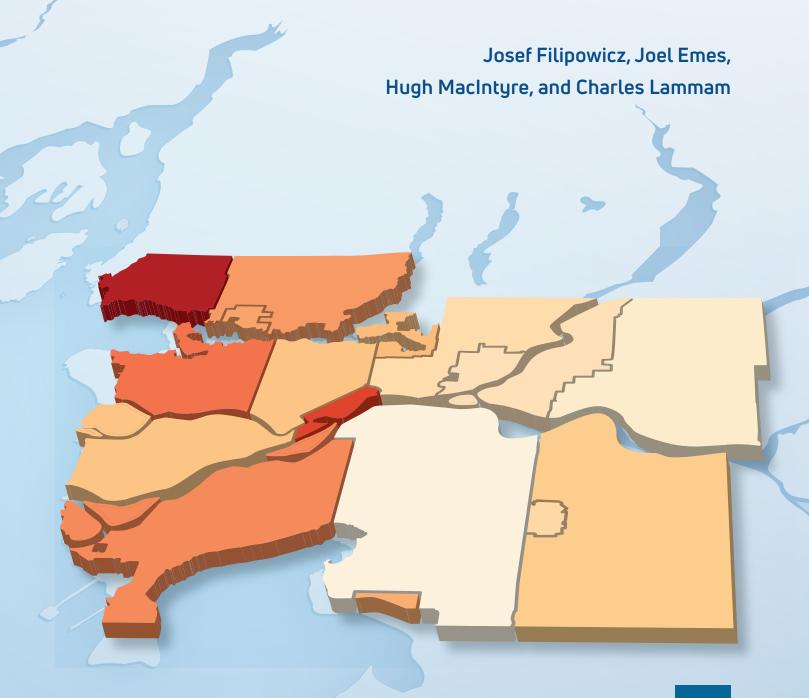
Comparing Municipal Government Finances in Metro Vancouver, 2018 Edition



2018

Comparing Municipal Government Finances in Metro Vancouver 2018 Edition

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Executive Summary

Municipal governments play an important role in the lives of British Columbians by providing key services and collecting taxes. But municipal finances do not receive the same degree of public scrutiny as the finances of senior governments. This can pose a problem for taxpayers and voters who want to understand how their municipal government performs, especially compared to other municipalities. To help create awareness and encourage debate, this report provides a summary analysis of important financial information for 17 of the 21 municipalities in Metro Vancouver, spanning the 10-year period from 2007 to 2016.

Government spending

There is considerable variation in per-person spending among the 17 Metro Vancouver municipalities. West Vancouver, the highest spender in 2016 (at \$2,583 per person), spends more than twice the amount spent by Surrey, the lowest spender (at \$1,057 per person), and more than one-and-a-half times the regional average (\$1,549 per person). But the large differences in per-person spending do not seem to be driven by population. For instance, the City of Vancouver has the largest population and is the third highest spender (\$1,944 per person), while Surrey has the second largest population and is the lowest spender (17th). From 2007 to 2016, all 17 municipalities increased per-person spending, after inflation. But the growth in inflation-adjusted spending per person was faster in some municipalities than others. The District of Langley had the fastest growth (46.6%) and Port Coquitlam had the slowest (3.3%). The regional average was 21.3%.

Government revenue

As with spending, there is great variation in per-person revenue levels among the 17 Metro Vancouver municipalities. In 2016, West Vancouver collected the most revenue per person (\$3,253)—nearly \$1,600 more per person than Pitt Meadows (\$1,661), which collected the least, and more than one-third above the regional average (\$2,256). Interestingly, the largest municipality—the City of Vancouver—collected the third highest total revenue per person (\$2,693) in 2016 while the second largest municipality—Surrey—collected the second lowest (\$1,673). Notably, large differences exist between neighbouring municipalities in terms of the amount of revenue they collect per person. After accounting for population growth and inflation, the City of Langley and Port Coquitlam are the only two municipalities that experienced a reduction in revenue per person over

the period of analysis. All other municipalities saw growth, with all except two (Richmond and Pitt Meadows) in the double digits. For the region as a whole, inflation-adjusted revenue per person grew by 25.3%, faster than the rate of spending growth (21.3%).

When it comes to developer fees, which are essentially taxes levied on property developers, Surrey, Maple Ridge, Port Coquitlam, and the District of Langley all relied more heavily on this revenue source than other municipalities over the decade analyzed. However, a high reliance on developer fees can have adverse implications because, as research shows, in some markets such taxes can be passed on to homebuyers, leading to higher prices for new homes and possibly existing housing. This is a critical issue for Metro Vancouver, which already has high home prices relative to other Canadian regions.

For property taxes, another key revenue source, some municipalities rely more heavily on businesses, as opposed to residents. The City of Langley has the largest property tax share coming from businesses at 50.9% and West Vancouver has the lowest at 7.0% (the range for most municipalities is between 28.3% and 46.8%). However, imposing too heavy a property tax burden on businesses can have negative economic consequences since property tax rates can influence business decisions about whether or not to maintain operations, expand, or relocate. This is particularly important for Vancouver, which in many ways is the economic hub of the region. Yet the share of Vancouver's property tax revenue coming from businesses (46.8%) is above both the regional average (40.3%) and the share found in Surrey (31.5%); the city also has among the highest ratios of business-to-residential property tax rates. For instance, Vancouver's heavy industry tax ratio is almost five times that of Surrey, the next largest municipality by population.

Government debt and interest spending

All Metro Vancouver municipalities examined in this report are in a net financial assets position. These range from \$107 per person in Surrey to \$5,023 in Burnaby. Vancouver, unique in its ability to issue government debt on its own authority, also has the highest interest expenditure relative to its operating spending (3.2%). Provincial regulations that require balanced operating budgets and that limit debt accumulation play an important role in keeping municipal debt low.

Introduction

Municipal governments provide many important services that directly affect the daily lives of city residents, including police and fire protection, water utilities, garbage collection, and parks and recreational facilities. They also extract revenue through various methods such as taxation (including property taxes), user fees, and fees paid by land developers. Despite the fact that municipalities play an important role in the lives of British Columbians, the finances of municipal governments tend not to receive the same level of scrutiny as those of the federal and provincial government. [1] As a result, it can be difficult for taxpayers and voters to understand the state of their municipal government's finances and even more difficult to understand how their government performs relative to others. [2]

While provincial regulations help limit financial mismanagement—for instance, municipal governments are generally required to balance their operating budgets every year—a balanced operating budget is only one indicator of healthy government finances. [3] Taxpayers need further information and analysis if they are to make a more complete judgement about the financial state of affairs of municipal governments.

^[1] Some organizations have tried to shed light on local government finances in British Columbia. Most notably, the Canadian Federation of Independent Business has published numerous studies looking at municipal finances. For the latest in the CFIB series, BC Municipal Spending Watch, see Truscott, Aerts and Protzer, 2017. The Business Council of British Columbia has also examined Metro Vancouver spending (see Peacock, 2016).

^[2] In 2012, the BC government created the Auditor General for Local Government (AGLG) to improve the performance evaluation of local governments in the province. The first AGLG report was published April 30, 2014, followed by a series of audits, perspectives, and targeted research on various topics pertaining to local government. However, this is merely one step in the right direction and not a panacea for poor local government performance (Veldhuis and Lammam, 2012). Experience with a similar office at the federal level has shown that an Auditor General does not prevent problems from reoccurring, even if the audit reports generate short-term media and public attention (Lammam, MacIntyre, Clemens, Palacios, and Veldhuis, 2013). Like the federal Auditor General, the AGLG lacks the authority to compel municipalities to improve their financial reporting and take corrective action when problems are identified.

^[3] See MacIntyre and Lammam, 2014 for a discussion of provincial regulations on debt accumulation.

This report provides a summary analysis of important financial information for 17 of the 21 municipalities in Metro Vancouver, [4] by far the largest regional district in the province, spanning a 10-year period from 2007 to 2016. [5] It is an update of an earlier report belonging to a series released in 2014 analyzing the state of municipal finances in Metro Vancouver (Lammam, Emes and MacIntyre, 2014; Lammam and MacIntyre, 2014; MacIntyre and Lammam, 2014). The series' aim was to foster greater public attention and encourage debate about municipal finances in the region.

The intention of this report is not to make an assessment of any particular municipality's finances—for instance, whether taxes or spending is too high or whether municipal governments produce good value for taxpayers. That is beyond the scope of the report, which is a summary analysis of key financial data. The intention is, however, to inform the public about the state of municipal finances and provide some basic comparative information that is otherwise not readily available. Further research into the reasons behind the differences in the financial statistics we observe is warranted, based on the questions raised in this report.

This report is organized as follows. The first section explains the data source used for the analysis and describes key data adjustments that were made. The second section provides an overview of government spending for the 17 Metro Vancouver municipalities in 2007 and 2016, while the third section provides a similar overview of revenue. The fourth section examines interest expenditures on outstanding municipal debt. The final section summarizes the report's findings. In addition, there are four appendices providing: a detailed description of the database; additional spending and revenue tables; adjustments to revenue; and summary profiles for each of the 17 municipalities.

^{[4] &}quot;Metro Vancouver" is formally the Metro Vancouver Regional District (until 2017, the Greater Vancouver Regional District). The regional government spends on major local services such as water, sewers, drainage, solid-waste disposal, regional services, and the Metro Vancouver Housing Corporation. However, the purpose of the paper is to examine the finances of "lower tier" local governments and not the regional government

^[5] The period from 2007 to 2016 was selected because 2016 was the latest year of available data during this report's production, and 10 years is a reasonable time span for analyzing trends over the longer term. For more details see Appendix 1 (p. 35).

1 Background

This section has three purposes. First, it explains why we focus on municipalities in Metro Vancouver. Second, it introduces the data source used for analyzing municipal government finances, including spending and revenue. Third, it notes key adjustments made to the data in the report.

Why focus on Metro Vancouver?

Differing relationships between regional districts and municipalities in British Columbia make province-wide municipal comparisons difficult. Besides a few activities mandated by the provincial government, the services provided by regional districts are diverse and largely dependent on what their constituent municipal governments want them to do (Bish and Clemens, 2008; Bish and Filipowicz, 2016). We focus solely on Metro Vancouver to avoid the difficulties in comparing spending in areas where municipal responsibilities differ from one regional district to another [6] and because the Metro Vancouver region contains the lion's share of the provincial population living in municipalities: in 2016, the region's combined population was 2.5 million or 60.3% of the 4.2 million living in municipalities in British Columbia. [7]

Data source—local government statistics

Municipal finances can be difficult to comprehend owing in part to differences in accounting practices and an inability to draw reliable conclusions (Dachis and Robson, 2014). In British Columbia, reporting on municipal finances is greatly aided by the Local Government Statistics database, which is published by the provincial government's Ministry of Municipal Affairs and Housing (2018). The provincial government requires municipalities to produce annual financial

- [6] A regional district government can also provide services within one of its constituent municipalities that are not offered in other municipalities. One example of a regional district service in Metro Vancouver not provided to all 21 municipalities is fire protection. The Villages of Anmore and Belcarra receive fire protection services from the Sasamat Volunteer Fire Department, which is funded by Metro Vancouver, but similar services are funded by the lower tiered municipalities elsewhere in the region (Metro Vancouver, 2017).
- [7] The database used in this report does not include population figures for areas outside municipalities. There were 510,768 people (10.7% of BC's population) living in unincorporated areas in 2016 (British Columbia, BC Stats, 2018). For more information on the Local Government Statistics database, see Appendix 1 (p. 35) and British Columbia, Ministry of Municipal Affairs and Housing, 2018.

information on a consistent accounting basis in calendar year format (January to December). [8] Importantly, the data in the Local Government Statistics database are for municipalities only; other local government units such as school boards are not included. [9] A more complete description of the Local Government Statistics can be found in Appendix 1 (p. 375).

A key term to define is "spending", which throughout the report refers to a municipal government's operating spending—that is, spending on public services such as policing, utilities, garbage, and parks. Such spending includes debt servicing payments (by design of the database) but excludes capital spending, which is spending on acquiring or improving capital assets such as a sewage system. Capital spending is excluded because its treatment switched in 2009 to an accrual basis that spreads the cost of capital spending over several years (British Columbia, Ministry of Community, Sport, and Cultural Development, 2016a). As a result, capital spending before and after 2009 is not strictly comparable.

Adjustments to the data

The report examines the government finances of 17 of 21 municipalities in Metro Vancouver. [10] The four municipalities not covered are Belcarra, Lions Bay, Bowen Island, and Anmore, which together account for approximately 0.3% of the total municipal population in Metro Vancouver. They were excluded because they individually have populations below 5,000 and thus different financial arrangements than the other municipalities. Specifically, a municipality with a population below 5,000 is not required by the provincial government to offer police services. Local police services in these municipalities are provided by the provincial government, typically contracted out to the RCMP. [11]

A data adjustment was made for the unique case of West Vancouver. Unlike other Metro Vancouver municipalities, West Vancouver operates its transit services through the Blue Bus system. The municipality spends on such services and

^[8] At the time of writing, the Local Government Statistics database was available online from 2005 to 2016 at http://www.cscd.gov.bc.ca/lgd/infra/statistics_index.htm. Earlier years are available upon request.

^[9] The Local Government Statistics database, however, also provides financial information on regional districts.

^[10] This report also excludes Electoral Area A, which encompasses several peripheral or smaller communities, such as the sparsely populated areas north of North Vancouver, Barnston Island, and the University Endowment Lands west of the University of British Columbia. Electoral Area A is unincorporated, and therefore not included in the Local Government Statistics database. According to Statistics Canada, its population was 12,988 in 2016 (Statistics Canada, 2016)—well under 1% of Metro Vancouver's total population.

^[11] Municipalities with a population of 5,000 to 15,000 pay 70% of the cost while municipalities with over 15,000 pay 90% (Province of British Columbia, 2012).

is then reimbursed by Translink, the regional transit authority. [12] As a result, unadjusted spending and revenue figures for West Vancouver include items not included in other municipalities. The amount of the Translink reimbursement was removed from West Vancouver's spending and revenue figures and from the aggregate Metro Vancouver figures to make West Vancouver's data comparable with the other municipalities.

Adjustments were made throughout the report to account for inflation and differences in population. As **table 1** shows, population varies greatly among the 17 municipalities examined. The City of Vancouver has the largest population with 651,619 or 25.7% of the total. Surrey has the second largest with a population of 546,853 (21.6%), followed by Burnaby at 234,110 (9.2%) and Richmond at 214,596 (8.5%). Coquitlam, the District of Langley, and Delta are the other municipalities with a population over 100,000. At the other extreme is White Rock with the smallest population of 19,371 or 0.8% of the total. Pitt Meadows,

Table 1: Municipal population in Metro Vancouver, 2016

	Population	Percentage of total	Rank
Vancouver	651,619	25.7%	1
Surrey	546,853	21.6%	2
Burnaby	234,110	9.2%	3
Richmond	214,596	8.5%	4
Coquitlam	148,337	5.9%	5
Langley, District of	123,096	4.9%	6
Delta	102,361	4.0%	7
North Vancouver, District of	86,913	3.4%	8
Maple Ridge	86,144	3.4%	9
New Westminster	73,255	2.9%	10
Port Coquitlam	61,541	2.4%	11
North Vancouver, City of	53,564	2.1%	12
West Vancouver	43,457	1.7%	13
Port Moody	34,414	1.4%	14
Langley, City of	27,413	1.1%	15
White Rock	19,371	0.8%	16
Pitt Meadows	19,680	0.8%	17
Total—Metro Vancouver	2,534,584		

Note: Total population includes all 21 municipalities in Metro Vancouver although the populations of four municipalities—Bowen Island (3,587), Anmore (2,328), Lions Bay (1,327), and Belcarra (618)—are not listed.

Sources: British Columbia, B.C. Stats, 2018; calculations by authors.

^[12] Gerald Yip, Accounting Supervisor, District of West Vancouver, personal communication, April 28, 2014.

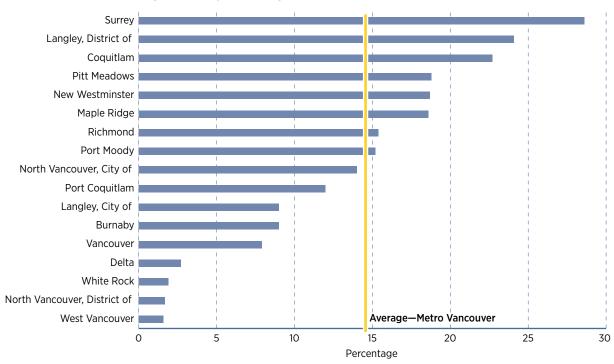


Figure 1: Population growth (%) in Metro Vancouver, 2007-2016

Sources: British Columbia, B.C. Stats, 2018; calculations by authors.

the City of Langley, Port Moody, and West Vancouver all have a population less than 50,000. Because of the variation in population, financial data are presented on a per-person basis unless otherwise noted. In addition, the 2007 values are adjusted to 2016 dollars to make both years spending and revenue figures directly comparable. [13]

There has also been great variation in population growth among Metro Vancouver municipalities over the last decade. The region as a whole grew 14.6% (322,123 new residents) between 2007 and 2016, led by Surrey with 28.6% growth (121,700 new residents) and the District of Langley with 24.1% growth (23,893 new residents). The North Shore municipalities of West Vancouver and the District of North Vancouver are at the other end of the scale with population increases of 1.6% and 1.7%, respectively (figure 1). The City of Vancouver, which is in many ways is the region's core, experienced growth (7.9%) well below the regional average.

^[13] The Consumer Price Index (CPI) for the Census Metropolitan Area (CMA) of Vancouver (Statistics Canada, 2018) is used to calculate inflation adjustments.

2 Municipal Spending

This section analyzes spending in 17 of the 21 Metro Vancouver municipalities. Table 2 presents per-person spending levels and rankings in 2007 and 2016 and the change in ranking over the period. [14] All figures are presented in 2016 dollars. Table 2 also displays the growth in (inflation-adjusted) per person spending from 2007 to 2016.

Spending

As depicted in figure 2 (and summarized in table 2), West Vancouver was the highest spending municipality in 2016 (spending \$2,583 per person) while Surrey was the lowest spender (spending \$1,057 per person). Put differently, per person West Vancouver spent more than double the amount spent by Surrey. [15] The average for the region is \$1,549 per person, as illustrated by the vertical line in figure 2.

At \$2,225 per person, New Westminster is the second highest spender, spending approximately \$350 less than West Vancouver. [16] Notably, these municipalities

[14] Appendix 1 (p. 35) gives a definition of the various categories of spending while Appendix 2 (p. 38) provides a breakdown of spending by major category in each municipality. Specific categories of spending that are discussed include debt-servicing payments for debt related to that category's activity. For example, payments on debt acquired to construct a new water-purifying facility are included in the solid waste and utilities category.

[15] Given that municipalities in the region provide a similar basket of services (such as police and fire, solid waste and utility services, and parks and recreation), such large differences in per-person spending can be surprising. However, explaining these differences in spending is beyond the scope of this report and an important area for future research. That said, there are a host of factors that can drive per-person spending and the differences across individual municipalities within the same region. These might include: the terms of collective agreements and/or the size of municipal payrolls per resident; differing preferences among residents as to the quantity and quality of locally provided services, as originally hypothesized by Professor Charles Tiebout (1956); geography (dispersed populations may be most costly to serve, although New Westminster runs counter to this logic); cost factors related to scale (perhaps it is more costly on a per-resident basis to provide services in smaller population centres); potential spillovers between jurisdictions (for example, if one local police service is disproportionately burdened with regional issues, such as drug trafficking or use); and whether municipalities outsource services or provide them in house.

[16] New Westminster's relatively high spending is driven in large part by its disproportionate "Other" category (table A2.1 in Appendix 2). This may be a result of New Westminster's unique electrical utility—the only municipally owned and operated electrical utility in Metro Vancouver. In this regard, New Westminster's chosen basket of municipal services is distinct, in the same way that Richmond and Surrey stand out as the only two municipalities to own

Table 2: Municipal spending (\$2016) per person in Metro Vancouver, 2007, 2016

	2007		201	2016			Growth in spending per person	
	Spending per person	Rank	Spending per person	Rank	Change in Rank	Percentage	Rank	
Burnaby	1,170	11	1,514	9	2	29.4	4	
Coquitlam	1,142	13	1,284	13	0	12.4	16	
Delta	1,466	4	1,823	4	0	24.3	8	
Langley, City of	1,151	12	1,309	12	0	13.8	14	
Langley, District of	984	16	1,442	11	5	46.6	1	
Maple Ridge	1,006	14	1,139	16	-2	13.2	15	
New Westminster	1,781	2	2,225	2	0	24.9	7	
North Vancouver, City of	1,439	5	1,691	6	-1	17.5	12	
North Vancouver, District of	1,339	6	1,748	5	1	30.6	3	
Pitt Meadows	1,000	15	1,231	15	0	23.1	9	
Port Coquitlam	1,195	9	1,235	14	-5	3.3	17	
Port Moody	1,292	8	1,536	8	0	18.9	11	
Richmond	1,308	7	1,508	10	-3	15.3	13	
Surrey	840	17	1,057	17	0	25.8	6	
Vancouver	1,588	3	1,944	3	0	22.5	10	
West Vancouver	2,024	1	2,583	1	0	27.6	5	
White Rock	1,188	10	1,609	7	3	35.5	2	
Average—Metro Vancouver	1,277		1,549			21.3		

Note: The average is the combined spending of the 21 Metro Vancouver municipalities divided by total municipal population.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

with relatively smaller populations, West Vancouver (43,457, ranked 1st) and New Westminster (73,255, ranked 2nd), consistently spend more per person, to varying degrees, than much larger municipalities such as Vancouver (3rd), Surrey (17th), Burnaby (9th), Richmond (10th), Coquitlam (13th), the District of Langley (11th), and Delta (4th)—all of which have populations over 100,000.

Also notable is the very large difference in spending between neighbouring municipalities (see map, p. 10). For instance, West Vancouver (1st) spends approximately \$800 more per person than either of its North Shore neighbours, the District and City of North Vancouver (5th and 6th). New Westminster (2nd) has perperson outlays more than \$700 higher than next door Burnaby (9th) and approximately \$950 higher than Coquitlam (13th). Vancouver (3rd) spends \$400 more per person than its two immediate neighbours, Richmond (10th) and Burnaby (9th).

and operate district energy corporations. Whether the spending attributed to these distinct services offered at the initiative of municipal governments provides value to residents relative to costs is beyond the scope of this analysis, and worthy of further study.

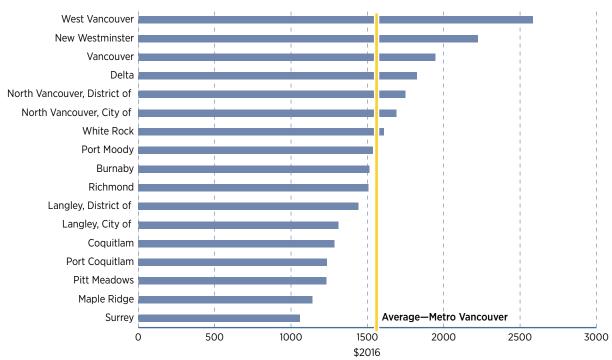


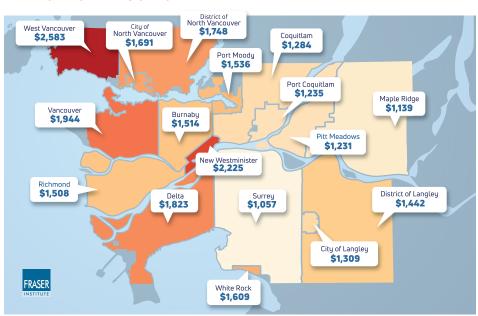
Figure 2: Municipal spending per person (\$2016) in Metro Vancouver, 2016

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

Spending per person by Delta (4^{th}) is over \$750 greater than adjacent Surrey (17^{th}). Among the Tri-Cities, Port Moody (8^{th}) stands out as a relatively high spender, spending \$250 more than Port Coquitlam and Coquitlam (13^{th} and 14^{th}).

Vancouver, the region's commercial hub and most populous municipality (651,619 people), was the third highest spender in 2016 (\$1,944 per person). Population, however, does not seem to explain the differences in per-person spending. [17] As noted, West Vancouver and New Westminster both spend more per person than Vancouver while having a fraction of Vancouver's population (6.7% and 11.2%, respectively). On the other hand, Surrey, with the second largest population (546,853), is the region's lowest spender, spending just over half the amount per person that Vancouver does. And Maple Ridge (16th), Pitt Meadows (15th), and the Port Coquitlam (14th) are among the lowest spenders despite having relatively small populations (between 3.0% and 13.2% the size of Vancouver).

[17] One theory posits that there are "economies of scale" in the provision of local government goods and services whereby the cost of producing one unit of a good or service decreases as the volume of production increases. The idea is that larger municipalities can benefit from scale since they can spread their fixed costs across more units, resulting in lower average costs compared to smaller municipalities. If this were consistently true, we would expect Vancouver, the most populous municipality in the region, to be among the lowest spenders per person.



Municipal spending per person in Metro Vancouver, 2016

Nine of the 17 municipalities analyzed retained their spending rank in 2007 and 2016. In both years, West Vancouver was the highest spending municipality, Vancouver was the third highest, and Surrey was the lowest. Critically, Surrey was able to maintain its relatively low spending level (less than half the amount of highest ranked West Vancouver in both 2007 and 2016) during a period in which it recorded the highest rate of population growth in Metro Vancouver. It is telling to compare Surrey's remarkable control over spending to that of the neighbouring District of Langley, which also grew substantially over the same period (24.1%). Langley spent the second lowest per person in the region in 2007 (approximately \$150 more than Surrey), but by 2016 was spending about \$400 more. Surrey's population grew faster than the District of Langley's but its spending per person grew slower.

Interestingly, the group of the highest four spenders is made up of the same municipalities in 2007 and 2016 (West Vancouver, New Westminster, Vancouver, and Delta). In all four cases, spending grew faster than the regional average, despite their high starting points in 2007.

Only four municipalities moved down in the spending rankings between 2007 and 2016. Port Coquitlam fell five spots to 14th highest, thanks to posting the lowest spending growth of the 17 municipalities (3.3%). Richmond fell three spots to 10th and Maple Ridge fell two spots to 16th. The City of North Vancouver fell by one position (to 6th), trading places with the neighbouring District of North Vancouver. Every municipality that dropped in the rankings kept the growth of inflation-adjusted spending per person below Metro Vancouver's average (21.3%).

Table 3: Difference in municipal spending (\$2016) per person compared to the Metro Vancouver average, 2007, 2016

vanocavor avorago, =	2007				2016	
	\$ 2016	Percentage	Rank	\$ 2016	Percentage	Rank
Burnaby	-107	-8.4	11	-35	-2.3	9
Coquitlam	-135	-10.6	13	-264	-17.1	13
Delta	189	14.8	4	275	17.7	4
Langley, City of	-127	-9.9	12	-239	-15.5	12
Langley, District of	-293	-23.0	16	-106	-6.9	11
Maple Ridge	-271	-21.2	14	-410	-26.5	16
New Westminster	504	39.4	2	676	43.7	2
North Vancouver, City of	161	12.6	5	142	9.2	6
North Vancouver, District of	61	4.8	6	200	12.9	5
Pitt Meadows	-277	-21.7	15	-318	-20.5	15
Port Coquitlam	-82	-6.4	9	-314	-20.3	14
Port Moody	15	1.2	8	-13	-0.8	8
Richmond	31	2.4	7	-41	-2.7	10
Surrey	-437	-34.2	17	-492	-31.8	17
Vancouver	310	24.3	3	395	25.5	3
West Vancouver	746	58.4	1	1,034	66.8	1
White Rock	-89	-7.0	10	61	3.9	7

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

By contrast, four municipalities went up the spending rankings over the decade, becoming relatively higher spenders in 2016. The District of Langley's inflation-adjusted spending per person jumped 46.6%, resulting in a five-step climb in ranking from 16th to 11th highest. White Rock, which saw almost no population growth from 2007 to 2016 (1.9%), saw per-person spending increase by 35.5% over this period, rising from 10th to 7th in the region. There is clearly a wide range between the highest and lowest municipal spenders in both 2007 and 2016. However, this range has grown slightly. Specifically, in 2016 the highest spending municipality (West Vancouver) spent 144% more than the lowest spender (Surrey), which is a slightly larger disparity than the 141% difference between the highest and lowest spender (the same two cities) in 2007. In other words, very large differences in spending persist among the municipalities, and have even grown somewhat over the last decade.

Table 3 displays the difference in per-person spending relative to the regional average for each municipality in 2007 and 2016. Unsurprisingly, West Vancouver, the highest spending municipality, has the greatest gap, spending \$1,034 (or 66.8%) more per person in 2016 than the average. Surrey, at the other extreme, spends \$492 less per person than the average (or -31.8%). Put differently, Surrey's per-person spending is approximately two thirds of the average.

Only one municipality, White Rock, went from being a below-average spender in 2007 to an above-average spender in 2016. By contrast, Port Moody and Richmond are the only municipalities where per-person spending follows the opposite path: above the average in 2007 and below the average in 2016. All other municipalities maintain their standing (above or below) the average in both years.

Summary

There is considerable variation in per-person spending levels among the 17 Metro Vancouver municipalities examined. West Vancouver, the highest spender in 2016 (at \$2,583 per person), spends more than twice the amount spent by Surrey, the lowest spender (at \$1,057 per person), and more than one-and-a-half times the regional average (\$1,549 per person). But the large differences in per-person spending do not seem to be driven by population. For instance, the City of Vancouver has the largest population and is the third highest spender (\$1,944 per person), while Surrey has the second largest population and is the lowest spender. Meanwhile, West Vancouver is the highest spender and has a relatively small population (6.7% the size of Vancouver's). The large differences in spending between neighbouring municipalities are especially noteworthy (for instance, New Westminster's per-person spending is nearly \$700 higher than adjacent Burnaby). These differences raise important questions for future research.

3 Municipal Revenue

This section analyzes municipal revenue from several angles. First, total revenue is presented in a format like that used for spending. Total revenue includes transfers from other levels of government, which are outside a municipality's direct control. For this reason, data on own-source revenue levels and growth are also provided. Two key revenue sources, developer fees and property taxes, are singled out and discussed in detail. [18] All revenue data are in 2016 dollars and per person unless otherwise noted.

Total revenue

Total revenue represents all revenue collected by a municipal government. It includes general taxation (mostly property taxes), the sale of services and user fees (such as for garbage collection), developer fees, and other revenue, including the gains from selling a financial or capital asset. It also includes transfers from other levels of government, which are not directly controlled by municipalities. Figure 3 presents each source's share of total revenue for all Metro Vancouver municipalities in 2007 and 2016. [19] At 45.4% in 2007 and 43.3% in 2016, general taxation has the highest share, followed by the sale of services and user fees (30.9% and 31.8%), developer fees (6.7% and 14.8%), other revenue (12.7% and 6.9%), and government transfers (4.4% and 3.2%).

Table 4 presents total revenue per person in 2007 and 2016 with rankings from high to low and percentage changes over the period while figure 4 illustrates total revenue per person for 2016 only. In 2016, West Vancouver collected the highest total revenue per person at \$3,253 and Pitt Meadows collected the lowest amount at \$1,661 per person. [20] Put differently, West Vancouver col-

^[18] Developer fees are typically dedicated to growth-related capital costs such as expanding the sewage system into a new subdivision. Capital costs, however, are not included in the measure of spending used by this report.

^[19] Appendix 1 (p. 35) gives a definition of the various sources of revenue while Appendix 2 (p. 38) provides a breakdown of revenue by major source in each municipality.

^[20] Adjustments have been made to the revenue data where there have been unusual fluctuations in 2007 or 2016 because of unusually high levels of revenue found in the "other revenue" category of sources, largely driven by the sale or revaluation of municipal financial and/or capital assets. Pitt Meadows' 2007 revenue is adjusted downwards for this reason. The adjustment is made by replacing the 2007 figure for "other revenue" with an estimated value based on the 2008–2015 average. Pitt Meadows' unadjusted level of total revenue per person in 2007 is \$1,704. Using this figure results in total revenue per person falling by 2.5%

Government transfers 4.4%

Government transfers 3.2%

Other revenue 12.7%

General taxation 45.4%

Developer fees 14.8%

Sale of services and user fees 30.9%

Sale of services and user fees 31.8%

Figure 3: Total municipal revenue in Metro Vancouver by source (%), 2007 and 2016

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

Table 4: Municipal total revenue (\$2016) per person in Metro Vancouver, 2007, 2016

	2007		201	6		Growth in re	
	Total rev. per person	Rank	Total rev. per person	Rank	Change in Rank	Percentage	Rank
Burnaby	1,883	7	2,559	5	2	35.9	4
Coquitlam*	1,767	10	2,007	12	-2	13.6	12
Delta	1,919	6	2,564	4	2	33.6	7
Langley, City of	2,047	5	1,883	13	-8	-8.0	17
Langley, District of*	1,749	11	2,400	6	5	37.3	3
Maple Ridge	1,421	16	2,094	11	5	47.3	1
New Westminster	2,215	2	2,786	2	0	25.8	10
North Vancouver, City of*	1,814	8	2,300	8	0	26.8	9
North Vancouver, District of	1,662	12	2,373	7	5	42.8	2
Pitt Meadows*	1,546	15	1,661	17	-2	7.4	14
Port Coquitlam	1,801	9	1,688	15	-6	-6.3	16
Port Moody	1,659	13	1,851	14	-1	11.5	13
Richmond*	2,186	3	2,260	9	-6	3.4	15
Surrey	1,354	17	1,673	16	1	23.5	11
Vancouver	2,111	4	2,693	3	1	27.6	8
West Vancouver	2,425	1	3,253	1	0	34.2	6
White Rock	1,637	14	2,216	10	4	35.4	5
Average—Metro Vancouver*,**	1,799		2,256		_	25.3	

Notes: *Adjusted to account for unusually large "other spending" in either 2007 or 2016 (see Appendix 3 for details). **The Metro Vancouver average is the combined revenue of the 21 Metro Vancouver municipalities divided by their total population (adjusted as described in Appendix 3).

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

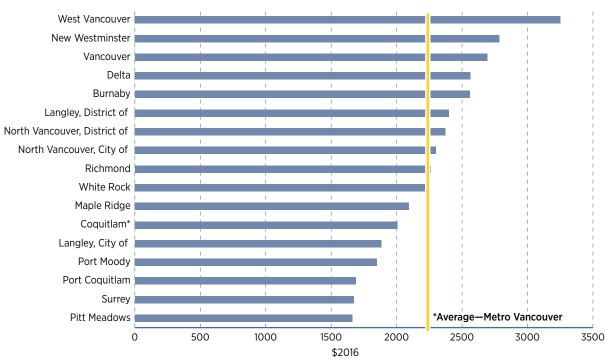


Figure 4: Municipal revenue per person (\$2016) in Metro Vancouver, 2016

Note: *Average adjusted as described in Appendix 3. Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

lects nearly double the revenue per resident that Pitt Meadows collects. The average for the region is \$2,256 as shown by the vertical line in figure 4.

As with spending, there are notable differences between neighbouring municipalities. For instance, in 2016 West Vancouver (ranked $1^{\rm st}$) collects approximately \$900 more revenue per person than the neighbouring District and City of North Vancouver ($7^{\rm th}$ and $8^{\rm th}$). Revenue per person in New Westminster ($2^{\rm nd}$) is approximately \$200 higher than Burnaby ($5^{\rm th}$), its neighbour to the west, and almost \$800 higher than Coquitlam ($12^{\rm th}$), its neighbour to the east. Delta ($4^{\rm th}$) collects about \$900 more than neighbouring Surrey ($16^{\rm th}$). Among the Tri-Cities, Port Moody ($14^{\rm th}$), and Port Coquitlam ($15^{\rm th}$) both collect at least \$150 less, per person, than Coquitlam. [21]

from 2007 to 2016 instead of growing by 7.4%. For details on "other revenue", see Appendix 1, (p. 35). Details of the adjustments can be found in the footnotes and in Appendix 3 (p. 40). [21] Coquitlam's 2016 revenue is adjusted downwards because of unusually high revenue from the "other revenue" category of sources. The adjustment is made by replacing the 2016 figure for "other revenue" with an estimated value based on the 2008–2015 average. Coquitlam's unadjusted level of total revenue per person in 2016 is \$2,394. Using this figure results in total revenue per person growing by 35.5% from 2007 to 2016 instead of growing by 13.6%.

Three municipalities—West Vancouver, New Westminster, and the City of North Vancouver—have the same ranking on total revenue per person in both 2007 and 2016. Specifically, West Vancouver and New Westminster [22] are consistently the two highest revenue collectors while the City of North Vancouver is consistently the eighth highest. [23]

Surrey was the lowest revenue collector in 2007 but moved to second lowest in 2016 after having been replaced by Pitt Meadows, which moved down two ranks from 2007, as the lowest. However, they are separated by a slim margin (\$12 collected per person), much less than the amount separating the top two collectors of revenue, West Vancouver and New Westminster (\$467).

Altogether, from 2007 to 2016 six municipalities moved down the rankings on total revenue per person. The City of Langley's change is the largest, sliding eight spots (from 5^{th} to 13^{th}). This is due to an 8.0% decline in total revenue over the period (from \$2,047 to 1,883). Among the other municipalities that moved down (Coquitlam, Pitt Meadows, Port Coquitlam, Port Moody, and Richmond), the ranking decline was most pronounced in Port Coquitlam (9^{th} to 15^{th}), and Richmond (3^{rd} to 9^{th}).

Eight municipalities moved up the rankings on total revenue per person. Jumping five spots between 2007 and 2016 were the District of Langley (11th to 6th), [24] the District of North Vancouver (12th to 7th), and Maple Ridge (16th to 11th). Growth in developer fees is partially responsible for this swing in ranking in the District of Langley, where it rose from 13.1% to 23.5% of total revenue, and Maple Ridge, where it jumped from 11.0% to 31.6%. In the District of North Vancouver, the change in ranking is attributable to strong total revenue growth between 2007 and 2016 (45.2%) without commensurate growth in population (1.7%).

[22] The relatively high revenue collected by New Westminster is driven in large part by its disproportionate "Sale of services/User fees" category (table A2.2 in Appendix 2). As mentioned in footnote 16, this may be the result of New Westminster's unique electrical utility. [23] The City of North Vancouver's 2007 revenue is adjusted downwards because of an unusually high level of revenue from the "other revenue" category of sources. The adjustment is made by replacing the 2007 figure for "other revenue" with an estimated value based on the 2008–2014 average. The City of North Vancouver's unadjusted level of total revenue per person in 2007 is \$2,703. Using this figure results in total revenue per person falling by 14.9% from 2007 to 2016 instead of growing by 26.8%.

[24] The District of Langley's 2007 revenue is adjusted downwards because of an unusually high level of revenue from the "other revenue" category of sources. The adjustment is made by replacing the 2007 figure for "other revenue" with an estimated value based on the 2008–2015 average. The District of Langley's unadjusted level of total revenue per person in 2007 is \$1,893. Using this figure results in total revenue per person growing by 26.8% from 2007 to 2016 instead of growing by 37.3%.

The range between the highest and lowest total revenue per person widened over the decade. In 2007, West Vancouver, the highest revenue collector, collected 79.1% more revenue per person than Surrey, the lowest. This gap is considerably narrower than the 95.8% range between the highest revenue collector, West Vancouver, and the lowest, Pitt Meadows in 2016.

Overall, all but two municipalities experienced revenue growth even after-inflation and growth in population are taken into account. These two are the City of Langley (-8.0%) and Port Coquitlam (-6.3%). The City of Langley's decline in revenue per person of 8.0% is primarily the result of a slow rate of total revenue growth (0.3% adjusted for inflation) and a growing population (9.0%). Similarly, Port Coquitlam's inflation-adjusted total revenue grew by only 5.0% from 2007 to 2016, compared to a population growth of 12.0%. As a result of the decline in revenue per person, the City of Langley dropped eight spots in the ranking and Port Coquitlam dropped six.

For all other municipalities, however, total revenue per person increased, by a relatively low growth rate of 3.4% in Richmond to a high of 47.3% in Maple Ridge. The two largest municipalities saw total revenue grow, Vancouver by 27.6% and Surrey by 23.5%; Vancouver's per-person inflation-adjusted revenue growth was above the Metro Vancouver average (25.3%) while Surrey's was below.

With very high revenue growth in Maple Ridge (47.3%) the municipality moved up from the second lowest total revenue per person in 2007 (16^{th}) to sixth lowest in 2016 (11^{th}). By contrast, Richmond, initially a high revenue municipality (3^{rd} highest in 2007), had one of the lowest rates of revenue growth between 2007 and 2016 (3.4%).

Table 5 displays the difference in total revenue per person relative to the regional average for each municipality in 2007 and 2016. In 2016, West Vancouver's total revenue per person exceeds the regional average the most, by \$998 per person (or 43.3%). Pitt Meadows is under the average by the greatest amount at -\$595 (or -25.8%). Two municipalities (the Districts of Langley and North Vancouver) go from below average total revenue per person in 2007 to above average total revenue per person in 2016. On the other hand, the City of Langley and Port Coquitlam go from above average total revenue per person in 2007 to below average in 2016. The other 13 municipalities maintain their standing (above or below) the average in both years.

Own-source revenue

Own-source revenue is total revenue minus transfers received from other levels of government. In other words, own-source revenue is the revenue collected directly by the municipality through municipal taxes, fees, and other levies. Own-source revenue is worth examining separately because it is revenue over which

Table 5: Difference in municipal total revenue (\$2016) per person compared to the Metro Vancouver average, 2007, 2016

	2007			2016			
	\$ 2016	Percentage	Rank		\$ 2016	Percentage	Rank
Burnaby	84	4.3	7		303	13.2	5
Coquitlam*	-32	-1.7	10		-249	-10.8	12
Delta	119	6.2	6		308	13.4	4
Langley, City of	248	12.8	5		-373	-16.2	13
Langley, District of*	-50	-2.6	11		145	6.3	6
Maple Ridge	-378	-19.6	16		-162	-7.0	11
New Westminster	416	21.5	2		531	23.1	2
North Vancouver, City of*	15	0.8	8		45	1.9	8
North Vancouver, District of	-138	-7.1	12		118	5.1	7
Pitt Meadows*	-253	-13.1	15		-595	-25.8	17
Port Coquitlam	2	0.1	9		-567	-24.7	15
Port Moody	-140	-7.3	13		-405	-17.6	14
Richmond*	387	20.0	3		4	0.2	9
Surrey	-445	-23.1	17		-583	-25.3	16
Vancouver	312	16.2	4		438	19.0	3
West Vancouver	625	32.4	1		998	43.3	1
White Rock	-163	-8.4	14		-39	-1.7	10

Note: *adjusted as described in Appendix 3.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

municipalities have full control and for which they do not directly depend on another level of government. [25] In other words, own-source revenue more closely reflects the fiscal policies of municipal governments, as opposed to what other levels of governments decide to provide. Table 6 and figure 5 provide the same breakdown as total revenue in table 4 and figure 4 but for own-source revenue.

For the most part, there is little impact on the 2016 and 2007 rankings when government transfers are excluded from total revenue. In 2016, West Vancouver continues to be the highest revenue collector by own-source revenue (at \$3,228 per person), although the City of Langley replaces Pitt Meadows as the lowest (at \$1,511 per person). The ranking of ten municipalities in 2016 is unchanged relative to total revenue per person (Burnaby, Coquitlam, Delta, the District of Langley, Maple Ridge, New Westminster, the District of North Vancouver, Richmond, Vancouver, and West Vancouver). Five municipalities move up one

^[25] The Metro Vancouver regional government and Translink also receive transfers from other levels of government that benefit municipalities. Transfers from other levels of government equaled 1.5% of the regional government's total revenue in 2016.

Table 6: Own-source revenue (\$2016) per person in Metro Vancouver, 2007, 2016

	2007		2016			Growth in own-source revenue per person	
	Own-source revenue per person	Rank	Own-source revenue per person	Rank	Change in Rank	Percentage	Rank
Burnaby	1,689	7	2,470	5	2	46.3	4
Coquitlam*	1,552	9	1,910	12	-3	23.1	13
Delta	1,777	5	2,530	4	1	42.4	6
Langley, City of	1,367	14	1,511	17	-3	10.6	15
Langley, District of*	1,485	13	2,345	6	7	57.9	2
Maple Ridge	1,284	15	2,046	11	4	59.3	1
New Westminster	1,941	4	2,656	2	2	36.9	8
North Vancouver, City of*	1,593	8	2,133	10	-2	33.9	10
North Vancouver, District of	1,549	10	2,273	7	3	46.8	3
Pitt Meadows*	1,222	17	1,631	16	1	33.4	11
Port Coquitlam	1,708	6	1,660	14	-8	-2.8	17
Port Moody	1,505	12	1,776	13	-1	18.0	14
Richmond*	1,953	3	2,135	9	-6	9.4	16
Surrey	1,261	16	1,631	15	1	29.3	12
Vancouver	1,963	2	2,630	3	-1	34.0	9
West Vancouver	2,230	1	3,228	1	0	44.7	5
White Rock	1,538	11	2,185	8	3	42.1	7
Metro Vancouver average*,**	1,631		2,182			33.7	

Notes: *Adjusted to account for unusually large "other spending" in either 2007 or 2016. See Appendix 3 for details. **The Metro Vancouver average is the combined revenue of the 21 Metro Vancouver municipalities divided by their total population (adjusted as described in Appendix 3).

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

or two positions (Pitt Meadows, Port Coquitlam, Port Moody, Surrey and White Rock) while two municipalities move down, generally reflecting relatively greater reliance on government transfer revenue (the City of Langley and the City of North Vancouver).

The reason for the minimal change in rankings is that most municipalities receive relatively little of their revenue as transfers from other governments. In 2016, just 3.2% of total municipal revenues in Metro Vancouver came from this source (see figure 3). In other words, the 17 municipalities are largely self-financed from a revenue standpoint, meaning they have direct authority over the bulk of funding for municipal services. However, in 2016 transfers accounted for well above the average share of total revenue in the City of Langley (19.8%) and the City of North Vancouver (7.3%) (table A2.2).

Notably, own-source revenue per person in the City of Langley increased by 10.6% while total revenue per person decreased by 8.0%, implying a considerable

West Vancouver New Westminster Vancouver Delta Burnaby Langley, District of North Vancouver, District of White Rock Richmond North Vancouver, City of Maple Ridge Coquitlam* Port Moody Port Coquitlam Surrey Pitt Meadows Langley, City of *Average-Metro Vancouver 500 1000 1500 2000 2500 3000 3500 \$2016

Figure 5: Municipal own-source revenue per person (\$2016) in Metro Vancouver, 2016

Note: *Average adjusted as described in Appendix 3. Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

drop in revenue from other levels of government. Indeed, per-person transfer revenue fell over the period by 45.4%. As a result, the share of total revenue that is own-source increased from 69.9% in 2007 to 80.2% in 2016. Similarly, transfer revenue fell in the City of North Vancouver by 24.4% per person.

Own-source revenue growth ranges from a low of 9.4% in Richmond to a high of 59.3% in Maple Ridge. Port Coquitlam is notable as the only municipality to experience a reduction in per-person own-source revenue (2.8%). Similar to the situation with total revenue, this reduction occurred because growth in inflation-adjusted revenue (8.8%) is slower than population growth (12.0%).

Developer fees

Developer fees are essentially taxes levied on developers, ostensibly to pay for new infrastructure. In principle, they are designed so that those who enjoy the benefits of the new infrastructure pay the costs. However, in some markets, such taxes can be passed on to home-buyers, leading to higher prices for new homes and, possibly, existing housing (Evens-Cowley, 2002). This is a critical issue in Metro Vancouver, which already has high home prices relative to other Canadian regions.

Developer fees can fluctuate from year to year because they are typically one-time payments from developers rather than a consistent annual source of revenue. As a result, municipal comparisons in a single year may not give an accurate measure over the longer term of the degree to which municipalities rely on this revenue source. Figure 6 presents average developer fees as a share of own-source revenue over the period from 2007 to 2016 to reduce the effect of annual fluctuations.

Between 2007 and 2016, developer fees as a share of own-source municipal revenue were, on average, 11.4% for the Metro Vancouver region. However, it is important to note that this share has grown over time (in 2016, the average share was 16.1%, up from 7.7% in 2007). And, some municipalities rely on developer fees much more than others. In seven municipalities—White Rock, Port Moody, the District of North Vancouver, the City of North Vancouver, New Westminster, Vancouver, and West Vancouver—developer fees as a share of own-source revenue account for less than half the Metro Vancouver average. But there are two municipalities with approximately double the average share: Surrey and Maple Ridge. Developer fees over the decade generated, on average,

Surrey Maple Ridge Port Coquitlam Langley, District of Coquitlam Richmond Pitt Meadows Burnaby Delta Langley, City of West Vancouver Vancouver **New Westminster** North Vancouver, City of North Vancouver, District of Port Moody White Rock Average-Metro Vancouver 15 25 Percentage

Figure 6: Average developer fees as a share (%) of own-source revenue in Metro Vancouver, 2007–2016

Note: Developer fees are fees charged to developers, ostensibly to pay for new infrastructure. Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

almost one quarter (23.1%) of Surrey's own-source revenue, followed by Maple Ridge (21.0%), Port Coquitlam (16.9%), and the District of Langley (16.9%). Coquitlam (12.8%) also had an above-average share of own-source revenue coming from developer fees.

Given that developer fees are meant to pay for the cost of expanding infrastructure to new developments, we would expect municipalities with high developer fees as a share of own-source revenue to also have high population growth. This expectation holds true for Surrey, the District of Langley, and Coquitlam, all of which feature among the region's five fastest growing municipalities between 2007 and 2016. However, this expectation does not hold for all municipalities with high revenue shares from these fees. For instance, on average 16.9% of Port Coquitlam's own-source revenue between 2007 and 2016 came from developer fees but its population grew more slowly (12.0%) than the Metro Vancouver average (14.6%).

Another way to look at developer fees is to compare municipalities based on the sum of these fees relative to the number of new residents over a similar period (table 7, figure 7). This is an indirect way to estimate the tax on development per new resident. From 2007 to 2016, average developer fees per new resident amounted to \$14,346 for the region. [26] The amount among individual municipalities ranges from a low of \$1,596 in Port Moody to a high of \$106,104 in West Vancouver, which is a remarkably large range. West Vancouver's developer fees per new resident are over 14 times higher than the amount for the City of North Vancouver. [27] Other municipalities with developer fees per new resident higher than the regional average include Delta (\$46,369), Port Coquitlam (\$25,975), the District of North Vancouver (\$23,128), Maple Ridge (\$21,193), Vancouver (\$16,605), Richmond (\$15,445), and Burnaby (\$15,346). The municipalities with below-average developer fees per new resident are: the District of Langley (\$13,999), Surrey (\$12,584), Coquitlam (\$12,226), White Rock (\$10,726), the City of Langley (\$10,530), Pitt Meadows (\$7,646), the City of North Vancouver (\$7,344), New Westminster (\$6,991), and Port Moody (\$1,596).

^[26] This is not an actual charge any new or existing resident has to pay. It is a hypothetical charge per new resident based on revenue collected from developer fees and population change within a municipality.

^[27] Port Moody and West Vancouver are arguably outliers on the measure of developer fees per new resident. Nonetheless, the amount for the second highest municipality, Delta, is still nearly seven times larger than the amount for the second lowest municipality, New Westminster.

Table 7: Developer fees relative to population change in Metro Vancouver, 2007-2016

	Developer fees 2007-2016 (\$2016 millions)	Population change 2006–2016	Developer fees per new resident (\$2016)	Rank
Burnaby	364	23,735	15,346	8
Coquitlam	351	28,735	12,226	11
Delta	135	2,917	46,369	2
Langley, City of	27	2,565	10,530	13
Langley, District of	369	26,333	13,999	9
Maple Ridge	312	14,714	21,193	5
New Westminster	89	12,766	6,991	16
North Vancouver, City of	49	6,715	7,344	15
North Vancouver, District of	35	1,496	23,128	4
Pitt Meadows	26	3,380	7,646	14
Port Coquitlam	181	6,965	25,975	3
Port Moody	9	5,674	1,596	17
Richmond	494	31,980	15,445	7
Surrey	1,689	134,199	12,584	10
Vancouver	865	52,109	16,605	6
West Vancouver	71	666	106,104	1
White Rock	5	507	10,726	12
Average—Metro Vancouver	5,105	355,867	14,346	

Note: Developer fees are municipal fees charged to developers, ostensibly to pay for new infrastructure.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

Property tax shares

General taxation, primarily made up of property taxes but also of other taxes such as hotel taxes, accounts for roughly half of own-source municipal revenue in Metro Vancouver. [28] As a share of own-source revenue in individual municipalities in 2016, general taxation ranges from a low of 37.4% in New Westminster to a high of 62.6% in Port Moody.

Table 8 displays the level of general taxation per person for each of the 17 municipalities in 2016. West Vancouver is the highest taxed municipality with revenue from general taxation amounting to \$1,504 per person. Delta is the second highest taxed municipality (at \$1,325 per person) and Burnaby is the third highest (\$1,152). The majority (13) of the 17 municipalities studied fall within \$150 of the Metro Vancouver average (\$997 per person). Surrey is an outlier and by far the lowest taxed municipality, with general taxation of \$675

^[28] In 2016, property tax revenue made up 97.0% of general taxes in Metro Vancouver. (British Columbia, Ministry of Community, Sport, and Cultural Development, 2018).

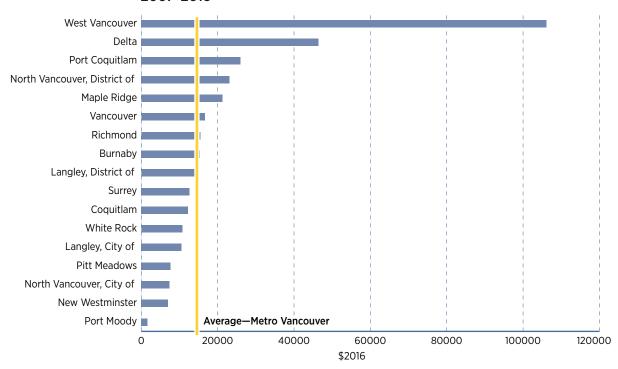


Figure 7: Developer fees per new resident (\$2016) in Metro Vancouver, 2007-2016

Note: Developer fees are fees charged to developers, ostensibly to pay for new infrastructure. Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; Statistics Canada, 2018; calculations by authors.

per person. In fact, Surrey's per-person tax burden is less than half (44.9%) that of highest ranked West Vancouver and just about two thirds (67.7%) of the regional average.

When it comes to property taxes, which make up the lion's share of general taxation, municipalities apply different rates for residents and businesses, with business classes almost always paying the higher rates (Bish, 2004; Kastelen, 2013). This difference in tax rates is exacerbated when one considers that businesses pay higher property taxes and receive fewer services in return than residents (Kastelen, 2013). For instance, a study commissioned by the City of Vancouver found that Vancouver businesses in 2006 paid \$2.42 for each dollar of tax-supported services received, while residents paid \$0.56 (MacKay, Pammenter, and Cook, 2007). [29]

[29] However, another government report for the Property Tax Policy Review Commission argued that the degree to which businesses are over-taxed is overstated because businesses receive indirect benefits from municipal spending on residents (City of Vancouver, 2007). For instance, businesses benefit when the city enhances the quality of life in the community since this can attract skilled labour.

Table 8: General tax revenue per person in Metro Vancouver, 2016

	Tax revenue	Rank		Tax revenue	Rank
Burnaby	1,152	3	Pitt Meadows	934	14
Coquitlam	1,045	9	Port Coquitlam	993	11
Delta	1,325	2	Port Moody	1,112	4
Langley, City of	931	15	Richmond	994	10
Langley, District of	978	13	Surrey	675	17
Maple Ridge	909	16	Vancouver	1,106	5
New Westminster	993	12	West Vancouver	1,504	1
North Vancouver, City of	1,085	8	White Rock	1,098	6
North Vancouver, District of	1,086	7	Average—Metro Vancouver	997	

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; calculations by authors.

Beyond the issue of setting tax rates based on service use, property tax rates can be an important factor in business decisions about whether or not to maintain operations, expand, or relocate (Bish, 2004). A thorough analysis of property-tax differentials is beyond the scope of this paper but a preliminary investigation gives us a sense of how much municipalities rely on businesses for revenue by comparing the shares raised from business and residential classes of property taxes. The Local Government Statistics database does not report the actual breakdown of taxes paid by residential and business classes but it does include detailed property-tax estimates by year and municipality, which include an estimate of the proportions of property tax coming from residential and business classes (British Columbia, Ministry of Municipal Affairs and Housing, 2018). [30]

In 2016, more than half of the property tax revenue in the City of Langley (50.9%) and Burnaby (50.8%) came from business classes. The average share for the region is 40.3% (table 9; figure 8). For most municipalities, the business share of property-tax revenue falls in the range of 28.3% to 46.8%; only three are below 30%: the District of North Vancouver, White Rock, and West Vancouver.

[30] The 2016 estimates for total property-tax revenue do not perfectly match the actual 2016 property-tax revenue as reported by the Local Government Statistics. For 14 of the 17 municipalities, the estimated total equals 93% of the actual and for 11 of the 14, the estimated total is over 97% of the actual. In the remaining thee municipalities, Burnaby, Coquitlam, and Surrey, the ratios of estimated total property tax to actual property tax are below 91%, meaning that the estimated values are well below the actual values for total property-tax revenue. However, an estimated total property tax that is lower than the actual total property tax does not necessarily mean that the estimated shares of residential and business property taxes are significantly different from the actual shares.

Table 9: Residential and business share (%) of total property tax in Metro Vancouver, 2016 estimates

	Residential	Business		Residential	Business
Burnaby	49.2	50.8	Pitt Meadows	60.6	39.4
Coquitlam	64.6	35.4	Port Coquitlam	58.2	41.8
Delta	53.9	46.1	Port Moody	67.8	32.2
Langley, City of	49.1	50.9	Richmond	54.9	45.1
Langley, District of	61.7	38.3	Surrey	68.5	31.5
Maple Ridge	78.3	21.7	Vancouver	53.2	46.8
New Westminster	60.7	39.3	West Vancouver	93.0	7.0
North Vancouver, City of	55.9	44.1	White Rock	89.6	10.4
North Vancouver, District of	71.7	28.3	Average—Metro Vancouver	59.7	40.3

Note: See footnote 28 for more details.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

The municipalities that rely more heavily on business classes for property tax revenue are the City of Langley (50.9%), Burnaby (50.8%), Vancouver (46.8%), Delta (46.1%), Richmond (45.1%), the City of North Vancouver (44.1%), and Port Coquitlam (41.8%), as demonstrated by their above average shares in figure 8. At 7.0%, West Vancouver has the lowest share, relying much less on business classes.

The variation among municipalities in their reliance on business property taxes depends, in part, on the size of the business-property tax base (the value of assessed properties) and, in part, on the tax rates. Municipalities have direct control over the latter but less so over the former, although there is a feedback loop whereby lower rates can encourage a larger tax base. [31]

The ratio of business-property tax rates to residential rates is another indicator of whether, and to what extent, business property taxpayers are "over-taxed" and effectively subsidizing lower residential rates for households. A high ratio implies that businesses are taxed more than residents. Throughout the province, different property tax rates are applied to different types of businesses, so that there are multiple ratios between business rates and residential rates. [32]

^[31] It should be noted that the shares of property taxes will vary depending on the composition of taxpaying units. Some municipalities have long had little in the way of a commercial or industrial presence because of the nature of their land base and historical settlement patterns. In these cases, one would not expect that business and industry would carry a large share of the local property tax burden. Other municipalities are naturally more commercial or industrial intensive because they host the region's central business district, lie along the Fraser River or the Burrard Inlet, are home to ports, and/or are traversed by major railways.

[32] In total, there are eight classes of business property tax rates: utilities, supportive housing, heavy industry, light industry, general business, managed forest, recreation, and farms.

Langley, City of Burnaby Vancouver Delta Richmond North Vancouver, City of Port Coquitlam Pitt Meadows New Westminster Langley, District of Coquitlam Port Moody Surrey North Vancouver, District of Maple Ridge White Rock West Vancouver Average-Metro Vancouver 0 10 20 30 40 50 60 Percentage

Figure 8: Business share (%) of total property tax in Metro Vancouver, 2016 estimates

Note: See footnote 28 for more details.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

For the purposes of this preliminary investigation, table 10a shows residential, heavy-industry and general-business tax rates and table 10b displays the ratios for heavy-industry and general-business to residential rates. [33]

The City of Langley and White Rock do not have a property tax rate for heavy industry because there are no heavy industry properties in either municipality. [34] Among the remaining 15 municipalities, Port Moody has the highest property-tax ratio for heavy industry (22.6), double the average of this group of municipalities (11.1), and Burnaby has the second highest (22.3). The municipality with the lowest heavy-industry ratio is the District of Langley (2.9). Vancouver has the third highest ratio (21.7), while Surrey has the third lowest (4.6). Interestingly, four of the municipalities with the five highest shares of developer fees relative to own-source revenue in figure 6—Surrey,

^[33] Heavy industry covers businesses such as manufacturing and cargo-loading facilities that fall into the province's property class 4 while general business covers businesses such as retail stores and hotels that fall into the province's property class 6.

^[34] This has not changed since the 2014 version of this study, in which personal communications were held with Shannon Johnston, Manager, Budget and Accounting, City of White Rock, and Darrin Leite, Director of Corporate Services, City of Langley, on September 29, 2014.

Table 10a: Residential and business tax rates in Metro Vancouver, 2016

	Resid	lential	Heavy industry		General business	
	Rate	Rank	Rate	Rank	Rate	Rank
Burnaby	2.0	15	44.9	2	8.5	10
Coquitlam	2.8	10	28.9	8	12.5	1
Delta	3.2	6	30.7	6	10.2	6
Langley, City of	3.6	3	n/a	n/a	9.0	8
Langley, District of	3.2	7	9.3	15	9.7	7
Maple Ridge	4.4	1	34.2	4	11.9	3
New Westminster	3.4	5	30.2	7	12.3	2
North Vancouver, City of	2.3	12	27.5	10	8.2	11
North Vancouver, District of	2.1	13	28.4	9	8.1	12
Pitt Meadows	3.8	2	38.7	3	11.2	4
Port Coquitlam	3.5	4	12.7	13	11.1	5
Port Moody	3.2	8	72.7	1	8.7	9
Richmond	2.1	14	13.5	12	6.7	15
Surrey	2.4	11	11.2	14	7.0	13
Vancouver	1.6	16	33.9	5	6.6	16
West Vancouver	1.6	17	16.8	11	4.4	17
White Rock	3.0	9	n/a	n/a	6.9	14
Average	2.8		28.9		9.0	

Notes: See footnote 31 for details.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

Table 10b: Ratio of business to residential tax rates in Metro Vancouver, 2016

	Heavy i	ndustry	General	business
	Ratio	Rank	Ratio	Rank
Burnaby	22.3	2	4.2	3
Coquitlam	10.3	7	4.5	1
Delta	9.5	9	3.1	9
Langley, City of	n/a	n/a	2.5	16
Langley, District of	2.9	15	3.0	10
Maple Ridge	7.8	11	2.7	14
New Westminster	8.8	10	3.6	5
North Vancouver, City of	11.7	5	3.5	6
North Vancouver, District of	13.4	4	3.9	4
Pitt Meadows	10.2	8	2.9	11
Port Coquitlam	3.7	14	3.2	8
Port Moody	22.6	1	2.7	15
Richmond	6.6	12	3.2	7
Surrey	4.6	13	2.9	12
Vancouver	21.7	3	4.2	2
West Vancouver	10.8	6	2.8	13
White Rock	n/a	n/a	2.3	17
Average	11.1		3.3	

Notes: See footnote 31 for details.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

Maple Ridge, Port Coquitlam, and the District of Langley—feature among the five with the lowest property-tax ratios for heavy industry to residential rates.

There is much less variation in the ratios of general business to residential property-tax rates, although they remain significantly higher than residential rates in certain municipalities. Coquitlam has the highest ratio (4.5) and White Rock has the lowest ratio (2.3). The average ratio is 3.3. Vancouver is above the average with the second highest ratio (4.2) and Surrey is below the average with twelfth highest (2.9).

Summary

As with spending, there is great variation in per-person revenue levels among the 17 Metro Vancouver municipalities. In 2016, West Vancouver collected the most revenue per person (\$3,253)—nearly \$1,600 more per person than Pitt Meadows (\$1,661), which collected the least, and approximately one-third above the regional average (\$2,256). Very large differences also exist between neighbouring municipalities in the amount of revenue they collect per person. After population growth and inflation are taken into account, only two municipalities saw a reduction in revenue per person: the City of Langley (8.0%) and Port Coquitlam (6.3%). Most other municipalities saw substantial revenue growth over the decade. Maple Ridge experienced the fastest growth at 47.3% and Richmond had the slowest positive revenue growth (3.4%). For the region as a whole, inflation-adjusted revenue per person grew faster than spending (25.3% compared to 21.3%). When it comes to relying on developer fees as a source of revenue, Surrey, Maple Ridge, Port Coquitlam, and the District of Langley all had a much greater average share from this revenue source over the decade than the other municipalities. On property taxes, another key revenue source, some municipalities rely more heavily on businesses rather than residents. The City of Langley has the largest property-tax share coming from businesses at 50.9% and West Vancouver has the lowest at 7.0% (the range for most municipalities is between 28.3% and 46.8%).

4 Municipal Debt and Interest Expenditures

For a complete picture of the state of municipal finances, we now turn to the overall financial position—that is, the difference between a municipality's financial assets and liabilities. [35] This section provides a snapshot of the financial position of the 17 Metro Vancouver municipalities featured in previous sections and discusses the immediate financial cost of long-term debt (debt outstanding for more than a year), namely interest expenditures.

Overall financial position

A municipality's overall financial position is the difference between the government's gross liabilities and financial assets. Gross liabilities, as defined in the Local Government Statistics database, are a combination of long-term debt and other forms of liabilities including pension obligations (Palacios, MacIntyre, and Lammam, 2014). Financial assets include cash and other liquid investments. It is important to account for financial assets because municipalities with more of such assets can afford higher levels of gross liabilities since they can, in theory, liquidate their financial assets if necessary.

All 17 of the Metro Vancouver municipalities included have net financial assets of greater value than liabilities (table 11). These range from \$107 per person in Surrey and \$121 in Vancouver to \$5,023 in Burnaby and \$3,088 in Richmond. Municipalities tend to have net financial assets partially because of limitations placed on the accumulation of municipal debt set out by the provincial government (MacIntyre and Lammam, 2014). For example, BC municipalities can only use long-term debt to pay for capital projects such as a bridge or a building. By contrast, the federal and provincial governments often accumulate debt to pay for operating spending. Another important limitation is that, in most cases, municipal debt must be approved by the municipal council, the regional district board, the provincial government, and an organization called the Municipal Finance Authority (MacIntyre and Lammam, 2014). [36] Notably, the City of Vancouver is the only exception to this rule and can issue government debt on its own authority.

^[35] Metro Vancouver municipalities have a number of types of financial assets as well as of liabilities (including long-term debt). For a complete list, see Appendix 1 (p. 35).

^[36] The Municipal Finance Authority (MFA) also typically issues municipal bonds.

Table 11: Net financial assets (or liabilities) (\$2016) per person in Metro Vancouver, 2016

	\$2016	Rank		\$2016	Rank
Burnaby	5,023	1	Pitt Meadows	841	11
Coquitlam	2,151	3	Port Coquitlam	1,554	6
Delta	1,327	7	Port Moody	833	12
Langley, City of	1,198	8	Richmond	3,088	2
Langley, District of	680	14	Surrey	107	17
Maple Ridge	1,001	10	Vancouver	121	16
New Westminster	684	13	West Vancouver	586	15
North Vancouver, City of	2,093	4	White Rock	1,859	5
North Vancouver, District of	1,060	9	Average—Metro Vancouver	1,224	

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018; calculations by authors.

Interest expenditure

When municipal governments incur debt, they must pay interest on that debt just like the rest of us. These annual interest expenditures consume government resources and displace other forms of operating spending. More money used to pay interest means less available for public services that Metro Vancouver residents value. Table 12 and figure 9 display the resources spent on interest expenditure by measuring such spending as a percentage of total operating spending.

Vancouver, the municipality with the second lowest net assets, spends the most on interest relative to total operating spending (3.2%). In Surrey, the municipality with the lowest net asset position, interest expenditures consume 1.4%, 4th highest among the 17 municipalities. Burnaby and the City of Langley both have zero interest expenditures and the City of North Vancouver has sufficiently low interest expenditures that it consumes less than one tenth of a percent of the municipality's operating spending. Overall, 1.6% of total Metro Vancouver municipal operating spending goes towards interest expenditures.

Summary

All Metro Vancouver municipalities examined in this report are in a net financial assets position. These range from \$107 per person in Surrey to \$5,023 in Burnaby. Vancouver, unique in its ability to issue government debt on its own authority, also has the highest interest expenditure relative to its operating spending (3.2%). Provincial regulations that require balanced operating budgets and that limit debt accumulation play an important role in keeping municipal debt low.

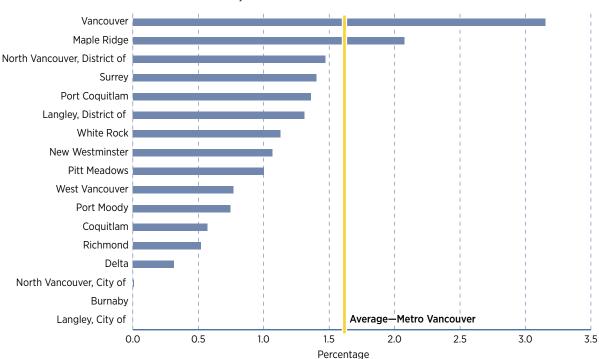
Table 12: Interest expenditure of municipalities in Metro Vancouver, 2016

	Interest expenditure (\$000)	Share of total operating spending (%)	Rank		Interest expenditure (\$000	Share of total operating spending (%)	Rank
Burnaby	0	0.0	16	Pitt Meadows	242	1.0	9
Coquitlam	1,087	0.6	12	Port Coquitlam	1,033	1.4	5
Delta	587	0.3	14	Port Moody	395	0.7	11
Langley, City of	0	0.0	16	Richmond	1,677	0.5	13
Langley, District of	2,330	1.3	6	Surrey	8,097	1.4	4
Maple Ridge	2,035	2.1	2	Vancouver	39,926	3.2	1
New Westminster	1,739	1.1	8	West Vancouver	864	0.8	10
North Vancouver, City of	6	0.0	15	White Rock	352	1.1	7
North Vancouver, Dist. of	2,237	1.5	3	Total—Metro Vancouver	62,866	1.6	

Notes: Burnaby and the City of Langley have no interest expenditures. Total includes all 21 Metro Vancouver municipalities.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

Figure 9: Interest expenditure as a share (%) of operating spending in Metro Vancouver, 2016



Note: Burnaby and the City of Langley have no interest expenditures. The average includes all 21 Metro Vancouver municipalities.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; calculations by authors.

Conclusion

Municipal governments provide important public services and collect taxes from residents but municipal finances do not always receive the same amount of public scrutiny as the finances of more senior governments. This can pose a problem for taxpayers and voters who want to understand how their municipal government performs, especially compared to other municipalities. To raise awareness and encourage debate, this report presents key comparative information on the state of government finances in 17 Metro Vancouver municipalities.

The report finds that municipalities differ considerably in their spending and revenue levels and the growth in these variables from 2007 to 2016. On spending, West Vancouver is the highest spender in 2016, spending more than twice the amount per person (\$2,583) spent by Surrey (\$1,057), the lowest spender, and more than one and a half times the regional average (\$1,549). Interestingly, the large differences in per-person spending do not seem to be driven by population. For instance, Vancouver has by far the largest population of the group (651,619 in 2016) and is the third highest spender, while Surrey has the second largest population (546,853) and is the lowest spender. The large differences in spending between neighbouring municipalities are especially noteworthy given that municipalities often provide similar baskets of services. These differences raise important questions for future research.

As with spending, there is great variation in per-person revenue levels among the 17 Metro Vancouver municipalities. In 2016, West Vancouver collected the most revenue per person (\$3,253)—nearly \$1,600 more per person than Pitt Meadows (\$1,661), which collected the least, and more than one third above the regional average (\$2,256). Interestingly, the largest municipality—the City of Vancouver—collected the third highest total revenue per person (\$2,693) in 2016 while the second largest municipality—Surrey—collected the second lowest (\$1,673). Notably, large differences exist between neighbouring municipalities in terms of the amount of revenue they collect per person. After population growth and inflation are taken into account, the City of Langley and Port Coquitlam are the only two municipalities that experienced a reduction in revenue per person over the period of analysis. All other municipalities saw growth, with all except two (Richmond and Pitt Meadows) in the double digits. For the region as a whole, inflation-adjusted revenue per person grew faster than spending from 2007 to 2016 (25.3% compared to 21.3%).

When it comes to developer fees, which are essentially taxes levied on property developers, Surrey, Maple Ridge, Port Coquitlam, and the District of Langley all relied more heavily on this revenue source than other municipalities over the decade analyzed. However, a high reliance on developer fees can have adverse implications because research shows that, in some markets, such taxes can be passed on to homebuyers, leading to higher prices for new homes and possibly for existing housing. This is a critical issue for Metro Vancouver, which already has high home prices relative to other Canadian regions.

On property taxes, another key revenue source, some municipalities rely more heavily on businesses, as opposed to residents. The City of Langley (50.9%) and Burnaby (50.8%) have the largest property tax shares coming from businesses, and West Vancouver has the lowest at 7.0% (the range for most municipalities is between 28.3% and 46.8%). Burnaby, in particular, relies more heavily on business property taxes as measured by its ratio of property-tax rates on business classes to the residential class.

However, imposing too heavy a property tax burden on businesses can have negative economic consequences since property tax rates can influence business decisions about whether or not to maintain operations, expand, or relocate. This is particularly important for Vancouver, which in many ways is the economic hub of the region. Yet, the share of Vancouver's property-tax revenue coming from businesses (46.8%) is above the regional average (40.3%) and the city has some of the highest ratios of business to residential property-tax rates. For instance, Vancouver's heavy industry tax ratio is almost five times that of Surrey, the next largest municipality by population.

Finally, the report finds that all 17 Metro Vancouver municipalities are in a net financial assets position, albeit with significant variation. Surrey has the lowest net assets per person (\$107) compared to Burnaby's net assets of \$5,023 per person. Vancouver, unique in its ability to issue government debt on its own authority, has the highest interest expenditure relative to its operating spending (3.2%). Provincial regulations that require balanced operating budgets and that limit debt accumulation play an important role in keeping municipal debt low.

Appendix 1: Description of the Local Government Statistics

Each year, municipal governments in British Columbia are required by the provincial government to submit information on municipal finances for the previous calendar year. That information is then organized into spreadsheets and posted online as the Local Government Statistics (http://www.cscd.gov.bc.ca/lgd/infra/statistics_index.htm). At the time of writing, the online information goes back to 2005; earlier data are available upon request to the Ministry. The financial information is reported in accordance to the Generally Accepted Accounting Principles established by the Public Sector Accounting Board. Details on how municipalities are expected to report their financial information can be found in the *Municipal LGDE Help Manual* (British Columbia, Ministry of Community, Sport, and Cultural Development, 2016a).

Definitions

The Local Government Statistics database presents spending and revenue by categories that are defined in the *Municipal LGDE Help Manual*. For the purposes of this report, and for ease of presentation, some of these categories have been combined. **Table A1.1** provides information on what is included in each category of spending as used in this report. It also indicates which category or categories are equivalent in the Local Government Statistics database. **Table A1.2** performs the same function for revenue sources. **Table A1.3** provides a list of financial assets and liabilities.

Accounting changes

From 2001 to 2016, there are two important accounting changes that affect the Local Government Statistics. Starting in 2002, the information contained in the Local Government Statistics is presented in a manner consistent with the Generally Accepted Accounting Principles. The second change started in 2008, when the treatment of capital spending moved from a cash basis to an accrual basis, with full implementation taking place in 2009. Rather than record the total cost of a capital project at the outset, the spending was recorded by spreading the cost over the life of the project. To ensure consistency, the spending categories "capital spending" before the change and "amortization" after the change were excluded from our analysis.

A 2008 accounting change also included a change in the way revenue was presented. The categories of "investment income" and "income from government business enterprise" were added in 2008. At the same time, two categories that appeared in previous years were terminated: "actuarial adjustments" and "other investment income". These categories are not strictly comparable but, combined appropriately with other categories, allow for a direct year-to-year comparison. To this end, the authors combined the pre-2008 categories of "other investment income", "other revenue", "actuarial adjustment", and "disposition of assets" to make them equivalent to the combined post-2007 categories of "investment income", "other revenue", "income from government business enterprise", and "disposition of assets".

Table A1.1: Definition of spending categories

Spending	Includes spending on:	Category (-ies)*
General government	Activities that provide for the overall administrative and strategic support of local government operations. Includes: central administration, finance, human resources, and information systems; legislative operations and other general government operations.	General government
Parks, recreation, and culture	Activities that provide recreational and cultural services. Includes: green space, trails, beaches, playing fields, gold courses, ski areas, public squares, swimming pools, skating rinks, curling rinks, gymnasiums, racquet courts, excerise areas, libraries, galleries, museums, community halls, performing arts theatres, and heritage conservation programs.	Parks, recreation, and culture
Protective services	Activities related to providing for security of the property and citizens of a local government. Includes: police operations, fire protection operations, bylaw enforcement operations, and other protective service operations such as emergency preparedness.	Protective services
Solid waste and utilities	Activities related to solid waste management as well those related to related to supplying, storing, treating and transporting potable and irrigation water and to gathering, treating, transporting, storing, utilizing or discharging municipal sewage or reclaimed water. Solid waste management includes: the collection, storage, handling, treatment, transportation, discharge, and destruction of solid waste such as garbage, litter, refuse, biomedical wastes, and special wastes as defined in the Hazardous Waste Regulation.	Solid Waste management and recycling; water services; and sewer services
Transportation and transit	Activities related to transportation and transit services. Includes: transit vehicles and other equipment, transit buildings (including offices), transportation administration, roads, sidewalks, streetlighting and signage, motor vehicle inspection, snow removal, and municipal parking facilities.	Transportation and transit services
Other spending	Activities related to health, social services, public health and housing as well as to resource conservation, industrial development, to community planning and development and items that are not covered in other categories. Includes: social services, public health, and environmental health (but excluding services related to water, sewer, garbage, and drainage); land use planning, zoning, subdivision and development planning, planning research and studies, economic development projects, agricultural development, business licensing, conventions and tourism, and business improvement areas; any municipal function that does not fall under the previous categories, such as cemetaries and airports and other utilities; other adjustments that do not easily fit into any of the other functional categories.	Health, social services and housing; development services; other services; other adjustments

Note: * Categories are from the Local Government Statistics database.

Source: British Columbia, Ministry of Community, Sport and Cultural Development, 2016a.

Table A1.2: Definition of revenue categories

Revenue	Includes revenue from:	Category (-ies)*
General taxation	Includes: real property taxes, parcel taxes, local service taxes, utility taxes, business taxes, hotel tax, other taxes, and all payments in place of taxes from other governments and government agencies. It also includes interest and penalities on taxes.	Total own purpose taxation and grants in lieu; currently described as: "Total Own Purpose Taxation Revenue (including PIPs)"
Sale of services and user fees	All revenues levied under Part 7, Division 2 of the Community Charter. Includes: user fees for water, sewer, solid waste, parks, recreation and culture centres/activities, and transportation; also includes any sales of other goods and services to individuals, organizations or governments including bulk sales revenue (such as the sale of bulk water).	"Service Charges/User Fees (and Other Sale of Services)"
Developer fees	Charges imposed on developers to provide certain municipal infrastructure including water, sewer, drainage, parkland, and roads.	Developer contributions
Government transfers	A government transfer is a conveyance of money to the local government from another public authority, where the public authority does not: receive goods or services in return, expect to be repaid or expect a financial return. Transfers can include entitlements, cost sharing agreements, and grants. Transfers do not include: payments in place of taxes, taxes or other revenue collected by one local government on behalf of another, or internal transfers within the local government reporting entity.	Transfers from other governments: federal government; provincial government; regional and other governments
Other revenue	Includes: certain revenues from financial assets; government business enterprises and government business partnerships income; the gain or loss recognized from the disposal (or revaluing) of financial and tangible capital assets; other sources that do not fit into another category.	Investment income; income from government business enterprise; disposition of assets; other revenue

Notes: * Categories are from the Local Government Statistics database. This table uses the current language from the *LGDE Help Manual* but the data tables use older language. For example, the column header for "Total Own Purpose Taxation Revenue (including PIPs)" is still "Total Own Purpose Taxation and Grants in Lieu" in the database. Also, "Service Charges/User Fees (and Other Sale of Services)" is "Sales of Services" in the tables.

Source: British Columbia, Ministry of Community, Sport and Cultural Development, 2016a.

Table A1.3: Definition of financial assets and liablilites

	Details
Financial assets	Financial assets are those assets that can provide resources to discharge existing liabilities or finance future operations. Includes: cash and investments, taxes receivable, amounts receivable, Municipal Finance Authority deposits, loans receivable, other financial investments, property held for resale, government business enterprise equity, and other assets and investments that do not fall into one of the other categories.
Liabilities	Includes: temporary borrowing and revenue anticipation borrowing, accounts payable, accrued liabilities, restricted revenue, deferred revenue, long-term debt (including debt guarantees), lease liabilities, future obligations (such as employee pensions), and other liabilities that do not fit into the other categories.

Source: British Columbia, Ministry of Community, Sport and Cultural Development, 2016a.

Appendix 2: Municipal Spending and Revenue per Person

Table A2.1: Municipal spending per person in Metro Vancouver, 2016

	Operations	Gen Goveri		Prote	ctive	Solid V		Transı Traı		Parks Recre		Oth	ner
	\$2016	\$2016	% of total	\$2016	% of total	\$2016	% of total	\$2016	% of total	\$2016	% of total	\$2016	% of total
Burnaby	1,514	229	15.1	438	28.9	320	21.2	139	9.2	357	23.6	31	2.0
Coquitlam	1,284	110	8.6	417	32.5	299	23.3	118	9.2	287	22.3	53	4.1
Delta	1,823	228	12.5	643	35.3	374	20.5	212	11.6	304	16.7	62	3.4
Langley, City of	1,309	138	10.6	556	42.4	242	18.5	129	9.9	205	15.7	39	3.0
Langley, District of	1,442	172	11.9	403	27.9	235	16.3	192	13.3	259	17.9	182	12.6
Maple Ridge	1,139	154	13.5	401	35.2	238	20.9	97	8.5	216	19.0	33	2.9
New Westminster	2,225	213	9.6	557	25.0	255	11.5	284	12.8	305	13.7	610	27.4
North Vancouver, City of	1,691	334	19.8	424	25.1	364	21.5	70	4.1	369	21.8	129	7.6
North Vancouver, Dist. of	1,748	197	11.2	489	28.0	471	26.9	100	5.7	419	24.0	72	4.1
Pitt Meadows	1,231	198	16.1	325	26.4	260	21.1	100	8.1	263	21.3	86	7.0
Port Coquitlam	1,235	134	10.9	403	32.6	295	23.9	160	12.9	196	15.9	47	3.8
Port Moody	1,536	178	11.6	509	33.2	329	21.4	85	5.5	352	22.9	83	5.4
Richmond	1,508	158	10.5	406	27.0	356	23.6	174	11.5	353	23.4	60	4.0
Surrey	1,057	117	11.1	389	36.8	258	24.4	57	5.4	188	17.8	47	4.5
Vancouver	1,944	237	12.2	622	32.0	300	15.4	241	12.4	364	18.7	181	9.3
West Vancouver	2,583	415	16.1	729	28.2	553	21.4	168	6.5	586	22.7	131	5.1
White Rock	1,609	247	15.4	502	31.2	228	14.2	244	15.1	311	19.3	77	4.8
Avg.—Metro Vancouver	1,549	189	12.2	486	31.4	305	19.7	156	10.0	304	19.6	109	7.1

Notes: Spending refers to a municipal government's operating spending—that is, spending on public services such as policing, utilities, garbage, parks, and others. It includes debt payments related to that category's activity (by design of the database) but excludes capital spending. Spending on transportation and transit by Metro Vancouver municipalities does not include spending by TransLink or, in the case of West Vancouver, spending that is reimbursed by TansLink. Municipal services such as road maintenance and municipal parking are included in transportation and transit.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018.

Table A2.2: Municipal revenue per person in Metro Vancouver, 2016

	Total revenue	Taxa reve		Sale of se User		Devel fee		Goverr transfer		Oth	ner
	\$2016	\$2016	% of total	\$2016	% of total	\$2016	% of total	\$2016	% of total	\$2016	% of total
Burnaby	2,559	1,152	45.0	473	18.5	445	17.4	88	3.5	400	15.6
Coquitlam	2,394	1,045	43.7	499	20.9	294	12.3	97	4.1	459	19.2
Delta	2,564	1,325	51.7	741	28.9	398	15.5	34	1.3	66	2.6
Langley, City of	1,883	931	49.5	403	21.4	158	8.4	372	19.8	18	1.0
Langley, District of	2,400	978	40.7	599	25.0	564	23.5	56	2.3	204	8.5
Maple Ridge	2,094	909	43.4	492	23.5	661	31.6	48	2.3	-16	-0.8
New Westminster	2,786	993	35.6	1,339	48.1	250	9.0	130	4.7	75	2.7
North Vancouver, City of	2,300	1,085	47.2	702	30.5	268	11.7	167	7.3	78	3.4
North Vancouver, Dist. of	2,373	1,086	45.8	1,065	44.9	78	3.3	100	4.2	44	1.9
Pitt Meadows	1,661	934	56.2	613	36.9	71	4.3	30	1.8	13	0.8
Port Coquitlam	1,688	993	58.8	523	31.0	75	4.4	28	1.7	68	4.1
Port Moody	1,851	1,112	60.1	633	34.2	6	0.3	74	4.0	26	1.4
Richmond	2,260	994	44.0	634	28.1	239	10.6	124	5.5	268	11.9
Surrey	1,673	675	40.4	495	29.6	370	22.1	42	2.5	90	5.4
Vancouver	2,693	1,106	41.1	1,034	38.4	355	13.2	63	2.3	135	5.0
West Vancouver	3,253	1,504	46.2	1,516	46.6	271	8.3	26	0.8	-63	-1.9
White Rock	2,216	1,098	49.6	1,016	45.9	5	0.2	32	1.4	65	2.9
Avg.—Metro Vancouver	2,302	997	43.3	731	31.8	340	14.8	74	3.2	160	6.9

Notes: Total revenue per person in Coquitlam differs from the value found in table 5 because, unlike in table 5, other and total revenue have not been adjusted.

Sources: British Columbia, Ministry of Municipal Affairs and Housing, 2018; British Columbia, B.C. Stats, 2018.

Appendix 3: Adjustments to Revenue

Adjustments affecting tables 4 and 5 and figure 4

Total revenue per person has been adjusted for several municipalities because of unusually high levels of "other" spending in 2007 or 2016. Revenue values for municipalities noted with an asterisk have been adjusted by replacing actual "other" spending with the 2008–2015 average (\$2016). Further, one unusually high value was dropped from the replacement calculation for the City of North Vancouver and for Pitt Meadows. The first set of values below show the original "total revenue per person"; the second provides the original "other" spending values; and the third set, the replacement values.

	per capi	evenue, ta \$2016 stment)	per capi	evenue, ta \$2016 istment)	Other r per capit (adjusted re	,
	2007	2016	2007	2016	Average 2	008-2015
Coquitlam		2,394		459		72
Langley, District of	1,893		238		94	
North Vancouver, City of	2,703		1,096		207	
Pitt Meadows	1,704		187		30	
Richmond	2,896		895		186	
Average—Metro Vancouver	1,930	2,302	244	160	114	114

Adjustments affecting table 6 and figure 5

Own-source revenue per person has been adjusted for several municipalities because of unusually high levels of "other" spending in 2007 or 2016. Revenue values for municipalities noted with an asterisk have been adjusted by replacing actual "other" spending with the 2008–2015 average (\$2016). Further, one unusually high value was dropped from the replacement calculation for the City of North Vancouver and for Pitt Meadows. The first set of values below show the original "own-source revenue per person"; the second provides the original "other" spending values; and the third set, the replacement values.

	per capi	ce revenue, ta, \$2016 ıstment)	per capi	revenue, ta \$2016 ustment)	per capi	evenue, ta \$2016 eplacement)
	2007	2016	2007	2016	Average 2	008-2015
Coquitlam		2,297		459		72
Langley, District of	1,629		238		94	
North Vancouver, City of	2,482		1,096		207	
Pitt Meadows	1,380		187		30	
Richmond	2,662		895		186	
Average—Metro Vancouver	1,762	2,228	244	160	114	114

Appendix 4: Municipal Summary Profiles, 2016

Notes to tables A4.1-A4.17

- [1] The Metro Vancouver average is the combined revenue of the 21 municipalities divided by their total population.
- [2] Developer fees are summed for 2007–2016 and presented relative to population growth to reduce the effect of annual fluctuations.
- [3] The business property tax share is based on an estimate provided by the municipality.
- [4] The City of Langley and White Rock do not have a property tax rate for heavy industry (property class 4) because there are no heavy industry properties in either municipality.
- [5] The average for the ratio of business to residential property tax rates is based on the average of 15 municipalities covered in this report that have a heavy industry property tax rate.
- [6] No adjustments have been made to these data.

Source: British Columbia, Ministry of Municipal Affairs and Housing, 2018.

Table A4.1: Burnaby-summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,514	9	1,549	-35	-2.3
Total revenue, per person	2,559	5	2,256	303	13.4
Own-source revenue, per person	2,470	5	2,182	288	13.2
Developer fees (2007-2016), per new resident	15,346	8	14,346	1,000	7.0
Business property tax share (%)	50.8	2	40.3	10.5	26.1
Ratio of business (heavy industry) to residential property tax rates	22.3	2	11.1	11.2	100.6
Interest expenditure as a share of spending (%)	0.0	16	1.6	-1.6	n/a

Table A4.2: Coquitlam-summary profile, 2016

	Value	Rank	Average— Metro Vancouver		rence Percentage
Operating spending, per person	1,284	13	1,549	-264	-17.1
Total revenue, per person	2,007	12	2,256	-249	-11.0
Own-source revenue, per person	1,910	12	2,182	-272	-12.5
Developer fees (2007-2016), per new resident	12,226	11	14,346	-2,120	-14.8
Business property tax share (%)	35.4	11	40.3	-5.0	-12.3
Ratio of business (heavy industry) to residential property tax rates	10.3	7	11.1	-0.8	-7.4
Interest expenditure as a share of spending (%)	0.6	12	1.6	-1.0	-64.4

Table A4.3: Delta—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,823	4	1,549	275	17.7
Total revenue, per person	2,564	4	2,256	308	13.7
Own-source revenue, per person	2,530	4	2,182	348	16.0
Developer fees (2007-2016), per new resident	46,369	2	14,346	32,023	223.2
Business property tax share (%)	46.1	4	40.3	5.8	14.4
Ratio of business (heavy industry) to residential property tax rates	9.5	9	11.1	-1.6	-14.7
Interest expenditure as a share of spending (%)	0.3	14	1.6	-1.3	-80.3

Table A4.4: City of Langley—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,309	12	1,549	-239	-15.5
Total revenue, per person	1,883	13	2,256	-373	-16.5
Own-source revenue, per person	1,511	17	2,182	-671	-30.8
Developer fees (2007-2016), per new resident	10,530	13	14,346	-3,816	-26.6
Business property tax share (%)	50.9	1	40.3	10.6	26.3
Ratio of business (heavy industry) to residential property tax rates	n/a	n/a	11.1	n/a	n/a
Interest expenditure as a share of spending (%)	0.0	16	1.6	-1.6	n/a

Table A4.5: District of Langley—summary profile, 2016

	Value	Rank	Average— Metro Vancouver	Difference Number Percentage	
Operating spending, per person	1,442	11	1,549	-106	-6.9
Total revenue, per person	2,400	6	2,256	145	6.4
Own-source revenue, per person	2,345	6	2,182	163	7.5
Developer fees (2007-2016), per new resident	13,999	9	14,346	-347	-2.4
Business property tax share (%)	38.3	10	40.3	-2.0	-4.9
Ratio of business (heavy industry) to residential property tax rates	2.9	15	11.1	-8.3	-74.2
Interest expenditure as a share of spending (%)	1.3	6	1.6	-0.3	-18.1

Table A4.6: Maple Ridge—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,139	16	1,549	-410	-26.5
Total revenue, per person	2,094	11	2,256	-162	-7.2
Own-source revenue, per person	2,046	11	2,182	-136	-6.2
Developer fees (2007-2016), per new resident	21,193	5	14,346	6,847	47.7
Business property tax share (%)	21.7	15	40.3	-18.6	-46.2
Ratio of business (heavy industry) to residential property tax rates	7.8	11	11.1	-3.3	-29.8
Interest expenditure as a share of spending (%)	2.1	2	1.6	0.5	29.5

Table A4.7: New Westminster—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	2,225	2	1,549	676	43.7
Total revenue, per person	2,786	2	2,256	531	23.5
Own-source revenue, per person	2,656	2	2,182	475	21.7
Developer fees (2007-2016), per new resident	6,991	16	14,346	-7,355	-51.3
Business property tax share (%)	39.3	9	40.3	-1.0	-2.6
Ratio of business (heavy industry) to residential property tax rates	8.8	10	11.1	-2.3	-20.7
Interest expenditure as a share of spending (%)	1.1	8	1.6	-0.5	-33.4

Table A4.8: City of North Vancouver—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,691	6	1,549	142	9.2
Total revenue, per person	2,300	8	2,256	45	2.0
Own-source revenue, per person	2,133	10	2,182	-49	-2.2
Developer fees (2007-2016), per new resident	7,344	15	14,346	-7,002	-48.8
Business property tax share (%)	44.1	6	40.3	3.8	9.3
Ratio of business (heavy industry) to residential property tax rates	11.7	5	11.1	0.6	5.4
Interest expenditure as a share of spending (%)	0.0	15	1.6	-1.6	-99.6

Table A4.9: District of North Vancouver—summary profile, 2016

	Value Rank	Average—	Difference		
			Metro Vancouver	Number	Percentage
Operating spending, per person	1,748	5	1,549	200	12.9
Total revenue, per person	2,373	7	2,256	118	5.2
Own-source revenue, per person	2,273	7	2,182	91	4.2
Developer fees (2007-2016), per new resident	23,128	4	14,346	8,783	61.2
Business property tax share (%)	28.3	14	40.3	-12.0	-29.8
Ratio of business (heavy industry) to residential property tax rates	13.4	4	11.1	2.3	20.7
Interest expenditure as a share of spending (%)	1.5	3	1.6	-0.1	-8.1

Table A4.10: Pitt Meadows—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,231	15	1,549	-318	-20.5
Total revenue, per person	1,661	17	2,256	-595	-26.4
Own-source revenue, per person	1,631	16	2,182	-551	-25.3
Developer fees (2007-2016), per new resident	7,646	14	14,346	-6,700	-46.7
Business property tax share (%)	39.4	8	40.3	-0.9	-2.3
Ratio of business (heavy industry) to residential property tax rates	10.2	8	11.1	-0.9	-8.3
Interest expenditure as a share of spending (%)	1.0	9	1.6	-0.6	-37.5

Table A4.11: Port Coquitlam—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,235	14	1,549	-314	-20.3
Total revenue, per person	1,688	15	2,256	-567	-25.2
Own-source revenue, per person	1,660	14	2,182	-522	-23.9
Developer fees (2007-2016), per new resident	25,975	3	14,346	11,629	81.1
Business property tax share (%)	41.8	7	40.3	1.5	3.8
Ratio of business (heavy industry) to residential property tax rates	3.7	14	11.1	-7.5	-67.1
Interest expenditure as a share of spending (%)	1.4	5	1.6	-0.2	-15.2

Table A4.12: Port Moody—summary profile, 2016

	Value Rank	Average—	Difference		
			Metro Vancouver	Number	Percentage
Operating spending, per person	1,536	8	1,549	-13	-0.8
Total revenue, per person	1,851	14	2,256	-405	-18.0
Own-source revenue, per person	1,776	13	2,182	-405	-18.6
Developer fees (2007-2016), per new resident	1,596	17	14,346	-12,750	-88.9
Business property tax share (%)	32.2	12	40.3	-8.1	-20.1
Ratio of business (heavy industry) to residential property tax rates	22.6	1	11.1	11.5	103.1
Interest expenditure as a share of spending (%)	0.7	11	1.6	-0.9	-53.4

Table A4.13: Richmond—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,508	10	1,549	-41	-2.7
Total revenue, per person	2,260	9	2,256	4	0.2
Own-source revenue, per person	2,135	9	2,182	-47	-2.1
Developer fees (2007-2016), per new resident	15,445	7	14,346	1,100	7.7
Business property tax share (%)	45.1	5	40.3	4.7	11.8
Ratio of business (heavy industry) to residential property tax rates	6.6	12	11.1	-4.6	-41.0
Interest expenditure as a share of spending (%)	0.5	13	1.6	-1.1	-67.6

Table A4.14: Surrey—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,057	17	1,549	-492	-31.8
Total revenue, per person	1,673	16	2,256	-583	-25.8
Own-source revenue, per person	1,631	15	2,182	-551	-25.2
Developer fees (2007-2016), per new resident	12,584	10	14,346	-1,762	-12.3
Business property tax share (%)	31.5	13	40.3	-8.8	-21.9
Ratio of business (heavy industry) to residential property tax rates	4.6	13	11.1	-6.5	-58.7
Interest expenditure as a share of spending (%)	1.4	4	1.6	-0.2	-12.5

Table A4.15: Vancouver—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,944	3	1,549	395	25.5
Total revenue, per person	2,693	3	2,256	438	19.4
Own-source revenue, per person	2,630	3	2,182	448	20.5
Developer fees (2007-2016), per new resident	16,605	6	14,346	2,260	15.8
Business property tax share (%)	46.8	3	40.3	6.5	16.2
Ratio of business (heavy industry) to residential property tax rates	21.7	3	11.1	10.6	94.9
Interest expenditure as a share of spending (%)	3.2	1	1.6	1.6	96.8

Table A4.16: West Vancouver—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		Difference Number Percentage	
Operating spending, per person	2,583	1	1,549	1,034	66.8	
Total revenue, per person	3,253	1	2,256	998	44.2	
Own-source revenue, per person	3,228	1	2,182	1,046	47.9	
Developer fees (2007-2016), per new resident	106,104	1	14,346	91,758	639.6	
Business property tax share (%)	7.0	17	40.3	-33.3	-82.6	
Ratio of business (heavy industry) to residential property tax rates	10.8	6	11.1	-0.3	-2.8	
Interest expenditure as a share of spending (%)	0.8	10	1.6	-0.8	-51.9	

Table A4.17: White Rock—summary profile, 2016

	Value	Rank	Average— Metro Vancouver		erence Percentage
Operating spending, per person	1,609	7	1,549	61	3.9
Total revenue, per person	2,216	10	2,256	-39	-1.7
Own-source revenue, per person	2,185	8	2,182	3	0.1
Developer fees (2007-2016), per new resident	10,726	12	14,346	-3,620	-25.2
Business property tax share (%)	10.4	16	40.3	-29.9	-74.1
Ratio of business (heavy industry) to residential property tax rates	n/a	n/a	11.1	n/a	n/a
Interest expenditure as a share of spending (%)	1.1	7	1.6	-0.5	-29.5

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