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#5 IN A SERIES

FROM A MANDATE FOR CHANGE TO A PLAN TO GOVERN

Avoiding Short-Cuts on the Road to Investing in Canada's Infrastructure

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INTRODUCTION

The Canadian economy is softening. Oil and gas prices continue to drop and energy companies have responded by cutting capital spending and laying off workers. The dollar has fallen to its lowest level in nearly 45 years. Equity markets are turbulent. Canadians are beginning to express a lack of economic confidence. The new government is now facing pressure from some quarters to present a bold economic plan.

Its major economic plank in its election platform was a significant increase in federal infrastructure spending. The Liberal Party pledged to effectively double federal spending on provincial, territorial, and municipal infrastructure by infusing another \$60 billion over the next 10 years. This election commitment was characterized as both a plan to boost Canada's economy in the short-term and to provide for "sustained economic growth for years to come" (Liberal Party).

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Canada's economic doldrums have prompted the new government to place a greater emphasis on its programme's short-termism. It is rumoured to be considering options to expedite or augment its infrastructure plan in order to provide for short-term economic stimulus.

The government's plan to boost support for national infrastructure has its merits. High-quality infrastructure is a key condition for long-term economic growth. It should be also be credited for its willingness to support public-private partnerships as an effective tool for infrastructure financing and project management, and consider innovative financing tools such as infrastructure banks to raise low-cost capital to meet our infrastructure needs.

But the government should exercise caution in shifting its focus from a long-term infrastructure plan to a preoccupation with short-term economic conditions. Not only is it unlikely to produce meaningful economic results, poor policy choices now may undermine the government's infrastructure plan over the long-term. Instead, the government should adopt big thinking with respect to (1) ensuring greater political accountability between infrastructure revenue generation and spending, (2) targeting projects with the most economic return, and (3) creating the policy conditions for more private sector capital spending.

The prime minister says that he intends to "do this right" with respect to setting out a long-term, strategic infrastructure plan (Evans 2016). The purpose of this essay is to help the new government achieve this important objective.

The Macdonald-Laurier Institute's mission is to help to inform sound public policy at the federal level. Our goal in this essay series is to help the new government best achieve its top policy objectives.

This fifth essay in the series will help Canadians better understand the limitations of infrastructure spending to boost the Canadian economy in the short-term and its importance as a long-term driver of economic growth.

We will then offer what we think the Canadian and international evidence establishes as the best policy options to develop a long-term, strategic infrastructure plan. The ultimate goal, as the Liberal Party press materials rightly put it, is to "set the foundation for 21st century prosperity."

THE EVOLUTION OF FEDERAL INVOLVEMENT IN INFRASTRUCTURE SPENDING

The federal government's role in infrastructure spending has ebbed and flowed over the past 50 years. Think-tank scholars and policy researchers have documented a gradual federal withdrawal from national infrastructure from the post-Second World War era to 2004 (Brodhead, Darling, and Mullin 2014; Mackenzie 2013). Thereafter a new political consensus emerged in favour of a renewed role for the federal government in infrastructure financing. It is currently poised to reach levels that would represent modern highs.

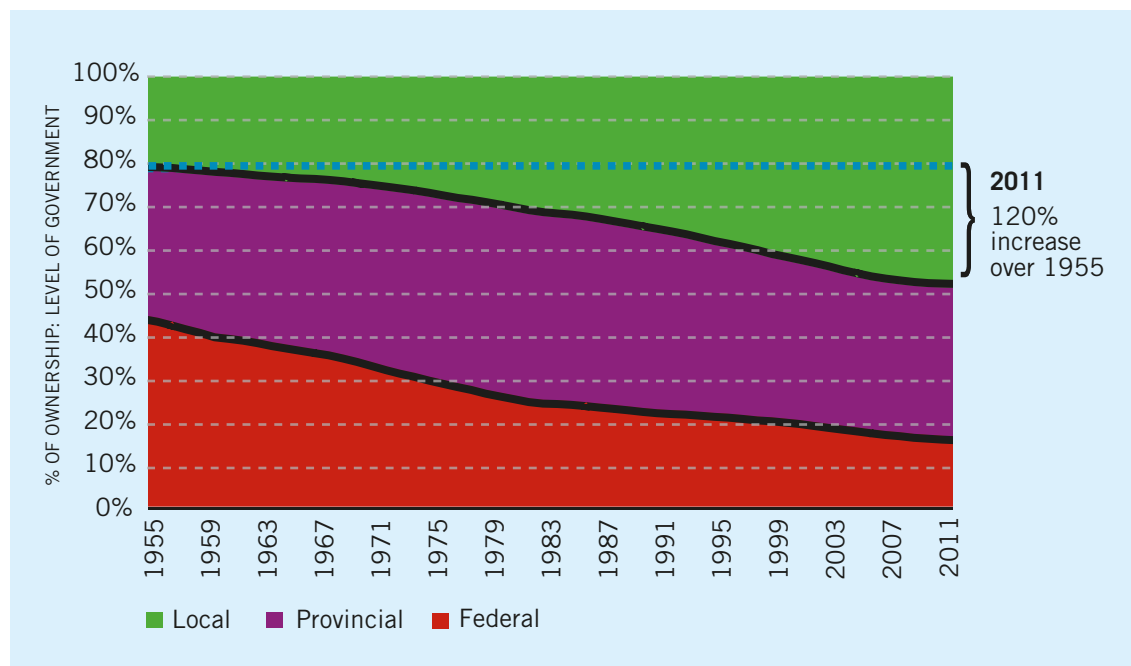
This evolving fiscal relationship between Ottawa and the other levels of government with respect to infrastructure financing is highlighted by the declining role of the federal government in direct ownership of capital assets and its increase in transfer payments to offset infrastructure spending by provinces, territories, and municipalities.

Consider, for instance, that in 1955 the federal government owned 44 percent of public infrastructure, the provinces owned 34 percent, and local governments owned 22 percent, and now provincial, territorial, and

municipal governments own and maintain roughly 95 percent of Canada’s public infrastructure (Brodhead, Darling, and Mullin 2014; Department of Finance Canada 2015).

Chart 1 shows the extent to which the federal government’s proportionate ownership stake in public infrastructure has fallen, but it fails to capture how dedicated transfer payments for infrastructure have become part of our system of fiscal federalism in the past 15 years.

Chart 1: Capital-stock asset share by order of government



Source: Bazel and Mintz 2014, Figure 5.

The federal government started to gradually assume a co-finance role in provincial, territorial, and municipal infrastructure projects in the early 2000s. New federal infrastructure programs functioned as intergovernmental transfer payments to the provinces for specific projects and were conditional on matching financing from provincial and municipal governments. This co-financing mechanism became the central means of federal infrastructure funding. The provinces would submit project applications and assume project management responsibility in exchange for a federal financing share.

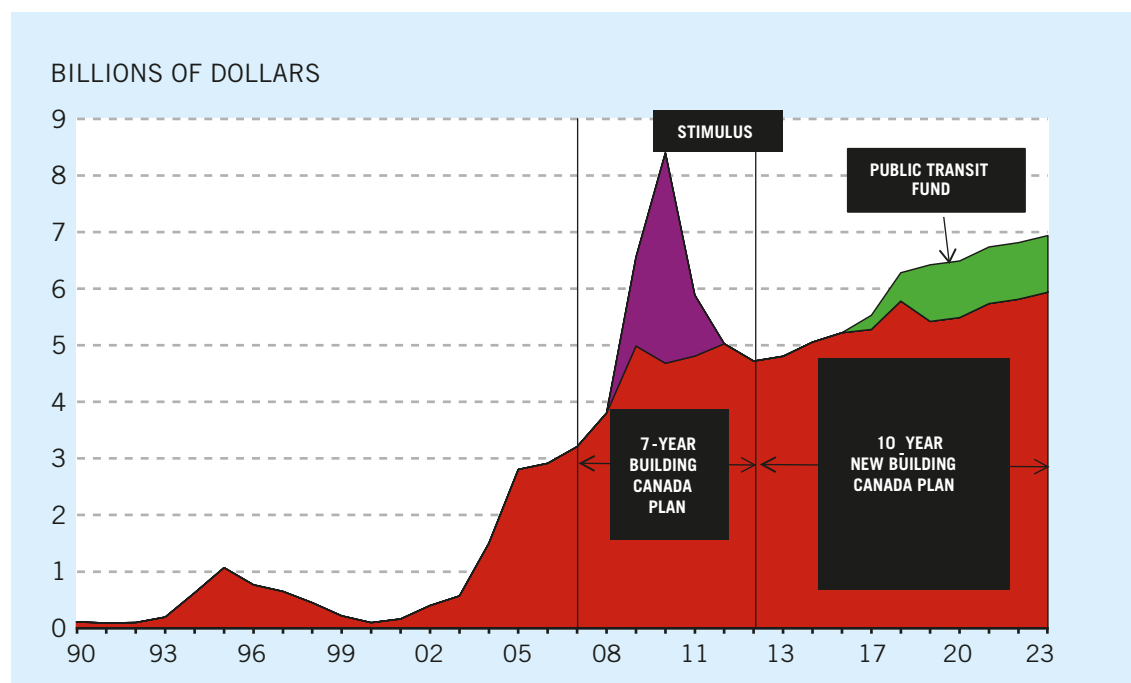
One exception to this model is the Gas Tax Fund which was launched in 2005 as the first dedicated transfer payment for municipal infrastructure. The fund was subsequently increased from \$1 billion to \$2 billion per year in 2009, made permanent in 2011 and indexed in 2014. It functions based on contribution agreements with provinces (except in the case of the City of Toronto) and allocates a per-capita share that provincial and territorial governments then flow to their municipalities to support local infrastructure priorities. Municipalities can pool, bank, and borrow against this funding and use it for a wide range of capital projects. There is no matching funds requirement. This type of dedicated, ongoing financing represented a significant new commitment to provincial, territorial, and municipal infrastructure on the part of the federal government.

The Harper government continued the expansion of the federal role in national infrastructure spending. Its 2006 election platform lamented the country’s “infrastructure deficit” and promised to provide greater

financial support to lower levels of government to co-finance infrastructure projects (Conservative Party of Canada 2006). The government subsequently rolled out its seven-year Building Canada Plan (which comprised different co-financing streams with the provinces, territories, and municipalities) and followed it up with its 10-year New Building Canada Plan in 2014. Annual federal infrastructure funding climbed by one-third as a result. These multi-year, large-scale transfer payments to the provinces, territories, and municipalities reflected a new federal role with respect to national infrastructure.

The Building Canada Fund framework was augmented in the intervening years by the government’s fiscal stimulus plan in response to the 2008 global economic recession. A major share of the federal stimulus package took the shape of greater transfer payments to lower levels of government for infrastructure projects. Federal spending jumped on provincial, territorial, and municipal infrastructure to an all-time high as a result (see chart 2). The Federation of Canadian Municipalities (2014) – the primary lobby group for Canada’s cities – describes it as “an unprecedented federal-municipal partnership that will benefit cities and communities for years to come.”

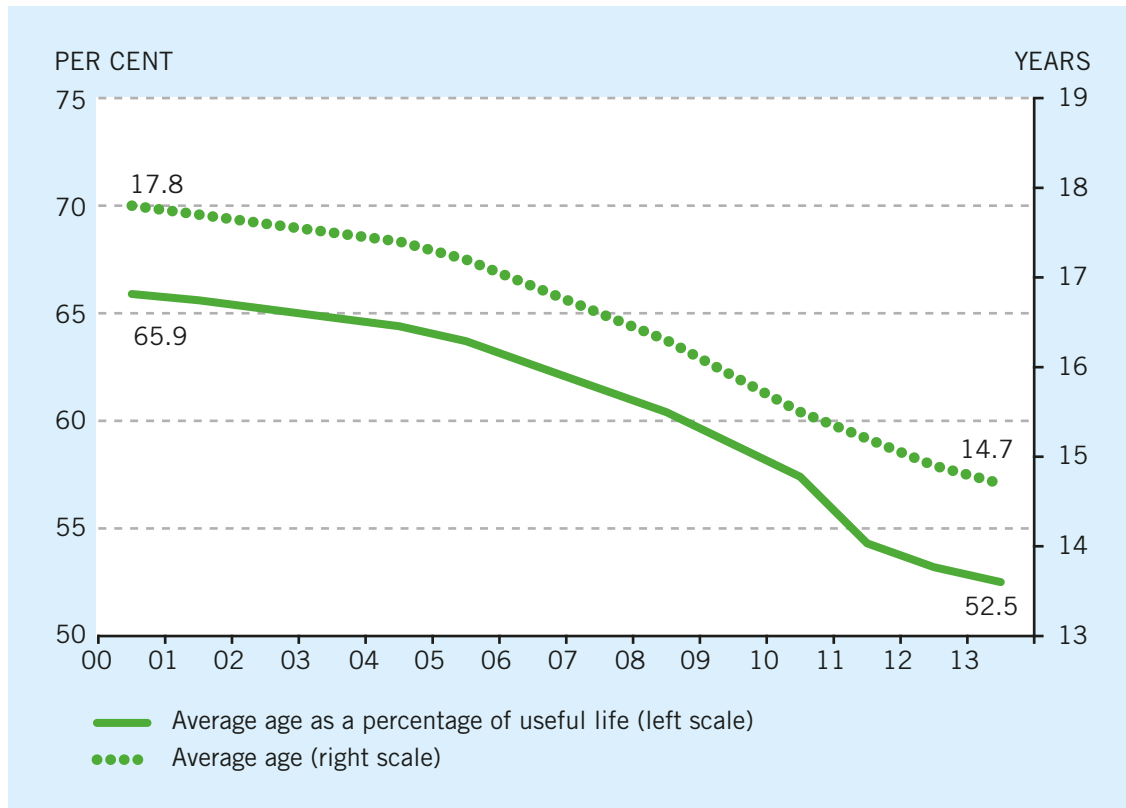
Chart 2: Federal spending on provincial, territorial, and municipal infrastructure



Source: Department of Finance Canada 2015, Chart 3.4.5.

The outcome of this increase in federal transfer payments for infrastructure has been a major renewal of Canada’s capital assets over the past 15 years. As economists Jack Mintz and Philip Bazel note, we have witnessed a sharp increase in infrastructure spending as a share of GDP. In fact, over the past 3 years, Canada has become one of largest spenders on public infrastructure among OECD countries at 4 percent of GDP. Only Estonia (5.5 percent), South Korea (4.8 percent), Poland (5 percent), and Sweden (4.4 percent) spend more. We now spend more than the US (3.7 percent) and the European Union (roughly 3 percent) (Mintz 2015; Bazel and Mintz 2015). The result is that the age of our public infrastructure stock has fallen from 17.8 years to 14.7 percent years (see chart 3).

Chart 3: Average age and age as a percentage of useful life of core public infrastructure in Canada



Source: Department of Finance Canada 2015, Chart 3.4.2.

The federal government’s expanded role in national infrastructure has not been limited to traditional co-financing with the other levels of government. It has also begun to experiment with public-private partnerships, and alternative forms of financing as exhibited by the Public Transit Fund announced in the last budget.

The 2008 creation of PPP Canada, a Crown agency responsible for coordinating federal support for infrastructure projects delivered through public-private partnerships, was an important catalyst for a new focus on innovative financing. The P3 Canada Fund was established with more than \$1 billion and was recapitalized in 2014 by the same amount. Progress was slow initially as the new organization was stood up and began to engage with lower levels of government on how best to advance these types of projects, but it is increasingly helping to shape a greater openness to public-private partnerships. As two policy analysts from the Conference Board of Canada (2013) write: “Through the creation of PPP Canada and the P3 Canada Fund, the federal government has played a more active role in encouraging P3 project delivery across the country. This fund is particularly important as an encouragement for greater municipal involvement in P3s.”

The growing interest in public-private partnerships as a financing and project management model has been partly motivated by the goal of leveraging private sector capital but the principal reasons have been to transfer risk and to draw in its expertise in asset management. The evidence in favour of the model – particularly for large-scale projects with clear revenue-generating potential – is strong. A recent study published by Lawrence National Centre for Policy and Management at the Ivey Business School, for instance, conducted case studies of 6 major infrastructure projects executed as traditional builds and public-private partnerships to analyse the results. The authors conclude that “the P3 approach is generally superior because it brings to

bear specialized expertise, due diligence and accountability mechanisms that are not possible to replicate in the political environment in which public sector managers work” (Boothe et al. 2015). These outcomes suggest that the public-private partnership model is likely to remain a key feature of the federal government’s involvement in national infrastructure and that there is reason to expand its usage.

Overall, these developments in the past 10 years represent a significant shift in the federal role in financing national infrastructure. The new government inherits a new, institutionalized fiscal arrangement setting out Ottawa’s expanded participation that includes directing resources to lower levels of government and coordinating private sector involvement.

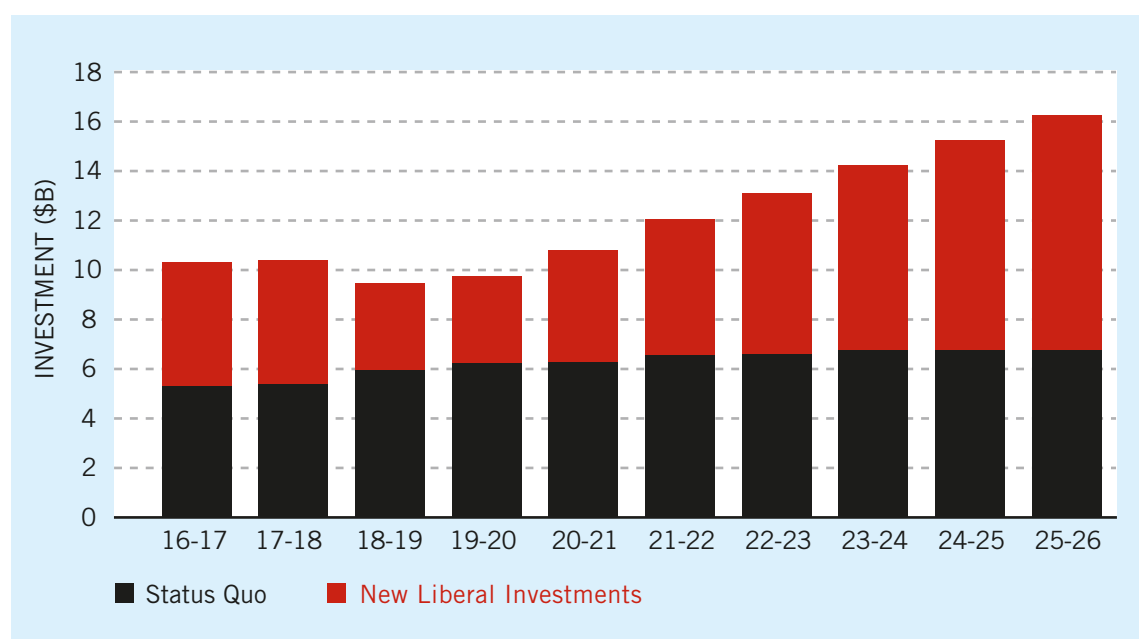
THE NEW GOVERNMENT’S PLAN

The new government arrived in Ottawa with a plan to not only continue but to significantly increase this trend of greater federal involvement in national infrastructure. It is fair to say that increasing federal transfer payments for infrastructure represents the core feature of its pro-growth agenda.

Its infrastructure plan was communicated as having two primary objectives – to “kick-start job creation and economic growth” in the short-term and to set the conditions for investment and productivity growth in the long-term. But the Liberal Party’s conceptual plan (the party’s platform did not provide a breakdown of funding distribution) also provided for “social infrastructure” such as social housing units and government-run child-care facilities and climate change adaptation projects. If fully implemented, it represents a further broadening of the federal role in provincial, territorial, and municipal capital spending.

The fiscal impact of the new government’s plan is considerable. As mentioned, it represents a near doubling of its predecessor’s plan, or another \$60 billion over the next 10 years. To put it in perspective: the government’s plan proposes to spend more per year than what was expended during the 2009–11 temporary stimulus, yet on a permanent basis for the next decade (see chart 4).

Chart 4: Federal infrastructure spending under the new government’s plan



Source: Liberal Party n.d., 5.

While the government has made firm commitments about the magnitude of its incremental support and provided a general sense of its priority areas such as public transit and wastewater facilities, there remain some outstanding details about the plan's design and financing model. It will be important that these issues are properly resolved if the government is to "do this right", as the Prime Minister has pledged.

One of the new government's key pledges with respect to infrastructure financing is the creation of a new Canada Infrastructure Bank to provide low-cost financing for new infrastructure projects. The party platform indicated that the bank will use the federal government's credit rating and lending authority to help municipalities achieve lower borrowing costs (Liberal Party). The details are otherwise undeveloped at this stage.

Brian Flemming writes extensively about the potential utility of this type of financing option as "another 'tool' in the 'toolbox' of possibilities for those public officials who are wrestling with great [infrastructure] needs and limited funds" (Flemming 2014). At present the new government's vision presumably involves the creation of a publicly-owned federal infrastructure bank, but that is not the only model available to them.

Brian Flemming has analysed other models such as a mixed public-private bank that is administered at the federal level, or provincial-municipal banks that are jointly owned and operated by the lower levels of government. The latter structure would be created by provincial legislation but the capital for such a body could come both from discrete bond issues for that purpose or even from pooling some or all of the gas tax or HST funds (transferred from the federal government) that are already in the exchequers of provinces and municipalities. This decentralized model would be responsive to regional and local circumstances.

With respect to public-private partnerships, the new government will need to clarify its intentions. The prime minister, to his credit, has spoken positively about a complementary role for private capital (Trudeau 2014). But early signs – particularly the removal of the so-called "P3 Screen" which requires all major federally-funded infrastructure projects to be assessed for public-private partnership options (Trudeau) – have led to some questions about the government's commitment to greater private sector involvement. An evidence-based infrastructure plan will need to draw from the research on the efficacy of public-private partnerships and figure out how to utilize the private sector.

The final outstanding question is the government's expectations with respect to the matching contributions of lower levels of government. The traditional co-financing model has tended to require two-thirds of funding from provincial and municipal governments. The purpose of this type of co-financing is not just motivated by fiscal considerations. There is also a fiscal federalism dimension to it. Requiring that the provinces and municipalities co-finance individual projects imposes discipline on the levels of government that are selecting and managing projects and provides for political accountability at the local level. The new federal infrastructure minister has indicated that the government may relax these co-financing requirements (Zilio 2016). If the government ultimately chooses this path, it will need to explain its rationale and what steps it is taking to maintain lower level accountability with respect to infrastructure spending.

The new government has set out an ambitious plan to expand the federal role in national infrastructure financing. Details about its programme will presumably be forthcoming. One of the key challenges will be balancing the need for a strategic, long-term plan with calls from some quarters for a short-term focus. Adopting a short-term vision may lead to policy design choices that undermine the plan's long-term effectiveness.

THE CASE AGAINST STIMULUS

There is speculation that the government is now “actively considering” options to speed up its infrastructure spending to provide for a fiscal stimulus (Evans 2016).

The question of whether the current economic conditions require a stimulative fiscal policy in general and a major infusion of short-term federal infrastructure funding in particular has generated some debate among economists and public policy commentators. The preponderance of opinion disputes the case for stimulus.

The case against fiscal stimulus in the current context rests on three primary considerations: (1) the commodity-driven nature of our current economic malaise is largely impervious to fiscal stimulus, (2) the economic downturn is regionalized and fiscal stimulus would likely be untargeted, and (3) the short-term economic payoff is probably overstated.

A major catalyst of Canada’s economic downturn has been the sharp drop in commodity prices. The precipitous drop in oil and gas prices over the past several months has continued largely unabated. Consider, for instance, that crude oil futures have fallen below \$30 US per barrel for the first time since 2003 and declined by more than 20 percent in the last two weeks alone (CBC News 2016). As a major energy-producing country, this fall in commodity prices has taken its toll.

But there is little evidence that unilateral fiscal stimulus by the Canadian government will mitigate a downturn prompted by changes in global oil prices. As Laval University economist Stephen Gordon (2016) writes: “there is no mechanism that I know of by which changes in government spending (a demand response) can offset the effects of changes in oil prices (a supply shock).”

Another limitation of a fiscal stimulus plan in the current context is the extent to which the economic downturn is regionalized. Energy-producing provinces such as Alberta are experiencing a significant downturn. Alberta’s unemployment rate, for instance, has climbed to nearly 7 percent and is now above Ontario’s for the first time since 1994 (Toneguzzi 2015). But other parts of the country are not experiencing the same type of downturn. As Bank of Canada governor Stephen Poloz (2016) says in a recent speech: “just as we see divergence in economic performance between countries in response to lower resource prices, so, too, we see divergence within Canada, among our different sectors and geographic regions.” A national programme of stimulus spending would therefore invariably be untargeted and largely unproductive in many parts of the Canadian economy.

The final limitation to a short-term stimulus programme is that Canada is an open trading economy and has a flexible exchange rate and thus any gains would be minimized by leakage across the border and distort the market-based adjustment to Canada’s exchange rate. University of Calgary economist Trevor Tombe (2016) has reviewed the economic research on fiscal stimulus spending in economies such as Canada’s and come to the conclusion that “we shouldn’t overestimate infrastructure’s short-run effects on economic activity.” This is exacerbated by the reality that so-called “shovel-ready projects” often fail to materialize and the timing of a short-term stimulus is unlikely to provide the boost in the right timeframe.

These limitations to the efficacy of short-term stimulus spending in current circumstances do not mean that the federal government should roll back its infrastructure plan. It just means that it should not sacrifice “getting this right” for the long-term in order to expedite or augment spending in the short-term.

RECOMMENDATIONS FOR A STRATEGIC, LONG-TERM INFRASTRUCTURE PLAN

Overall, the new government is right to prioritize high-quality infrastructure as a key driver for economic growth. As Canadian economist Kevin Milligan (2015) writes: “a volume of academic research finds public infrastructure makes workers and firms productive.”

The minister of infrastructure has been tasked with developing a 10-year infrastructure plan in partnership with the provinces, territories, and municipalities. Here are three policy recommendations for his consideration as he carries out his important work.

First, the federal role in national infrastructure should better incorporate the strengths of Canadian federalism. This could involve major changes to the current co-financing model. Bazel and Mintz (2014) argue that the interprovincial transfer payments are a “seriously flawed means of funding local infrastructure.” They argue that this severs the link between revenue generation and spending responsibilities and in turn diminishes political accountability. Their analysis points to a greater use of user fees such as tolls and market-based transit fees to finance the cost of local infrastructure.

Such an approach would not necessarily involve a complete federal withdrawal from infrastructure financing. An infrastructure bank, for instance, would draw upon the federal government’s low-cost borrowing but still leave project decision-making and asset management to local governments. An infrastructure bank could source its initial capital from the divestiture of current federal assets. The federal government presently owns valuable assets such as airports and ports that could be monetized and used to capitalize the bank without worsening federal public finances. It is an important idea that the government is right to explore.

Another option would be to shift a greater share of federal support to the Gas Tax Fund or other unconditional transfers rather than traditional co-financing arrangements. Direct benefit spillovers from infrastructure justify some federal involvement – particularly with respect to highways, railways, and ports – but the goal should be to maintain decentralized decision-making and political accountability. A plan that leads to more federal conditionality and centralized decision-making would therefore be a step in the wrong direction.

The second recommendation is that the government’s emphasis should be on projects that offer the greatest long-term economic return. This seems intuitive but often the political nature of infrastructure decision-making leads to poor choices. A bias towards recreational or cultural projects over productivity-enhancing ones or subsidizing the true cost of infrastructure use (think, for instance, subsidized public transit) are often political calculations that produce sub-optimal outcomes.

The new government’s broad infrastructure categories poses this risk. The inclusion of child-care facilities, social housing units, and transportation infrastructure in a single plan could limit the scope for cost-benefit analysis and orient funding to non-core projects. It is not to say that child-care facilities or social housing are unimportant but rather that lumping these categories together can confuse priorities and ultimately lead to project decision-making based on political or ideological calculus.

Policy thinkers have contemplated different options to minimize political input into infrastructure decision-making. Bazel and Mintz (2015), for instance, have proposed the creation of arm’s-length public organizations responsible for carrying out independent cost-benefit analysis of prospective projects to determine which ones should be prioritized based on economic return.

The infrastructure bank model could be part of the solution. Brian Flemming has written about how the design elements of a federal infrastructure bank would ensure independence and accountability with

respect to investment decisions. An infrastructure bank could be structured with similar transparency and accountability as any TSX-listed company. That means having public annual general meetings and the issuance of regular quarterly and annual reports with independently audited accounts plus a management review and analysis that is similar to those required by public companies (Flemming 2014).

More generally, the use of the public-private partnership model can serve to minimize the politicalization of infrastructure spending. The market impulses of private partners impose a discipline on project decision-making and execution. Therefore the new government should revisit its plan to remove the P3 Screen and indeed consider ways to enhance greater use of the public-private partnership model. This may require seed-funding to smaller municipalities to help them build the capacity to develop proper business cases.

Another virtue of a greater independence in project decision-making is that it allows for a more forward-looking assessment of need. The political cycle is invariably focused on the short-term while infrastructure spending has long-term consequences. Any cost-benefit analysis should take into consideration forward-looking trends so that infrastructure assets do not become obsolete or limit the use of new technologies. One example is the potential for automated vehicles in the next 10 years. Current decision-making on prospective transportation projects should at least consider how to accommodate this technology if it becomes widely used.

The final recommendation is not to neglect the potential for private sector capital spending in its overall plan. There is a tendency in public policy discussions to use a narrow definition of infrastructure that excludes private assets, such as energy projects or communications and broadband infrastructure, even though this private capital spending can be significant. Consider, for instance, that the private share of utility infrastructure has risen from 15 percent to 35 percent of infrastructure spending in the past 25 years (Mintz 2015).

The reality is that private infrastructure investment has been growing faster than public investment, and could represent a major source of productivity-enhancing investment in the coming years. The Energy East pipeline alone is projected to have capital costs of more than \$15 billion (Morgan 2015). This level of private capital spending could represent a significant boon to Canada's long-term economic prospects in particular since it will have broader utility with respect to energy transmission or broadband connectivity.

The government should therefore examine what steps could be taken to create the conditions for greater private infrastructure spending. Recently the minister of natural resources has pledged to get Canadian oil and gas to tidewater (Cheadle 2016). This is a promising commitment. Many projects remain tied up by slow regulatory processes. Any steps that the government can take to expedite the process would unlock significant private infrastructure spending, in addition to the long-term benefits of resource development.

More broadly, the government should avoid acting precipitously and instead take the time to develop a long-term, strategic plan. It can draw on the expertise that resides in Canadian pension plans with respect to private investment in core infrastructure. Canadian pension plans are global leaders in infrastructure investment and it is only logical that a national infrastructure plan draws on their experience and expertise, and ultimately their capital. It should also consider the findings of the Hon. David Emerson's review of the *Canada Transportation Act*. The review was launched in June 2014 and the review committee's recommendations are expected soon. Mr. Emerson has talked about the need for transportation policy to be forward-looking with respect to global trends and plausible scenarios on the horizon. The government should release the review's findings prior to making judgments about its infrastructure plan so that it can incorporate the recommendations accordingly. These sensible steps – drawing on Canadian expertise on public-private partnerships in particular and infrastructure spending more generally, and releasing the recommendations of the transportation review – would help to ensure that the government's infrastructure plan is rooted in an evidence-based foundation.

CONCLUSION

Among the new government's top economic priorities is developing a long-term, strategic infrastructure plan. The recent economic downturn has placed pressure on the government to shift its plan's focus to the short-term.

This essay makes the case for resisting these calls for short-term stimulus in favour of setting out a strategic infrastructure plan that contributes to long-term economic growth. A preoccupation with short-term imperatives could risk undermining the long-term efficacy of the government's plan.

As for the design of a long-term strategic plan, our essay sets out three key recommendations to "get this right", as the prime minister has put it.

An effective infrastructure plan should (1) harness Canadian federalism to maintain political accountability with respect to infrastructure revenue generation and spending, (2) target projects with the greatest economic return rather than based on political calculations, and (3) improve the conditions for private sector infrastructure spending on energy projects, broadband and communications infrastructure, and utilities. Practical options to achieve these goals can include a greater adoption of user fees and market-based transit fees, experimentation with infrastructure bank(s), and more use of public-private partnerships.

A long-term, strategic national infrastructure plan that incorporates these elements could be part of the government's overall agenda to "set the foundation for 21st century prosperity."

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The Macdonald-Laurier Institute is an important source of fact and opinion for so many, including me. Everything they tackle is accomplished in great depth and furthers the public policy debate in Canada. Happy Anniversary, this is but the beginning.

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