

P3'S: BRIDGING THE FIRST NATIONS INFRASTRUCTURE GAP



The Canadian Council for
Public-Private Partnerships



Le Conseil Canadien pour
les Partenariats Public-Privé

www.pppcouncil.ca

 @pppcouncil

The Canadian Council for
Public-Private Partnerships



Le Conseil Canadien pour
les Partenariats Public-Privé

Contents

| | |
|--|-----------|
| Introduction..... | 2 |
| First Nations Infrastructure Deficit..... | 3 |
| Explaining Public-Private Partnerships | 5 |
| P3 Benefits for First Nations Communities..... | 7 |
| First Nations Involvement in the Process..... | 8 |
| Where Do We Go From Here?..... | 13 |
| A Possible Model..... | 14 |
| Concluding Comments | 16 |

Acknowledgements

The Canadian Council for Public-Private Partnerships would like to thank Jeff Frank, Senior Director, The Castlemain Group and Dale Booth, President, Tiree Innovation Inc. for their contributions to this report. We would also like to thank the many First Nations', private sector and government representatives who provided information and advice to help make this research possible.

Introduction

The worldwide infrastructure deficit, which has been pegged to rise to \$57 trillion by 2030,¹ is having a negative impact on economic activity, quality of life, and in some instances, basic infrastructure needed to live. In Canada, the infrastructure deficit could be as high as \$570 billion,² with the Federation of Canadian Municipalities estimating the municipal shortfall of that total being \$123 billion.³

The solution to the infrastructure gap is multi-faceted, but governments at all levels are moving toward long-term infrastructure plans with record levels of investment. However, governments are also attempting to tackle this challenge in an era of low growth and low fiscal flexibility, increasing their need to ensure that their investments are maximizing value for taxpayer dollars, delivering high-quality infrastructure on time and on budget. Increasingly, public-private partnerships (P3s) are one of the tools governments are using to meet this challenge.

But as Canada moves towards new and innovative ways to meet the increasing demand for infrastructure, First Nations continue to struggle with an immense infrastructure deficit on reserve and an outdated procurement and financing model that stands to further strain the dire state of infrastructure in these communities.

Over the past twenty years the public sector has been implementing, in ever-increasing frequency, public-private partnerships and other alternative service delivery (ASD) methods as alternatives to traditional financing and procurement models such as preliminary project approval (PPA), effective project approval (EPA), or design-bid-build. However, First Nations infrastructure procurement and financing processes have not changed.

There are myriad reasons why innovation in First Nations infrastructure procurement and financing has lagged behind the rest of the Canadian public sectors, whether because of the inflexibility of *The Indian Act*, existing federal government policies, First Nations capacity issues, or lack of capital expenditure size, to name just a few.



AN EXAMPLE OF POOR HOUSING CONDITIONS AT THE WASAGAMACK FIRST NATION

¹ "McKinsey & Company, "Infrastructure Productivity: How to Save \$1 Trillion a Year," January 2013.

² The Canadian Chamber of Commerce, "The Foundations of a Competitive Canada: The Need for Strategic Infrastructure Investment," December 2013.

³ Saeed Mirza, The Federation of Canadian Municipalities, "Danger Ahead: The Coming Collapse of Canada's Municipal Infrastructure," November 2007.

This report will:

- provide an overview of the infrastructure deficit facing First Nations and the Federal Government;
- explain P3s and some of the key benefits of the model;
- describe the opportunities P3s could potentially provide for First Nations communities;
- identify the key inhibitors that prohibit First Nations from actively participating in the P3 market;
- provide an overview of the feedback heard from our market sounding; and
- propose solutions that could give First Nations the opportunity to participate in the P3 market by providing the necessary security for the finance markets to become active in the sector and help bridge the infrastructure gap.

This report is intended to spark discussion about innovative ways to tackle the First Nations infrastructure gap, and it is important to note that P3s are just one tool in the toolkit, not a panacea. Furthermore, some barriers to creating a First Nations P3 market will not be overcome instantly, but that should not detract from critical investments needed right away. Finally, P3s truly are about partnerships and should only be undertaken where there is a willing First Nation partner.

First Nations Infrastructure Deficit

The infrastructure deficit, or gap, on First Nation lands has been the source of one of the main ongoing disputes between First Nations and the Federal government. The infrastructure deficit across First Nations in Canada has been estimated by some experts to be between \$25 billion and \$30 billion (with some citing even higher figures). There are differing views on the issue of whether current government investments are keeping pace with population growth and the rate of inflation. However, outcomes are not improving fast enough for Aboriginals, whose population grew at a rate significantly faster than that of the general Canadian population. The Aboriginal population increased by 20 per cent from 2001 to 2006 and nearly by the same percentage between 2006 and 2011, although some of this growth can be attributed to an increase in non-status Indian or Métis self-identification.⁴ Status Indian population growth hovered at just above 2 per cent per annum over the 2001–2011 period.

⁴ "Aboriginal Demographics From the 2011 National Household Survey," Aboriginal Affairs and Northern Development Canada, www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ-AI/STAGING/texte-text/abo_demo2013_1370443844970_eng.pdf

⁵ Community Opportunity Readiness Program (CORP) Program Guidelines.

⁶ National First Nations Infrastructure Investment Plan 2014-15 <https://www.aadnc-aandc.gc.ca/eng/1425477312133/1425477531299>

In Ontario alone the infrastructure gap was estimated to be approximately \$2.2 billion for housing, \$2.5 billion for institutional service buildings⁵, \$2 billion for water and wastewater treatment plants, and \$1.9 billion for linear structures and roads.⁶

Infrastructure Deficit (Ontario)

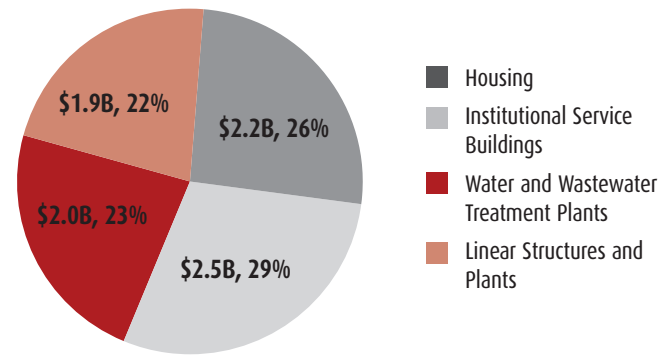


FIGURE 1. ONTARIO FIRST NATION INFRASTRUCTURE DEFICIT

Figure 1 details the breakdown of the infrastructure deficit in First Nations across Ontario alone. The deficit is split fairly evenly across four areas:

- housing;
- institutional service buildings (education facilities, community buildings, etc.);
- water and wastewater treatment plants; and
- linear structures and roads.

Figure 2 illustrates the range of estimated infrastructure deficits in First Nations communities across all seven regions of Canada, both as a conservative estimate and a calculated proportionate estimate relative to the deficit in Ontario.

First Nations Infrastructure Deficit (\$ Billion)

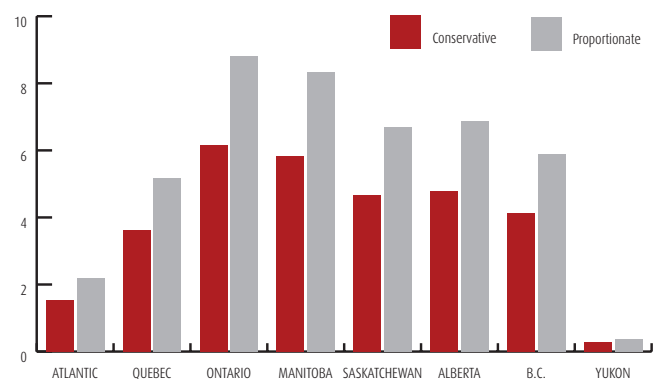


FIGURE 2: FIRST NATIONS INFRASTRUCTURE DEFICIT BY REGION

It is, possible, however, that the deficit is much greater. The Ontario First Nations Technical Services Corporation (OFNTSC) puts the Ontario infrastructure gap on First Nations reserves at \$8.8 billion, a figure calculated over a 20-year period and putting the annual gap at almost \$500 million. In 2011, the annual infrastructure budget for First Nations in Ontario was around \$260 million. The OFNTSC reported in 2011 that, on average, an on-reserve housing unit cost \$250,000 and that \$2.2 billion was required to remedy Ontario's First Nations housing deficit,⁷ defined as the amount needed to build new units to meet demand and renovate houses in need of major repair. OFNTSC's own estimates put the First Nations housing deficit at 8,800 units in Ontario alone.

The national First Nations infrastructure deficit figures were estimated using the Ontario deficit figure and proportionately distributing the gap across each of the regions using each regional First Nation population as weighting. The population figures were those cited in Aboriginal Affairs and Northern Development Canada's (AANDC) *National First Nations Infrastructure Investment Plan 2014–2015*.⁸ Though this methodology is not ideal, a large-scale study of this kind, which would be the only way to get more accurate information, has not been undertaken; the closest thing to such a study, "The National Assessment of First Nations Water and Wastewater Systems," was completed in 2011.

Using this methodology it can be estimated that Ontario and Manitoba have the greatest deficit, of respectively \$8.8 billion and \$8.34 billion proportionately and \$6.16 billion and \$5.84 billion conservatively, as shown in Figure 2. (The conservative numbers are 30 per cent⁹ lower than the proportionate numbers to reflect the possibility that Ontario's situation may not be representative of the rest of the country; this study, based on a range of available estimates, errs on the side of underestimating rather than overestimating the gap.)

In 2011 the Assembly of First Nations (AFN) estimated that across Canada capital expenditures on reserves were underfunded by \$169 million to \$189 million annually and operations and maintenance expenditures by \$11 million. At that time the AFN included 40 new schools costing \$12.5 million each and 85,000 housing units costing as much as \$21.25 billion that would have to be built just to meet current needs.¹⁰ These figures are supported by a report from the Canadian Centre for Policy Alternatives, *Delivering the Goods: Alternative Federal Budget 2015*, which estimated that by 2034, there will be a housing shortfall of 130,197 units, a need for an additional 11,855 units to replace existing ones, and approximately 10,000 units requiring major repairs, all of which will require an investment of nearly \$1 billion per year.¹¹

TABLE 1: AANDC PLANNED REGIONAL INFRASTRUCTURE EXPENDITURE (VOTE 10) FOR 2014-2015

| Breakdown of Regional Vote 10 Spending for 2014-2015 | | | | | | | | | |
|--|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------|----------------------|
| | Atlantic | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Yukon | National |
| Education Facilities | 4,708,000 | 3,431,372 | 47,717,257 | 12,075,400 | 10,968,71 | 8,123,125 | 26,464,909 | 0 | 113,488,764 |
| Water & Sewer | 4,148,297 | 10,220,307 | 31,828,893 | 52,847,636 | 26,364,700 | 4,895,890 | 25,414,867 | 1,850,000 | 157,570,590 |
| Contaminated Sites | 0 | 0 | 1,457,111 | 5,403,500 | 0 | 0 | 2,407,000 | 0 | 8,907,611 |
| Community Infrastructure | 3,002,703 | 0 | 23,598,272 | 67,981,923 | 11,699,200 | 2,549,313 | 15,833,948 | 500,000 | 125,165,359 |
| Minor Capital (Formula) | 9,060,182 | 22,468,583 | 48,020,043 | 51,598,601 | 29,047,955 | 51,299,072 | 20,235,069 | 2,872,218 | 234,601,723 |
| Minor Capital (Proposal) | 11,546,595 | 5,198,839 | 27,630,462 | 5,624,290 | 5,480,226 | 16,233,030 | 23,909,056 | 1,148,965 | 96,771,463 |
| Infrastructure O&M | 18,333,438 | 30,826,248 | 123,508,192 | 64,044,722 | 57,320,872 | 51,560,915 | 51,286,885 | 2,868,076 | 399,749,348 |
| Grand Total | 50,799,215 | 72,145,349 | 303,760,230 | 259,576,072 | 140,881,654 | 134,661,345 | 165,191,734 | 9,239,259 | 1,136,254,858 |

⁷ <http://www.wawataynews.ca/home/huge-first-nations-infrastructure-gap-reported>

⁸ <http://www.aadnc-aandc.gc.ca/eng/1425477312133/1425477531299>

⁹ Since large material disparities exist between Ontario's northern and southern First Nations communities, it is difficult to determine whether Ontario is representative of the rest of the country; therefore, this report uses a conservative estimate when extrapolating Ontario's figures to arrive at its estimate for Canada as a whole.

¹⁰ <http://www.cbc.ca/news/canada/shacks-and-slop-pails-infrastructure-crisis-on-native-reserves-1.1004957>

¹¹ https://www.policyalternatives.ca/afb2015chapters/First_Nations.pdf

AANDC Planned Spending by Region

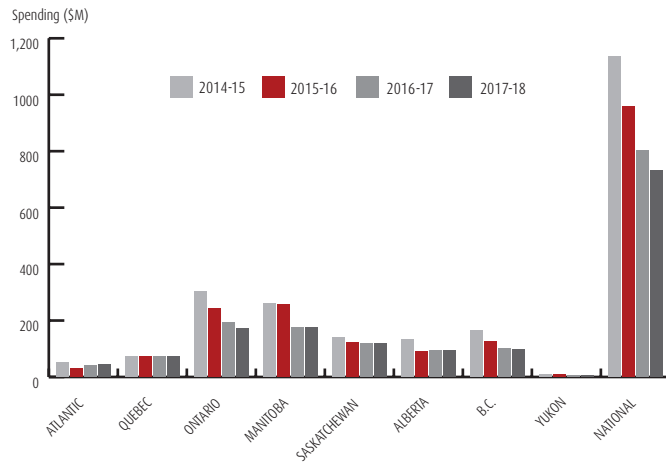


FIGURE 3: AANDC PLANNED REGIONAL INFRASTRUCTURE EXPENDITURE 2014-2018

The Federal Government, on the other hand, calculates the total cost for housing needed on reserve is within the range of \$5 billion to \$8.75 billion. This disparity demonstrates the confusion and lack of consensus that surrounds the First Nations housing deficit.

Table 1 and Figure 3, both based on numbers taken from the AANDC's *National First Nations Infrastructure Investment Plan 2014–2015*, indicate previous-year spending along with planned spending to the fiscal year 2018–19 and detail regional spending for grants and contributions (Vote 10)¹² for 2014–15 (Table 1) as well as total infrastructure investment by region and planned spending by region to the fiscal year 2017–18 (Figure 3).

What Table 1 and Figure 3 both clearly illustrate is that the Federal Government has not planned infrastructure investment on reserve very far into the future. Both also indicate future declines in spending, although it is expected that subsequent budgets will include further investments. This is in contrast to the long-term planning we have witnessed for other levels of government. The current trajectory of planned spending coupled with the current gap in infrastructure investment points to an increased infrastructure gap in 2018.

Federal, provincial, and municipal governments are all using innovative financing and procurement methods to maximize value and build community infrastructure faster, and are increasingly using public-private partnerships (P3s) as one of those methods. Unfortunately, infrastructure projects on reserve are cash-managed, which in practical terms means that the Department of Indigenous

and Northern Affairs Canada will only move a project forward when it has the money on hand. This largely prevents any innovation from taking place and means P3s are unlikely to be leveraged in any sizeable way until the funding structure and flexibility changes.

Explaining Public-Private Partnerships

What are Public-Private Partnerships (P3s)?

Public-private partnerships, also called PPPs or P3s, are partnerships between governments and the private sector to build public infrastructure like roads, hospitals or schools, or to deliver services.

Simply, the public sector integrates all phases of a project (design, building, finance, maintenance, and sometimes operations) into one contract.

This approach requires the architect, the builder and the maintenance provider to form a team (a consortium known as "Project Co") with a private-sector lender. The team members collaborate with each other to plan, design and construct the project (see Figure 4). Through their lender, they finance the project during its design and construction phases and are not paid until the project is substantially complete. If there is a maintenance component the government normally makes availability payments to the private-sector consortium over the course of the contract (normally 25 to 35 years) based on the availability of the asset, with strict stipulations about the quality of infrastructure upon handback to government at the end of the contract.

Depending on a project's scope and size, the consortium may include one or more architects, contractors, lenders and financial institutions, and maintenance and operation providers.

Typical P3 Project Structure

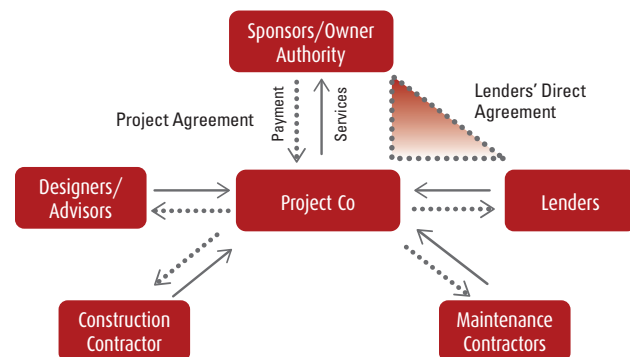


FIGURE 4: TYPICAL P3 PROJECT STRUCTURE

¹² For an explanation of "voted" spending by the Federal Government, visit <http://www.tbs-sct.gc.ca/hgw-cgf/finances/pgs-pdg/be-bd/index-eng.asp>

How do P3s work?

Where the business case supports P3s, these fixed-price contracts are used to deliver large, complex infrastructure or to deliver multiple infrastructure facilities and services across a region. P3s have been used to build and expand roads, bridges, hospitals, water treatment plants, wastewater facilities, transit systems, schools, justice facilities, broadband, and social housing, among other sectors.

The public sector always owns the infrastructure. It determines when and where to build an infrastructure project, the scope of the project and its budget. The public sector also selects, using a competitive process, which private-sector companies will design, build, finance, maintain and operate a public infrastructure or public service. One major difference from traditional procurement is that instead of specifying exactly what must be built, a government will provide the outputs it is looking for from the asset, encouraging private-sector innovation to provide the best solutions for achieving those outputs.

Why use P3s?

P3s have a strong track record in Canada of delivering high-quality public infrastructure faster and more cost-effectively than traditional delivery methods, providing better value for money.

In a traditional arrangement the public sector assumes the risk for time and cost overruns on an infrastructure project, and historically such cost overruns have not been uncommon. The P3 approach transfers risks to either the public or private sector based on their areas of expertise; cost overruns are borne by the private partner and are rare.

In a P3, for example, the government (the public partner) retains risks such as the time and costs associated with the Crown's duty to consult and accommodate First Nations; the government also likely holds the risk around obtaining land for a project. On the other hand, the private sector, since it is responsible for construction costs, delays caused by labour disruptions, etc., bears far greater risk than it does under traditional procurement.

The fact that the private sector is financing the upfront costs of the project provides incentives for it to complete the project on time and on budget since the public-sector partner will not pay for the asset until it is substantially complete, will not pay for cost overruns, and may impose penalties for time delays; the equity partner is motivated to ensure that the consortium stays on track to avoid losing money on the project.

P3s also take into account the full life cycle costs of an asset. Since design, construction, operations and maintenance are covered by the same contract and since the private-sector consortium is responsible for the infrastructure over the duration of the contract with such payment incentives and disincentives as are listed above, it will be invested in providing good design, quality construction and durable materials as well as minimizing changes during construction. Not only does this ensure longer-lasting infrastructure, but also, since the contract also stipulates that its maintenance is fully assumed by the private-sector partner for the life of the contract, maintenance of an asset can no longer be deferred, for example by a government in a given year to try to balance the books, or any savings spent on a new project. The proper construction and long-term care of the asset means long-term cost savings.

When to use a P3: Key Ingredients

The Canadian Council for *Public-Private Partnerships' Public Private Partnerships: A Guide for Municipalities*¹³ covers much of what has been discussed above, and also details many of the finer points of P3s, including how they may be structured and the roles of the various players; this report will not go over the same ground. Its focus, rather, is to outline what first steps must be taken to create the conditions under which a P3 market might be established in First Nations communities and to provide useful information for those contemplating a P3 project. However, the CCPPP guide has a section that focuses on the key ingredients for success in a P3 project worth highlighting here. Section 5 identifies some of the hurdles First Nations communities must overcome to obtain these key ingredients.

Public-private partnerships are a proven procurement option and offer many benefits to municipalities but they are not a panacea for Canada's infrastructure deficit and are not suitable for every infrastructure project. PPPs must be able to demonstrate value for money but for some projects, depending on their unique characteristics, traditional delivery methods may provide better value for money and may be the more appropriate procurement option.

Generally the characteristics that make a project suitable for PPP procurement include:

Quantifiable Output Specifications: *You can measure performance objectively based on quantitative parameters. For example, the temperature in the room must not be below 18 degrees Celsius and no higher than 22 degrees Celsius; a water treatment facility must maintain a minimum pressure in the water delivery system; the ice rink must be available for us between 6 a.m. and midnight seven days a week;*

Market Capacity: *Sufficient market capacity and interest exists in the private sector. This will help to ensure that competition among private-sector players drives savings and innovation;*

¹³ The Canadian Council for Public-Private Partnerships, *Public Private Partnerships: A Guide for Municipalities*, p.16, <http://www.p3canada.ca/en/about-p3s/p3-resource-library/public-private-partnerships-a-guide-for-municipalities/>

Degree of Risk Transfer: *The public sector can extract value from transferring responsibilities to the private sector because the latter can best manage those responsibilities and associated risks. Conversely, PPP will not generate value if the private partner is being asked to take on responsibilities and risks for which it is ill suited. For example, it would be difficult to ask the private partner to pay entirely for a social housing project from the proceeds of the rental revenue if the private partner does not have control over the parameters which influence that revenue, such as the location of the project, soliciting and managing tenants, and setting rents and rental increases. Typically, given their commitment to the social housing mission, the public partner retains these responsibilities;*

Distinct Service or Facility: *When specifications and performance measurement can be clearly set for the service or facility in question. For example, it would be difficult to set energy efficiency performance parameters for a new wing of City Hall that is physically integrated to the existing building and will share electromechanical services with the existing building.*

The value generated by P3s is also enhanced when:

Project Term: *Terms of 25 to 35 years, driven by long-term demand for the asset and a sufficient operating period to allow the private partner to recover its investment;*

Significant Operations and Maintenance: *A significant operational component allows the private partner to produce operating and design efficiencies and to focus on whole-life cost minimization;*

Innovation: *There is potential for the private partner to contribute ideas and leading best practices to make the project more efficient and improve service quality;*

New vs. Refurbishment: *Projects involving the refurbishment of existing assets are less likely to be good candidates for PPP than projects involving the construction of new assets since refurbishment projects carry a high degree of latent defect risk which can be very difficult and expensive for the private sector to price.*

Project Size: *There is no minimum dollar value or project size that determines whether a P3 might make sense or not, but many governments start mandatory screening of projects costing more than \$100 million as they are strong candidates for P3s. Until recently, British Columbia's P3 screen threshold was \$50 million, an indication that smaller P3 projects can make sense; the larger and riskier the project, the greater chance a P3 will bring value for money.*

P3 Benefits for First Nations Communities

Benefits of using the P3 model to improve infrastructure in First Nations communities might include:

The Ability to Build More Infrastructure Faster: The integration of the design, building, financing, maintenance and sometimes operations into one contract leads to better up-front planning and integration of projects. P3s generally have a longer procurement time, but that time is often more than made up through the construction phase, which can often proceed much more quickly than projected due to the integration of design and construction within one contract as well as the private sector's incentive to reach substantial completion of the project as soon as possible in order to be paid.

Since in most instances the private-sector consortium is not paid until substantial completion, the liabilities incurred in a P3 may not be paid until several years down the road, freeing up resources for more projects today. This budgeting flexibility allows governments to tackle the infrastructure deficit through a mix of P3s and traditional projects. This benefit is magnified for First Nations, since because some needs relate to basic health and safety, the sooner infrastructure is in place and more disposable income is on hand, the better it is for the community.

Better Value for Money: The transfer of risk to the private sector and the on-time, on-budget performance of P3s mean citizens get more for their dollar, and in First Nations communities with limited resources, every dollar counts, and money that is saved can then be put toward other priority projects for the community.

Though P3s have higher transaction costs than traditional design-build (DB) projects, construction and operation and maintenance costs can be much lower and the risk retained by the public sector in a P3 is minimal compared to in the DB model, making P3s a much more attractive option.

Increased Competition and Expertise: P3s' highly competitive procurement processes drive down prices. The size of the projects attracts competition from across Canada and around the world, including proponents with a track record of expertise in major projects, and results in lower prices and more innovation, which would be a welcome change for a market that sometimes lacks competitive interest and attracts the occasional "bad actor."

High Quality Infrastructure: Unfortunately, there are too many stories of shoddy construction on reserve. However, the fact that the private sector finances a P3 project and is responsible for its maintenance over the course of the contract ensures high-quality infrastructure. For example, if the P3 consortium builds a school with

low-quality roofing and the roof starts leaking after eight years, the cost to fix it is borne entirely by the private sector, which is a motive to use the best possible materials in the first place if savings are to be accrued over the life of the 25- to 35-year contract.

Operations & Maintenance Fully Funded: Currently, infrastructure on reserve tends to deteriorate more quickly than its expected life cycle because O&M is not fully funded; sometimes the community lacks adequate training or is unable to retain the right employees to operate the facility. Under a P3, the private sector is responsible for ongoing maintenance of the asset and payment is incentive-based, so the private partner is motivated to ensure capacity as well as training and retention of personnel or it risks not meeting the requirements of the performance-based contract.

It is important to note that a new O&M model is needed at INAC. The current model, in which INAC only approves infrastructure projects once it has the cash on hand, essentially means that no leveraging of dollars or spreading a project's costs over many years can occur. This is not just a barrier to P3 – it is a barrier to better outcomes for all infrastructure on reserve.

First Nations Involvement in the Process

Given the integrated approach of P3s, First Nations will be at the table through all phases of the project right from the planning phases, ensuring that the community can put its needs at the forefront from the beginning of the process. Particularly if projects are bundled together, collaboration among First Nations will be critical. There may be a significant role for Tribal Councils in organizing these projects.

A number of First Nations communities are rural, northern, and remote, which makes any type of construction project expensive and at risk of overruns and time delays. Though P3 bidders will attach a price to assuming this risk, the fact that governments will not be liable is a major incentive.

There are six sectors in particular where P3s might provide a way of mitigating the infrastructure deficit plaguing First Nations communities, both in First Nations' connections to the rest of Canada and with core infrastructure on reserve.

Opportunity Sectors – Connecting Communities

Roads/Highways: Many First Nations are still only accessible by fly-in or winter road networks, and this isolation can add significantly to their cost of fuel, food, health care and so on, as well as reduce labour mobility and economic opportunities. Connecting communities to provincial and territorial highway networks would be major undertakings and given the size of most such projects, they would be strong candidates as P3 projects. In particular, climate change presents a serious challenge to the long-term viability of the winter road network and major issues are already appearing in a number of communities with a shortened winter road season.

A number of highway projects throughout Canada have utilized the P3 model; P3 has also been proven effective in roads built to connect major resource projects to the broader network.

Electrification: There are far too many communities off-grid and that rely for power on diesel generation, which can be expensive and unreliable, and produces negative environmental impacts. Providing the necessary generation and/or transmission lines required to connect communities to provincial power grids would be an expensive undertaking for some jurisdictions. Bruce Power,



SIERRA YOYO DESAN RESOURCE ROAD, BRITISH COLUMBIA



MACKENZIE VALLEY FIBRE LINK PROJECT, NORTHWEST TERRITORIES

John Hart Generating Station, Kokish River Hydroelectric Project, The Fort McMurray West 500-kilovolt Transmission Project are all examples of successful P3 projects in the energy sector.

Broadband: The U.S. Federal Communications Commission has stated that the United States is lagging behind other countries in high-speed broadband access.¹⁴ Canada's situation is far worse, and the deficit gap will become even larger if nothing is done, and will become even more pronounced in First Nations' rural, northern, and remote communities. Aside from the purely economic benefits of high-speed broadband, there are social benefits as well, including access to broader telehealth programs and education tools.

The Northwest Territories is constructing a P3 fibre broadband project that will connect Yellowknife to the Arctic Ocean, providing Internet access to Canadians truly from coast to coast to coast. It is a perfect example of the model that could be used to connect First Nations communities.

Opportunity Sectors – Core Community Infrastructure

Schools: The need for more school infrastructure on reserve – whether new schools, renovations, or major repairs – is long-documented. While most stand-alone projects will not cost \$50–\$100 million, regional and national needs are so great that a bundling of projects could easily hit the threshold to make P3 procurement attractive. Examples off-reserve in Saskatchewan and Alberta provide plenty of evidence to demonstrate the value for money that can be attained through bundling school projects. School infrastructure likely provides the single largest opportunity for P3s on reserve.

Water/Wastewater: To bring systems up to standard and reduce the number of boil water advisories across the country water and wastewater investments may need to be in the billions of dollars over the next decade.¹⁵ Though a bundling of systems has not occurred like it has for schools off reserve, there are a number of successful stand-alone P3 projects in this sector. The Saint John Safe Clean Drinking Water initiative and the Regina Wastewater Treatment Plant are two examples where significant savings are being realized by using the P3 approach. Given the scope of most on-reserve projects, it is likely that bundling would be the more attractive option for the private sector.

Housing: As noted earlier, the need for housing on reserve could top 130,000 units by 2034 if action is not taken soon. While projects within one single community would be unlikely to attract the interest of the P3 sector, a bundling or large-scale partnership could create the project size necessary to generate savings through the use of P3s. The Vancouver SRO Renewal Initiative project and the Pan American Games Athletes' Village are two examples where P3s have been utilized to deliver much-needed social housing. Local contractors are often used for housing projects, and any P3 in the housing sector would need to pay particular attention to local employment.

So if the benefits of P3s are so stark, why have they not been taken up by First Nations communities? Significant challenges have been identified that must be solved in order to develop a robust P3 market in First Nations communities.

¹⁴ <https://www.fcc.gov/document/fcc-finds-us-broadband-deployment-not-keeping-pace>

¹⁵ www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/enr_wtr_nawws_rurnat_rurnat_1313761126676_eng.pdf



OUTHOUSES IN USE AT THE WASAGAMACK FIRST NATION

Barriers to P3s in First Nations Communities

Before examining the barriers to a P3 First Nations market, it is important to examine the two P3 projects that involve First Nations government participation.

Kokish River Hydroelectric Project

The 'Namgis First Nation partnered with Brookfield Renewable Energy Partners to develop a \$200 million, 45-megawatt hydroelectric generating facility and involves the design, construction, financing, and operation phases. The Kwagis Power Limited Partnership, the special purpose vehicle that is developing the project, is 25 per cent owned by the 'Namgis First Nation and 75 per cent owned by Brookfield Renewable Energy Partners. The project is located on the traditional territory of the First Nation, not on reserve land. This was the first project to receive PPP Canada funding through a loan, which offered the First Nation a better borrowing rate to take its equity share in the project, saving the First Nation substantial amounts because of lower interest payments.

While this is a very successful project and a good-news story, there are a few things worth noting that demonstrate why it is not necessarily the breakthrough for First Nations P3s that one would have hoped:

- The project is not on reserve land;
- The ownership structure is not majority-owned by the First Nation, which, since P3s are always owned by the public sector, makes this project at best a quasi-P3;

- Since the project was not on reserve land the private partner could have moved forward on its own after consultation obligations were met. To the benefit of all involved, the private partner chose the most collaborative method possible – bringing the 'Namgis First Nation in as an equity partner – but that was not the only option available to it.

Okanagan Correctional Centre

The second example of a P3 with First Nation government involvement is the Okanagan Correctional Centre, a regional corrections facility located on the Osoyoos reserve in British Columbia. The new facility is being constructed on First Nations reserve land, with the British Columbia government signing a 60-year, \$10.8 million land lease agreement with the option to extend for an additional 20 years. Again, this is a very exciting P3 project that is bringing jobs to the local community, but it is also unlikely the breakthrough project for First Nations because although the project is on reserve land, the Osoyoos First Nation is not an owner or participant in the project itself. The provincial government is the owner of the asset and is leasing the land from the Osoyoos First Nation; in essence, they are the facility's landlord.

The Mackenzie Valley Fibre Link project in the Northwest Territories and the Iqaluit Airport project in Nunavut are two other examples for governments to look at when considering how to move P3 projects with First Nations forward. Both projects feature indigenous benefits packages to ensure that there are also benefits for the local communities.



SASKATCHEWAN JOINT-USE SCHOOLS



OKANAGAN CORRECTIONAL CENTRE, BRITISH COLUMBIA

There have been a couple of other attempts by First Nations to explore the use of the P3 model for projects but they have resulted in little or no success. For example, in 2010 the Atlantic Policy Congress of First Nation Chiefs put forward a revolutionary proposal to create a single water authority for the Atlantic region, develop its own water and wastewater regulations and bundle the infrastructure components of water and wastewater facilities into one project as a P3,¹⁶ yet the project has largely been stalled at the federal level for unknown reasons.¹⁷ The 2012 Federal Budget also allocated \$50 million to look into the use of P3s to complete four Manitoba school projects.¹⁸ That project has failed to materialize again for unknown reasons. Other applications for PPP Canada funding have not led to success with the exception of the 'Namgis project discussed above.

Barriers to Entry

There are likely a number of reasons for the lack of progress on P3 projects, including the following:

Financial Backstop/Long-Term Investment Authority

Probably the single most important requirement for a successful First Nations P3 project is a secured financial backstop for the length of the concession period, typically 25 to 35 years. This market requirement has been mentioned repeatedly in market soundings with the private sector and in business cases developed for proposed First Nations P3 projects. When this key component is not in place before anything else the ability of a First Nation P3 infrastructure project to get to an investment decision is nonexistent.

A few mechanisms can provide a financial backstop or long-term investment authority. The easiest may be allowing First Nations to enter into 25- to 35-year funding agreements with the Federal Government. Currently, Treasury Board can allow funding agreements of up to ten years,¹⁹ but the norm has been just one to five years depending on the financial strength of the community.

The rationale for shorter agreements is largely based on the lack of confidence the Federal Government has in a First Nation's ability to manage the funds in the agreement. While in some instances such concerns may be real, the remedy – that is, withholding funds for things like school operations, water/wastewater management, and other core infrastructure – borders on the absurd. Tools exist to deal with fiscal mismanagement but entering into one-year deals year after year seems like a red-tape-heavy approach with no discernible positive outcome for either the First Nation or the government. A

funding agreement that lasts 25 to 35 years can still include tools for a government to use to ensure that money is well-managed, and that include appropriate recourse mechanisms if it isn't. An even bolder step would be to move to a formula-based transfer system to First Nations similar to what the Federal Government does with the provinces.

The Financial Management Act provides another vehicle that can be used for long-term investment with a financial backstop. The benefit of this for government is that entry into the borrowing regime requires the First Nation to put in place a strong financial governance regime, and the benefit for First Nations is in using a system run by First Nations for First Nations and allowing the pooling of its own source revenue to leverage financing from the markets for infrastructure investment. However, although the first bond issuance raised \$90 million, that revenue pool is still relatively small when considering a single P3 procurement can be over \$50 million or more, exhausting the fund with just one or two projects.

Other options to overcome this problem could range from loan guarantees to the Federal Government entering into and financing the P3 arrangement on behalf of the First Nation.

Governance

Another key component that is critical to the development and successful implementation of a P3 infrastructure project is a strong governing body that can act on behalf of First Nations or provide critical support necessary for a First Nation pursuing a P3 on their own. P3s involve thorough upfront due diligence and the drafting of contracts and agreements, and they require significant legal and technical expertise to ensure a project is done right. Existing tribal councils and other provincial treaty organizations lack the necessary experience, expertise, and structure that would allow them to act as counterparties in a P3 transaction. There is no representative body such as Infrastructure Ontario or Partnerships BC for First Nations to work with so that they can effectively participate in P3/ASD projects. Historically, attempts by First Nations to participate have been channeled through AANDC; however, this organization also lacks the experience, expertise, structure, and necessary long-term investment authority that could allow for successful First Nations P3 projects. PPP Canada itself is a funding agency and not a P3 procurement institution.

There are a few avenues that could lead to stronger governance on all sides and put First Nations in a stronger position to take advantage of future P3 opportunities:

- The federal government should boost funding to the FMA institutions to expand their operations and bring more First Nations into the regime;
- The federal government should either:
 - build the in-house capacity to advise on and support First Nations P3 projects;

¹⁶ <http://www.afn.ca/uploads/files/nfnic/1C.pdf>, p. 5.

¹⁷ Water and Wastewater Infrastructure Investment Report: April 2012–March 2013, www.aadnc-aandc.gc.ca/eng/1403198954861/1403199074561

¹⁸ Education Facilities Progress Report, April 2008 to March 2013, www.aadnc-aandc.gc.ca/eng/1402943744995/1402943840475

¹⁹ www.aadnc-aandc.gc.ca/eng/1322748384053/1322748516807

- create a P3 centre of excellence as a stand-alone entity or within an existing organization; or
- buy the expertise from provincial agencies and/or the private sector;
- First Nations governments should take the steps necessary to strengthen financial governance by achieving certification from the First Nations Financial Management Board if they have not already done so.

Market Support

Although the aboriginal banking sector has been growing and is identified by many financial institutions as “an emerging market,” participation in potential First Nations P3 projects has been met with lukewarm responses, primarily due to

- lack of a federal long-term investment authority (i.e., financial certainty);
- project size;
- concerns over project governance, especially over the long term; and
- length of project development time.

These factors create a risk profile that makes the financial institutions that historically participate in non-First Nations P3 infrastructure projects uncomfortable. Project market soundings have continually reiterated the point that these institutions want to participate in potential First Nations projects if the risk profile can be reduced by addressing the factors listed above.

Education or Training

There have been some educational and training initiatives in the past eight years targeted at providing P3 education to First Nations, Tribal Councils and other associated organizations. Although PPP Canada and INAC both ran programs to provide information to First Nations about P3, focusing on how they work, how to apply, and so on, it is clear that most communities still do not understand the mechanics of a P3 infrastructure project, what the necessary requirements are, and what role or responsibilities the communities have in the development and implementation of a P3 infrastructure project. There are a few options to build expertise in this space and The Canadian Council for Public-Private Partnerships can play a role in this regard.

Project Size

As mentioned previously in the Market Support section, one of the biggest factors is project size. The majority of infrastructure projects on reserve range in capital value (capex) from \$1.0 million to approximately \$25 million, far too small on their own to elicit interest from the financial markets as P3s. (As also mentioned earlier, projects over \$100 million are ideal, with projects in the \$50–\$100 million range also being viable in some instances.) As municipalities and First Nations struggle to meet their infrastructure requirements, the

technique of bundling similar projects together to form one P3 project has grown in popularity in recent years. While this approach makes sense in terms of increasing the capex and achieving some economies of scale, it also creates more pressure on project governance.

Land Management

The Indian Act limits First Nations' ability to control their own lands and often acts as a disincentive to development. Though not an absolute barrier to pursuing a P3 project, as the Okanagan Correctional Centre project demonstrates, it still acts as a disincentive for the private sector to enter into partnerships because of uncertain land tenure.

A movement by First Nations into the First Nations Land Management regime, self-government opportunities, or the pursuit of other mechanisms to bring certainty and greater clarity to the land management process would be welcomed by the market.

Where Do We Go from Here?

Market Sounding Results

The following is a synopsis of a market sounding conducted during the research for this paper and from market soundings associated with previous project development efforts:

1. There must be one central governing authority fully empowered and resourced as a credible counterparty to manage projects on behalf of the First Nations community and Indigenous and Northern Affairs Canada (INAC), with all of the same characteristics and powers of such comparable Provincial procurement agencies as Infrastructure Ontario, Partnerships BC or SaskBuilds, while understanding that there may be some structural differences, such as using existing First Nations institutions to play key roles. However, as in the provincial agencies, these institutions must be staffed by people with extensive P3 experience.
2. First Nations will need to have access to experienced P3 advisors and there will need to be a source of funds identified. The failure so far to move a P3 project forward has shaken market confidence and it is critical to get the next project right.
3. Governments should be looking for more opportunities to involve First Nations in P3 projects where First Nations can benefit through leases or benefit agreements and local employment opportunities, as was done in the Okanagan Correctional Centre project. P3 private-partner consortia should also proactively look to partner with First Nations and First Nation businesses – either within the consortia itself or as subcontractors on the project – since demonstrating local knowledge and benefiting the community by creating local employment can strengthen their bids.

4. The lack of knowledge about P3 as well as a lack of understanding of how First Nations might participate in them, whether as equity partners or in subcontracting roles, has resulted in communities missing out on employment and long-term revenue streams. Communities are not always given the best advice, often relying on consultants that do not have any P3 experience, which results in the communities not gaining or understanding the full benefit of the P3. A preapproved list of qualified, experienced P3 advisors should be compiled and supplied to First Nations communities to ensure that they obtain competent advice.
5. Since the use of unqualified advisory services leads to issues and challenges that threaten P3 transactions and put First Nations participation at risk, funding should be provided to First Nations to access experienced P3 advisory services; current funding programs should be adjusted to allow for the acquisition of professional P3 services in consideration of the long-term opportunities provided by P3 projects.
6. The private sector would benefit from being able to access community data and financial records as part of its due diligence process. In many cases this data is not available or is very difficult to access, which affects the level of risk attributed to pursuing a project in that community.
7. Continued starts and stops on P3 projects in First Nations has eroded private-sector confidence and its willingness to take on such transactions. The inability of both the Manitoba Schools initiative and the Atlantic Policy Congress's clean water project to move forward has contributed significantly to this perception.
8. There should be mandatory participation levels for First Nations in projects that occur within their traditional territories, similar to the American policy whereby consortia must meet certain participation thresholds in order for their bids to be compliant. In Canada, such participation is not mandatory and viewed only as "nice-to-have." An approach similar to that taken in the U.S. would ensure that First Nations people in Canada benefit from large projects taking place near their territories and communities.

A Possible Model

With First Nations infrastructure needs increasing at a greater rate than the government funding that is needed to meet them, and with significant barriers to entry for First Nations into the P3 market, there needs to be a new approach, one that will ultimately remove these barriers and allow First Nations access to the P3 marketplace so that they, too, can benefit from the innovation and savings the model has provided other levels of government in this country.

The easiest solution to procuring First Nations infrastructure using the P3 model would be to leverage existing P3 procurement agencies at the provincial level. Infrastructure Ontario, Partnerships British Columbia, Saskbuilds, New Brunswick Department of Transportation and Infrastructure, la Société québécoise des infrastructures, and Alberta Infrastructure all have experience successfully procuring P3 projects. First Nations or the federal government could simply buy their services. This option has sometimes been identified as an attractive one in discussions with First Nations, although not unanimously. Some First Nations expressed a desire for a First Nations-led process, outlined in more detail below.

Over the years federal legislation has created a number of institutions and organizations with the capacity to help lower the barriers to active participation of First Nations in P3 projects. In 2005 the *First Nations Fiscal Management Act* was created to allow for real-property taxation powers, financial management standards, and as a mechanism to pool own-source revenue²⁰ to leverage markets to raise revenue for infrastructure projects. The institutions established under this Act are the:

- First Nations Tax Commission;
- First Nations Financial Management Board; and
- First Nations Finance Authority.

Utilizing aspects of the current Act and amending parts of the legislation could go a long way to reducing the barriers to a P3 market, and various approaches could be undertaken to remove these barriers. The model illustrated in Figure 5, which was developed with the help of feedback from various market soundings, is just one option. Acting in concert these institutions could create the necessary structure, expertise and accountability required for First Nations to actively participate in the P3 market.

²⁰ Own-source revenue is "the revenue that an Aboriginal government raises by levying taxes and resource revenues or by generating business and other income. Under self-government agreements, Aboriginal governments use some of this revenue to contribute to the costs of their own operations (e.g., providing programs and services to their citizens)." <https://www.aadnc-aandc.gc.ca/eng/135411773784/1354117819765>

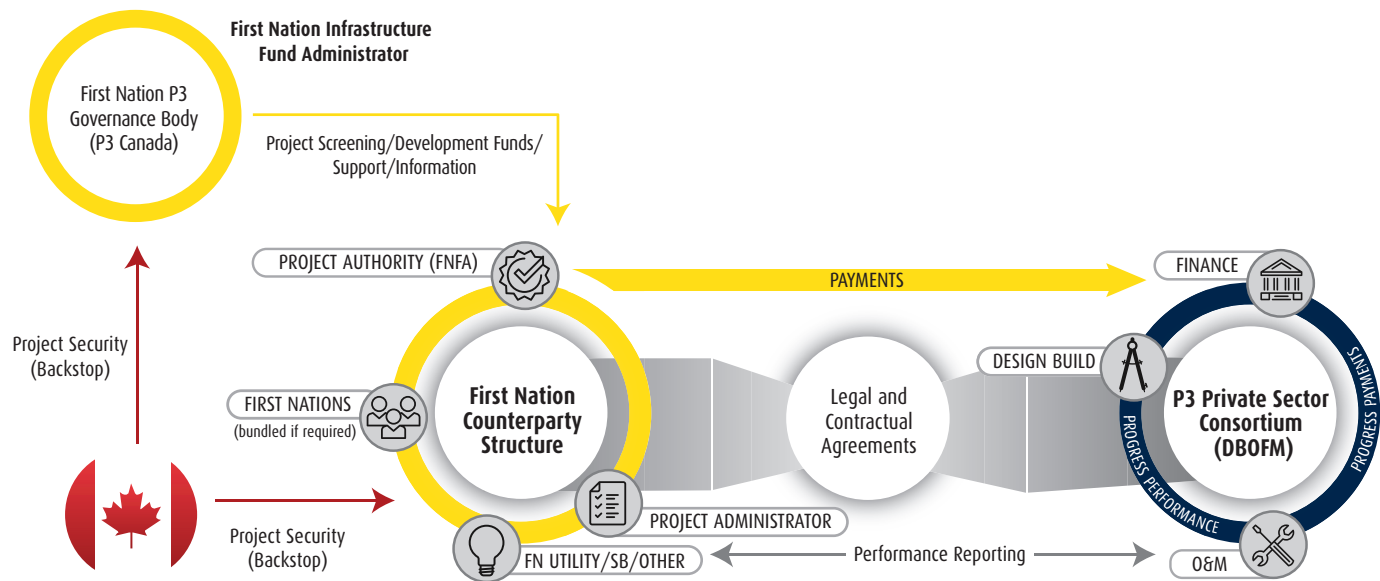


FIGURE 5: PROPOSED FIRST NATIONS P3 GOVERNANCE IMPLEMENTATION MODEL

A number of assumptions have been made in constructing this model:

- *The First Nations Fiscal Management Act* could be amended to reflect the First Nations Finance Authority and First Nations Financial Management Board's new responsibilities;
- that there is an appetite for PPP Canada or a similar entity to participate in this structure;
- that long-term investment authority could be obtained from Treasury Board;
- that this model would only apply for infrastructure on reserve and other projects where a First Nation or groups of First Nations act as proponent(s); and
- that these institutions are adequately resourced.

Proposed Roles

The following roles reference the model illustrated in Figure 5.

Canada

- financial backstop for all First Nations on-reserve infrastructure projects

PPP Canada

- provides information and support to First Nations wishing to enter into P3 projects

- provides preferred supplier list (for project management, procurement, business case development, etc.) to support P3 process
- acts as a reporting body for the performance of the fund
- provides support to a First Nations project screening process

Project Authority (FNFA)

- represents a First Nation or groups of First Nations as a counterparty structure to a P3 private-sector consortium
- can issue bonds to support certain infrastructure projects
- can enter into legal/contractual agreements on behalf of the FN/FNs.
- issues substantial-completion, capital and O&M availability payments to the private-sector consortium (20 to 30 year concession period)
- First Nations require entrance criteria to use the Project Authority

Project/Contract Administration (FNFMB)

- creates local agreements with O&M provider and FN operating body (utility, school board, housing authority, etc.)
- receives contract performance reports from O&M provider, trigger for availability payments throughout the concession period of the project;
- prepares annual financial review of the project

First Nation Utility/School Board/Housing Authority

- signatory on agreement with O&M provider and possibly project administrator
- provides emergency response for issues
- reporting body for performance review
- training body for required service personnel
- operated by an individual First Nation or bundled-member First Nations

Concluding Comments

In this report we have tried to:

- describe the existing condition of the First Nations infrastructure gap, and the opportunity that exists for the private sector to play a role in reducing this deficit;
- outline the key barriers to entry that exist today for First Nations when trying to enter into a P3 project and to identify why there have not been any successful First Nations P3 projects to date; and
- propose a structural solution that would bring together federally mandated institutions to provide support, guidance, funding and security for the financial markets.

There is ample opportunity for the private sector to benefit from a robust First Nations P3 market, but the private sector needs to fully understand the risks involved in pursuing these opportunities on reserve. Aside from the barriers and risks identified in this report, clarity around who owns the on-reserve infrastructure, who decides which infrastructure gets built, a more transparent federal decision-making process, affording the private sector legal certainty around projects, and a new approach to funding O&M will be critical to getting the necessary buy-in from the private sector. The inability to satisfy any of these questions will lead to higher risk premiums built into bids, which does not benefit anyone.

Next to municipalities, First Nations may hold the single greatest growth market in Canada for the use of P3s, and the benefits of a robust First Nations P3 market can be significant for the private sector if they can deliver high-quality infrastructure on time and on budget.

It is hoped that this report will further the discussion among all concerned sectors, helping them to together find a solution that enables First Nations to close the infrastructure gap they face; there is no doubt that forging new and deeper relations between First Nations and the Canadian business community will also lead to further opportunities for both.