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BACKGROUNDER

Fiscal & Tax Competitiveness

Holding Canada's Cities to Account:

An Assessment of Municipal Fiscal Management

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In this issue...

Despite their importance in Canadians' lives and their cost, most Canadian cities have rudimentary financial controls and routinely miss their budget targets. Better budgeting and reporting could raise their performance and make cities more accountable to taxpayers.

The Study in Brief

Note to readers: This is a revised version of a Backgrounder issued on November 23, 2011. We thank those who provided comments before and after the original version, and remain responsible for the figures and conclusions presented here.

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Rigorous external review of every major policy study, undertaken by academics and outside experts, helps ensure the quality, integrity and objectivity of the Institute's research.

Cities are the most visible level of government for most Canadians, providing services such as waste collection, policing and transit. Yet their budgets are the most opaque of any level of government.

Municipalities generally use accounting in their budgets that does not match what they use in their financial reports. Peering through the messy numbers reveals that most cities routinely miss budget targets by large amounts. Councillors and taxpayers who seek to hold these municipal governments to account face a daunting task.

Amid the mixed record, however, are some municipalities with clearer numbers and better records for spending control. That fact, along with improvements that have occurred at the federal and provincial levels in recent years, shows that progress is possible.

To improve financial performance and budget clarity, cities should adopt some of the budget reforms that higher-order governments have implemented over the past decade. This would require that cities take steps, either of their own accord or by provincial mandate, to:

- Adopt accrual accounting in budgets;
- Integrate operating and capital budgets;
- Present multi-year budgets;
- Report department-by-department results on the same basis as in budgets; and
- Show gross, rather than net revenues and expenditures.

These five basic reforms would create clearer, more consistent budgets and would bring the financial management of Canada's municipalities into line with their fiscal impact and their importance in Canadians' lives.

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About the Institute

The *C.D. Howe Institute* is an independent not-for-profit organization that aims to raise Canadians' living standards by fostering economically sound public policies. It is a trusted source of essential policy intelligence, with research that is rigorous, evidence-based, and peer-reviewed, recommendations that are relevant, constructive, and timely, and communications that are clear, authoritative and practical.

Essential Policy Intelligence

Cities are frontline providers of many services Canadians receive from their governments, including key quality-of-life functions such as drinking water, policing, public transit, and garbage collection. These services come at considerable cost: total local government expenditures in Canada in 2008 came to some $75 billion, or more than $2,200 per Canadian.[1] So Canadians have good reason to hold their municipal governments accountable. Yet municipal budgets, and the success or failure of municipal governments in meeting their financial goals, are among the least understood areas of Canadian fiscal policy.

In this *Backgrounder*, we attempt to shed some light on this area by examining the sharply contrasting financial control practices of selected municipalities and, to the extent the problematic published numbers permit, by evaluating how well they fulfill their budget commitments. In general, our review tells a story of inconsistent and problematic budgeting and financial reporting, and outcomes very different from what readers of budgets might reasonably expect.

The picture is not uniformly bleak, however. Surrey, British Columbia, and Markham and London in Ontario, for example, currently present budgets and financial results so that elected representatives and taxpayers can easily understand the full costs of municipal spending promises, while the Durham, Waterloo, and Niagara regions in Ontario most consistently spend close to what they budget. Many other municipalities, though, routinely miss budget targets by large amounts and use incompatible accounting for budgeting and reporting. Councillors and taxpayers who seek to hold these municipal governments to account thus face a daunting task.

Poor budget presentations and missed budget targets are also not uncommon among other levels of government in Canada. In the past, the federal and provincial governments also used inconsistent accounting for the budgets they voted on at the beginning of each fiscal year and the results they published after its end. Pressure for better accountability is ending these practices, however, and most senior governments have moved to accrual accounting consistent with the Canadian Institute of Chartered Accountants' *Public Sector Accounting Handbook*. These improvements, and the better managed among Canada's cities, show how municipal governments can raise their game.

Municipal Budgets and Financial Reports: Some Background

Coming at the subject for the first time, one might reasonably expect Canada's cities to show better financial management and fiscal accountability than its senior governments. One might think, for example, that the control provincial governments exercise over municipalities – cities are, to use a common constitutional term, "creatures of the provinces" – would produce common, transparent budgets and public accounts. On the spending side, direct operating costs tend to be a higher share of local government budgets than of provincial and federal budgets, so the needs of transfer recipients and the formulas that often drive transfer payments should produce fewer

We thank Colin Busby for comments, and the many cities, organizations, and individuals, including the Single Tier and Regional Treasurers group, that reviewed previous drafts of this *Backgrounder*. We stress, however, that not all reviewers agreed with our observations, and we take full responsibility for the analysis and conclusions presented here. Robin McNamara provided excellent assistance double-checking and inputting municipal budget data.

1 Statistics Canada, CANSIM database, table 385-0003; available online at http://www40.statcan.gc.ca/l01/cst01/govt52a-eng.htm. This figure excludes $48 billion in education expenses that Statistics Canada reports as a local government expenditure.

unbudgeted surprises.[2] On the revenue side, local governments generally set property taxes – mill rates – at whatever share of the taxable value of property will raise the money needed to match planned spending, reducing the likelihood, so problematic for senior governments, of finding that bumps and dips in cyclical tax bases throw things off course.

As we document in the next two sections, however, this seemingly reasonable expectation would be badly off the mark. Because comparing budget targets to outcomes requires first figuring out what revenue and spending figures to compare, we begin by evaluating the financial presentation of municipal budgets and financial results, highlighting some of the features that make them hard for elected representatives and voters to follow. With that as background, we then make some adjustments to compare budget targets to outcomes in a consistent way across the country – an exercise that shows how far Canada's cities have to go to get their results in line with their announced intentions.

Reading Municipal Budgets and Financial Reports

As with the C.D. Howe Institute's surveys of the fiscal accountability of Canada's federal, provincial, and territorial governments, the two linked premises behind this survey of municipal governments are straightforward.[3] One is that, without poring over 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 budget or end-of-year financial report. The other premise is that, with no inordinate effort or expertise, this person should be able to compare the same totals between the two documents. Ideally, then, the figures this person would use – and the ones we would like to have used in this review – would be displayed early and prominently in each year's budget documents and in each year's financial report. Yet, in almost every major Canadian municipality, such a reasonably intelligent and motivated person would find these simple tasks hard and, in most cases, impossible. Four major problems stand in the way.

Different accounting practices for budgets and financial reports: Since 2009, Canada's municipalities have produced financial reports at year-end using accrual accounting. Like private sector organizations, and like the federal, provincial, and territorial governments – which moved to accrual accounting several years earlier – these financial reports record income as it is earned, not necessarily when cash is received, and obligations as they are incurred, not necessarily when the cash is disbursed. Accrual accounting attempts to match revenues and expenditures to relevant activities. Capital projects, for example, are not expensed at once but, rather, give rise to annual depreciation charges as they deliver their services. Entitlements to pension and other post-retirement benefits, to pick another key example, are recorded as they accrue, even though they might not require cash payments until years later.

In contrast, the budgets municipalities produce at the beginning of the year use cash accounting, rather than accrual accounting. These documents show cash the municipality expects to receive or disburse during the year, regardless of when the activities those receipts and disbursements relate to are expected to occur. This is not a sensible

2 Looking at Ontario, for example, where detailed municipal expenditure data are available on a consistent basis, cities spent only 12 percent of their 2008 total operating and capital expenditures on transfers. For the province, by comparison, transfers to boards, authorities and persons represented 76 percent of expenditures in fiscal year 2008/09. Ontario municipalities spent $37.9 billion (out of $42.3 billion in total expenses) on the programs and services they directly control, whereas the province spent $23.2 billion on direct costs, such as salaries and wages, interest expenses, and other expenses, out of $96.8 billion in total expenses.

3 See Adrian, Guillemette, and Robson (2007); and Busby and Robson (2008, 2009, 2010, 2011) for evaluations of the fiscal reporting and performance of Canada's senior governments. Busby, Dachis, and Robson (2010) apply the same approach in looking at the City of Toronto.

basis for budgeting: senior governments long moved away from it; businesses do not do it; and even households, which are often more cash-flow-constrained than governments and businesses, typically do not count the full cost of buying a car or a house in the same budget as the grocery money. The point in this context is that this fundamental discrepancy means that straightforward measurement of gaps between voted and actual revenues and expenses is impossible.[4]

Separate operating and capital budgets: A related problem is that most municipalities prepare two separate budgets:[5] a "capital" budget for projects that might take more than a year to complete and will yield services for a long time into the future, and an "operating" budget for items to be consumed and expensed during the year (see Box 1). Some cities present and vote on these two types of budgets together; others do so separately. As just noted, capital projects create long-lived assets. Accrual accounting attempts to match the cost of capital projects as well as possible to the benefits they will produce. Voting capital projects on a cash basis thus makes little sense, and can exacerbate policymakers' tendency to neglect the interactions between capital and operating commitments – especially when the two budgets are not presented and voted on at the same time and when, as is often the case, the municipality does not provide multi-year projections in operating budgets. For our reasonably intelligent, non-expert reader, separate operating and capital budgets exacerbate the problem created by cash accounting, since producing totals for revenues and spending in those municipal budgets requires finding and adding two sets of figures – which, when funds are moving between operating and capital budgets, might include double counting.

Different levels of aggregation in budgets and financial reports: Less fundamental, but still problematic, is that most municipalities report department-level spending at different levels of aggregation in budgets than in financial reports. For example, while most municipalities separate expenses and revenues for specific departments in their budgets – for example, policing and firefighting – financial reports might aggregate into broader categories – for example, "protection services." These inconsistencies sometimes result from provincial mandates. For example, in Ontario, cities are required to report their audited year-end expenses in their Financial Information Return with standardized aggregations of municipal operations, and use the same basis of departmental aggregation in their financial statements. Happily, some municipalities provide their own reconciliations in their budgets in a user-friendly form. In the majority of cases, however, inconsistent aggregation compounds the problems that elected representatives, voters, and even municipal managers themselves have in figuring out how closely end-of-year results match budget votes, since it complicates what should be a straightforward search for the operations most responsible for under- or overshoots.

Reporting net rather than gross amounts: Like businesses, governments face choices about when to report gross values for revenue and spending associated with specific entities or programs and when to show the difference between the two on a net basis.[6] Netting simplifies presentations and is suitable in some situations, but these advantages come at considerable potential cost in

4 Many cities do produce quarterly "variance" reports that show the difference between actual spending and budgeted spending, but these reports are not audited or included in annual financial statements.

5 Senior levels of government might have a separate infrastructure spending plan, but the main budget projections are produced on a consolidated basis.

6 Balance-sheet presentations involve similar choices. Our focus is on flows, rather than stocks, so we do not explore the potential problems of balance-sheet netting here. We note, however, that the recent financial crisis uncovered some important examples of financial institution balance sheets that showed net items that, if they had been shown as gross assets and liabilities, would have revealed far greater exposure and risk than many regulators, managers, and shareholders appreciated.

Box 1: Operating and Capital Budgets

Canadian cities have two budgets, a capital budget for key infrastructure projects and a separate operating budget for day-to-day costs. Operating budgets must be balanced without relying on borrowed funds, but capital budgets treat debt issuance as funding sources to meet expenses.

The difference between cash accounting, as is still standard in most municipal budgets, and accrual accounting – now the standard for financial reports – is especially pertinent to capital budgets. Capital budgets with cash accounting treat a capital expense – even on an infrastructure project that will yield benefits for decades into the future – as an up-front expense, whereas an accrual-based financial account amortizes the cost over the capital project's expected lifetime. Because capital assets* loom larger in municipal activities than in federal and provincial activities, differences in accounting methods between budgets and financial reports matter more for municipalities than they do for senior governments.

* In 2009, the first year that municipalities were required to report the audited value of capital assets, Ontario municipalities collectively held a net book value of $109 billion of tangible capital assets (Ontario 2011). The province held a net book value of $63 billion in tangible capital assets at the end of fiscal year 2009/10 (Ontario 2010).

economically meaningful reporting. For municipalities, a distinction between "tax-supported" and "rate-supported" services might seem reasonable – for example, reporting net amounts for the latter, with user fees and dedicated revenues deducted from gross expenses, to highlight the tax-supported elements of the budget that presumably are of most interest to taxpayers. Residents still pay expenses on rate-supported programs, such as water and sewer services, however, and having different presentations for fee-supported services creates a misleading measure of a city's fiscal footprint. Many senior governments have consolidated more public sector entities in their budgets and financial statements in recent years, so that their total revenues and expenditures give a fuller picture of all the entities the government controls. Additionally, in some cities, departmental-level expenditures are presented only as netted against departmental revenues, and the only presentation of total municipality-wide gross expenses is on types of spending, such as salaries or contracts. Such reporting makes individual departments with revenue-raising abilities, such as levying user fees, less accountable for spending control – and further complicates the task of figuring out why results differ from intentions.

Grading Canadian Municipal Budgets

With these shortcomings in mind, we created several benchmarks of good budgeting practice based in part on the reforms that the federal and provincial governments have made over the past decade.

The Criteria

To undertake our analysis, we examined whether the municipalities met the following criteria in their most recent budgets and financial reports at the time of writing:

- *Consistent accrual accounting in budgets and financial reports*. Does the municipality present its budgets and financial reports on a consistent basis, using full accrual accounting for both?
- *Combined operating and capital budget*. Does the municipality report combined capital and operating expenses to present the total amount of annual municipal spending?
- *Multi-year budgets*. Does the municipality present more than one year of projected municipal-wide operating expenditures and revenues?
- *Consistent aggregation*. Does the municipality use the same department-level aggregation in budgets

and annual reports or provide a separate summary with consistent aggregation?

- *Combined rate- and tax-supported expenditures*. Does the municipality report the full revenues and expenditures of all municipal entities by including rate-supported programs and utilities in total expenditures?
- *Gross revenues and expenses*. Does the municipal budget report gross expenditure figures for municipal departments and entities?

We graded municipal budget documents based on how well they met these criteria of clearly presented budgets. A municipality got an "A" if it met at least four of our six criteria of a good budget and an "F" if it met none of them (see Table 1). A municipality received partial points if it partially met one criterion, such as reporting both capital and operating amounts together in a summary of total municipal expenses but not taking the additional step of summing the two figures to create a single annual expense amount for the year or not reporting important data in table format.

The Results

Surrey, British Columbia, and Markham and London, Ontario, were the only municipalities that met, at least partially, as many as five of our six criteria. Markham and Surrey were unique in having taken measures to report budgets on the same accounting basis as their year-end financial statements, while London partly met a number of criteria of good budgeting practice.

At the other end of the spectrum, Hamilton met none of these criteria of good budgets, and is the only municipality to receive a failing grade. Hamilton's operating budget supported by property taxes does not present gross expenditures on a department-by-department basis in the main budget document, meaning that answering a straightforward question such as which activities had the largest annual increase in expenditures requires a detective exercise. Further, Hamilton does not report municipal utility expenditures at all in any of its main budget documents.

Brampton, Halifax, Sudbury, and Windsor met only one criterion of good budget presentation, and each received a "D."

Measuring Fiscal Accountability

Clear and transparent budget and accounting processes are means to the end of good fiscal management. The superior practices that have evolved in these areas among Canada's senior governments allow legislators and taxpayers, without inordinate effort, to assess how closely actual results match budget plans. Having described why this task is much harder with respect to municipal governments, we now present the results of our attempt to do so.

Assembling the Numbers

We compiled spending data from annual budgets and end-of-year financial statements from 2001,[7] or the first year of a municipality's existence,[8] through 2010 for all municipalities with a population of more than 250,000 or a combined operating budget of more than $500 million in that year.[9] In cases where municipalities were amalgamated –

7 Since Ontario municipalities must also complete provincial reports with similar information, we used the standardized provincial end-of-year reports for cities in that province and annual financial reports produced by the municipalities in other provinces. As a reviewer from the Town of Markham pointed out, however, a change in the accounting for a municipal electricity utility in 2001 requires us to make use of Markham's financial statements, which provide a restatement of income that accounts for this change and which is more appropriate for this exercise.

8 Some years of data were unavailable for some cities. As of September 7, 2011, Sudbury, Mississauga, Calgary, and Halton Region were unable to provide the authors with capital expenditures for 2000; these amounts are not shown in their 2001 budgets, making a year-over-year comparison from 2000 to 2001 impossible. In addition, Halton Region's gross operating expenditure data for 2000 and 2001 are unavailable.

9 The only exceptions are Laval and Quebec City, for which we were unable to collect municipal budget data for the full time-frame we desired, partly due to recent amalgamations.

Table 1: Scorecard for Most Recent Approved Budgets, Major Canadian Municipalities

		Criterion						
Municipality	**Year**	**Budget and Financial Reports on Same Accounting Basis?**	**Same Department Aggregation in Budget and Audited Financial Statement?**	**Combined Operating and Capital Budget?**	**Multi-year Operating Budgets?**	**Budgets Report Total of Rate-Supported and Tax-Supported Expenditures?**	**Departmental Gross Expenses Reported Clearly?**	**Grade**
Brampton	2011	No	No	No	No	Yes	No	**D**
Calgary	2011	No	No	No	Yes	Yes	Yes	**B**
Durham Region	2011	No	No	Yes	No	Yes	Yes	**B**
Edmonton	2011	No	No	No	No	No	Yes	**D**
Halifax	2010/11	No	No	No	No	No – Halifax Water is separate body	Yes	**D**
Halton Region	2011	No	No	No	All but gross expenses	Yes	Yes	**C**
Hamilton	2010	No	No	No	No	No	No	**F**
London	2011	No	Close – only for net expenditures	Yes	All but gross expenses	Yes	Yes	**A**
Markham	2011	Yes	Yes	Yes	No	Yes	Yes	**A**
Mississauga	2011	No	No	No	Yes	Yes	Yes	**B**
Montreal	2011	Yes	Yes – for expenses only	No	No	Yes	Yes	**B**
Niagara Region	2010	No	No	No	No	Yes	Yes	**C**
Ottawa	2011	No	No	Yes, but not totalled	No	Yes	Yes	**C**
Peel Region	2011	No	No	No	No	Yes	Yes	**C**
Sudbury	2011	No	No	No	No	Yes	Gross not by department	**D**
Surrey	2011	Yes	No	Yes	Yes	Yes	Yes	**A**
Toronto	2010	No	No	No	No	Yes	Yes	**C**
Vancouver	2011	No	No	No	No	Yes	Yes	**C**
Vaughan	2010	No	No	Yes	No	Yes	Yes	**B**
Waterloo Region	2010	No	No	Partly, only in pie chart	No	Partly, only in pie chart	Yes	**C**
Windsor	2010	No	No	No	No	No	Yes	**D**
Winnipeg	2011	No	No	No	Yes	Yes	Yes	**B**
York Region	2011	No	Yes	No	Yes	No	Yes	**B**

Note: Scale runs from 4 or more points (A), at least 3 points (B), 2 points (C), 1 point (D), and 0 points (F). Cities partly meeting criteria are awarded a half mark. Analysis is based on the most recent council-approved budget book posted on the municipality's website as of August 9, 2011.

or, in Montreal's case, de-amalgamated – over this period, we used the budget amounts from the year after the change.[10]

Because municipal budgets and financial statements use different accounting rules, and because the rules have sometimes changed during the year, comparisons of levels of spending between budgets and financial results are often uninformative or misleading. To reduce the effect of these distortions, we used growth rates from the prior year as calculated from the figures presented in budget and financial report documents, respectively. Growth rates for announced and actual expenditures, and the difference between the two, are reported in Appendix Table A-1. Where changes in accounting methods affected results reported for prior years – as happened to financial statements, but not budgets, with the move from full accrual accounting by all municipalities after a change in Public Sector Accounting Board rules in 2009 – we calculated growth rates from the restated amounts, not the original amounts for budgets and for financial reports (see Box 2).[11]

Comparing the growth rates calculated from these budget numbers with the growth rates calculated from the numbers reported at year-end allows us to produce two summary measures of a municipality's success, or lack of it, in hitting its budget targets:

- Bias: the average difference between actual and predicted results. This is the arithmetic mean of the annual differences (in percent), and captures the direction – over or under – of actual versus budgeted results, weighing each percentage deviation over the period equally.
- Accuracy: the mean square error of the deviations. If over- and undershoots cancel out, a series of large misses will have the same bias score as a series of small misses. The accuracy measure weighs larger misses more heavily and sums them without regard to sign, creating a useful summary indicator of deviations from targets, regardless of their direction.

The Results: How Well or Poorly Municipalities Hit Their Targets

Durham, Waterloo, and Niagara regions and Halifax and Toronto stand out as the top five municipalities when it comes to the accuracy of spending results versus budgets (see Table 2). Brampton has the lowest budget accuracy score, with actual spending missing planned spending by an average of 51 percent. Peel Region has a very good score for bias, meaning it did not consistently under- or overspend compared with its budget plans, but it consistently missed targeted expenditures by a wide margin. Vaughan has the largest bias of all municipal budgets and the second-worst accuracy.

Similar efforts to match budget projections and end-of-year results for the federal, provincial, and territorial governments (Busby and Robson 2011) allow us to comment – not very positively – about how Canada's cities compare with them. If the top-performing municipality on the expenditure accuracy measure, Durham Region, were a province, it would rank eighth among what would then be a field of 15 senior governments, while Brampton's inaccuracy in hitting its expenditure targets is six times worse than the most inaccurate of the senior governments, Yukon. Notwithstanding the advantages municipalities might appear to have in achieving their budget targets, they are generally far worse at it than the federal, provincial, and territorial governments.

10 Since December 31, 2000, in addition to Montreal's de-amalgamation, Ottawa, Hamilton, and Sudbury have amalgamated. We excluded the first year of a new municipality since there was no directly comparable previous year's budgeted or actual expenditure from which to calculate an annual growth rate – thus, we excluded the 2001 budget for Hamilton, Ottawa, and Sudbury, and the 2002 budget for Montreal. We did, however, include Montreal's 2001 pre-amalgamation budget. For the post-2006 de-amalgamated Montreal, we used the combined revenues and expenses of Montreal City Council and the Urban Agglomeration Council.

11 For discussions of this methodology and the measures of adherence to budget targets presented below, see Adrian, Guillemette, and Robson (2007); and Busby and Robson (2008, 2009, 2010, 2011).

Box 2: Methodology

In keeping with our premises regarding the reasonably intelligent and motivated reader, we used the most conspicuously stated total gross expenditure figures for each of a municipality's capital, operating, and utility budgets in each year. Where budgets clearly report total expenses separately for "tax-supported" services (such as police, fire, or other general municipal services) and "rate-supported" services (such as water), we combined the two amounts. We also combined capital and operating budgets when the two are reported separately.

As described in the text, we then divided the dollar changes in expenditures anticipated in a budget by the prior-year level of gross expenditure in the same document, and divided the dollar changes in expenditures reported at year-end by the prior-year level of gross expenditure in the budget. Most cities also do not report the previous year's budgeted capital expenses; in those cases, we used the originally budgeted amounts for the comparison.

As noted in the text, cities transfer funds between capital and operating budgets. In our tallies, we simply added the two. This resulted in some double counting in budgets. But these transfers between budgets are a relatively small share of total budgets.

The standardized provincial financial reports of actual spending that we used for Ontario cities do not restate amounts from the previous year. Ontario municipalities produce these statements in addition to their audited financial statements. Lacking restated totals from the previous year, for most cities we used the previously stated amounts as the baseline in year-over-year comparisons, and we assumed that the amounts as initially reported were not restated enough to affect our results. Because all cities moved to accrual accounting in 2009, we used audited financial reports for 2009 and 2010 for all cities; the 2009 financial statements also provided restated 2008 amounts, allowing a year-over-year comparison.

The Cumulative Effects of Missed Budget Targets

In municipalities where spending overshoots are common, they sometimes cumulate to startling amounts. As a share of the 2010 budget's expenditures, cumulative overspending from 2001 to 2010 in Vaughan, Edmonton, and London amounted to 20 percent, or higher, of their most recent total budgets (Table 3).[12] While spending overshoots are the usual story in some municipalities, as they are among Canada's senior governments, many municipalities have tended to spend less than they budgeted. Winnipeg, Surrey, and Halton Region, for example, spent $598 million, $147 million, and $215 million, respectively, less than they voted between 2001 and 2010. While some undershoots might reflect successful quests for in-year savings, they might also reflect capital expenditures not being completed as planned.

To understand why some cities failed to meet their budget targets, we separated our analysis of over- and undershoots from 2001 to 2008 to produce separate tallies for capital operating budgets (Figures 1 and 2).[13] Operating budgets are usually larger – and easier to estimate – than

12 We reiterate that our approach is to compare each year's results to the same year's budget, which has the effect of restarting the meter every year, with the previous year's over- or undershoots becoming part of the new year's baseline.

13 We analyzed capital and operating budgets separately between 2001 and 2008 because municipalities reported audited year-end capital and operating expenditures separately in their financial statements in these years. The move to full accrual accounting ended this separation from 2009 forward. The only exception is Winnipeg, which reported only consolidated total expenditures in its financial statements in all years.

Table 2: Summary of Spending Bias and Accuracy, Budgets of Major Canadian Municipalities, 2001-'10

	Change in Expenditure Forecast			
Municipality	**Bias** (%)	**Rank**	**Accuracy** (%)	**Rank**
Brampton	1.5	**12**	51.4	**23**
Calgary	0.1	**2**	6.2	**7**
Durham Region	0.7	**8**	3.9	**1**
Edmonton	4.1	**20**	9.9	**13**
Halifax	0.5	**6**	5.1	**4**
Halton Region	3.9	**19**	14.2	**20**
Hamilton	1.0	**9**	11.3	**15**
London	4.5	**21**	7.4	**10**
Markham	2.0	**14**	10.8	**14**
Mississauga	2.8	**18**	11.4	**17**
Montreal	0.5	**5**	5.8	**6**
Niagara Region	0.6	**7**	4.7	**3**
Ottawa	1.7	**13**	12.2	**19**
Peel Region	0.0	**1**	14.4	**21**
Sudbury	1.4	**10**	6.4	**8**
Surrey	2.6	**17**	7.8	**11**
Toronto	0.4	**4**	5.1	**5**
Vancouver	0.2	**3**	9.5	**12**
Vaughan	4.5	**22**	21.6	**22**
Waterloo Region	2.5	**16**	4.3	**2**
Windsor	1.5	**11**	12.0	**18**
Winnipeg	4.6	**23**	7.3	**9**
York Region	2.2	**15**	11.3	**16**

Note: Gross operating expenditure data for Halton Region for 2000 and 2001 are unavailable. Calgary and Mississauga did not provide capital expenses for 2000 that were comparable with those of 2001; the analysis for these cities and for Hamilton starts in 2002. For Sudbury and Ottawa the analysis starts in 2003. Montreal data for 2002 are excluded because of amalgamation.

Sources: Authors' calculations, from municipal budgets and financial reports, and, for Ontario municipalities, the Financial Information Return.

capital budgets. Most municipalities had cumulative operating budget overshoots between 2001 and 2008, with Vaughan having the largest overshoot relative to its 2010 operating budget. This preponderance of overshoots in operating budgets suggests that cities should apply more scrutiny to in-year cost control in annual departmental expenditures.

Vaughan, Edmonton, and London were the worst offenders in cumulatively overspending on capital expenditures over the 2001-08 period. In contrast, however, most cities spent less than budgeted on the capital side. Several factors, alone or together, might explain this undershooting. For example, higher-order government grants might not have materialized as planned during the course of a year, cities might have used contingency allowances for capital projects – intentionally overestimating the costs in budget plans[14] – or they might have failed to complete capital projects

14 Our calculations of the bias for capital budgets between 2001 and 2008 revealed that the average bias was 7.2, almost four times higher than that for operating budgets.

Table 3: Summary of Cumulative Expenditure Overshoots/Undershoots of Budgets of Major Canadian Municipalities, 2001–2010

Municipality	Total Expenditure Overshoot (+)/Undershoot (-) ($ millions)	Total Expenditure Overshoot/Undershoot as a Percentage of 2010 Budget (%)
Winnipeg	-598	-34.2
Surrey	-147	-25.6
Halton Region	-215	-19.6
Waterloo Region	-230	-19.5
Mississauga	-132	-18.0
Windsor	-136	-14.1
York Region	-293	-12.0
Hamilton	-236	-11.1
Brampton	-73	-10.7
Markham	-30	-9.5
Sudbury	-62	-9.4
Ottawa	-237	-7.7
Toronto	-730	-6.1
Calgary	-9	-0.2
Vancouver	15	1.4
Durham Region	19	1.6
Montreal	107	2.0
Halifax	21	2.5
Niagara Region	45	4.6
Peel Region	144	6.8
Edmonton	701	19.7
London	383	36.9
Vaughan	119	46.4

Note: Gross operating expenditure data for Halton Region for 2000 and 2001 are unavailable. Calgary and Mississauga did not provide capital expenses for 2000 that were comparable with those of 2001; the analysis for these cities and for Hamilton starts in 2002 and in 2003 for Sudbury and Ottawa. Montreal data for 2002 are excluded because of amalgamation.

Sources: Authors' calculations, from municipal budgets and financial reports, and, for Ontario municipalities, the Financial Information Return.

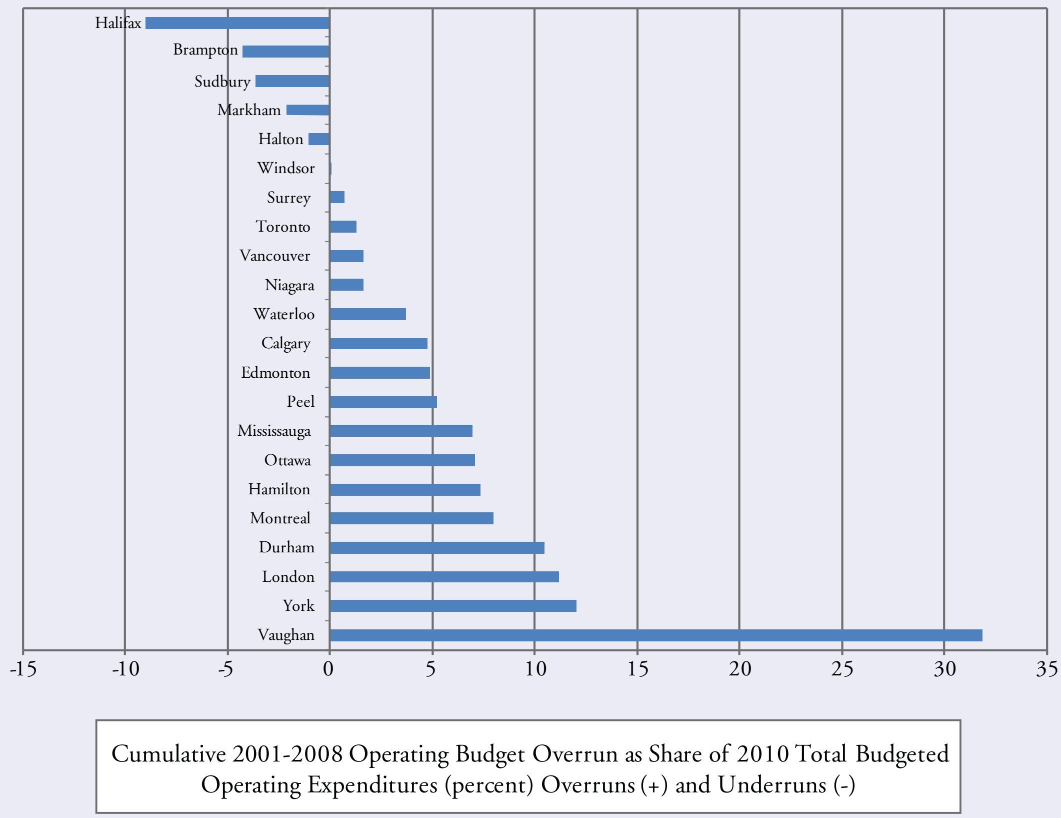
because of delays. Markham, Sudbury, and Brampton were the most notable underspenders relative to their 2010 capital budgets over the period.

Recommendations for Better Municipal Budgets

Municipalities should use the grades of budget clarity we have assigned to look for and imitate better budgeting practices. In many instances, these would involve simply following some of the same budget reforms that higher-order governments have implemented over the past decade.

Adopt accrual accounting in budgets: Municipalities should transition to fully consolidated accrual accounting in their budgets, as is now standard provincially and federally and

Figure 1: Cumulative Deviation from Budgeted Operating Expenditures, Major Canadian Municipalities



Note: Gross operating expenditure data for Halton Region for 2000 and 2001 are unavailable. The analysis for Halton starts in 2003. The analysis for Ottawa, Sudbury, and Hamilton starts in 2002. Montreal data for 2002 are excluded because of amalgamation. Winnipeg is excluded because it did not separately report capital and operating expenses in its financial statements.

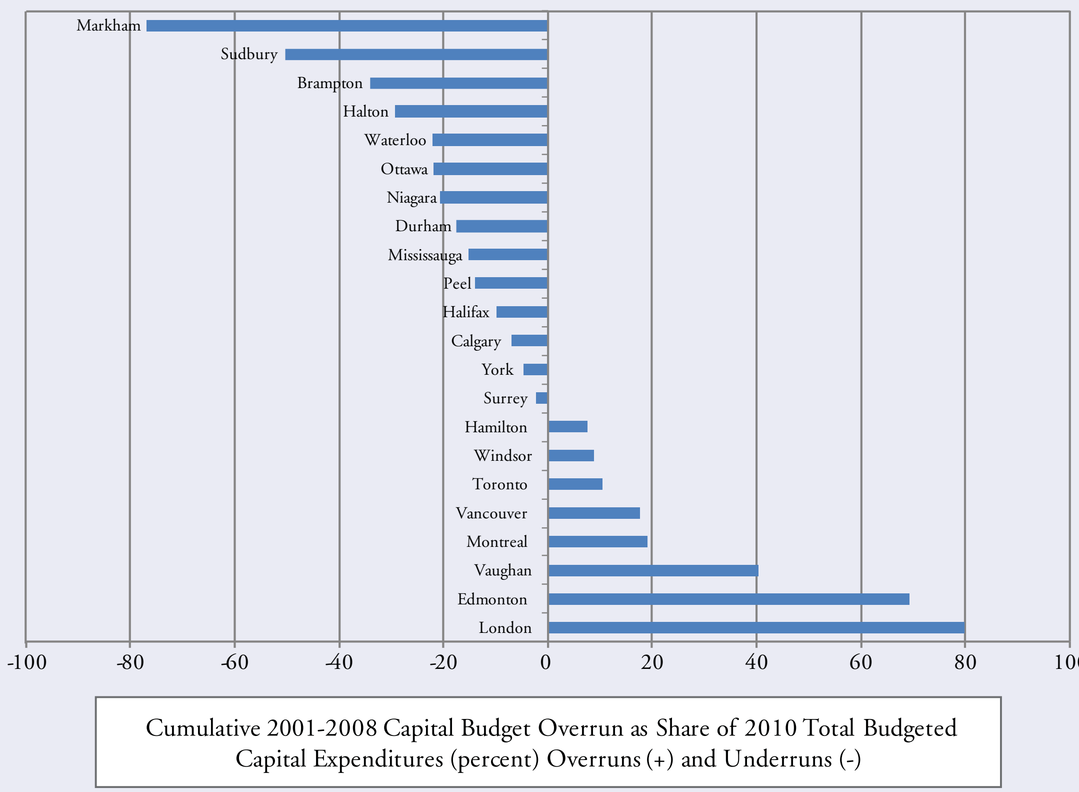
Sources: Authors' calculations, from municipal budgets and financial reports, and, for Ontario municipalities, the Financial Information Return.

as is already the practice in their financial reports.[15] The almost universal practice of presenting municipal budgets on a cash basis, rather than on the same accrual basis that is now required for their financial reports, suggests some reluctance on the part of councils and municipal staff to adopt accrual accounting. While not making light of transition issues – although the move to accrual accounting for financial reports means municipalities must face those issues in any event – we feel strongly that accrual accounting makes more sense.

As we noted earlier, accrual accounting generally tries to match the recording of revenues and expenditures to the activities to which they pertain. This makes as much sense in budgets as it does in financial reports. With regard to capital assets, a municipality would have a better

15 For a summary of how municipalities should transition from cash-based to accrual-based budgeting, see Ratford (2008). City budget officials will face transition problems in moving to accrual accounting in their budgets – as did the federal and provincial governments when they made the change. Budget officials could present both the cash-based budget and the full accrual-based budget to highlight the differences between the documents in the first year. After that, however, they should present a single, full accrual budget. Municipalities also could help explain the new accrual-based budget to the public by showing the analogy between investments in tangible capital assets that depreciate, such as buses, and an individual's need to make monthly payments for a vehicle.

Figure 2: Cumulative Deviation from Budgeted Capital Expenditures, Major Canadian Municipalities



Note: Calgary and Mississauga did not provide capital expenses for 2000 that were comparable with those in 2001. The analysis for those cities and Hamilton starts in 2002. Capital expenditure data for Halton Region for 2000 and 2001 are unavailable and Ottawa and Sudbury did not provide 2001 capital expenditures. The analysis in those cities starts in 2003. Montreal data for 2002 are excluded because of amalgamation. Winnipeg is excluded because it did not separately report capital and operating expenses in its financial statements.

Sources: Authors' calculations, from municipal budgets and financial reports, and, for Ontario municipalities, the Financial Information Return.

opportunity to calibrate the revenues it raises to match depreciation charges each year, so that they match the services provided by the asset. Under cash-based systems, capital investments show up as money is spent, rather than being amortized over the period in which the investment will yield benefits.[16] Under accrual accounting, the people who benefit from an asset pay the cost. Accrual accounting also creates opportunities to show obligations as they will be incurred, rather than when cash payments become necessary. This is a major advantage for councillors and taxpayers who otherwise might neglect such important future obligations as pension entitlements of city employees or environmental liabilities such as landfill decommissioning.[17]

16 As Ratford (2009) argues, the current cash-based accounting system effectively amortizes an asset during its development and construction (the period of cash disbursements).

17 That such opportunities exist does not mean they will always be used 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 (Laurin and Robson 2010). For municipalities to move to the standards currently applied to the federal government and most provinces and territories would nevertheless be a big step forward from the current system, which is far cruder than the system private sector entities or senior governments use.

As a practical matter, accrual accounting is now the standard for the financial reports of all Canadian governments, cities included. While the specific methods used can and will improve, moving back to cash accounting would be a retrograde step that is, happily, impossible to imagine. For municipalities, therefore, the immediate task is to present budgets on the same basis, so that a fundamental obstacle to understanding on the part of the reasonably intelligent and motivated councillor and citizen disappears.

One obstacle to the transition in some provinces is inconsistencies between the framing of balanced budget rules applying to municipalities and the superior financial management that accrual accounting allows. Typically, municipalities are required to present balanced operating budgets, while capital budgets may be in surplus or deficit. But accrual accounting would eliminate the distinction between capital budgets and operating budgets. For provinces not prepared to let their municipalities budget as they see fit and to suffer any consequences of bad choices, one option would be to focus on the overall bottom line – much as the federal and provincial governments typically target their budget balances as calculated on an accrual basis. An alternative would be to focus on debt-service costs relative to revenues. The key point is that provincial legislation should not mandate budget targets that are inconsistent with goals represented more meaningfully by financial reports using accrual accounting.

Integrate operating and capital budgets: A related reform would be to eliminate separate operating and capital budgets. Indeed, a move to full accrual accounting in budgets would do this automatically. One means to induce municipalities to enact these reforms would be to amend provincial legislation on municipalities and individual city charters to require municipalities to follow provincial guidelines on producing annual operating and capital budgets that match the accounting systems of their annual reports.[18] Since the current inconsistent presentation of budget plans makes comparing municipal overall spending plans and future liabilities unnecessarily difficult, provincial regulation would make such comparisons easier. In provinces that continued to mandate reporting using methods and categories that differ from those that municipalities find most useful in planning their expenses, municipalities should provide reconciliation reports that compare consistently calculated numbers.

Present multi-year budgets: Consolidated budgets would also make multi-year budgeting more feasible.[19] Today's capital spending has key implications for tomorrow's capital and operating spending. Looking only one year ahead exacerbates many problems, such as the neglect of interactions between capital commitments – spending on, say, transit infrastructure – and related future operating commitments. Cities should approve budgets – or deviations from long-term plans – on an annual basis, but multi-year budgeting can guard against one-time fixes that ignore long-term consequences. A consolidated, multi-year budget would recognize the effect of long-term capital spending plans – forecasts of which are already part of all municipal capital budgets – on long-term revenue requirements. Since municipalities are on a fixed election cycle, with elections every three or four years, depending on the province, multi-year budgets sensibly should be based on the same cycle, which would

18 Such requirements, however, should not mandate or allow municipalities to deviate from good accounting practices for either purpose. For example, the *Ontario Municipal Act*, 2001 was amended in 2009 to allow municipalities to exclude from their annual budgets amortization expenses of post-employment benefits expenses and solid waste landfill closure and post-closure expenses. The Minister of Municipal Affairs and Housing is slated to review this additional regulation by the end of 2012, and our recommendation is that the provincial government require municipalities to include these expenses in their budgets. Currently, Ontario requires only 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.

19 In British Columbia, for example, all municipalities except Vancouver are subject to *Community Charter, SBC 2003, c 26, Part 6 – Financial Management*, which requires multi-year financial plans.

let councillors define the long-term plan for a municipality at the outset of their tenure.

Report department-by-department results on the same basis as in budgets: Consistent aggregation allows observers to identify activities in which results differ significantly and consistently from what was budgeted. Rather than have provinces define the units of departmental aggregation in budgets and annual reports – which might not suit all municipal departmental structures – the best approach would be to allow cities the flexibility to define their own suitable organizational breakdown, though provinces could require that cities maintain that aggregation between budgets and annual reports or provide a comprehensive table of reconciliations. This requirement should be implemented so as not to reduce the amount of information available in budget decisions – for example, by maintaining the existing level of departmental detail in current municipal budgets.

Show gross, rather than net, amounts: Municipal gross expenditure and revenue budgets should also include wholly owned corporations such as utilities, so that their activities appear in a transparent, public, and accountable budget process that protects councillors and taxpayers from surprises. With budgets produced on a consolidated basis, there would be only a single budget for all fully controlled municipal departments.

The question then becomes which entities should be included in the consolidated budget. The general standard applied in senior levels of government is to report, on a consolidated basis, entities that are under the complete control of government and operate in a non-commercial environment. However, many government-owned enterprises that are not under direct government control or that operate commercially often appear in government books only when they return a profit or require a subsidy.[20] Applied to municipal budgets, this would consolidate water and waste utilities, while recognizing only net revenues from many government business enterprises.

Improving Municipal Fiscal Accountability

Finally, councillors and taxpayers alike should insist that their municipal governments adhere more closely to the budget their council votes every year. Where the budget and the financial report use different accounting methods, explanations that blame discrepancies on the differences are unacceptable: the accounting should be consistent. And when the results are available on a consistent and standardized basis, councillors and taxpayers should insist that deviations from budgeted amounts revealed in year-end results become smaller and presentations that reconcile them become more transparent.

The chronic overspending of cities such as Edmonton, London, and Vaughan means that taxpayers there are paying more than they would if these cities had stuck to their budget plans. More fundamentally, both underspending and overspending undermine the accountability of municipalities to their voters. Clearer, more consistent figures and better adherence to budget targets would bring the financial management of Canada's municipalities into line with their fiscal impact and their importance in Canadians' lives.

20 Canada Mortgage and Housing Corporation is an example in the former category; the Canadian Broadcasting Corporation is an example in the latter.

Appendix

Table A-1: Annual Expenditure Increase, Major Canadian Municipalities, 2001–2010

	Brampton	Calgary	Durham Region	Edmonton	Halifax	Halton Region	Hamilton	London	Markham	Mississauga	Montreal	Niagara Region
						Announced Spending Change *(%)*						
2001	21.2	n/a	5.0	6.8	12.6	n/a	n/a	3.9	0.0	n/a	-1.6	3.2
2002	20.4	-5.6	5.3	-6.9	3.7	n/a	2.1	-7.1	20.9	3.2	n/a	8.3
2003	36.2	10.1	7.5	2.4	-2.6	1.9	4.3	-0.6	-2.1	7.4	4.4	1.9
2004	7.1	5.3	10.3	9.8	14.6	7.0	4.2	2.6	20.8	3.7	5.3	7.6
2005	-8.0	2.3	18.7	3.3	16.1	21.3	11.3	14.5	4.7	7.5	4.6	11.7
2006	35.4	14.2	5.6	-2.0	3.2	4.1	1.4	2.5	-0.1	15.8	0.9	1.9
2007	-8.5	19.4	1.9	16.9	6.7	1.2	10.9	0.0	11.9	3.1	4.8	1.4
2008	22.0	6.2	4.4	7.0	2.7	24.2	-2.9	3.4	18.0	15.5	9.5	6.2
2009	10.0	10.9	9.0	19.2	-4.7	24.8	29.3	-0.4	-1.3	-6.4	5.5	7.9
2010	-4.9	-0.6	4.2	0.2	4.9	-7.9	-1.7	-5.9	-11.0	18.5	-3.0	-2.3
						Actual Spending Change *(%)*						
2001	133.3	n/a	12.4	16.2	10.7	n/a	n/a	7.8	21.5	n/a	-0.5	9.5
2002	-79.1	2.8	5.0	-6.7	7.5	n/a	20.5	11.0	12.2	-13.0	n/a	6.8
2003	8.5	5.6	9.2	9.7	8.8	4.8	-2.7	2.3	8.0	16.0	4.4	5.3
2004	13.1	2.1	17.1	7.5	14.2	6.2	5.4	5.4	4.3	-2.3	5.8	7.2
2005	23.5	7.6	15.4	9.3	12.4	2.2	16.2	11.2	15.5	11.4	5.5	6.6
2006	0.0	12.3	7.6	9.0	0.8	16.4	0.8	0.7	-6.7	-3.0	-7.0	7.1
2007	7.6	8.5	2.0	22.7	5.4	7.8	2.5	8.3	10.9	8.0	19.7	-0.5
2008	0.4	13.0	1.8	24.8	-2.8	3.3	3.6	6.4	-1.1	26.2	11.6	0.3
2009	2.9	6.0	4.3	1.7	2.8	2.2	4.5	1.6	4.6	-2.3	-1.4	5.4
2010	5.4	3.8	4.2	3.9	2.3	2.5	-1.0	3.5	-0.3	2.1	-3.4	5.8
						Difference *(%)*						
2001	112.1	n/a	7.4	9.4	-1.9	n/a	n/a	3.9	21.5	n/a	1.1	6.3
2002	-99.5	8.4	-0.3	0.2	3.8	n/a	18.4	18.1	-8.7	-16.2	n/a	-1.5
2003	-27.8	-4.5	1.7	7.3	11.3	2.9	-7.0	3.0	10.2	8.6	0.0	3.5
2004	6.0	-3.2	6.8	-2.2	-0.4	-0.7	1.2	2.8	-16.5	-5.9	0.5	-0.5
2005	31.5	5.3	-3.3	6.0	-3.7	-19.1	4.9	-3.3	10.8	3.9	0.8	-5.1
2006	-35.5	-2.0	2.0	11.0	-2.4	12.3	-0.6	-1.8	-6.7	-18.9	-8.0	5.2
2007	16.1	-10.9	0.1	5.8	-1.4	6.6	-8.3	8.4	-1.0	4.9	14.8	-1.9
2008	-21.6	6.8	-2.7	17.9	-5.5	-20.9	6.5	3.0	-19.1	10.7	2.1	-5.9
2009	-7.2	-4.9	-4.8	-17.6	7.4	-22.5	-24.8	2.0	5.9	4.1	-6.9	-2.5
2010	10.4	4.4	0.0	3.7	-2.7	10.4	0.8	9.4	10.8	-16.4	-0.4	8.0

Note: Gross operating expenditure data for Halton Region for 2000 and 2001 are unavailable. Calgary and Mississauga did not provide capital expenses for 2000 that were comparable with those of 2001; the analysis for these cities and for Ottawa, Sudbury, and Hamilton start in 2002. Montreal data for 2002 are excluded because of amalgamation. Ottawa and Sudbury capital expenses for 2001 are missing.

Sources: Authors' calculations, from municipal budgets and financial reports, and, for Ontario municipalities, the Financial Information Return.

Appendix

Table A-1: Continued

	Ottawa	Peel Region	Sudbury	Surrey	Toronto	Vancouver	Vaughan	Waterloo Region	Windsor	Winnipeg	York Region
						Announced Spending Change *(%)*					
2001	n/a	-1.0	n/a	5.8	3.9	4.0	5.8	5.9	-2.7	12.2	17.6
2002	n/a	27.7	n/a	3.5	0.8	9.8	6.0	6.0	4.6	5.3	19.8
2003	0.6	26.4	4.0	5.6	1.2	1.3	1.4	7.1	12.3	-1.1	23.8
2004	-6.7	-0.2	7.5	4.4	2.0	5.6	19.1	4.5	8.4	2.5	11.8
2005	22.6	-13.4	6.9	21.5	8.0	9.5	33.0	7.4	7.9	8.8	-10.0
2006	26.8	15.5	9.0	-2.6	7.8	2.3	-25.2	15.3	16.5	3.1	3.9
2007	-13.7	5.8	16.8	9.3	11.9	12.0	13.2	6.9	2.2	15.3	9.1
2008	9.1	16.0	7.2	12.1	4.6	-3.4	-4.3	5.3	2.5	2.9	10.9
2009	-2.2	19.1	4.5	2.1	7.6	5.9	9.8	17.8	13.1	10.4	22.0
2010	8.6	-12.2	-1.5	28.1	11.7	29.2	-1.2	5.7	4.8	0.8	1.7
						Actual Spending Change *(%)*					
2001	n/a	15.4	n/a	4.5	-1.1	2.8	-6.0	6.2	17.9	-3.0	15.4
2002	n/a	13.0	n/a	-0.3	5.3	7.0	37.6	6.6	-11.1	1.7	9.7
2003	7.1	7.6	13.9	8.8	11.2	5.0	-4.8	6.4	9.7	1.3	11.7
2004	-1.0	10.8	0.4	12.6	5.4	6.2	38.1	5.2	16.9	1.5	21.2
2005	9.3	8.9	5.3	13.5	8.2	11.6	-3.2	3.8	13.2	2.3	10.9
2006	2.2	6.0	9.2	0.1	7.7	5.2	2.8	9.6	-4.7	1.6	2.4
2007	3.5	0.7	3.9	8.2	4.8	7.9	-3.5	3.5	6.3	3.5	3.7
2008	6.8	10.5	6.2	10.9	5.1	18.1	20.5	7.0	6.6	2.8	11.3
2009	-0.6	5.8	3.1	-2.1	4.3	4.6	10.7	8.2	0.4	0.6	0.2
2010	3.9	4.6	1.2	7.4	4.8	9.7	10.8	0.2	-0.1	2.0	1.6
						Difference *(%)*					
2001	n/a	16.4	n/a	-1.3	-5.0	-1.2	-11.8	0.3	20.6	-15.2	-2.2
2002	n/a	-14.6	n/a	-3.8	4.4	-2.8	31.6	0.6	-15.7	-3.7	-10.1
2003	6.6	-18.8	9.9	3.2	10.0	3.7	-6.2	-0.7	-2.6	2.4	-12.1
2004	5.6	11.0	-7.0	8.2	3.3	0.7	19.0	0.7	8.4	-1.0	9.4
2005	-13.3	22.3	-1.6	-8.0	0.2	2.1	-36.3	-3.6	5.2	-6.4	20.9
2006	-24.6	-9.5	0.2	2.7	0.0	2.9	28.0	-5.7	-21.3	-1.4	-1.5
2007	17.3	-5.1	-12.9	-1.1	-7.1	-4.1	-16.7	-3.4	4.1	-11.8	-5.5
2008	-2.3	-5.4	-1.0	-1.2	0.5	21.4	24.8	1.7	4.2	-0.1	0.4
2009	1.6	-13.3	-1.5	-4.2	-3.3	-1.3	0.9	-9.6	-12.7	-9.7	-21.8
2010	-4.7	16.8	2.7	-20.6	-6.9	-19.5	12.0	-5.6	-4.9	1.1	-0.1

Note: Gross operating expenditure data for Halton Region for 2000 and 2001 are unavailable. Calgary and Mississauga did not provide capital expenses for 2000 that were comparable with those of 2001; the analysis for these cities and for Hamilton starts in 2002. Montreal data for 2002 are excluded because of amalgamation. Ottawa and Sudbury capital expenses for 2001 are missing.

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