



Munich Personal RePEc Archive

Non-tax Revenue for Funding Municipal Governments: Take-up, Constraints, and Emerging Opportunities

Tedds, Lindsay M.

University of Calgary

July 2018

Online at <https://mpra.ub.uni-muenchen.de/96919/>

MPRA Paper No. 96919, posted 14 Nov 2019 17:04 UTC

Non-tax Revenue for Funding Municipal Governments:
Take-up, Constraints, and Emerging Opportunities

Lindsay M. Tedds
Associate Professor
Department of Economics & School of Public Policy
University of Calgary

Draft Date: July 3, 2018

1.0 Introduction

As was outlined in the chapter by Slack and Bird (2018) governments should raise revenue by using instruments that minimize distortions and maximize fairness. This is why they say that the sensible rule of local finance is to “wherever possible, charge!” (Bird and Slack 2014) That is, where possible, the direct users, the beneficiaries, of the good or service should pay the price of providing the good or service. By charging users directly, this ensures that the goods or services are consumed by those who value them the most and the government obtains direct feedback as to whether citizens really desire the provision of the good or service at the cost incurred to provide that good or service.

In Canada, there are three main types of legally recognized revenue instruments that are most in line with the user charge model: user fees, regulatory charges, and proprietary charges (referred to collectively as user levies). User fees are levies that are used to recoup the cost of providing a good or service, regulatory charges are levies that are used to recoup the cost of granting a right or privilege, and proprietary charges are levies that are used in relation to a proprietary interest. These three user levies are available to be used by all levels of government in Canada, including municipalities, having been generally devolved by all the provinces. While these levies have key differences that are well established by legal tests, they also share a lot in common with each other as well as with taxes. As a consequence, user levies have faced numerous legal challenges but also a number of negative internal audits demonstrating that governments have limited expertise regarding the clear and definitive design and implementation of user levies. This challenge weighs heavily on municipalities because they have only been devolved the constitution authority for limited revenue powers and if a user levy is found not meet the legal limitations set for it, municipalities can find themselves in a challenging legal position. The worst case scenario faced by municipalities would be the case where they levy is found outside of the jurisdictional sphere of the municipality and the revenues associated with the levy need to be repaid.

What are user levies? How do they differ from a tax? When are user levies an appropriate or preferred policy instrument? What are the trends in user levies across Canada? What are the implications for municipal activities and budgets? How can user levies be used by municipal governments in relation to emerging pressures? This chapters will document the increasing reliance on user levies by municipal governments in Canada compared to the provincial and federal governments and show that this increasing reliance is generally consistent across Canada.

It will outline reasons for the increasing reliance. The paper will clarify the legal definitions and limitations on user levies in Canada and what this mean for the design and implementation of these levies. Finally, the paper will explore both existing and emerging opportunities for the employment of user levies using case studies and present areas of potential concern along with suggestions for improvement.

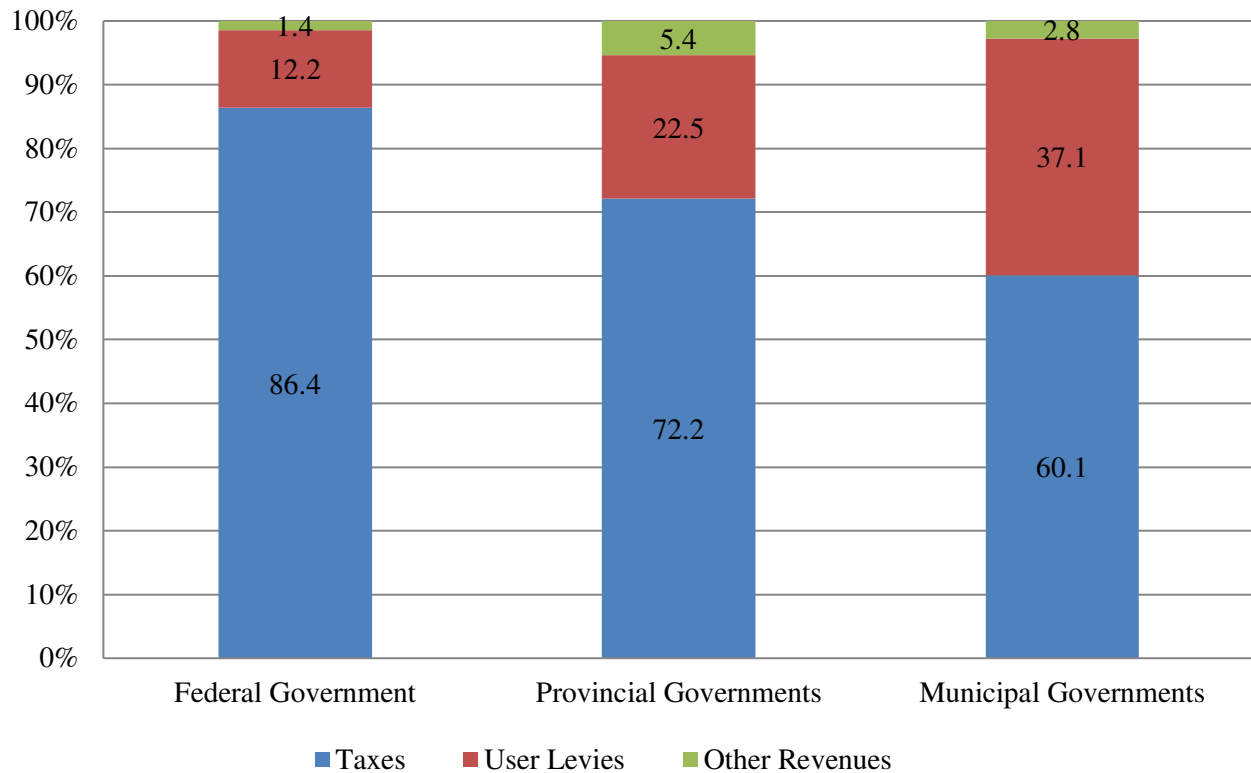
2.0 Trends in User Levies

If the theory is “whenever possible, charge”, what has been the take up of user levies in Canada? While the chapter by Slack and Bird (2018) and Dahlby and McMillan (2018) provide a view of the sale of goods and services that is but one category of user levies. The Statistics Canada data sources (*Financial Management System* for the years 1998-2008 and *Government Finance Statistics for the years 2008-2016*) do not delineate well across various types of user levies, often including user fees, regulatory charges, and proprietary charges within the same categories. As a result, no comparisons can be made regarding specific user levies, but rather user levies in general.¹

The data clearly show that, while user levies are revenue tools that are available to all levels of government, they are not used to the same degree by all levels of government. Figure 1 presents the share of own source (excluding intergovernmental grants) revenues raised by taxes, user levies, and other revenue sources by the various levels of government in Canada for the year 2016. Figure 1 shows that while all three levels of government rely on user levies, municipalities rely on them the most. The federal government raises 12.2% of their own source revenues from user levies, with the majority (65%) of these user levy revenues coming from social security contributions (notably Employment Insurance and Canada Pension Plan Premiums), which are forms of regulatory charges. Provincial governments raise 22.5% of their own source revenues from user levies, the sources of which vary by province. Resource rich provinces such as Newfoundland, Saskatchewan, Alberta, and BC raise much of their user levies from the regulation and sale of natural resources, which are forms of proprietary charges. In non-resource rich provinces the revenues are from a variety of user levies, including rents from social housing (proprietary charges), worker safety and compensation regimes (regulatory charges), the proceeds from the sale of liquor (proprietary charges), and various administration of licensing (e.g. regulatory charges on drivers). In comparison, municipalities raise more than a third, 37.1%, of their own source revenues from a number of different types of user levies, including revenues from service provision (e.g. user fees on services like public transit).

¹ The data related to revenue collected by governments in Canada for 2008-2016 is available through the Statistics Canada Canadian Government Finance Statistics (CFGS) database. The data is available in consistent categories for the federal government (Table 385-0033), the provincial governments (Table 385-0034), and municipal governments (Table 385-0037). However, the classifications of the revenue across the various categories often mixes taxes, user levies, charges, and other. As a result, the author took great care to create her own classifications based on her knowledge of the legal definitions of the various levies.

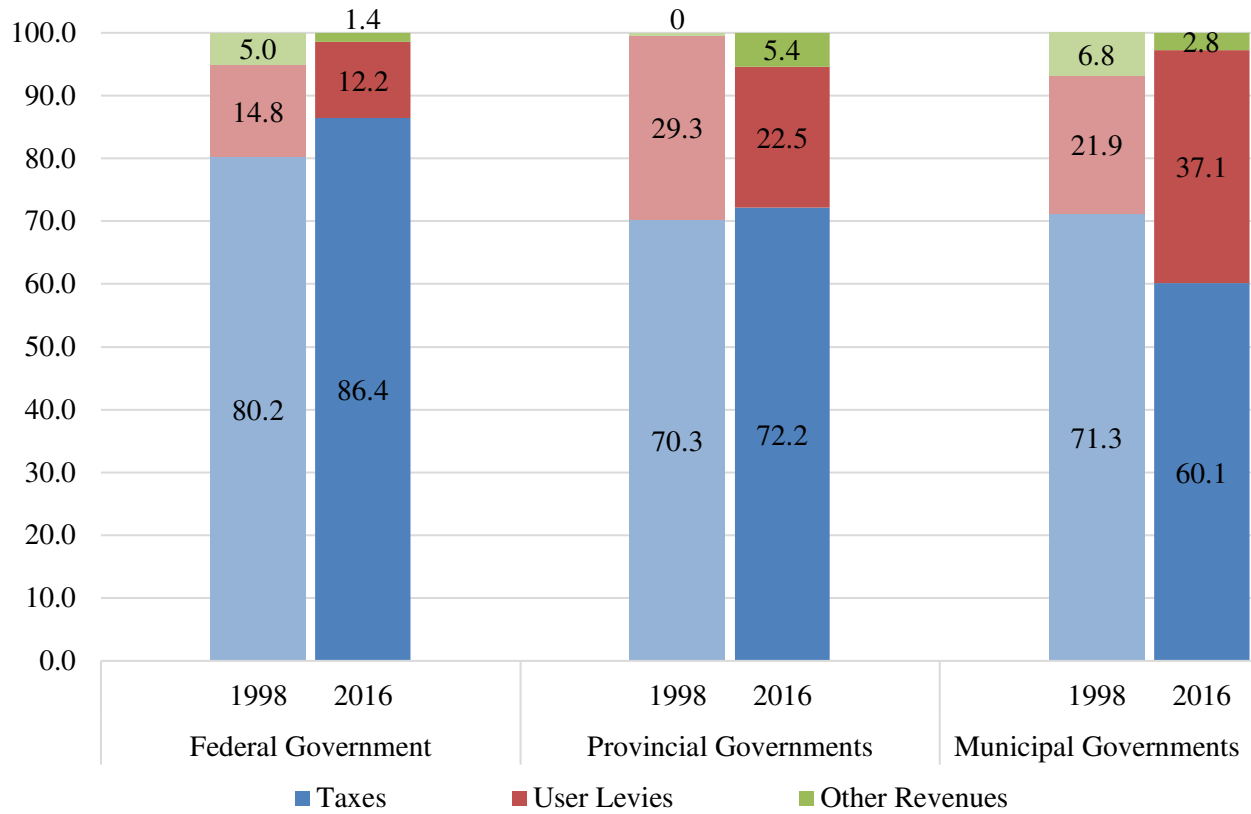
Figure 1: Share of Own Source Revenues Raised by Taxes, User Levies, and Other Revenues by Level of Government, 2016



Source: Statistics Canada Tables 385-0033, 385-0034, 385-0037. Classifications of revenue by category Done by author.

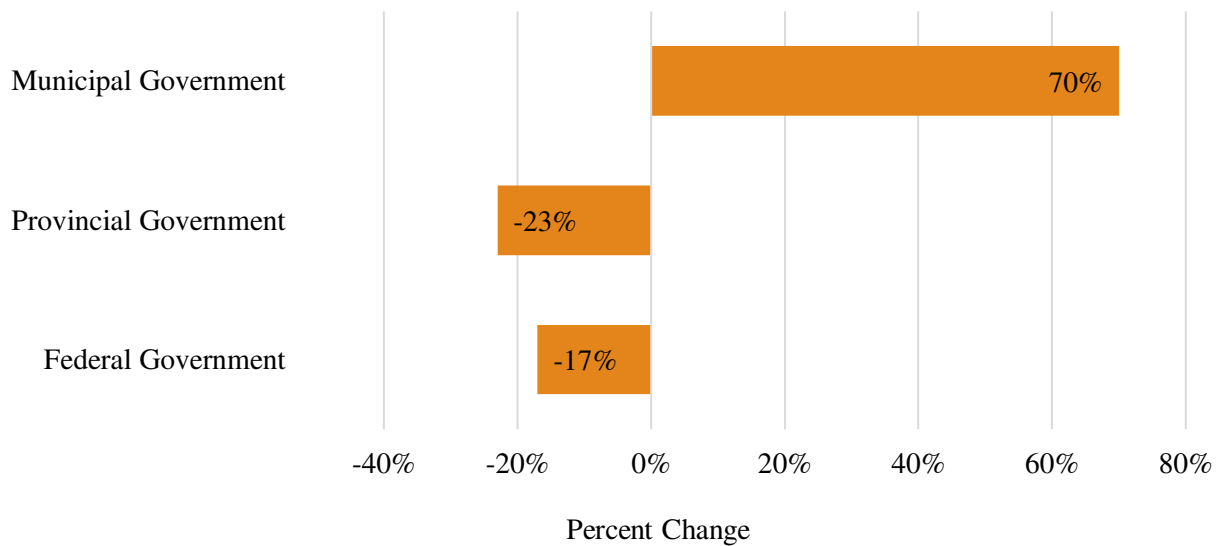
Comparing the reliance on these various sources over time also presents an informative trend. Figure 2 presents the share of own source revenue raised by these three categories of revenue by the three levels of government for the year 1998, the earliest the data is available, and 2016, the last year currently available. Figure 2 shows that the federal and provincial governments are increasingly relying on taxes as a source of revenue whereas user levies are showing a declining share of revenues for these governments. This contrasts with the trend shown by municipalities which are reducing their reliance on property taxes and increasing their reliance on user levies. In particular, as shown in figure 3, while user levies decreased as a share of own source revenues by 17% for the federal government and 23% for the provincial governments, user levies increased as share of own source revenues by nearly 70% for municipal governments, increasing from 21.9% to 37.1% of revenues.

Figure 2: Share of Own Source Revenue Raised by Source and Level of Government, 1998 vs 2016



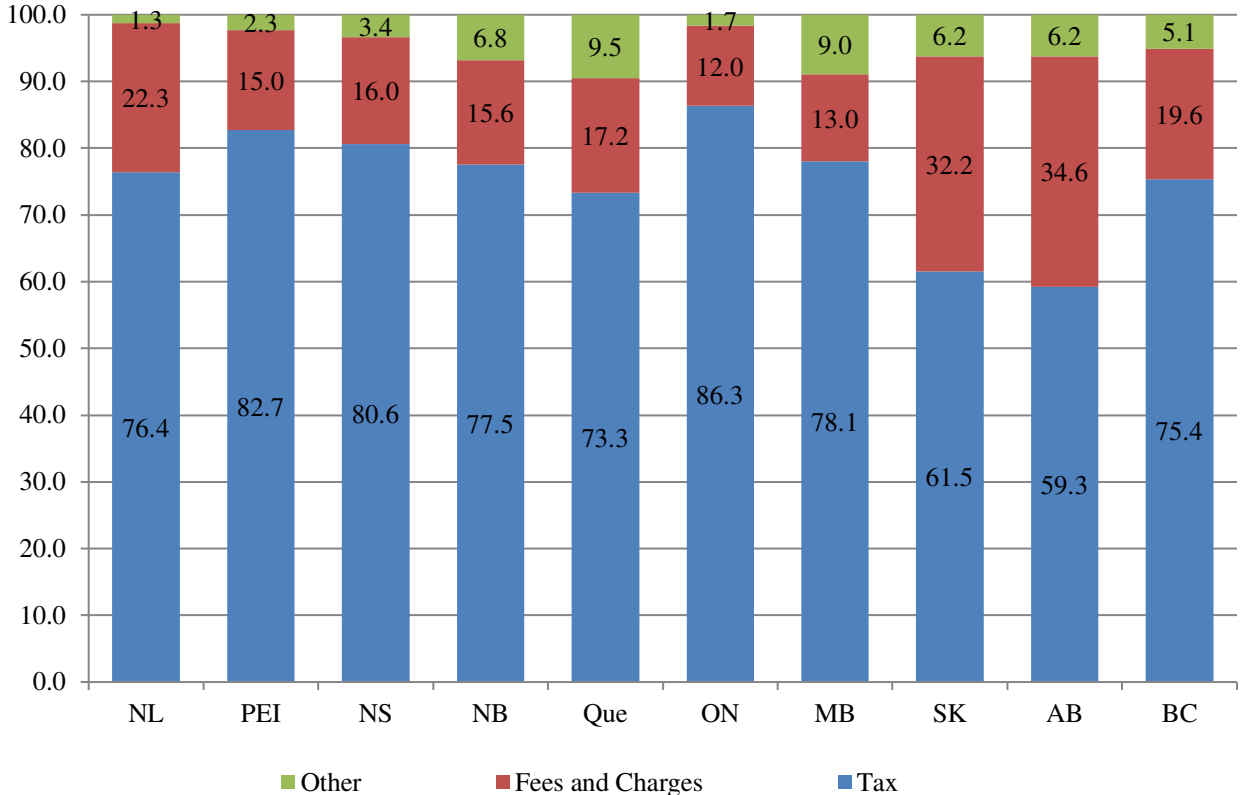
Source: Statistics Canada Table 385-0002 for 1998 and Tables 385-0033, 385-0034, and 385-0037 for 2016. Classification of revenues by categories done by author

Figure 3: Growth in User Levies by Level of Government, 1998 to 2016



Of course, provinces and municipalities operate within geographic contexts that may result in a varying application of user levies across Canada. This context is dictated by various institutional aspects, many of which are established by devolution of powers, along with the fact that each province has very different economic and geographic characteristics, settlement patterns, population density, and public policy priorities, all which may influence their reliance on user levies. Figure 4 shows the share of own source revenue raised by the provincial governments for the year 2016. The share of user levies raised by the provinces varies from a low of 12% in Ontario to a higher of nearly 35% by Alberta. It is interesting to note that the share of own source revenues from user levies is the highest in the three most Western provinces of Saskatchewan, Alberta, and B.C., along with Newfoundland and Labrador, while the Eastern provinces, excluding Newfoundland and Labrador, all show the lowest reliance on user levies.

Figure 4: Share of Own Source Revenues Raised by Taxes, User Levies, and Other Revenues by Provincial Governments, 2016

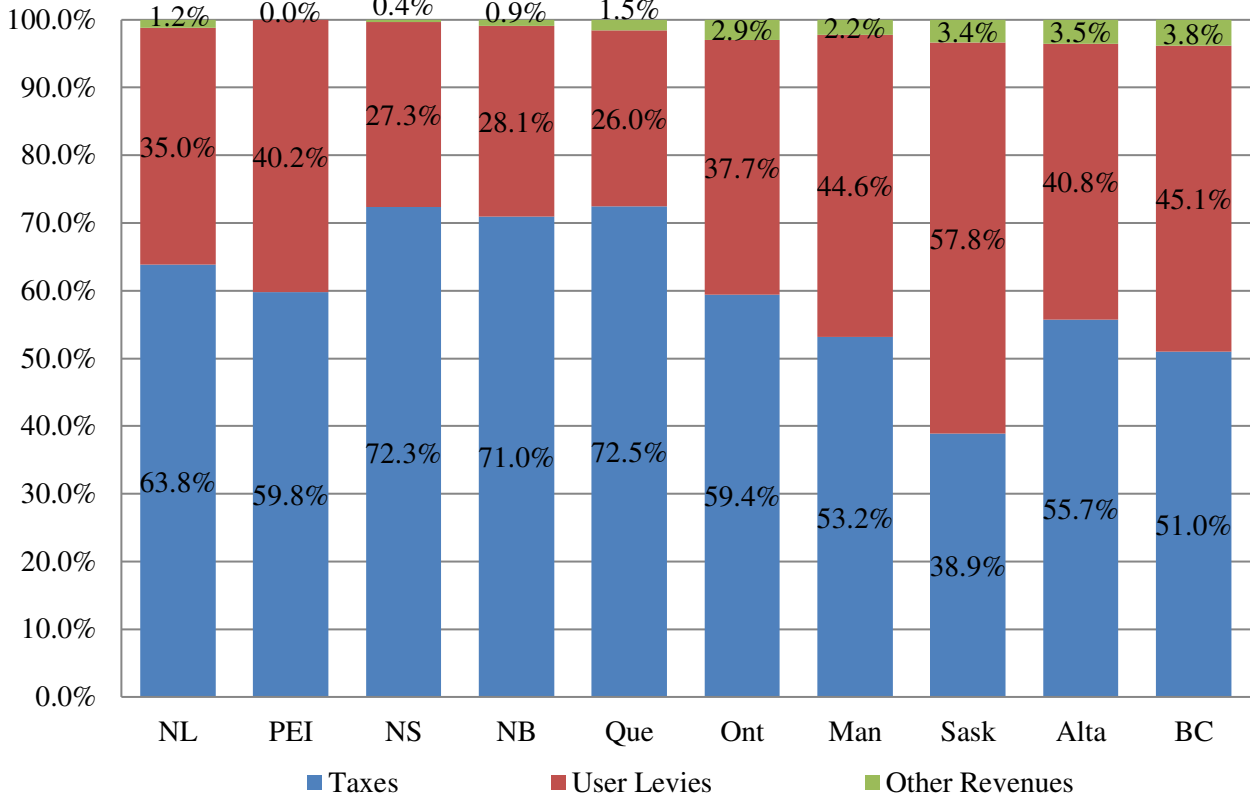


Source: Statistics Canada Tables 385-0034. Classifications of revenue by category done by author.

Figure 5 shows the share of own source revenues raised by taxes, user levies, and other revenues raised by the municipalities across the ten provinces for the year 2016. The share of own source revenues raised by user levies varies from a low of 26% in Quebec to a high of 57.8% in Saskatchewan. It is interesting to note that municipalities in the four Western provinces all show the highest reliance on user levies, averaging 47.1%, while municipalities in the eastern provinces all show a lower reliance on user levies. In fact, there does appear to be a high degree of correlation between the reliance on user levies at the provincial level and

the municipal level in the provinces. Regardless, the municipalities in all the provinces all show a higher reliance on user fees than their provincial and federal counterparts.

Figure 5: Share of Own Source Revenues by Municipal Governments by Province, 2016



Source: Statistics Canada Table 385-0037. Classifications of Revenue by Category Done by Author.

As has been shown above, Canadian municipal governments have, compared to their provincial and federal counterparts, increasingly turned to user levies rather than taxes to fund their activities. This is likely partially due to a number of interrelated factors. First, Canadian municipal governments are constitutionally constrained to limited revenue sources despite facing increasing infrastructure pressures, services demands, and expectations from the constituents. Second, municipalities are increasingly likely to be involved in the provision of goods, services, or rights where the direct beneficiary is well defined, such as public transit and community pools, as pointed out by Slack and Bird (2018). Third, financial support to municipalities from other levels of government, in the form of grants, has been declining (as detailed by Kitchen 2018) at the same time that increases in property taxes to fund municipal capital and operational outlays has faced increasing opposition from municipal taxpayers.² Fourth, Canadian municipalities are often constrained by having to adhere to borrowing limits and by being disallowed from incurring operational deficits, further limiting public finance

² The chapter by Dahlby and McMillian (2018) show how property taxes as a share of household income have flatlined.

options to assist in solving public policy problems. Finally, municipalities that are home to federal or provincial properties (including universities) face the burden of having to provide goods and services for those properties and their associated workers, yet those properties are exempt from paying property taxes, though not user levies. While payments-in-lieu (also known as grants-in-lieu) payments from these high order levels of government to affected municipalities are supposed to compensate municipalities for the forgone property tax revenues³, these payments in lieu of taxes have been declining⁴, eliminated⁵, or disputed⁶ in recent years. In a way then, municipal government have been compelled towards user levies rather than necessarily through a recognition of their efficiency improvements over taxes.

3.0 Defining User Levies

While there has been an increasing reliance on the user-pay model to fund municipal obligations in Canada, the application of the user-pay model is constrained by an important factor. Notably, user levies have very specific legal constraints on them that may be at odds with the nature of the specific infrastructure for which funds are being sought. As a result, designing and implementing these user levies requires expert knowledge because user levies have legal limitations on them as revenue tools and the courts have established tests to determine if a levy meets these limitations. If a user levy is not carefully crafted to meet these limitations, then the levy may be found to be beyond the power of any particular municipality to impose. When these limitations are properly adhered to, though, user levies can be an important source of revenue to fund municipal activities and address municipal pressures.

What are the various user levies available to municipalities in Canada? As previously mentioned, a user levy generally refers to some form of payment for a resource, infrastructure, good, service, or right provided or owned by a government. There are three main types of constitutionally recognized user levies in Canada: user fees, regulatory charges, and proprietary charges. What are these levies? How are user levies different from taxes? How can these levies be differentiated? To what activities do these levies apply? The extensive case law that exists related to legal challenges of various levies provides answers to these questions. The limitations and tests for user fees and regulatory charges have previously been detailed in Athaus, Tedds, and McAvoy (2011), Farish and Tedds (2014), and Alhaus and Tedds (2016), and Tedds (2017), whereas proprietary charges have yet to be well detailed in the literature.

3.1 Taxes

³ The chapter by Kitchen (2018) discusses payments-in-lieu of taxes in more detail.

⁴ For example, in British Columbia, the pool of funds set aside for payments-in-lieu of taxes has not increased since its inception. As a result, the payments have not kept pace with inflation, let alone with the expansion of services offered. The payments per property have also been reduced because the pool of properties, particularly the number of post-secondary institutions, covered by the funds has expanded.

⁵ For example, in the 2017 provincial budget, the Government of Saskatchewan eliminated payments-in-lieu of taxes to municipalities for properties owned by SaskPower and SaskEnergy, eliminating \$36 million in annual funding to municipalities in the province.

⁶ The City of Halifax provides an example of such a dispute. The federal government owns the Halifax Citadel National Historic site. In calculating the amount of the payment-in-lieu of taxes, the federal government valued the 42 acres of land in downtown Halifax at \$10, despite a local assessment of the land of \$19 million. The nominal value set by the federal government reduced the amount of the grant-in-lieu of taxes by millions of dollars.

The key distinction between a tax and a user levy is that the former is a payment for the purpose of raising revenue not connected to the activity being taxed, whereas the latter is a payment connected to the activity being charged. Notably, tax revenues can be used to fund any government activity, whereas user levies are constrained in this area. For example, revenue from property taxes can be used to fund police services, public walkways, beautification efforts, street lights, and so forth. Tax revenues may be earmarked for specific purposes, for example the revenues from a local service tax may be earmarked for the purposes of providing municipal infrastructure to benefiting properties, but that earmarking is a political choice rather than a legal constitutional requirement.

3.2 User Fees

A user fee is a charge for a publicly provided good or service, the revenues for which must be solely used to fund the provision of that good or service, and the fee charged is dictated by the cost of providing the good or service. Further, payment of the fee is a necessary condition for consuming the good or service. User fees, therefore, are valuable tools related to offsetting the operating costs of municipal services. There are many examples of user fees, particularly at the municipal level, including public transit fares, recreation fees, and refuse collection payments.

These conditions have several implications for the design, implementation, and use of user fees in Canada. First, user fees are a cost-recovery revenue tool. This means that the fees must be used to recoup actual costs incurred, the revenues from user fees must be solely used to offset the costs of providing the good or service, and there must be a tight link between the activity being charged and the activities funded by the user fee revenue. That is, there is a need to track the money collected along with how the money is spent. Second, the user fee must be designed to not intentionally generate a surplus of revenues. Ongoing surpluses are a clear indication that the fee charged exceeds the costs incurred, violating the cost-recovery nature of the revenue tool. There is, however, no requirement for the revenue from the user fee to fully offset costs, but any shortfall in revenues must be made up from revenues from taxes. Third, the fee charged must be reasonably connected to the costs incurred by providing the good or service to that user. Notably, if the costs of providing the service are fixed, that is it costs the same amount to provide each unit or it costs the same amount to provide the service to every user, the fee charged cannot vary by unit or user. Unlike taxes, the legal constraints make user fees use as a general revenue tool or their use to cross-subsidize various public provided goods and services very problematic and doing so would not sustain a court challenge.

3.3 Regulatory Charges

While a user fee is a charge related to a publicly provided good or service, a regulatory charge is a charge related to a right or privilege granted by a government. Regulatory charges are a broad category of charges imposed by governments and include such levies as development charges, local improvement charges, removal and dumping charges (e.g. sand, gravel, water, landfill, electronics, and beverage containers), fines, inspections, environmental protection, and licenses (e.g. liquor, animal, and business).

There are four key components to a regulatory charge: (1) a specific regulatory purpose; (2) a detailed code of regulation; (3) actual costs incurred; and, (4) a relationship between the regulation and the person being regulated (Farish and Tedds 2014, p. 658; Althaus and Tedds

2016, p.53). Under a regulatory charge, the revenues must be used to recover the costs of the regulatory scheme, in whole or in part. That is, much like a user fee, a regulatory charge is a cost-recovery tool and the conditions described above that a user fee must meet must also be met by a regulatory charge.⁷ This means that for Canadian municipalities, regulatory charges and user fees differ only in purpose. Both are cost-recovery tools: a user fee is a charge for a good or service, whereas a regulatory charge is for a right or privilege (e.g. serving liquor, owning a dog or cat, and the disposal of specific products).

3.4 Proprietary Charges

In addition to user fees and regulatory charges, a government may invoke charges that are the “exercise of proprietary rights over its public property.” (Hogg 2014, 31.10) There are two uses for proprietary charges: first, selling directly or granting permits, leases, licenses, rents, or royalties that permit private firms to extract publicly-owned natural resources⁸; and second, selling goods and services that are supplied by government “in a commercial way.” (Hogg 2014, 31.10). Clearly, resource royalties and similar regimes fit the definition of a proprietary charge, meeting the first use listed above and are very similar to regulatory charges.

The second use of proprietary charges appears very similar to what user fees are, with the key qualifier being how they are supplied, specifically in a commercial way. Notably, that for a proprietary charge to apply as opposed to a user fee, the government must be acting like a private proprietor. Here, the charge may be determined by market forces and the government is free to generate general revenue from the imposition of the charge. That is, unlike user fees and regulatory charges, revenues from proprietary charges are not required to be solely used for cost recovery.

Examples of proprietary charges include the mark-up (i.e. profit) applied to alcohol that is owned and sold by a government commercial supplies (e.g. the LCBO in Ontario)⁹, stumpage fees to harvest timber from public land, and rental payments made to the government related to the rental (e.g. the rental payment applied for publicly provided housing) or leasing of government-owned land or property (e.g. the lease payment for a daycare to operate out of a school)¹⁰. While user fees and regulatory charges are required to be administered in a cost-recovery manner, proprietary charges are not similarly constrained. Instead, proprietary charges can generate a

⁷ There is a second permitted use of a regulatory charge. One where the size of the charge levied on persons is set to proscribe, prohibit, or encourage a specific behaviour. If the purpose of the regulatory charge is to change behaviour, then a surplus of revenues may be a permitted outcome. However, the presence of a behavioural modification aspect has been found by the courts to mean the regulatory charge meets the criteria of an indirect tax. The authority to charge indirect taxes, however, is not delegated to the provinces and, therefore, cannot be delegated to municipalities. Therefore, a regulatory charge enacted by a municipality must still meet the definition of a direct tax, which, according to the courts, means that the objective of behavioural modification as a principal objective of a regulatory charge is not available to Canadian municipalities, or provinces for that matter.

⁸ In comparison, a levy on the extraction and production of privately-owned resources would be a tax.

⁹ *Toronto Distillery Co. v. Ontario (Alcohol and Gaming Commission)* 2016 CarswellOnt 19995; 2016 ONCA 960; 135 O.R. (3d) 637; 274 A.C.W.S. (3d) 138 Ontario Court of Appeal Ontario December 20, 2016

¹⁰ *Québec (Procureur général) v. Algonquin développements Côte Ste-Catherine inc. (Développements Hydroméga inc.)* 2011 CarswellQue 11739; 2011 QCCA 1942; [2011] R.J.Q. 1967; 211 A.C.W.S. (3d) 461; 343 D.L.R. (4th) 272; J.E. 2011-1853; EYB 2011-197199 Cour d'appel du Québec Québec October 21, 2011 Docket: C.A. Qué. Montréal 500-09-019625-094 Subject: Constitutional; Natural Resources; Public

surplus of revenues over the costs incurred related to the proprietary regime, and those surplus revenues can be spent to fund any type of government activity.

3.5 Considerations

The legal limitations on these three types of user levies make them imperfect revenue tools to fund the Canadian city. With respect to user fees and regulatory charges, public finance theory says that government revenues should not be constrained to certain expenditure categories. However, this imperfection has to be balanced with the related public finance theory that user levies are more efficient than taxes. Proprietary charges are the most aligned with public finance theory in that the charge can not only be determined by market forces, rather than solely by costs, and the revenues from proprietary charges can generate a surplus of revenues that are unconstrained.

Not only are user levies efficient, user levies can also be more equitable than taxes, depending on implementation. User levies satisfy the benefits-received principle of equity, where there is a clear link between the good, service, or right being provided and the benefit the consumer receives. User levies favour the benefits received principle as it is the main beneficiary that pays. User levies, however, are often discounted by opponents as a viable option to raising revenues because they are regressive instruments. This means that the levies take up more of the income of a lower income payer than a higher income payer. This ignores that fact that whether or not a revenue tool is actually regressive depends not on the levy itself but on how the levy is designed and implemented. Any regressivity associated with user levies can often be offset by careful attention to implementation, including discounts, increased service provision, and cash transfers, but doing so requires the municipality to engage in detailed distributional analysis and take a broad view of the services that should be equitably available. That said there are areas of concern. For example, governments across Canada have committed to employing gender-based analysis to policies. Taking a gender lense, it is possible that user levies may fall more heavily on women, who tend to have a higher consumption of government services, leading to questions about the application of user fees for basic services that affect living standards and economic participation, an important distributional impact that has not yet been carefully studied.

User levies are also more visible and add to accountability. The user knows exactly what they are being charged for, how much they are consuming, and can help the user take steps to manage the amount charged. This is the concept of tax salience, the concept that people are more likely to change their behaviour in response to highly visible and highly salient taxes. User levies, therefore, add a layer of accountability between the user and government. That said, payees of user levies do not always appreciate this visibility, expressing dissatisfaction with having to pay a multitude of fees as opposed to just one property tax bill.

While aspects of efficiency, equity, and transparency are not mundane issues and need to carefully be considered, possibly the most important complexity to tackle is the overlapping nature of these user levies. What is a service? What is a right or privilege? What is a commercial purpose? A parking levy, for example, can be all of these things: on street parking can be a service, a permit related to parking privileges can be a right, and parking can also be provided on a commercial basis. While the lines can be and often are blurred between these three types of user levies, the limitations placed on these charges mean that the blurring may simply pose a choice burden on a municipality that can be addressed by being clear about the intention of the

levy, the objectives of the levy, and the legislative mandate of the body collecting the levy. In addition, careful review of the case law related to the levies can help inform design.

4.0 Opportunities for User Levies

4.1 Existing Opportunities

The data presented above shows that there has been an increasing reliance on user levies, but the lack of detailed and comparable data does not allow for a clear understanding of how this unfolds across each of the three types of user levies described here. However, given the overlapping and interchangeable nature of these levies and that different jurisdictions may apply the levies differently for the same locally provided good or service, the breakdown may not provide a useful comparison. A further complication is in some provinces, like British Columbia, some municipal services are actually provided by regional districts and the Regional Districts charge the municipalities directly for services. The municipalities then determine how to recoup those charges from the constituents. This means that the regional district can charge its municipalities a user levy for a service (e.g. sewage services, refuse collection), but the municipality is not obligated to pass that charge along to its constituents in the form of a user levy. It could, instead, pass the cost along in the form of higher property taxes. So the reliance on user levies by governments may not paint an accurate picture of whether users actually pay a user levy in some jurisdictions (Tedds 2017).

While the data on municipal public finance in Canada that was presented in section 2 above is informative, it does not allow for a comparison of revenues and expenses matched to a service line to get a clearer picture of the deployment of use levies. More disturbing is that few provinces provide such data about the financing and spending patterns of their municipalities. Such data is, however, available in the province of Alberta (Alberta 2017). The province of Alberta releases comprehensive annual statistics on revenue and expenditures by local governments within the provinces. This provincially provided data offers much greater information about the source of revenues and expenditures than provided by the Statistics Canada data presented above.

The latest year of data available for Alberta is for 2016. Information is obtained on revenues, including the portion raised through user levies, and expenses across four key municipal service lines for which user levies can be charged, meeting the criteria outlined in the chapter by Bird and Slack in this volume. These four service lines are public transit, water supply and distribution, waste water treatment and disposal, and waste management. Figure 6 presents information on user levies as a proportion of reported expenses across these four municipal service lines for all municipalities in Alberta, as well as broken down across cities as compared to all other types of smaller municipalities. Broadly there does appear to be clear evidence that municipalities in Alberta do have room to increase their reliance on user levies. Overall, Albertan municipalities obtain 75% of their revenues for all of the five service lines from user levies. The proportion is higher in cities at 77% compared to 65% in all other types of municipalities.

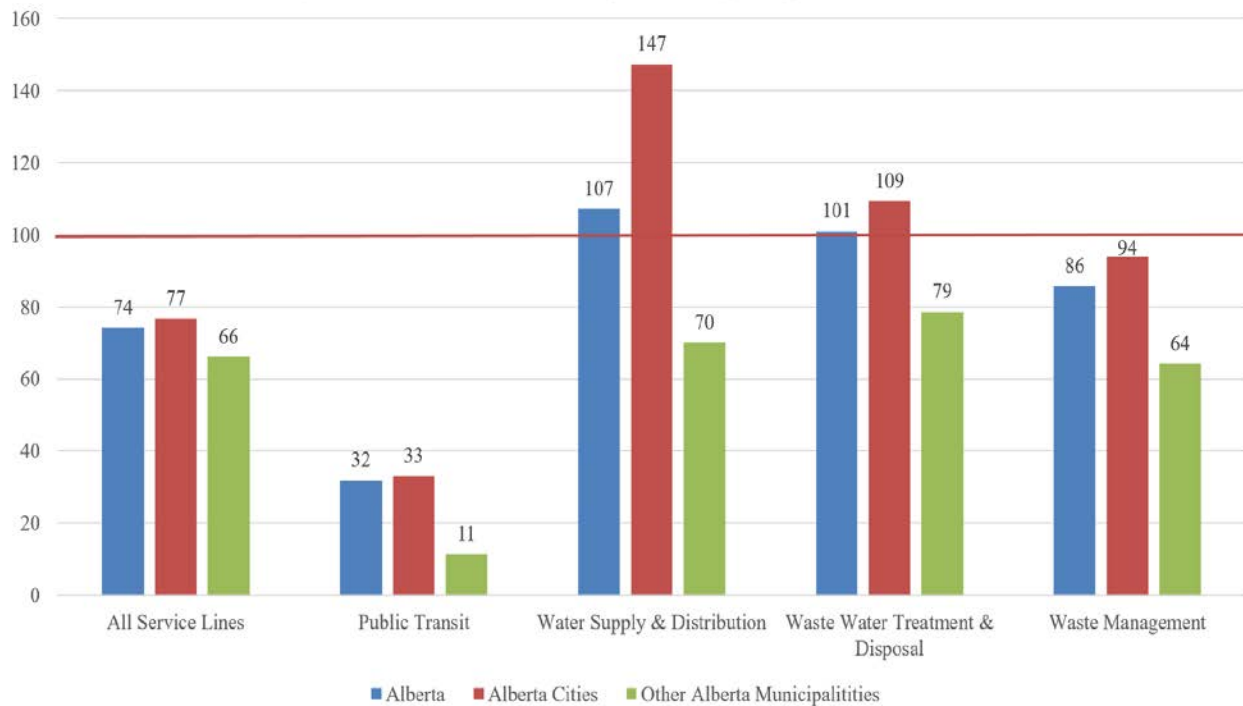
The pattern across each of the five service lines shows some interesting variation both within and across the service line. The service line with the lowest share of user levies as a proportion of expenses is public transit. Across Alberta, user levies only account for 32% of expenditures on public transit and most of this is due to cities, in which user levies account for 33% of public

transit expenditures, whereas it is only 11% in all other Albertan municipalities. As noted in the chapter by Slack and Bird (2018, p.#) in this volume:

Although it is generally believed that some of the costs of running the transit system should be covered by fares and the rest should be subsidized, the optimal amount of subsidy is difficult to determine. Part of the problem is that, because roads are not priced on a user fee basis (as discussed below), public transit usually needs to be subsidized to be competitive with road use (Parry and Small 2009).

Given that the only toll road in Alberta is related to entry into Banff National Park it is not surprising that public transit in Alberta is heavily subsidized. That said, arguments could be made that there is room to shift the model, especially considering the degree to which public transit in the City of Toronto is reliant on user levies (70-80%) (Slack and Bird 2018, p. #).

Figure 6: User Levies as Percentage of Municipal Expenses, Alberta 2016



Source: Alberta 2017

In terms of water supply, distribution, and waste water treatment and disposal, municipalities fully recover their costs of these services through user levies, and then some. Municipal user levies account for more than 100% of costs across Alberta, with cities recover nearly 150% of costs from user levies while all other types of municipalities recover 70%. There are two key concerns here. First, whether the accrued surplus from user levies relative to costs is compliant with the legal constraints on user levies, but the data is not sufficient to determine if the underlying legal authority for these levies is a user fee, regulatory charge, or proprietary charge. In that latter case, surpluses would be permitted, whereas in the form cases, they would not. Second, smaller jurisdictions have a lower recovery of costs from user fees. Whether this is due to a greater reliance on property taxes or grants due to small population bases is a question for consideration.

It is interesting to compare this Alberta data with that from a recent study by the Ecofiscal Commission. The Ecofiscal Commission (2017) recently conducted a detailed analysis of the application of user levies to municipally provided water and wastewater systems in Canada. They found that over the past two decades municipalities have shifted towards user charges for these systems. In particular, they found that 80% of larger cities currently derive their water utility revenues from user levies, but a much smaller proportion of revenues come from user levies in small municipalities. Instead, small municipalities rely more on funding from federal and provincial grants. While they noted that the trend though varies across Canada, almost every municipality in Western Canada already charges user levies for water services. In contrast, municipalities in Quebec still rely heavily on property taxes to fund water and wastewater system, which may explain why water leaks are the highest in Quebec than in any other province (Environment Canada 2011, p. 8). It is interesting to note, however, that while Canadians overall are still the highest consumers of water, Alberta has the second lowest total water use per capita in Canada (Environment Canada 2011, p. 5). It may be that this is the direct result of the user levies on the service lines.

The last service line to be considered is related to waste management. Municipalities in Alberta recover 86% of their waste management costs from user levies. As with the other service lines, the share is much higher in cities (94%) than in other types of municipalities (64%). While these levies appear to align with a model of cost recovery, it is not clear that the fees align with encouraging waste reduction and waste diversion from landfills. For the most part, the waste management user levies in Alberta are fixed monthly fees that do not vary according to waste generation. This is important since Canadians are among the biggest generators of waste in the world, diverting a relatively small share of their waste away from landfills.

4.2 *Emerging Opportunities*

As noted in the chapter by Slack and Bird (2018) in this volume, it may be that the best time to convince users that they should pay for the services they consume is when the initial investment needs to be made or when something has changed to elevate the importance of increased investment in or highlight the pressure on existing infrastructure. In this case it is worthwhile to explore emerging areas in which user levies could be introduced or expanded.

4.2.1 Storm Water Levies

According to Environment and Climate Change Canada (2016), many areas in Canada have been experiencing increased precipitation year-round. This increase in precipitation has led to an increase in over land flooding incidents (Government of Canada 2016) and mounting pressure for municipalities to increase their efforts in managing storm water to reduce such flooding incidents. Further, as the severity, intensity, and regulatory implications of precipitation events in most of Canada are expected to continue to increase due to climate change this increases the need for funding for storm water infrastructure and their associated operating costs. In addition, the amount of impervious surfaces in municipalities, like roads, buildings, rooftops, patios, and paved surfaces mean that the precipitation that is falling cannot be as easily absorbed, meaning the water has few places to go other than the storm water system. Finally, many provinces and the federal government have legislated that municipalities address the environmental impacts of storm water pollution in public waterways. Storm water eventually ends up ponds, rivers, lakes,

oceans, and the like and as the water travels over properties on its way to the storm water system it picks up various environmental contaminants, include pesticides, motor oil, and chemicals.

In many jurisdictions in Canada, most of the costs associated with building, operating, and maintaining the storm water system are funded through property taxes, particularly in non-urban areas. The limitation of relying on property taxes is that funding for storm water infrastructure must compete with other priorities, and it provides no incentive to the property owner to take action to reduce the flow of water from the property into the storm water system by reducing the amount of impervious surfaces on their property.

Some jurisdictions have begun to apply a storm sewer charge on water or sewer bills, but this typically means the fee is either fixed or related to water usage, either of which are poor measures of usage of the storm water system. Further, imposing a levy on a water or sewer bill exempts properties that do not use these municipal services (i.e., they are on well water or septic) yet directly benefit from the storm water system, does not incentivize property owners to reduce the amount of impervious surface area on their property, and in some municipalities means that the City itself must also pay the levy, creating the need for it to find a way to fund this payment.

A levy that was popularized in the U.S. and has recently seen implementation in Canada is a storm water user fee based, at least in part, on a property's impervious area. There are two cost components to fund storm water: the fixed costs related to the infrastructure itself and the variable costs that come from the pressure storm water run-off places on the infrastructure. The fixed portion of the fee, which is related to the infrastructure costs, could differ across broad categories of users. For example, the infrastructure costs for properties in rural areas may differ from those costs for properties in urban areas and the fixed portion could vary according to these differences. The variable cost based on impervious surface is more administratively complex, which is likely why the take up in Canada has been low so far. The ideal would be to assess every property for factors that contribute to storm water run-off (e.g. slope, vegetation, buildings, paved surfaces), but doing so would be complicated. It is something that could be considered to be included in provincial property assessments over time as a way to encourage municipalities to move towards the user pay model, something recommended by the Environmental Commissioner of Ontario (ECO 2016). In lieu, the variable portion could be based on an equivalent residential unit which is "calculated through a statistical sampling of measured impervious areas for residential dwelling to determine the average equivalent residential unit (ERU) or single-family unit (SFU) (square meters of impervious area) that are used as the base billing unit against which the fee is calculated." (ECO 2016, p. 20) The municipality can then also provide incentives to reduce impervious surfaces by providing discounts for property owners that enact changes that reduce the amount of impervious surface by a substantial degree.

The storm water user fee could be paired with a development regulatory charge that is applied to new developments or redevelopments to cover the costs of providing services and infrastructure to the development. Including the costs of storm water infrastructure could help cover the costs of the initial infrastructure requirements, with the user fee then applying to the homes to cover the costs of repair, maintenance, replacement, and operations. The charge could be reduced for developers that develop projects that have less impervious surfaces.

4.2.2 Electric Vehicle Charging Levies

Electric Vehicles (EVs) are becoming more common place on Canadian roads: electric vehicle sales increased 56% in 2017 over 2016, and there are an estimated 42,000 total EVs in Canada (Stevens 2017). EVs are most popular in Quebec and B.C. but are seeing a rise in popularity in Ontario (Stevens 2017). Governments in Canada seem eager to support the purchase of EVs. The federal government, through Budget 2016, provided \$62.5M over two years to support alternative transportation fuels and infrastructure, including charging infrastructures for EVs, and accelerated to the capital cost allowance provided under the tax system so that expenses related to EV charging stations can be deducted more quickly. Many provincial governments are providing various tax incentives towards the purchase of EVs as well as working with the federal government to roll out charging infrastructure.

The increasing demand for EV charging stations, however, also presents a challenge and opportunity for municipalities. Municipalities, particularly in B.C., are eager to support measures to reduce community greenhouse gas emissions, yet providing EV infrastructure to help promote an EV shift in pursuit of this is costly. Indeed, the ability to charge an EV remains one of the biggest barriers to EV take-up by consumers (City of Port Coquitlam 2017, p. 6). While, as noted above, there is an effort by governments to fund the establishment of EV charging stations, municipalities may not find the locations suitable to their needs and still need to consider the operating costs of this infrastructure as well as related costs. Given that there are both individual benefits and social benefits to EV use if they reduce air pollution and greenhouse gas emissions, this suggests there is some role for the public subsidization of EVs through the revenues from broadly applied taxes, but also a role for user levies. Further, the free provision of municipal EV charging can result in unwanted behavior, including EV drivers preferring municipal charging stations over charging at home or at the workplace because of the cost differential, and EV drivers monopolizing municipal EV stations, reducing access and turnover of the stations.

There are three inter-related aspects to providing EV charging stations: a parking space, a charging station infrastructure and its maintenance¹¹, and the cost of the electricity consumed for charging¹². Municipalities, of course, through its by-laws can ensure that EV infrastructure is part of any new buildings and developments and can provide incentives for the private sector to provide the infrastructure. There are also opportunities for municipalities to obtain revenues from this demand. First, private suppliers, like Tesla, are interested in installing their charging stations in municipalities. Rather than these be solely at private facilities, the municipality can negotiate the installation of these privately-provided charging stations on municipal property in exchanging for a rental/leasing charge for the use of the property. In this case a leasing charge would be a proprietary charge. A related problem with this model, however, is what to do about the parking spot that will be redeployed and used by the EV chargers. Does it also become part of the proprietary charge related to the EV charging station or does the municipality charge separately for the parking? Not charging for the parking leads to incentivizing EV drivers to remain parked at and hooked up to the EV charging station, despite their vehicle no longer needing a charge. Additionally, the private provision model may not align with the objectives of

¹¹¹ The costs associated with the preparation of a site and the installation of the EV charging station itself should not be understated. The costs of preparation rise according to the distance from a power source, the available electrical supply, and the type of charging station. (Government of Connecticut 2014, 9. 9)

¹² In many jurisdiction, including B.C., the re-sale of electricity for profit is prohibited. Electricity can, however, be resold at cost.

the municipality, notably ensuring the fee charged by the private provider still encourages EV take-up.

Alternatively, the municipality could buy or lease the infrastructure themselves and provide the service directly and recoup their costs in several ways. One model would be a user fee where the fee would reflect the cost of the one-time service. Another model would be to develop a regulatory scheme with an associated regulatory charge related to charging, either in lieu of the user fee model above or in tandem. In this case, the municipality would issue permits to applicants that would permit them to use the municipally provided EV charging infrastructure. In either case, the fee or charge should reflect all costs to some degree as reflected in the policy of the municipality: parking, infrastructure, maintenance, and electricity. This means that the fee would most likely be a combination of a fixed and variable fee. The fee or charge would have to be set to meet the competing objectives of cost recovery, ensuring turnover of spaces, encouraging home charging, incentivizing take-up of EVs, and fairness across users and nonusers. These competing objectives may mean there would still be some need for a municipality to cover a portion of the associated costs through revenues from taxes. Doing so, however, should be carefully considered and assessed given that EV use is highly positively correlated with income and wealth.¹³

4.2.3 Linear Property Levies

Most people are familiar with the residential and commercial property along with their features, but many are unfamiliar with linear property. Linear property is typically property that crosses municipal boundaries and includes pipelines, wells, electric power systems, telecommunications systems, cable distribution, and the like (Government of Alberta 2017). Linear property poses challenges to municipalities along several lines. One challenge pertains to the direct burden linear property places on municipalities in terms of costs that may not be fully addressed through a linear property tax revenue system, if one exists. Another challenge is that many linear property pose potential environmental consequences, particularly pipeline and well development. In addition, there is the risk of environmental contamination that could result in ongoing costs to the municipality. Adding to this risk is that when the linear property is not directly on municipal property, the municipality may not know precisely the location of the property hindering risk assessment and response. This brings along the fact that municipalities faced with linear property in their region face costs related to ensuring appropriate emergency response systems, teams, training, equipment, and clean-up, all of which is often highly specialized to each form of linear property (Pearce et al 2015, p. 4). Finally, the municipality may also face economic risk, including costs associated with development constraints, loss of space, loss of agricultural land, and loss of tourism (Pearce et al 2015, p. 7) which is not addressed through other means. While some may want to discount these concerns, tackling them may go a long way to increasing support for the expansion of linear property in Canada, notably pipelines.

When a linear property runs along private property, the owner of linear property typically pays the property owner rent for the use of the land. The same can be true for linear property that runs along (or under) municipal sidewalks, roads, and other property. This property is a public right of way and municipalities have the right to manage the public right of way according to their local

¹³ The most recent data from the Center for Sustainable Energy shows that more than 75% of EVs sold are sold to people earning \$100,000 or more a year (Center for Sustainable Energy (2018).

standard. This includes the ability to charge for the use of the public rights of way by owners of linear property. There are two ways to do this. One way is through a local rights-of-way access fee, which is commonly classified as a regulatory charge. This route has the municipality establish a regulatory charge that is ancillary to a detailed regulatory regime that is detailed in a by-law. Through this regulatory scheme, municipalities could recoup their costs, including those related to permitting, coordination, inspections, administration, repair, and damage costs. It may also be able to recoup any costs related to emergency response and levy fines provided that the regulatory scheme is written accordingly. The regulatory regime and fee can also require the owner of the linear property to obtain a permit before it accesses the linear property for any reason.

Another approach, often employed in a complementary way to a right-of-way access regime, is through franchise or access agreements (FCM 2009). An important part of a franchise agreement is a proprietary charge that permits access to municipal property. Rather than a one-size fits all approach to regulating access to municipal property that occurs through a rights-of-way regime, this approach has the municipality negotiate individual agreements with each linear property owner wanting access to the municipal rights-of-way. A franchise of access agreement sets use the charges and the conditions for use of public land. The owner of the linear property then is free to pass these costs onto the consumer. The franchise agreement could establish, as part of the charges, a fair market rate for the access to the public right-of-way which would allow for revenue generation opportunities, as permitted under a proprietary charge.

It should, however, be noted that a proprietary charge related to a public right of way has been rejected by the CRTC related to telecommunications linear property. This was embedded in a 2001 Canadian Radio-television and Telecommunications Commission (CRTC) decision (Ledcor), which greatly limited the costs municipalities could recoup through the rights-of-way regulatory charge regime, notably related to casual costs and rejecting proprietary charges (CRTC 2001; Federation of Canadian Municipalities 2008, 2009) and some telecommunications providers ignore the need to seek approval and pay for access.

4.3 Considerations

It has already been established that municipal governments are employing user levies to a greater degree than both the federal and provincial governments, but municipalities are provided with very little guidance from provinces with respect to the varied application of user levies. While large municipalities have the ability to rely on sophisticated internal and external advice, the same is not true of smaller jurisdictions that lack internal capacity. That data clearly shows that some municipalities are demonstrating a greater success at employing user levies than others. Some of this can be ameliorated by a broad municipal user levy design and implementation guide, similar to that provided by Althaus and Tedds (2016) for user fees. The knowledge gap can also be bridged by examining case studies related to emerging opportunities for the expanded reliance of user levies. A number of the current pressures being faced by municipalities appear to be ripe for funding through user levies, but whether any particular municipality has the authority to levy these charges on these services would be dependent on a review of that municipalities enabling legislation and careful attention to the crafting of the by-law, regulatory regime, or related supporting document.

5.0 Conclusion

This chapter documents the increasing use of user levies by municipalities in Canada. User levies account for between 26-58% of municipal own-source revenue, varying by province. While there is no easy way to break this down by type of user levy with the data that is available, the trends suggest that the provinces vary in their knowledge, understanding, and benefits of user levies and their broad applicability, though Alberta seems to have heard the message. The chapter details the three different types of user levies available to municipalities and details the legal limitations of them. While these legal limitations limit the tools as revenue sources, they still provide valuable ways for municipalities to manage their proprietary interests and recoup costs, alleviating pressures on the property tax revenues. To aid municipalities take up of various user levies, the chapter also considers the deployment of user levies by Alberta municipalities in four key areas and the emerging application of user levies in three emerging areas, namely; storm water levies, EV charging levies, and levies on linear property. This shows that municipalities have room to expand their use of the various user levies in novel ways.

References

- Alberta, Municipal Affairs, 2017, Municipal Financial and Statistical Data. Retrieved from http://www.municipalaffairs.alberta.ca/municipal_financial_statistical_data
- Bird, Richard M. and Enid Slack (2014) “Local Taxes and Local Expenditures in Developing Countries: Strengthening the Wicksellian Connection,” *Public Administration and Development*, 34 (4): 359-369.
- Canadian Radio-television and Telecommunications Commission, 2001, *Ledcor/Vancouver-Construction, operation and maintenance of transmission line in Vancouver (Decision CRTC 2001-23)* (January 25, 2001) Available <https://www.crtc.gc.ca/eng/archive/2001/dt2001-23.htm>
- Catherine Althaus, Lindsay M. Tedds, and Allen McAvoy, 2011, The Feasibility of Implementing a Congestion Charge on the Halifax Peninsula: Filling the “Missing Link” of Implementation, *Canadian Public Policy*, Vol 37, No. 4, pp. 541-561.
- Catherine Althaus and Lindsay M. Tedds, 2016, *User Fees in Canada: A Municipal Design and Implementation Guide* (Toronto: Canadian Tax Foundation, 2016)
- Center for Sustainable Energy (2018). California Air Resources Board Clean Vehicle Rebate Project, EV Consumer Survey Dashboard. Retrieved [insert date retrieved] from <http://cleanvehiclerebate.org/survey-dashboard/ev>.
- City of Port Coquitlam, 2017, Report to Smart Growth Committee (January 27). Accessible
- Dahlby, Bev and Melville McMillian (2018) What is the Role of Property and Property-related Taxes? An Assessment of Municipal Property Taxes, Land Transfer Taxes, and Tax Increment Financing (chapter in this volume)

EcoFiscal Commission, 2017, *Only the Pipes Should Be Hidden*. Consulted 18 March 2018. Available at <http://ecofiscal.ca/wp-content/uploads/2017/09/Ecofiscal-Commission-Report-Only-the-Pipes-Should-be-Hidden-FINAL-Sept-26-2017.pdf>

Environment Canada, 2011, *2011 Municipal Water Use Report: Municipal Water Use 2009 Statistics*. Consulted 27 February 2018. Available https://ec.gc.ca/Publications/B77CE4D0-80D4-4FEB-AFFA-0201BE6FB37B%5C2011-Municipal-Water-Use-Report-2009-Stats_Eng.pdf

Environment and Climate Change Canada, 2016, *Canadian Environmental Sustainability Indicators: Precipitation Change in Canada*. Consulted 18 January 2018. Available <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/precipitation-change.html>

Environmental Commission of Ontario, 2016, *Urban Stormwater Fees: How to Pay for What We Need*. Available <https://media.assets.eco.on.ca/web/2016/11/Urban-Stormwater-Fees.pdf>

Kelly Farish and Lindsay M. Tedds, 2014, User Fee Design by Canadian Municipalities: Considerations Arising from Case Law, *Canadian Tax Journal*, Vol. 62, No. 3.

Kitchen, Harry (2018) Beyond Property Tax: What Taxes for Large Cities (chapter in this volume)

Federation of Canadian Municipalities, 2008, *Highway Robbery: How federal telecom rules cost taxpayers and damage public roads*. Available https://fcm.ca/Documents/reports/Highway_robbery_how_federal_telecom_rules_cost_taxpayers_and_damage_public_roads_EN.pdf

_____, 2009, *Dealing with Telecom Companies: Protecting Municipal Rights of Way*. Available https://fcm.ca/Documents/reports/Dealing_with_Telecom_Companies_Protecting_Municipal_Rights_of_Way_EN.pdf

Government of Alberta, 2017, *Linear Property Assessment: 2017 Annual Report*. Available http://www.municipalaffairs.alberta.ca/documents/as/2017_Annual%20Report_Linear%20Property_2017-05-01_Rpt.pdf

Government of Canada, 2016, *What is overland flooding?*. Last modified 10 November 2016. Available <https://www.canada.ca/en/campaign/flood-ready/overland-flooding.html>

Government of Connecticut, 2014, *Guidelines for the Installation of Electric Vehicle Charging Stations at State-Owned Facilities*. Available http://www.ct.gov/deep/lib/deep/air/electric_vehicle/guidelines_for_the_installation_of_electric_vehicle_charging_stations_at_state_facilities.pdf

Peter W. Hogg, 2014, *Constitutional Law of Canada*, fifth edition (Toronto: Carswell, 2014)

Scott Pearce and Frederick Jones, 2015, *Pipeline Safety: Municipal Concerns and Expectations*. (June 2, 2015). Accessible <https://www.neb-one.gc.ca/sftnvrnmnt/sft/2015frm/prsnttn/Scott-Pearce-eng.pdf>

Lindsay M. Tedds. 2017. "Municipal User Fees in Western Canada." Enid Slack and Richard Bird (Eds.). *Financing Municipal Infrastructure: Who Should Pay?* (McGill-Queen's University Press, Toronto, ON) (forthcoming)

Slack, Enid and Richard M. Bird (2018) *Municipal Taxation in Canada's Federal System: Linking Taxes and Expenditures?* (chapter in this volume)

Statistics Canada. Table 385-0033 - Canadian government finance statistics (CGFS), statement of operations and balance sheet for the federal government, annual (dollars) (accessed: November 23, 2017)

Statistics Canada. Table 385-0034 - Canadian government finance statistics (CGFS), statement of operations and balance sheet for the provincial and territorial governments, annual (dollars) (accessed: November 23, 2017)

Statistics Canada. Table 385-0037 - Canadian government finance statistics, statement of operations and balance sheet for municipalities and other local public administrations, annual (dollars) (accessed: November 23, 2017)

Matthew Stevens, 2017, *Electric Vehicles Sales in Canada, Q3 2017* (November 7). Accessible <https://www.fleetcarma.com/electric-vehicle-sales-in-canada-q3-2017/>