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Baffling Budgets: Canada's Cities Need Better Financial Reporting

Cities deliver key services and impose major taxes on Canadians, but their financial reporting is comparatively primitive. The spending councils vote and actual year-end results rarely match – partly because they are typically not even on the same accounting basis. To improve budget clarity and financial performance, cities should adopt some reforms that federal and provincial governments have implemented over the past decade.

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A handwritten signature in black ink that reads 'Finn Poschmann'.

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THE STUDY IN BRIEF

In nearly all Canada's major municipalities, what should be a simple exercise – comparing the spending city council votes in its annual budget with the actual spending reported at year-end – will baffle any but the most expert reader. While most of Canada's federal and provincial governments now use the same accounting methods in preparing their budgets and their financial reports, municipalities typically do not. As a result, the headline totals for revenue and spending in budgets and financial reports are usually not comparable, and judging whether a city over- or under-shot its budget targets, and by how much – which should be a simple matter of comparing headline numbers – is not possible for a typical councillor, taxpayer or citizen.

The exact discrepancies between budget presentations and financial reports vary from city to city, but a critical common element is that most cities use antiquated budgeting for capital projects. Most of Canada's senior governments use modern “accrual” accounting that matches the costs of long-lived assets such as buildings and infrastructure to the period they deliver their services. Municipal budgets, by contrast, show cash outlays on capital, exaggerating the up-front cost of major projects, and understating their later expenses.

This study shows how a reasonably intelligent but time-constrained non-expert user – a councillor or taxpayer – might attempt to reconcile budgeted spending with actual results. We look at the last 10 years of municipal budgets and financial reports for cities from coast to coast and calculate standard statistical measures (root mean square errors) of the gaps between the planned spending changes and what cities presented at the end of the year. Among Canada's largest cities, Toronto and Waterloo Region come off best, with gaps of less than 5 percent, but the worst – Brampton, Halton Region, and Vaughan – have gaps of around 20 percent, and cities generally are far worse at hitting their targets than Canada's federal and provincial governments.

Canada's senior governments have tended to over-shoot their budgeted spending over the past decade. Among municipalities, the inappropriate budgetary treatment of capital assets and poor record of hitting budget targets seems to have a different real-world consequence. The financial statements of Canada's major cities show a cumulative surplus over the past five years of \$29 billion – Calgary, Saskatoon, Halton Region, Vaughan and Markham have run the largest surpluses compared to their revenues – and the cities with the biggest gaps between budget targets and end-of-year spending have tended to have larger surpluses. This record suggests that cities have tended to over-charge up-front for capital projects, and thus not matched the costs of these projects to taxpayers with the delivery of their benefits over time as well as they could have.

Changes in provincial legislation could foster better municipal financial reporting, but cities also have the capacity to present more meaningful numbers on their own. Both provinces and municipalities should take steps to improve the fiscal accountability of municipalities and the stewardship of municipal funds.

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Just about anyone who follows them finds the annual debates over municipal budgets in Canada mystifying. In city after city, councillors and staff struggle to vote a balanced budget, warning ratepayers of tax increases and lobbying federal and provincial governments for more funds.

Then year-end figures reveal a bottom line – which often looks like a massive surplus – radically different from what anyone following the budget discussions would expect.

Budget targets are naturally a challenge for any organization to meet – Canada’s federal and provincial governments do not hit their revenue and expenditure targets reliably. However, the gaps between what Canadian cities vote at budget time and their actual results are typically far larger than what occurs with senior governments – in large part because the headline numbers in the cities’ two financial documents are not prepared on the same basis of accounting.

This *Commentary* shines some light into this vital but murky area by surveying the financial-reporting practices of Canada’s largest municipalities and – to the extent the unsatisfactory published numbers permit – evaluating their records in fulfilling their budget commitments. The differences between the presentations of budget documents on the one hand and financial reports on the other are a concern not only for accountants. They have real-world consequences, such as budgets that exaggerate the

costs of capital projects up front and understate them later on, potentially distorting investment decisions and obscuring the extent to which cities are fiscally sustainable. More generally, inconsistent presentations hamper the scrutiny by legislators, ratepayers, and voters that Canadians need to hold their municipal governments to account.

A decade ago, the federal government and all provincial and territorial governments used different accounting and presentations in their budgets than in their financial reports. Over time, they are bringing the two into line. This review of fiscal reporting by Canadian municipalities shows how local governments should and can move forward also, and improve their accountability for the money they raise and spend.

MUNICIPAL BUDGETS AND FINANCIAL REPORTS

Accountability has many dimensions: actual and potential reports on public-sector activity range from on-time performance in public transit systems, through how well students and patients fare in

Many comments from reviewers of an earlier draft have improved this *Commentary*. We gratefully acknowledge the comments of the late Bob Brown, as well as of Colin Busby, Don Drummond, Rob Graham, Enid Slack, and Almos Tassonyi, the Municipal Finance Officers’ Association of Ontario and a large number of the municipalities profiled here. We emphasize that responsibility for the assessments, conclusions, and any errors is ours. Many of the reviewers will disagree with some of our specific assessments, and will have reservations about the thrust of our recommendations. We look forward to continued discussions and progress toward municipal financial reports that are useful to councillors, officials, citizens, and outside experts alike.

public schools and hospitals, to audits of spending in government agencies. The focus of this review is governments' annual fiscal footprint: the aggregate figures for revenue and spending in a fiscal year.

A municipality's overall fiscal footprint determines the taxes, user fees, and other charges that citizens and businesses must pay, and is a critical element in assessing its impact on public services and the local economy.

Like Canada's federal and provincial governments, Canadian municipalities produce two major documents in their annual financial cycles: budgets and financial reports. Budgets are the cornerstone of municipalities' financial plans. They take months of preparation, and are the principal opportunity for citizens, the councillors who represent them, and the media to consider and provide input on municipal priorities. At the opposite end of the cycle, municipalities publish audited financial reports that show actual revenue and spending over the year.

Ideally, our investigation of fiscal accountability in Canada's municipalities would start by comparing budgeted revenue and spending to results for the most recent year in each city, and then extending that survey back in time to get a sense of average performance and trends. As with the C.D. Howe Institute's annual surveys of the fiscal accountability of Canada's federal, provincial, and territorial governments,¹ this ideal start requires two things. First, without digging through dozens of pages, tables of numbers, and footnotes, or doing lots of arithmetic, a person of reasonable intelligence – a motivated but time-constrained councillor, say – should be able to pick the key revenue and spending totals out of a city's budget or end-of-year financial report. Second, with no inordinate effort, expertise, or resort to external experts, that person should be able to compare the same totals between the two

documents to see how a city has managed relative to the financial goals it set at the beginning of the year (see Box 1).

A Basic Accounting Discrepancy

For most Canadians, however, this ideal situation is an ideal only. In most of Canada's major cities, our reasonably intelligent and motivated, but time-constrained reader would find a simple comparison of aggregate revenue and spending numbers in budgets and financial reports impossible since the vast majority of cities do not use the same accounting methods in the two documents. So our investigation first requires a look at the differences and their significance.

The best way to represent economic reality in financial documents is a subject of ongoing and energetic debate. Among the better-established principles – key in what is typically called “accrual accounting” – is that financial documents should anticipate, or report, revenues and expenditures during the period when the relevant activity is expected to occur, or occurred.

A salient example is the purchase of a long-lived asset such as a building. A business does not record the entire cost of construction as an expense at the time it laid out the cash. Instead, it records the value of the building as an asset, and amortizes the expense – writing it off over time – as the building delivers its services. Similarly, accrual accounting for municipal governments, which have large capital assets such as roads, bridges, and water and sewage facilities, as well as buildings and equipment, does not record the entire cost of these items as expenses in the year of the cash outlay, but shows the annual amortization over their useful lives. Among other virtues, this approach helps match the period during which taxpayers cover the cost of long-lived assets

1 See, for example, Busby and Robson (2008, 2009, 2010, 2011, 2013).

Box 1: Clarifying Our Objectives and Methodology – The Case of Vaughan

The City of Vaughan took issue with our inaugural fiscal accountability survey of Canadian cities (Dachis and Robson 2011), and commissioned a report from Ernst and Young to reconcile its budget and financial-report figures (Vaughan 2012). We welcome Vaughan’s response. It implicitly acknowledges our key critique, since they hired an expert team to perform a reconciliation we think should be possible for a non-expert. Vaughan’s response also suggests that we can usefully elaborate some key points about the premise of this study and our approach in implementing it.

To begin with, a vital element in the reconciliation undertaken by Ernst and Young was to add in-year changes – additional funds voted by council after the original budget was approved. Our survey treats the beginning-of-year budget as uniquely important, since the budget gives “big-picture” treatment to the overall fiscal position and plan of the municipality, and involves a level of scrutiny by councillors, the media, and the public well beyond what subsequent votes get. It is regrettably common for federal and provincial governments, like cities, to vote in-year amounts that are large and inconsistent with previous fiscal plans. We treat these deviations from plan as problems – especially when the financial statements themselves do not itemize and explain them – rather than as changes of course that are automatically validated by the associated vote.

A second major feature of the Ernst and Young reconciliation is a number of sometimes quite large adjustments to budget figures. One set of adjustments deals with the discrepancy we note in our critique: that capital expenditures appear in budgets as cash outlays, but in financial reports on an amortized basis consistent with accrual accounting. Another deducts transfers to reserves from the budget expenditure totals – reasonable in its own right, but hugely different from the spending figures presented to Vaughan council in the city’s budget.

The simple fact that Vaughan commissioned a study by an eminent accounting firm to perform a reconciliation that an intelligent non-expert should have been able to perform in a matter of minutes using only the main tables in the city’s budget documents and financial statements offers an oblique but powerful testimonial to the problems with its current presentations. Giving councillors and citizens straightforward information that would allow a comparison of key budget items and year-end results seems a reasonable request of any municipality – and getting skilled accountants to do the necessary work ahead of time would be a better use of city resources than commissioning a reconciliation after the fact.

with the period during which the assets provide services – a straightforward tool to achieve fairness among taxpayers over time.²

To a considerable extent, Canada’s municipalities use accrual accounting in their end-of-year financial reports; indeed, the Public Sector Accounting Board (PSAB) has required it since 2009.³ As is the case with the provinces and the federal government, accrual accounting as practised by cities can have gaps – notably omitting employee benefits earned but not yet paid, pensions in particular.⁴ These gaps are important, because they reduce the value of annual income statements and associated statements of net worth in determining how well a government is matching its revenues to its expenditures and avoiding unfair transfers of wealth over time. Because existing accrual accounting does a better job in this regard than alternatives such as cash accounting, however, and because its embodiment in current standards signifies widespread acceptance, we accept the methodology in current financial reports as definitive for this survey.

But the budgets most municipalities produce at the beginning of the year do not follow this standard. For a mixture of historical reasons and constraints imposed by the province in which they are located, they budget using mixed methods. They use accrual accounting in some areas, such as accounts receivable, but they use cash accounting for others, most notably capital items, which are large and have large implications. Unlike businesses and senior governments – and unlike in their financial reports – municipalities typically do not

present budgets in which capital assets that will yield services for years into the future are capitalized and amortized. Instead, they show the related cash outlays when they expect them to occur. A common practice is to show these expected cash outlays in a “capital” budget, while also producing an “operating” budget for items to be consumed and expensed during the year. Some municipalities present and vote capital and operating budgets together; others do so separately. Either way, the resulting budget totals are not comparable to what will appear in financial reports.

This discrepancy complicates comparing spending in budgets and financial reports. It also makes comparing revenue in the two documents largely pointless. This is because “capital financing” in municipal capital budgets includes all sources of funds – not just tax and other current revenue such as grants from other levels of government, but also funds raised by issuing debt. This mixing of an item that does not add to an entity’s net worth with items – such as taxes, remitted profits of municipally owned enterprises, and grants from other levels of government – that do add to net worth will defeat a non-expert reader’s attempt to figure out how large the claim of a municipality on community resources actually is.

A Further Complication: Gross versus Net Figures

Another obstacle to comparing actual to budgeted amounts is the pervasive practice of netting certain

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- 2 Although decisions about how to finance assets are not necessarily linked to decisions about how to represent them in financial statements, the usefulness of accrual accounting in matching costs and benefits over time is clear in a situation where a government borrows, say, \$1 billion to finance an asset that will produce services for 20 years, and amortizes the loan over the same 20-year period during which it writes off the asset.
 - 3 Many provinces also require that municipalities submit their final financial results to the ministry of municipal affairs. Ontario municipalities, for example, file the provincial Financial Information Return, with standardized aggregations of municipal operations, and use the same basis of departmental aggregation in their financial statements.
 - 4 As Laurin and Robson (2010, 2011) note, the interest rate that the federal government uses to discount future pension liabilities does not provide an economically meaningful estimate of the present value of future pension payments.

types of revenue against expenditure. Defenders of netting in municipal budgets typically point to the centrality of property taxes in budget debates. “Tax-supported” services attract more attention than “rate-supported” services such as water and sewage. Homeowners and businesses typically consider rate-supported items as akin to a priced service – possibly one they can control by varying their use – unlike property taxes, which feel like more of an imposition. So it might appear sensible to deduct water, sewage, and so on from revenue and spending to highlight the tax burden.

However valuable such net amounts might be as supplementary information in budgets and financial statements, highlighting net amounts while downplaying gross amounts – or, worse, not showing gross amounts at all – understates a government’s aggregate fiscal footprint. When municipal budgets obscure or omit the total revenues and expenses associated with rate-supported services, budget figures become even less comparable to their counterparts in financial reports.

Lack of Reconciliation between Budgets and Financial Statements

Even when accounting and gross reporting are consistent, it helps to have reconciliation tables in financial reports that show how actual expenses deviated from the budget by item. Canada’s senior governments increasingly show these reconciliations. They help users understand discrepancies, which enables legislators and citizens to hold governments to account for their actions

and, if necessary, take steps to reduce the size of surprises in the future. When accounting and gross reporting are inconsistent, it is critical to have reconciliation tables.

GRADING CANADIAN MUNICIPAL BUDGETS

This background sets the stage for our first presentation of critical aspects of the financial information in municipal budgets. To put the non-expert reader in the ideal situation of being able to proceed directly to comparing key revenue and spending totals, municipal financial documents should have:

- budget figures presented on the same accrual basis as is used in the financial report;
- failing that, combined capital and operating expenses presented early and prominently in budgets to present the total amount of annual municipal spending;
- budget presentations of combined rate- and tax-supported gross expenditures on the same basis as in financial reports;⁵ and
- a reconciliation of gross spending figures to budget projections – as originally reported – in the financial report.

We focus on spending in this review because, as noted above, municipalities combine funds raised by borrowing with tax and other revenues in their capital-financing budgets, making budget revenue figures misleading. The quality of the spending numbers also differs in important ways. We do not think it reasonable to assume a non-expert reader

5 Most municipalities report department-level spending at different levels of aggregation in budgets than in financial reports. For example, most set budgets for specific departments – say, policing and firefighting – each of which is at least notionally under the control of a department head. Financial reports, on the other hand, might aggregate such items into broader categories – for example, “protection services.” We do not examine here whether municipalities provide the same departmental aggregation in budgets as in financial reports. Our previous report (Dachis and Robson 2011) shows that hardly any do so.

Table 1: Clarity Criteria of Approved Municipal Budget, Selected Canadian Cities, 2012

Municipality	Fiscal Year	Headline Budget and Financial Reports on Same Accounting Basis?	If Budget not on Accrual Basis, Combined Operating and Capital Budget?	Headline Total Includes Gross Expenses and Total of Rate-Supported and Tax-Supported Expenditures?	Reconciliation Table in Most Recent Financial Statement Matches Gross Expenses Amount in Budget?
Brampton	2012	no	no	yes	no
Calgary	2012	no	no	yes	no ^a
Durham Region	2012	no	no ^b	no ^b	yes ^c
Edmonton	2012	no	no	no	no
Greater Sudbury	2012	no	no	yes	no ^a
Halifax	2012–13	no	partial ^d	yes	yes
Halton Region	2012	no	partial ^d	yes	no ^a
Hamilton	2012	no	yes	yes	yes ^c
London	2012	no	yes	yes	yes
Markham	2012	yes ^e	yes	yes	no
Mississauga	2012	no	no	yes	no ^a
Montreal	2012	yes ^f	n/a	yes	yes
Niagara Region	2012	no	yes	yes	yes
Ottawa	2012	no	partial ^d	yes	no ^a
Peel Region	2012	no	yes	yes	no ^a
Saskatoon	2012	no	partial ^d	no	yes ^c
Surrey	2012	yes ^g	n/a	yes	no ^a
Toronto	2012	no	no	partial ^h	no ^a
Vancouver	2012	no	yes	yes	no
Vaughan	2012	no	yes	yes	yes
Waterloo Region	2012	no	partial ^d	partial ^h	no
Windsor	2012	no	no	yes	no
Winnipeg	2012	no	no	no ⁱ	no
York Region	2012	no	no ^j	yes	no

a Financial statement contains reconciliation, but totals differ from operating totals in the originally approved budget by more than 0.5 percent of total approved spending.

b Durham Region presents gross expenditures and the sum of capital and operating budgets in printed budget, not online.

c Financial statement contains reconciliation, but totals differ from operating totals in the originally approved budget by less than 0.5 percent of total approved spending.

d Budgets show capital and operating budgets on the same page, but do not sum the total.

e Markham's executive summary of budget presents cash budget as headline; it presents an accrual basis budget in budget details, but only on page 167.

f Montreal presents a non-audited presentation of actual, end-of-year expenditures and revenues as its headline totals in its financial reports. These estimates match the accounting standards of the headline budget total. However, the accounting basis in the headline amount differs from the audited amounts in the financial statements.

g Surrey's budget presents two headline totals, one that is comparable to financial statements and another that is not.

h Rate and tax supported budgets are presented together, but not summed.

i Winnipeg's budget book is preceded by a PowerPoint presentation in which the headline figure does not provide total of rate-supported and tax-supported expenditures.

j Not in budget book, but in a PowerPoint presentation to council.

Source: 2012 approved budget books posted on municipal websites.

will be able to find and add multiple spending figures located throughout a budget document. Accordingly, we judge only the merits of the most prominently displayed aggregate budget figures in the budget documents posted on a municipality's website.

As Table 1 shows, some cities did better than others in 2012. Montreal presented its headline budget expenditures on a basis consistent with its financial reports and presented the gross, total expenditures of all municipal departments. Markham and Surrey also fulfilled these criteria, but detracted from what would otherwise have been a praiseworthy practice by not displaying the accrual-basis figures early and prominently – our non-expert reader would have had trouble finding and identifying them. Vaughan, Niagara Region, and London fulfilled some criteria, but critically did not present their budgets on an accrual basis. One notable improvement from our 2011 survey was made by Hamilton, which in 2012 presented total gross expenditures prominently in the budget along with the total capital and operating expenditures.

Two municipalities – Edmonton and Winnipeg – failed to fulfil any of our clarity criteria. Their online budgets use accounting that is inconsistent with their financial reports, do not present the municipality's

full fiscal footprint in the headline estimates, and provide no reconciliation with budget numbers in their financial reports. The documents published by these cities would stump our non-expert reader at the outset.

MEASURING FISCAL ACCOUNTABILITY

Clear and transparent budget and accounting processes are means to the end of accountability for the direction of fiscal policy.⁶ The superior financial presentations of many of Canada's senior governments allow legislators and taxpayers, without inordinate effort, to assess how well actual results match budget plans. Having said why this task is harder in the case of municipal governments, we now discuss our attempt to do it, and present the results.

We compile spending data from annual budgets and end-of-year financial statements from 2002, or the first year of a municipality's existence, through 2012 for 24 major municipalities.⁷ In cases in which municipalities were amalgamated – or, in Montreal's case, de-amalgamated – over this period, we use the budget amounts from the year after the change.

Because municipal budgets and financial statements use inconsistent accounting rules, and because rules changed during our study period, straightforward comparisons of levels of spending

6 Because accountability for public funds has many dimensions, we stress again that we are not dealing here with such measures as program effectiveness or disclosure of expenses. Over time, more of these types of data are becoming available, and some municipalities are energetic in collecting and publishing them. Consistent presentation of aggregate revenue and spending data will make such data more useful to users who, for example, want to compare value for money in different jurisdictions and over time.

7 These are cities with a population of more than 275,000 in 2011 or total end-of-year revenue of more than \$500 million in that year. The exceptions are Laval, Longueuil, and Quebec City, for which we were unable to collect municipal budget data we desired for the full period, partly due to recent amalgamations and de-amalgamations. For this reason, we exclude 2006 for Montreal. Some years of data were unavailable for some municipalities. We exclude Vaughan's 2009 budget because that city did not restate its 2008 results on the same basis as its 2009 totals in that year's budget, preventing a meaningful calculation of year-over-year changes. Niagara Region did not provide 2011 gross expenditures. We do not have the complete budget books for Calgary for 2002 through 2005. We use the headline figures from Calgary's budget books for years in which we obtained budget books, but otherwise use the most prominently displayed gross expenditure figures from budget documents the city provided to the authors.

in budgets and in financial results are uninformative or misleading. With the caveat that this calculation would be a stretch for our non-expert reader, we reduce the effect of these distortions by comparing projected and actual growth rates, rather than levels. In both budgets and financial reports, we calculate increases for the reference year from the prior year as presented in the same document.⁸ We show these growth rates in budgets and in financial reports, and the difference between them, in Appendix Table A-1 (see Box 2 for additional details).

Comparing annual growth rates in budgets to those in financial reports lets us produce our main summary measure of how well the end-of-year spending a municipality reports matches its budget amounts: the root mean square error.⁹ This standard measure of accuracy sums differences without regard to sign, creating a useful summary measure of deviations from targets, regardless of their direction.

So, how good were the spending changes approved by municipal councils as a guide to what municipalities reported at year-end? Waterloo Region and Toronto earn top marks among municipal governments: our measure shows an annual average gap between the actual spending changes in their financial reports and their budgeted changes of less than 5 percent (Table 2). We emphasize that this standing is high only relative to other cities. In a survey of Canadian major governments that also included Ottawa,

the provinces and territories, Waterloo Region and Toronto would place only eighth and tenth.¹⁰ Brampton, Vaughan, and Halton Region have the lowest accuracy: our measure shows average annual gaps between reported and budgeted spending changes in the 18-to-22 percent range for them.¹¹ No senior government's gaps were as large: add them to the comparison, and Brampton, Vaughan, and Halton Region would still be dead last.

WHY THIS MATTERS: THE MYTHS AND REALITIES OF STRAINED MUNICIPAL FINANCES

That actual reported spending changes by Canada's major cities routinely differ by large amounts from what they vote at budget time suggests that councillors have a less reliable grasp on municipal fiscal policy than Canadians might wish. In particular, it might impede their ability to manage the inevitable tension between the current desires and interests of taxpayers and users of municipal services, and those of taxpayers and service users in the future – notably in the construction and financing of long-lived assets.

Inconsistent Budgeting Distorts Municipal Investment Choices

Cash budgeting for capital projects not only messes up comparisons of budgets and financial results; it also likely biases decisions about investing in and

8 That is, we use the current and prior year in the financial report to calculate the growth rate in the financial report, and the current and prior year in the budget document to calculate the growth rate in the budget.

9 In other words, the square root of the squared percentage deviations.

10 See Busby and Robson (2013) for the expenditure accuracy estimates of these governments from fiscal years 2002/03 through 2011/12.

11 These accuracy scores are slightly lower – that is, less inaccurate – than those in our first review of municipal financial reporting, partly because of the moving 10-year time frame and partly because, in our first review, we used the Financial Information Return that Ontario municipalities submit to the Ontario Ministry of Municipal Affairs and Housing, while, in this review, we use the financial statements of Ontario municipalities directly.

Box 2: Methodology

In keeping with our premises regarding the reasonably intelligent and motivated reader, we use the most conspicuously stated total gross expenditure figures from municipalities' capital and operating budgets. We add capital and operating budget totals when a budget presents the two separately, as our reader would have great difficulty tracking the transfer of funds between budgets. Municipal budgets often show transfers of funds between capital and operating budgets: while adding the two can result in some double counting, these transfers are small compared with the totals.

As described in the text, we then calculate the difference between the current-year expenditure anticipated in a budget and the prior-year expenditure in the same document, and divide that amount by the prior-year expenditure to get a percentage change. We do the same to get a percentage change from the figures in the audited financial statements. We ensure that our calculations use consistently presented numbers – for instance, on the occasion of the accounting change in financial statements in the 2009 fiscal year – by basing them on the restated amounts from the previous year's budgets or financial statements. Most cities do not report the previous year's budgeted capital expenses; in those cases, we use the amounts in the budget from the previous year for the comparison.

We do not compare municipal budget estimates of revenues to actual revenues. As mentioned in the text, municipal capital budgets often show cash from borrowing along with other sources of revenue that add to net worth – a regrettable mixing that produces a figure that is meaningless in the context of an income statement.

paying for long-lived assets. Specifically, voting capital budgets that show a cash outlay on such assets as in-year expenses (as cash budgeting does), rather than capitalizing them and amortizing them on the income statement (as happens under accrual accounting), likely biases municipalities toward raising revenues up front to finance

infrastructure expenditures that will yield benefits well into the future.

One type of upfront revenue is the development charges municipalities impose on developers to finance infrastructure.¹² Like other levies, such charges may make sense when they spread costs over the period during which benefits – in this

12 Ontario has a specific *Development Charges Act*, while other provinces have sections in their municipal acts that outline the types of charges cities can levy on developers. For example, sections 42 and 37 of *Ontario's Planning Act* provide for payments or in-kind contributions by developers for the provision of parklands or community amenities to secure planning approval for buildings that exceed existing zoning regulations. Many other provinces have similar provisions. In Ontario, municipalities are required to dedicate development charges to capital projects.

Table 2: Summary of Spending Accuracy, Selected Canadian Cities, 2003 – 2012 Fiscal Years

Municipality	Accuracy (<i>percent</i>)	Rank	Municipality	Accuracy (<i>percent</i>)	Rank
Brampton	18.7	22	Ottawa	11.0	17
Calgary	6.1	7	Peel Region	13.7	21
Durham Region	5.9	6	Saskatoon	8.0	11
Edmonton	11.4	18	Sudbury	7.7	10
Halifax	5.5	4	Surrey	8.1	12
Halton Region	22.2	24	Toronto	3.7	1
Hamilton	7.0	9	Vancouver	9.8	16
London	6.7	8	Vaughan ^c	19.9	23
Markham	12.7	20	Waterloo Region	4.7	2
Mississauga	9.5	15	Windsor	8.5	14
Montreal ^a	8.3	13	Winnipeg	5.6	5
Niagara Region ^b	5.3	3	York Region	12.6	19

a We exclude 2006 for Montreal.

b We exclude 2011 for Niagara Region.

c We exclude 2009 for Vaughan.

Sources: Authors' calculations from municipal budgets and financial statements.

case, the delivery of incremental new infrastructure and public services to each new household – will flow (see Bird, Slack, and Tassonyi 2012).¹³ Cash accounting, however, creates an imperative to levy these charges to match cash outlays rather than the flow of future benefits, which, given the size of development charges, might represent a significant subsidization of services for current and future residents by new homebuyers.¹⁴

The pattern of surpluses since the adoption in 2009 of accrual accounting in municipal

financial statements suggests that, in recent years, municipalities might have collected more revenues than the value of their operating and capital services. From 2008 through 2012,¹⁵ the 24 largest municipal governments ran an aggregate cumulative surplus of \$29.0 billion (Table 3). The 2012 total surplus, \$6.8 billion, is 14 percent of these municipalities' total revenues in 2012. The municipalities with the largest surpluses as a share of revenues in 2012 – Calgary, Halton Region, Markham, Saskatoon, and Vaughan – had surpluses

13 Blais (2010) notes that development charges are normally set at average cost, not the marginal cost that matching an incremental service increase would justify.

14 Development charges are one of the main sources of capital financing of municipal capital assets. In 2011, Ontario municipalities collected \$1.3 billion in development charges, according to Schedule 61 of the Ontario Financial Information Return.

15 Cities restated their actual 2008 revenues and expenditures on an accrual basis in their 2009 financial statements, giving us an additional year of data to compare.

Table 3: Budget Surplus as a Share of 2012 Revenues, and Cumulative Surplus, Selected Canadian Cities

Municipality	Surplus, 2012		Surplus, 2008–2012 Cumulative (\$ millions)	Municipality	Surplus, 2012		Surplus, 2008–2012 Cumulative (\$ millions)
	As Share of 2012 Revenues (percent)	Total (\$ millions)			As Share of 2012 Revenues (percent)	Total (\$ millions)	
Toronto	12.2	1,426	3,472	Halifax	10.3	96	493
Montreal	5.0	305	2,543	Halton Region	28.4	263	1,044
Calgary	26.9	1,088	4,323	Waterloo Region	8.2	74	332
Ottawa	11.8	386	1,432	Saskatoon	35.3	316	1,010
Edmonton	19.9	556	2,751	Niagara Region	3.1	25	260
Peel Region	12.0	253	1,367	Windsor	10.2	78	375
York Region	23.3	483	1,882	Brampton	24.9	183	776
Hamilton	8.2	131	870	Surrey	21.0	148	870
Winnipeg	13.2	197	966	Mississauga	-0.8	-6	473
Vancouver	10.1	146	631	Sudbury	8.7	46	208
Durham Region	16.0	196	871	Vaughan	31.2	164	615
London	10.9	113	755	Markham	38.5	163	647
				All major cities	14.3	6,833	28,965

Note: Cities listed by size of 2012 revenues.

Sources: Authors' calculations from financial statements.

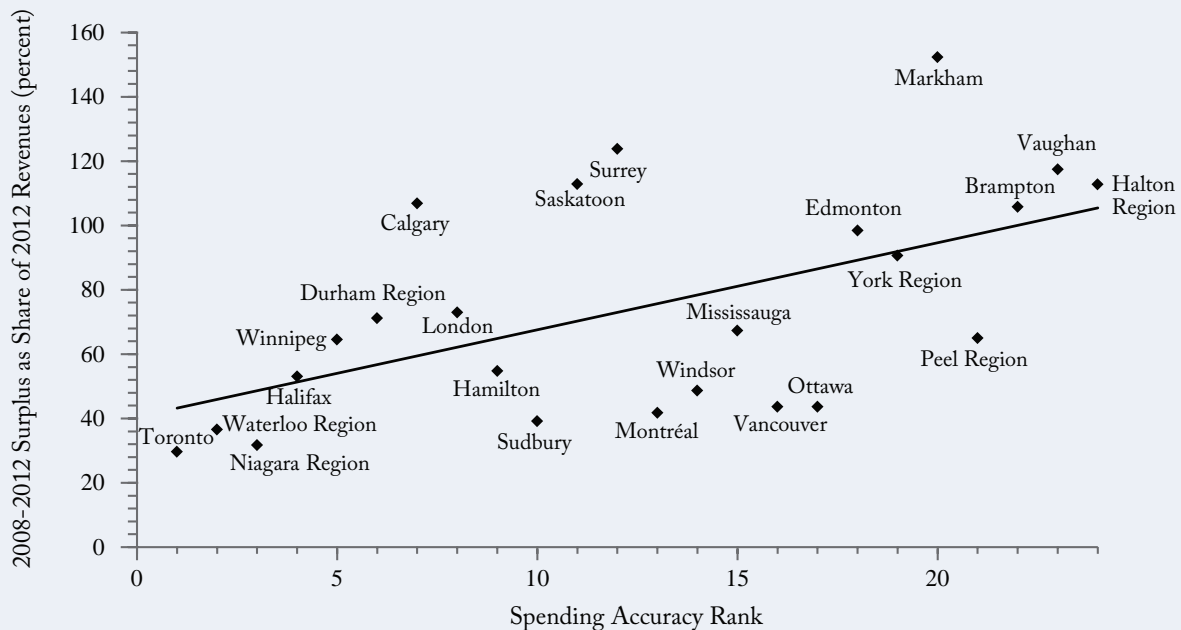
of more than 25 percent of total revenues.¹⁶ This does not mean that municipalities, in reality, have hugely positive net worth; as we noted earlier, current public-sector accounting standards might let them omit important liabilities, such as those

related to pensions and other future employee benefits, as well as environmental obligations. It does suggest, however, that current practices are not spreading the costs and benefits of municipal infrastructure to households as fairly over time as they should.¹⁷

16 We include developer contributions, government capital transfers, and developer contributions in-kind for all municipalities to ensure we present comparable annual surplus estimates for all municipalities. For 2009 through 2012, the financial statements of Calgary, Edmonton, Saskatoon, and Winnipeg count these as “other” revenues and include them in the annual surplus.

17 An intertemporally fairer approach to infrastructure financing would be to match the timing of paying for an asset with the lifespan of the asset. Municipalities have numerous ways to do this, such as by issuing revenue bonds or entering public-private partnerships that provide up-front cash financing for infrastructure projects with a long-term stream of obligations paid by the generations of users and taxpayers who benefit from the assets. Instead, many municipalities are financing capital infrastructure projects on a “pay-as-you-go” basis, which makes otherwise worthwhile infrastructure projects politically unpalatable to taxpayers who will benefit only with a delay, or not at all, from the investments their outlays would finance.

Figure 1: Spending Accuracy and Cumulative 2008 – 2012 Surplus, Selected Cities



Note: The results are similar if the spending accuracy measure, rather than the accuracy rank, is placed on the x-axis.
Sources: Authors' calculations from municipal budgets and financial statements.

The Pattern of Budget Inaccuracy

Looking at our accuracy measure and municipal surpluses together suggests that discrepancies between budgets and results do have real effects. Cities with the worst gaps tended to have larger cumulative surpluses (measured relative to revenue) from 2008 to 2012 (see Figure 1). Although the

differences between announced and actual spending changes in both directions are very large year to year, making strong conclusions about average misses calculated over a decade inappropriate,¹⁸ the effort to balance budgets on a cash basis may bias municipalities toward surpluses on an accrual basis.

18 Busby and Robson (2013) calculate a bias score that suggests a tendency for the federal and provincial governments to spend more than they budget. A similar calculation for municipal governments results in a bias score that is tiny in comparison with the variability – in statistical terms, indistinguishable from zero.

RECOMMENDATIONS FOR BETTER MUNICIPAL BUDGETS

In seeking to improve municipal fiscal accountability in Canada, we hearken back once more to our reasonably intelligent but time-constrained and non-expert reader. This person – a typical municipal councillor or motivated taxpayer – should be able to pick up a city’s budget and its financial report for the same year, start at page one, easily pick out the key aggregate revenue and spending figures, and then compare them to see how close the results are to the plan. The majority of Canada’s senior governments now publish budgets and financial reports that make this exercise possible, and other public-sector entities are following suit.¹⁹ As in our previous survey of municipal fiscal accountability (Dachis and Robson 2011), we have several suggestions to bring Canada’s municipalities up to the same mark.

Adopt Accrual Accounting in Budgets

A key first step is to use accrual accounting in municipal budgets. Ideally, the provinces would

relax their current requirements for cash accounting; alternatively, they could mandate accrual accounting consistent with financial statements. But absent provincial action, individual municipalities could present budget numbers consistent with the financial statements on their own.²⁰

Now that municipalities are preparing accrual-based financial statements, there is no good reason not to show accrual-based numbers in budgets as well. This recommendation does not pre-empt presentations of other information, such as figures net of rate-supported services, to show the effect of spending on property tax rates. At the risk of repetition, we underline that accrual accounting is intended to match revenues to the services provided, now and in the future.²¹ This is a major advantage for councillors and taxpayers, whether they are looking at the financing of long-lived infrastructure assets, for example, or tracking how future obligations such as pension entitlements of municipal employees or landfill decommissioning and other environmental liabilities are affecting their municipality’s net worth.²² Accrual accounting in budgets will be a useful tool to improve asset management.

19 School boards in Ontario, for example, have recently moved to full accrual budgets.

20 Provincial requirements, however, should not allow or mandate municipalities to deviate from established accounting practices for financial statements. For example, Ontario Regulation 284/09 of the *Ontario Municipal Act, 2001* allows municipalities to exclude from their annual budgets amortization expenses of post-employment benefits expenses and solid waste landfill closure and post-closure expenses. Currently, Ontario requires that staff present to council a report of the extent of these costs. Alberta allows, but does not require, municipalities to produce their budgets on a comparable basis as their financial statements.

21 A move to accrual accounting would also make multiyear budgets more meaningful. The multiyear capital budgets that all large cities produce (along with a handful that present multiyear operating budgets) are of relatively little use when they do not include the full future amortization costs of capital expenses in a consolidated budget.

22 That such opportunities exist does not mean that governments will use them wisely. As in the private sector, accounting standards in the public sector change as opinions about the best ways to represent economic reality change. Current public-sector accounting standards are open to criticism, for example, for valuing pension obligations using arbitrary, rather than market-based, discount rates, which typically makes those obligations look smaller than the cost to pay them off at the valuation date (Robson 2012). For municipalities to move, in both their budgets and their financial reports, to the standards currently followed by the federal government and most provinces and territories would nevertheless be a big step forward.

In some provinces, accrual accounting in budgets would create tension with the requirement that their municipalities present balanced operating budgets. Accrual accounting would consolidate all items affecting net worth into common revenue and expense totals, making the concept of a separate operating budget irrelevant. One option would be to focus on the overall bottom line – which, under accrual accounting, should represent change in net worth – much as the federal and most provincial governments target their budget balances as calculated on an accrual basis. Other measures related to fiscal prudence and sustainability, such as interest costs relative to revenues, are possible.²³ The key point is that provincial legislation should not mandate budget targets that are inconsistent with the accrual accounting already in use in municipal financial reports.

Show Gross, Consolidated, Municipal-wide Spending

Municipal budgets should also show spending and revenue on a gross basis, so that users of financial statements have one, comprehensive overview of a government's fiscal footprint. As for what entities to include, senior governments typically distinguish between Crown corporations whose principal revenue source is the government and do not operate in a commercial environment, and Crown corporations whose principal revenue sources are sales to outside parties and operate in a commercial environment. These governments consolidate the former in their financial statements, while recording only transactions with, and equity investments in, the latter.²⁴ Applying this distinction at the

municipal level suggests consolidating water and waste utilities, while showing transactions and equity investment in connection with many other government business enterprises.

Show Detailed and Consistent Departmental and Functional Totals

Inconsistent reporting of department-level spending is not as serious a flaw as the non-comparability of aggregate numbers, and is not a primary focus of this survey. When budgets and financial reports use different accounting methods, the current practice in most municipalities of budgeting for specific departments but reporting results using broader functional categories does not stand out, because even consistent categorization would not yield comparable numbers.

Anticipating that municipalities increasingly present budgets on an accrual basis, however, we take this opportunity to urge them to improve the consistency of their presentation by department and function. Where provinces mandate certain reports, or in cases where they extend their control over how municipalities report their finances, we urge that they not mandate aggregations that hide details that help councillors and taxpayers understand why results did not work out as expected.

Show Deviations from Budget Plans

Accounting differences aside, municipalities in general should provide prominently displayed reconciliation tables that explain why year-end results differ from budgeted amounts. They should also highlight any budget modifications approved by council in their annual reporting to ensure that

23 Indeed, this debate about the appropriate public-sector finance anchor applies to federal and provincial budgets as well.

24 At the federal level, the Canada Mortgage and Housing Corporation is an example in the former category; the Canadian Broadcasting Corporation is an example in the latter.

financial statements present the full, originally approved budget.²⁵

Another valuable practice is the production of in-year reports showing results relative to plan. Many senior governments do this. The federal government, for example, produces a monthly fiscal monitor showing fiscal-year results to date compared with the budget plan, while Ontario produces a quarterly report. Many municipalities do produce regular reports that show the difference between budgeted and actual spending, but the inconsistent accounting in budgets and financial reports reduces the value of these reports, particularly for non-expert readers.

IMPROVING MUNICIPAL FISCAL ACCOUNTABILITY

It is time for Canadian municipalities to adopt budget practices that are becoming standard in more senior levels of government. In many cases, provinces can facilitate that transition by changing

the laws governing municipal financial reports. Cities should use accrual accounting consistent with their financial statements in their budgets, thereby avoiding the baffling discrepancies and potentially biased decisions about revenue and spending that inconsistent cash budgeting creates.

Municipal governments might have some concerns about moving to accrual accounting in their budgets, but the logic of adopting it is strong: it has carried the day with regard to municipal financial statements, and is now the general practice in budgeting for the federal and provincial governments. The confusion created by different accounting in municipal budgets and financial reports might not be intentional, but it is real, and its effect on transparency and accountability is deleterious. Clearer, more consistent figures and better adherence to budget targets would better align the financial management of Canada's municipalities with their fiscal impact and their importance in Canadians' lives.

25 Ernst and Young made these recommendations to the City of Vaughan (Vaughan 2012).

Appendix – Table A1: Change in Annual Expenditures, Selected Canadian Municipalities, 2001–12

Fiscal Year	Budgeted Spending Change (percent)											
	Brampton	Calgary	Durham	Edmonton	Halifax	Halton	Hamilton	London	Markham	Mississauga	Montreal	Niagara
2003	36.2	10.1	5.9	2.4	-2.6	1.9	4.3	-0.6	-5.7	7.4	4.4	1.9
2004	4.1	5.3	10.3	9.8	14.6	7.0	4.2	2.6	20.8	3.6	5.3	7.6
2005	-8.0	2.3	18.7	1.6	16.1	21.3	11.3	14.5	4.7	7.6	4.6	12.0
2006	35.4	15.5	5.6	2.5	3.2	4.3	1.0	2.5	-0.1	15.8	N/A	1.9
2007	-8.5	19.4	1.9	16.9	6.7	-0.9	7.5	0.0	11.9	3.1	4.8	1.0
2008	22.0	12.9	4.4	13.7	3.7	24.2	-2.4	3.4	18.0	15.5	8.4	6.2
2009	10.0	2.7	9.0	22.6	-5.0	23.7	9.1	-0.4	-1.3	-6.4	5.5	7.9
2010	-4.9	-1.4	4.2	-0.6	4.3	-8.0	10.6	-5.9	-9.8	18.5	-3.0	-2.3
2011	-0.7	0.1	9.6	-4.5	2.2	-14.8	-4.0	-2.4	6.8	-7.1	11.5	N/A
2012	0.0	-2.4	1.7	1.7	2.0	52.4	14.1	0.4	15.0	-5.5	8.1	4.7
Fiscal Year	Actual Spending Change (percent)											
	Brampton	Calgary	Durham	Edmonton	Halifax	Halton	Hamilton	London	Markham	Mississauga	Montreal	Niagara
2003	12.5	6.9	12.8	11.7	8.7	2.7	-0.5	3.9	11.8	11.3	3.5	7.9
2004	19.4	2.7	14.9	8.3	18.1	9.6	4.0	1.6	5.5	-2.4	3.2	5.9
2005	22.9	10.3	11.1	11.1	15.3	-0.8	12.9	6.6	22.8	12.7	5.1	3.9
2006	9.9	18.1	12.8	11.6	1.0	21.9	1.2	-4.0	-8.9	1.8	N/A	8.0
2007	9.2	11.7	-0.2	27.7	6.7	10.7	1.1	12.7	15.7	11.1	22.2	0.4
2008	2.7	19.0	-2.3	31.0	-3.6	1.6	4.2	4.9	-1.5	22.6	11.4	2.0
2009	4.4	12.0	4.9	2.7	4.0	3.7	5.4	1.9	7.5	-2.7	-1.5	6.6
2010	8.8	7.5	6.0	7.4	3.0	4.9	-1.4	4.6	-0.4	2.9	-3.8	7.2
2011	10.1	0.5	0.3	8.0	6.8	3.1	2.5	4.5	8.2	7.8	26.6	N/A
2012	8.9	1.6	4.7	2.8	1.0	1.7	0.5	-1.1	4.3	1.1	3.1	5.9
Fiscal Year	Difference (percent)											
	Brampton	Calgary	Durham	Edmonton	Halifax	Halton	Hamilton	London	Markham	Mississauga	Montreal	Niagara
2003	-23.8	-3.1	6.9	9.3	11.3	0.8	-4.8	4.5	17.5	3.9	-0.9	6.0
2004	15.3	-2.5	4.6	-1.5	3.5	2.6	-0.2	-1.0	-15.3	-6.0	-2.1	-1.8
2005	30.9	8.0	-7.6	9.6	-0.7	-22.1	1.6	-7.8	18.1	5.1	0.5	-8.1
2006	-25.5	2.6	7.1	9.1	-2.2	17.6	0.2	-6.5	-8.8	-14.0	N/A	6.1
2007	17.7	-7.7	-2.1	10.8	0.0	11.7	-6.4	12.7	3.8	8.0	17.3	-0.7
2008	-19.3	6.1	-6.8	17.3	-7.3	-22.6	6.6	1.5	-19.5	7.1	3.0	-4.2
2009	-5.6	9.4	-4.1	-19.9	9.1	-20.1	-3.7	2.3	8.8	3.6	-7.0	-1.3
2010	13.7	9.0	1.8	8.0	-1.3	12.9	-12.0	10.4	9.4	-15.6	-0.9	9.4
2011	10.8	0.4	-9.3	12.6	4.5	17.9	6.4	6.9	1.5	15.0	15.2	N/A
2012	8.9	4.1	3.0	1.1	-1.0	-50.7	-13.7	-1.5	-10.7	6.6	-5.0	1.1

Table A1 Continued on next page.

Appendix – Table A1: Continued

Fiscal Year	Budgeted Spending Change (percent)											
	Ottawa	Peel	Saskatoon	Sudbury	Surrey	Toronto	Vancouver	Vaughan	Waterloo	Windsor	Winnipeg	York
2003	0.6	26.4	-0.3	4.0	5.6	0.7	1.3	1.4	7.0	12.5	-1.4	23.8
2004	-6.7	-0.2	16.9	9.7	4.4	6.6	5.6	19.1	4.5	6.0	5.3	11.8
2005	22.6	-13.4	24.8	5.7	21.5	8.6	9.5	33.0	6.7	7.9	11.3	-10.0
2006	26.8	15.5	9.6	8.7	-2.6	8.1	2.3	-25.2	16.3	16.5	2.3	3.9
2007	-13.7	5.8	8.9	18.9	9.3	4.3	12.0	13.2	6.7	2.2	13.6	9.1
2008	9.1	16.0	8.2	6.7	12.1	5.2	-3.4	-4.3	3.2	2.5	1.8	10.9
2009	-2.2	19.1	10.3	1.7	2.1	7.6	5.9	N/A	21.3	9.9	6.4	21.2
2010	8.6	-12.2	19.4	-1.5	28.1	11.7	29.7	-24.5	5.5	2.9	-0.5	1.7
2011	4.4	21.4	8.5	-15.4	16.2	-2.6	-4.1	10.9	5.0	-9.0	-3.2	3.6
2012	6.3	0.0	1.1	3.5	4.1	2.9	-3.4	1.4	1.9	0.2	6.2	10.6
Fiscal Year	Actual Spending Change (percent)											
	Ottawa	Peel	Saskatoon	Sudbury	Surrey	Toronto	Vancouver	Vaughan	Waterloo	Windsor	Winnipeg	York
2003	5.4	12.9	12.6	15.7	10.5	4.3	4.8	4.8	8.4	5.2	1.8	19.2
2004	-0.9	13.9	10.8	-0.1	14.3	5.3	5.9	12.0	5.5	14.9	2.0	28.8
2005	10.7	9.3	14.2	2.6	14.0	4.3	10.8	3.7	2.5	12.3	3.1	13.4
2006	1.1	2.2	17.6	8.3	0.2	7.8	4.8	5.1	12.3	-3.3	2.3	0.8
2007	3.9	3.7	7.7	2.1	8.8	9.0	7.1	-0.9	5.7	6.4	4.9	1.8
2008	7.3	6.9	10.1	8.6	11.8	5.2	17.0	14.9	6.4	2.5	3.1	9.0
2009	-0.7	8.2	8.4	3.9	-10.1	5.1	4.4	N/A	11.5	0.5	8.4	0.3
2010	4.6	7.1	5.4	1.5	9.3	5.9	9.4	9.1	-0.1	-0.2	3.0	3.1
2011	3.1	7.6	2.3	-9.1	8.5	1.0	4.7	8.4	0.9	-1.2	7.5	17.5
2012	3.2	4.6	4.2	0.1	3.6	-2.7	0.4	-0.1	7.1	3.0	2.1	6.7
Fiscal Year	Difference (percent)											
	Ottawa	Peel	Saskatoon	Sudbury	Surrey	Toronto	Vancouver	Vaughan	Waterloo	Windsor	Winnipeg	York
2003	4.9	-13.5	12.9	11.7	4.9	3.6	3.6	3.4	1.4	-7.4	3.2	-4.6
2004	5.8	14.1	-6.1	-9.8	9.9	-1.3	0.3	-7.1	1.1	8.9	-3.3	17.1
2005	-11.9	22.8	-10.7	-3.1	-7.5	-4.4	1.3	-29.4	-4.2	4.4	-8.1	23.5
2006	-25.7	-13.3	8.0	-0.4	2.8	-0.3	2.5	30.3	-4.0	-19.8	0.0	-3.1
2007	17.6	-2.1	-1.2	-16.8	-0.5	4.6	-4.9	-14.0	-1.0	4.2	-8.7	-7.4
2008	-1.8	-9.0	1.9	1.8	-0.3	0.0	20.4	19.2	3.2	0.1	1.3	-1.9
2009	1.5	-10.9	-1.9	2.2	-8.0	-2.6	-1.4	N/A	-9.8	-9.4	2.0	-20.9
2010	-4.0	19.4	-14.0	3.0	-18.8	-5.8	-20.4	33.6	-5.6	-3.0	3.5	1.5
2011	-1.2	-13.8	-6.2	6.4	-7.7	3.6	8.8	-2.4	-4.1	7.9	10.6	14.0
2012	-3.1	4.7	-3.0	-3.4	-0.5	-5.6	3.8	-1.5	5.2	2.8	-4.1	-3.9

Notes: Halifax's budgets start in April of the calendar year, ending in March of the subsequent year.

Sources: Authors' calculations from municipal budget documents and financial statements.

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