MIND THE GAP
Finding the Money to Upgrade Canada's Aging Public Infrastructure

Executive Summary

A quarter century of under-investment has left Canada's public infrastructure – which includes transit systems, roads, highways, bridges, water and water works, educational facilities, and hospitals – in a weakened state. Yet, after four to five years of renewed government capital spending, momentum to address this problem is already losing steam. Finance ministers are currently facing a tightening fiscal noose, as revealed in the 2004 round of budgets. And, with no end in sight to the continual upward pressure on health care costs, competition for scarce public resources is unlikely to let up in the years ahead. In such an environment, infrastructure tends to lose out to other areas of government funding. Meanwhile, Canada's infrastructure pothole continues to deepen.

Although the negative impacts of inadequate public infrastructure are only starting to mount – and become visible to Canadians on a day-to-day basis – we believe that ongoing neglect of the nation's capital stock presents one of the greatest risks to the country's overall quality of life. With the state of a region's infrastructure weighing more heavily on location decisions of highly-mobile businesses and individuals, a deteriorating capital stock will increasingly cut into gains in productivity and living standards. The economy is only part of the picture, however. Without an excellent system of public assets, it will be become difficult to ensure that the health, safety and security of the region's residents will be protected.

How did Canada fall behind?

Much of Canada's existing public infrastructure was put in place in the 1950s, 1960s and 1970s. And, given the fact that the useful life of most of the country's physical structures only extends up to four to five decades, a significant share of assets would be already ripe for replacement or rapidly approaching the end of their cycle. However, there have been a number of developments on both the supply and demand sides of the equation that have acted to accelerate the amount of wear and tear on many public assets over the past few decades:

First, apart from brief periods of recession in the early 1980s and early 1990s, the Canadian economy has grown steadily, placing added strains on the nation's public infrastructure. This has been no more apparent than in the largest urban centres, which have accounted for the bulk of the gains in economic activity, new immigrants, and overall population in recent decades.

Second, the growth in supply of infrastructure was greatly curtailed in the 1980s and the first half of the 1990s when the federal and provincial governments ran into deficit problems. Not only were cuts to government capital spending more politically palatable than those made to operations, but the "big ticket" nature of large infrastructure projects meant that the immediate savings that could be realized from reductions on that side were substantial.

Third, notwithstanding the fiscal woes of the federal and provincial governments, the largest obstacle in the way of satisfying increasing infrastructure demands has been at the local level. Notably, Canadian local governments were asked to take on added responsibilities at the same time as municipal grants were being scaled back. Furthermore, owing to restrictive provincial legislation, municipalities have remained heavily reliant on funding these growing needs through the use of the property tax – a revenue instrument that does not tend to grow over time at the same pace as the cost of service delivery.

Fourth, a number of ill-thought-out policy approaches have contributed to the public infrastructure challenge. For one, in many instances, a less-than-stellar job has been done maintaining and rehabilitating public assets on schedule, which has acted to shorten the useful life of infrastructure. What's more, a number of government policies – including setting the level of property taxes, development charges and user fees below the cost of delivering a service – have fuelled urban sprawl, and hence raised the average cost of infrastructure provision.

As much as $125 billion investment shortfall

The new amounts injected into infrastructure by all levels of government over the past few years has been welcome news, but have only managed to put a dent in a problem that has accumulated over a period of a few decades. This raises the question of how much work is still left to be done to clear away the backlog of deferred maintenance, rehabilitation and replacement of public assets – the so-called "infrastructure gap". Another way of looking at the public infrastructure gap is the accumulated annual deficit between the amount *needed* to properly maintain or replace existing public assets as well as to support growth with the amount actually spent.

Measuring the size of the gap is certainly no easy task, since the meanings placed on "public infrastructure" and "needs" will range across individuals. Still, that has not stopped Canadian researchers from taking a stab at it. For Canada as a whole, estimates of the gap range from a low of about $50 billion to a high of $125 billion. Moreover, sector-specific estimates show that infrastructure deficiencies are widespread across areas of public service and that the problem is more likely than not to rise further down the road.

Finding the Money

While the exact cost required to bring Canada's infrastructure up to scratch and to support future growth is hotly debated, one thing is for sure – the figure exceeds what most governments could viably foot under the status-quo. As such, in order to combat the enormous infrastructure challenge, governments will need to open the door more widely to approaches that will both relieve pressures on the public treasury and maintain the high quality of public services. We recommend a four-part strategy:

Strategy 1 – further tilt towards user pay model needed

While Canada stands in the middle of the pack internationally in terms of tax competitiveness, we rely more heavily on raising government revenues through income taxes at the federal and provincial levels and property taxes at the local level than most industrialized countries. On the flip side, Canada's reliance on consumption-based taxes and levies is relatively low compared to our international competitors other than Mexico and the United States.

Although there is a good case to be made that income and property taxes must remain a fundamental part of the funding equation in Canada, we support a re-balancing of the revenue mix toward greater use of consumption-based levies, such as user fees. Often in Canada, there is little effort put to aligning the price of services toward the full marginal cost of delivery (including capital replacement and environmental impacts). Although consumption-based levies are the most efficient revenue generator, they are also regressive. Nonetheless, there is significant potential to increase their usage in areas where there are no overriding equity concerns and where consumption can be accurately measured. Water, sewers, electricity and garbage collection all satisfy this requirement. Above all – in stark contrast to trends sweeping the globe – Canada has taken little advantage of utilizing tolls for the purposes of funding roads, highways and bridges.

Strategy 2 – Give cities the right equipment for the job

The challenges facing municipalities on the infrastructure front have been exacerbated by inefficient use of their existing – albeit limited – tools and powers. Reforming property tax systems, pricing services more in line with the cost of service provision, better application of land-planning strategies to reduce sprawl, stronger coordination of services across municipalities in order to enjoy economies of scale, and improved management of the billions of dollars of public assets are all on the "to do" list. And, perhaps most importantly, many municipalities – particularly smaller ones – have not made optimal use of debt financing, with many opting to fund infrastructure almost exclusively from non-borrowed sources. Maintaining a very low debt-load may be a laudable goal, but if it comes at a cost of foregoing or delaying capital projects because non-debt sources of financing aren't available, then a low-debt strategy is counter-productive. Besides, a healthy level of borrowing passes the test of equity, since benefits, which are normally consumed over the life of several decades, are matched with the costs.

In any event, better use of debt and other funding vehicles currently at the disposal of municipalities will only go so far in providing them with adequate resources to effectively take on their challenges. As we argued in the April 2002 report *A Choice Between Investing in Canada's Cities or Disinvesting in Canada's Future,* municipalities require increased administrative flexibility and access to additional sources of taxation above and beyond the property tax. For example, a change in provincial legislation that would offer local governments the power to levy a gasoline tax over a commuter area on the same base as the province – and where the municipality would set the rate – passes the tests of administrative efficiency and accountability.

South of the border, municipalities not only have access to a larger number of tax sources, but a number of other types of innovative instruments that support debt-financing and the re-development of poverty-stricken and/or contaminated areas. These vehicles – which include tax-exempt bonds, revenue bonds, tax-increment financing, infrastructure banks and enterprise zones – are reviewed in Part II of the report. In short, some of these arrangements deserve far more consideration than others do, while none represent a magic bullet. But, apart from tax-exempt bonds – which should be left on the shelf given their inherent flaws – these approaches to financing infrastructure may prove useful on a case by case basis. Thus, Canadian municipal governments should at least be given the authority to decide when their specific situations warrant them.

Strategy 3 – bring the private sector on board

With the demand for public infrastructure outstripping governments' ability to finance and maintain capital projects, there is an increasing need to bring the private sector on board in assisting in the country's infrastructure challenge. Partnering with the private sector – and in particular, contracting out maintenance services – is not a new concept in Canada. However, commissioning a private-sector group to design, build, finance and operate public infrastructure is in its relative infancy in this country, especially when stacked up against the United Kingdom, continental Europe and Australia. It is this country's relative inexperience with P3s and the resulting lack of public understanding of them that remains the number one road-block of more widespread use of this model.

There are two common misperceptions about P3s that are often bandied about, and which have held back their growth in popularity:

i) *P3s are little different from privatization.* P3s and privatization are two distinct concepts. Privatization refers to the outright selling of a public asset or service to the private sector. In contrast, in a P3 arrangement, the government retains ownership of the asset and continues to establish the ground rules. Thus, there is little loss of public control.

ii) *P3s are more expensive than traditional public procurement*. This argument stems from the fact that governments can borrow at a cheaper rate and that the private sector must be appropriately compensated for taking on the risk of a project. The concerns are valid, but they over-simplify the issue. Few analyses take into account the opportunity cost involved – such as higher taxes, debt, and potentially missed investment opportunities – when governments tie up significant resources to a particular cause. But, more importantly, it is not cost, but *net benefit*, which is the most relevant benchmark in considering the way to go. And, on this count, P3s could provide significant bang for the buck by allowing projects to be carried out more quickly and with greater overall benefits to the taxpayer.

Still, we acknowledge that P3s can be a risky game to the taxpayer if not executed correctly. As is the case with any business relationship, there must be synergies in working closely together. And, to the extent that the private and public sector parties have different cultures and attitudes, there may be leakage in the potential rewards of a P3. Above all, for P3s to provide value to taxpayers, the risks and rewards have to be properly aligned. Unfortunately, the public sector has a tendency to underweight or improperly evaluate risk, which can result in excessive private returns.

Canada's difficulties in allowing P3s to get off the ground is in good part due to a piece-meal approach on government policy, with little federal involvement and provincial practices that vary across jurisdictions. In fact, a major reason why the U.K. has achieved success on the P3 front – and why other countries around the world have followed its lead – is that the central government took action early to create a more competitive market and bolster private and public confidence. In particular:

- The U.K. government established a standardized process to assist public sector employees in comparing risks and returns across all public and private sector options.
- The U.K. National Audit Office was given a mandate to review and evaluate the performance of P3s. In fact, many of its recommendations have been incorporated into the government's P3 legislation.
- In order to help public-sector employees identify opportunities for P3s and to help bridge the gap in expertise between the public and private sectors, the central government established Partnerships UK.

In addition to changing the legislative framework to make the ground in Canada more fertile for the P3 market to develop, governments should concentrate their efforts in areas that more easily accommodate P3s. Projects that fall under this umbrella tend to be large in scale, capital-intensive, have an identifiable revenue stream (i.e., user fee), and have measurable results – all of which would raise commercial viability and make it relatively straightforward to assess the potential risks and rewards. Roads, bridges, highways and water and wastewater facilities could all be considered good candidates in this regard.

Strategy 4 – a bigger role by the federal government

Over the past decade, the federal government has implemented a number of policies in the infrastructure domain. Chief among them is the roughly $12 billion in total set aside in a string of infrastructure programs, the bulk of which was directed at municipal capital projects. And, while some observers have voiced disappointment over the fact that the amount of federal infrastructure funding has slipped in annual average terms over the past two federal budgets, the Prime Minister promised last month that a share of the federal gasoline excise tax or "equivalent" would be forthcoming to municipalities by year-end as a further downpayment toward "A New Deal for Communities." This latest announcement has kept hopes alive that infrastructure will soon make it back on the government's list of top priorities.

We argue that given the enormity of this nation-wide challenge, infrastructure needs to become a centrepiece in the federal government's agenda. The good news is that such a focus would not require much of a strategic shift for the federal government. Consider the major priorities laid out in the federal government's 2004 budget – health, learning (i.e., post-secondary education and innovation), communities, and Canada's relationship with the United States and position in the world. The need to upgrade infrastructure – from health facilities, to sewers to educational institutions and border crossings – spans all of these areas.

a) Address issues in federal jurisdiction as a first step

The federal government can go a long way in strengthening infrastructure by getting its own house in order. Although infrastructure largely falls under the jurisdiction of the local and provincial governments, greater federal attention heeded to issues in its own backyard – such as research, innovation, immigration and social security – would play a major role in boosting the number of skilled graduates, lifting prosperity and ultimately relieving fiscal pressures in the nation's municipalities. There is unfinished work in the following areas of federal jurisdiction:

- Both the nation's standard of living and security are closely tied to a smooth-running Canada-U.S. border, which falls under federal jurisdiction. Yet, the infrastructure at border crossings is inadequate, as evidenced by long queues and delays.
- A better job needs to be done to match immigrant settlement funds to the areas where the costs are being incurred.
- The large increase in funding for research and assistance for students in recent federal budgets has been positive, but there remains a patchwork of programs across the federal and provincial levels that should be better integrated.
- Finally, while many of the government's enrichments of social programs in recent years have been paved with good intentions, they have also come with some unfortunate side-effects. Notably, in light of the rapid rate at which benefits are taxed back as income rises, marginal personal income tax rates often exceed 60 per cent for low and modest income individuals. This needs to be addressed.

b) Improve the design of federal infrastructure programs

The Prime Minister's recent pledge on the gasoline tax or "equivalent" suggests that more direct assistance is in the pipeline for municipalities, although the specific form of how the money will be provided remains uncertain. As we discuss in Part IV of the study, we are not in support of a gasoline tax transfer as a vehicle to fund infrastructure, and thus, were pleased to see that he has left the door open to other alternatives. Regardless, any additional assistance needs to be spent as efficiently as possible. In order to achieve this, new funding should satisfy two major criteria:

- *Minimize interference in local operational issues* – it is important that the federal government not follow a one-size-fits all approach, nor allow its priorities to trump local priorities in allocating funding.
- *Don't substitute taxpayer funds in cases where user-pay works.* Federal funding should not be used to in effect subsidize projects that are good candidates for full-cost pricing.

Happily, the federal department that administers infrastructure funds – Infrastructure Canada – appears to be doing a better job adhering to these requirements recently. As such, we believe that it would be more efficient for the federal government to take action to strengthen the current process rather than set up a new vehicle, such as one to administer the sharing of the gasoline excise tax. The federal government should consider the following changes to the way its manages infrastructure programs:

- *Set up an advisory board* – although the federal government would still call the ultimate shots for the sake of accountability, an independent board should be established to provide advice to the government on what type of infrastructure should be financed and how. We envision a board similar to that of the National Roundtable of the Environment and Economy (NRTEE) that would play a lead role in setting standards and principles on which infrastructure should be cost-recovered, which require general tax-financed funding and which are good candidates for private-sector involvement. In order to ensure local priorities are heard the board should have a strong local and provincial government representation. The private sector should also have a seat at the table, so that the governments can better capitalize on opportunities for P3s.
- *Education should be made eligible* – over the past few years, infrastructure funds have largely focused on municipal transportation and environmental projects, which we support. However, one area that we believe should be pushed up in the pecking order is the all-important area of education. Put simply, inadequate capacity and huge deferred maintenance will threaten the ability to educate the next generation of Canadians, thus presenting a major risk to Canada's ability to compete down the road.
- *Create an infrastructure bank with private-sector involvement* – Federal infrastructure assistance could extend to a newly-established vehicle that would be aimed at helping municipalities to finance projects similar to those commonly used in the United States. This revolving lending facility could be created by a federal grant, and used to leverage contributions from the provincial government and the private sector. Advice on lending decisions could be made by the same public-private advisory board as that above to ensure the money is well spent.

c) *Increase role in combating the most severe urban challenges*

Many of Canada's larger urban areas face problems that are so enormous in scope that local governments cannot handle them alone. Affordable housing and brownfield sites are two shining examples of large impediments that are driven largely by market failure. As such, while both areas are eligible for funding under existing infrastructure programs, the severity of these problems indicates that not only additional federal financial assistance is required, but also its creativity and leadership. The good news is that the federal government has begun to raise its profile in both areas over the past few years, with the establishment of the federal-provincial Affordable Housing Framework and the National Roundtable on the Environment and Economy. We hope efforts on both of these fronts continue to be well supported.

The federal government could also spearhead the development of tripartite agreements – or formal deals between all levels of government that are designed to accomplish a specific set of goals. In fact, there have been precedents in Canada for this type of arrangement in Winnipeg and Vancouver. The federal government – along with its provincial and local counterparts – can apply the lessons learned from these experiences to improve the usefulness of the tripartite model in the future.

Come together (right now) over infrastructure

Closing the infrastructure gap will require public- and private-sector participation, a higher degree of cooperation across the various actors involved, and the federal government to step into the role as quarterback. But, above all, success in repairing Canada's growing infrastructure pothole will require an open-mindedness among Canadians to support less-traditional and bolder ways of doing business.

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