



FEDERATION  
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# THE ROAD TO JOBS AND GROWTH: SOLVING CANADA'S MUNICIPAL INFRASTRUCTURE CHALLENGE

NOVEMBER 2012

Submission to the Government  
of Canada's Long-Term  
Infrastructure Plan Consultation

by  
The Federation of  
Canadian Municipalities

[www.fcm.ca](http://www.fcm.ca)



THE ROAD TO JOBS AND GROWTH: Solving Canada's  
Municipal Infrastructure Challenge

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## EXECUTIVE SUMMARY

**Municipal infrastructure provides the foundations on which our economy rests. Small businesses need quality roads and bridges to deliver goods and services. Workers need fast, efficient public transit to connect them to jobs. And growing companies count on high-quality community services, from libraries to hockey rinks, to attract skilled workers. Yet today, those foundations are buckling under the strain.**

Municipal leaders are ready and willing to continue doing their part. But because they collect just eight percent of Canada's total tax revenue and depend largely on a regressive property tax system, they cannot meet the infrastructure challenge on their own.

The commitment made by the federal government in 2011 to develop a new long-term infrastructure plan (LTIP) presents an opportunity to stop the decline in our infrastructure and secure our economic foundations.

However, the LTIP must break the old cycle of short-term thinking and one-off funding that caused Canada's municipal infrastructure deficit to balloon over the past two decades, despite increased investments from all orders of government.

The LTIP needs to provide real, long-term value for every taxpayer dollar invested. That means fixing what was wrong with earlier programs, notably by providing predictable, secure investments that allow communities to budget responsibly and effectively for their future.

The LTIP must find new efficiencies and better ways of doing business. It needs to tap private-sector innovation and expertise by encouraging public-private partnerships (P3s) that make sense. It must keep bureaucracy, red-tape, and costly project delays to a minimum, while guaranteeing accountability.

Finally, the LTIP must also recognize and meet emerging infrastructure challenges and needs that are related to economic growth, demographic changes, new federal regulations and the need to adapt our infrastructure to climate change and increasingly severe weather.

## SUMMARY OF RECOMMENDATIONS

### 1. Funding should be long-term and predictable

Commit funding to LTIP for 15 to 20 years with five-year planning cycles, with the exception of the permanent Gas Tax Fund (GTF).

### 2. Invest to leverage additional funds

An annual federal investment of \$5.75 billion in LTIP will leverage an additional \$7.5 billion in new provincial, territorial and municipal investments. These investments are on top of the \$12 to \$15 billion that municipalities already invest each year in local infrastructure and billions more contributed by provincial and territorial governments.

### 3. Renew and improve the Gas Tax Fund and the Building Canada Fund

- a. Direct 100 percent of the Building Canada Fund (BCF) to municipal infrastructure.
- b. Protect the current purchasing power of the GTF and BCF against inflation and population and economic growth; index the GTF at three percent, the same rate as health-care transfers.
- c. Adapt the GTF and BCF as needed to reflect the specific needs and circumstances of each province and territory, in particular Canada's North.
- d. Reduce the population cut-off of the BCF Small Communities Component to below 100,000; streamline the program to ensure small, rural and remote communities can access the funds efficiently and fairly, in particular for roads and bridges.
- e. To improve flexibility and streamline program design, harmonize the eligible project categories of BCF and GTF to include all municipally owned infrastructure.

### 4. Core Economic Infrastructure Fund

- a. Invest \$2.5 billion annually in a Core Economic Infrastructure Fund (CEIF), to be matched by municipal governments and by provincial and territorial governments, for a total program value of \$7.5 billion a year.
- b. Focus CEIF on core economic infrastructure, such as transit, roads, bridges and other municipal transportation infrastructure, and on water, wastewater and storm-water infrastructure.
- c. Direct \$1 billion of this fund to the Cutting Commute Times component, and \$1.5 billion to the Core Infrastructure Component.
- d. Allocate the Core Infrastructure Component to each province and territory using the same "base-plus-per-capita" formula used for GTF and BCF, with federal funds matched by provinces, territories and municipalities; adapt the Core Infrastructure Component to reflect the specific needs and circumstances of each province and territory, in particular Canada's North.
- e. Deliver Core Infrastructure Component funding to every municipality using the same method as GTF. For purposes of reporting and visibility, require funding recipients to present their annual capital plan, from which the federal government can decide where to direct CEIF funding.

## **5. Reduce gridlock, build transit**

To reduce congestion and improve local mobility, allocate the \$1 billion Cutting Commute Times component of the CEIF to transit, based on current and projected transit ridership and other measurements of mobility; ensure the program design recognizes the diversity of transit governance, particularly regional arrangements, in major centres; ensure the program design recognizes the diversity of transit governance, particularly regional arrangements, in major centres.

## **6. Meeting new needs**

Prioritize projects that meet new federal wastewater regulations through a \$300 million envelope within BCF, with its own application and review process; provide support for the development of local wastewater-treatment plants.

## **7. P3s and alternative financing**

- a. Ensure the majority of LTIP is delivered through program models that maximize predictability and certainty. This increases municipal financing options, especially for P3s.
- b. Create a “P3 screen” that requires all municipal projects with a value of \$200 million or more that are receiving federal funding to develop a thorough business case that includes analysis on the viability of P3s.
- c. Integrate support for P3s and alternative financing into all LTIP programs, rather than developing a segregated program dedicated solely to P3s; ensure that all programs support and encourage consideration of P3 options but do not mandate a P3 approach.
- d. Provide direct funding support and technical assistance to municipalities to develop rigorous business cases to analyse the most effective financing model for a particular project, including but not limited to P3s.

## **8. Innovative Infrastructure**

- a. To support the effective investment of LTIP funding, partner with FCM to create the Centre for Municipal Infrastructure Innovation and Sustainability (CMIIS) to help build the capacity of municipalities to improve asset management and innovative infrastructure practices.
- b. To provide the technical foundation for the CMIIS, work with FCM and other infrastructure stakeholders to renew and expand the National Guide to Sustainable Municipal Infrastructure (InfraGuide), which operated between 2001 and 2007 as a partnership between FCM, the National Research Council and Infrastructure Canada.
- c. Create the Innovative Infrastructure Fund (IIF) by expanding the FCM Green Municipal Fund endowment to make revolving loans and grants to municipalities for innovative, sustainable infrastructure pilot projects, including asset-management initiatives, and to leverage the best practices of these innovative pilots for use by all communities.

## I. WHY INFRASTRUCTURE MATTERS

**Municipal infrastructure is the foundation of our economy. Our small businesses need quality roads and bridges to deliver goods and services. Workers need fast, efficient public transit to connect them to jobs. And growing companies count on high-quality community services, from libraries to hockey rinks, to attract skilled workers.**

After decades of neglect and underinvestment, Canada is beginning to confront its municipal-infrastructure deficit, a backlog of repairs and needed construction that hurts every business and family. The commitment made by the federal government in 2011 to develop a new long-term infrastructure plan (LTIP) presents an opportunity to stop the decline in our infrastructure and secure our economic foundations.

### ROOTS OF CANADA'S INFRASTRUCTURE DEFICIT

Following the infrastructure building boom of the 1950s and 1960s, when much of today's infrastructure was built, municipal governments were forced to take on the responsibility of building, repairing, and maintaining most of Canada's core infrastructure without a reasonable, reliable source of funding.

Today, municipal governments are responsible for more than 60 percent of Canada's infrastructure, up from 34 percent in the 1960s. They must rely on an out-of-date property-tax system to meet their growing responsibilities, including many downloaded by other governments. This regressive tax hits middle and low-income Canadians hardest, including working families, senior citizens, and small-business owners. During the last few years, the federal government has worked with municipal, provincial and territorial governments to being repairing some of the damage done to our infrastructure by our antiquated municipal funding system.

The federal government has made new investments and has begun reforming its infrastructure programs. It has moved toward a longer term funding model that supports better planning and more-efficient use of tax dollars. It has fostered a new spirit of intergovernmental partnership, and designed faster, more-efficient funding programs. The building blocks of a permanent solution to the municipal infrastructure deficit are taking shape. The challenge now is to put them together.

## Emerging infrastructure challenges

In addition to repairing rapidly aging roads, bridges, and public transit systems, and making new investments to support growth, municipalities face a range of new and unprecedented infrastructure challenges.

### *Transportation*

To compete globally, Canada needs fast, efficient transportation networks that connect companies to customers, workers to jobs, and communities to international markets. However, a lack of long-term funding and coordination among governments has allowed traffic to clog city streets and critical gaps to form in Canada's air, rail, road and marine linkages.

The average Canadian commuter spends the equivalent of 32 working days a year travelling to and from work. The Greater Toronto Area and Metro Montréal have average daily commute times of more than 75 minutes, longer than London, New York, and Los Angeles. Many other urban regions, including Ottawa, Calgary, and Vancouver, need major investments to fight growing gridlock.

The lack of adequate transportation infrastructure is not just a problem for large cities. In many rural, remote, and northern areas, communities lack the bridges, highways, and airport infrastructure to support families and industry, or remain reliably connected to distant markets.

### *Wastewater*

Proposed new federal wastewater regulations will require cities and communities to rebuild one in four of the country's wastewater systems, at an estimated cost of more than \$20 billion.

### *Climate change*

Climate change is creating growing cost pressures, most immediately in northern communities, where the cost of adapting roads, bridges, and public buildings to a warming Arctic could more than double the North's estimated \$400-million infrastructure deficit.

The devastation caused in New York City and along the U.S. Atlantic seaboard by Hurricane Sandy starkly illustrates the needs and the costs of inaction when it comes to adapting our infrastructure to increasingly extreme weather events. We can choose to invest now, so we are ready for these events, or pay many times more later in recovery and rebuilding costs, as well as the incalculable cost in disrupted lives and commerce.

## Boosting our lagging productivity

Successive federal governments have focused on closing the innovation gap between Canada and its international competitors, especially the United States. A study by the Institute for Research on Public Policy showed that manufacturing productivity levels were almost identical in Canada and the United States in the mid-1990s. By 2006, productivity in the United States was more than 20 percent higher than in Canada. Governments are constantly searching for the cause and for a solution.

While public infrastructure appears to be important for economic success, its impact on productivity has not been clearly described or analysed, due to the difficulty of collecting and analyzing data. However, during the period when productivity in the United States outpaced Canada's, infrastructure investment in Canada declined by 3.5 percent while in the United States it grew by 24 percent. The discrepancy between Canada's infrastructure investments and that of other global competitors, especially China and the European Union, are even greater.

A study for the Residential and Civil Construction Alliance of Ontario by economic forecasting firm *RiskAnalytica* suggests that underinvestment in public infrastructure over the next 50 years could cost Canada 1.1 percent in real GDP, a 20 percent cut to the net profit of Canadian businesses, and thousands of dollars in lost salary for workers.<sup>1</sup> The same study showed that for every extra tax dollar invested in improved infrastructure, the taxpayer is better off by \$1.48 on average, in after-tax wage terms. Clearly, investing in infrastructure is a smart investment to protect and improve our enviable quality of life and productivity.

<sup>1</sup> Stiff, David and Smetanin, Paul. Public Infrastructure Underinvestment: The Risk to Canada's Economic Growth. RiskAnalytica, 2010. [http://www.acec.ca/assets/pdf/advocacy\\_pdf/RCCAO\\_Report\\_2010.pdf](http://www.acec.ca/assets/pdf/advocacy_pdf/RCCAO_Report_2010.pdf)

## II. SETTING THE CONTEXT

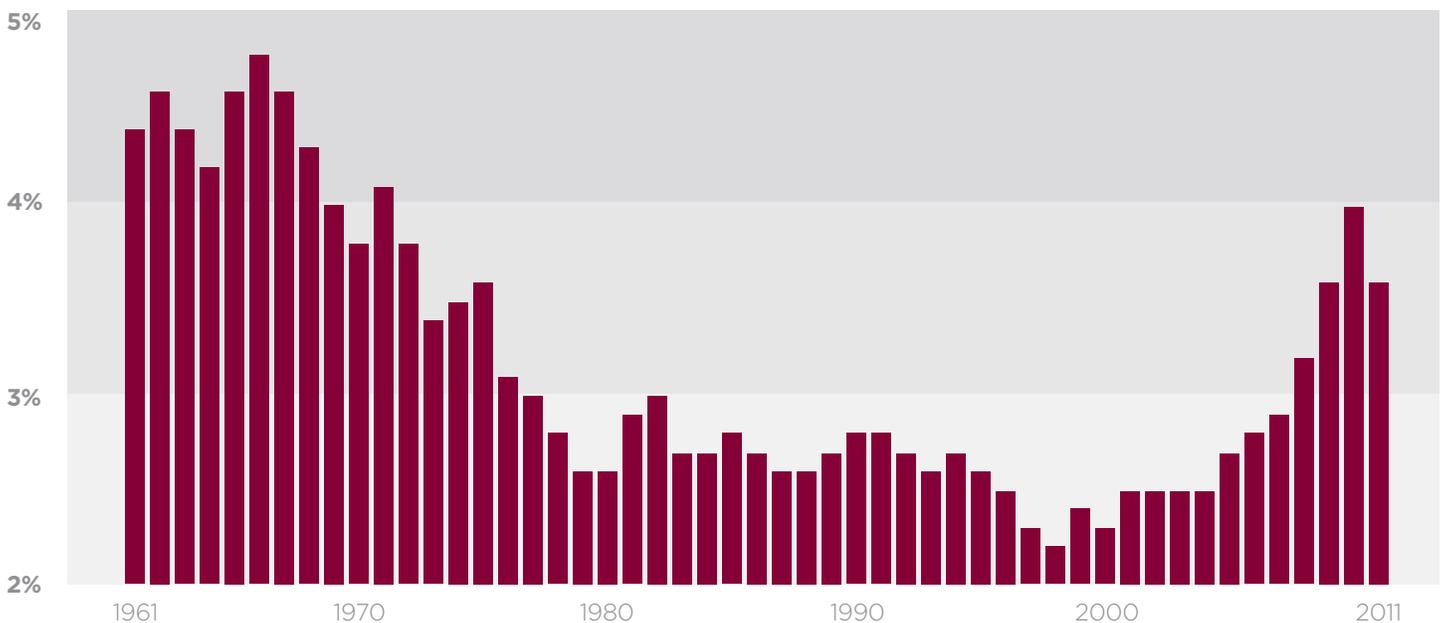
### Reversing the long decline in Canadian public investment in infrastructure

Between 1961 and 2002, governments in Canada together spent an average of 3.1 percent of GDP on public infrastructure. However, this number doesn't tell the whole story.

From the 1950s through to the mid-1970s, a period of massive urbanization, population growth and a burgeoning economy, Canada spent more than four percent of GDP on public infrastructure, recognizing its importance to underpinning our economy in an increasingly competitive world. These figures tailed off quickly, reaching a low of just over two percent of GDP in the late 1990s.

#### FIGURE 1:

*Total Government Infrastructure Investment Relative to GDP*



**Source:** Casey Vander Ploeg, "New Tools for New Times," Canada West Foundation, 2012 ([http://letstoc.com/wp-content/uploads/2012/05/lil\\_Myth-Mystery-Myopia.pdf](http://letstoc.com/wp-content/uploads/2012/05/lil_Myth-Mystery-Myopia.pdf))

The recent resurgence of interest in the role and importance of infrastructure, which is driven partly by a massive and growing infrastructure deficit following decades of neglect, and partly by the pressures of globalization and increased competition, saw public investment in infrastructure reach just over three percent in 2008<sup>2</sup>.

To put these numbers in perspective, Canada's GDP in 2012 will be close to \$1.8 trillion. The difference between investing three percent of GDP in infrastructure and four percent is about \$18 billion, four times the amount the federal government is expected to invest in public infrastructure in 2012.

The good news is that all governments have made massive reinvestments in infrastructure, led in large part by a new and sustained federal interest. The

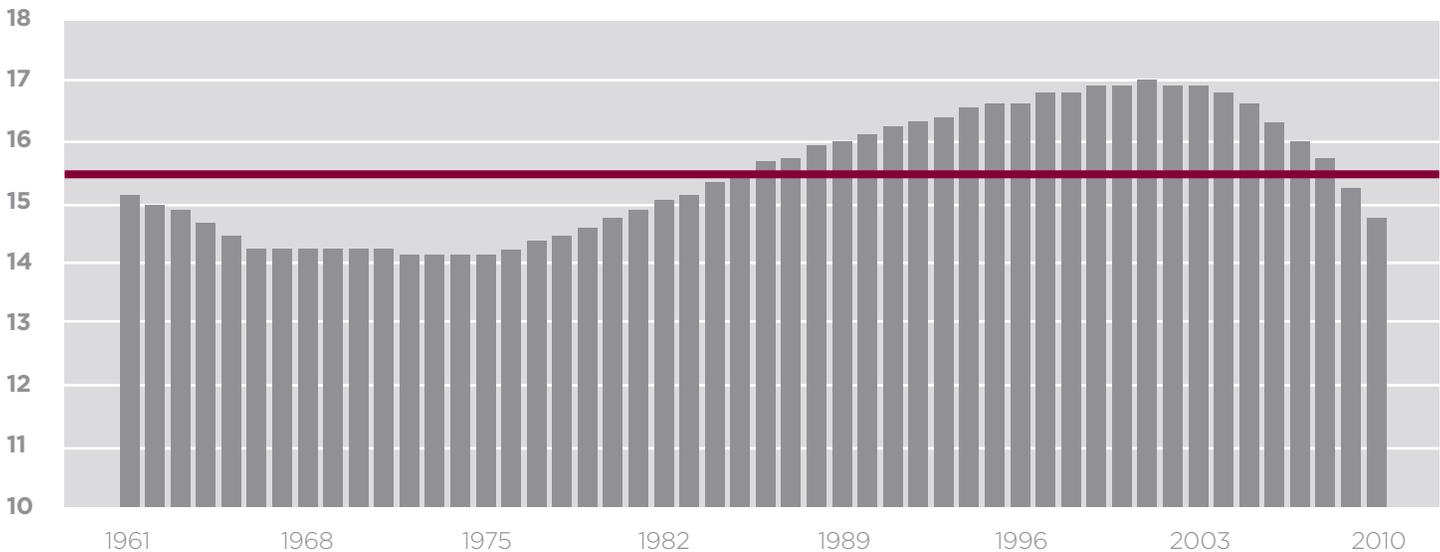
challenge is to protect this momentum and build on it to ensure we have the infrastructure we need to create jobs and compete globally.

### Aging infrastructure

What does this mean for our infrastructure? Quite simply, the vast stock of infrastructure built in the 1950s through 1970s, which helped Canada become one of the world's leading economies, is close to the end of its service life (see Figure 2). Municipalities, which collect just eight cents out of every tax dollar from a limited, regressive property tax system, are pressed to maintain and replace this critical national asset. The result is visible in cities and communities across the country: traffic congestion, potholes, rusting bridges, and leaking water pipes.

## FIGURE 2:

*Average age of core public infrastructure (1961 to 2010) = 15.41*



Source: Infrastructure Canada, *Building for Prosperity*, 2012. <http://www.infrastructure.gc.ca/plan/bpp-pbp/booklet-livret/index-eng.html>

<sup>2</sup> Investments topped four percent briefly in 2010 as a result of one-time stimulus investments in 2009-11.

From a low of 14 years in the 1960s, the average age of infrastructure peaked at 17 years in the late 1990s. The average age started dropping as investment trends reversed, and Canada began rebuilding and replacing its infrastructure. The momentum has shifted. Earlier this year, FCM released the first-ever Canadian Infrastructure Report Card, which gave municipal infrastructure mixed grades. The overall grades for the four asset categories assessed show about 30 percent of municipal infrastructure ranks between “fair” and “very poor”.

The report card suggests that recent investments in core public infrastructure are beginning to have an effect. It also shows that work still needs to be done to ensure the remaining problems don't grow in response to new challenges, including extreme weather, new wastewater regulations, and continued population and economic growth.

### **Keeping taxes low and investing in increased productivity**

Canadian taxes are lower now than they have been for generations. Taxes collected by all governments peaked in 1998 at 37 percent of GDP and this has dropped to 31 percent, a savings of \$12,000 a year for a family of four.

Although taxes as a percentage of disposable income are down, tax revenues collected by all governments are still up. This is a result of a progressive taxation system built mainly around taxes that grow with the economy, particularly sales and income taxes collected by federal, provincial and territorial governments.

What does this mean for infrastructure investments? It means there is an incentive for governments to invest in measures that grow with the economy, such as improved infrastructure. Economic growth leads to higher wages and greater consumption, which generate more tax revenues. More tax revenues create opportunities to reinvest tax dollars to support more growth and to reduce tax rates. This in turn encourages individuals to invest in their own productivity and consumption, which supports still more growth.

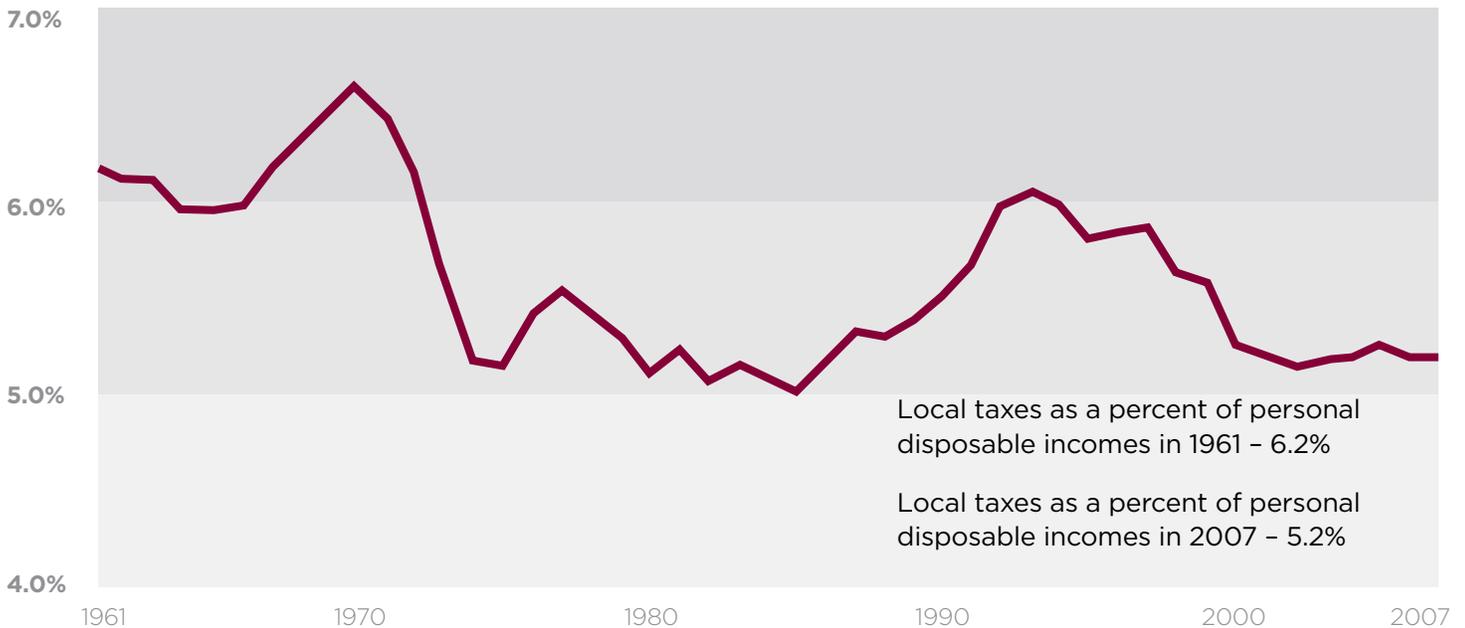
There is an even more direct incentive for federal, provincial and territorial governments to invest in infrastructure: they gain a direct benefit in the form of increased income and sales taxes generated by infrastructure construction. In fact, for every dollar the federal government invests in infrastructure, they receive 17 cents in new tax revenues. In 2012, the federal government will invest approximately \$4 billion in municipal infrastructure, added to the approximately \$15 billion invested by municipal governments. In return, the federal government will receive about \$3.4 billion in new tax revenues, almost covering their investment.

However, these incentives do not apply to local governments. Municipal governments rely on the property tax to fund their contributions to infrastructure, a tax that does not respond to economic growth. As a result, municipal property tax revenues do not grow with the economy; they grow only if tax rates are increased. Growth does not pay for more growth when it comes to municipal infrastructure investments.

As a result of federal, provincial and territorial cuts to municipal infrastructure funding in the 1980s and 1990s, the responsibility to maintain almost 60 percent of Canada's public infrastructure fell on municipal taxpayers. The result was a combination of reduced infrastructure spending and higher property taxes, as municipalities were forced to pay for repairing and replacing declining infrastructure and building new infrastructure to respond to population growth.

**FIGURE 3:**

*Total local property taxes collected in Canada, as a percentage of disposable income*



**Source:** Casey Vander Ploeg, "New Tools for New Times," Canada West Foundation, 2012 ([http://letstoc.com/wp-content/uploads/2012/05/lil\\_Myth-Mystery-Myopia.pdf](http://letstoc.com/wp-content/uploads/2012/05/lil_Myth-Mystery-Myopia.pdf))

Between the late 1980s, when infrastructure built in the 1960s and 1970s reached the end of its service life, and the early 2000s, when federal, provincial and territorial governments began reinvesting in infrastructure, the value of all property taxes collected increased from five percent of disposable income to six percent—a 20 percent increase. Property taxes have dropped since federal and provincial/territorial governments began supporting municipal infrastructure again. Federal, provincial and territorial infrastructure investments can help keep property taxes down.

The long-term infrastructure plan is an opportunity to recognize and plan for the benefits of investing the growth revenues collected by federal, provincial and territorial governments in infrastructure, which in turn will generate direct benefits back to these governments and, more importantly, sustain growth and improve productivity.

### III. TWO DECADES OF SHORT TERM INVESTMENTS

**In November 2011, Transport, Infrastructure and Communities Minister Denis Lebel announced the start of a one-year engagement process to “develop a new long-term plan for public infrastructure beyond the expiry of the Building Canada Plan in 2014.”<sup>3</sup> The minister said that this would “build the foundation of a new infrastructure plan that supports economic growth and job creation.”**

The federal government’s commitment to a long-term infrastructure plan is the culmination of a policy shift that started with the introduction of the gas tax transfer in 2005. It is also an unspoken acknowledgment that the traditional approaches to infrastructure funding, while representing important investments in Canadian communities, failed to lay the foundations for long-term economic growth.

To understand how we got here and why it matters, it is instructive to look at the history of the last two decades of federal infrastructure funding.

Between 1993 and 2002, the Government of Canada invested approximately \$10 billion in municipal infrastructure repair and construction, largely through a series of application-based programs.

Until the introduction of the Gas Tax Fund (GTF) in 2005 and the seven-year Building Canada Plan in 2007, most of these programs tended to revolve around two to three year funding frameworks. In addition, all programs except the GTF were application-based, which had the effect of creating a “funding lottery” that discouraged long-term capital planning.

These programs and the lack of certainty around funding tended to shift funding away from high-priority projects toward those that seemed most likely to be funded.<sup>4</sup> By shifting scarce resources away from priority repairs and upgrades, this can actually contribute to the infrastructure deficit.

<sup>3</sup> *Government of Canada Invites Partners to Join in Developing a Long-Term Infrastructure Plan*, Infrastructure Canada, news releases, November 30, 2011

<sup>4</sup> Richard Soberman, *Review of Federal Gas Tax Transfer and Infrastructure Programs*, paper prepared for the Federation of Canadian Municipalities, 2006

Short-term infrastructure programs serve to move municipal capital planning away from strategic, longer term considerations toward a transactional approach that often fails to take into account future fiscal and planning impacts.

## **2005 – 2009: Paradigm shifts and stalls**

In 2005, the federal government announced a major policy shift in how it financed municipal infrastructure. Originally designed as a back-end loaded program ramping up to \$2 billion at the end of five years, the GTF was packaged as an environmental measure designed to encourage investments in “green infrastructure”.

While some aspects of the GTF made it a more effective way to finance local capital projects, notably that it was not application-based, its five-year time horizon was too short to allow its proper integration into long-term capital budgeting and planning. This problem was addressed in 2008 when the government made GTF permanent, and added further certainty to the program in 2011 when GTF was legislated.

The need for a long-term funding horizon was formally recognized by the federal government in Budget 2006: “Federal investments in infrastructure are significant, but this funding needs to be put on a long-term track to allow for long-term planning, especially given the time spans involved in planning and building major infrastructure projects.”

In Budget 2007, the Government of Canada broke new ground with the announcement of a seven-year infrastructure fund. The Building Canada Fund provided the longest funding commitment and framework, with close to \$18 billion dollars for municipal infrastructure.

But the paradigm shift stalled. The design and development of the Building Canada Plan was saddled with many of the administrative problems that beset earlier programs. It was not until the 2009 recession brought a renewed sense of urgency to infrastructure investment that the plan’s red tape was finally cut, allowing much-needed investments to flow.

Importantly, as highlighted by the Auditor General of Canada in her 2010 report, the approach introduced in the design of the federal stimulus funds dealt with a number of the problems that had beset earlier programs, particularly an overly complex application process that discouraged municipal take-up.

As the Auditor General of Ontario pointed out in his 2010 report, the 2009 stimulus program, while implemented in record time and characterized by new flexibility, suffered from problems that had plagued earlier federal infrastructure programs. Most significantly, the program’s short-term, application-based design displaced municipal funding away from well-established priority projects to second-tier and third-tier priorities.

## IV. TOWARDS A LONG-TERM INFRASTRUCTURE PLAN

**Our proposal for the long-term infrastructure plan (LTIP) is designed to address those program shortcomings and respond to the needs and priorities of the funding partners and all Canadians.**

FCM's proposal has three fundamental objectives:

1. Build a stronger economy and create new jobs;
2. Ensure long-term value for money invested; and
3. Leverage support and investment from all three orders of government, the private sector and other infrastructure stakeholders.

Our proposal recognizes the importance of making every dollar invested through LTIP deliver maximum value by ensuring that the highest priority infrastructure is built or repaired—at the right time and for the right reason—by following rigorous long-term asset-management plans, and by designing funding programs that minimize red tape and maximize accountability.

A real plan to tackle Canada's infrastructure challenge and deliver on these shared objectives must ensure that municipalities have access to secure, predictable funding. This aspect is critical when planning and building infrastructure with a lifespan of from 30 to 70 years. Predictable revenue streams are also essential to making P3s work by, for example, ensuring that all partners know how a project will be funded for the duration of what can be multi-decade financing plans.

### EXISTING INVESTMENTS IN PUBLIC INFRASTRUCTURE

The federal government invests approximately \$3.25 billion<sup>5</sup> annually through the following key programs:

Gas Tax Fund (GTF):	\$2 billion
Building Canada Fund (BCF):	\$1.25 billion
<b>Total:</b>	<b>\$3.25 billion</b>

<sup>5</sup> The federal government also invested an average of \$300 million to \$400 million in dedicated funding for public transit between 2005 and 2010. The last of these programs, the Public Transit Capital Trust, expired in 2009-10. In addition, the government's 100% rebate of the GST is worth approximately \$700 million to municipalities. Municipalities are also able to access a portion of other, smaller programs, including the P3 Fund, the Green Infrastructure Fund and the Community Infrastructure Investment Fund, together worth \$450 million annually.

Finally, a real plan must protect the momentum generated by the Building Canada Plan while recognizing and meeting new and emerging infrastructure challenges related to economic growth, demographic changes, new regulations, and the need to adapt our infrastructure to climate change and increasingly extreme weather.

These and other smaller existing federal programs leverage an additional \$3.4 billion in matching funds from provincial, territorial and municipal governments.

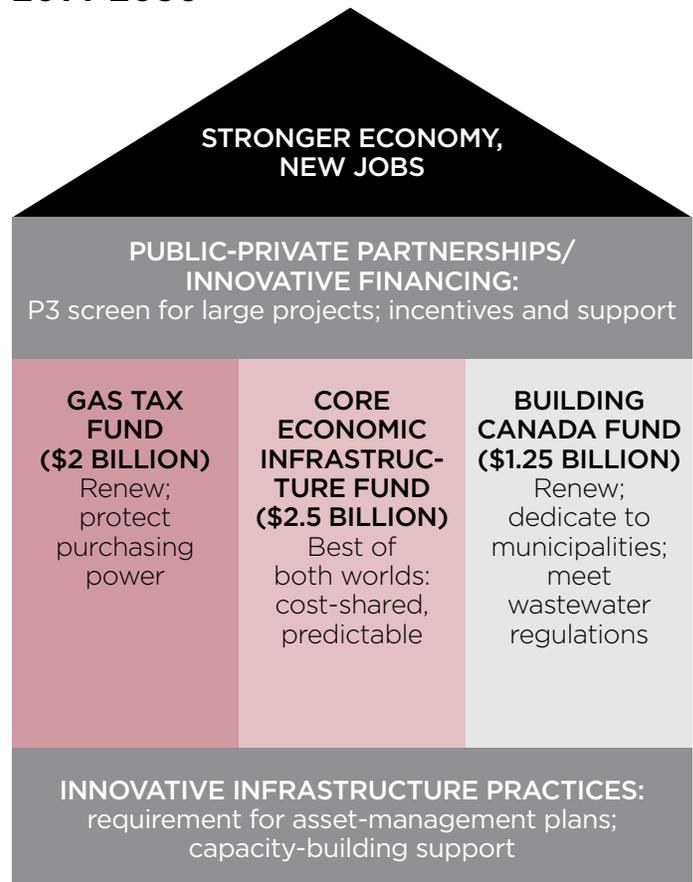
These funds are in addition to the \$12 billion to \$15 billion municipalities spend annually on their infrastructure outside of these programs, using their own revenues, and tens of billions more invested by the federal, provincial and territorial governments on infrastructure like major highways and bridges, hospitals, schools, ports and defense assets.

### **FCM's proposal: Building on a strong foundation for a stronger economy**

Our proposal is built around the renewal of two existing federal infrastructure programs and the creation of one new program concept. These programs should all leverage the value from improved and innovative infrastructure practices, such as good asset-management plans, as well as private-sector partnerships and other alternative financing.

The primary objective of these three programs, when leveraged with private-sector partnerships and innovative infrastructure practices, is to build a stronger, more innovative economy; improve the nation's productivity; and create and sustain new jobs.

## **LONG-TERM INFRASTRUCTURE PLAN 2014-2030**



### **1. Long-term, predictable funding**

Truly long-term, predictable funding facilitates more efficient and effective investment decisions. Municipal asset-management plans and capital budgets are often 10 to 30 years, for assets with a lifespan from 50 to 100 years. When funding matches planning horizons, plans are more realistic and less likely to be changed in response to the latest funding programs. They can therefore maximize available funds and begin work sooner.

Uncertainty about future infrastructure funding forces construction companies to delay hiring new workers and investing in new equipment until funding is approved. This often results in short-term labour shortages, inflation in wages and supplies, and delayed, more costly projects.

Finally, infrastructure funding must be both predictable and long term. Businesses make investment decisions about where to locate new plants or upgrade existing ones based on the public infrastructure and services available and planned. But companies know that infrastructure plans without predictable and reliable funding are just plans, not guarantees of future action, and they will not make decisions based on plans. Predictability means being able to budget for future funding, not being forced to wait until it arrives to begin planning. Application-based funding mechanisms like the BCF have a place in responding to large, one-time needs, such as new wastewater-treatment systems. But without predictability, the funding cannot be included in asset-management or long-term capital plans.

***Recommendation 1 – Funding should be long-term and predictable***

Commit funding to LTIP for 15 to 20 years with five-year planning cycles, with the exception of the permanent Gas Tax Fund.

## **2. Total public investments**

We propose that the Government of Canada extend the existing Gas Tax Fund at \$2 billion annually and extend the existing Building Canada Fund, which invests on average \$1.25 billion annually, for a total of \$3.25 billion in renewed funding. We also propose the creation of a new Core Economic Infrastructure Fund (CEIF) to invest \$2.5 billion annually in new funding for roads, bridges, water, wastewater and storm-water systems, and public transit. The total federal investment proposed is \$5.75 billion.

Every new dollar the federal government invests through the \$2.5 billion CEIF will go to core economic infrastructure and will be matched by provincial, territorial and municipal governments. The federal government's investment will leverage an additional \$5 billion from provincial, territorial and municipal governments through CEIF, and \$2.5 billion through BCF. LTIP would therefore see total annual investments by all three orders of government of \$13.25 billion.

Assuming other investments in federal, provincial, territorial and municipal infrastructure are maintained at existing or greater levels, LTIP would increase the percentage of GDP invested in infrastructure by 0.3 percent, to approximately 3.7 percent, almost returning Canada's total infrastructure investments to the levels of the early 1970s.

***Recommendation 2 – Invest to leverage additional funds***

A federal investment of \$5.75 billion in LTIP will leverage an additional \$7.5 billion in new provincial, territorial and municipal investments. These investments are on top of the \$12 to \$15 billion that municipalities already invest in local infrastructure and billions more contributed by provincial and territorial governments.

### **Creating jobs and building the economy**

Total LTIP investments of \$13.25 billion by federal, provincial, territorial and municipal governments will directly create almost 150,000 new jobs annually and could add as much as \$16 billion to real GDP, almost a full percentage point.<sup>6</sup> This new and rehabilitated infrastructure will benefit the economy by reducing costs, improving the mobility of goods and workers, and attracting and retaining skilled workers. For example, according to Statistics Canada, every dollar invested in transportation infrastructure reduces private-sector costs by 17 cents.

<sup>6</sup> According to Conference Board of Canada research, every new dollar invested in infrastructure increases real GDP by \$1.20.

### 3. Focused, predictable and fast programs

#### *Renew and improve the existing Gas Tax Fund and Building Canada Fund*

The Gas Tax Fund and the Building Canada Fund, the foundations of the Building Canada Plan, are well understood by the governments involved; are built on negotiated and well-designed agreements; and generally work well. These programs should be renewed at existing funding levels with minor improvements to cut red tape and improve visibility, flexibility and accessibility.

The Gas Tax Fund delivers funding to municipalities in a fast, efficient and predictable manner. These funds are often used to rehabilitate core infrastructure, and more than 60 percent of them has been invested in transit and transportation initiatives. Although a large number of projects are funded, many are small or difficult to demonstrate, contributing to the low visibility of this program.

The application-based Building Canada Fund is an excellent vehicle for funding large “one-off” projects that a community could not fund alone. BCF has funded significant wastewater-treatment projects in small and large municipalities. It has also contributed to some of the most ambitious new transit projects in recent decades. BCF projects tend to be comparatively large and highly visible, but there are many fewer BCF-funded projects in a given year than GTF-funded projects. Importantly, BCF funding cannot be incorporated into long-term municipal capital plans, because there is no certainty that a specific project will be approved until late in the planning process.

#### **Recommendation 3 – Renew and improve the Gas Tax Fund and the Building Canada Fund**

- a. Direct 100 percent of the Building Canada Fund to municipal infrastructure.
- b. Protect the current purchasing power of the GTF and BCF against inflation and population and economic growth; index GTF at three percent, the same rate as health-care transfers.
- c. Adapt the GTF and BCF as needed to reflect the specific needs and circumstances of each province and territory, in particular Canada’s North.

- d. Reduce the population cut-off of the BCF Small Communities Component to below 100,000 and streamline the program to ensure small, rural and remote communities can access the funds efficiently and fairly, in particular for roads and bridges.
- e. To improve flexibility and streamline program design, harmonize the eligible project categories of BCF and GTF to include all municipally owned infrastructure.

### 4. Core Economic Infrastructure Fund

FCM proposes that all new federal funds invested in LTIP be delivered through a new program called the Core Economic Infrastructure Fund (CEIF). This Fund would combine the advantages of the Gas Tax Fund and the Building Canada Fund. The CEIF would ensure that all new federal investments in LTIP, beyond the renewal of existing programs, would be matched by other orders of government and that the federal government would have the opportunity to identify the projects in which it wants to invest.

CEIF would use the GTF model to deliver funding to every community on a predictable basis, allowing for long-term budgeting and planning. But CEIF would also borrow from BCF by requiring provinces, territories and municipalities to match federal funds. CEIF would also require municipalities to share with the federal government its annual capital plans, from which the federal government could then choose which projects would receive funding.

CEIF would tend to fund fewer projects than GTF. They would be higher in dollar value, since the federal government would likely choose to direct funding to a small number of strategically important projects in the capital plan every year. CEIF would certainly fund more projects than BCF. They would be lower in dollar value, since every municipality would receive and invest CEIF funding annually.

The result would be a fast and efficient program without the need to re-profile funding due to project delays. This program would generate less red-tape and lighten the paper burden; provide municipalities with the flexibility they need for better planning; and allow for rigorous annual reporting and strong visibility.

## MAKING LTIP WORK IN CANADA'S NORTH

The unique conditions of Northern and remote communities greatly affect how municipal infrastructure is built and maintained there. These communities face extreme isolation; a shorter and highly variable construction season; limited human resource availability and capacity; limited access to capital; growing demands on aging and existing infrastructure; early stages of corporate development; and unique project needs.

Extreme weather conditions shorten the life of many assets in the North, and climate change, which is occurring there more rapidly than in the south, exacerbates this effect. From a demographic perspective, the three territories are seeing population increases driven by new employment opportunities and overall higher rates of fertility. However, the market has not been efficient in delivering assets considered critical to social and economic development in the region, including housing, communications infrastructure, recreational facilities and deep seaports.

### Designing LTIP for Canada's North

To accommodate and respond to these unique conditions, infrastructure funding programs must be designed and customized for these communities. For example, with the North's much higher construction costs, most Northern communities with their limited resources have trouble sharing one third of the costs as required by traditional application-based funding programs.

The Gas Tax Fund works very well in the territorial North, because of its flexibility and predictability and because it does not require cost-sharing. The BCF was adapted to the North through agreements with each territory, so that some of its funds could be allocated using "GTF-style" mechanisms. In some cases, capital planning and project funding is managed by the territorial government in consultation with communities. This model addresses many of the challenges with traditional application-based programs, by reducing administrative burdens, maximizing project flexibility and increasing the federal share of eligible costs. These elements need to be retained in LTIP.

FCM's "best practices" for designing an "LTIP-Territories" component:

- Use "base + population" or similar approach for the national allocation formula to ensure the territories receive funding adequate to their unique needs.
- Generally disburse funds using a transfer-style mechanism like the GTF; very few funds should be application based;
- Maximize the ability of communities to "stack" federal funds from various programs, given the limited local availability of capital;
- Application forms and reporting requirements should be simplified, and designed specifically for the territories;
- Ensure territorial municipal associations or other partners are allowed to apply for funding on behalf of northern municipalities;
- Broaden the list of eligible project categories, including recreational infrastructure, in recognition of the importance of all public infrastructure in these small communities.

Building communities in the North is important for local social and economic sustainability. Given the role this region plays in national sovereignty and supporting resource development, these investments should also be seen as critical to nation building.

#### **Recommendation 4 – Core Economic Infrastructure Fund (CEIF)**

- a. Invest \$2.5 billion in a Core Economic Infrastructure Fund (CEIF), to be matched by municipal governments and by provincial and territorial governments, for a total program value of \$7.5 billion a year.
- b. Focus CEIF on core economic infrastructure, such as transit, roads, bridges and other municipal transportation infrastructure; and on water, wastewater and storm-water infrastructure.
- c. Direct \$1 billion of this fund to the Cutting Commute Times component, and \$1.5 billion to the Core Infrastructure Component.
- d. Allocate the Core Infrastructure Component to each province and territory using the same “base plus per capita” formula used for GTF and BCF, with federal funds matched by provinces, territories and municipalities; adapt the Core Infrastructure Component to reflect the specific needs and circumstances of each province and territory, in particular Canada’s North. Deliver Core Infrastructure Component funding to every municipality using the same method as GTF.
- e. Require funding recipients to present their annual capital plan from which the federal government can designate its CEIF funding for the purposes of reporting and visibility.

### **5. Reduce gridlock, build transit**

Canadians count on modern, efficient transportation networks. They count on high-quality roads to get to and from work. Businesses count on these same systems to link their goods and services to domestic and international markets. Canada’s overall economy is directly dependent on the transportation systems in its largest cities.

Yet recent studies exploring how well transit and transportation systems support the activities of Canadians and businesses tell a troubling story. Each year, Canadians spend, on average, 32 working days a year commuting. In our largest cities, this challenge is even more acute. Average daily commute times in Calgary are 66 minutes; in Vancouver, 67 minutes; and in Montreal and Toronto, nearly 80 minutes.<sup>7</sup>

Traffic congestion also has significant and direct impact on the productivity of local businesses. Transport Canada has estimated that traffic congestion in Canada costs our economy almost \$5 billion a year in lost productivity. This research did not include the costs associated with moving goods across our country. A study by the OECD, which did include these costs, concluded that gridlock costs the City of Toronto alone \$5 billion.

Reducing traffic congestion in our cities must be a priority for all governments. Without modern, efficient transit systems, the road networks that facilitate the movement of goods and people across our country will come to a standstill. Ensuring that the LTIP targets traffic congestion in meaningful and measurable ways is key to Canada’s continued long-term economic prosperity.

#### *Current investments and future needs*

The Government of Canada invests approximately \$750 million annually in transit and projects to reduce traffic congestion through the existing GTF and BCF. These programs should be extended at the current level of investment.

In a recent study, the Canadian Urban Transit Association (CUTA) estimated transit capital needs of \$53.5 billion between 2012 and 2016). Approximately \$40 billion of this \$53.5 billion will come from existing funding commitments by all governments, including almost \$4 billion over five years from GTF and BCF. This leaves a funding shortfall of \$13.5 billion. CUTA estimates that the federal share of closing this \$13.5 billion shortfall is approximately \$1 billion a year.

#### *CEIF “Cutting Commute Times” component*

We propose that \$1 billion be dedicated from the Core Economic Infrastructure Fund (CEIF) to a “Cutting Commute Times” component to reduce gridlock and build transit. When combined with investments in transit and reducing traffic congestion made through the Gas Tax Fund, the Building Canada Fund and the rest of CEIF, LTIP will invest a total of \$2 billion annually in reducing commute times, on top of new and ongoing provincial and territorial investments.

<sup>7</sup> Statistics Canada. 2010. “Commuting to work: Results of the 2010 General Social Survey.” Available at: <http://www.statcan.gc.ca/pub/11-008-x/2011002/article/11531-eng.htm>.

Past federal transit investments have been allocated on some combination of population and transit ridership to ensure funding is allocated according to need. This approach should be continued and expanded to include metrics related to cutting commute times and local mobility targets. Consideration must also be given to ridership growth forecasts so that this funding can be used to build new transit that encourages new ridership.

**Recommendation 5 - Reduce gridlock, build transit**

To reduce congestion and improve local mobility, allocate the \$1 billion Cutting Commute Times component of the CEIF to transit, based on current and projected transit ridership and other measurements of mobility ; ensure the program design recognizes the diversity of transit governance, particularly regional arrangements, in major centres.

## 6. Meet new and emerging infrastructure needs

FCM's Canadian *Infrastructure Report Card* described a highly developed country with mostly first-class infrastructure with some significant challenges and shortcomings. The report card did not measure or estimate the impact of new or emerging needs that will place added pressures on municipalities.

New wastewater regulations, for example, will require upgrades at one in four wastewater treatment systems across the country, costing \$20 billion to \$40 billion over 20 to 30 years. Growth in the number of extreme weather events—from flooding, to melting permafrost and ice roads, to drinking-water shortages due to drought—require wide-scale adaptation of our infrastructure. Bridges or storm-water systems built to withstand rare extreme storm events now experience those storms once a decade. Much of this adaptation can be incorporated into planned infrastructure replacement at a limited additional cost, but only if municipalities are able to plan appropriately. Some of this work will cost billions of dollars above and beyond what is budgeted and planned today.

In addition, an aging population requires more accessible and flexible transportation systems, and different kinds of community and recreation services.

Continuing urbanization forces large metropolitan areas to plan for significant population increases, while rural and remote areas must balance the need to maintain essential services with the constraints of a declining tax base. Both challenges are new and, in many cases, unfunded. LTIP must not only protect and extend existing programs, but make major new investments to ensure we are able to meet these emerging needs while maintaining the momentum we have built up over the last decade.

**Recommendation 6 - Meeting new needs**

Prioritize projects that meet new federal wastewater regulations through a \$300 million envelope within BCF, with its own application and review process; provide support for the development of local wastewater-treatment plants.

## 7. P3s and alternative financing

Canada has one of the most developed P3 markets in the world, but there is clearly more room to leverage the expertise and financing of the private sector to meet our infrastructure challenges and maximize the long-term infrastructure plan.

LTIP must provide municipalities with access to a full suite of financial options that provide certainty and predictability, as well as access to new and innovative funding sources and financing approaches. While P3s are not a magic bullet that will solve our infrastructure challenge, they are an important tool that must be in the toolkit available to cities and communities.

P3 Canada was created in 2007 and has begun to build the expertise and role to support and further develop our P3 market. However, its \$1.25 billion P3 Fund has experienced significant challenges in investing its budgeted funding. LTIP is an opportunity for the Government of Canada to rethink how it supports the P3 sector and to improve the role and function of P3 Canada.

**Predictable funding: the foundation for P3s**

Making stable, predictable investments in municipal infrastructure is the most important thing governments can do to improve our infrastructure. These investments extend the life of our infrastructure by supporting regular

repairs and maintenance, which is the single most important factor in keeping infrastructure costs down. But they also create the conditions necessary for P3s by providing municipalities with the secure revenue streams they need to enter into P3 contracts extending for 20 or 30 years. On their own, short-term funding programs can't meet the needs of public or private partners.

Current federal infrastructure programs present municipalities with an either/or proposition: a municipality can *either* apply for cost-shared infrastructure dollars *or* attempt to access P3 funding through a dedicated P3 fund. Future federal infrastructure programs must ensure that traditional investments and potential P3 project funding is available and delivered under a single framework. This will allow, for example, a community to apply for an application-based program like BCF while still considering the P3 option. If the project is appropriate for a P3, then the community can follow that path. If not, the project could still be considered under the application-based program.

When to use the P3 model should be up to individual municipalities. Municipalities need the information and expertise to make an informed choice and the support to manage new and complicated partnership agreements.

Costly business cases, lengthy program-application processes, and up-front legal fees can discourage municipalities from pursuing the P3 option. Current P3 programs do not provide the support municipalities require to do this work. Without this support, increasing the use of P3s in Canada will continue to be a challenge. Support for building this capacity will maximize federal investments by empowering municipalities to make the best choices for where and how to invest in its infrastructure.

#### **Recommendation 7 - P3s and alternative financing**

- a. Ensure the majority of LTIP is delivered through program models that maximize predictability and certainty. This increases municipal financing options, especially for P3s.
- b. Create a "P3 screen" that requires development of a rigorous business case, including an analysis of the P3 option, for all municipal projects valued at \$200 million or more and receiving federal funding.

- c. Integrate support for P3s and alternative financing into all LTIP programs, rather than developing a segregated program dedicated solely to P3s; ensure that all programs support and encourage consideration of P3 options but do not mandate a P3 approach.
- d. Provide direct funding support and technical assistance to municipalities to develop rigorous business cases to analyse the most effective financing model for a particular project, including but not limited to P3s.

## **8. Infrastructure Innovation**

Investments that build the capacity of the municipal sector to use better, more innovative infrastructure planning and practices will maximize the use of every LTIP dollar. Both GTF and BCF allocated funds to capacity building - up to 1% was dedicated for this in BCF, while GTF included capacity building as an eligible project cost, and on average has invested more than 1% in these activities. However, these funds were not always widely accessed due to a range of factors, including local human resource constraints.

These capacity building allocations should be retained and improved in renewed GTF and BCF programs. These programs are especially effective at supporting provincial, territorial and municipal capacity-building initiatives, tailored to local needs. However, a complementary national capacity-building initiative will support these local efforts by taking advantage of economies of scale to produce and share technical knowledge and tools.

### **A Role for FCM**

FCM has more than a decade of experience in building the capacity of local governments to make better infrastructure investments, particularly through the Green Municipal Fund (GMF) and InfraGuide. These programs have a proven track record in maximizing cost savings, increasing municipal revenues, supporting innovation and economic development and creating jobs.

### *FCM's Green Municipal Fund and InfraGuide*

The GMF funds pilot projects in innovative infrastructure projects that generate “proof of concept,” state-of-the-art knowledge and techniques that can be shared with and applied to all municipalities. It is this combination of direct project funding and knowledge dissemination that makes the program a powerful, cost-effective tool to produce real innovation in Canada’s infrastructure practices.

Since 2000, FCM has committed to provide \$613 million in financing to support 934 green and innovative infrastructure initiatives, including 162 capital projects, in more than 460 communities across Canada. This \$613 million investment has leveraged more than \$3.2 billion in total project value from GMF-supported initiatives. When completed, GMF-funded capital projects are expected to save municipalities up to \$82 million a year and reduce energy use by 1.1 billion kilowatt hours. The knowledge generated from these pilot initiatives will multiply these benefits when applied in municipalities across the country, generating hundreds of millions of dollars in savings over the long term and better value for every federal dollar spent through LTIP.

FCM’s InfraGuide, which operated from 2001 to 2007, was a practitioner-developed, made-in-Canada resource on asset-management planning and infrastructure innovation. It provided best practices and technical guides to municipal engineers, treasurers and public works managers to help them plan more effectively, reduce costs and build more innovative infrastructure. Although it has been five years since the project ended, InfraGuide remains well used in the infrastructure community. With updating and a new focus on training and dissemination, the InfraGuide program could complement the GMF program with highly technical, rigorously researched tools and techniques developed by practitioners and potential industry partners.

### *Centre for Municipal Infrastructure Innovation and Sustainability*

A Centre for Municipal Infrastructure Innovation and Sustainability (CMIIS) would integrate a renewed InfraGuide program and an enhanced Green Municipal Fund to deliver “best of both worlds” knowledge generation and dissemination on innovative infrastructure practices. This program would build

and share knowledge that would enhance the value for money from LTIP through improved efficiencies, environmental sustainability and customer service.

FCM has close to 2,000 member municipalities that comprise 90 percent of Canada’s population, as well as a partnership with 18 provincial and territorial municipal associations and a host of other infrastructure stakeholders, including Engineers Canada, the Canadian Public Works Association and the Canadian Construction Association. FCM is well positioned to leverage these networks for a truly national capacity-building program.

As a partner of the federal government in program delivery, FCM has proven itself to be an exemplary steward of public funds, earning praise from the Auditor General in 2005 for good practices in monitoring and oversight with the \$550 million GMF endowment. FCM wants to build on this successful model and our successful partnership with the federal government to make LTIP the catalyst for large-scale infrastructure innovation in Canada.

### **Recommendation 8 – Innovative Infrastructure**

- a. To support the effective investment of LTIP funding, partner with FCM to create the Centre for Municipal Infrastructure Innovation and Sustainability (CMIIS) to help build the capacity of municipalities to improve asset management and innovative infrastructure practices.
- b. To provide the technical foundation for the CMIIS, work with FCM and other infrastructure stakeholders to renew and expand the National Guide to Sustainable Municipal Infrastructure (InfraGuide), which operated between 2001 and 2007 as a partnership between FCM, the National Research Council and Infrastructure Canada.
- c. Create the Innovative Infrastructure Fund (IIF) by expanding the FCM Green Municipal Fund endowment to make revolving loans and grants to municipalities for innovative, sustainable infrastructure pilot projects, including asset-management initiatives, and to leverage the best practices of these innovative pilots for use by all communities.

