Dedicated Financing Mechanisms for Climate Action

MUNK SCHOOL OF GLOBAL AFFAIRS AND PUBLIC POLICY

Executive Summary

The City of Toronto has outlined an ambitious strategy for a low carbon future. To help meet the long-term transition goals outlined within TransformTO, the City will require approximately $60 billion. Considering funding constraints, the City can learn from other jurisdictions by exploring revenue generating mechanisms to achieve both its climate goals and broader community benefits. This report explores three revenue generating mechanisms in four distinct jurisdictions – London, Portland, Logan City and Seattle – highlighting the strengths and challenges of each case. Each mechanism was also applied to the City of Toronto's context to measure its political palatability, potential revenue generation, ease of implementation, direct impact on Transform TO goals, initial investment required and administrative costs.

The **London Congestion Charge** was a cordon congestion charge introduced in the central London area in 2003. The charge was introduced to manage congestion as well as raise funds for London's transportation infrastructure. Over the 2017/2018 fiscal year, the charge raised £230 million, with operating costs making up approximately 33% of the revenue. While the official implementation of the charge took approximately three years, research into congestion charging started far earlier which contributed to the charge's success. Additionally, a strong communications strategy, which included meaningful stakeholder and community engagement, was integral to its success. A hostile media environment and legal challenges were the largest barriers faced by London during the implementation period. In Toronto, the application of a cordon congestion charge would require preliminary research as well as heavy investment into public transit. A congestion charge would both generate significant revenue and directly contribute to the goals of TransformTO. However, the barriers to implementation include substantial initial investment and low political palatability.

The **Portland Clean Energy Initiative** is a community-led ballot initiative that was recently passed in November 2018. The initiative sought to generate funds for clean energy in Portland by imposing a 1% business licensing surcharge for retail businesses generating over US$1 billion annually in national gross revenues. Notably, the revenues generated by the surcharge will be allocated to the Clean Energy Community Benefits Fund which will disperse funds to private organizations to finance clean energy projects and clean energy job training for disadvantaged workers. The continued involvement of community groups greatly enhanced the political palatability of the business registration surcharge. The Portland Clean Energy Initiative poses a unique example of the strength of community-driven initiatives in generating public support for a revenue generating mechanism.

Earmarking residential property taxes are adaptable taxation tools which commit a portion of tax revenues collected to fund a specific priority or project. To capture the diversity of earmarking tools available to municipalities, the following two jurisdictions were explored to asses this mechanism as a funding tool for environmental programming:

1. Logan City's Environmental Levy

   Logan City Council levies a flat environmental levy of AU$77.40, for which its revenues are earmarked to fund land acquisition for conservation, environmental education, and community grants. Situated in Queensland, Australia, the small city of 300,000 residents, raises AU$13 million in annual revenue through the Environmental Levy.

2. The Seattle Park District

   In 2014, Seattle residents voted in, by ballot initiative, an increase in property taxes of US$0.33 per US$1,000 of assessed property value, raising US$47.8 million in 2016, to be earmarked for the Seattle Park District.

Both municipalities highlighted the importance of community engagement to ensure acceptability of higher taxes. However, the legislative framework governing the earmark must be carefully crafted in order to avoid loss of core program funding or the creation of rigidities in the expenditure of revenues. While the City may face political opposition to raising residential property taxes, the City could raise significant revenues for TransformTO programming with relative ease.

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Introduction

The City of Toronto has outlined an ambitious strategy for a low carbon future in its TransformTO strategy. To achieve these goals, the City will need to generate approximately $60 billion in investment by 2050. As such, the City of Toronto will need to secure funding from a variety of sources, including from higher levels of government and private investment.

However, it is reasonable to expect that the City of Toronto will need to dedicate a portion of its own budgetary resources in order to achieve some of the goals. Considering these revenue requirements, the City hopes to explore dedicated financing mechanisms (including taxes, user fees, levies and surcharges) used by other jurisdictions to raise municipal funds to achieve both climate goals and broader community benefits. This report explores three revenue generating mechanisms in four distinct jurisdictions (London, Portland, Seattle, and Logan City), highlighting the strengths and challenges of each case.

In raising revenue, the City of Toronto is limited by the constraints of the City of Toronto Act (COTA). As such, the mechanisms outlined by each case were also applied to the City of Toronto's context to measure political palatability, potential revenue generation, ease of implementation, direct impact on Transform TO goals, initial investment required and administrative costs. The research was guided by the following question:

RESEARCH QUESTION

HOW CAN THE CITY OF TORONTO RAISE ADDITIONAL REVENUES VIA DEDICATED FINANCING MECHANISMS (INCLUDING TAXES, USER FEES, SURCHARGES AND LEVIES) TO FUND THE GOALS OF THE TRANSFORMTO STRATEGY?

Methodology

Following a jurisdictional scan, municipal finance and governance experts were consulted via informational interview. Once case studies were selected, a literature review was conducted prior to key-informant interviews with jurisdictional experts. Using these findings, each case was analyzed and compared to the City of Toronto's context. The following steps were taken to ensure a comprehensive analysis:

i. Perform a jurisdictional scan
ii. Informational interviews with municipal finance and governance experts
iii. Select case studies based on relevance for the City of Toronto
iv. Conduct primary and secondary data collection to explore revenue generation, political palatability and the administrative costs associated with each case study
    a. Secondary data was collected via a literature review
    b. Primary data was collected via informational interviews with jurisdictional experts
v. The three case studies were applied to the City of Toronto's context

London Congestion Charge

Overview

The London Congestion Charge was introduced in 2003 to tackle congestion and raise revenue for transportation infrastructure. London implemented a cordon charge, a one-time charge for vehicles that entered the cordon zone, regardless of the number of times entered or the distance travelled within the zone. The original charge was set at £5 and has since been raised to £11.50 (approximately CAD$21.04). The charge is active between 7am – 6pm, Monday through Friday. The charge is monitored at 170 access points and covers 21 km^2.[1]

Vehicle licence plates are monitored using video cameras which are mounted at the access points. Drivers can either set up an auto pay account or pay manually by the end of their day of travel to avoid non-payment fines (the fine starts at £65 and increases to £130 after 14 days of non-payment). Payment can be done online, using a smartphone application or by calling in. Discounts are available (90%) for residents who live in the cordon area. Exemptions have been made for low-emission vehicles, motorcycles and emergency service vehicles.[2,3]

Three years after the charge was implemented, traffic was reduced by 15% and congestion was reduced by 30%.[i4] Additionally, a 2014 report has estimated that there has been 38%-40% fewer vehicle accidents in central London following the implementation of the charge.[5] As congestion in London has returned to pre-charging levels, the mechanism has come under criticism by opponents. However, it is estimated that congestion would be far worse in London with the absence of such a charge.[6]

Key Policy Drivers

There were three key policy drivers that allowed for the charge to be implemented. The first is the electoral support for former Mayor Ken Livingstone. Livingstone's election campaign included a promise to explore congestion charging. By running on a platform that included congestion charging, Livingstone was able to withstand the pressure and hold a referendum. Additionally, despite vocal opposition to the charge, Livingstone was re-elected to serve as mayor in 2004, a year after the charge was implemented.[7]

Secondly, the legalities of the jurisdiction gave authority to the Mayor to implement the charge. After a 1998 referendum which established a directly elected Mayor and Assembly, a White Paper was published which proposed powers and responsibilities for the Mayor, which permitted the Mayor to implement road user charges.[8] While the charge did come under legal review, it

[i] Traffic is measurement of the number of vehicles on the road, whereas congestion is a measurement of the extra time it takes in between trips due to traffic.

was ultimately determined to be feasible.[9] Finally, the public was concerned about the increasing congestion in London which created an enabling political environment.[10]

Timeline of Implementation

The timeline of the charge's implementation strategy can be found in Figure 1.[11][12]

Figure 1:

1964
- The Smeed Report was published by the UK Ministry of Transport. The report is commonly referenced for road use charges

Late 1960s - 1970s
- The Greater London Council (later abolished) begins to explore road use charges for London

Early 1990s
- Government carried out London Congestion Charging Research Programme, which researched various charging schemes for London

March 2000
- The Road Charging Options for London (ROCOL) published report which determined that a road charging scheme was effective, feasible and publicly acceptable

May 2000
- Ken Livingstone elected Mayor of London

July 2000
- Greater London Authority comes into formal existence

November 2000
- Mayor Ken Livingstone begins preliminary consultation on Draft Transport Strategy

Fall 2002
- Public information campaign begins on charging scheme

February 17, 2003
- Congestion charge introduced

Legend

= Events Part of Official Implementation

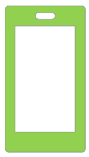
= Events Part of Unofficial Implementation

Communications Strategy

3 Part Communications Approach

Dissemination of Information

Public and Stakeholder Engagement



Public Outreach and Marketing

London's communication strategy in relation to the congestion charge has been viewed as widely successful. Part of the communications effort was to disseminate practical knowledge about the cordon charge to the general public, which was crucial given the novelty and complexity of the scheme. This included information about start date, geographical boundaries, hours of operation and technicalities regarding charge enforcement. Other information communicated to the public included the charge's purpose, discounts and exemptions, methods of payments, early registration instructions, consequences of non-payment and alternative methods of transportation.[13] By delivering information "in a straightforward tone of voice, as a public information campaign, not a marketing or 'selling' campaign," the information was better absorbed by the citizens of London.[14]

Additionally, regular surveys were conducted every six-eight weeks to test whether the citizens of London understood key aspects of the charge. If the survey results illustrated that the public was confused about aspects of the charge, the surveys were reframed in subsequent rounds to serve as an information delivery mechanism.[15] The success was reflected through a 97% awareness among Londoners of the scheme details two weeks prior to implementation, and only a 10% penalty rate for drivers in the first week of implementation.[16]

The second part of the communications approach was centered around public and stakeholder engagement. Formal stakeholder consultation was conducted with both the general public and key stakeholders to ensure the charge was well-designed and reflected the concerns of the those who would be impacted. A preliminary consultation with key stakeholders was held by the Transport for London (TfL) in June/July 2001, which was followed by 14 more consultations to explain the details of the scheme and engage stakeholders. In addition to hearing from key stakeholders, the TfL was also interested in hearing from the general public. The TfL had a well-designed feedback mechanism which allowed the general public to raise concerns they had regarding the charge. Rather than shying away from criticism, the city made feedback notices easy to access, displaying them in local newspapers as well as displaying them on every street.[ii] Additionally, the TfL made an active effort the follow up with individuals who had contributed to previous consultations to ensure they understood their concerns.[17]

The final component of the communications approach focused on public outreach and marketing. To combat opposition, the TfL used its own media channel to counter negative press coverage, reached out to public figures who supported the charge and would frequently take out media editors to lunch, alongside the head of the transportation authority to explain the details of the charge. Finally, the TfL set up a "quick-response mechanism" in order to combat false or misleading information written about the charge in the media.[18]

Total Investment Required for Implementation

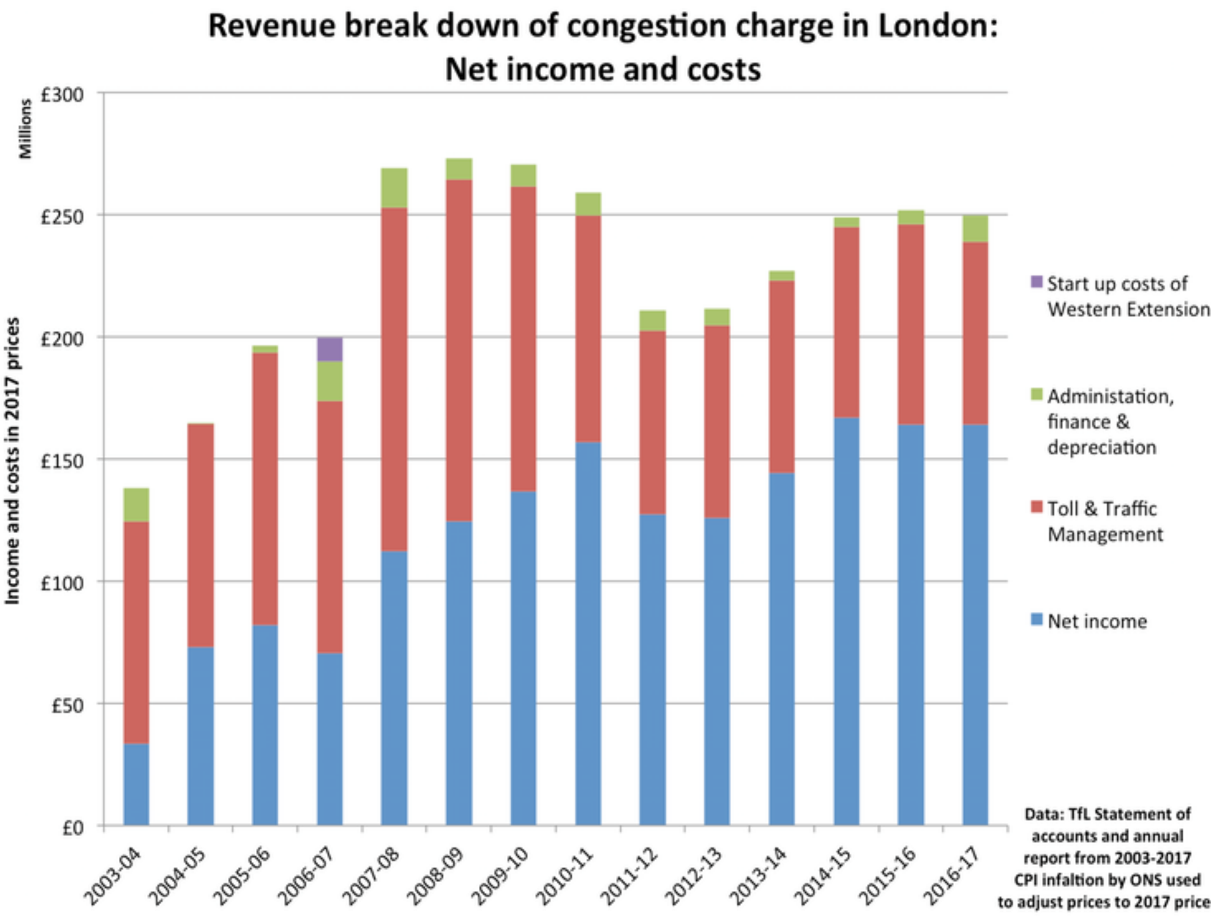
This financing mechanism had the highest initial investment out of the three cases observed in this report. Initial costs included investment into charging infrastructure, transportation infrastructure and communications. While the UK Government provided some funding through the Ministry of Transport, much of the expenses were paid for using London's General Fund. London's initial capital investment to establish the charge is estimated to be £130 million.[19] Depending on the resource consulted and how costs are calculated, some sources have stated that the charge was running at a deficit in the first two years. However, as costs have decreased overtime, the operating costs of the charge are now down to 33% of revenue.[20] The 2017/2018 revenues were listed at £230 million.[21]

From 2003-2013, it is estimated that approximately £1.2 billion from the charge have been invested into public transportation, improvements to bridge and road infrastructure and improvements for pedestrians and cyclers.[22] Table 1 displays the revenue break down from the charge.[iii]

[ii] The TfL was so diligent with ensuring the general public had access to this information that they calculated the distance between each notice to guarantee there were notices published in every 250 meters of road. The program was monitored weekly during the consultation process so that missing or damaged notices could be replaced.

[iii] Note that discrepancies between revenue figures can be attributed to the adjustment for inflation/method used to calculate costs.

Table 1:



https://www.citymetric.com/transport/london-congestion-charge-has-been-huge-success-it-s-time-change-it-3751

Barriers and Challenges

One of the main barriers faced by London in the implementation of the charge were appeals made by the Westminster City Council and the Royal Borough of Kensington and Chelsea, challenging the legality of the scheme. However, those appeals were rejected in the High Court in 2002 as it was determined that the transport strategy's reference to the charge was legally sufficient, allowing for the charge to move forward.

Additionally, despite Mayor Livingstone's election promise to explore congestion charging, the charge still faced a great deal of opposition, especially from the media. When the observing the press coverage leading up to the implementation of the charge (October 2002-Novemeber 2002) there were 730 articles written about the charge in London, of which 50% were negative and only 18% were positive.[23]

Comparison and Application to City of Toronto

The application of a cordon charge was analyzed by KPMG. This section of the report will summarize their findings, as well as include other information conducted from primary and secondary research pertaining to the application of such a charge to Toronto's context.[iv]

KPMG's Analysis of a Cordon Charge in Toronto

Main Components of the Charge

- Charge would be applied between 6:00am – 10:00am (to correlate with peak travel times during the weekdays). Setting a time on the charge allows individuals who can change their travel times the ability to do so.
- Cordon will be active 250 days per year (average number of business days in calendar year).
- Charge will be a flat fee applied to all vehicles entering charging zone.
- 49 entry points will exist in the City of Toronto.
- City will need to establish an operation and oversight department.
- Proposed charging zone displayed (Figure 2).

Legal Applicability

According to the COTA, the portion of highway or road that is being designated as a toll road first needs to be approved by the province. Cordon charges are not explicitly identified in the COTA, but there is a high possibility that a charge of this nature would need provincial approval.

Revenue Potential

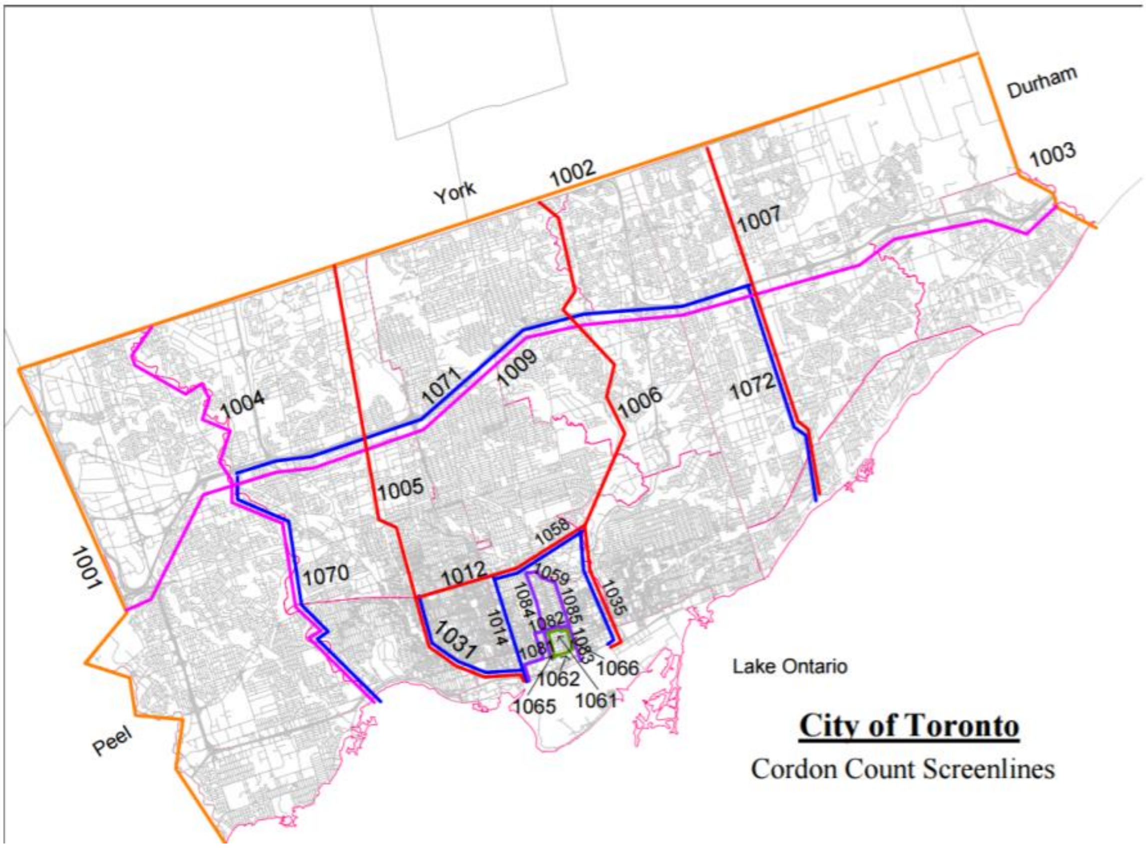
Operating costs for the charge could vary substantially depending on factors including size of the cordon, level of enforcement, number of transactions occurring, etc. The costs (Table 2) include all operating and administrative costs (including system maintenance, customer service and charge enforcement). Based on the average administrative and operations costs per entry point in other cities (including London), the average entry point cost for Toronto was estimated at $1.5 million. Other costs estimated included the installation of gantries, development of back office technical systems and other technologies. Depending on the price of the cordon charge (ranging from $1-$20), the net annual revenue could range from $40.2 million to $376 million. An additional revenue source that has not been included in this estimate comes from late penalties. In London, it is estimated that 27% of the overall revenue received in their cordon charge comes from late penalties. The analysis also did not include any potential gains in revenue made by public transit.[v][24]

[iv] KPMG used data from 2011 to construct its analysis and thus certain limitations exist within the accuracy of their report.

[v] The full report can be found here: https://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-94513.pdf

Figure 2:

(Bayview Avenue/Don River) to the east. The southern boundary is Lake Ontario. These boundaries make up the Toronto Central Area Cordon.



https://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-94513.pdf

Table 2:

	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**

https://www.toronto.ca/legdocs/mmis/2016/ex/bgrd/backgroundfile-94513.pdf

Other Accounts of Road Pricing in Toronto

There is a consensus among the literature that congestion is and will continue to be a costly problem faced in Toronto. The direct annual cost for congestion in the GTHA is estimated to increase to $15 billion by 2031 if action is not taken.[25] There is disagreement on whether a cordon charge, such as the one set up in London, would work in Toronto. While the KPMG report indicates that a charge like this would be possible, others are not as sure. According to expert testimony, a cordon charge would be difficult, partially because drawing the cordon lines can quickly transpire into a political issue. Additionally, the traffic patterns in Toronto are polycentric, and therefore, have no natural barriers (such as a bridge for example) which would make tracking drivers more difficult and expensive. Alternatives, such as highway tolls or high occupancy toll lanes were suggested, although the drawback of highway tolls are that they incentive drivers to find alternate free routes that could push traffic into otherwise quiet neighbourhoods.

Despite disagreement on cordon charging, there is agreement that Toronto would need to heavily invest in infrastructure. For Toronto implement its own congestion charge, the city's public transportation capacity would need to be improved. Additionally, it is recommended that Toronto start research and public consultation soon, as congestion pricing is a long-term process. Vancouver is currently in the research/consultation phase as they have put together the Mobility Pricing Commission to explore congestion pricing for the city. Finally, compared to the other case studies, the congestion charge would make the most direct contribution toward TransformTO goals.

Portland Clean Energy Initiative

Overview

The Portland Clean Energy Community Benefits Initiative is a community-led ballot initiative that sought to impose a 1% surcharge due at the time of business registration for retail businesses generating over $1 billion in annual national gross revenues. Grocers, pharmacies and healthcare service providers are exempt from the surcharge. As the surcharge will be calculated using the gross revenues generated by retailers within the City of Portland, the business must generate at least $500,000 in revenues within the City of Portland.[26] The initiative was championed by a coalition of eleven community organizations that serve communities of colour and champion environmental causes within the City of Portland. Notably, the initiative was endorsed by a long list of community organizations, advocacy groups, neighborhood associations, community leaders and members of the faith community. Despite fierce opposition from industry, the ballot initiative passed by a margin of 65% in November 2018. The City of Portland is currently in the process of implementing the new legislation.

Under its Climate Action Plan, the City of Portland aims to meet 100% of its electricity needs with clean renewable energy by 2035.[27] With the launch of the Portland Clean Energy Initiative, the City of Portland has unlocked a new source of revenue to fund clean energy programs in Portland. The revenue generated by the surcharge will be allocated to a separate Clean Energy Community Benefits Fund which will be distributed to private organizations who finance clean energy projects and clean energy job training for disadvantaged workers. The Fund will be managed by a committee of nine community members who will review project proposals and make suggestions to the City of Portland. Though the community-led committee will make recommendations as to how the funds should be dispersed, Portland City Council holds the final decision-making authority as to which projects will receive funding.

Key Policy Drivers

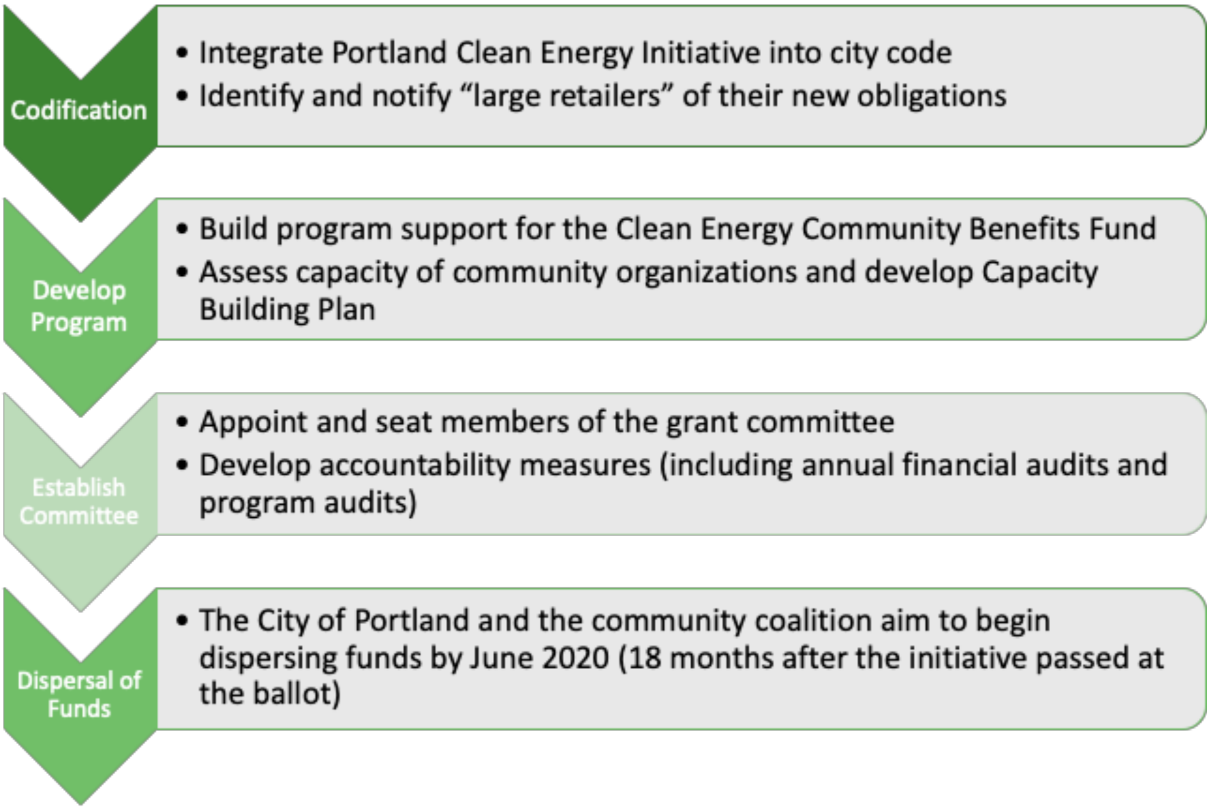
The political context in Portland enabled the success of the Portland Clean Energy Initiative at the ballot. This is evident when comparing the Portland Clean Energy Initiative to Measure 97, a similar ballot at the state-level in Oregon, that sought to impose a 2.5% gross receipts tax on C corporations with Oregon sales exceeding $25 million. Unlike the Portland Clean Energy Initiative, Measure 97 failed at the ballot, securing only 41% of the vote and passing in only two of Oregon's 36 counties.[28] Importantly, the measure did pass in Portland's Multnomah County, indicating pre-existing public support for corporate taxation.

Additionally, by exercising their right to enact laws by citizen initiative as stipulated by the United States constitution, a coalition of community groups had the power to develop and propose legislation for the public to pass legislation via ballot initiative. With the power in the hands of members of the public, the Portland Clean Energy Initiative faced a higher chance of success at the ballot than it would have before City Council. Due to opposition from large industry, some city councillors may have found it politically challenging to pass the Portland Clean Energy Initiative. Notably, the mayor of Portland, Ted Wheeler, did not initially support the Portland Clean Energy Initiative as a result of pressure from his voter base and large industry. Instead, the coalition, composed of trusted community groups, had the opportunity to directly campaign and communicate the merits of the Initiative to the public. With the support of the public, Mayor Wheeler now embraces the Portland Clean Energy Initiative as it enters the implementation phase and wants it to serve as a model for other jurisdictions.

Timeline of Implementation

Recently passed at ballot in November 2018, the implementation of the Portland Clean Energy Initiative is currently underway. The City of Portland expects the implementation period to take 18 months and as such, the Portland Clean Energy Initiative should be fully implemented by June 2020 (Figure 3). Importantly, the eleven community groups that were involved in the conception of the ballot measure remain involved through the implementation process and play an important role in realizing their vision for the Portland Clean Energy Initiative. A detailed timeline for implementation can be found in Appendix 3.

Figure 3: The anticipated implementation schedule for the Portland Clean Energy Initiative.



Communications Strategy

Passing the Portland Clean Energy Initiative was contingent on strong community support. To overcome funding constraints and significant industry opposition, the community coalition deployed a unique communications strategy to generate the public support required to pass the initiative at the ballot. The community coalition adopted a low-cost grassroots communications strategy that called upon the credibility of community organizations to build voter support for the initiative.

As the Portland Clean Energy Initiative was originally unfunded, the community coalition was unable to hire communications consultants or deploy a traditional communications campaign. Instead the coalition relied on "Earned Media", publicity gained through promotional campaigns rather than traditional paid advertising efforts. These earned media opportunities presented an opportunity to gain public support for the initiative through promotional events such as youth-driven climate activism. Notably, the coalition developed significant media attention when it was discovered that industry had engaged in predatory behaviour by supplying misleading information to SME business owners in an effort to have them to sign an industry-led petition opposing the initiative.[29] Ultimately, unpaid publicity greatly helped the coalition expand awareness of the initiative before funds became available for traditional advertising campaigns in August 2018.

In addition to gaining unpaid publicity, the community coalition utilized a field strategy to generate support for the Portland Clean Energy Initiative. The coalition was able to mobilize community group members, volunteers and staff in order to execute a door-to-door campaign which provided a platform to directly connect with community members and encourage their support for the initiative. Though this grassroots campaign, the coalition provided an opportunity to directly answer questions and address concerns regarding the initiative. This strategy allowed the coalition and other supporters to utilize their credible reputations within the community to establish a sense of trust amongst the public when promoting the initiative. The coalition hired a field officer to coordinate these efforts.

Total Investment Required for Implementation

The City of Portland is allocating funds for the implementation of the Portland Clean Energy Initiative which will be recovered once the program is fully implemented. The Revenue Division of the City of Portland will administer and enforce the collection of the Large Administrator Surcharge whereas the Clean Energy Community Benefits Fund committee will review grant applications and provide recommendations to City Council surrounding the allocation of funds. During the first two years of the program's implementation, administrative costs and expenses incurred by the City's Revenue Division will be recovered from the funds collected through the business license surcharge. Following this period, administrative costs will be capped at 5% of the total funds generated by the surcharge. Currently, the Revenue Division estimates that the business license surcharge will raise between $45 - $70 million each year. As a result, costs recovered for administrative purposes could range from $2.25 - $3.5 million each year.

Barriers and Challenges

The key challenge experienced by the coalition in passing the Portland Clean Energy Initiative was opposition from industry. The initiative had significant opposition from large retailers and the Portland Business Alliance. The Keep Portland Affordable PAC was established in June 2018 for the purpose of blocking the Portland Clean Energy Initiative. The PAC raised $1 million, collecting donations from numerous large retailers such as Amazon, Walmart and Target.[30] As a result of these efforts, there was a well-funded opposition campaign which attempted to convince the public to vote against the ballot measure.

Those opposing the ballot measure called the constitutionality of the initiative into question which ultimately, had to be settled by the courts.[31] Time spent in court delayed the coalition's campaigning which reduced the amount of time they had to obtain signatures for the ballot. Nonetheless, the Portland Clean Energy Initiative achieved the required 20,000 signatures to be placed on the ballot.

Comparison and Application to City of Toronto

When comparing the Portland Clean Energy Initiative to the City of Toronto, it is important to consider both the applicability of the revenue generating mechanism and the structure of the larger initiative.

Potential Revenue Generation

The Revenue Division at City of Portland remains unsure of exact revenue to be generated by the business license surcharge. Considering that the City of Toronto's nominal GDP ($174.6 billion)[32] is comparable to the City of Portland's nominal GDP ($171.8 billion)[33], it is reasonable to expect that a business license surcharge in Toronto could generate comparable revenues, yielding an estimated $45-$70 million each year. However, it should be noted that defining "large retailers" by using nationally determined revenues (as opposed to internationally determined revenues) could disadvantage Canadian retailers. At a time where large retail is struggling in Canada, a surcharge on retailers may be more challenging to justify.

Political and Legal Feasibility

Due to limitations stipulated by the City of Toronto Act (COTA) 267 (2): the City is not authorized to impose "a tax imposed on a person in respect of the person's income, revenue, profits, receipts or other similar amounts".[34] Consequently, a tax on the gross revenues of large retailers would prove to be legally challenging and would likely require amendment to the COTA by the provincial government. Further, the Portland Clean Energy Initiative was passed via ballot initiative. In Ontario, ballot initiatives are used far less frequently to pass legislation than in the United States.

The Value of Community-Led Action

Despite these shortcomings for Toronto's context, there are important lessons to be learned from the success of the coalition of community groups in developing and passing the Portland Clean Energy Initiative. The continued involvement of community groups greatly enhanced the political palatability of the business registration surcharge. As trusted fixtures in the community, the coalition was able to connect directly with community members to share their vision for the Portland Clean Energy Initiative and dismantle the opposition's claims. The structure of the Clean Energy Community Benefits Fund reassured the public that the funds raised by the initiative would be used for the wider community benefit, as trusted community groups were poised to carry out the work of the fund. Toronto is home to many credible community organizations, which could help to build community support for a new revenue generating mechanism. By igniting a powerful community movement, the Portland Clean Energy Initiative demonstrates the power of community-led initiatives in overcoming opposition and reluctance to act from City Councillors.

Earmarking Residential Property Taxes

Overview

Paying an average of $6.36 per $1,000 of assessed property value, Toronto homeowners pay comparatively less in residential property taxes than other municipalities in Canada. While tax obligations vary amongst the provinces, the Altus Group estimates that Toronto residents pay 24.6% lower residential property taxes than the national average.[35] In addition, Toronto's residential property taxes are 20% lower than other municipalities in the Greater Toronto and Hamilton Area (GTHA). As a result, there is an opportunity to marginally increase residential property taxes to fund the programs and activities stipulated by TransformTO.[36]

The earmarking of tax revenues is an adaptable tool that can be used to commit a portion of taxes collected to fund specific priorities or projects. While political and taxpayer resistance to raising property taxes is common, earmarking protects funds from reallocation to other budgetary priorities. As such, the implementation of an earmark on property taxes would provide an opportunity to ensure a long-term funding source to support the goals of TransformTO.

Earmarking mechanisms can vary by jurisdiction according to the legal and regulatory rules delineating how budgets are formed and disbursed. Notably, earmarking can introduce or exacerbate inefficiencies and rigidities within municipal budgets, calling for careful planning and periodic reviews to ensure long-term appropriateness of the earmarking tool.

To reflect the variety of earmarking tools used by other jurisdictions, two case studies were explored in detail to assess the suitability of using this budgetary mechanism in the City of Toronto's context.

1. Logan City Environmental Levy

Logan City Council levies a flat environmental levy of AU$77.40, for which its revenues are earmarked to fund land acquisition conservation, the City's climate action plan, environmental education and community grants to support annual priorities (such as funding green renewable energy projects).[37] Situated in Queensland, Australia, the small city of 300,000 raises AU$13 million in annual revenue through the Environmental Levy.[38] Environmental programming is delivered and administered by Logan City in collaboration with local organizations and volunteers.

2. The Seattle Park District

In 2014, Seattle residents passed a ballot initiative to increase property taxes by US$0.33 per US$1,000 of assessed property value to be earmarked for the Seattle Park District.[39] The Seattle Park District, a new local entity governed by the Seattle City Council, is responsible for providing "funding for City parks and recreation including maintaining parklands and facilities, operating community centers and recreation programs, and developing new neighborhood parks".[40] The earmark for the Seattle Park District raised US$47.8 million in 2016, equating to an annual property tax increases of approximately US$145 on a US$440,000 home.[41] These earmarked Seattle Park District taxes contribute 8% of Seattle Parks and Recreation's annual operating budget, which is responsible for the program's implementation (Table 4).

Figure 4:

"Seattle Park District Mid-Cycle Report" Seattle Parks and Recreation, 2018.

Key Policy Drivers

The main policy driver for the establishment of the earmark was to secure long-term, dedicated funding for environmental and recreational priorities. Earmarking revenues are an attractive funding source as they bypass annual budget negotiations, thereby insuring a constant revenue stream for specific programs and activities.[42] Both Seattle and Logan City sought to commit a portion of municipal property taxes toward land acquisition, protection of local ecosystems, community programming and climate change mitigation.

In the years prior to the ballot initiative, the Parks and Recreation team of the Seattle government recognized that their previous funding tool, the Park Levy, was time-limited and would be phased out without the establishment of a new levy. As such, they sought to secure a permanent funding mechanism, which according to local regulations, could only be achieve through a direct vote. Generating the public support required to pass the Seattle Park District ballot initiative shaped the communications strategy utilized by the Parks and Recreation team.

Timeline of Implementation

FIGURE 5: Logan City's Environmental Levy (Queensland, AUS)[43]

1991

Initially, $8 per property levied on resident property taxes to fund the acquistion of land for environmental purposes

1994

Policy amendments to:

-increase levy to $15 per property

-allow fund to be allocated towards for enviro. education, world enviro. day, and community grants

2008

Broad environemntal levy policy drafted to include funding for climate change mitigation and community engagement

2010-2017

Numerousl amendments to the environmental levy , including increases to the levy itself.

2018-2019

In accordance with the latest amendments, a flat charge of $77.40 is levied on each property.

FIGURE 6: Seattle Park District (Washington State, USA)[44]

November 4, 1997

Code of the State of Washington authorizes municipalities to create a park district with special taxing authorities

August 5, 2014

Seattle voters approved Proposition 1 which created the Seattle Park District

2015

Ramp-up year - Park District was funded by $10 M loan from the City of Seattle

(6 year payback term)

2016

First year of the Seattle Pak District tax collection

2018-2019

Planning for the Park District's 2nd 6-year programing plan

November 2020

City adoption of the new financial plan

Communications Strategy

To improve political support for property tax increases, both cities sought to highlight the benefit of environmental programming for residents and the community at large. Each jurisdiction employed a communication strategy that was designed to prioritize community involvement in the planning and implementation of the programs funded by the earmarked tax. To ensure community engagement, both communications strategies had the following three characteristics in common:

1. Community Days and Workshops

Both Logan City and Seattle hosted publicly funded community days and engagement workshops which served a dual purpose. First, they encouraged environmental awareness and education amongst members of the public, thereby generating public recognition and support for the environmental issues as funding priorities. Additionally, the workshops served as a platform to explain and demonstrate the outcomes of the programs funded by the ear-marked tax. As such, members of the community could witness the value of their City's environmental and recreational programming.

2. Partnering with Local Organizations

Both cities rely on partnerships with local stakeholders to increase the legitimacy of programs funded by the earmarked property tax. As such, the jurisdictions identify and engage key stakeholders to assist with the promotion and delivery of planned activities, such as community days. For example, Logan City partners with universities to yield a dual benefit of reducing the City's labour costs while providing students with experience in community planning and event management. The Seattle Park District also funds a variety of community initiatives delivered by community associations with expertise in environmental management. In doing so, the municipal Park and Recreation department benefits from the expertise of community organizations but maintains visibility by ensuring the Seattle Park District logo is present throughout the length of the project.

3. Annual Survey and Review

Both jurisdictions tracked their progress and political support by issuing annual surveys to members of the public. The information generated by the surveys informs periodic program reviews and amendments to the legislative framework.

Total Investment Required for Implementation

Generally, new property taxes do not require significant investment for implementation. There are some costs associated with employment for research and drafting of proposals. Logan City and Seattle's major costs were associated with their communication strategies. The main difference between both program budgets is that Seattle Parks and Recreation is funded by multiple sources, including revenues from the Park District and budgetary resources. Logan City's Environmental Levy entirely funds its planned activities and does not include a capital budget.

Barriers and Challenges

1. Importance of Community Engagement

Both jurisdictions identified the critical importance of engaging members of the community. Given the transparency of the earmark on residents' property tax bill, there is heightened accountability for programs to achieve their desired outcomes. As such, Logan City and Seattle include key stakeholders and community members into their programming and use targeted communications to raise awareness and build long-term acceptance of earmark.

2. Avoiding Loss of Core Budgetary Resources

Both Logan City and Seattle city officials highlighted the importance of communicating the earmarked funds' long-term value. With the introduction of an earmark, there is a risk of core funds being cut from the budget given the presence of a guaranteed long-term source of funding. To avoid loss of core funding, it is imperative that the benefits of the earmarked fund are clearly demonstrated by explicit communication and monitoring of results.

3. Building financial flexibility

Another key risk with earmarking is that the longevity of the earmark policy may be challenged due to an inability to adapt to evolving priorities. If the legislative framework is not amendable and adaptable, it may be challenging to redistribute the funds towards emerging priorities.

Both Logan City and Seattle mitigate this issue by incorporating periodic program reviews to monitor progress and identify gaps. This information is used to modernize the legislative framework and ensure that funds can be distributed towards pressing priorities. While Logan City made amendments to the Environmental Levy Policy when necessary, the Seattle Park District utilizes six-year planning cycles to ensure funded programs are both appropriate and timely.[45]

Comparison and Application to City of Toronto

Political Palatability

Currently, there is strong resistance to residential property tax increases in Toronto. Recent proposals to raise property taxes have been voted down by Toronto City Council. Recently, a rejected proposal was put forth by Councillor Kristyn Wong-Tam in early March 2019. She called for a marginal tax increase of up to 0.0006% "to fund, respectively, a program helping low-income people facing eviction and an aquatic program in a disadvantaged neighbourhood."[46] As such, revenue earmarking proposals in Toronto will need to consider political opportunity and the budget cycle within their timelines.

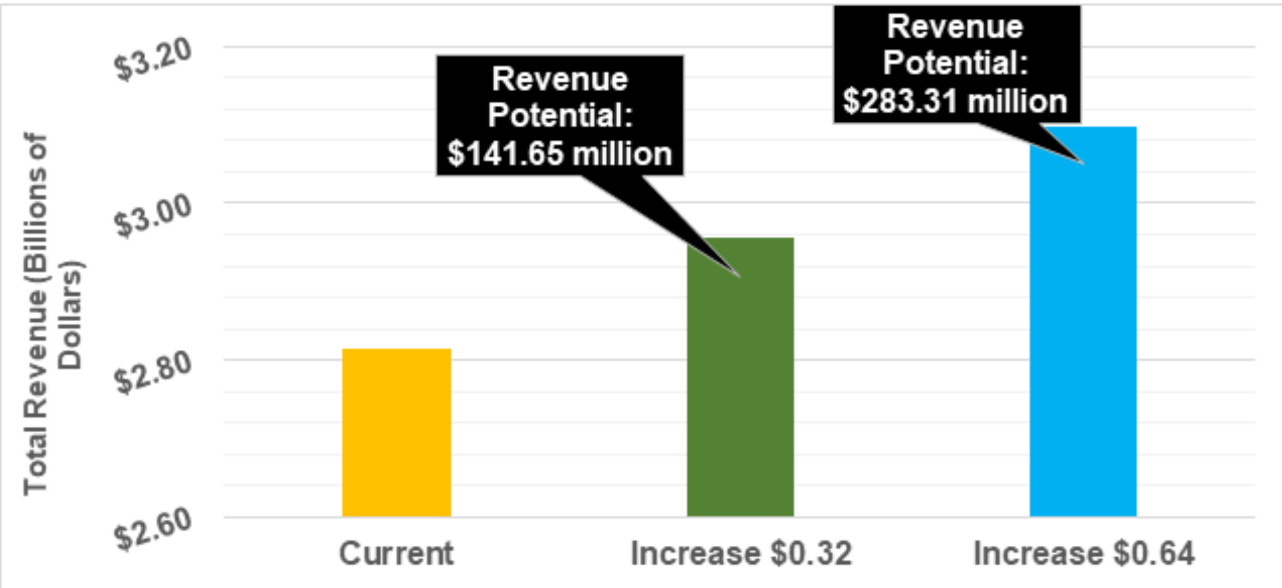
Legal Applicability

Earmarked property taxes are legally permissible under the COTA, which delineates that a percentage of total assessed property value can be collected from residential property owners. Notably, the presence of the "City Building Fund", an existing earmarked tax in the City of Toronto, demonstrates the legal feasibility of earmarking.

Revenue Generation Potential

Other jurisdictions that have introduced earmarking have incrementally increased the earmark to reduce both the immediate burden on property owners and the political opposition to the increase in property taxes. As such, increases of $0.32 and $0.64 on $1,000 of assessed property value were used to explore the gross revenue potential of marginal increases in property taxes (Figure 7). Further, to illustrate the burden on property owners, the same property tax increases were applied according to the average price of single-family homes, apartments and townhouse in Toronto (Figure 8). Gross revenue potential is estimated to be between $141.65 million and $283.31 million, with an average per property owner impact ranging between $165 and $550 per year.

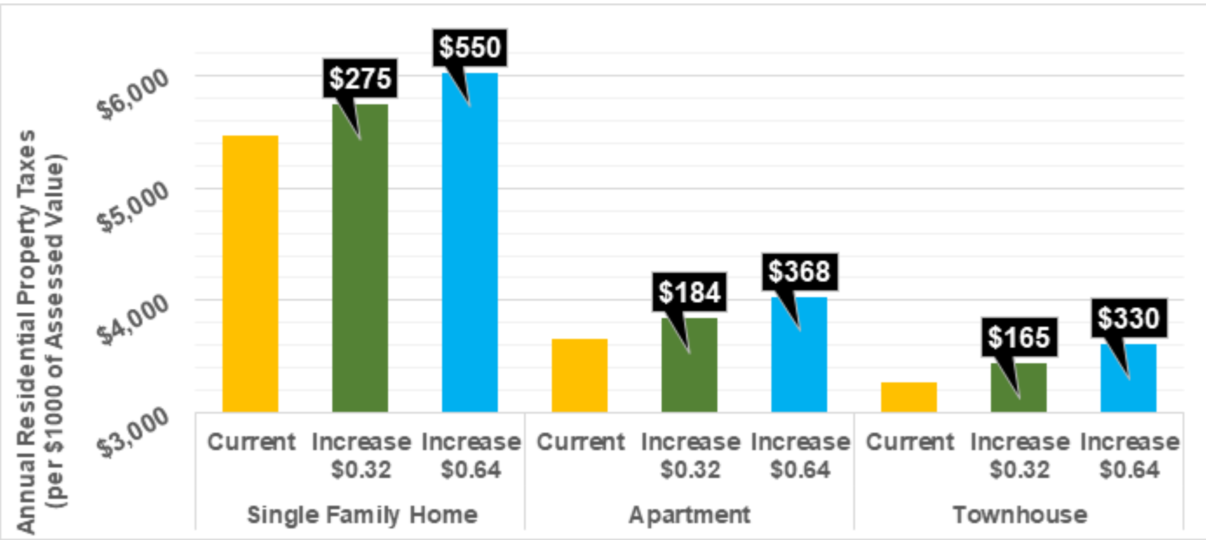
Figure 7: Annual Total Revenue Potential from Earmarking Residential Property Taxes



"https://www.altusgroup.com/wp-content/uploads/2018/10/Canadian-Property-Tax-Rate-Benchmark-Report-2018.pdf,

https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

Figure 8: Annual Revenue Collected Per Property Owner, according to the Type of Residential Property Owned



*Labels indicate the increase in annual residential property paid by the average homeowner in that housing category compared to current annual residential property taxes paid in Toronto.

"https://www.altusgroup.com/wp-content/uploads/2018/10/Canadian-Property-Tax-Rate-Benchmark-Report-2018.pdf

http://creastats.crea.ca/treb/

Cross-Case Application to City of Toronto

To compare the three jurisdictions and their applicability in the City context, a heat map was developed that analyzes each jurisdiction using the same six indicators. The indicators are measured using relative ranking, with each case being analyzed in comparison to the other two cases. The cases are ranked on a spectrum from positive / high feasibility (green) to negative / lower feasibility (red). Justification for the rankings on this heat map are explored in detail within each case section. Further information on the definition of each indicator can be found in Appendix 1.

FIGURE 9: In order to establish the relative applicability of the cases to the City of Toronto's context, the cases were ranked amongst one another on six key metrics.

	Congestion Charge	**Business Registration Surcharge**	**Earmarking Residential Property Taxes**
Political Palatability			
Potential Revenue Generated			
Ease of Implementation			
Direct impact on TransformTO goals			
Initial Investment required			
Administrative costs			

Conclusion

To meet the goals outlined by Transform TO, the City of Toronto will need to coordinate approximately $60 billion in investment. To generate a portion of the funds required to meet these goals, the City can establish a dedicated financing mechanism. This report has explored three revenue generating mechanisms from four distinct jurisdictions – London, Portland, Logan City and Seattle. The three revenue generating techniques each present their own set of opportunities and challenges for application to the City of Toronto. As such, it is challenging to recommend the application of one financing mechanism over the others.

Notably, the City of Toronto has an opportunity to learn from each case and the experiences of the respective jurisdictions in building public support for the implementation of behaviour changing policies. The power of community engagement and a strong communications strategy were clearly illustrated by all four of the jurisdictions studied in this report, and as such, similar efforts should be given priority when seeking to implement dedicated financing tools in Toronto.

There are clear benefits for the City of Toronto in establishing a dedicated financing tool to support climate transition and fulfill the goals of TransformTO. However, the establishment of such a tool requires careful planning and research. The cases studied in this report speak to the importance of advance research and planning to ensure the long-term flexibility and adaptability of revenue generating mechanisms.

Appendix

1) Key Indices for Heat Map

Table 3	
Indicator	**Defining Parameters**
Political Palatability	This indicator reflects the ease of generating public support for a financing mechanism amongst the existing political climate in Toronto.
Potential Revenue Generated	This indicator measures the revenue generation potential of each dedicated financing mechanism. It is measured on the highest potential revenue and administrative and initial investment are excluded.
Ease of Implementation	This indicator reflects the barriers and challenges related to the implementation of a financing mechanism. The ease of implementation is determined by legality under COTA and the size of the program hurdles associated with the implementation of the financing mechanism.
Direct impact on TransformTO Goals	This indictor measures the direct impact of the measure on the goals outlined by TransformTO. Simply raising funds that are allocated to combat climate strategies would not qualify as a direct impact. Instead, this indicator measures the mechanism's ability to directly change behaviour to align with TransformTO goals.
Initial Investment Required	The initial investment is defined as the start-up costs for the dedicated financing mechanism. However, the entirety of this investment does not necessarily need to be funded at the municipal level. This excludes day-to-day operational costs that follow the implementation of the financial mechanism.
Administrative Costs	This cost includes day-to-day operational and administrative costs that will be incurred by the city in the operation of the financing mechanism.

2) Summary of Alternate Cases

Workplace Parking Levy, Nottingham, U.K.

Adjusting the price of parking offers another method of tackling congestion in cities. Parking can either be levied or taxed, the latter of which is not feasible under the current COTA. By increasing the price of parking, drivers face a higher price for driving and may choose to opt for alternate modes of transportation. Free workplace parking commonly offered as an incentive by employers and encourages people to drive to work when they may have otherwise opted for an alternative method of transportation thereby, increasing congestion.[47] To combat this issue, the city of Nottingham, UK developed the Workplace Parking Levy (WPL) in 2012. The WPL was implemented to encourage commuters to use alternative methods of transportation by imposing a levy on the free parking spaces provided by employers. Under the WPL, employers that provide 11 or more free parking spaces currently pay a levy of £417 per space annually. Approximately 80% of companies that are paying the levy pass the charge onto their employers. [48] Employers that have fewer than 11 parking spaces are exempt from paying the levy. Disabled parking spaces are also exempt from being included in the levy. The levy has a 99% compliance rate in Nottingham.[49] In the first five years of the charge, the levy generated over £44 million, with an operating cost of less than 5%. Grants are also available for employers to encourage alternate methods of transportation, such as a $5000 cycling grant that can be used towards providing showers for employees.[50] Importantly, a parking levy increases the cost of private parking. To ensure the efficacy of the levy in reducing congestion, the cost of public parking must also increase. While high cost of parking can discourage drivers from driving (thereby reducing congestion), a large cost discrepancy between expensive private parking spots and comparatively cheap public spots encourages drivers to circling the neighbourhood looking for cheaper alternatives thereby, worsening congestion.[51] Further research would need to be conducted to ensure such a policy would not inadvertently worsen congestion.

Development Cost Levy, Vancouver, Canada

Development Charges are collected from property developers and are intended to help municipalities cover the costs associated with increased occupancy.[52] The City of Vancouver imposes several development charges on property developers. The most prominent is the Development Cost Levy (DCL) which is calculated as a function of square footage and applies to most new developments in Vancouver. DCLs provide the City of Vancouver with revenue to support parks, childcare facilities, affordable housing and infrastructure. Between 2013-2017, DCL collections have averaged $72 million in revenues for the City of Vancouver each year.[53]

The City of Vancouver also imposes several other development charges on property developers. In density bonus zones, developers are permitted to build more floor space than allowed under existing zoning rules, in exchange for affordable housing and amenities such as parks, community centres and libraries.[54] Bonus contribution rates vary by zone and in 2017, density bonus contributions amounted to $1 million in additional revenues for the City of Vancouver. For developments that require re-zoning, the City of Vancouver also accepts Community Amenity Contributions (CACs) when development rights are issued through rezoning. The CAC is paid in addition to the DCL and aims to lessen the impact of rezoning and increased density on the community. In 2017, the City of Vancouver raised $88 million in CSC contributions which supported the construction of park space, cultural facilities and transportation services.[55]

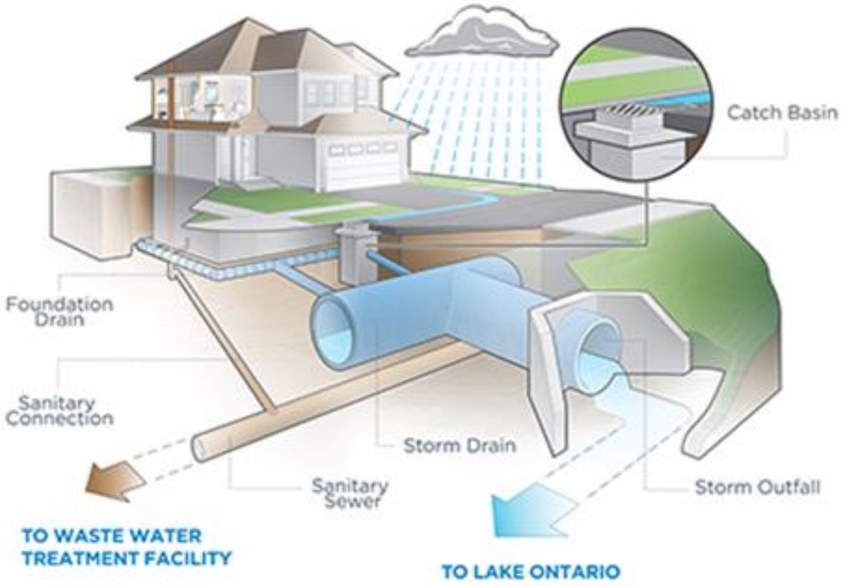
Importantly, the City of Toronto has recently succeeded in amending the COTA and a development charge was implemented in 2018. Revenues from Toronto's Development Charge (DC) will be allocated to infrastructure spending to support growing population density.[56] Revenues will be allocated to infrastructure projects such as road improvement, transit, water and sewer systems, and community centres. Notably, Toronto also accepts density bonus agreements (DBAs), like Vancouver's CACs, as outlined by Section 37 of the Ontario Planning Act, though this legislation is often criticized for its ambiguity in contrast to CACs in Vancouver.[57] In Toronto, the collection of DBAs is highly politicized due to the involvement of City Councillors in the negotiation and distribution of the benefits, whereas in Vancouver, the collection and distribution of CACs follows a technocratic process and results in more efficient allocation of funds.[58] Given the tensions between population growth and the goals of TransformTO, an argument could made for ensuring that a portion of DCs and DBAs support the goals of TransformTO in Toronto.

Stormwater Charge, GTHA, Canada

Large cities, including Toronto, have a difficulty keeping up with the maintenance, repair, expansion and emergency response and cleanup of their stormwater system, which includes stormwater sewage and drains, catch basins, etc. Major contributors to water flows in urban stormwater systems include residences, businesses, and street and roof runoff from rain or snowmelt. Climate change stands to exacerbate current urban stormwater infrastructure deficits by increasing the risk of flash flooding and extreme weather.[59]

Stormwater charges are an alternative municipal financing model used to fund the costs associated with stormwater management. A stormwater charge is a user fee calculated based on the amount of impervious area, including rooves, driveways and streets, on a commercial or residential property. The utility bill surcharge is justified by the rationale that users with more impervious area on their property place a higher demand on the municipal stormwater system. This type of user fee is viewed as "fair because they are based on runoff contribution rather than property value."[60] A few municipalities in the GTHA, including Mississauga, Newmarket, Vaughan and London, have successfully incorporated this type of user fee on property owners within their jurisdiction.

Figure 10: Typical urban stormwater system in the GTHA.[61]



Currently funded by the "pay-as-you-go" water rate, the "City of Toronto's stormwater management program includes operating and capital funding for the entire storm sewer system, as well as the Wet Weather Flow Master Plan and its components such as the Basement Flooding Protection Program."[62] Beginning in 2013, City of Toronto staff have been analyzing the benefits and impacts of implementing a stormwater charge in Toronto to directly fund its stormwater management system. However, in 2017, Mayor John Tory's executive committee indefinitely shelved city staff's proposal for a stormwater charge in Toronto.[63] Given current political resistance and the in-depth stormwater analysis that was developed by the City of Toronto in 2017,[64] this charge was not explored in greater detail in this report.

Impact Investing, Toronto, Canada

Impact investing is a growing category of investment borne out of investors' desire to use capital resources for societal good. Impact investors invest with society in mind, targeting investments that will yield both financial returns and social environmental benefits. The availability of social finance is growing and by 2020, the global social finance market is projected to reach $1 trillion by 2020.[65]

Notably, impact investing often supports community-driven solutions, as social enterprises play an integral role in harnessing private funds to achieve societal good on a local-scale. Social enterprises exemplify the shifting role government as they develop innovative ways to address challenges that are too complex for the public sector to tackle alone.[66] Ontario is home to over

10,000 social enterprises, many of which aim to address environmental issues.[67] As such, community-driven social enterprises represent an important opportunity to achieve the goals of TransformTO.

There are several organizations in Toronto that are active impact investors. The Toronto Atmospheric Fund (TAF) is a City agency that finances and supports organizations that reduce greenhouse gas emissions within the GTHA. The TAF deploys its funds to provide grants, loans and financing to initiatives that reduce greenhouse gas emissions in the City of Toronto, thereby contributing to the goals of TransformTO. Notably, through their “low-carbon enterprises” program, TAF seeks to provide the capital required to support the commercialization of low-carbon technologies.[68] By scaling-up low-carbon enterprises, TAF plays a supportive role in a privately developed carbon solution.

In addition, numerous foundations engage in impact investing to their advance their mission. Notably, the Toronto Foundation has allocated a pool of $10 million to be fund community-driven projects via investment or loan.[69] The Toronto Foundation has already invested in several projects that are in line with the goals of TransformTO.

Debt Financing: The Community Revitalization Levy, Alberta, ON

In the province of Alberta, municipalities can take advantage of the Community Revitalization Levy (CRL) in permits them to borrow against future property tax revenues to finance infrastructure development.[70] Currently, municipalities in Alberta use the CRL to fund a variety of projects, some of which include environmental and social revitalization. The levy, ultimately to be paid by future taxpayers, is justified under the premise that infrastructure improvements will be used to the benefit future residents, will attract private investment and will increase property values for the future residents. In the context of climate financing, debt financing can take the form of a number of mechanisms including green bonds and green banks.[71]

3) Portland Clean Energy Initiative: Additional Information

Given the wealth of knowledge gained from the key-information interviews with jurisdictional experts, greater detail pertaining to the justification and implementation of the Portland Clean Energy initiative is provided here.

Justification for the Surcharge on Large Retailers

The surcharge for large retail businesses stipulated by the Portland Clean Energy Initiative was rationalized given the significant contributions to carbon emissions associated with "large retail" which will be external to Oregon's pending "cap and trade" system. Separately, by reserving the surcharges for businesses generating US$1 billion in revenues, the Clean Energy Initiative avoids negative implications for small businesses and local entrepreneurs. By targeting large retailers, the coalition argue that because pricing is set at the national level, it is inconvenient to transfer the surcharge on to consumers.

Detailed Program Implementation

Phase 1: Adoption into City Code (November 2018 - May 2019)

The first step in the implementation process was to integrate the Portland Clean Energy Initiative into city code. The City of Portland Revenue Division had to amend existing code, namely the existing business licensing law, to allow for the surcharge on large retailers. To do so, the City's revenue division had to clarify and establish key definitions in order to establish clarity surrounding the application of the surcharge. In order to adopt these amendments, the City of Portland will host a public hearing in early April to solicit public feedback regarding the proposed changes. Finally, the Revenue Division will be required to identify and notify "large retailers" of their new obligations under the Clean Energy Initiative.

Phase 2: Developing Program Support (June - December 2019)

The second phase of the implementation process will require building program support for the Clean Energy Community Benefits Fund. In doing this, the City of Portland will have to hire staff to new positions which will oversee the fund committee and related programming. These staff will oversee the implementation process and will support the committee once it is established. At this stage, the coalition will need to ensure that private organizations in Portland hold an adequate baseline capacity in order to carry out the work of the fund. To do this, a community capacity building plan will be developed and will outline the current capacity level of grant-seeking organizations and will establish a plan to improve capacity if necessary. This is essential to the success of the program considering community organizations will ultimately create impact for the City of Portland's climate and societal goals.

Phase 3: Establishing the Grant Committee

The third phase of implementation will involve seating committee members to oversee the Clean Energy Community Benefits Fund. The committee consist of community members and local experts that will make recommendations to city council surrounding the allocation of funds. The committee will consist of nine members, the first five of which will be appointed by city council. In order to seat the committee, key decisions regarding committee member time commitment, payment (if any), processes and conflict of interest policies will have to be reached. The first members of the grant committee will play an important role in establishing the structure of the fund and granting processes. Additionally, the committee members will participate in training processes led by the community coalition and the City of Portland. Finally, the City of Portland will also seek to establish accountability measures to ensure the Clean Energy Community Benefits Fund serves the broader goals of the Portland Clean Energy Initiative. Annual financial audits and program audits will be established to encourage accountability between members of the committee, city council and the community at large.

Phase 4: Dispersal of Funds (beginning in June 2020)

Finally, the City of Portland and the community coalition aim to begin dispersing funds to community groups by June 2020. Due to City of Portland's rules regarding gradual taxation, only $10 million will be collected in 2020. However, this will grow to $45-70 million by June 2021.

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