Provincial-Local Fiscal Transfers in Canada: Provincial Control Trumps Local Accountability

Enid Slack
Institute on Municipal Finance and Governance
Munk Centre for International Studies
University of Toronto
September 2009

Draft paper prepared for Conference on
"General Grants vs. Earmarked Grants: Theory and Practice"

Copenhagen
September 17-18, 2009

Provincial-Local Fiscal Transfers in Canada: Provincial Control Trumps Local Accountability

Over 30 years ago, Canadian municipalities were characterized as "puppets on a shoestring" (Canadian Federation of Mayors and Municiplities, 1976) and the provincial role with respect to cities was described as one in which "father knows best" (O'Brien, 1975). Not much has changed in 30 years. Unlike the relationship between the federal government and provinces, local governments in Canada are highly controlled and tightly constrained by provincial governments (Bird & Tassonyi, 2003). Indeed, local governments are often referred to as "creatures of the provinces" because they have no original powers in the Constitution and enjoy only those powers that are delegated to them by the provinces.

In reality, the Province establishes local governments and their geographic boundaries, mandates their expenditure responsibilities, sets standards for local service provision even for services that are not mandated, limits their own-source revenues largely to property taxes and user fees, sets the rules around levying the property tax, requires that municipalities not incur a deficit in their operating budget, and determines the extent to which municipalities can borrow to meet capital requirements. At the same time, the province influences municipal expenditures through its grant programs.

The good news is that the high degree of provincial control over local governments in Canada means that there cannot be any visible fiscal crisis at the local level: municipal governments are strictly held to balanced budgets for operating purposes and their borrowing for capital expenditures is constrained by provincial legislation and regulations. The bad news, however, is that municipal governments in Canada have only very limited fiscal autonomy and are constrained from solving any fiscal problems they may have.

This paper provides a case study of provincial-local transfers in Canada and evaluates the extent to which they are designed to increase local accountability or maintain provincial control. The evaluation is based, in part, on a review of trends in provincial transfers to municipalities and school boards over the last 20 years and, in part, on an assessment of the extent to which

grants are designed to satisfy the standard rationales for intergovernmental transfers found in the traditional fiscal federalism literature (vertical fiscal imbalance, horizontal fiscal imbalance, and externalities) or political rationales.

The first section of the paper presents trends in municipal expenditures and revenues in Canada over the last two decades. The second section reviews the special case of education funding. The third section focuses specifically on trends in provincial-municipal transfers and looks at whether earmarking has increased over the last two decades. The fourth section sets out the standard rationales for transfers and considers the extent to which provincial-local transfers in Canada are designed to meet those objectives or more political objectives. The fifth section describes some of the problems with transfers in general and with transfers in Canada specifically. The sixth section provides some concluding comments on provincial-local transfers in Canada in the context of the overall provincial-municipal fiscal system.

1. Trends in Municipal Finance in Canada

Canada is a federation with three levels of government: the federal government, ten provincial and three territorial governments, and about 4,000 local governments. Canada's *Constitution Act, 1982*, lists the jurisdictions over which federal and provincial governments have lawmaking authority. Although local governments are only mentioned in the Constitution as one of the responsibilities allocated to provincial governments, municipalities are largely responsible for delivering important services such as police and fire protection, roads and transit, water and sewers, solid waste collection and disposal, recreation, and culture and planning. Elementary and secondary education is delivered by school boards in most provinces.

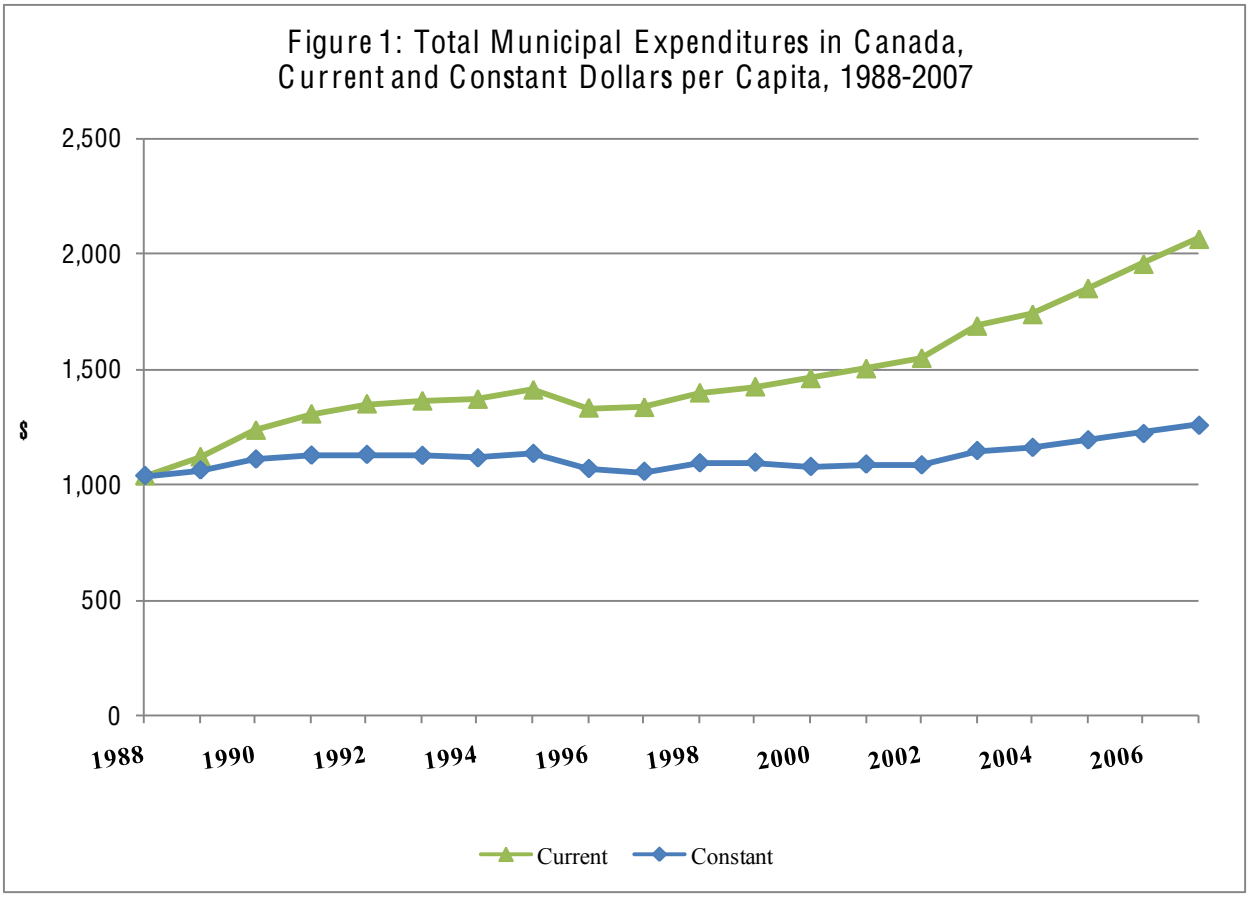
Provincial legislation sets out the powers of municipal governments in Municipal or Local Government Acts and other legislation. A few cities (for example, Toronto, Vancouver, Winnipeg, Montreal, and Saint John) are governed by separate Charters or other special legislation that confer powers and duties (but few, if any, extra revenue tools) additional to those of other municipal governments. For example, the City of Toronto Act gives Toronto greater authority and autonomy than other municipalities in the province. In terms of taxes other than the property tax, however, it is restricted to selective taxes on vehicle registrations, alcohol, entertainment, and tobacco as well as a land transfer tax.

Figure 1 shows the growth in municipal expenditures per capita (including capital and operating expenditures but excluding education expenditures)[1] in current and constant dollars from 1988 to 2007. Municipal expenditures held their own during the recession of the early 90s in Canada but then declined somewhat in the mid to late 90s before increasing again in 2000 and beyond. As will be shown later, the decline in expenditures in the mid-90s corresponds with a decline in provincial-municipal grants over the same period.

Municipal governments in Canada deliver a wide range of services as can be seen in Table 1, which sets out information on municipal expenditures for 1988 and 2007. These services extend from those that have private good characteristics (for example, water, sewers, solid waste, and transit) to those that have public goods characteristics (for example, police and fire protection, local roads, streets, and street lighting). In some provinces, municipal governments also provide services that are redistributive in nature (such as welfare assistance, health, and social housing). More than half of all municipal expenditures today are for transportation (roads, streets, snow removal, public transit), protection (police and fire), and environment (water, sewage, solid waste collection and disposal). Expenditures on environmental services have increased in relative importance over this period, reflecting the growing importance that municipalities are placing on clean water and environmental issues as well as the need to meet higher provincial standards.

Social service expenditures include social assistance and other social services such as homeless shelters, women's shelters, immigration settlement, food banks, etc. Social assistance is a provincial financial responsibility in every province except Ontario where costs are shared between the provincial and municipal governments.[2] For the country as a whole, social services accounted for almost 9 percent of total municipal spending in 2007; when Ontario is excluded, social services only accounted for less than 1 percent of total municipal spending.

[1] Local government statistics in Canada are separated into two distinct components – municipal services (sometimes referred to as local general government expenditures) and education (specifically, public elementary and secondary schools). Education expenditures are discussed in section 2.
[2] The uploading of social service costs to the province is slated to begin in 2010 and be completed by 2018.



Source: Statistics Canada, CANSIM Table 385-0024 - Local general government revenue and expenditures, current and capital accounts, year ending December 31.

Health expenditures are the responsibility of provincial governments except for land ambulance in Ontario (and in parts of the province of Alberta and in the City of Winnipeg). Some relatively small municipal expenditures are also made on public health (e.g. anti-smoking campaigns, restaurant inspections, etc.) in some provinces. Expenditures on recreation and culture have accounted for 12 to 13 percent of municipal expenditures throughout the 20-year period. Debt charges for capital projects have dropped dramatically over the last two decades reflecting a drop in interest rates and a reduction in municipal borrowing.

Table 1: Municipal Expenditures by Function, Canada, 1988 and 2007

Province	1988 $millions CAD	1988 %	2007 $millions CAD	2007 %
General government services	2,749	9.9	6,887	10.1
Protection	4,122	14.8	10,960	16.1
Transportation	6,197	22.3	13,822	20.3
Health	560	2.0	1,676	2.5
Social services	2,053	7.4	6,095	8.9
Resource conservation/ind'l development	585	2.1	1,464	2.1
Environment	4,064	14.6	12,461	18.3
Housing	3,241	11.6	8,564	12.6
Recreation and culture	489	1.8	2,348	3.4
Regional planning	572	2.1	1,370	2.0
Debt charges	2,657	9.5	2,249	3.3
Other	560	2.1	303	0.4
Total expenditures	27,849	100.0	68,201	100.0

- Protection includes courts of law, correction and rehabilitation, police, firefighting, and regulatory measures.
- Transportation and communications includes roads and streets, snow and ice removal, parking, and public transit.
- Health includes hospital and preventive care.
- Resource conservation and industrial development includes agriculture, tourism, trade and industrial development.
- Environment covers water, sewer, solid waste collection and disposal, and recycling.
- Debt charges cover interest payments.
- Other expenditures include miscellaneous expenditures and *municipal* expenditures on education.

Source: See Figure 1.

Turning to municipal revenues, Table 2 and Figure 2 show that own-source revenues (mainly property taxes and user fees) account for the largest source of revenues. Intergovernmental transfers account for less than 20 percent of municipal revenues and these are largely from the provincial governments. Over the last 20 years, the relative importance of own-source revenues (mainly municipal property taxes and user fees) has grown, in large part, because the dependence on transfers has fallen. The annual average growth in property taxes per capita in constant dollars over the period was 1.2 percent; transfers fell by 0.1 percent over the same period. This decline comprises a decline in general purpose transfers of 2.7 percent per year and an increase in specific purpose transfers of 0.6 percent per year (in constant dollars per capita). Federal transfers to municipalities have historically been fairly small and all federal grants are for specific purposes. Figure 2 shows that specific purpose grants have fluctuated

more than general purpose grants and more than property taxes over the last 20 years. Moreover, conditional transfers appear to have increased during the recession of the early 90s and declined in the mid 90s.

Since municipalities are not permitted to budget for operating deficits, the annual budget must include sufficient revenues to cover all operating expenditures. If expenditures exceed revenues in a particular year, the resulting deficit must be covered in the following year's budget.[3] Borrowing is permitted, however, for capital expenditures.

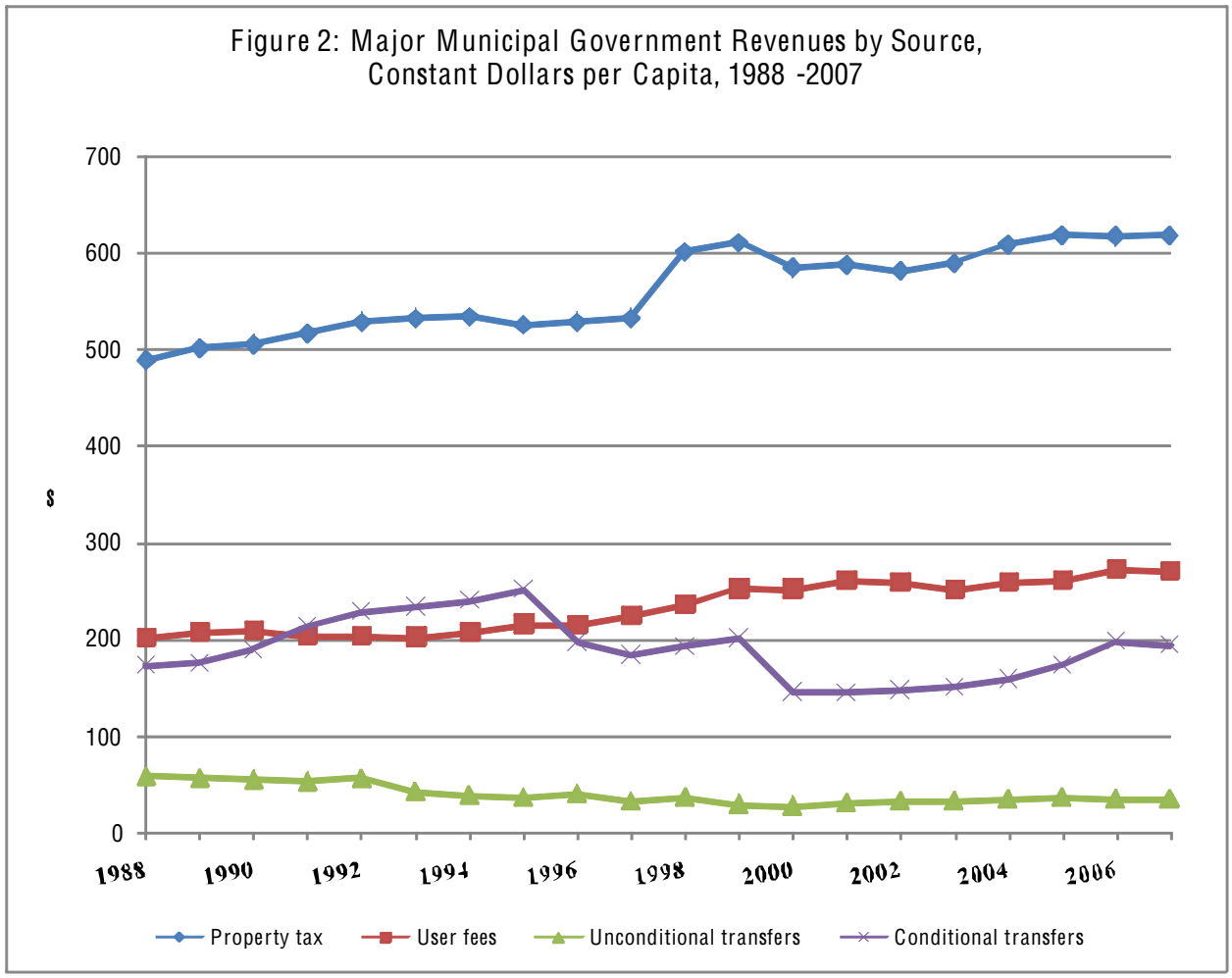
Although it may appear from the trends in municipal expenditures and revenues that there has been an increase in local autonomy over the last 20 years, appearances can be deceiving. Even though municipalities have been relying increasingly on own-source revenues to fund municipal services, the rules and regulations set out by the province both on the standards for services and the collection of taxes and user fees suggests that provincial control has not declined. The following section on education funding illustrates, even more strongly, the increase in provincial control over the last two decades.

Table 2: Municipal Revenues by Source, 1988 and 2007

	1988 $millions CAD	1988 %	2007 $millions CAD	2007 %
Own Source Revenues:				
Property and related taxes	13,112	48.4	33,450	50.7
Other taxes	384	1.4	901	1.4
User fees	5,426	20.0	14,658	22.2
Investment income	1,628	6.0	3,504	5.3
Other	292	1.1	999	1.5
Total own-source revenues	20,843	77.0	53,512	81.2
Transfers:				
General purpose transfers	1,579	5.8	1,880	2.9
Specific purpose transfers	4,649	17.2	10,534	16.0
- Federal	194	0.7	1,067	1.6
- Provincial	4,455	16.5	9,467	14.4
Total Transfers	6,228	23.0	12,413	18.8
Total revenue	27,071	100.0	65,925	100.0

Source: See Figure 1.

[3] The Province of Ontario has become more flexible in recent years, permitting municipalities to balance their budgets over a two to five-year period.



Source: See Figure 1.

2. The Special Case of Education

In most provinces, elementary and secondary education is delivered by local school boards that are funded wholly, or in part, by the provincial government. Provincial governments levy property taxes in eight provinces (the exceptions are Quebec and Saskatchewan), but provincial property taxes are only dedicated to education in five provinces (British Columbia, Alberta, Manitoba, Ontario, and Nova Scotia).[4] In Ontario and Nova Scotia, for example, the education property tax rate is set by the province, collected by municipalities, and remitted to school

[4] Provincial property taxes are not specifically earmarked for education in New Brunswick, Prince Edward Island, and Newfoundland and Labrador.

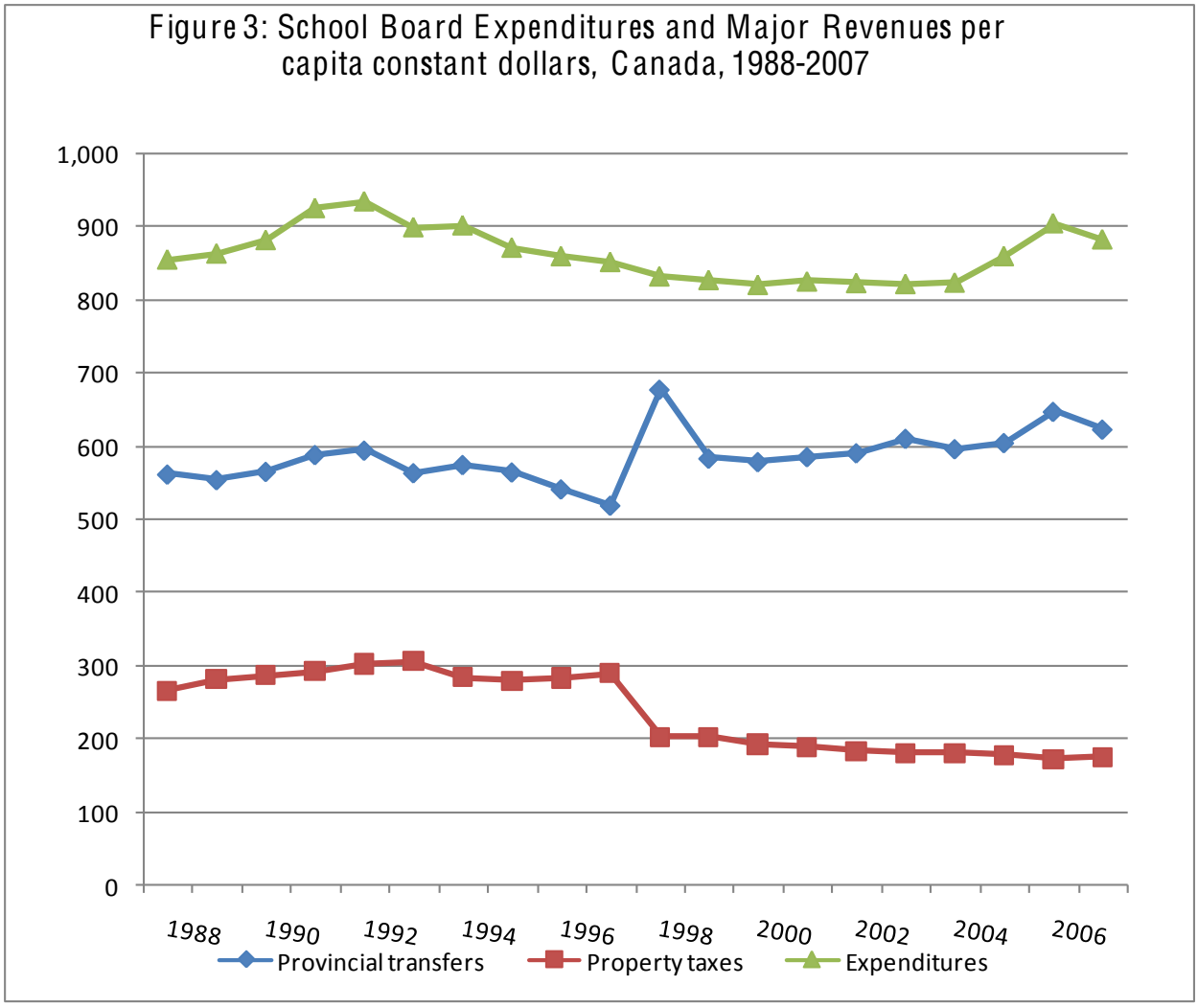
boards. School boards have not had taxing powers in Ontario since the provincial takeover of education funding in 1998.

Figure 3 shows that school board expenditures declined through much of the 90s and beyond with an increase in 2004. Over the same period, provincial transfers for education have generally increased and property taxes have fallen. The big drop in 1998 reflects a major reform in Ontario whereby the province took over the funding of education, created a new funding formula, and took over the property tax for education. As part of this reform, the province lowered its newly acquired education property tax leaving room for municipalities to raise theirs.

On average across Ontario, the reduction in property taxes was compensated for by an increase in provincial grants from general provincial revenues. For some of the larger, richer school boards where transfers were less significant, however, there has been a decline in overall revenues.[5] Moreover, the takeover of education funding by the province meant that locally elected school boards no longer have taxing authority or much responsibility for overall expenditures. Certainly in the case of education in Ontario, provincial control has been paramount and overrides local accountability.

Of course, the interesting question is what happened to student outcomes as a result of the provincial takeover of education funding in Ontario. This precise study has not been done but standardized testing in reading, writing, and mathematics in Ontario does permit an analysis of the impact of funding changes on student performance. A recent study, for example, found that equal per-student funding of public and Catholic schools has resulted in competition for students and this competition has modestly improved student performance on provincial tests between grade 3 and 6 (Card, Dooley, & Payne, 2008).

[5] Prior to the local services realignment, two school boards in Ontario (Toronto and Ottawa) were in a negative grant position with respect to the major equalization transfer for education. They were not required to submit funds to the province, however. These boards were able to raise additional property taxes to meet local needs but were no longer permitted to do so after the provincial takeover of education funding.



Source: Statistics Canada, CANSIM Table 385-0009 - School board revenue and expenditures, year ending December 31.

3. Trends in Provincial-Municipal Transfers in Canada

This section shows the trends in provincial-municipal transfers in Canada over the last two decades and attempts to answer some of the questions that were posed for this conference.

Are provincial-local grants in Canada largely conditional or unconditional?

In contrast to federal-provincial transfers in Canada, provincial-municipal transfers are largely conditional. Although conditional grants represent a large portion of total grants across the country on average, however, Table 3 highlights some of the differences across provinces. The Table shows the ratio of grants for municipal services only and for municipal services and education combined. In all provinces, conditional grants as a proportion of total grants increase when education is included because all grants for education are conditional. Overall, the ratio of conditional grants to total grants is 85 percent for municipalities and 95 percent for municipalities and school boards combined. In three of the smaller provinces (New Brunswick, Manitoba, and Saskatchewan),[6] however, the ratio of conditional to total transfers is significantly less than the national average.

Table 3: Conditional Grants as a Proportion of Total Grants, by Province in Canada, 2007

Province	Municipal only	Municipal and Education
British Columbia	65.1%	97.6%
Alberta	96.9%	99.3%
Saskatchewan	56.2%	90.2%
Manitoba	47.4%	84.1%
Ontario	88.2%	94.4%
Quebec	83.7%	97.1%
New Brunswick	44.4%	46.9%
Nova Scotia	66.6%	93.7%
Prince Edward Island	77.2%	95.6%
Newfoundland and Labrador	84.3%	97.3%
Canada (incl. northern territories)	85.2%	95.4%

Note: School boards in New Brunswick are administered by the provincial government.
Source: See Figure 3.

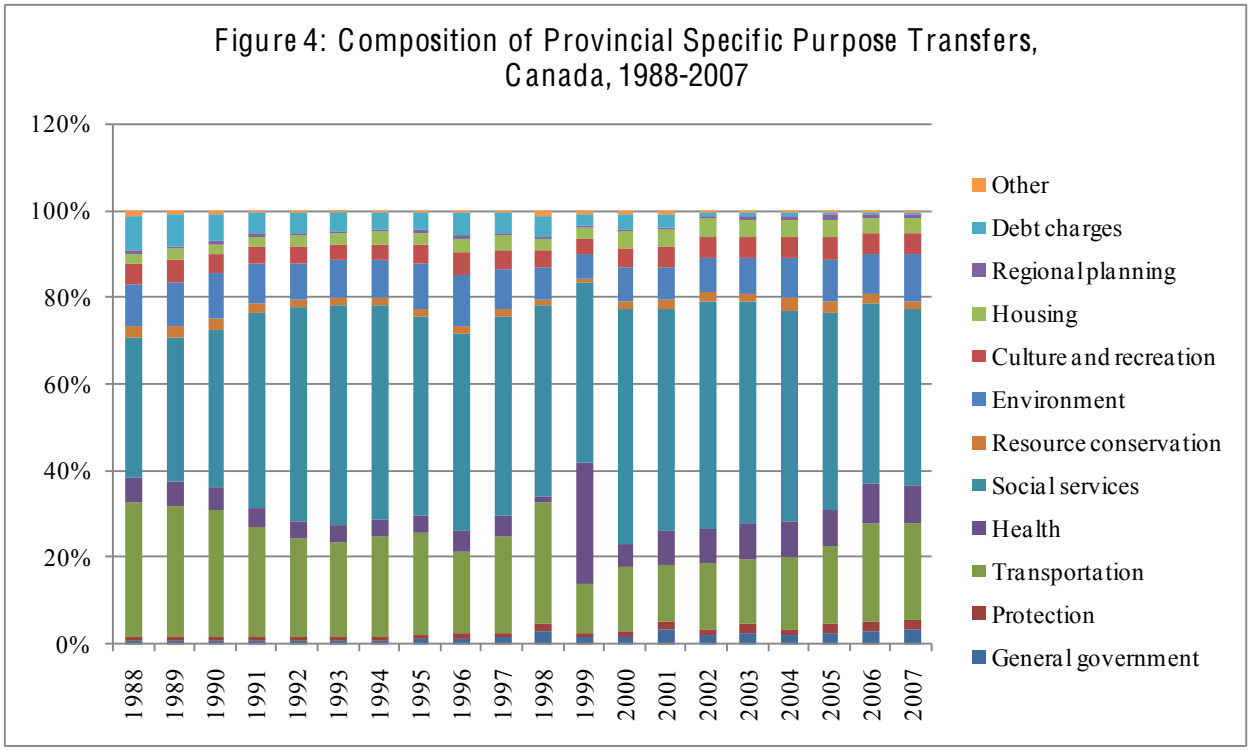
[6] The high proportion of unconditional transfers in New Brunswick reflects the implementation of the "Equal Opportunity" program in 1967 whereby the province took over responsibility for health, education, social services, and the administration of justice and has, since that time, shared the property tax field with municipalities. Saskatchewan also has undertaken a realignment of services. Manitoba has a revenue sharing program with municipalities that accounts for the largest portion of its transfers (see discussion below).

Have conditional grants been increasing?

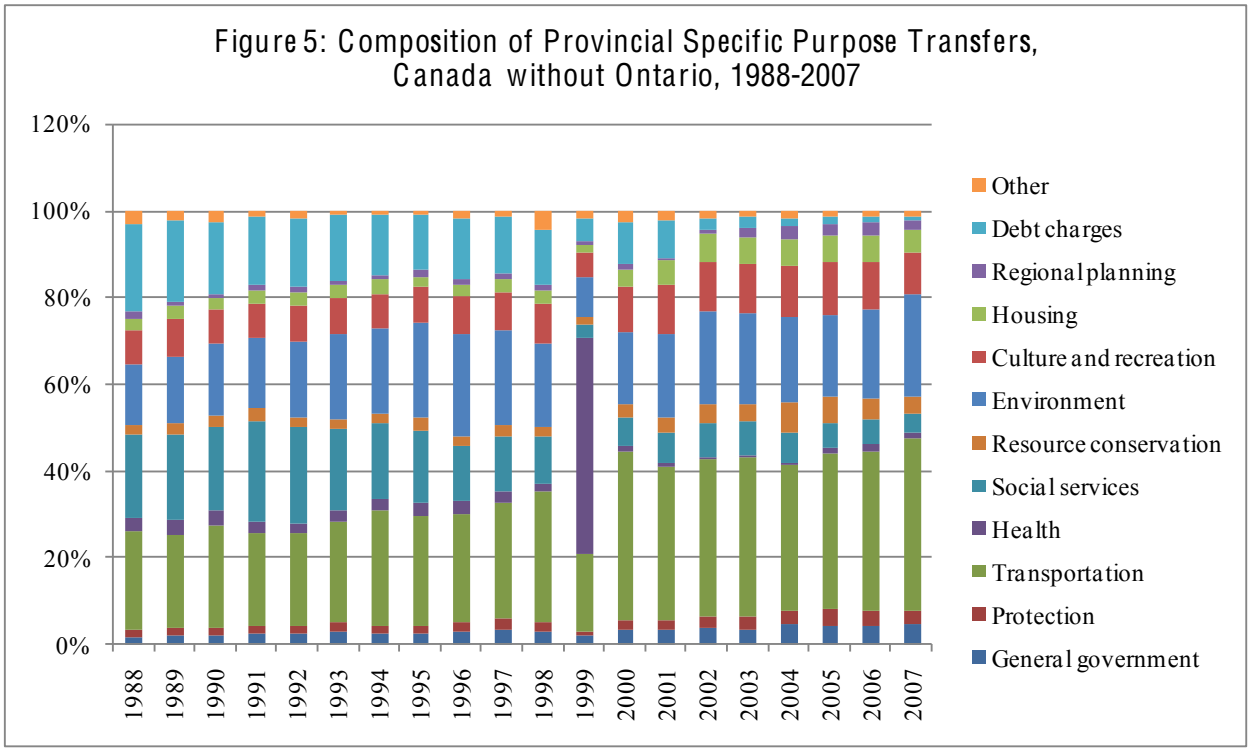
Figure 2 showed the breakdown of provincial-municipal transfers by conditional (specific purpose) and unconditional (general purpose) over the period from 1988 to 2007. It shows the swings in conditional transfers over the period with a major decline in the mid to late 1990s and a rebound in starting in 2000. Transfers continued to increase during the recession of the early 90s and declined after that. Unconditional transfers as a proportion of municipal revenues have remained both low and constant over the last 20 years and, indeed, over the entire post-war period (Bird & Chen, 2001). Money from the provinces has come with restrictions and controls designed to "meet provincial wishes at the local level" (Bird & Tassonyi, 2003).

What is the composition of conditional grants?

Figure 4 shows the composition of provincial conditional transfers from 1988 to 2007. Because social services are jointly funded by the province and municipalities in Ontario, Figure 4 shows significant transfers for social services. Indeed, one could argue that social services are a shared responsibility in Ontario and these transfers are simply the provincial contribution. In any event, Figure 5 looks at the Canadian average without Ontario to see how other provinces are earmarking transfers. When Ontario is taken out of the chart, the largest transfers are earmarked for transportation (roads and transit) and the environment (water, sewers, solid waste). The Figure also shows that transfers for these two functions have been increasing over the last two decades.



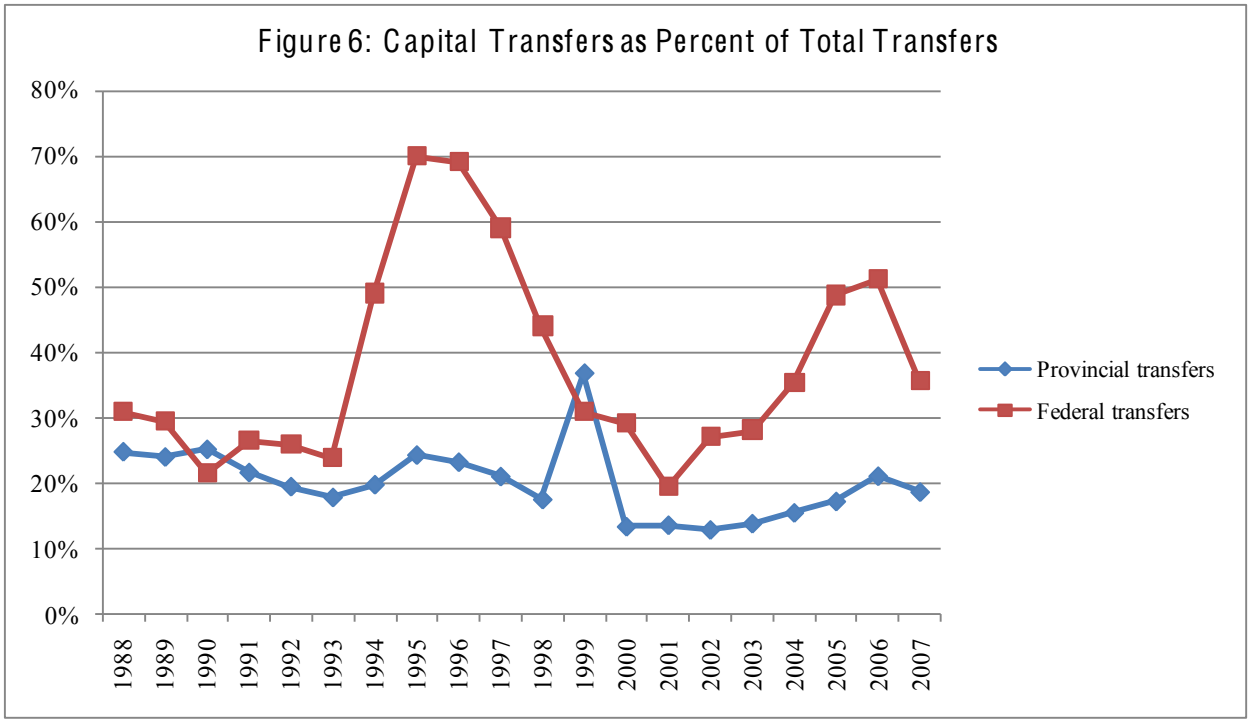
Note: The transfer for health increased in 1999 because the provincial government of British Columbia made a $1.9 billion capital transfer for debt forgiveness for municipal hospitals.
Source: See Figure 1.



Note: See Figure 4; Source: See Figure 1.

It has been argued that one of the reasons for earmarking is to assist municipalities with large expenditures on infrastructure. Most public infrastructure in Canada is the responsibility of municipal governments. The local government capital stock represented 48 percent of the total capital stock of all three levels of government in 2002 compared to 34 percent for the provincial government and 18 percent for the federal government (Harchaoui, Tarkhani, & Warren, 2004). Local public infrastructure largely comprises roads and highways (45 percent of total local public infrastructure in 2000) followed by sanitary sewers (at 17.3 percent) and sewage treatment (at 12.2 percent).

Figure 6 compares capital transfers as a percentage of total transfers for the federal and provincial governments over the period from 1988 to 2007. Although federal transfers to municipalities are fairly small, they tend to be earmarked for capital purposes to a much greater extent than are provincial transfers. Figure 6 also shows considerable variability in the percentage of transfers that are earmarked for capital purposes over the 20-year period. The decline in the proportion of federal capital transfers after 2006 will likely be reversed starting in 2009 because of the current federal stimulus package which include funding for infrastructure investment.



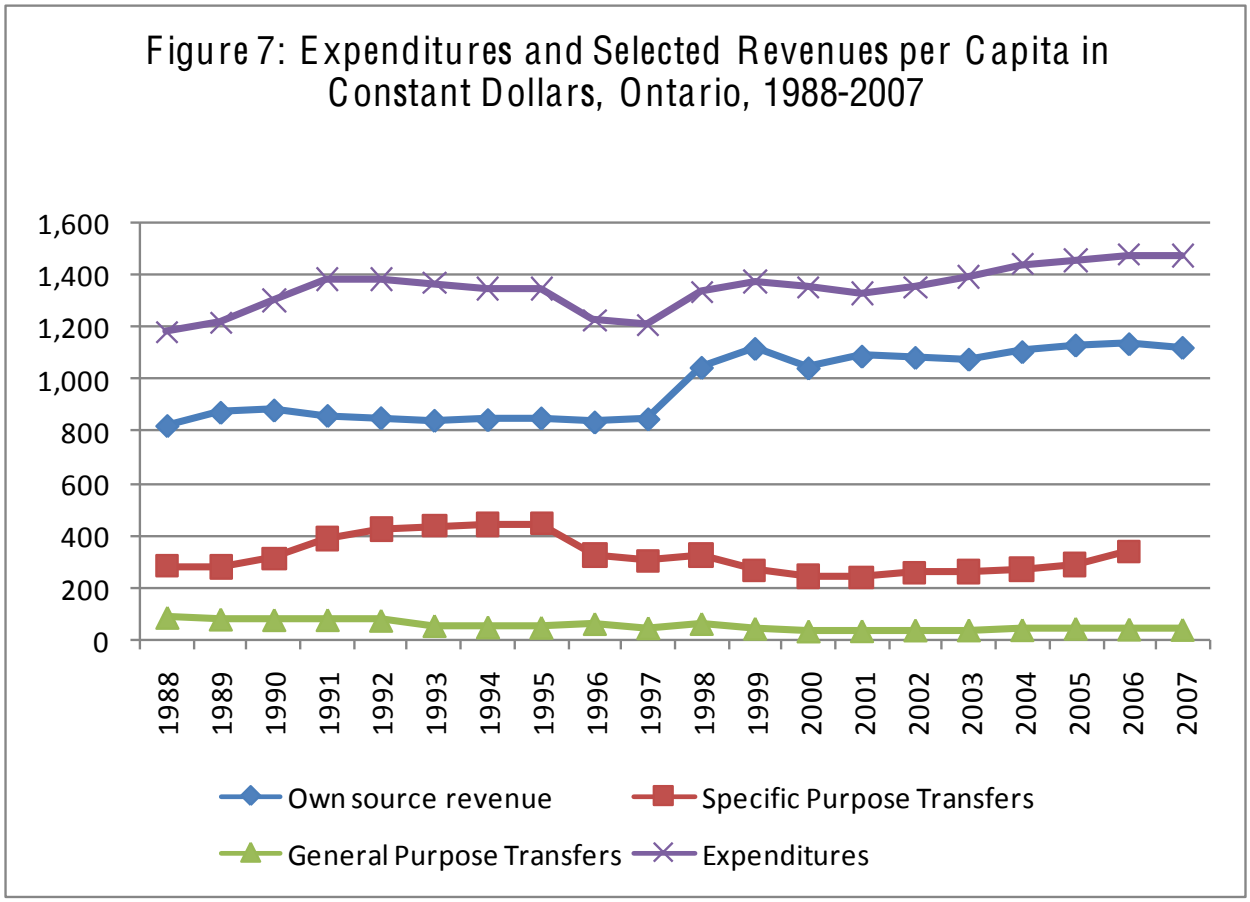
Source: See Figure 1.

Is there a relationship between earmarking and decentralization?

It is difficult to answer this question for the entire country since, as noted earlier, every province is different. An interesting case study is Ontario, however, where a major realignment of provincial and local services took place in 1998.[7] Figure 7 shows the trends in municipal expenditures and revenues in Ontario from 1988 to 2007. In 1998, municipal expenditures per capita in constant dollars increased to reflect the additional responsibilities devolved to municipalities. Own-source revenues also take a jump in 1998 reflecting the tax room provided to municipalities as part of the services realignment in which the province took over the funding of education. The province also took over the education property tax and lowered it to give this tax room to municipalities. Conditional grants declined after 1998 because many of the jointly funded programs were devolved to municipalities. The formula for the unconditional grant changed in 1998 but does not appear to have resulted in a significant change in the overall magnitude of the grant.

[7] See Appendix Table 1 for a description of the local services realignment.

It thus appears that, at least in one province, devolution has meant a reduction in conditional grants and an increase in own-source revenues. The increase in own-source revenues was made possible by the provincial takeover of education funding.



Source: See Figure 1.

3. Rationales for Transfers

The literature sets out three main rationales for transfers from one level of government to another: vertical fiscal imbalance, horizontal fiscal imbalance, and externalities and considers political rationales as well (see, for example, (Shah, 2007) or (Slack, 2007)). The type of grant that is appropriate depends on the underlying rationale. This section briefly describes these

rationales and evaluates the extent to which provincial-municipal transfers in Canada appear to be designed for these purposes.

Vertical Fiscal Imbalance

A vertical fiscal imbalance occurs when municipalities have inadequate own-source revenues to meet their expenditure responsibilities. To close the fiscal gap, senior governments can transfer additional revenue-raising powers to local governments or they can reduce the expenditure responsibilities that local governments are required to undertake. For example, if senior levels of government were to "upload" the funding of some services, then the expenditure responsibilities at the local level would be reduced and so would the local fiscal imbalance. Alternatively, the senior levels of government could allow local governments to raise revenues from additional tax sources.[8] Large cities and metropolitan areas, in particular, could be given access to more revenue sources. Moreover, cities themselves could reduce their expenditures or raise their taxes to address the gap.

As a last resort, the fiscal gap can be closed with an unconditional transfer or revenue sharing that allows the municipality to spend the funds in whatever areas it deems appropriate. The amount of the transfers allocated for this purpose can be determined in three ways (Bird & Smart, 2002, p. 900): as a fixed proportion of the revenues of the donor government; on an ad hoc basis; or on the basis of a formula (for example, as a percentage of specific local government expenditures or some other characteristics of the local governments such as population).

The first option (a fixed proportion of the revenues of the donor government) is revenue sharing. Donor governments can allocate a proportion of their total revenue for local governments or a portion of one or more taxes (tax sharing). For example, a provincial/state government may agree to share a percentage of its personal income tax revenues with municipalities. Once the total amount of funds available for grants is determined, funds can be allocated to municipalities on the basis of where they were collected or on the basis of a formula. In the former case, taxes are retained by the jurisdiction in which they are collected as opposed to being distributed on the basis of a formula. Revenue sharing on a derivation basis favours richer

[8] In the Canadian context, there have been several major realignments of services between the provincial and local governments over the last 20 years but only minor changes in the tax sources available to municipalities.

areas where revenue collections are the largest. If, on the other hand, revenues are distributed on a per capita basis, richer areas give up tax revenues to poorer areas.

The advantage of revenue sharing is that the transfer to municipalities automatically increases as the yield from that revenue source increases. To be a stable source of revenue to municipalities, however, the percentage share going to municipalities has to be maintained over time. Revenue sharing does not enhance local autonomy, accountability or efficiency. Local governments do not set the tax rates or the tax base and they receive transfer funds regardless of their tax effort.

As noted earlier, the use of unconditional grants in Canada is much less extensive than conditional grants. In terms of revenue sharing specifically, a few provinces engage in limited fuel tax revenue sharing with municipalities but these grants are all conditional on being spent on transportation. In BC, for example, 11 cents per litre of provincial fuel tax revenues are transferred to the Greater Vancouver Transportation Authority (TransLink) to meet capital and operating expenditures for transit and major roads in the Vancouver region. Two cities in the province of Alberta (Calgary and Edmonton) similarly receive for transportation infrastructure an amount equal to 5 cents per litre of taxable gasoline and diesel fuel delivered to service stations in those cities. This tax transfer replaced specific purpose grant funding for capital transportation projects in those cities. In Quebec, l'Agence Métropolitaine de Transport (AMT) gets 1.5 cents per litre from provincial fuel taxes collected on motor fuel sold in the Greater Montreal area. In Ontario, the province shares 2 cents per litre with municipalities for transit. In all these cases, how the tax is levied, collected, and distributed is unilaterally decided by the province and can be changed at will.

The only comprehensive unconditional revenue sharing program in Canada at the provincial-local level is in Manitoba.[9] The Province of Manitoba shares the revenues from five provincial taxes with municipalities: 4.15 percent of provincial income taxes (personal and corporate), 2 cents per litre of provincial gasoline tax revenue, 1 cent per litre of provincial diesel

[9] In Saskatchewan, the provincial government will base its municipal operating grants on the value of one point of the provincial sales tax starting in 2009-10.

fuel taxes, 10 percent of video lottery terminal revenues, and 100 percent of provincial fine revenues for municipalities that provide their own policing (urban municipalities with a population over 750). With the introduction of the Building Manitoba Fund in 2005, however, the unconditional nature of these grants has been somewhat modified; the base amount remains unconditional but increases over the 2005 base are conditional on being spent on infrastructure.

Given the restricted use of provincial unconditional grants and given the limited extent of provincial revenue sharing with municipalities in Canada, it appears unlikely that the main rationale underlying provincial-local transfers is to correct the vertical fiscal imbalance.

Horizontal Fiscal Imbalance

Horizontal fiscal imbalance refers to the difference in resources among governments at the same level. For example, some municipalities are unable to provide an adequate level of service at reasonable tax rates whereas other municipalities can. This inability to provide an adequate level of service may occur because the costs of services are higher, the need for services is higher, and the tax base is smaller.

Tax bases per capita differ from one jurisdiction to another. This means that, to collect the same amount of revenue, a jurisdiction with a small per capita tax base will have to levy a higher tax rate than a jurisdiction with a large per capita tax base. Expenditures may differ across municipalities because costs may be greater in some municipalities than others or because needs differ among municipalities. This means that more tax revenues are required to provide the same level of service in some jurisdictions than in others. Needs and/or costs may be greater than the average because of geographic location, population density, or other factors. For example, wages and rents are usually higher in cities with high population density and the cost per unit to provide services increases with increasing population because of congestion (Fenge & Meier, 2001). Needs may be higher for municipalities with a high proportion of low-income households who require affordable housing and social services.[10]

[10] Of course, expenditures per capita could be higher because of inefficient spending by some municipalities. If inefficiency is the reason for higher expenditures, then this inefficiency will also be rewarded by the grant.

Measuring need can be difficult and requires considerable data (Kim & Lotz, 2008). In the absence of the necessary data, need can be measured by the size of the population (the assumption being the more people will mean greater need for expenditures) and by using a separate formula for different types of local governments based on size, type, region, or whether it is urban or rural (Shah, 2004).

Equalization grants, based on expenditure needs and the ability of local governments to levy taxes, can ensure that those municipalities with small tax bases and greater costs and needs will be able to levy tax rates that are comparable to other jurisdictions. Generally, the formula calculates the difference between a standardized expenditure and a standardized revenue base. Standardized expenditures are calculated by a standard level of per capita expenditure multiplied by the population of the municipality; standardized revenues are calculated by multiplying a standard tax rate by the tax base of the municipality.

The design of an equalization grant requires a definition of "standard" or “comparable” level of service. It could be a minimum level, an average level, the level of the highest expenditure municipality or some standard that reflects an adequate level of service. The problem with any formula that uses standard expenditures is that the "standard" may not adequately recognize differences in needs and costs. Similarly, the standard tax rate could reflect the tax rate of the richest municipality, the average of all municipalities, or some other number.

The amount of equalization overall will depend on the choice of the standard expenditure and the standard tax rate. In most countries, as noted by (Bird & Smart, 2002), budgetary constraints prevent governments from applying full equalization. They generally equalize up to the “average” rather than the “richest” municipality and thus municipalities with lower than average fiscal capacity remain somewhat disadvantaged.

In seven Canadian provinces, the provincial government provides unconditional equalization grants to municipalities. In only two provinces (Nova Scotia and New Brunswick), the equalization grant formula recognizes expenditure needs as well as fiscal capacity; the other provinces only take into account tax base deficiencies (fiscal capacity). In the case of Nova Scotia, equalization grants only include expenditure needs for a few categories -- expenditures such as police, fire, water and sewers – and omit expenditures such as parks, culture, and

recreation. The two provinces that include measures of expenditure need in the grant formula differentiate their equalization grants by classes of municipalities. The reason for differentiating by types of municipalities is that there are wide divergences in the expenditures and revenue-raising capacities of different types of municipalities. In New Brunswick, for example, the three largest cities (Saint John, Fredericton, and Moncton) are in one group. If there were no groupings, expenditure levels and revenue-raising capacity would over-emphasize fiscal needs and fiscal capacity, respectively, in the formula owing to the significantly higher expenditure levels and tax base in the three largest cities.

In summary, most provinces provide some form of equalization grants to municipalities but these do not generally constitute the major component of grants. In other words, equalization is definitely an objective of grant programs in most provinces but it is not the only objective.

Externalities

The benefits (and costs) of some services spill over municipal boundaries (for example, regional highways) and may result in an under-allocation of resources because the municipality providing the service bases its expenditure decisions only on the benefits captured within its jurisdiction and does not take account of the benefits to those outside the jurisdiction. One way to internalize the externalities is to expand the municipal boundary to include all of the beneficiaries of the service. Not only would the boundaries likely be different for different services, however, amalgamation is rarely a popular policy choice (Slack, 2007).

Another way to provide an incentive to allocate more resources to the service generating the externality is a conditional, matching grant (a Pigouvian subsidy that would internalize the positive externality from the local expenditures). The grant should be conditional in that it has to be spent on the service which generates the externality. It should be matching to reflect the extent of the externality. The rate of grant may decline as expenditures increase on the grounds that the externalities diminish. The matching rate may be different in different jurisdictions reflecting that there are greater externalities in some places than in others (Bird & Smart, 2002). In the case of large metropolitan areas, for example, the externalities can be internalized within the jurisdiction if the regional boundaries are designed to reflect all of the users of the service.

For those services that generate externalities beyond the borders of the metropolitan area (such as education and health), it may still be appropriate to provide a transfer.

Although the notion of a matching rate to reflect spillovers works in theory, the extent to which the grant will induce municipalities to spend more on the subsidized service depends on the matching rate, the responsiveness of spending to a lower price, and whether the grant stimulates new spending or replaces spending that would have occurred in the absence of the grant (Bahl, 2000). In practice, governments do not know the magnitude of spillovers for specific services (Bird, 2000) and there is empirical evidence that the scope of externalities is limited and thus cannot justify the high matching rates that are generally used (Blochliger & Petzold, 2009).

Matching grants require that the municipalities contribute a portion of the funds to deliver the service. A uniform matching rate tends to favour richer cities because they are more able to match funds than poorer cities, unless there is an equalization component to the grant. Moreover, a matching grant will only stimulate spending if the municipality has the power over expenditures and the ability to increase taxes (Bird, Ebel, & Wallich, 1995).

There are hundreds of examples of conditional transfers across Canada, many of which are matching transfers. Alberta, for example, provides over 65 conditional grants to municipalities from 10 different provincial government departments. One of these grants is the City Special Transportation Grant which is a conditional matching transfer that provides financial assistance for high priority transportation capital projects within cities. Funding is provided for capital transportation projects on highways and truck routes, capital transportation facilities, and highway maintenance. There are no specific project eligibility criteria but proposals are evaluated and prioritized by a review committee comprised of provincial department representatives and the Alberta Urban Municipalities Association. If approved, the province funds 75 percent of the costs leaving the cities to fund 25 percent. The maximum provincial share for any project is $3 million.

There are many more examples of conditional, matching grants across Canada and many have very high matching rates. It is difficult to know if these grants have been designed to

address externalities but, given the very high matching rates, it seems likely that this is not the primary rationale.

Political Rationales

Transfers are sometimes established in response to successful lobbying by municipal associations (for example, the lobbying by the Federation of Canadian Municipalities for a permanent federal gas tax transfer). Transfers have also been introduced in response to a public outcry over deteriorating services or infrastructure (as happened when there were problems with water quality and the public demanded higher standards and more funding). But, more fundamentally, provincial governments often use transfers as a way to exert control over how municipalities deliver services.

Provincial governments have a choice with respect to the delivery of local services. They can deliver the services themselves, they can let local governments deliver the services but regulate how the services are delivered, or they can let local governments deliver the services with provincial regulations and provide some financial assistance.

In most provinces in Canada, the provincial government has chosen the third option and the type of grant that is used to encourage local governments to provide at least a minimum standard of service (in areas such as road safety, ambulance services, and water and waste water treatment) is a conditional, lump-sum grant. Conditional non-matching grants are appropriate to subsidize activities that are a high priority for the donor government but a low priority for the recipient government (Boadway & Shah, 2009). These transfers are used to provide incentives for local governments to act as agents of the donor government. The donor government benefits from local management in providing a service but gets to determine how the service will be delivered. Local governments in this model have been described as the "handmaidens" of the provincial government (Boadway & Shah, 2009).

Provincial-municipal transfers in Canada thus seem largely designed to give provincial governments a fair amount of control over the expenditure and taxing decisions of local governments while, at the same time, appearing to let municipal governments deliver their own services. In essence, local governments in Canada, to a considerable extent, are acting as agents

of provincial governments spending provincial dollars on provincially-designated activities (Bird & Slack, 1993, p. 138)

Whether or not they provide funding for municipal services, provincial governments set standards of service that municipalities have to meet and they enforce those standards. For example, there are standards for fire protection, water and sewerage services, solid waste disposal, building inspection, day care, and housing for the elderly. Provincial regulations for maintenance of municipal highways in Ontario (Ontario Regulations 239/02), for example, set standards with respect to routine patrolling, snow clearing, treating icy roadways, repairing potholes, repairing shoulder drop-offs, repairing cracks, removing debris, repairing non-functioning lights, repairing or replacing signs, repairing defects in the traffic control signal system and sub-systems, repairing bridge deck spalls, and repairing surface discontinuity. Detailed standards are specified such as routine patrolling has to be done 3 times every 7 days for a class 1 highway, 2 times every 7 days for a class 2 highway, once every 7 days for a class 3 highway, etc. Routine patrolling has to be carried out by driving on or electronically monitoring the highway to check for conditions described in another part of the regulation and so on and on.

Under Ontario's Safe Drinking Water Act and the Ontario Drinking Water Quality Standards Regulation 169/03, the provincial government has established standards for numerous contaminants. Water supplied by drinking water systems in the province is required legally to meet these standards for microbiological, chemical, and radiological contaminants. Under Ontario Regulation 170/03, owners of drinking water systems are required to prepare annual reports that show the results of all drinking water tests, including the total number of adverse results. Higher standards have led to higher costs but not necessarily higher provincial funding.

Why is the provincial control over municipal finances in Canada so pervasive? In part, it is because municipalities are constitutionally creatures of the provinces and, if they are about to go bankrupt, the province generally has to come to their rescue. It is also the case that municipalities provide a wide range of very visible services to their inhabitants some of which are very capital intensive (such as the water supply) and some of which are very labour intensive (such as social services) (Bird & Tassonyi, 2001). Since most Canadians use these services, Bird and Tassonyi argue that it is not surprising that provincial politicians want to guarantee that these

services will continue to be provided even though they are financed by local budgets. Indeed, when municipalities have been unable to fund services adequately, the province has generally stepped in with some type of assistance. In other words, municipalities can depend on the province to bail them out, if necessary, but only at the expense of substantial provincial control over every aspect of their finances – expenditures, revenues, borrowing, etc.

4. Problems with Transfers

Efficient service delivery requires that those responsible for providing services have a clear mandate, adequate, sufficient flexibility to make decisions, and are accountable for the decisions they make (Bird & Vaillancourt, 1998). Transfers need to be designed to ensure that these conditions are not violated. The literature has identified a number of potential problems with intergovernmental transfers and examples of these problems abound in provincial-local transfer systems in Canada.

Transfers can interfere with the efficient delivery of services.

Transfers should not be designed to discourage municipalities from charging the right price for services: "the basic task in transfer design is thus to get the prices 'right' in the public sector – right, that is, in the sense of making local governments fully accountable – at least at the margin of decision-making – to both their citizens and, where appropriate, to higher levels of government" (Bird & Smart, 2002, p. 899). There is no incentive to use proper pricing when grants cover a large proportion of operating and capital costs. In many provinces, for example, large grants for water treatment plants in the past reduced the incentives of municipalities to use volumetric pricing to reduce the demand for water or to engage in asset management.

Transfers can distort local decision-making.

Conditional transfers require municipalities to spend the funds they receive according to guidelines set out by the donor government and often require matching funds on the part of the municipality. A matching transfer, by lowering the price of some services, encourages municipalities to spend more on those services.[11] In the presence of externalities, this change in

[11] For a comparison of the impact of conditional and unconditional transfers to municipalities in Ontario in the mid-1970s, see (Slack 1980).

behaviour may be appropriate. Where there are no externalities, however, or where the amount of the grant exceeds the amount of the externality, the resulting distortion in municipal behaviour is inappropriate.

The extensive literature on the flypaper effect ("money sticks where it hits") suggests that grants will be effective at stimulating local spending in the areas for which they are earmaked rather merely crowding out spending that would have occurred anyway (Inman, 2008). Yet, conditional grants can be fungible in the sense that, even though they come with strings attached, there is no guarantee that the recipient will spend the funds on what the donor government intended. This is particularly true for large cities that are more likely to be spending on the designated function in any event. They are less fungible, however, if their receipt is conditioned on meeting performance standards and compliance is monitored.

In Canada, federal transfers to fund part of the cost of provincial and municipal infrastructure projects under the 2009 Infrastructure Stimulus Fund provide an interesting example of how transfers distort local decision-making. As part of the stimulus package, the City of Toronto applied to the federal government for funding to pay part of the costs of 204 new streetcars needed to implement its transit plan. The streetcars would be 25 percent made in Canada, mostly at a Bombardier facility in Thunder Bay (a city in Northern Ontario). The federal government turned down the request because it did not meet the criteria. In particular, it was not "shovel ready," meaning that the construction of streetcars could not begin immediately; all of the streetcars would not be built by 2011 (the deadline for stimulus spending); and the jobs created were not in the local economy but rather in Northern Ontario. As a result, the City re-applied to the federal government for stimulus funds for 500 smaller projects.

Transfers can reduce accountability.

When two or more levels of government are funding the same service, accountability problems are sure to arise. When users or taxpayers want to complain about the service, they are not sure which level of government is responsible for the problem. Accountability is blurred when the level of government making the spending decisions (municipalities) is not the same as the level of government that is raising the revenues to pay for them (provincial or federal governments). There is no incentive to be efficient when someone else is responsible for funding. Local

governments are more likely to carry out their expenditure responsibilities in a responsible manner if they are also raising the revenues to pay for them.

Although performance measurement is mandatory for municipalities in Ontario and it is used in some other Canadian jurisdictions as well, it is not generally used to determine if municipalities receiving specific provincial grants are meeting performance standards for those services. Performance measures in Ontario, for example, are designed to assess the efficiency (amount of resources used to produce a given amount of service) and effectiveness (extent to which a service is achieving its intended results) of municipal services. Over 80 performance measures have been constructed for 12 municipal services (general government, fire protection, police protection, roads, transit, wastewater, storm water, drinking water, solid waste, parks and recreation, libraries, and land use planning).[12]

The provincial government requires that municipalities report the results of these measures to taxpayers annually (through direct mailing to taxpayers or households, an insert with the property tax bill, in local newspapers or advertising periodicals, or posting the information on the internet) but no provincial funding turns on the results of the performance measures. Nevertheless, these measures enhance accountability by permitting municipal elected officials, administrators, and taxpayers to monitor and evaluate municipal expenditures over time and in comparison to other municipalities. Municipalities are also required to submit annual financial information returns (with details on expenditures and revenues) to the provincial government before they receive any grant funding. Provincial auditors can perform audits to determine if municipalities have actually spent the grant money but this is not a regular occurrence.

Output-based performance measures are used by the federal government as part of its gas tax revenue sharing program, however.[13] Federal gas tax transfers are conditional, non-matching transfers that have to be spent on environmentally sustainable municipal infrastructure and municipalities receive a lump sum amount (based on the size of their population). To implement this program, very detailed agreements have been prepared with every province (and territory)

[12] Appendix 2 provides some examples of performance measures in Ontario under the Municipal Performance Measurement Program (MPMP).
[13] Although this grant is referred to as a gas tax transfer, it is actually no longer based on gas tax revenues. Rather, it is fixed at $2 billion per year (FCM 2008).

establishing an allocation formula under which the revenues are allocated to provinces on a per capita basis. Funds have to be used to support the desired outcomes of cleaner air, cleaner water, and the reduction of greenhouse gas emissions. Eligible projects and eligible costs are set out in the agreements. Provinces (who receive funds from the federal government and pass them onto municipalities)[14] can withhold payment, reduce payment, return payment, and/or not renew the Memorandum of Agreement with municipalities that are non-compliant.

Provinces are required to submit an outcomes report to the federal government and provincial residents each year. The content of the report, including indicators to measure results and outcomes is to be agreed upon with municipalities but must include information on the degree to which these investments have contributed to the achievement of the objectives.

Transfers are rarely a stable and predictable source of revenue for local governments.

All too often, the amount of money local governments receive varies from year to year, in part depending on the fiscal state of the donor governments. Lack of predictability makes it difficult for municipalities to plan expenditures. Capital grants, in particular, need to be maintained for sufficiently long periods of time to allow municipalities to sustain capital investments. When grants decline, municipalities have to make up the lost revenue by increasing local taxes, user fees, or other revenues, or by reducing expenditures.

With respect to predictability, the sharing of fuel tax revenues in Alberta is a prime example of how donor governments can unilaterally change funding. Since April 2000, the Alberta government has been giving transfers to Calgary and Edmonton for transportation infrastructure equal to 5 cents per litre of taxable gasoline and diesel fuel delivered to service stations in those cities. In October 2001, however, the provincial government announced that it would reduce fuel tax funding to 4.25 cents per litre as of April 1, 2002. In the end, it relented and left the funding at 5 cents per litre but this example shows how vulnerable cities can be to the whims of donor governments (Kitchen and Slack 2003).

[14] In some provinces, funds are distributed by the municipal association.

5. Concluding Comments

Federal and provincial transfers to municipalities in Canada account for less than 20 percent of their revenues and provincial transfers, in particular, have been declining over the last two decades. At the same time, own-source revenues (mainly property taxes and user fees) have increased as a percent of municipal revenues. Although these statistics suggest that municipalities are enjoying greater local autonomy than in the past because they are more dependent on their own resources, the reality is that municipalities have been and continue to be heavily dependent on provincial governments.

Although transfers represent a small percentage of municipal revenues, most of these grants are conditional, sometimes matching and sometimes non-matching. Municipalities receive no unconditional grants from the federal government and only a small proportion of provincial grants are unconditional. The conditional grants are designed to finance specific services at levels and standards which are set by the province but delivered by local governments. Simply stated, provincial-municipal transfers in Canada are designed to achieve provincial objectives and not local fiscal autonomy.

The design of transfers does not tell the whole story, however. Provincial intervention in local fiscal decisions is pervasive and takes many forms than simply the use of conditions on transfers. The province limits municipal access to revenue sources -- municipalities are restricted largely to property taxes and user fees and cannot levy income or sales taxes, for example. The province mandates the services that have to be provided by municipalities and regulates standards for services (whether the service is mandated or not and whether municipalities receive transfers for the service or not). The province determines borrowing limits and sets rules for borrowing. The province establishes the geographic boundaries of municipalities and is involved in most other aspects of municipal finance. When it comes to transfers or any other aspect of the municipal finance system in Canada, provincial control trumps local fiscal autonomy and accountability.

References

Bahl, R. (2000). *Intergovernmental Transfers in Developing and Transition Countries: Principles and Practice.* Washington, DC: The World Bank.

Bird, R. M. (2000). Setting the Stage: Municipal and Intergovernmental Finance. In M. Freire, & R. Stren, *The Challenge of Urban Government: Policies and Practices* (pp. 113-28). Washington, DC: World Bank Institute.

Bird, R. M., & Chen, D.-j. (2001). Federal Finance and Fiscal Federalism: The Two Worlds of Canadian Public Finance. *Canadian Public Administration , 41* (1), 51-74.

Bird, R. M., & Slack, E. (1993). *Urban Public Finance in Canada.* Toronto: John Wiley and Sons.

Bird, R. M., & Smart, M. (2002). Intergovernmental Fiscal Transfers: International Lessons for Developing Countries. *World Development , 30* (6), 899-912.

Bird, R. M., & Tassonyi, A. (2003). Constraining Subnational Fiscal Behavior in Canada: Different Approaches, Similar Results? In J. A. Rodden, G. S. Eskeland, & J. Litvack, *Fiscal Decentralization and the Challenge of Hard Budget Constraint.* Cambridge: Mass.: MIT Press.

Bird, R. M., & Tassonyi, A. (2001). Constraints on Provincial and Municipal Borrowing in Canada: Markets, Rules, and Norms . *Canadian Public Administration , 44*, 84-109.

Bird, R. M., & Vaillancourt, F. (1998). Fiscal Decentralization in Developing Countries: An Overview. In R. M. Bird, & F. Vaillancourt, *Fiscal Decentralization in Developing Countries* (pp. 1-48). Cambridge: Cambridge University Press.

Bird, R. M., Ebel, R. D., & Wallich, C. I. (1995). Fiscal Decentralization: From Commnad to Market. In R. M. Bird, R. D. Ebel, & C. I. Wallich, *Decentralization of the Socialist State: Intergovernmental Finance in Transition Economies* (pp. 1-67). Washington, DC: The World Bank.

Blochliger, H., & Petzold, O. (2009). *Taxes or Grants: What Revenue Source for Sub-Central Governments?* Paris: OECD.

Boadway, R., & Shah, A. (2009). *Fiscal Federalism: Principles and Practices of Multiorder Governance .* New York, NY: Canbridge University Press.

Canadian Federation of Mayors and Municiplities. (1976). *Puppets on a Shoestring: The Effects on Municipal Government of Canada's System of Public Finance.* Ottawa: Canadian Federation of Mayors and Municipalities.

Card, D., Dooley, M., & Payne, A. A. (2008). *School Choice and Benefits from Competition: Evidence from Ontario.* Toronto: D.D. Howe Institute.

Fenge, R., & Meier, V. (2001). *Why Cities Should Not be Subsidized.* Munich: Center for Economic Studies & Ifo Institute for Economic Research.

Harchaoui, T. M., Tarkhani, F., & Warren, P. (2004). "Public Infrastructure in Canada, 1961-2002. *Canadian Public Policy , 30* (3), 303-18.

Inman, R. P. (2008). *The Flypaper Effect.* Cambridge, Mass.: National Bureau of Economic Research.

Kim, J., & Lotz, J. (2008). *Measuring Local Government Expenditure Needs.* Copenhagen: The Korea Institute of Public Finance and The Danish Ministry of Social Welfare.

Kitchen, H., & Slack, E. (2003). Special Report: New Finance Options for Municipal Governments. *Canadian Tax Journal , 51* (6).

O'Brien, A. (1975). Father Knows Best: A Look at the Provincial-Municipal Relationship in Ontario. In D. C. McDonald, *Government and Politics of Ontario* (pp. 154-71). Toronto: McMillan.

Shah, A. (2007). A Practitioner's Guide to Intergovernmental Fiscal Transfers. In R. Boadway, & A. Shah, *Intergovernmental Fiscal Transfers, Principles and Practice* (pp. 1-53). Washington, DC: The International Bank for Reconstruction and Development/The World Bank.

Shah, A. (2004). *Fiscal Decentralization in Developing and Transition Economies: Progress, Problems, and Promise.* Washington, DC: The World Bank.

Slack, E. (2007). Grants to Large Cities and Metropolitan Areas. In R. Boadway, & A. Shah, *Intergovernmental Fiscal Transfers, Principles and Practice* (pp. 453-81). Washington, DC: The International Bank for Reconstruction and Development/The World Bank.

Slack, E. (1980). Local Fiscal Response to Intergovernmental Transfers. *The Review of Economics and Statistics , 62* (3), 364-70.

Slack, E. (2007). *Managing the Coordination of Service Delivery in Metropolitan Cities: The Role of Metropolitan Governance.* Washington, DC: The World Bank.

Appendix 1: Changes in Responsibilities between the Provincial and Municipal Governments in Ontario

Responsibility	1997	1998
General Welfare Assistance:*		
Benefits	80% provincial; 20% municipal	80% provincial; 20% municipal
Administration	50% provincial; 50% municipal	50% provincial; 50% municipal
Family Benefits Assistance:		
Benefits	Provincial	80% provincial; 20% municipal
Administration	Provincial	50% provincial; 50% municipal
Child Care Services	80% provincial; 20% municipal	80% provincial; 20% municipal
Long Term Care	Provincial	Provincial
Hostels	80% provincial; 20% municipal	80% provincial; 20% municipal
Homes for Special Care	Provincial	Provincial
Women's Shelters	95% provincial; 5% municipal	Provincial
Social Housing	Provincial-municipal	Municipal
Child Welfare	80% provincial; 20% municipal	Provincial
Municipal Transit	33% provincial; 67% municipal	Municipal
GO Transit**	Provincial	Municipal
Ferries	Provincial	Municipal
Airports	40% provincial; 60% municipal	Municipal
Sewer and water	10% provincial; 90% municipal	Municipal
Policing	10% provincial; 90% municipal	Municipal
Farm Tax Rebate	Provincial	Municipal
Property Assessment	Provincial	Municipal
Libraries	5% provincial; 95% municipal	5% provincial; 95% municipal
Public Health***	70% provincial; 30% municipal	50% provincial; 50% municipal
Ambulances	90% provincial; 10% municipal	50% provincial; 50% municipal

Appendix 1(cont'd): Changes in Responsibilities between the Provincial and Municipal Governments in Ontario

Responsibility	1997	1998
Roads****	Provincial-municipal	More municipal
Gross Receipts Tax	Municipal	Provincial
Provincial Offences	Provincial	Municipal
Residential Education Taxes	School boards	50% prov'l for education; 50% municipal

*The Ontario Drug Benefit Program and the Ontario Disability Support Program will be uploaded to the Province starting in 2008 and 2009 respectively and will be phased in by 2011. Starting in 2010, the province will upload the municipal costs of Ontario Works benefits over nine years.
** The Province took back funding for GO Transit in 2002; the Greater Toronto Transportation Authority (now Metrolinx) took over transportation in the Greater Toronto Region and Hamilton in 2006.
***The provincial portion of public health was increased from 50 to 75 percent between 2004 and 2007 and increased provincial funding has been made available for ambulances.
**** Provincial roads grants to municipalities were cut back in 1996; maintenance of some provincial highways was also transferred to municipalities.

Appendix 2: Examples of Performance Based Measures for Municipalities in Ontario

Service Area	Measure
General Government	Operating costs for governance and corporate management as a percentage of total municipal operating costs
Fire protection	Operating costs for fire services per $1,000 of assessment Number of residential fire related injuries per 1,000 persons Number of residential fire related injuries averaged over 5 years per 1,000 persons
Police protection	Operating costs for police services per person Violent crime rate per 1,000 persons Property crime rate per 1,000 persons Total crime rate per 1,000 persons Youth crime rate per 1,000 youths
Roads	Operating costs for paved (hard top) roads per lane kilometre Operating costs for unpaved (loose top) roads per lane kilometre Operating costs for winter maintenance of roadways per lane kilometre maintained in winter Percentage of paved lane kilometres where the condition is rated as good to very good Percentage of bridges and culverts where the condition is rated as good or very good Percentage of winter events where the response met or exceeded locally determined municipal service levels for road maintenance
Transit	Operating costs for conventional transit per regular service passenger trip Number of conventional transit passenger trips per person in the service area in a year
Wastewater	Operating costs for the collection of wastewater per kilometre of wastewater main Operating costs for the treatment and disposal of wastewater per megalitre Operating costs for the collection, treatment, and disposal of wastewater per megalitre (Integrated System) Number of wastewater main backups per 100 kilometres of wastewater main in a year Percentage of wastewater estimated to have by-passed treatment

Storm water	Operating costs for urban storm water management (collection, treatment, disposal) per kilometre of drainage system Operating costs for rural storm water management (collection, treatment, disposal) per kilometre of drainage system
Drinking water	Operating costs for the treatment of drinking water per megalitre Operating costs for the distribution of drinking water per kilometre of water distribution pipe Operating costs for the treatment and distribution of drinking water per megalitre (Integrated System) Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect Number of water main breaks per 100 kilometres of water distribution pipe in a year
Solid waste	Operating costs for garbage collection per tonne or per household Operating costs for garbage disposal per tonne or per household Operating costs for solid waste diversion per tonne or per household Average operating costs for solid waste management (collection, disposal and diversion) per tonne or per household Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households Total number of solid waste management facilities owned by the municipality with a Ministry of Environment Certificate of Approval Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a municipally owned solid waste management facility, by facility Percentage of residential solid waste diverted for recycling Percentage of residential solid waste diverted for recycling (based on combined residential and ICI tonnage)
Parks and recreation	Operating costs for parks per person Operating costs for recreation programs per person Operating costs for recreation facilities per person

	Operating costs for recreation programs and recreation facilities per person (Subtotal) Total kilometres of trails and total kilometres of trails per 1,000 persons Hectares of open space and hectares of open space per 1,000 persons (municipally owned) Total participant hours for recreation programs per 1,000 persons Square metres of indoor recreation facilities and square metres of indoor recreation facilities per 1,000 persons (municipally owned) Square metres of outdoor recreation facility space and square metres of outdoor recreation facility space per 1,000 persons (municipally owned)
Library Services	Operating costs for library services per person Operating costs for library services per use Library uses per person Electronic library uses as a percentage of total library uses Non-electronic library uses as a percentage of total library uses
Land use planning	Percentage of new residential units located within settlement areas Percentage of land designated for agricultural purposes which was not re-designated for other uses during the reporting year Percentage of land designated for agricultural purposes which was not re-designated for other uses relative to the base year of 2000 Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during the reporting year Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000

Source: Ontario Ministry of Municipal Affairs and Housing. *Municipal Performance Measurement Program*, 2009