- Miscellaneous goods

Service categories to consider taxing, not part of Statistics Canada's retail sales categories but which make up significant portions of consumer spending, could include:

- Restaurant sales
- Hotel accommodations
- Amusement sales (concerts, movies, sporting events)
- Various other services (beautician, barber, massage, gym memberships, etc.)

This section considers restaurant sales within the overall sales tax estimate, but does not include other services such as hotel accommodations or amusement sales taxes (covered under section 10 and 4 respectively) or the various other services that could be considered.

Consideration of these categories and how potential revenues were estimated will be further discussed in section 12.2

12.1.2 Legislative Requirements

A general municipal sales tax is not permitted under COTA. Under Part X, Section 267. (2)-5 the City is not permitted to impose a sales tax on a person in respect of the acquisition or purchase of any tangible personal property, any service or any intangible property, other than a tax imposed on the person,

i. for the purchase of admission to a place of amusement as defined in the Retail Sales Tax Act,

ii. for the purchase of liquor as defined in section 1 of the Liquor Licence Act for use or consumption,

iii. for the production by the person of beer or wine, as defined in section 1 of the Liquor Licence Act, at a brew on premise facility, as defined in section 1 of that Act, for use or consumption, or

iv. for the purchase of tobacco as defined in section 1 of the Tobacco Tax Act for use or consumption.

The implementation of the RST would therefore require provincial approval and legislation to be put in place following approval by City Council.

12.1.3 Implementation Issues

Currently there is no precedence in Ontario for a municipal RST. However, Vancouver and Victoria in British Columbia and Montreal in Quebec collect a fixed tax on gasoline. While some provinces have in place a tax system whereby provincial sales taxes (PST) are collected by the Province (as in British Columbia and Quebec), Ontario moved to the use of the combined Harmonized Sales Tax, a value added tax, in 2010. The HST replaced the Ontario PST by adding a provincial component to the existing federal Goods and Services Tax (GST). HST is collected and administered by the CRA, which then remits the provincial portion to the Province of Ontario.

Prior to 2010 and the adoption of the HST, Ontario businesses were required to remit GST to the CRA and PST to the Province of Ontario. Since that time businesses submit HST to the CRA only, and therefore the Province has likely lost much of the capability necessary to administer a sales tax. While there are still a handful of other provincial taxes in place, they are much more specific in nature and of a much smaller scale than the previous PST. These taxes include, but are not limited to:

- Beer and wine tax
- Tobacco tax
- Fuel tax
- Land transfer tax
- Retail Sales Tax on privately purchased cars and certain insurance premiums

Implementation of a non-refundable municipal sales tax, separate from the HST, would require support and administration at either the municipal, provincial or federal level. Costs of implementation, administration and compliance are likely to be significant. For the purposes of calculating annual revenue estimates, it has been assumed that $18 million in annual administration expenses would be incurred as described in section 12.2.2.4.

The initial analysis suggests that it would be very challenging to add a municipal tax component to the existing HST. As noted, the HST is a value-added tax. Businesses are therefore able to claim credits for any HST included in their own purchases of goods and services, and they only need to remit the net amount to taxing authorities. To the extent

that businesses pay more HST than they collect, they may be able to obtain refunds. Because many businesses operate across municipal boundaries, and almost all businesses purchase goods and services from both within and outside Toronto, it would be very difficult to operate a refundable tax system when there are multiple layers of tax being charged (i.e., federal, provincial and municipal tax levies within a combined rate). This difficulty reflects the fact that it will be challenging to allocate tax credits to the appropriate level of government within a combined pool. While this issue is already present in the existing system, which combines federal and provincial levies, the problem will be significantly magnified with a third municipal layer. A particular problem is the small geographic area associated with Toronto. Accordingly, as noted elsewhere, it has been assumed that any municipal sales tax will have to be implemented as a separate regime.

12.1.4 Other Jurisdictions

New York City

New York City has three components to its sales tax regime, one of which is a dedicated revenue stream for New York City itself.

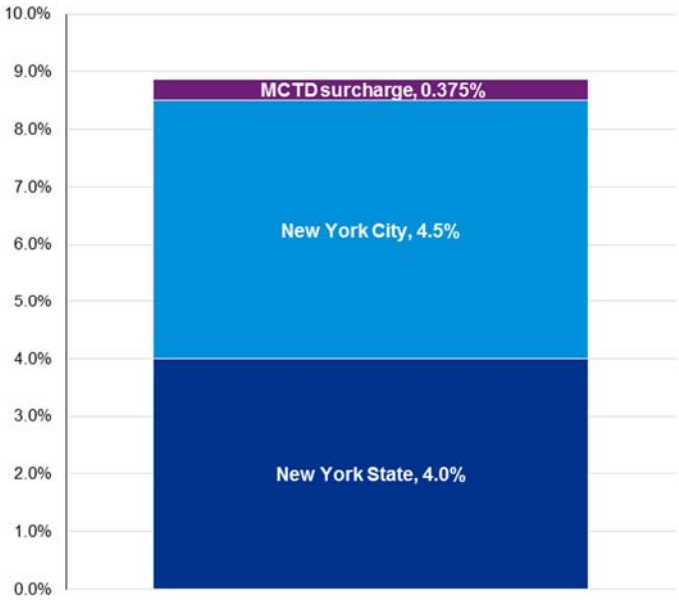
Exhibit 12.1 below breaks out the three components of the general merchandise sales tax, which are:

1 A 4.0% state sales tax.

2 A 4.5% local sales tax, dedicated to New York City. The state requires a minimum local sales tax rate of 3%, with higher rates requiring state legislative approval.

3 The Metro Commuter Transportation District (MCTD) surcharge of 0.375%, which flows to the Metropolitan Transit Authority for the funding of the metro areas transportation infrastructure.

Exhibit 12.1 – New York City General Merchandise Sales Tax



Also taxed at this rate (8.875%) are utility and telecommunication services, cleaning and maintenance services, hotel accommodations, food and beverage sold by restaurants and caterers, admission to places of amusement and credit-rating services.

The city also imposes a tax on certain services in the jurisdiction (4.5% city tax only), including beautician services, barbering, manicures and pedicures, massage services, gymnasiums, tanning and electrolysis. There is also a separate tax for parking (10.375% or 18.375% based on residency).[200]

There are some purchases, considered necessities, that are exempt from sales tax; these include clothing or footwear items that cost less than $110, unprepared and packaged food products, certain beverages, health supplements, drugs and medicine, medical equipment, newspapers and magazines, diapers, laundry and dry cleaning services, shoe repair, prosthetic aids, hearing aids, eyeglasses and veterinary medical services among others.[201]

[200] City of New York, New York State Sales and Use Tax, Available at: https://www1.nyc.gov/site/finance/taxes/business-nys-sales-tax.page
[201] City of New York. Sales Tax, Available at: http://www1.nyc.gov/nyc-resources/service/2389/sales-tax

Chicago

Like New York City, Chicago's sales tax on general merchandise is broken down into multiple components to fund different levels of government and initiatives. Unlike New York City, there is an additional layer of tax used to directly fund the county.

Exhibit 12.2 breaks down Chicago's sales tax on general merchandise which is composed of:

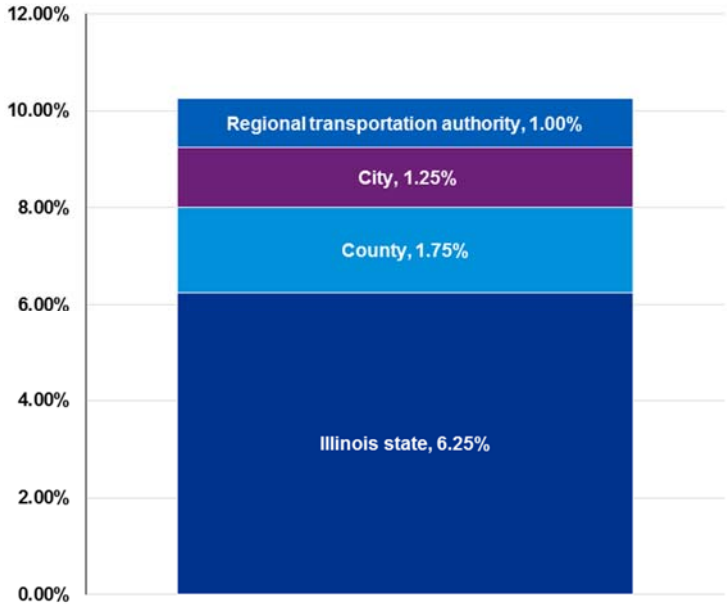
1 A 6.25% state sales tax

2 A 1.75% county sales tax

3 A 1.25% city sales tax

4 A 1.0% tax to fund local transit projects via the regional transit authority

Exhibit 12.2 – Chicago General Merchandise Sales Tax



Chicago also has in place other forms of tax from which they collect revenue. These taxes include, but are not limited to, an amusement tax (5% or 9%), bottled water tax ($.05 per bottle), cigarette tax ($.059 per cigarette or $1.18 per pack), liquor tax ($0.29-$2.68 per gallon), hotel accommodations tax (4.5%), fountain soft drink tax (9% of syrup price), restaurant tax (0.25%) and telecommunications tax (7%).[202]

[202] City of Chicago, Tax List, Available at: http://www.cityofchicago.org/city/en/depts/fin/supp_info/revenue/tax_list.html

Vancouver

While there is no municipality in Canada that has successfully put in place a municipal sales tax to date, Vancouver attempted to do so in 2015. In July 2015 they held a referendum for Metro Vancouver area residents asking whether they were for or against a 0.5% sales tax whose revenues would support infrastructure projects undertaken by the local transit authority. This type of tax regime is found in numerous cities in the United States, including New York City and Chicago as detailed above and others such as Seattle and Phoenix. The result of the vote in Vancouver landed against the tax with 62% voting against the implementation of the tax and 38% voting in favour of it.

12.2 Quantitative Assessment

12.2.1 Key Assumptions and Limitations

Annual revenue potential from a RST were estimated using 2015 Toronto Census Metropolitan Area (CMA) retail sales data sourced from Statistics Canada via the City of Toronto website.

As the CMA retail sales data is not defined by the same borders as the city of Toronto, the information was sized based on a population ratio between the two jurisdictions.

It should be noted that the calculations assumed the following:

- The city of Toronto population is equivalent to 47% of the total population in the Toronto CMA. This factor was used to size the Toronto CMA retail sales data to the city of Toronto. Information provided by the City of Toronto allowed this data to be further tailored by applying an index factor representing whether expenditure on certain cost categories in the city is above or below the average spent on the category in the Toronto CMA.
- Sales from grocery and specialty food stores would not be taxed. This is a simplifying assumption as some food considered not to be 'basic groceries' currently has HST applied and therefore could arguably have the RST applied as well.
- Prescription sales would not be taxed and compose 47% of spending in the retail sales category "Health and personal care stores."
- Children's clothing and accessories would not be taxed.
- Restaurant sales, which are not included in retail sales data, would be taxed and are added to the estimations using information from Statistics Canada's Household Spending Survey.[203]

[203]Statistics Canada, CANSIM table 203-0021

The categories by which the RST was estimated are outlined in Exhibit 12.3 below.

Exhibit 12.3 – Retail Sales Tax Categories

Retail Category	Taxable status
Motor vehicle and parts dealers	Fully taxable
Furniture and home furnishings stores	Fully taxable
Electronics and appliance stores	Fully taxable
Building material and garden equipment dealers	Fully taxable
Food and beverage stores	Not taxable
Health and personal care stores	Prescriptions not taxed
Gasoline stations	Fully taxable
Clothing and clothing accessories stores	Children's clothing not taxed
Sporting goods, hobby, book and music stores	Fully taxable
General merchandise stores	Fully taxable
Miscellaneous store retailers	Fully taxable
Restaurants	Fully taxable

Tax revenue from other potential services offered within the city, including beautician services, barbering, hotel accommodations and gymnasiums, are not included in these estimates and are discussed below.

12.2.2 Revenue Potential

12.2.2.1 Gross Revenue Potential

After estimating the total taxable base of each retail category through adjustment of the Toronto CMA retail sales data, the potential annual gross revenue was estimated by applying potential RST rates that varied between 0.5 - 2.0%.

Exhibit 12.4 presents the potential annual gross revenue at each rate level.

Exhibit 12.4 – Gross Annual Retail Sales Tax Revenue Potential by Rate ($ Millions)

Retail Category	Taxable Base	Tax Rate			
		0.5%	1.0%	1.5%	2.00%
Motor vehicle and parts dealers	7,900	39.5	79.0	118.5	158.0
Furniture and home furnishings stores	1,200	6.0	12.0	18.0	24.0
Electronics and appliance stores	1,368	6.8	13.7	20.5	27.4
Building material and garden equipment dealers	1,905	9.5	19.1	28.6	38.1
Food and beverage stores	1,729	8.6	17.3	25.9	34.6
Health and personal care stores	1,364	6.8	13.6	20.5	27.3
Gasoline stations	3,035	15.2	30.4	45.5	60.7
Clothing and clothing accessories stores	2,534	12.7	25.3	38.0	50.7
Sporting goods, hobby, book and music stores	837	4.2	8.4	12.6	16.7
General merchandise stores	4,092	20.5	40.9	61.4	81.8
Miscellaneous store retailers	777.41	3.9	7.8	11.7	15.5
Restaurants	2,491	12.5	24.9	37.4	49.8
Gross Annual Revenue Potential	**29,233**	**146.2**	**292.3**	**438.5**	**584.7**

While a tax on services was not included in these estimates a high level estimate was completed for certain 'street-level' services. This estimate was based on information from the Survey of Household Spending. It showed that if clothing services (dry cleaning, laundromats), personal care services (grooming and beautician services), and recreation facility fees and revenues were taxed at a rate of 1% an additional $15 million could be realized.

12.2.2.2 Demand Reduction

A sales tax will affect the demand for different goods in different ways. For each major retail category an elasticity factor was determined based on research[204] or professional judgement. These factors were used to estimate the overall reduction in demand that could be expected from a pure increase in price.

Exhibit 12.5 below summarizes the elasticity factors representing:

$$\frac{\%\text{ change in price}}{\%\text{ change in quantity demanded}}$$

[204] McConnell, Brue, Flynn, 2005, Microeconomics: Principles, Problems, and Policies, McGraw-Hill Irwin.

Exhibit 12.5 – Elasticity factors by retail category

Retail category	Elasticity factor
Motor vehicle and parts dealers	-1.14
Furniture and home furnishings stores	-0.63
Electronics and appliance stores	-0.63
Building material and garden equipment dealers	-0.5
Food and beverage stores	-0.7
Health and personal care stores	-0.31
Gasoline stations	-0.6
Clothing and clothing accessories stores	-0.57
Sporting goods, hobby, book and music stores	-0.5
General merchandise stores	-0.5
Miscellaneous store retailers	-0.5
Restaurants	-2.27

As can be seen, the categories experiencing the highest elasticity of demand are those considered luxuries (restaurants, vehicles, furniture and electronics).

12.2.2.3 Consumer and Vendor Avoidance

A preliminary study recently completed at Stanford University[205] analyzed the effect of different sales taxes between state borders on retailer revenues on either side of the border. The analysis supported the logical perspective that for more expensive purchases the jurisdiction with the lower tax will experience higher sales. This result is shown to be most prominent in motor vehicles and parts, electronics and appliances, miscellaneous retailers and clothing and accessories stores sales. The remaining spending categories in the study did not show a significant variance across state borders. Based on this information, the factors in Exhibit 12.6 present the assumed current sales expected to be lost to cross-border shopping by spending category as a percent of estimated current sales:

[205] This study requested to not be cited.

Exhibit 12.6 – Increase in revenue in lower tax rate jurisdiction based on 1% increase in tax rate of higher tax rate jurisdiction by retail category

Retail category	Revenue difference
Motor vehicle and parts dealers	10.4%
Furniture and home furnishings stores	1.3%
Electronics and appliance stores	6.7%
Building material and garden equipment and supplies dealers	0.0%
Food and beverage stores	0.0%
Health and personal care stores	0.0%
Gasoline stations	0.0%
Clothing and clothing accessories stores	4.0%
Sporting goods, hobby, book and music stores	0.0%
General merchandise stores	0.0%
Miscellaneous store retailers	2.3%
Restaurants	0.0%

12.2.2.4 Implementation and Administration Costs

The Province of British Columbia expected to save $30 million in administration costs in moving from GST/PST to HST in 2010.[206] This amount has been used as the basis for the estimate of administration costs for a City sales tax. In 2009-10, the total amount of PST collected in BC was $5.09 billion[207] (much higher than the estimated annual revenue potential for a City of Toronto RST) and Toronto's estimated number of HST tax registrants is roughly 60% of BC's. Using HST tax registrants as a proxy, it has been assumed that a retail sales tax could cost the City approximately $18 million annually to administer. This represents about 6% of the gross revenue estimate ($309.7 million) if the tax rate was set at 1.0%.

12.2.2.5 Net Annual Revenue Potential

Exhibit 12.7 below presents the estimated annual revenue potential for a sales tax at varying rates after accounting for potential reduced demand and tax avoidance from cross border shopping.

[206] British Columbia, 2010, Ministry of Finance
[207] Government of Canada, 2000, Federal Administration of Provincial Taxes, New Directions

Exhibit 12.7 – Estimated Net Annual Revenue Potential ($M)

Retail Category	Tax Rate			
	0.5%	1.0%	1.5%	2.00%
Motor vehicle and parts dealers	37.2	69.9	98.0	121.5
Furniture and home furnishings stores	5.9	11.8	17.5	23.1
Electronics and appliance stores	6.6	12.7	18.3	23.4
Building material and garden equipment dealers	9.5	19.0	28.4	37.7
Food and beverage stores	8.6	17.2	25.7	34.2
Health and personal care stores	6.8	13.6	20.4	27.1
Gasoline stations	15.1	30.2	45.1	60.0
Clothing and clothing accessories stores	12.4	24.2	35.4	46.0
Sporting goods, hobby, book and music stores	4.2	8.3	12.5	16.6
General merchandise stores	20.4	40.7	60.9	81.0
Miscellaneous store retailers	3.8	7.6	11.2	14.7
Restaurants	12.3	24.3	36.1	47.5
Less: estimated annual operating costs	(18.0)	(18.0)	(18.0)	(18.0)
Net Annual Revenue Potential	**124.9**	**261.4**	**391.4**	**514.9**

12.2.3 Sustainability of Revenues

The Federal Reserve Bank of Kansas City[208] undertook a study comparing the volatility of different state tax revenue sources. One of the revenue options analyzed was a general sales tax. The results of the study showed that a general sales tax grows at approximately the same rate as personal income and is the least volatile in comparison to other revenue sources over the long-term. However, certain spending categories are more unstable than others. It was found that spending on durable goods, such as motor vehicles and parts, furniture and household equipment, was much more volatile than spending on other categories such as clothing and accessories, food and gasoline.

Also noted was the fact that while less volatile over the long-term, sales tax revenues can have increased short-term volatility. Furthermore, because food and medical expenses are costs that are reduced last in times of economic hardship, taxing these items can reduce overall revenue volatility.

[208] R. Alison Felix, The Growth and Volatility of State Tax Revenue Sources in the Tenth District, Available at: https://www.kansascityfed.org/publicat/econrev/pdf/3q08felix.pdf

While in a global sense the RST can be expected to reduce overall consumption in Toronto, it is expected the overall impact on total spending will be minimal and therefore have little effect on current provincial and federal revenues.

12.3 Qualitative Assessment

12.3.1 Impact on Stakeholders

The key stakeholders impacted by a municipal sales tax include the following:

- End consumers (Toronto residents, employees and tourists);
- Retailers within Toronto;
- Federal and provincial governments; and
- The City of Toronto.

Sales taxes are a revenue option that broadly distribute the burden across end consumer groups. This revenue option does not target just Toronto residents, but also GTHA individuals who are employed and/or shop in Toronto as well as visiting tourists. However, it is often a very unpopular revenue option given its widespread impact on all end consumers, as demonstrated by the failed Vancouver referendum.

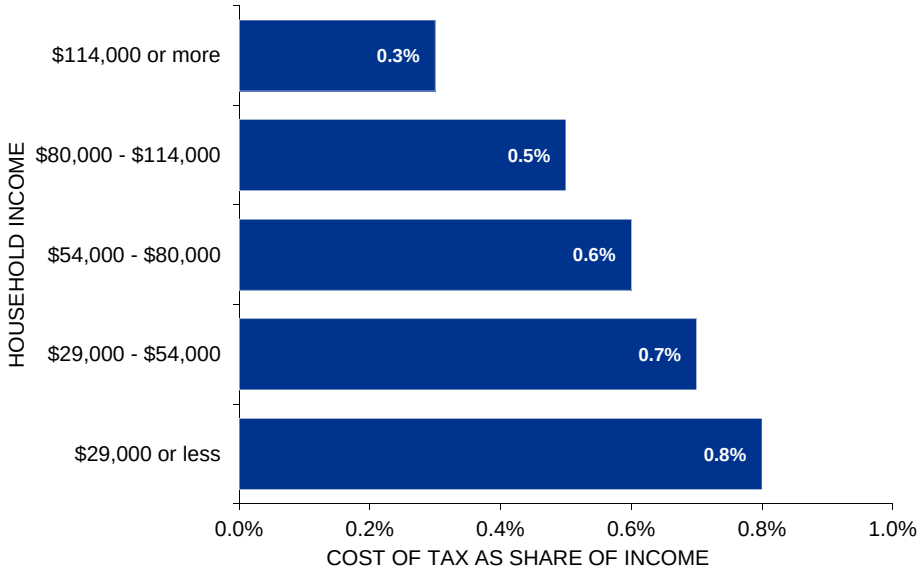
It is expected that the majority of the tax would be shouldered by the end consumer at most retail locations, with the retailer passing the increased cost fully onto consumers. However, there may be instances where retailers offset the tax by reducing their price to stay competitive with other jurisdictions, especially sellers of bigger ticket items. The negative impacts of a municipal sales tax and end consumers is further discussed below:

- *Retailers* - The impact of a RST will have varying impacts on different retailers. Retail locations selling high-value items – e.g., motor vehicles, electronics, appliances and furniture, -- could see higher levels of avoidance, as Toronto residents have greater incentive to shop for these items outside Toronto borders given the potential savings realized. Other retailers such as coffee shops, selling lower value products, would likely see little impact in terms of reduced demand.
- *End consumers* - Avoidance is an easier option for residents of the GTHA outside Toronto. For example, a resident of Oakville who commutes to work downtown and tends to shop at the Eaton Centre after work due to convenience may now consider shopping at retail locations in Oakville to save the incremental tax.

An incremental sales tax on all sales also has a proportionately larger impact on lower income groups and, for this reason, sales taxes are generally considered regressive taxes. The price of boots and laundry detergent, for example, is the same for those of higher incomes and those of lower incomes. A new sales tax has the effect of immediately

increasing the price of many goods like these, requiring proportionately more of lower income individuals' disposable income. This is one of the main policy reasons behind not imposing tax on basic necessities, including Ontario's HST. In considering a 1% increase in the state retail sales tax in Washington, the Institute on Taxation and Economic Policy[209] came to the same conclusion as presented in Exhibit 12.8.

Exhibit 12.8 – Annual cost of 1% increase in state retail sales tax as a share of personal income (2009)



Lower income individuals also arguably have less ability to travel to neighboring jurisdictions to avoid the tax. These negative impacts can be mitigated by restricting the tax to consumption of items not considered basic necessities or by considering potential tax rebates as was the case in Washington.

Province of Ontario– The result of a sales tax and higher revenues for the City of Toronto means a more financially stable City and therefore a City less reliant on provincial transfers. However, this revenue option would require legislative approval by the province.

12.3.2 Impact per Affected Toronto Consumer Base

The portion of the sales tax that will affect Torontonians can be determined by adding back administrative costs to net revenue and by reducing the revenue collected from non-residents of Toronto. For the purposes of this calculation, it is assumed that 75% of the sales tax is paid by Torontonians, and the remaining 25% is exported to visitors of Toronto.

[209] Washington State Budget and Policy Centre, Increasing and Modernizing the Sales Tax, Available at: http://budgetandpolicy.org/reports/increasing-and-modernizing-the-sales-tax

The adjusted revenue balance is approximately $258 million. The consumer base in this case can be approximated using the total number of households in Toronto. As a result, it is estimated that the average Torontonian household will see an increase of approximately $222 per year on their total expenditures with the introduction of a 1 - 1.5% sales tax. At the same tax rate, approximately $86.1 million of the potential tax revenue is exported to non-residents.

12.3.3 Impact on Economic and Business Activities

Consumer spending – Any implementation of a retail sales tax must be moderate in order to not discourage consumer spending and therefore decrease business revenues. If the tax is not excessive in nature, a consumption or retail sales tax is believed to have minimal effect on consumer spending overall.[210]

Employment – The implementation of a small retail sales tax would be expected to have minimal impact on employment within the city, unless some businesses confront large adverse effects due to avoidance from consumers choosing to 'cross-border' shop. Further investigation into the impact on retailers of big-ticket items such as motor vehicles should be considered. Certain policy decisions could be enacted to avoid this type of undesirable behaviour, such as not taxing purchases with a unit cost over a certain threshold.

Savings – A consumption tax like the retail sales tax is considered to present no barrier to saving and actually encourage individuals to save more as the cost of consumption increases.[211] In the case of a minimal increase in the sales tax it is expected there would be little overall change in saving.

12.3.4 Competitiveness and Avoidance

Avoidance - As previously mentioned, retailers of smaller everyday purchases could be expected to experience little avoidance due to a minor increase in taxes paid on goods and services. However, retailers of durable goods (including sellers of appliances, furniture, motor vehicles and larger electronic equipment) could be adversely effected. One way to mitigate this type of avoidance is to put in place proper legislation. For example, a use tax, which is the responsibility of the buyer, is imposed on consumers of property which purchased said property in a jurisdiction where there was no responsibility of the retailer to collect the sales tax imposed in the purchaser's home jurisdiction. Therefore, a resident of Toronto who purchases a motor vehicle outside the city border (where the municipal sales tax is non-existent) would be responsible to remit the RST under use tax legislation. This can be related to paying Ontario legislated taxes on purchases made in the United States upon crossing the border. However, in a jurisdiction such as Toronto with no border control,

[210] InvestorGuide, Consumption vs Income Tax: Which has a Larger Impact?, Available at: http://www.investorguide.com/article/11831/consumption-vs-income-tax-which-has-a-larger-impact-igu/
[211] Ibid

compliance would be much more difficult to enforce. This becomes infinitely more difficult to enforce when considering the potential for online shopping.

Tourist Traffic - As a small retail sales tax would be considered insignificant in comparison to the overall expenses incurred in traveling to a city such as Toronto, it would not be expected to have any obvious effect on tourism. Tourists visiting Toronto for the sole purpose of shopping would have the highest opposition to such a tax, but these shoppers are often consumers of luxury goods which are largely unavailable in jurisdictions outside of Toronto.

12.3.5 Other Considerations

As noted previously, the quantification provided here focused on the taxation of mostly goods, but also included restaurant sales. There are various other services (beautician, barber, massage, gym memberships, etc.) that might potentially be taxed, but would have to be considered individually. It is expected that including the taxation of additional services in the implementation of a retail sales tax would increase revenues beyond those estimated here.

12.4 Summary Evaluation

Overall, a local retail sales tax is a strong option for increasing annual revenues within a jurisdiction if implemented properly. It has the potential to broadly distribute the impact across different consumer groups and taxes both residents and non-residents. It has strong revenue potential that has shown to be more stable than other revenue options in both growth and volatility.

Consideration of any retail sales tax should take into account the disproportionate impact on lower income individuals and households and mitigate these effects through mechanisms such as tax exemptions on necessities or rebate programs.

A municipal sales tax would be a highly visible revenue option – essentially appearing on all receipts for goods going forward. Avoidance and the potential for driving sales outside Toronto borders should also be considered, especially for more expensive goods.

The potential difficulty in gaining provincial approval to implement such a tax should also be weighed.

13 Carbon Tax

13.1 Background

Carbon pricing refers to the mechanisms that governments around the world use to put a price on carbon and to drive policies that help address climate change. A price on carbon helps shift the burden of negative externalities produced from burning carbon back onto those who are responsible for it so they are encouraged to reduce emissions. A price incentivizes businesses and individuals to reduce fuel consumption, increase fuel efficiency, use cleaner fuels, and adopt new technology to reduce the amount that they pay for carbon taxes or allowances.

The two main mechanisms for carbon pricing are emission trading systems and carbon taxes.

1. Emissions Trading Systems. Commonly referred to as cap-and-trade systems, emissions trading systems cap the total level of greenhouse gas emissions in the economy to a level determined by the number of allowances provided. Allowances can either be allocated by the government to existing emitters (such as companies) free of charge or sold through some form of auction process. If distributed free of charge, some methodology for allocation, such as based on existing emissions, will need to be developed. However allowances are distributed in the first instance, a secondary market for allowances can be developed as emitters buy or sell allowances depending on whether they are long or short on the amount that they need to cover their own emissions. The value of allowances determined in an initial auction and in secondary markets effectively results in a price for carbon emissions.
2. Carbon Tax. The carbon tax is a levy applied directly on greenhouse gas emissions generated from burning fossil fuels. The tax is different from the cap-and-trade system in that the emissions reduction outcome under a tax is not predefined.

   Globally, governments primarily use these two mechanisms for pricing carbon to drive policy and address climate change. Proceeds from these programs are normally invested back into the economy to encourage green initiatives such as clean energy projects and greenhouse gas reduction programs. Alternatively, the proceeds may be used to reduce other forms of taxes. They are rarely used as a revenue tool to fund general government spending.

13.2 Jurisdictional Review

According to the Carbon Pricing Watch 2015 Report, almost 40 countries and over 20 provinces, states, and cities already administer or are scheduled to implement a carbon tax or cap-and-trade system.[212]

The combined annual global value of carbon pricing mechanisms totals slightly under USD $50 billion.[213] This revenue is used for different purposes in different jurisdictions, but the cash flow is predominately spent to support climate change mitigation and to offset the impact of policies for carbon emissions reduction on lower income families.

Countries that have carbon pricing programs include, but are not limited to, the United States, Mexico, United Kingdom, France, Portugal, and South Africa. Although carbon pricing initiatives are often implemented at the federal or provincial level, the Carbon Pricing Watch 2015 Report indicates that there are a few examples of cap-and-trade systems implemented by specific cities in China and Japan.[214] In 2010, the Tokyo Metropolitan Government for example implemented a cap-and-trade system for an area that consists of 62 small municipalities.[215] The highly complex system was implemented to tackle greenhouse gas emissions in the city, and play a leading role in Japan's efforts to deal with climate change. In contrast, as of 2015, this same report was not able to identify any examples of carbon tax programs administered at the municipal level.

Although Canada does not currently have a federally administered carbon tax or cap-and-trade program, many provinces have implemented their own carbon pricing programs as detailed in the sections below.

It should be noted that the City currently lacks legislative authority to charge this tax and would therefore require legislative approval by the Province.

13.2.1 British Columbia

In British Columbia, a revenue neutral carbon tax is applied to the purchase or use of fuels within the Province. By law, the government must show that the carbon tax revenue flows back to individuals and businesses through tax reductions. As such, the tax is not a revenue tool for the Province and is instead used to drive policy and change consumer behaviour within the Province. Administratively, the tax is applied as a fixed charge per unit of fuel purchased, and collected at the point of sale in the same way that existing motor fuel taxes are collected in the Province. By leveraging the existing administrative infrastructure of the

[212] The World Bank, 2016, Pricing Carbon, Available at: http://www.worldbank.org/en/programs/pricing-carbon
[213] World Bank Group and ECOFYS, 2015, Carbon Pricing Watch 2015, Available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/08/26/090224b08309a09a/4_0/Rendered/PDF/Carbon0pricing0e0released0late02015.pdf
[214] Ibid
[215] Bureau of Environment Tokyo Metropolitan Government, 2010, Tokyo Cap-and-Trade Program, Available at: https://www.kankyo.metro.tokyo.jp/en/attachement/Tokyo-cap_and_trade_program-march_2010_TMG.pdf

Province, collection and enforcement costs are minimized. The tax was first introduced in British Columbia in 2008, and the tax rates were updated in 2012. Exhibit 13.1 shows the various carbon tax rates in British Columbia.

Exhibit 13.1 – British Columbia Carbon Tax Rates

Type of Fuel	Rate
Gasoline	6.67¢/L
Diesel (light fuel oil)	7.67¢/L
Jet Fuel	7.83¢/L
Natural Gas	5.7¢/m^3
Propane	4.62¢/L
Coal - high heat value	62.31$/T
Coal - low heat value	53.31$/T

Source: British Columbia Ministry of Finance, 2016, **Tax Reductions, Funded by a Revenue Neutral Carbon Tax**, http://www.fin.gov.bc.ca/tbs/tp/climate/tax_cuts.htm

13.2.2 Alberta

Starting on January 1, 2017, the Province of Alberta will be applying a carbon levy to the price of all fuels that produce greenhouse gas emissions when combusted. The levy will be applied to fuels at a rate of $20/tonne of emissions in 2017, and a rate of $30/tonne of emissions in 2018 and onwards.[216] This translates to specific rates for each category of fuel as detailed in Exhibit 13.2.

Exhibit 13.2 – Alberta Carbon Tax Rates as of July 1, 2012

Type of Fuel	January 1, 2017 Rate ($20/tonne)	January 1, 2018 Rate ($30/tonne)
Diesel	5.35 ¢/L	8.03 ¢/L
Gasoline	4.49 ¢/L	6.73 ¢/L
Natural Gas	1.011 $/GJ	1.517 $/GJ
Propane	3.08 ¢/L	4.62 ¢/L

Source: Alberta Government, 2016, Carbon levy and rebates, http://www.alberta.ca/climate-carbon-pricing.cfm

The program is projected to collect $9.6 billion over the next 5 years, and is earmarked to be reinvested back into the province's economy specifically to diversify the province's energy economy, to create jobs, and to support households, business, and communities adjust to the carbon price.[217]

[216] Alberta Government, 2016, Carbon levy and rebates, Available at: http://www.alberta.ca/climate-carbon-pricing.cfm
[217] Ibid.

13.2.3 Quebec

In 2013, the Province of Quebec introduced a cap-and-trade-system for carbon emission allowances to help fight climate change. In 2014, Quebec linked its system with that of California, thereby creating the largest carbon trading market in North America. A portion of the emission allowance units are allocated to companies free of charge, and a portion of the units are auctioned off by the government four times a year. The minimum price for each metric tonne of emissions is set at $10.75, and the rate is scheduled to increase at 5% plus inflation until 2020.[218] For joint auctions with California, the minimum price is set at the higher of the two system's minimum prices. All auction proceeds of carbon emission units feed directly into the Quebec Green Fund, and are earmarked for financing initiatives that aim to reduce greenhouse gas emissions and help Quebec's residents adapt to the impacts of climate change.

13.2.4 Ontario

On February 23, 2016, the Ontario government unveiled plans to implement a cap-and-trade program for carbon allowances. The cap will initially be set at 142 megatonnes per year in the first year of the program, and will decline to 125 megatonnes per year by 2020.[219]

Total proceeds from the new cap-and-trade program are expected to bring in $0.5 billion during partial fiscal year 2016-2017, and $1.9 billion during full fiscal year 2017-2018. The proceeds will be deposited into a new Greenhouse Gas Reduction Account. The Province is proposing that money in the account can only be "invested in a transparent way back into green projects that reduce greenhouse gas pollution and help homeowners and businesses save energy such as public transit, clean-tech innovation for industry, electric vehicle incentives, social housing retrofits."[220]

Although the specific rates that will be charged per metric tonne of emissions are not yet known, it is anticipated that the rates will be similar to those of Quebec as the government has signaled its intent to link the Ontario program with those of Quebec and California.

It is anticipated that the program once implemented, will increase the price of gasoline by 4.3 cents per litre in 2017, and increase the average monthly price of natural gas by $5.[221] These cost increases at the consumer level are expected to encourage a change in consumer behaviour to reduce emissions.

---

[218] Department of Sustainable Development, 2016, Environment and the Fight against Climate Change, A Brief Look at the Quebec Cap-and-Trade-System for Emission Allowances, Available at: http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/in-brief.pdf

[219] Province of Ontario, 2016, Cap and trade, Available at: https://www.ontario.ca/page/cap-and-trade

[220] Ibid.

[221] Ibid.

14 Uber Registration Fee

14.1 Background

Uber is a mobile application-based, ride-sharing service provider that connects vehicle-for-hire drivers to customers looking for single-trip, short-distance rides. The application facilitates ride matches based on the proximity of the driver and customer, and allows both the driver and customer to view each other's details and peer ratings prior to the ride. Uber uses "surge" pricing to bring out more drivers when demand is higher. This normally results in a quick response for customers as the increase in price encourages more drivers to provide rides at peak times. The application takes payment directly from a customer's credit card or PayPayl account when the ride is over, and a detailed receipt is sent to the customer via email.

Although Uber does offer various categories of cars and drivers (including registered taxis and taxi drivers), the majority of its rides are provided by drivers who are not registered with the city to provide customers with commercial rides.

Currently, Uber is operating in 414 cities worldwide.[222] In Canada, the company is operating in Alberta, Ontario, and Quebec, most notably in municipalities including Toronto and Montreal.[223] Given that the taxi and limousine industry is heavily regulated in many cities around the world, the safety and legality of Uber's service is a topic that is actively reviewed and debated by municipal and state officials around the world.

14.2 Jurisdictional Review

There has been a wide variety of jurisdictional responses from cities and countries around the world. Responses range from national-level bans to municipal-level implementation of regulatory amendments to permit Uber and similar companies to operate legally. For the purposes of this review the analysis will not discuss the regulatory environment of the vehicle-for-hire industry, nor the legality of Uber. The review focuses only on implemented or proposed fees that are or could be charged to Uber and its drivers.

14.2.1 Toronto

Uber has been operating in the city of Toronto since 2012, and initially dispatched only registered taxicabs and limousines. UberX, the service which allows anyone with a vehicle to offer rides, commenced in Toronto in September 2014.[224] On April 14, 2016, the City of Toronto's Licensing and Standards Committee reviewed proposed bylaws that introduced

[222] Uber, 2016, Our Story, Available at: https://www.uber.com/our-story/
[223] Uber, 2016, Welcome to Uber Canada, Available at: http://www.driveuber.ca/
[224] City of Toronto, 2016, A New Vehicle-for-Hire Bylaw to Regulate Toronto's Ground Transportation Industry Staff Report

a new regulatory framework for the vehicle-for-hire industry, which includes taxi companies, limousine companies, and new "Private Transportation Companies" like Uber. In addition to changes in existing regulation for taxi and limousine companies, the proposed bylaws included proposed fees that would be charged to private transportation companies such as Uber. These fees include:[225]

- Charging Uber or any new private transportation company an one-time application fee of $20,000.
- Charging each driver a provisional licence issuance fee of $10.
- Charging each trip originating from the city of Toronto a $0.20 fee.

It is estimated that the new fees will generate an additional $3.5 million annually for the City. It should be noted that the new regulations will decrease fees that are charged to existing taxicabs and limousines, resulting in a net increase in annual revenue (not considering administrative and implementation costs) to be approximately $1.3 million.[226]

14.2.2 Edmonton

On January 26, 2016, Edmonton City Council amended their existing regulations for taxicabs and limousines, and created new regulations for "Private Transportation Providers" including Uber. The new regulations came into effect on March 1, 2016.

Under the new regulations, private transportation providers operating 200 or more vehicles will be required to pay an annual dispatch fee of $50,000 to the government, and drivers will be required to pay $0.06 per trip. There are no additional driver licensing or registration fees. For providers who operate less than 200 vehicles, an annual dispatch fee of $1,000 is charged, in addition to $400 per year per vehicle, and $60 per year per driver.[227]

However, as of the date of the report, the Alberta Superintendent of Insurance has not yet created a class of commercial insurance for private transportation provider vehicles. As such, Uber is currently not operational in the City of Edmonton, and will need to wait until July 1, 2016 when the new class of insurance is introduced to resume operations.

14.2.3 Calgary

On February 22, 2016, Calgary City Council approved amendments to their existing regulations for taxicabs and limousines and created a new regulation to permit

[225] City of Toronto, 2016, A New Vehicle-for-Hire Bylaw to Regulate Toronto's Ground Transportation Industry Staff Report
[226] Ibid
[227] City of Edmonton, 2015, Vehicle-for-Hire Bylaw, Available at: http://www.edmonton.ca/bylaws_licences/licences_permits/vehicle-for-hire-bylaw.aspx

"Transportation Network Companies" to operate in the city. The new regulations come into effect on April 1, 2016.

Under the new regulations, an annual transportation network company license fee of $1,753 will be charged to the ride sharing company, and an annual driver license fee of $220 will be charged to each driver. There are no additional variable charges per ride provided.[228]

Similar to the City of Edmonton, the Alberta Superintendent of Insurance has not yet created a class of commercial insurance for private transportation provider vehicles. As such, Uber is currently not operational in Calgary, and will need to wait until July 1, 2016 when the new class of insurance is introduced to resume operations.

14.2.4 Ottawa

On April 13, 2016, the City of Ottawa City Council voted to approve new vehicle-for-hire regulations which will become effective on September 30, 2016.

Under the new regulations, "Private Transportation Companies", such as Uber, will need to pay the following licensing fees to be able to obtain an operating license similar to that of a taxi broker.[229]

- $807 for companies with 1 to 24 vehicles.
- $2,469 for companies with 25 to 99 vehicles.
- $7,253 for companies with 100 or more vehicles.

In addition to the licensing fee, a $0.105 will also be charged per ride.[230]

14.2.5 Chicago

The City of Chicago's 2016 budget includes a Ground Transportation Tax that is charged to ridesharing companies such as Uber. The fee currently stands at $0.20 per vehicle per trip.[231] For pickups and drop offs at a Chicago Airport, McCormick Place, or Navy Pier, a $5 City of Chicago Airport Surcharge and a $0.50 City of Chicago Surcharged is charged on consumers. [232]

---

[228] City of Calgary, 2016, Taxi, limousines, transportation network companies, Available at: http://www.calgary.ca/CSPS/ABS/Pages/Livery-Transport-Services/Livery-Transport-Services.aspx
[229] City of Ottawa, 2016, City Council approves new vehicle-for-hire regulations, Available at: http://ottawa.ca/en/news/city-council-approves-new-vehicle-hire-regulations
[230] City of Toronto, 2016, A New Vehicle-for-Hire Bylaw to Regulate Toronto's Ground Transportation Industry Staff Report
[231] City of Chicago, 2016, 2016 Budget Overview
[232] Uber Newsroom, 2016, Uber.com, Available at: https://newsroom.uber.com/us-illinois/airportpickups/

14.2.6 San Francisco

On April 15, 2016, the San Francisco Treasurer's office is requiring that all transportation network company drivers (including those from Uber) register as a business within the city or let the city know that they no longer drive for a ride-hailing company. The cost of registration is $91 per year.[233] For drivers who have been offering ride-sharing rides for multiple years, they are required to pay the fee (and any penalties) for those years that they did not register with the city.

[233] LA Times, 2016, San Francisco will require Uber and Lyft drivers to register as businesses

15 Municipal Land Transfer Tax

15.1 Background

A land transfer tax is a revenue option that is widely-used across North America and beyond, and is applied against the purchase or sale of a residential home. In Canada, the land transfer tax is a provincial tax that is calculated as a percentage of the transaction price, based on either a single flat rate or a sliding scale. All provinces have a land transfer tax, except for Alberta and Saskatchewan, who instead apply a land title transfer fee.[234]

Effective in February 2008, COTA put in place the authority for the City to levy its own Municipal Land Transfer Tax ("MLTT") in parallel with the Ontario government. The City is the only municipality in Ontario to levy a MLTT. Other Canadian municipalities, such as Montreal and cities in Nova Scotia,[235] also impose a separate MLTT.

When purchasing property in the city of Toronto, the buyer pays both the provincial land transfer tax ("LTT") and the MLTT at the rates presented in Exhibit 15.1.

Exhibit 15.1 – Ontario and Toronto Land Transfer Tax (Property with One or Two Single Family Residences)

Ontario LTT		Toronto MLTT	
Value of Consideration	**Rate**	**Value of Consideration**	**Rate**
Up to and including $55,000.00	0.5%	Up to and including $55,000.00	0.5%
$55,000.01 to $250,000.00	1.0%	$55,000.01 to $400,000.00	1.0%
$250,000.01 to $400,000.00	1.5%		
Over $400,00.01	2.0%	Over $400,000.00	2.0%

The combined top marginal land transfer tax in Toronto is therefore 4.0% for the portion of the sale above $400 thousand for a property with at least one and not more than two single family residences.

For all other property types not containing one or two single family residences the MLTT rates are presented in Exhibit 15.2.

[234] RateHub, 2016, Available at: http://www.ratehub.ca/land-transfer-tax

[235] Each municipality in Nova Scotia sets their own land transfer tax (also known as Deed Transfer Tax), which can vary from 0.5% to 1.5% of the purchase price. For homes in the Halifax area, the land transfer tax is 1.5%

Exhibit 15.2 – Ontario and Toronto Land Transfer Tax (all other properties)

Ontario LTT		Toronto MLTT	
Value of Consideration	**Rate**	**Value of Consideration**	**Rate**
Up to and including $55,000.00	0.5%	Up to and including $55,000.00	0.5%
$55,000.01 to $250,000.00	1.0%	$55,000.01 to $400,000.00	1.0%
Over $250,000.01	1.5%	$400,000.01 to $40,000,000	1.5%
		Over $40,000,000	1.0%

In the City's 2016 budget, the MLTT was expected to generate revenue of $532 million, which represents approximately 5.2% of all operating funding. By comparison, the property tax represents the largest source of operating revenue at 39.5% of budget.

15.2 Jurisdictional Review

15.2.1 Philadelphia

The 4% LTT in Philadelphia is the highest in North America. The LTT has both a state and city component, where 1% is provided to the state and the remaining 3% is considered city revenue. In 2015, this 3% LTT generated approximately $203 million, or 5% of general fund tax revenue for the city. The city is much more dependent on wage and earnings tax as well as property taxes, which generated approximately 35% and 14% of city revenues respectively in 2015.[236]

15.2.2 Chicago

The LTT in Chicago is applied slightly differently than in other jurisdictions, in both structure and the application of the revenues. LTT is levied on behalf of 3 levels of government and totals $6.00 per $500 of the transfer price:[237]

- State of Illinois: A rate of $0.50 per $500 (or 0.10%) is collected by the state. The seller is customarily liable, but this depends on terms of sale.
- County: A rate of $0.25 per $500 of the transfer price (or 0.05%) is collected by the county. The seller is customarily liable, but this depends on terms of sale.

[236] City of Philadelphia, 2015 Comprehensive Annual Financial Report Fiscal Year Ended June 30, 2015
[237] RVoice, 2015, Real Estate Transfer Taxes, Available at: http://www.illinoisrealtor.org/sites/illinoisrealtor.org/files/Advocacy/TransferTax.pdf

- City of Chicago: In total the tax is applied as $5.25 per $500 of the transfer price or 1.05%. Of this tax, a portion ($3.75) is collected by the city for general funding purposes while the remainder ($1.50) is passed on to the Chicago Transit Authority to support local transit. The buyer is responsible for $3.75/$500 while the seller is responsible for $1.50/$500.

In total, Chicago's portion of the LTT tax, equivalent to 0.75% of the transfer price, is expected to raise $160 million in 2016 which represents 1.7% of all appropriations.

15.2.3 New York City

In New York City there are two levels of government which require payment of the land transfer tax:

- New York State: Transfer of real property in excess of $500 is taxed at a rate of 0.4%, payable by the seller. For residential property transferred at a value of $1 million or higher, an additional transfer tax of 1% is applied to the transfer price.
- New York City: New York City's equivalent to a LTT is known as the Real Property Transfer Tax (RPTT). For the transfer of a residential property, the tax rate is 1% if the transfer price is less than $500 thousand and 1.425% if the transfer price is more than $500 thousand. For commercial property transfer the rate is 1.425% if the transfer price is less than $500 thousand and 2.625% if the transfer price is greater than $500 thousand.

16 Other Municipal Funding Models

In reviewing the potential revenue options in this report, it will be important for the City to consider an overall funding strategy going forward. Specifically, the City should consider how individual revenue options are packaged within an overall portfolio of revenue sources.

This section profiles three jurisdictions similar to Toronto in terms of scale and growth, economic sectors, and challenges that they face, such as funding for infrastructure. The jurisdictions profiled below are New York, Chicago and Philadelphia. These jurisdictions were profiled in terms of revenue sources and overall revenue levels.

Exhibit 16.1 summarizes Toronto's current and proposed revenue options and how they compare to the profiled jurisdictions. The table below demonstrates that cities similar to Toronto have a broader range of revenue options outside of property taxes. A diverse mix of revenue options could potentially give Toronto more flexibility to adapt to changing economic and fiscal circumstances.

Exhibit 16.1. Revenue Options in Similar Jurisdictions to Toronto

	Toronto	New York	Chicago	Philadelphia
Current Toronto Revenue Tools				
Property Taxes	x	x	x	x
Land Transfer Taxes	x	x	x	x
Development Charges	x			
Third party sign 'billboard' tax	x	x		x
Proposed Revenue Options for Toronto				
Alcohol Beverage Tax		x	x	x
Development Levy				
Entertainment and Amusement Tax			x	x
Hotel Tax		x	x	x
Motor Vehicle Ownership Registration Tax		x	x	
Personal Income Taxes		x		x
Business Income Taxes		x		x
Municipal Sales Tax		x	x	
Parking Tax				x
Road Pricing (Cordon Charge)				
Tobacco Tax		x	x	x

16.1 Toronto

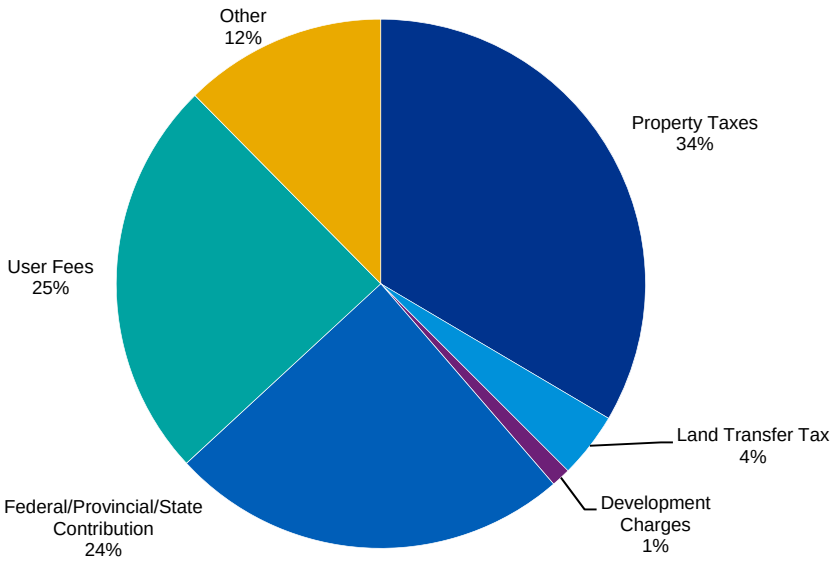
To provide context, this section reviews the City's current revenue levels and revenue sources. Toronto's 2016 Preliminary Tax-supported Operating budget is currently $10.1 billion.[238] Property taxes are the City's largest revenue source, with $3.95 billion or 39% budgeted for 2016.[239] Provincial transfers and user fees, such as TTC fares, are the next largest revenue sources. The remainder of the City's revenue comes from smaller sources, such as the Municipal Land Transfer Tax and Development Charges.

The MLTT is estimated to generate $532 million, or 5%, of the City's 2016 operating budget.[240] Revenues generated from Development Charges are part of the City's capital budget and are used to pay for the cost of growth related capital infrastructure required to provide municipal services to new development, such as roads, and water and sewer infrastructure. Development Charges account for $1.4 billion or 7% of the City's 2016-2025 Capital Budget of $20 billion.[241] In 2015, the City generated $221 million in revenues from Development Charges. The third party sign tax, or "billboard" tax is expected to generate approximately $12 million annually.[242]

The following Exhibit provides a breakdown of the City of Toronto's revenues for its Fiscal Year 2014.

[238] City of Toronto. 2016 Preliminary Budget Overview. Available at: http://www1.toronto.ca/City%20Of%20Toronto/Strategic%20Communications/City%20Budget/2016/PDFs/Budget%20Basics/Web%20final%20A1508176_Budget2016_Understanding-Dec17.pdf
[239] City of Toronto. Toronto 2016 Budget. Strategic Communications. Available at: http://www1.toronto.ca/City%20Of%20Toronto/Strategic%20Communications/City%20Budget/2016/PDFs/Charts/Chart_MoneyComesGoes_full.pdf
[240] Ibid
[241] Ibid
[242] City of Toronto. February 2016. 2016 Budget Committee Recommended Tax Supported Operating Budget. Appendix 1. Available at: http://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-90361.pdf

Exhibit 16.2. City of Toronto FY2014 Revenues ($ Millions)



Source: City of Toronto. Consolidated Financial Statements FY2014 Ended December 31st, 2014

16.2 New York

The City of New York may be significantly larger than Toronto in terms of population (8.55 million vs. 2.79 million), but it faces similar challenges such as demands for infrastructure investment to accommodate population growth, as well as increasing income disparities and the need for city investment in social housing and programs.[243]

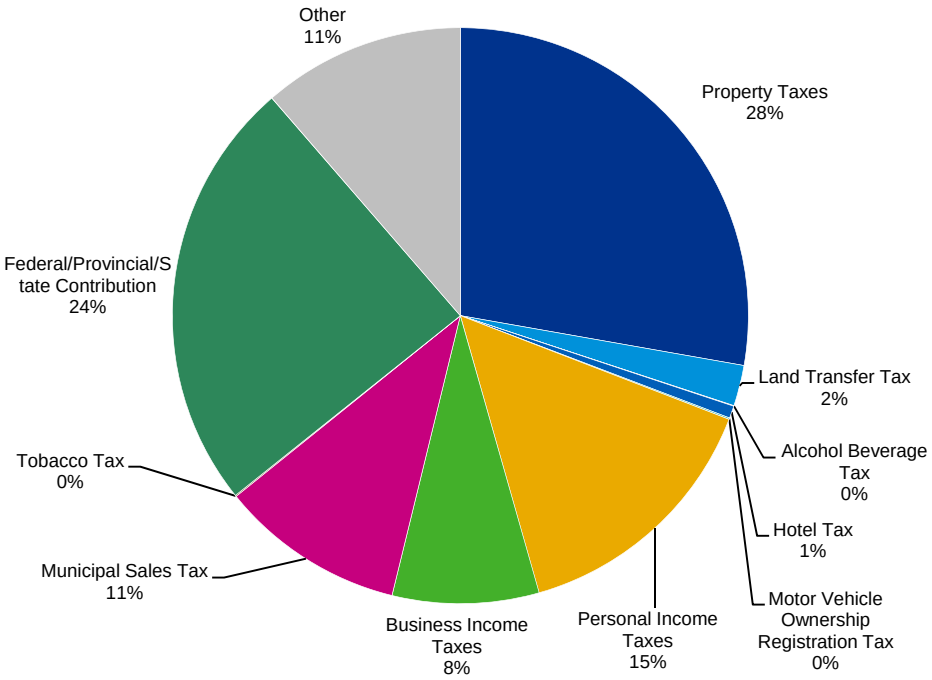
New York's Executive Budget for 2016 is $78.3 billion, the largest city budget in the United States.[244] Similar to Toronto, property taxes are the largest revenue source, accounting for $22.24 billion, or 28%, of its 2016 budget. The second largest revenue source are Federal and State transfers (also similar to Toronto).

As demonstrated in Exhibit 16.1, New York relies on a number of revenues tools outside of property taxes, such as personal and business income taxes and sales taxes. In 2015, personal income taxes generated $11.3 billion in revenues for the City.[245] This was the third-largest revenue source, after property taxes and federal and state transfers. Following this, sales taxes generated $8.05 billion in revenues in 2015.

[243] The City of New York. Executive Budget. Fiscal Year 2016.
[244] Ibid
[245] New York City. 2015 Comprehensive Annual Financial Report of the Comptroller of The City of New York for the Fiscal Year Ended June 30, 2015.

The following Exhibit provides a breakdown of the City of New York's revenues for its Fiscal Year 2015.

Exhibit 16.3. City of New York FY2015 Revenues ($ Millions)



Source: The City of New York. Comprehensive Annual Financial Report of the Comptroller Fiscal Year 2015 Ended June 30, 2015

16.3 Chicago

Chicago shares similar industry sectors and population size to Toronto. However, Chicago is currently undergoing acute fiscal challenges due in large part to its significant, unfunded pension liability for public employees of $20 billion.[246] As a result, Chicago has faced significant downgrades to its credit ratings, making it more expensive to raise funds though bond sales.

Chicago's proposed budget for 2016 is $9.32 billion.[247] Property taxes are the largest revenue source, accounting for $1.68 billion, or 18% of its 2016 budget. Grant funding from federal and state agencies was the second largest revenue source, accounting for $1.5

[246] Plume, K. and Pierog, K, October 2015, Chicago Approves Emanuel's City Budget, Property Tax Increase, Reuters
[247] City of Chicago. 2016 Budget Overview

billion of the budget. As demonstrated in Exhibit 16.1, Chicago uses a number of other revenues tools such as sales taxes, entertainment taxes and hotel taxes.

Chicago's sales tax is the third-largest revenue source for the city and is expected to generate $667.8 million in revenues for 2016. [248]

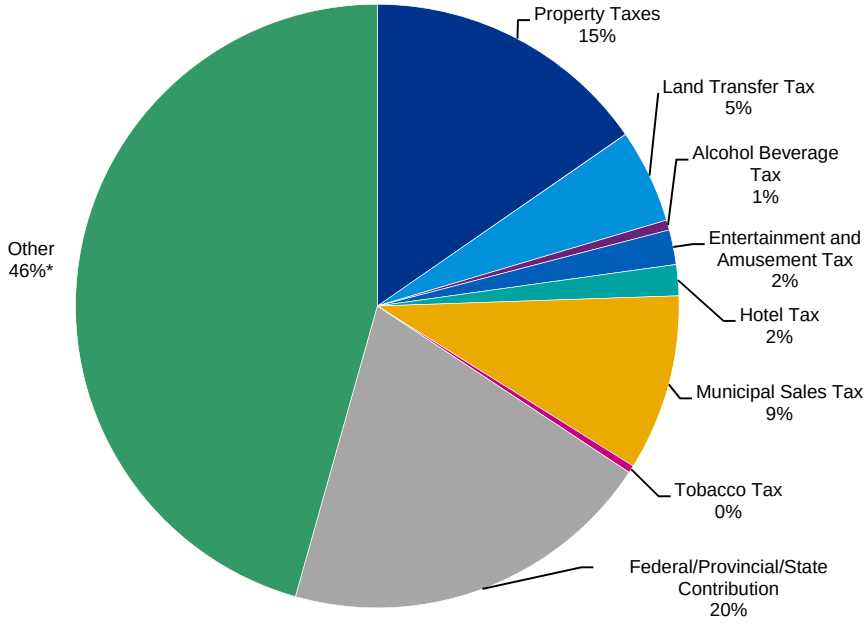
Following this (although not considered as a revenue option in this report), Chicago's utility taxes and fees are expected to generate $441 million in 2016. Utility taxes and fees include taxes on electricity, natural gas, and telecommunications, as well as fees received from cable companies for the right to operate within the City of Chicago.[249]

Chicago's transaction taxes, similar to Toronto's MLTT, are expected to generate $344.7 million in 2016, representing the fifth-largest revenue source for Chicago. Following this is Chicago's recreation tax. This includes taxes on amusements, automatic amusement devices, the mooring of boats in the city's harbors, liquor purchases, cigarette purchases, purchases of non-alcoholic beverages, and off-track betting. Recreation taxes are expected to generate $218 million in 2016.[250]

The following Exhibit provides a breakdown of the City of Chicago's revenues for its Fiscal Year 2014.

[248] Ibid
[249] Ibid
[250] Ibid

Exhibit 16.4. City of Chicago FY2014 Revenues ($ Millions)



*Note: Other sources of revenue include permits, health and safety services, fines, utility taxes, sewer and water fees, grants, and funds
Source: The City of New Chicago. Comprehensive Annual Financial Report Fiscal Year 2014 Ended December 31st, 2014

16.4 Philadelphia

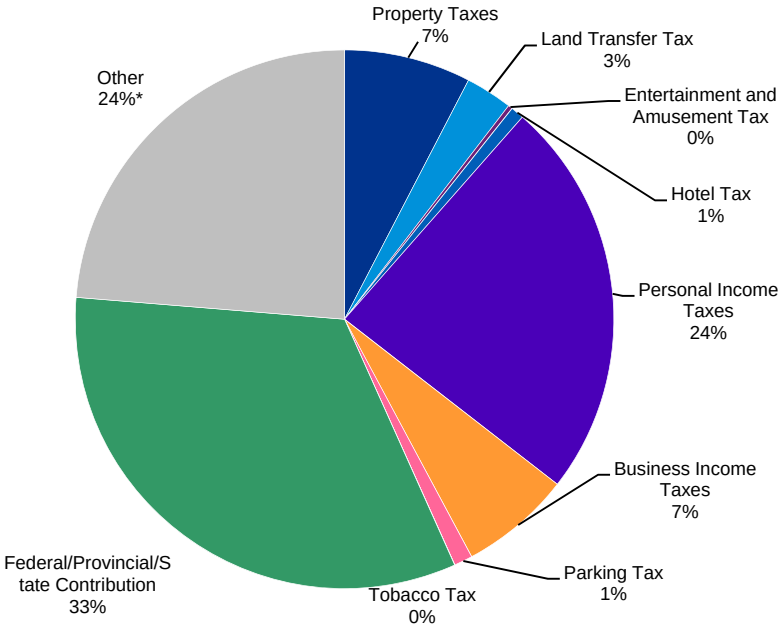
Philadelphia has a slightly smaller population size than Toronto (1.56 versus 2.79 million), but shares similar economic sectors, including financial services, health care, information technology, and education.[251]

In its Fiscal Year 2015, Philadelphia generated a total of $7.23 billion in revenues.[252] Property taxes accounted for only $578 million or 8% of its total revenues. The largest contributors to Philadelphia's revenues were federal and state grants, accounting for $2.4 billion or 33% of revenues. Following this was Philadelphia's Wages and Earnings Tax, which contributed $1.74 billion or 24% of revenues.[253]

The following Exhibit provides a breakdown of the City of Philadelphia's revenues for its Fiscal Year 2015.

[251] Pennsylvania Department of Labour and Industry, October 2015, Philadelphia County Profile. Centre for Workforce Information Analysis, Available at:
https://www.portal.state.pa.us/portal/server.pt/document/1279409/phila_cp_pdf
[252] City of Philadelphia, Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2015
[253] Ibid

Exhibit 16.3. City of Philadelphia FY2015 Revenues ($ millions)



Note: Other sources of revenue include user charges, licenses and permits, fines, fees and payment for certain services
Source: The City of Philadelphia. Comprehensive Annual Financial Report Fiscal Year 2015 Ended June 30, 2015

16.5 Summary

It is clear from this review that North American peer cities use a broad range of revenue options outside of property taxes and land transfer taxes. The cities profiled in this section use a suite of tax measures, many of which are profiled in this report.

Notably all three jurisdictions profiled use alcohol, tobacco and hotel taxes as additional revenue sources. Thus there is precedent for the City if it seeks to consider these measures further.

Overall, North American peer cities appear to employ a mix of revenue sources, allowing for the flexibility to respond to changing economic and fiscal circumstances.

17 Property Tax Analysis

In addition to providing an assessment of potential new revenue options for the City, a review of the City's existing municipal property taxes was also performed. This review included:

- An analysis of how much the City's property tax rates would need to increase to generate the same amount of estimated revenues as each new revenue option in the preceding profiles.
- A summary of a study completed by BMA Management Consulting ("BMA") that analyzed how the City's existing property tax rates and property tax burden compare with those of surrounding jurisdictions.

17.1 Property Taxes Compared to Revenue Options

The City of Toronto's largest revenue source is municipal property taxes. In 2016, the City of Toronto budgeted to collect almost $4.0 billion from property taxes, of which 51% was from residential properties, 12% from multi-residential properties, 34% from commercial properties, and 3% from industrial properties.[254]

Exhibit 17.1 – 2016 City of Toronto Budgeted Property Tax Revenue ($ Millions)

Property Tax Type	Budget 2016 Revenue	% of Total Property Tax
Residential	2,029.1	51%
Multi-Residential	478.1	12%
Commercial	1,346.8	34%
Industrial	114.8	3%
Other	3.2	0%
Total	**3,971.9**	**100%**

The City's objective is to set the residential property tax rate at an approved target that is 2.5 times that of commercial, industrial, and multi-residential property tax rates. To achieve this objective, the City's current policy is to increase commercial, industrial, and multi-residential property tax rates by only 0.33% for every 1.00% increase in the residential property tax rate. As such, this ratio must be observed when calculating the potential increase in property tax rates that is equivalent to each of the potential revenue options.

Per discussions with the City's Manager of Financial Policy, the rule of thumb approximation that should be used in calculating changes in property tax rates is that every 1% increase

[254] City of Toronto provided 2016 budget information.

in residential tax rates (and corresponding 0.33% increase in commercial, industrial, and multi-residential tax rates) would raise approximately $26.4 million for the City.

Using this metric, the percentage increase in residential and non-residential property tax rates required to match the annual revenue potential estimated for each of the options is presented in Exhibit 17.3 below.

Exhibit 17.2 – % Increase in Property Tax Rates to Match Potential Revenue Options ($ Millions)

Revenue Options	Estimated Annual Revenue Potential	% Increase in Residential Tax Rate[255]
Alcoholic Beverage Tax	20.4 - 151.3	0.8% - 5.7%
Entertainment and Amusement Tax	2.9 - 34.7	0.1% - 1.3%
Motor Vehicle Ownership Registration Tax	17.8 - 93.5	0.7% - 3.5%
Parking Levy	171.3 - 535.4	6.5% - 20.3%
Road Pricing (Cordon Charges)	89.0 - 376.6	3.4% - 14.3%
Tobacco Tax	5.0 - 45.8	0.2% - 1.7%
Development Levy	17.4 - 87.1	0.7% - 3.3%
Hotel Tax	21.3 - 125.8	0.8% - 4.8%
Municipal Business Income Tax	145.0 - 580.1	5.5% - 22.0%
Municipal Personal Income Tax	580.0 - 926.0	22.0% - 35.1%
Municipal Sales Tax	124.9 - 514.9	4.7% - 19.5%
Parking Sales Tax	29.8 - 120.8	1.1% - 4.6%

17.2 Property Taxes Compared to Surrounding Jurisdictions

While this report is focused on potential options for raising revenue through new means, analysis of surrounding jurisdictions has shown that existing methods, mainly property taxes, have the potential to be more heavily used. As indicated previously, property taxes

[255] It should be noted that the corresponding % increase in non-residential tax rates would be 1/3 of that of residential tax rates.

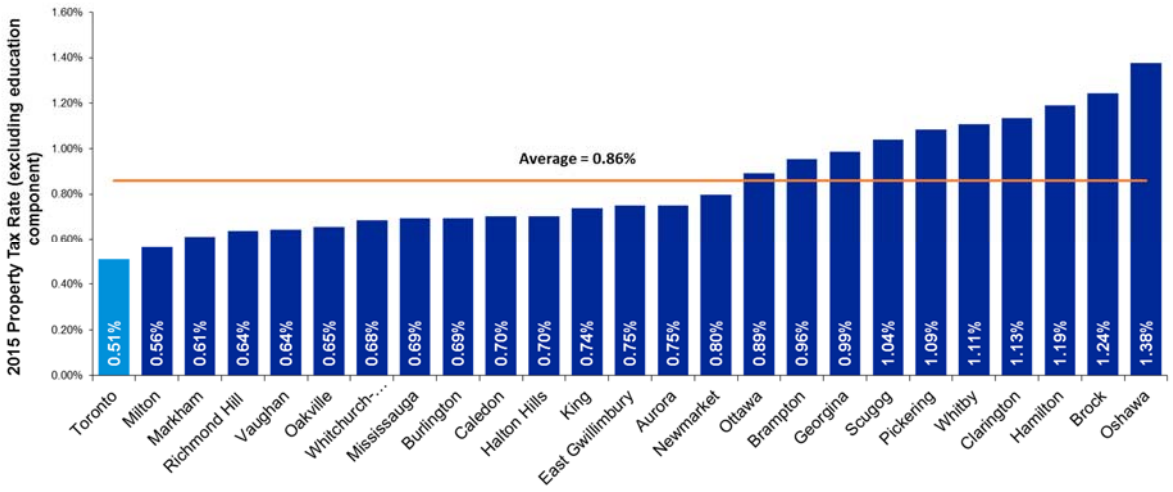
represent the largest single revenue source for the City with a 2016 budget estimate of $4.0 billion in property taxes from residential and business property owners.

A report commissioned by the City in 2015 and executed by BMA Management Consulting ("BMA") reviewed the average property tax rate in the city of Toronto in comparison to other Ontario municipalities.[256] It also incorporated information on average household[257] income ($95,870 in Toronto) and MPAC's weighted median dwelling value ($449,217 in Toronto) to determine the average property tax burden (in percent of household income and dollars) on the average household. The sections below highlight some of the data and results from this review, which have been modified to isolate the municipal property tax rates and therefore excluding the provincial education property tax component.

17.2.1 Property Tax Rate

The exhibit below displays the 2015 property tax rates on residential properties for various municipalities throughout Ontario. These rates represent the total property tax rate by municipality less the education property tax component set annually by the Province (0.195% in 2015).

Exhibit 17.3 – 2015 Residential Property Tax Rates by Municipality (excluding education property tax component)



As indicated above, the weighted average (by population) municipal component of the residential property tax rate in the municipalities reviewed, excluding Toronto, is approximately 0.86%. This average rate is significantly higher than the municipal

[256] BMA Management Consulting, Municipal Study 2015.
[257] Note that a household in this context includes both property owners and non-property owners (renters), and therefore does not directly align with owners of single family residential properties.

component of the Toronto property tax rate (0.51%), which was the lowest of all municipalities reviewed by BMA. In order to bring the 2015 City of Toronto rate in line with the average rate, an increase of 68% in the municipal component of the residential property tax rate would be required. It should also be noted, however, that low rates in Toronto are partly a result of relatively high property values. Many other municipalities have lower median home values, which will result in higher property rates to generate similar levels of revenue.

17.2.2 Property Tax Burden

Exhibit 17.4 below displays the estimated 2015 property tax burden on an average household expressed as a percentage of income, taking into account median dwelling value and average household income by municipality. The property tax rates used are the total tax rate by municipality less the education property tax component (0.195% in 2015).

For municipalities excluding Toronto, the average burden for a "typical" household (i.e., a household with a median dwelling value and an average household income) is 3.2%. This is shown as a line on Exhibit 17.4 below. This average has been calculated by weighting percentage values for individual municipalities by population. The 3.2% average value compares to a calculated burden of 2.4% for the typical or average household in Toronto (i.e., with median dwelling value and average household income). In order to bring the typical tax burden as a percentage of household income in Toronto in line with the typical tax burden in other jurisdictions, the municipal component of the residential property tax would have to be increased by 32%.

Exhibit 17.4 – 2015 Residential Property Tax Burden as % of Average Household Income (excluding education property tax component)

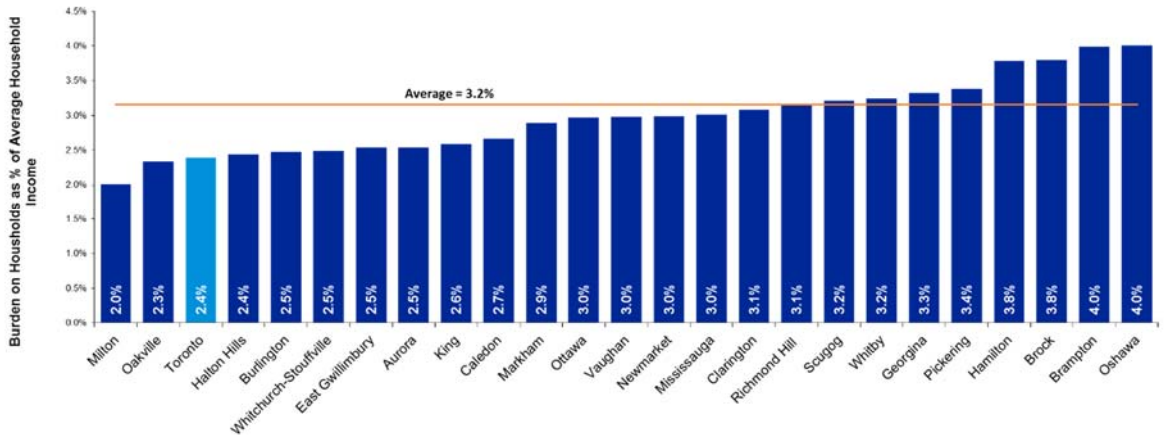
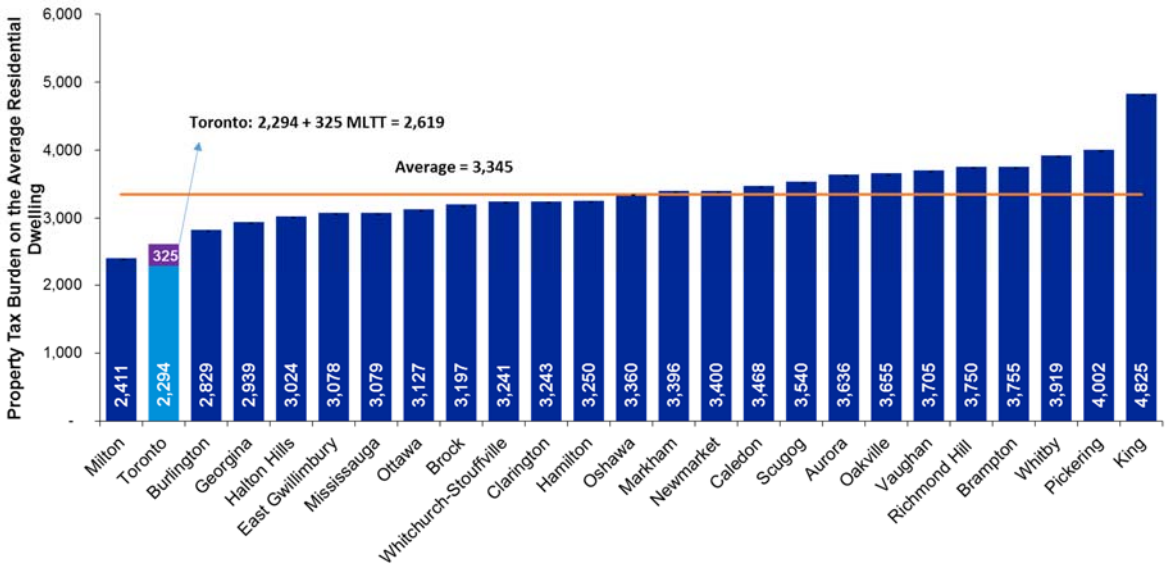


Exhibit 17.5 displays, in dollar terms, estimated property taxes paid by the average household (excluding the education component). The average property tax bill (weighted by population) in the jurisdictions reviewed, excluding Toronto, was $3,345. This compares to an average bill in Toronto of $2,294 for municipal property tax. However, Toronto also has the added burden of the MLTT, which is an additional tax levied on property owners, and estimated by the City of Toronto at $325 per year per household.[258] When this amount is added to the property tax burden for Toronto, it brings the total annual tax burden to $2,619 annually. In order for the average Toronto taxes paid (including MLTT) to align with the average taxes paid of the jurisdictions reviewed, the municipal component of the residential tax rate would have to be increased by 32%, assuming the MLTT would be unchanged.

Exhibit 17.5 – 2015 Residential Property Tax Burden in dollars (excluding education property tax component)



17.3 Summary

The municipal property tax is the largest generator of revenue for the City. For many of the revenue options analyzed in this report, the annual revenue potential of the option could be achieved instead through less than a 5% increase in property tax rates. In the case of the municipal personal income tax applied to total taxable income (the largest revenue generator among the revenue options reviewed in this report), the estimated revenue potential is approximately $926 million. This amount represents just over 23% of the total revenues

[258] City of Toronto, 2016, Toronto 2016 Budget, Appendix 3: Preliminary Tax Impacts. Available at: http://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-89460.pdf

collected through property taxes. Raising equivalent revenues through the property tax regime would require a 35% increase in residential property tax rates (taking into account the policy to apply lower rates of increase on commercial, industrial and multi-residential properties).

Similarly, the information presented above suggests that residential property tax rates levied by the City of Toronto and the implied burden on households, expressed both in dollar terms and as a percentage of household income, are lower than those in the majority of other GTHA municipalities. This indicates that there may be an opportunity to increase property tax rates and still maintain burdens that are below the average of the municipalities reviewed, while also considering that Toronto is the only city in the sample that also applies MLTT.

When considering the municipal property tax, there are no implementation costs associated with the option as there are mechanisms already in place for administration and collection. Some other revenue mechanisms do have the advantage of providing pricing signals that may be advantageous from a policy perspective. For example, an alcohol and tobacco tax might be considered to have positive impacts on health. Similarly, road pricing mechanisms and parking taxes might encourage greater use of transit and help to lower traffic congestion. On the other hand, some revenue option mechanisms can also discourage economic activity (e.g. municipal income taxes), although this is also true of property taxes to some degree. In summary, the selection of revenue options is not a straightforward exercise and the City will have to balance multiple policy objectives.

18 Comparative Assessment

The purpose of this section is to present a summary of the revenue options profiled in this report in an effort to assess relative implementation timelines and net annual revenue potential. Revenue options are organized here into two categories:

- Those options for which the City has COTA authority to implement subject to Council approval; and
- Those options requiring provincial or federal approval and cooperation.

Exhibit 18.1 presents the COTA-permitted revenue options, sub-divided by implementation timelines. Exhibit 18.2 presents the COTA permitted revenue options, sub-divided by net annual revenue potential.

Exhibit 18.1 – COTA-permitted revenue options – implementation timing

Revenue Option	Implementation Timeline
Motor Vehicle Registration Tax *($20 to $100)*	6 months
Alcoholic Beverage Tax *(1 - 10% rate)*	12 months
Entertainment and Amusement Tax *(1 – 10% rate)*	12 months
Tobacco Tax *(1 – 10% rate)*	12 months
Parking Levy *($0.50 to $1.50 per spot / day)*	18 months
Road Pricing (Cordon Charges) *($5 to $20 per day)*	36 months

Exhibit 18.2 – COTA-permitted revenue options – net annual revenue potential

Revenue Option	Net Annual Revenue Potential ($ millions)
Entertainment and Amusement Tax *(1 – 10% rate)*	3 – 35
Tobacco Tax *(1 - 10% rate)*	5 – 46
Motor Vehicle Registration Tax *($20 to $100)*	18 – 94
Alcoholic Beverage Tax *(1 – 10% rate)*	20 – 151
Road Pricing (Cordon Charges) *($5 to $20 per day)*	89 – 377
Parking Levy *($0.50 to $1.50 per spot / day)*	171 – 535

Exhibit 18.3 presents the non-COTA-permitted revenue options, sub-divided by implementation timelines. Exhibit 18.4 presents the non-COTA permitted revenue options, sub-divided by net annual revenue potential.

Exhibit 18.3 – Non-COTA-permitted revenue options – implementation timing

Revenue Option	Implementation Timeline
Development Levy *(1 – 10% rate)*	12 months
Hotel Tax *(2 – 14% rate)*	12 months
Municipal Business Income Tax *(0.5 – 2% rate)*	24 months
Municipal Personal Income Tax *(1% rate)*	24 months
Municipal Sales Tax *(0.5 – 2% rate)*	24 months
Parking Sales Tax *(5 – 20% rate)*	12 months

Exhibit 18.4 – Non-COTA-permitted revenue options – net annual revenue potential

Revenue Option	Net Annual Revenue Potential ($ millions)
Development Levy *(2 – 10% rate)*	17 – 87
Hotel Tax *(2 – 14% rate)*	21 – 126
Municipal Business Income Tax *(0.5 – 2%)*	145 – 580
Municipal Personal Income Tax *(1% rate)*	580 – 926
Municipal Sales Tax *(0.5 – 2%)*	125 – 515
Parking Sales Tax *(5 – 20% rate)*	30 – 121

Ultimately, the City will need to weigh several factors while it considers which revenue option(s) to implement. As indicated, the first order of business is determining whether or not the City has legislative authority to implement the revenue option. The summary tables above provide two of the most important factors in considering the revenue options; timeline to implementation and net annual revenue potential.

This study has provided a high-level overview of a number of options and considerations for revenue generation; however, it is likely in the City's best interest to shortlist preferred revenue options and perform a more complete analysis of each prior to implementation.

19 Summary of Findings

The purpose of this section is to present a dashboard to assess the relative policy strengths and weaknesses, as well as the relative opportunities and threats, for the revenue options described in this report.

The report assesses a variety of revenue options, each with a range of potential rates, which can be grouped into four broad categories for comparative purposes:

1) Product-specific sales taxes permitted under COTA
    - These revenue options are sales taxes focused on specific non-essential goods and services that can generate modest annual revenues, which the City currently has the power to implement under COTA.
    - Includes the alcoholic beverage tax, entertainment and amusement tax and tobacco tax.
2) Other product-specific taxes and levies permitted under COTA
    - These revenue options are transportation focused and are limited in the City's ability to charge non-residents.
    - Includes the motor vehicle owner registration tax and the parking levy.
3) Product-specific taxes and levies not permitted under COTA
    - These revenue options target specific products that the City does not currently have the legislative authority to tax.
    - Modest annual revenue potential due to the limited tax base for each option; however, are likely to have a minimal burden on low-income residents / earners / retirees / seniors when compared to other revenue options assessed.
    - Includes the hotel tax, parking sales tax and development levy.
4) Large revenue-generating options not permitted under COTA
    - These options are not currently allowed under COTA, but have potential for significant annual revenue generation despite barriers to implementation (e.g., complexity, long lead-time, cost, public opinion).
    - Includes the municipal income tax (business and personal), municipal sales tax and road pricing (specifically cordon charges).

A more detailed analysis of the strengths, weaknesses, opportunities and threats for each of the categories has been provided in the section that follows.

19.1 Comparative analysis: Strengths, Weaknesses, Opportunities and Threats

Competitive impacts and sensitivities are likely to vary by business sector. Exhibits 19.1 to 19.4 present a comparative analysis of strengths, weaknesses, opportunities and threats of relevant trade-offs.

Exhibit 19.1 – Analysis of product-specific sales taxes permitted under COTA

- **Alcoholic beverage tax**
- **Entertainment and amusement tax**
- **Tobacco tax**

Strengths	Weaknesses
• Currently permitted under COTA Part X "Power to Impose Taxes" • Applicable only to non-essential goods and services ("luxury" items) • Potential positive externalities of alcohol and tobacco taxes if tax results in decreased alcohol and tobacco consumption (e.g., health benefits) • Reduced tobacco and alcohol consumption can be aligned with public health policies • Shorter timeframe to implement (as compared to the other revenue options assessed) due to focus on specific goods and products • Ample precedent for similar taxes in other municipal jurisdictions • Easy to identify businesses owing tax, given extensive regulation of alcohol, tobacco and live events	• Relatively high potential for revenue leakage on these goods (excepting downtown entertainment and amusement venues) • Thousands of business establishments within Toronto sell alcohol and tobacco, potentially increasing administrative burden/ compliance • Regressive (tobacco and perhaps alcohol) • Entertainment and amusement sales tax could decrease consumption of local entertainment and amusement, which the City spends money to promote • Tobacco tax could increase consumption of contraband tobacco • Tax largely borne by residents of Toronto • Likely pushback from retail establishments that sell alcohol and tobacco • Strong pushback from entertainment and amusement venues

Opportunities	Threats

• Modest annual revenue potential given narrow base (as compared to the other revenue options assessed). Net annual revenue potential:
  • $20 million to $151 million for an alcoholic beverage tax at a 1% to 10% rate
  • $3 million to $35 million for an entertainment and amusement tax at a 1% to 10% rate
  • $5 million to $46 million for a tobacco tax at a 1% to 10% rate
	• Steadily declining proportion of the population who smokes, which threatens tobacco tax revenues over long term
	• Increased usage of tobacco vaporizers or e-cigarettes may reduce the revenue potential of a tobacco tax
	• Potential for legalization of marijuana could present alternatives to tobacco or alcohol usage, limiting the revenue potential of the revenue options
	• An amusement tax is a tax on discretionary spending; revenue is thus likely to fluctuate with local economic conditions

Exhibit 19.2 – Analysis of other product-specific taxes and levies permitted under COTA

- **Motor Vehicle Ownership Registration Tax**
- **Parking levy**

Strengths	Weaknesses
• Currently permitted under COTA Part X "Power to Impose Taxes", as they are not listed as exclusions in Subsection 2 • Transportation-related revenue options (and therefore intuitively related to new transportation-related infrastructure investments) • Relatively short timeframe to implement (as compared to the other revenue options assessed) depending on how the parking levy is implemented • Limited potential for avoidance • Potential for slight reduction in number of vehicles on the road (reduce congestion)	• Parking levy potentially administratively burdensome • Tax largely borne by Toronto residents • Application of parking levy on unpaid non-residential parking spots in suburban context (e.g., shopping malls) could have adverse impact on retailers • Parking levy could have negative impact on commercial office location • Motor vehicle ownership registration tax was in place for approximately two years before being repealed by the previous municipal administration; potential for public disapproval
Opportunities	**Threats**
• Net annual revenue potential for a Motor Vehicle Ownership Registration Tax at a $60 fee is $56 million • Net annual revenue potential for a parking levy at $1.00 per non-residential paid and unpaid space is $353 million • Parking levy has potential for converting underutilized parking space inventory into either paid parking or other uses	• Limited threats given that the proposed Motor Vehicle Ownership Registration Tax is less than 1% of annual automobile ownership costs; unlikely to affect future consumer behaviour or business sector • Increase in number of alternatives to personal vehicle ownership in the city could impact revenue potential in the future (e.g., Uber, auto sharing, improved public transit, increased cost of living, road pricing) • Challenging to determine effective boundaries for the parking levy (particularly if implemented using a tiered pricing structure)

Exhibit 19.3 – Analysis of product-specific taxes and levies not permitted under COTA

- **Hotel tax**
- **Parking sales tax**
- **Development levy**

Strengths	Weaknesses
• Limited potential for avoidance (excepting some hotel accommodations) • Minimal burden on low-income residents/earners/retirees/seniors (as compared to the other revenue options assessed) • Narrow stakeholder impacts (as compared to the other revenue options assessed) • Difficult to avoid	• Not currently permitted under COTA Part X "Power to Impose Taxes" and would therefore require provincial legislative change prior to implementation • Hotel tax could potentially discourage tourists from visiting the City or reduce conference/ meeting location to Toronto • Limited precedent for the type of development levy assessed herein
Opportunities	**Threats**

• Modest annual revenue potential given narrow base (as compared to the other revenue options assessed). Net annual revenue potential:
  • $21 million to $126 million for a hotel tax at a 2% to 14% rate
  • $30 million to $121 million for a parking tax at a 5% to 20% rate
  • $17 million to $87 million for a development levy at a 2% to 10% rate
	• Development levy could dampen future development activity
	• 13% HST and current Destination Marketing Fee on hotel accommodation presents limited room for an additional tax
	• Parking sales tax could lead to avoidance of paid parking by drivers and increase street parking

Exhibit 19.4 – Analysis of major revenue options not permitted under COTA

- **Municipal income tax – business income and/or personal income**
- **Municipal sales tax**
- **Road prices and congestion charges (Cordon Charge)**

Strengths	Weaknesses
• Broad-based taxation measures with distributed effects and large annual revenue potential • A modest sales tax increase is not expected to have material adverse impacts on consumer spending, employment or savings patterns • Based on jurisdictional review, cities with cordon charges were not negatively impacted from an economic standpoint	• Not currently permitted under COTA Part X "Power to Impose Taxes" and would therefore require provincial legislative change prior to implementation • Significant barriers to implementation (e.g., complexity, public opinion, stakeholder resistance and cost) • Relatively long implementation times (24-36 months or longer) when compared to other revenue options assessed • Administrative complexity • Reduces the City's attractiveness as a residential/business location • Likely significant stakeholder resistance
Opportunities	**Threats**

• Potentially significant annual revenue potential:
  • $290 million for a municipal income tax on business income at a 1% rate
  • $580 million for a municipal income tax at a 1% rate on residents' employment income
  • $261 million for municipal sales tax at a 1% rate
  • $220 million from a $10 cordon charge
	• Affects Toronto's competitive position over the long term, which may in turn affect the revenue collected
	• Municipal sales tax is considered a stable revenue source; real concern is spending on "big ticket items" diverted into neighbouring jurisdictions
	• A cordon charge may impact business decisions to locate within the cordon; however other jurisdictions have seen a neutral to positive impact to economic activity within the cordon

Appendix A: Summary of Elasticity, Avoidance and Administration Deductions

Definitions:

Avoidance - Potential degree to which revenues are sensitive due to increased use of substitutes, non-payment of tax, or 'cross-border' shopping as a result of the implementation of the revenue option.

Elasticity - Degree to which demand is sensitive to changes in price.

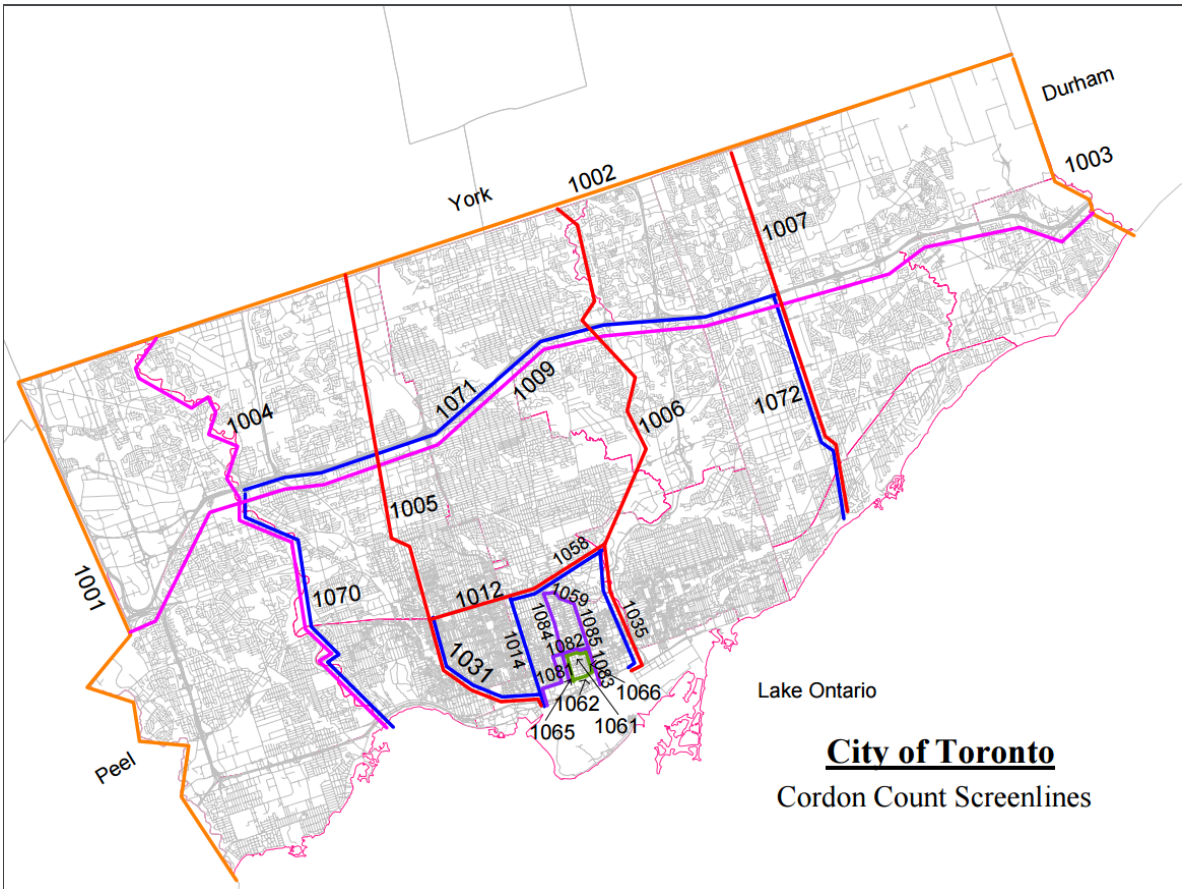
Name of Proposed Revenue Option	Elasticity Deductions	Avoidance Deduction	Administration Deduction
Alcoholic Beverage Tax	**-0.50**	**-2 to -1.5**	**$1 million**
Entertainment and Amusement Tax	**-0.87 to -0.23**	**-0.5 to -0.3**	**$1 million**
Motor Vehicle Ownership Registration Tax	**-0.06**	**-0.06**	**$1.1 million**
Parking Tax	**-0.30**	**N/A**	**$2.5 to 10.7 million**
Parking Tax Levy	N/A	5% inventory reduction	$10.7 million
Parking Sales Tax	-0.30	N/A	$2.5 million
Road Pricing	**-0.30**	**N/A**	**$76 million**
Tobacco Tax	**-0.40**	**-2.50**	**$1.4 million**
Development Levy	**N/A**	**N/A**	**N/A**
Hotel Tax	**-0.86**	**-0.40**	**N/A**
Municipal Income Tax	**N/A**	**-0.05**	**1.50%**
Municipal Sales Tax	**-2.27 to -0.31**	**-10.4 to 0**	**$18 million**
Motor vehicle and parts dealers	-1.14	-10.4	--
Furniture and home furnishings stores	-0.63	-1.3	--
Electronics and appliance stores	-0.63	-6.7	--
Building material and garden equipment dealers	-0.50	0.00	--
Food and beverage stores	-0.70	0.00	--
Health and personal care stores	-0.31	0.00	--
Gasoline stations	-0.60	0.00	--

Name of Proposed Revenue Option	Elasticity Deductions	Avoidance Deduction	Administration Deduction
Clothing and clothing accessories stores	-0.57	-4.0	--
Sporting goods, hobby, book and music stores	-0.50	0.00	--
General merchandise stores	-0.50	0.00	--
Miscellaneous store retailers	-0.50	-2.3	--
Restaurants	-2.27	0.00	--

Note: Elasticity and avoidance deduction estimations were based on previous economic research and was not verified unless otherwise specified by KPMG. Further econometric analysis would be required to accurately estimate the elasticity and avoidance deduction, recognizing that these values may change in the long term as people affected have the opportunity to adapt to changes in prices.

Appendix B: City of Toronto Cordon Map

The boundaries used for this cordon charge analysis are screen lines[259] 1014 (Bathurst Street) to the west, 1058 (CP Rail North Toronto Subdivision) to the north, and 1035 (Bayview Avenue/Don River) to the east. The southern boundary is Lake Ontario. These boundaries make up the Toronto Central Area Cordon.



[259] Lines defined by surveyors along roads, transit ways or other routes on a map by which you can define specific geographic areas.

Glossary

Term / Acronym	Definition
Avoidance	Potential degree to which revenues are sensitive due to increased use of substitutes, non-payment of tax, or 'cross-border' shopping as a result of the implementation of the revenue option.
BMA	BMA Management Consulting
CBD	Central Business District
CCT	Commercial Concentration Tax
CMA	Census Metropolitan Area
CMHC	Canada Mortgage and Housing Corporation
COTA	The City of Toronto Act
CPA-ACS	Canadian Parking Association
CRA	Canada Revenue Agency
DCL	Development Cost Levy
DCs	Development Charges
DMPs	Destination Marketing Programs
Elasticity	Degree to which demand is sensitive to changes in price.
ERP	Electronic Road Pricing
ETR	Express Toll Route
Exportability	Ability of the tax burden to be transferred to residents outside the jurisdiction.
GST	Goods and Services Tax
GTA	Greater Toronto Area
GTHA	Greater Toronto and Hamilton Area
HST	Harmonized Sales Tax
IU	In-vehicle Unit
LFS	Statistics Canada Labour Force Survey
LIDs	Local Improvement Districts
LLT	Land Transfer Tax
LVC	Land Value Capture
MCTD	Metro Commuter Transportation District
MLTT	Municipal Land Transfer Tax
MRDT	Municipal and Regional District Tax
MTA	New York City Metropolitan Transportation Authority

Term / Acronym	Definition
NHS	National Household Survey
OECD	Organization for Economic Co-operation and Development
PST	Provincial Sales Tax
PT	Parking Tax
Progressive	A tax rate that increases as the taxable amount increases.
Regressive	A tax where the tax burden is higher on low income residents.
RPTT	Real Property Transfer Tax
RST	Retail Sales Tax
RTO	Government of Ontario's Regional Tourism Organizations
SHS	Survey of Household Spending
TID	Tourism Improvement District
TOT	Transient Occupancy Tax
TPA	Toronto Parking Authority
VAT	Value Added Tax
VFR	Visiting Friends/Relatives
WHO	The World Health Organization