



ASKING THE RIGHT QUESTIONS: A GUIDE FOR MUNICIPALITIES CONSIDERING P3s

SECOND EDITION



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INTRODUCTION



This guide is designed to answer questions mayors, municipal councillors and civic officials might have about public-private partnerships (P3s or PPPs).

There is renewed financial and political pressure on municipalities to use P3s to reduce the infrastructure deficit and deliver services. Proponents of P3s stress their perceived benefits, and the manuals P3 advocates prepare reflect this optimism.

This guide asks questions that probe deeper into the costs and benefits of P3s, giving municipalities a better understanding of what they involve. Based on the answers to these questions, this guide urges municipalities to take a cautious approach, fully examine the evidence, and ask the right questions before considering entering into a P3.

1.

HOW BIG IS THE INFRASTRUCTURE DEFICIT?

A 2007 study conducted for the Federation of Canadian Municipalities (FCM) estimated the backlog in maintaining and upgrading existing infrastructure to be \$123 billion,¹ broken down as follows:

- 25 per cent water and wastewater;
- 18 per cent transportation infrastructure (sidewalks, roads, bridges);
- 19 per cent transit systems;
- 33 per cent cultural, social, community and recreational infrastructure; and
- 6 per cent waste management.

By 2016 the FCM suggested that the infrastructure deficit had grown to \$388 billion (roughly 20 per cent of Canada's GDP) based on the state of repair of municipal assets.² Municipalities own 56.8 per cent of all infrastructure assets in Canada, for a total value of \$1.1 trillion. But most of these have already reached the end of their useful service life, "an astounding 28% of the assets are between 80 and 100 years old,"³ and nearly 35 per cent of municipal infrastructure assets are in urgent need of attention.⁴

Municipalities raise only 12 per cent of total taxes in Canada⁵ and hence are highly dependent on other levels of government and on borrowing to meet the growing need for investment in existing municipal infrastructure and development of new infrastructure. The consensus is that the infrastructure deficit continues to grow as federal and provincial funding fails to keep pace with demand. The issue is then how best to finance, build, operate and maintain municipal infrastructure.

2.

WHAT ROLE DO MUNICIPALITIES PLAY IN BUILDING AND MAINTAINING INFRASTRUCTURE?

Municipalities generally finance, own, operate and maintain infrastructure assets such as roads, water and wastewater lines and treatment plants, and transit systems. When building new infrastructure, municipalities either use in-house expertise or hire outside consultants to design the facility. The project is then put out to competitive tender to be built by the private sector to the fixed design specifications. The municipality (or a firm hired by the municipality) monitors the

private contractor's construction progress. On completion, the asset is handed over to the municipality, which is then responsible for operations and maintenance. Infrastructure construction is financed either out of accumulated municipal reserve funds established for that purpose, out of operating revenue, out of transfers from higher levels of government or, more usually, by issuing long-term debt.

3. WHAT ROLE DOES THE PRIVATE SECTOR PLAY IN INFRASTRUCTURE PROVISION?

The private sector already plays an important role in delivering municipal infrastructure. It may handle design work and construction monitoring if the municipality does not have in-house capacity. It handles all construction, as the public sector in Canada does not build infrastructure. The private sector bears prime responsibility, therefore, for projects being constructed on budget and on time.

In addition, private institutions such as pension funds, insurance firms and finance companies lend money to municipalities through municipal finance authorities or through the purchase of municipal bonds at relatively low interest rates. Pension funds also invest heavily in infrastructure P3s and do so strictly for financial reasons; they consider infrastructure a safe, long-term investment for pension capital.⁶

4. WHAT ARE P3s?

P3s are multi-year, often multi-decade, contracts in which a corporation or consortium of corporations assumes responsibility for activities previously undertaken by the public sector. These responsibilities include direct financing of infrastructure, as well as management, operation, maintenance and/or ownership of facilities.

P3 models have varying degrees of private involvement (see Appendix One for an overview of the most common P3 models). At one level, the private sector may operate or maintain public sector infrastructure, delivering services within the municipality's prior budget and retaining a portion of any savings. At the other extreme, the private company may design, build, finance, own, operate and maintain the facility. In between, the private partner undertakes some combination of these tasks. In some cases, assets are sold to the private sector and then leased back over the life of the contract.

In P3s involving private financing, the private company contributes a certain proportion of equity – usually about 10 per cent. The rest is loaned to the private company by banks and other financial institutions, which are often part of the consortium. The municipality makes regular payments to the private company to cover financing, operating and maintenance costs, as well as private sector profits.

Contracts range in length from 20 to 40 years (Ontario’s Highway 407 is an extreme 99-year contract), though service contracts can be shorter. The attraction for the corporation or consortium is that private delivery of municipal infrastructure and services can be extremely profitable. The return on private equity can be as high as 10 to 20 per cent, and in some cases higher.⁷ Long-term high rates of return at a low risk guaranteed by the public sector are very attractive for private sector investors in the current economic climate.

5. ARE P3s A FORM OF PRIVATIZATION?

Infrastructure built as a P3 may also be owned by the private sector. This is the case in build-own-operate-transfer (BOOT) P3s, such as Winnipeg’s Charleswood Bridge. However, in most P3s the public sector retains ownership, and takes over responsibility for operations and maintenance at the end of the contract. The most common forms of P3 in Canada are the design-build-finance-maintain (DBFM) and design-build-finance-operate-maintain (DBFOM) models. While ownership is public, there is an unprecedented degree of private involvement in and control of public services and assets. It is for these reasons that some view P3s as a form of ‘privatization by stealth.’⁸

Often, the corporation or consortium in a P3 will seek to expand its influence to include other aspects of municipal infrastructure or services. For example, in September 2000 Vivendi subsidiary US Filter, the corporation operating Moncton, New Brunswick’s P3 drinking water treatment plant, made an unsolicited bid to handle Moncton’s water distribution system. The city rejected the bid based on independent analysis — commissioned in response to great public outcry — which recommended the city finance and manage the system upgrades itself. In principle, if municipalities believe there is merit in an unsolicited bid, they should first examine the public option, and only then put it out to tender to avoid claims of possible collaboration, favouritism, or corruption.

6. WHO IS PROMOTING P3s?

The main promoter is the Canadian Council for Public-Private Partnerships (CCPPP). The members of this pro-P3 lobby group come from the various segments of the private sector that benefit from P3s, and from governments using them.

The federal government and many provinces have tried to institutionalize P3s by adopting pro-P3 legislation that encourages or requires tendering authorities to consider P3 approaches for the delivery of major infrastructure projects above certain thresholds (\$40 million in Quebec, and \$100 million in Ontario, BC and Saskatchewan in 2016).⁹

From 2008 until its closure in 2017, the federal crown corporation PPP Canada oversaw the P3 screening process for major infrastructure projects, and an initial fund of \$1.2 billion to facilitate P3 projects, specifically targeting municipalities.

In 2017, PPP Canada was succeeded by the Canada Infrastructure Bank (CIB), another crown corporation. The federal government provided the CIB with \$35 billion in funding over 11 years to invest in “revenue generating”¹⁰ infrastructure projects, including P3s, and to attract additional private sector investment from institutional investors such as pension funds. In doing so, the CIB has been criticized for commercializing public infrastructure and for serving as a “bank of privatization.”¹¹

For example, the CIB provided a \$1.2 billion loan to the Réseau express métropolitain (REM) P3 project, a new automated light rail network serving greater Montreal. Under the REM, the government of Quebec outsourced public transit planning, design, operation, maintenance and ownership of the rail line to CDPQ Infra, a subsidiary of the Caisse de dépôt et placement du Québec, an institutional investor managing the pension plans and insurance programs of several public and quasi-public entities in Quebec. CDPQ Infra will run the REM on a for-profit basis. Private, for-profit investors like the Caisse expect returns of between seven and nine per cent on their investment. This amounts to a cost of finance more than three and half times higher than the federal government’s 2.5 per cent cost of borrowing.¹²

P3s are most aggressively promoted by large multinational P3 corporations, financial investors, and the legal, accounting, and consulting firms that profit most from them. Others, such as the construction industry, architects, and engineers, have voiced concern and opposition to P3s for reasons discussed below.

7. HOW ARE P3s BEING PROMOTED?

P3s have been promoted for various reasons over the years. They became popular three decades ago because public sector accounting practices allowed governments to undertake infrastructure investments without the capital cost appearing on their books. But auditors have since tightened up their accounting rules. More recently, a variety of claims have been made to promote P3s.

Proponents claim P3s help municipalities access private financing that would not otherwise be available, closing the infrastructure gap and allowing municipalities to spend scarce resources on other activities. Proponents also claim P3s build infrastructure more cheaply and on time, bring more efficient operation of infrastructure and provision of services, improve maintenance, and bring innovation and improved design – all motivated by the private sector pursuing profit in a competitive and budget-constrained environment. All these claims have been challenged as being without foundation,¹³ as this guide will show.

8. HOW COMMON ARE P3s IN CANADA?

Between 1985 and 2011, 200 P3s were planned or implemented in Canada (137 finalized), costing US\$71.6 billion.¹⁴ This was equal to only about 5.3 per cent of total public sector spending on capital and repairs during this period. While the pace of P3s picked up in the last 10 years of that period, the vast majority of new infrastructure, between 80 and 90 per cent of all projects, was still provided in the conventional manner by the public sector.¹⁵ However, there has since been a push to expand the use of P3s in several sectors, including municipal infrastructure and services. By 2019, the CCPPP claimed that there were 286 active P3s valued at \$139.3 billion.¹⁶



FINANCE, COSTS AND REVENUES



9.

DO P3s INCREASE THE AVAILABILITY OF CAPITAL FINANCE FOR MUNICIPALITIES?

The short answer is no. All private sector financing for P3s must be repaid. P3 leases or operating payments are effectively debt payments, so municipalities are simply switching one form of debt for another. Larry Blain, former chair of Partnerships BC, the provincial P3 agency, told the publication *Bond Buyer*, “Clearly all the money is coming from the government’... ‘It’s debt of the province, whether you borrow it as bonds, or contract over a 35-year period.’”¹⁷ As Pierre Hamel wrote in a 2007 report commissioned by the FCM, “P3s are not a cure-all or miracle treatment for all situations. They do not offer municipalities a magic solution to the real problem of financing infrastructure, the primary and often only real challenge facing local governments.”¹⁸

The CIB provides loans, equity, and loan guarantees to P3 projects to attract private sector investments from private and institutional investors.¹⁹ Its \$35 billion fund comes from federal money that could have been made directly available for infrastructure spending without the necessity of P3s.

10.

DO P3s RAISE MONEY MORE CHEAPLY THAN MUNICIPALITIES?

No. Private P3 financing almost always has a higher interest rate and is usually paid back over a longer term than direct municipal borrowing. Moncton’s water treatment plant had lease terms that were the equivalent of a 10 per cent yearly interest rate, while Moncton could have borrowed directly at 5.85 per cent. Privately financing the plant’s \$23 million capital cost means Moncton has paid an extra \$14.4 million in debt costs over the 20-year contract (or \$8.4 million in 1999 terms, when the deal was struck) – money that could have been saved or used for other projects if the city had financed the plant itself at a much lower interest rate. Likewise, EPCOR is charging 6.462 per cent for its 30-year loan to upgrade and expand the Regina wastewater treatment plant. The city could have borrowed directly at 4.1 per cent, saving over a third of the interest costs.

High interest payments are also a feature of P3s arranged by provinces. For example, in 2014, the Auditor General of British Columbia reviewed 16 different P3 projects in seven different government organizations and two ministries. The interest rates on this \$2.3 billion of P3 debt ranged considerably, from 4.42 per cent to 14.79 per cent, with an average rate of 7.5 per cent, adjusted for project size. Over the previous two years, the government paid about four per cent interest for debt it had incurred directly. Private financing nearly doubled the cost of borrowing for these 16 projects.²⁰

In the United Kingdom, Edwards has argued that purchasing a building like a hospital through the UK equivalent of P3s, a Private Finance Initiative (PFI) contract, is like financing the purchase of a house with a credit card rather than a mortgage. According to Edwards' analysis, the annual cost of privately financed capital is 10 per cent whereas public financing costs 4.3 per cent.²¹

11. DO P3s INCREASE OR REDUCE LONG-TERM FINANCIAL FLEXIBILITY?

P3s significantly reduce the long-term financial flexibility of municipalities, for several reasons:

- They tie up municipal funding for more years, on average, than publicly financed projects;
- They cost more financially;
- They guarantee maintenance funding for specific projects only;
- They commit infrastructure to specific tasks for long periods, even though demand may change; and
- They prevent municipalities from refinancing debt because the debt is held by the private sector.

In the case of the Charleswood Bridge, the City of Winnipeg is still paying 11.05 per cent in yearly interest to the private sector, while its own costs of borrowing have fallen to under 4.0 per cent. Since the city is locked in by contract, Winnipeg is unable to take advantage of these reduced interest rates.

12.

HOW DO P3s IMPACT A MUNICIPALITY'S BALANCE SHEET AND DEBT RATING?

Municipalities can be drawn to P3s by the prospect of getting infrastructure financing and debt off their books. Early P3s attempted to keep debt payments off public balance sheets and protect public sector credit ratings by replacing public infrastructure borrowing with annual lease payments that repaid private sector borrowing out of public operating budgets (so-called *operating leases*).

The Charleswood Bridge and the Confederation Bridge between Prince Edward Island and New Brunswick were designed to be 'off-book.' However, in both cases auditors later required them to be accounted for as debt because, under accounting rules, payments to the private consortia were deemed to be capital leases.²²

Some P3s have been able to keep debt obligations off the books through various financial manoeuvres, but tightening up of accounting rules under the International Financial Reporting System will make it even more difficult to avoid putting the implied debt of P3s on the books of municipalities. In addition, the related movement to accrual accounting by municipalities since 2009 allows municipalities to spread the costs of capital assets over many years, in much the same way as P3 operating leases. Previously, under cash accounting, the full value of an asset had to be shown in the year of purchase. This change eradicates many accounting advantages of P3s and makes it much more financially viable for municipalities to undertake the financing themselves, without a P3 contract.

Since 2015, the Public Sector Accounting Board has been developing the first Canadian accounting standard for P3s. The board has issued draft guidance, which was open for comments until February 29, 2020. The guidance, which was not finalized as this document went to press, establishes that P3 infrastructure must be recorded on a government's books as a liability when it is not controlled by the public sector. The guidance also requires that the public sector's financial liability must reflect "the finance charges being passed on to the public sector entity through the public private partnership agreement."²³ This suggests a tightening of the loose accounting practices applied to P3s in the past and a recognition of the exorbitant fees the public sector is obliged to pay over long P3 contracts that use more costly private finance.

Regardless of how they are treated by accountants, all P3 payments properly belong on the books of municipalities. All P3 contracts, including operating leases, are a form of debt. They are a contractual agreement to pay set amounts of money at set times into the future and are treated as debt by bond rating agencies. If new accounting standards bring these costs transparently onto public sector books, this may help avoid a future 'debt bomb' when liabilities are suddenly, and overwhelmingly, brought together and made public as happened in the UK to the tune of over £300 billion or almost CDN\$20,000 per UK family.²⁴

13. IF THE P3 INVOLVES A SALE/LEASEBACK, AT WHAT COST?

To overcome short-term budget difficulties, governments are sometimes tempted to sell buildings and other assets to the private sector and lease them back. Cash received from the sale may be used to reduce debt or finance new infrastructure.

However, the rent paid to lease the buildings must include the higher interest costs of private borrowing. Adding up these lease payments in present-day dollars shows that the government is paying much more than the one-time payment it is receiving for the asset. The public sector's debt position and long-term cash flow situation have therefore deteriorated, even if the short-run cash flow situation has improved.

The sale of seven federal government buildings in 2007 to Larco Investments Ltd. for \$1.644 billion has been highly problematic. While the amount the government will pay over the 25-year lease-back period remains undisclosed, there have been numerous disputes between Larco and the government over parking fees, operating budget increases and repairs and maintenance. This includes allegations of overpayment and double charging of fees, with threats of lawsuits.²⁵ In 2016, the release of the Panama Papers revealed that Larco had been routing profits through the British Virgin Islands to reduce taxes. This was particularly embarrassing for the government since three of the seven buildings sold to Larco are being rented to the Canada Revenue Agency.²⁶

14. WHAT ABOUT THE TRANSACTION COSTS OF P3s?

The legal, technical, and administrative requirements of P3s are acknowledged to be much greater than under conventional public sector procurement. P3s involve complex bidding, corporate and financial arrangements. They also require legal documentation pertaining to financing, design, build, operation, and maintenance arrangements, as well as outlining the long-term project handover. Legal documents alone can run into hundreds of pages.

The transaction costs of these requirements range between 2.0 and 5.0 per cent of project capital cost, compared with 0.5 to 3.0 per cent for conventional contracts. The average P3 transaction cost is more than twice as high as for conventional projects (3.5 per cent versus 1.7 per cent).²⁷ The size of these costs has led Vining and Boardman to conclude that "the potential benefits of P3s are often outweighed by high contracting costs."²⁸

Since the 2008-2010 financial crisis, transaction costs have increased with the introduction of honoraria, or bid fees, for unsuccessful bidders, a move designed to encourage the recovery of P3s.²⁹ Provincial P3 agency SaskBuilds has adopted this practice, paying \$5.6 million in honoraria in 2015-16 to eight companies to cover the costs of their unsuccessful bids on P3 contracts. Similar payments were also made to bidders on other P3 projects such as the new Mosaic Stadium, Saskatoon's north commuter bridge and the Warman/Martensville interchange.³⁰ Infrastructure Ontario's practice of paying bid fees attracted the attention of Ontario's auditor general, who proposed that "Infrastructure Ontario should develop a formal process for managing the intellectual property rights acquired in exchange for the bid fees paid to unsuccessful bidders to ensure that the province receives any benefits from these rights in planning new projects."³¹ Infrastructure Ontario is the provincial agency that assesses and promotes P3s.

15. HOW MIGHT P3s AFFECT PUBLIC SECTOR REVENUES?

P3s can create new sources of revenue, usually by shifting costs onto the public through increased user fees. These fees are then used to pay P3 leases or operating charges. An example is highway tolls, which shift costs from general tax revenues onto specific users through tolls. Depending on the severity of traffic problems and the availability of toll-free alternative routes, the public may have no choice but to accept the new tolls, as in the case of Highway 407, a botched privatization mired in litigation, where a private consortium's 99 year monopoly has led to toll increases of over 300 per cent.³² In the case of the Fredericton-Moncton Highway, tolls paid directly by drivers using the highway were abolished after public protest. They were replaced by "shadow tolls," still based on road usage but paid to the private consortium out of general tax revenues.

Abolishing tolls has a significant impact on P3 revenues and expenditures. In the case of the federal Champlain Bridge project in Montreal, tolls were abolished in 2015, months after the P3 contract had been signed. The resulting revenue losses were expected to be at least \$3 billion over the first 30 years of the bridge's operation. The removal of tolls means user demand is expected to rise by 20 per cent, with significant impact on the public sector related to maintenance and repair costs, and presumably the expected lifetime of the bridge.³³

When recreation facilities are built as P3s, the private partner may take over food and concession operations and payments for ice time — revenue previously earned by the local council or by community groups — often raising fees in the process. This was the case in Penticton's South Okanagan Event Centre P3 where concessions were privatized, fees were raised substantially, and money raised by volunteer groups through concessions to allow low-income children to play hockey was cut.³⁴

16. WHO BENEFITS FROM REFINANCING OF P3 CONTRACTS?

P3 projects are often refinanced following the construction phase. This can dramatically increase profit for private sector partners because borrowing becomes cheaper once costly construction and delay risks are no longer in play. The public sector will not benefit from the refinancing unless the contract specifically provides for it. In the UK, contracts provide for a 30/70 public-private split of refinancing savings. But, based on publicly available information, most contracts in Canada don't have such a requirement. Since P3 contracts are hidden behind commercial confidentiality rules, it is almost always impossible to calculate the private sector's profit, or how it would increase after refinancing.

At the refinancing stage, project managers often make large profits by "flipping" ownership to other private companies. Sometimes projects are flipped many times, as in the case of the Abbotsford Hospital in BC, which changed ownership four times between 2005 and 2011.³⁵ This makes it impossible for the public sector to know exactly with whom they will be partnering, causing relationship and continuity problems. It is common in the UK that the final owner is located in an offshore tax haven. In Canada, seven of the more than 20 refinancing deals that took place between 2002 and 2016 led to ownership in offshore tax havens.³⁶ In the UK, profits from refinancing between 1998 and 2016 have been calculated to be 28.7 per cent per year, or double the already very high equity profits from P3s.³⁷

In March 2020, the Caisse de dépôt et placement du Québec bought a controlling interest in 36 Plenary Group P3s in Canada and the US.³⁸ Plenary has infrastructure holdings worth over \$8 billion in North America.³⁹ Its prominent Canadian P3s include the Corner Brook Acute Care Hospital in Newfoundland and Labrador, the Disraeli Bridge in Winnipeg, the Humber River Hospital in Toronto and the Okanagan Correctional Centre in BC.⁴⁰ Though a public pension fund, the Caisse invests in P3s purely to make profits for its stakeholders, thereby creating the possibility of tension between the interests of these stakeholders and the broader public interest.

17.

WHAT ABOUT THE RISK OF RENEGOTIATION WELL INTO THE LIFE OF THE CONTRACT?

P3 contracts are often renegotiated even before the projects are completed, as has happened with some BC hospitals. This may happen because the public sector changes its specifications, because of cost overruns, or because expected revenue streams do not materialize. Renegotiations well into the life of a P3 contract can be expensive for the public sector because, at that stage, there is no competitive process and the public sector is vulnerable to service disruption. If the public sector is perceived to be open to renegotiations further down the line, the private consortium might deliberately underbid for the initial contract.

We do not have information on contract renegotiation in Canada but there is a real risk here, as experience in Latin America⁴¹ in particular has shown, one that the public sector must be aware of.



VALUE FOR MONEY AND RISK TRANSFER



18. DO P3s DELIVER VALUE FOR MONEY?

P3s have been justified on the basis that they provide “value for money,” or VfM, which is based on an analysis of “the lowest combination of capital, operating and maintenance costs over the life of a project.”⁴² In practice, however, cost minimization is the real meaning of VfM. While this may sound straightforward, the evaluation process is far from transparent or objective.

A VfM assessment compares the costs of delivering a project through a P3 with the costs if the project was delivered conventionally using the public model. If the P3 costs are lower, the project proceeds as a P3. Without such a calculation, and unless there is no possibility of proceeding with a conventional project, there is absolutely no basis for choosing the P3 model.

Yet, there are several examples of Canadian P3s which have not been justified with VfM assessments. These include the Charleswood Bridge, the redevelopment of Ottawa’s Lansdowne Park, the New Brunswick deal with Shannex Inc. to provide 216 new nursing home beds, and the Amicus long-term care facility deal in Saskatoon.

To calculate VfM, a public sector comparator (PSC) must first be developed. This shows, in detail, the costs and benefits of delivering the project through conventional public sector procurement, including an assessment of the risks over the lifetime of the project. The costs of the P3 will be compared to this comprehensive financial model. While this may sound straightforward, it is not.

- The two projects being compared should be of the same capacity and offer the same quality of service. Often, however, it is a case of comparing apples with oranges as in the case of the Moncton water treatment plant P3, which promoters claimed would save \$10 million in capital costs. In this case, the public sector comparator was of a much larger plant and no evaluation was made using comparable plants, nor of what might happen in the future when additional capacity was required.
- There should be “competitive neutrality” between the public sector and P3 proposals, meaning that each should be treated the same in some important areas. P3 proponents want private bid costs lowered (or the PSC raised) to factor in taxes on a P3 that would not be paid in conventional procurement, such as sales, payroll or land taxes.
- Other impacts, such as on employment, economic development, the environment, and health and safety should be considered, but rarely are.
- P3s must be put out for open, public and competitive tendering. This is key to establishing a P3’s lifetime costs, and is a major pillar of the claims that P3s deliver superior efficiency and VfM. It is also crucial for the transparency and openness of the VfM process, and for reducing the possibility of fraud and corruption. Yet several

high-profile Canadian P3s have been sole-sourced, without tender, including projects in Ontario (the Business Transformation Project), New Brunswick (the Shannex nursing homes deal) and Saskatchewan (Amicus long-term care facility deal).

- P3 tendering often involves little or no competition. This was the case with the Abbotsford Hospital (where a VfM assessment was carried out only after the contract was signed)⁴³ and the over \$2 billion Centre hospitalier de l'Université de Montréal project.⁴⁴ Large municipal projects such as the Disraeli Freeway extension in Winnipeg have ended up with only two bidders. It is generally accepted that a minimum of three bidders is required in a competitive process. The size, complexity and financial commitment involved in P3s exclude participation by small and medium-sized local construction firms and suppliers, further reducing competition.

Boardman, Siemiatycki and Vining conclude that “all those risks that are supposedly transferred to private players are never truly transferred: The government is always the residual risk holder should the consortium somehow fail.”⁴⁵ This was certainly borne out with the 2018 collapse of Carillion, a huge UK P3 corporation, which is said to have cost the UK government £149 million (approximately CDN\$256 million).

In addition, it is difficult to find objective consultants to prepare VfM assessments. The large consulting firms are all committed to P3s, heavily involved in the projects themselves and, even when not, are active members of the CCPPP. In the case of Vancouver's \$2 billion Canada Line project, only KPMG was deemed “sufficiently independent of the process to provide the level of credibility, objectivity, and transparency” required to prepare the PSC,⁴⁶ but KPMG had direct links to individual members of the bidding consortia and a publicly-expressed bias in favour of P3s.

As Stuart Murray of the Canadian Centre for Policy Alternatives argues, “[t]he major accounting firms now make so much money on P3 projects, it seems unlikely they would ever speak against them.”⁴⁷ So municipalities considering P3s must either find smaller, more impartial consultants, or build in-house capacity to independently evaluate value for money.

19. THE IMPORTANCE OF THE DISCOUNT RATE

Cost comparisons that estimate the total amount spent over the life of the contract generally skew the results in favour of P3s. Future costs or benefits of a project are converted into today's money (present value) by “discounting” the sums involved, based on the argument that future sums are worth less than sums today because time is money. The higher the discount rate and the further into the future the cost or benefit appears, the lower its present value.

While inflation is not the same as discounting, the impact of inflation does show how discounting works. With two per cent inflation, a dollar a year from now will be worth 98 cents. Using a seven per cent discount rate a dollar will be worth 93 cents a year from now and will continue to decline rapidly into the future.

The choice of discount rate is, therefore, crucial. But there is no agreed-upon rate in Canada. Some argue the discount rate should be low, reflecting the obligation of society to meet the needs of future generations who will bear the costs of P3s. At the other extreme, some argue it should be equal to the private sector's cost of borrowing. Other models use the public sector's borrowing costs, usually between the two extremes.

In Canada, the discount rates that are used tend to be high. This benefits P3s, because public sector comparators tend to "front-end load" costs at the beginning of a project life cycle, while P3 models load costs onto the end, known as "back-end loading."

High discount rates favour P3s, and create the illusion of value for money, by shrinking back-end costs in terms of present value, compared to the public model. A relatively small change in the discount rate can radically alter the overall VfM of a P3. In the case of the Abbotsford Hospital, a six per cent discount rate was used to show VfM of \$39 million, but that would have fallen to \$13 million had a five per cent discount rate been used.

For over 30 years, the federal government used a high discount rate of 10 per cent, falling to 8.0 per cent in 2007 and later to 6.65 per cent.⁴⁸ Quebec was using 8.0 per cent but then reduced it, on the advice of the auditor general, to 6.5 per cent.⁴⁹ Ontario uses the province's current 30 year cost of borrowing, which was 4.6 per cent in 2011 but which had fallen to 2.9 per cent by 2019.⁵⁰ Lower rates do seem appropriate. In the United Kingdom, a 3.5 per cent discount rate is used, based on the rate of "social time preference" (the rate at which consumers are thought to be prepared to give up consumption now in favour of the next generation). On this basis, Arrow has recommended a 4.0 per cent discount rate for the United States.⁵¹ For Canada, Boardman, Moore, Vining and De Civita have recommended a 3.5 per cent "social rate of discount," based on estimating the rate that is "a solution to an optimal growth rate model."⁵²

Clearly, multiple discount rates in Canada for evaluating P3s make no sense, and there may be more consistency when new P3 accounting rules are introduced. In addition, the discount rates being used to evaluate Canadian P3s are generally too high relative to what theory suggests the rate should be. In general, therefore, discount rates to date have created a bias in favour of choosing P3s.

20.

HOW IMPORTANT IS RISK IN P3 VFM ASSESSMENTS?

Given that private financing is more expensive, that the private sector always designs and builds public sector projects whether or not they are P3s, and that P3s have higher transaction costs, how can P3s be seen to deliver value for money?

The central justification claims that P3s shift important risks from the public to the private sector. The other claim is that the private sector is more efficient in operating and maintaining projects — an argument that will be addressed later.

While the degree and type of risk will vary, the main risks for municipal P3 projects are likely to be project risk during construction (due to costing errors, construction delays, or environmental and technical problems), and the ongoing risk that revenue to support the project will be less than planned (known as demand risk). A full list of risks is outlined in Appendix Two.

The project risk is closely related to the financial structure of the P3. The project company may not receive any payments until the project is complete or substantially complete. Borrowed money, usually about 90 per cent of the capital cost, carries a high risk premium. Owners' equity, usually about 10 per cent of the capital cost, is also often most exposed during this phase.

Exposure of equity and the need to meet debt commitments are used to explain project risk shifting to the private sector. The private sector has a strong incentive to bring projects in on time and on budget. Once the construction phase is completed, this risk declines dramatically. Debt is often refinanced at lower rates and owner equity is often "flipped." The public sector must quantify the project risk and enter into contracts that clearly shift as much risk as possible onto the private sector.

The demand or revenue risk is important when lease payments (sometimes referred to as availability payments) are linked to the level of use of a P3 asset or service. Leases to pay off highway P3s might be linked to the number of vehicles using the highway and the size of the toll. The lease payments for a water treatment plant may be linked to water rates and consumption levels. If either usage or price estimates are incorrect, there will be revenue shortfalls. The question then becomes, who makes up the difference? Again, these risks need to be quantified and P3 contracts need to specify the degree to which the private sector will assume risks previously carried almost entirely by the public sector.

P3 VfM assessments are published on the websites of provincial P3 agencies Infrastructure Ontario and Partnerships BC. For Ontario, the assessments very clearly show that risk transfer alone supposedly gives P3s value for money over conventional procurement. The Credit Valley Hospital is said to deliver VfM of \$26 million, based on risk transfer valued at

\$39.7 million. The Durham Regional Court House shows VfM of \$49 million, while risk transfer is said to be \$132 million. The Ministry of Government Services Data Centre shows VfM of \$64 million and risk transfer of \$150 million. How risk transfer could possibly amount to so much for such pedestrian buildings as a courthouse (39.5 per cent of final P3 cost) and a data centre (42.6 per cent of final P3 cost) is not explained – the public is simply expected to believe it.

An Ernst & Young report prepared for SaskBuilds concludes that the Regina Bypass P3, which opened in 2019, would be \$380 million cheaper than a typical government-led build. However, the claimed savings are based on a net risk transfer of \$428 million, which cannot be independently verified.⁵³

A similar methodology has been used in Winnipeg. The Chief Peguis Trail is said by Deloitte & Touche to have a VfM of \$31 million and risk transfer is said to amount to \$51.4 million, or over a third of the P3 cost of \$147.8 million. In this case, about \$14 million is said to be shifted on account of project planning and approval risks, just under \$10 million for design and construction risks and almost \$27 million – or more than the other risks put together – for operations, maintenance and lifecycle risks. These numbers are very hard to believe, but neither the public nor the city council is allowed to see how they were arrived at or to challenge them.

In 2014, Ontario's auditor general discovered that in 74 Infrastructure Ontario P3 projects, VfM comparisons valued the risks associated with public sector delivery of these projects at \$18.6 billion, or roughly five times more costly than with P3s. In the case of these 74 projects, the cost of risk transfer was the primary reason why P3 approaches appeared to provide better VfM. However, closer examination by the auditor general found "no empirical data" supporting the costing out of these risks.⁵⁴ She also found that some risks were not actually transferred and that two risks identified with the conventional public approach should not have been included, and served to artificially increase the cost of the public sector comparators.

Disturbingly, across all 74 of these projects, the cost of construction, financing, legal services, engineering services and project management services associated with the P3 approach were nearly \$8 billion higher than if the projects had been delivered through a traditional approach. In light of the above, it is not difficult to see how risk transfer can be used as a smokescreen to greenlight P3 projects that are actually more expensive than conventional projects.

In October 2019, delegates to the annual conference of the Association of Consulting Engineering Companies — Canada were told that some large private companies active in P3s, such as SNC-Lavalin, Skanska and Granite Construction, were withdrawing from bidding on P3 contracts because too much risk was being pushed on to them by the public sector.⁵⁵ In fact, each had experienced large losses on P3 contracts. The problem seems to have been large projects, such as the Champlain Bridge, the Gordie Howe Bridge and LRT projects coming in late or going over budget.

Conference attendees were told that interest in P3 bids would decline, making P3s less competitive and reducing their value for money. Panellist and CCPPP president and CEO Mark Romoff mentioned specific risks, including the relocation of utilities.⁵⁶ The conference was told that “major construction firms are not willing to take on so much risk while bidding low, and they are not going to bid on large projects until terms and conditions change.”⁵⁷

Less than a month later, in a speech to the CCPPP annual conference, the provincial infrastructure minister announced that Infrastructure Ontario would be given authority to ensure that utility lines can be expeditiously relocated, the province’s authority to assemble project lands would be modernized and the environmental assessment process would be sped up, all of which would minimize delays.⁵⁸ These measures, designed to reduce private sector risk, and the speed with which they were introduced, demonstrate the political influence of the CCPPP.

What is not clear, however, is why these companies made losses on P3s, and the extent to which their own failures contributed to those losses. At the same time as SNC-Lavalin withdrew from P3s, AECON announced its intention to expand its activities in fixed-price contract P3s. The firm has partnered and continues to partner with SNC-Lavalin on some P3 projects.⁵⁹ This suggests that companies can make money under current circumstances. Furthermore, the pipeline of provincial and municipal P3s is said to be ‘robust’ and there is no sign of P3s slowing down.

21. IF RISK ASSESSMENT IS CRUCIAL TO VFM CALCULATIONS, HOW IS IT MEASURED?

Increasingly in Canada, the method of estimating risk used by Infrastructure Ontario has gained ground. Their treatment draws on a consultant’s report which is said to have examined 60 different risks involved in infrastructure investment and measured their probability and likely impact. However, as Ontario’s auditor general has confirmed in her 2014 review of the province’s entire P3 program, there was no evidence provided for these generic estimates of different types of risk, and calculations done for specific projects are not made public.

In the case of the Disraeli Bridge, consultants Deloitte & Touche have refused to disclose their risk data on the grounds of commercial confidentiality, despite requests and appeals through City of Winnipeg Access to Information rules. However, the P3 was justified purely on the basis of risk calculations. The Edmonton LRT P3 was subject to even more secrecy for many years beginning in 2009. There is no independent verification of risk transfer assumptions being made in P3 Vfm assessments across the country. Yet risk transfer is held up as the main reason to engage in a P3.

In the UK, where P3s have a much longer track record, the British Association of Chartered Certified Accountants and Manchester Business School have concluded that “the general case for private finance is not proven.” Their study finds any benefits of private financing, risk transfer and improved decision-making are “too nebulous to allow certainty that they are outweighing the known additional costs that arise on average from the cost of capital, transaction costs, and flexibility.”⁶⁰ Reviewing the global experience of P3s over the past 30 years, the 2012 report concludes that “[v]alue for money is difficult to establish convincingly, owing to the higher costs associated with private finance and the high premium payable for risk transfer, and there are important accountability issues around the commitments made to providers of private finance.”⁶¹

Very little is known about risk transfer because there have been few serious studies of the subject. In one review, Vining and Boardman conclude that “[a]lthough risk transfer is a major posited goal of many public-sector governments...our review of the Canadian evidence suggests that, in negotiating (and re-negotiating) P3s, government has often failed to achieve significant risk transfer, especially that which is related to use-risk.”⁶² They go on to state that “[i]n infrastructure projects, it rarely makes sense to try to transfer large amounts of risk to the private sector.”⁶³ A 2010 study of key Canadian P3s also found they generally performed poorly on risk transfer.⁶⁴ Improving risk transfer is one area stressed by the CIB, which promises to develop financial models that will address the issue of user risk and encourage the private sector to “assume additional risks relating to infrastructure usage or revenue.”⁶⁵

There are risks that cannot easily be foreseen or provided for. The Quebec government’s March 2020 declaration of a state of emergency over the coronavirus, and its accompanying elimination of road and bridge tolls, led to a drastic reduction in the revenues of the A30 Express consortium operating the P3 Highway 30. This could have had long term negative impact on the profits and credit rating of the company. The investment community feels, however, that these developments could be seen to have a discriminatory effect on the consortium, and therefore be subject to compensation by the government. Unlike other transport P3 projects, the contract with the A30 Express consortium also has compensation provisions for force majeure.⁶⁶

Evaluating risk transfer is also difficult because P3 contracts are subject to cost overruns, reductions in scope, and delays, all of which may be hidden in contract renegotiation. Pro-P3 claims also neglect to take into account the much longer time needed to negotiate contracts, making on-time delivery a flexible concept. A recent study concludes “The ‘start dates’ of PPPs are marked after the conclusion of a lengthy negotiation and project-planning process between a government and a private consortium, making project completions seem more efficient than they really are.”⁶⁷ Even then, large projects are often late by many months if not years. The Eglinton Crosstown light rail P3 will be between two and three years late and cost overruns will be at least \$500 million on a \$5.3 billion capital cost.⁶⁸ In addition to these very real issues, the long life of most P3s means contracts may be renegotiated many years into the project, rendering earlier VfM calculations redundant.

22.

DOES PROJECT RISK TRANSFER REQUIRE P3S?

Project risk, covering planning, design and construction, is often the main risk in infrastructure projects. Transferring the risk of cost overruns and project delays to the private sector is a central justification of P3s. But there are ways of shifting project risk in conventional procurement. Small contractors, who normally undertake municipal projects, see no need for P3s to deal with this risk.

John Knappett, a small BC contractor, has argued that “[o]ur firm has completed hundreds of public sector projects in BC over the past 25 years and we have seldom been late and never over budget. I know that because when we bid on a Stipulated Sum Contract, we have a contracted fixed budget and an attached schedule to the Contract. If we are late the Province has penalties it can assess and if we are over budget we must absorb the cost at no fee to the Province.”⁶⁹

Project risk can be shifted onto private contractors in conventional procurement through penalties or requirements for insurance. While there are also some problems with projects limited to a combination of design and building (Design/Build), this is another way in which risk can be transferred without private financing or long-term private operation of public facilities.

23.

ARE MUNICIPALITIES CAPABLE OF ASSESSING AND MINIMIZING RISKS?

Appropriate and accurate assessment of risks is difficult in most situations, and generally beyond the capacity of most municipalities. At the same time, unbiased advice is hard to find. For example, the Ottawa LRT P3 has been beset with problems because of poor risk management, risks which in the words of the *Ottawa Citizen* “cascaded in a manner rarely seen in the launch of a major transportation system...thanks in part to compressed budgets and timetables.”⁷⁰ Instead of serving as a model of private sector competence, the project has resulted in enormous delays, operations and maintenance issues, and service cancellations. In March 2020 Ottawa City Council issued a notice of default to the private consortium, Rideau Transit Group (RTG), giving the consortium a month to come up with a turnaround plan.⁷¹

In the case of the South Okanagan Event Centre, both project and revenue risks were inadequately estimated, and the P3 contract did not ensure risk transfer to the private partner. The result left the City of Penticton responsible for cost overruns of \$25 million in 2012 on an original projected cost of \$56 million. The city also had to cover annual revenue shortfalls caused by poor projections and rising user fees. According to city officials, from the point of view of the private partner, this was “a can’t-lose contract.”⁷² Similar cost overruns and revenue shortfalls have plagued several other municipal P3 projects.⁷³

Ultimately, governments are responsible for providing public services. If a P3 operator fails or backs out because profits aren’t high enough, all these risks revert to the public sector and are often magnified. Yet, this is rarely accounted for in risk assessments.

Climate change also poses a challenge in that it is difficult to quantify climate risks over contractual periods of between 20 and 30 years. In cases where climate events affect current P3 contracts, private partners may seek financial compensation or demand contract renegotiations to limit their exposure to such risks, in effect transferring them back to the public sector. In some cases, private partners may walk away from P3 deals leaving the public sector to manage the fallout.

24. IF RISK IS NOT TRANSFERRED IN P3 PROJECTS, WHAT IS THE LIKELY IMPACT ON MUNICIPALITIES?

Failure to actually transfer project and demand risk can have serious consequences for municipalities, usually leaving them with higher costs or more debt. Penticton paid a high price for capital cost overruns, and had to cover ongoing annual operating deficits for the South Okanagan Event Centre. These unforeseen deficits placed an incredible financial burden on the city. The Event Centre was slated to lose \$1.6 million in 2012, forcing the city budget into a projected deficit of \$1.2 million as of January 2012. Failure to transfer risk to the private sector led to cuts in other services and pressure on Event Centre staffing and wages.⁷⁴

A P3 recreation complex in Cranbrook also suffered from cost overruns and revenue shortfalls. The project was eventually taken back into public hands, leaving the municipality with the biggest debt burden among BC municipalities.⁷⁵

The 2014 report of Ontario's auditor general found that risks assigned to private sector VfM exercises for P3s were sometimes not actually transferred in practice because contracts did not allow for this. Such risks would then increase the costs of the public partner.⁷⁶ The auditor general also found systemic bias against the public procurement option. If public sector contracts were tightened up with regard to risk and management of private contractors "[t]otal costs for these projects could be lower than under an AFP, and no risk premium would need to be paid."⁷⁷ In Ontario, P3s are referred to as Alternative Financing and Procurement, or AFP.

The Ottawa LRT P3 has been plagued with rail car design and maintenance problems. The new trains, untested in Ottawa's climate, have suffered from "jammed doors, hobbled communications, unpredictable rail switches, disconnected power cables, disabled brakes and more."⁷⁸ Shortages of skilled labour have compounded maintenance problems. This has meant frequent interruptions of service, inconvenience for commuters, financial penalties for the private partners, and a potentially high cost for local politicians.

The situation led to calls for Ottawa to adopt the approach used in Calgary for the next phase of the light rail project: a design-build-finance model with "vehicle purchase, operation and maintenance staying in public hands."⁷⁹ This was not, however, the way Ottawa chose to proceed. In March 2019, the city announced that the Stage 2 extensions would go ahead as P3s. Kiewit and VINCI, under the name East-West Connectors, will construct the Confederation Line extensions. SNC-Lavalin, under the name TransitNEXT, will construct the Trillium Line extensions and maintain the line,⁸⁰ despite not meeting the minimum technical standards.⁸¹

The 2018 collapse in the UK of P3 consortium Carillion, which ran large numbers of P3s and employed thousands of workers, led to the abandonment of P3s by the UK government. The UK government ended up covering many of the costs of the collapse, taking on risks which should have been covered by Carillion. Likewise, the collapse of Carillion's operations in Canada led to the governments of Alberta and Ontario picking up costs of road maintenance contracts.⁸²

While failure to transfer revenue or demand risk will be readily apparent, leading usually to pressure on the public sector to make up the difference, failure to transfer project risk in more complex projects may be hidden. In the long run, however, it will take the form of higher payments to private companies. Ultimately, residual risk always lies with the public sector.



QUALITY OF PUBLIC SERVICES AND THE PUBLIC INTEREST



25.

DO P3S ENSURE HIGHER-QUALITY SERVICE?

Proponents of P3s argue the private sector improves the quality of service delivery. The assumption is that competition and the incentive and penalty structure that P3s are said to offer make the private sector more efficient. P3 advocates also argue that P3 maintenance contracts give a long-term guarantee that public assets will be kept in better shape than is often the case in conventional projects.

As the International Monetary Fund has put it, “[m]uch of the case for PPPs rests on the relative efficiency of the private sector.” Yet, “[i]t cannot be taken for granted that PPPs are more efficient than public investment and government supply of services ... While there is an extensive literature on this subject, the theory is ambiguous and the empirical evidence is mixed.”⁸³ In fact, a review of the literature “points strongly to the conclusion that there is no systematic intrinsic advantage to private sector operation in terms of efficiency. Equally, there is no evidence to assume that a public sector operator is intrinsically less efficient and effective.”⁸⁴

The quality of some P3 service delivery in Canada has been spectacularly dismal. Perhaps the worst example is the service delivered by the Hamilton-Wentworth water treatment plant, which had a huge environmental cost. In 1994, Philip Utilities Management Corporation took over the operation, management and maintenance of the Hamilton-Wentworth Region’s water and wastewater system.⁸⁵ Philip would share in any savings it could make in the region’s previous budget for the service. In 1996, there was a huge sewage spill, with 180 million litres ending up in the Hamilton harbour and surrounding areas. Philip was held responsible but attempted to avoid liability.⁸⁶

P3s can often have a very negative impact on the communities that they are supposedly meant to benefit, from unfettered increases in tolls on Ontario’s Highway 407 to the privatization of concession fees at Penticton’s South Okanagan Event Centre P3, which were redirected into private hands as profit, revenues that had previously been used to allow children from low-income families to play hockey.⁸⁷

26.

DO P3S ENSURE HIGHER-QUALITY MAINTENANCE?

No. The argument for superior maintenance is flawed. There is no question more needs to be done to maintain municipal assets, but municipalities should not pay a premium to put in place an inflexible long-term commitment to maintaining P3 assets. In doing so, they give up the discretion to allocate maintenance dollars where they are most needed in a budget year. It is especially problematic that the public does not know the dollar value of maintenance guarantees for P3 projects. Such information is often kept confidential, supposedly for commercial reasons, yet is available for all non-P3 public sector projects. This difference in treatment of maintenance budgets makes no sense in terms of transparency and accountability.

Even where provision is made for maintenance in a P3 project, “there is no guarantee that maintenance will be performed optimally or that the facility is, at the end of the contract term, transferred to the public sector in accordance with the value or in the condition specified in the contract.”⁸⁸ Indeed, a recent Canadian Centre for Policy Alternatives study shows the model is “wildly inefficient in certain respects, particularly in regards to day-to-day maintenance and operations.”⁸⁹ The CCPA interviewed workers in P3 projects in Saskatchewan and found that P3 contracts are unable to forecast “the minute vagaries of day-to-day operations and maintenance,” especially over 20 to 30 year contracts, or to clearly specify who is responsible for what.

Questions have also arisen about the quality of maintenance under P3 contracts in Canada. The Auditor General of Ontario has identified hospital contracts that provide inadequate financing for maintenance, with excessive amounts being charged by private partners for maintenance jobs that are not covered by the contract. Disputes over who does what are common, and P3 contracts lack provisions for their settlement.⁹⁰ Similar issues have been raised with P3 schools and roads⁹¹ and with a number of P3s in Saskatchewan.⁹²

27.

DO P3S OFFER MORE INNOVATION AND BETTER DESIGN OF PUBLIC INFRASTRUCTURE?

P3 proponents argue that private sector involvement generates more innovation and better design of public projects, because of the need to be innovative under fixed budgets. There is little evidence that this is the case. Even if it were, municipalities can enter into fixed price or design-build contracts without engaging in a P3 for financing, ownership, operations or maintenance. Moreover, architects find that by bundling design with construction, P3s sacrifice creatively aesthetic design for cost minimization.

In the case of Vancouver's Canada Line SkyTrain project, part of the private sector's "innovation" was to project increased revenue from running more mid-day trains, and to decrease costs by building fewer stations.⁹³ This change was not permitted in the estimate of public sector comparator costs so the PSC was not comparable.

In the case of the Canada Line, Metro Vancouver's regional transit authority TransLink chose a private sector consortium led by SNC-Lavalin over one led by Bombardier largely because they relied on older, less innovative and cheaper technology for trains and tracks than that proposed by Bombardier. The result is a system that's technologically incompatible with other SkyTrain lines.

In the case of the Edmonton LRT, the Southeast line is separated from the West expansion, but the winning bidder on the Southeast project may be required to provide operation and maintenance for the West line, a line they may not get the opportunity to build. This opens up the possibility of all kinds of disputes and litigation, with the city caught in the middle.⁹⁴ Meanwhile, expansion of existing LRT lines in Edmonton will be built using conventional methods and not by P3. Rather than ensuring a well-coordinated system, the P3 arrangement in fact sets the stage for issues with system synchronization.

The Saskatchewan Hospital North Battleford best illustrates the hyperbole surrounding the claims that P3s deliver better design than publicly procured projects. In a 2014 announcement about bidders on the project, SaskBuilds minister Gordon Wyant praised the hospital's P3 deal for delivering cost savings and value through innovations in design "that couldn't be achieved through a traditional approach."⁹⁵ However, the facility opened a year late, and only two months later its roof failed and had to be replaced. Other design flaws in the hospital building prevent equipment from passing through certain doors, requiring staff to descend with their equipment to lower floors and then re-ascend in order to access certain areas of the building. Poor electrical wiring also resulted in malfunctioning doors and frequent tripping of breakers. These and other examples confirm that P3s do not necessarily provide innovation and better design for infrastructure.⁹⁶

28.

WILL CITIZENS PAY MORE?

Sometimes, the need to cover a P3's higher borrowing and transaction costs (as well as to make money for the private partners, which is not an issue in public projects) will lead to a direct increase in the cost of the service provided. This can be reflected in the introduction of, and/or increases in, taxes, road tolls, water rates, arena fees or fees for using schools after hours.

The high premium paid for the private partner to accept risk often means that citizens will pay more for infrastructure or services delivered through a P3 model than through conventional methods — even if risk is successfully transferred. These higher payments will be hidden in P3 contract costs that will weigh on municipal budgets for many years into the future.

Reynolds found that from 2003 to 2016, the government of British Columbia committed \$18.2 billion to finance 17 public infrastructure projects through P3s, at a cost that was at least \$3.7 billion higher than conventional forms of procurement.⁹⁷ The higher cost of private financing is common among P3s across Canada and, combined with our skepticism about risk transfer taking place, leads us to conclude that P3s really do lead to citizens paying more.

29.

WHAT IMPACT DO P3S HAVE ON WORKERS?

Often, when the private sector claims to be more efficient than the public sector, this really means cutting labour costs by laying off workers, using non-unionized instead of unionized labour, cutting wages, pensions and other benefits, or reducing hours or conditions of work. This is particularly common in service delivery P3s, where the private partner is handed a budget or part of a budget to deliver services previously delivered by the public sector in return for a share in any savings it can generate.

In the case of the Hamilton-Wentworth water and wastewater system, the private corporation laid off half the staff, reducing the operating budget by close to 40 per cent.⁹⁸ The result was a catastrophic reduction in service quality. Cuts in public sector staff were also a key feature of the Ontario Business Transformation Project and the Urban Shared Services hospital food project in Winnipeg, both of which had serious operating problems as a result.

Other Canadian P3s have saved money by using non-unionized labour where unionized workers would otherwise have been employed with better wages, benefits and working conditions. This was the case with the Evergreen Park School, the Fredericton-Moncton Highway, the Moncton water treatment plant, and the Moncton water distribution system proposal. Where this is the case, municipalities can reasonably expect strong opposition from public sector workers and their unions. They can also expect pressure when such contracts come up for renewal or renegotiation. In several P3s, however, union collective agreements have been recognized. This was the case with the Regina wastewater treatment plant, but CUPE 7667 has since been fighting staff cutbacks and workload increases as well as a two-tier wage system.⁹⁹

There are other ways in which workers can be affected by P3s. A 2020 study of P3s in Saskatchewan revealed that P3 contracts are so ambiguous about who is responsible for what aspect of operations and maintenance that public sector workers often end up taking on extra responsibilities, without which P3s wouldn't work.¹⁰⁰ In addition, the safety of workers has been a concern in some P3 projects. There were numerous accidents, near accidents and safety lapses in the construction of the Ottawa LRT¹⁰¹ and in the Canada Line and Evergreen Line P3s.¹⁰²

30. HOW DO P3S AFFECT LOCAL COMMUNITIES?

P3s can have harmful effects on local communities which are not always apparent when contracts are signed. Cuts to wages and jobs have ripple effects on local businesses and quality of life. The insertion of a profit factor into service delivery can shift spending from the community to business centres elsewhere in the country or even abroad. In the United Kingdom and with increasing numbers of Canadian projects, equity flips have meant ownership of P3s ends up in offshore tax havens.

Small local contractors, who rely heavily on municipal and other local contracts, say P3s are squeezing them out of business. The Vancouver Island Construction Association, the BC and Canadian construction associations and the Independent Contractors and Businesses Association have all raised concerns about P3s. They feel there are too few bidders on P3 projects, and value for money calculations are biased. Together with the Merit Contractors Association of Alberta and the Alberta Construction Association, they have also objected to P3 bundling of small projects to achieve economies of scale. They fear that if larger P3 projects using big, out-of-province construction firms become dominant, local construction expertise and capacity to build and maintain schools, hospitals, roads and bridges might be at risk.

Municipalities should be particularly sensitive to the environmental risks of P3s. The workforce cuts in the Hamilton-Wentworth water and wastewater project led to untreated sewage polluting Hamilton harbour. The P3 contract was so poorly put together that the regional government ended up paying the cleanup costs. A study of Whistler, BC's cancelled plans for P3 wastewater treatment found the deal's cost savings came in part from trucking sewage waste through numerous ecologically sensitive watersheds. The municipality remained responsible for any spills and cleanup costs.¹⁰³ Not all municipal projects carry this kind of risk, but the ones that do should not be exposed to further risk by corners being cut for the sake of profit.

31. DO P3S IMPROVE TRANSPARENCY AND ACCOUNTABILITY?

Proponents of P3s argue they make spending on public services and infrastructure more transparent and accountable, as they open up all stages of the project to competitive bidding and outside review. The direct involvement of banks and other financial institutions in P3s is said to add a layer of accountability, compared to conventional projects. In P3s, the private partner is also supposed to be locked into contracts to meet certain performance levels, with mandatory financial penalties if they are not met.

In practice, however, P3s may not lead to more transparency, as P3 contracts are often protected by commercial confidentiality and exempt from freedom of information legislation. While P3 agencies in BC and Ontario are making more information public, including P3 contracts and VfM assessments, any numbers which are needed to fully evaluate the projects are either left out or deliberately redacted. Published information is of limited value in terms of either transparency or accountability of P3 projects. In BC, essential financial information about P3s was for many years withheld on the basis that it was a "cabinet secret." In 2018, the NDP government released financial information for 17 BC P3s, and has recently reduced the province's exposure to P3s by using only design-build contracts with some short-term financing.¹⁰⁴

The Canada Infrastructure Bank, established in 2017, has also been criticized for having a lower level of accountability to Canada's auditor general than government departments. While the CIB is empowered to accept unsolicited private sector bids, the federal auditor general may not be allowed to review whether projects funded by the CIB offered value for money to taxpayers. Furthermore, and more seriously, Reynolds finds that "[l]egislation creating the CIB specifically forbids the bank from releasing any information obtained from 'proponents of, or private sector investors or institutional investors in, infrastructure projects' and it is forbidden to 'knowingly communicate, disclose or make available the information, or permit it to be communicated, disclosed or made available.' A person releasing this information may be subject 'to a fine of not more than \$10,000 or to imprisonment for a term of not more than six months, or to both.'"¹⁰⁵

Consultants providing so-called impartial advice also hide behind commercial confidentiality. They will not allow access to assumptions that are vital for their conclusions, such as the source of their risk calculations. Furthermore, their VfM reviews often come with qualifications that render the entire assessment highly questionable. In their assessment of the Brampton Youth Justice Facility, PricewaterhouseCoopers concludes that the P3 would yield value for money compared to the conventional delivery model. But PricewaterhouseCoopers qualifies this by saying “[w]e did not audit or attempt to independently verify the accuracy or completeness of the information or assumptions underlying the PSC, which were provided by [Infrastructure Ontario], and/or the successful proponent’s final offer, nor have we audited or reviewed the successful proponent’s financial model.”¹⁰⁶

P3s also severely restrict democratic accountability by tying the hands of future municipal governments, as far ahead as 30 years or more. Even more troublesome, promoters of P3s in Canada have on occasion made contributions to the political campaigns of sympathetic councillors, as in the case of the Hamilton-Wentworth water and sewage system¹⁰⁷ and, apparently, the Lansdowne Park development in Ottawa.¹⁰⁸ Though not illegal, such contributions are highly questionable.

Finally, it is common practice to withhold information from citizens and prevent public input into decisions about P3s. This was a huge problem in the case of the Edmonton LRT where access to information, even for city councillors, was severely limited¹⁰⁹ as well as in Ottawa, where councillors have been deprived of important information on P3 LRT bids and costs.¹¹⁰

Citizens are rarely permitted to formally express their views on whether they want a project managed as a P3. In the few cases where the public has been given formal input or the issue has gone to a public vote, citizens have generally rejected P3s. Citizens in Victoria, BC used public meetings to oppose a P3 for a new sewage project. In 2011, 75 per cent of voters in Abbotsford, BC voted down a P3 water project, and the same proportion of voters vetoed a P3 for a wastewater treatment plant in Comox Valley, BC.¹¹¹ However, this does not always occur. In a 2013 referendum on using the P3 approach for a wastewater treatment plant, Regina residents voted 57 per cent in favour.¹¹² The high degree of secrecy and heavily redacted value for money analysis meant City of Regina claims about P3 cost savings could not be independently verified, leading researchers to call the process “a vote hijacked by a war of numbers from nowhere.”¹¹³

32.

DO P3S REDUCE CORRUPTION?

Corruption in infrastructure projects is widespread globally.^{114,115} Advocates of P3s argue that they reduce corruption in infrastructure projects because of their greater transparency and public accountability. According to one commentator, P3s “tie down contractually what is happening,” and uphold the principle of “competition at every level.”¹¹⁶

The problem with this laudatory view of P3s reducing corruption is the complete absence of any reliable data, making it an article of faith rather than of objective analysis. As we have seen, P3s are not always characterized by competition, openness and transparency. Even the World Bank admits that “P3s can provide an opportunity for corruption.”¹¹⁷ In Canada, the \$2 billion McGill University Health Centre, one of the largest P3 hospital projects in the world, has been judged to be the object of “the largest P3 infrastructure corruption prosecution globally and the first money laundering one in Canada.”¹¹⁸ A \$22 million bribe was allegedly paid to Dr. Arthur Porter, a business executive, in exchange for SNC-Lavalin being awarded the contract to design, build and manage the hospital, which had been approved by Infrastructure Québec. Porter died before facing a trial.

The lessons of this experience do not appear to have been applied to recent P3 projects. In 2019, the Auditor General of Nova Scotia identified a lack of fraud risk management in Nova Scotia’s QEII hospital P3 project, the largest infrastructure project in the history of the province. The auditor’s review found that “[f]or a project the size of the QEII New Generation Project, we expected to see a project-specific fraud risk management program which included a fraud policy, code of ethics, fraud risk assessment, fraud awareness training, and processes to ensure ongoing monitoring of fraud risk. However, these have not been completed.”¹¹⁹

Rather than discouraging corruption, Bildfell has argued that P3s might in fact contain intrinsic features that actually encourage it, such as “an absence of guidelines governing the P3, weak monitoring provisions, a lack of mechanisms for grievance redressal, insufficient protections (or incentives) for whistleblowers, and a lack of transparency, to name a few.”¹²⁰ What is more, corruption can be encouraged at each stage of a project’s life, from design to final transfer to government.

Proponents of P3s claim they hold the potential for more openness and transparency and, hence, less corruption — but this is not inevitable, nor is it supported by evidence. It can easily be argued, as the World Bank acknowledges in its P3 manual, that they may open the door to new forms of corrupt and unethical practices.¹²¹



P3s, MUNICIPALITIES AND ALTERNATIVES



33.

ARE P3S APPROPRIATE FOR MUNICIPALITIES?

As this guide has documented, there are serious concerns about transparency, loss of local control, and the inflexibility of multi-decade P3 deals. In addition, PPP Canada's own 2009-2014 corporate plan acknowledged some of municipalities' key concerns with P3s: the complexity and cost at the procurement and contract stage – issues felt most acutely by small communities; the long-term expense of higher private-sector financing costs; the erosion of in-house expertise and capacity; and the need to maintain and upgrade existing infrastructure.¹²² There is a general acknowledgement, even by their proponents, that P3s are not appropriate for small municipalities. There are several reasons:

- Transaction costs are expensive and cannot be justified in small projects;
- Small municipalities are no match for large international corporations when it comes to negotiating contracts;
- Turnover of councillors and staff means that the institutional memory of municipalities is not strong enough to properly supervise and monitor P3 contracts that span decades; and
- Large private companies lose economies of scale on small projects and tend not to compete for them.

Even large municipalities have had difficulty with P3 contracts, such as cost overruns (for example, the Canada Line in Vancouver, the Edmonton LRT, the Eglinton Crosstown LRT, and the Ottawa LRT), delays in completion of projects (for example, the Edmonton, Eglinton Crosstown and Ottawa LRT projects), failure to shift demand risk (BC's Golden Ears Bridge), and heavy subsidies and bailouts (for example, in several Ottawa recreation P3s). All rely heavily on expensive outside consultants because of their complicated legal and administrative components.

The evidence in this guide casts considerable doubt on the wisdom of the federal government's promotion of P3s for First Nations which, among other things, provide a form of municipal government. The relatively weak governance structures and short time frames for elections, and the lack of attraction to private capital, outside the resource sector, all products of colonial influences, make P3s particularly unsuitable for First Nations.¹²³ Furthermore, the value system underlying P3s may conflict with First Nation values. This seems to have been a major consideration in the decision of the Atlantic First Nations Water Authority to opt for a full service-decentralized model of water supply owned and operated directly by First Nations, rather than a P3 model. The First Nations believed that environmental stewardship, the spiritual aspects of water and Two-Eyed Seeing — a principle integrating First Nations traditional knowledge and culture with Western science — could not be replicated through the P3 model.¹²⁴ Similar considerations might well apply to extending the P3 model to Inuit and other Indigenous communities.

34.

WHAT CAPACITY DOES THE MUNICIPAL SECTOR HAVE TO MONITOR P3S?

P3 agreements are unlike any other arrangement that municipalities engage in. They are complex and there can often be disagreements and disputes which may require arbitration or legal action. P3s can also be very demanding in terms of ongoing monitoring and evaluation of private sector performance over the lifetime of the agreement.

There has not been any systematic evaluation of the record of Canadian municipalities in monitoring and evaluating P3s, nor of their capacity to do so effectively. The exception is Ottawa, where in 2006 the city auditor found that P3 contracts were not being formally monitored. The reason appeared to be that while there was an established, funded and staffed process for monitoring conventionally procured projects, there was none for P3s and the council was reluctant to put the necessary resources into this task.¹²⁵ In 2013, the City of Ottawa did establish a P3 monitoring policy.¹²⁶ However, this protocol was incapable of forestalling the numerous institutional failures that have plagued its current LRT P3 project (see question 23), demonstrating the inherent difficulty of P3 oversight.

The experience of school boards, many of which are comparable to municipalities in terms of size and staff expertise, provides insight into the task that municipalities face in monitoring P3s. In Nova Scotia, the highly controversial P3 schools established in the 1990s were beset with ongoing contract monitoring problems. The provincial auditor has documented numerous overpayments to corporations and underpayment to school boards. There were ambiguities in contracts, an absence of systems to check compliance with contracts, ignorance of what contracts contained, and a lack of institutional memory as public sector staff turned over or retired.¹²⁷ These problems eventually led the provincial government to buy back 37 of 39 P3 schools.¹²⁸ It would not be surprising if municipalities or First Nation communities encountered similar problems with P3 contracts.

35.

WHAT DO THE PROFESSIONALS SAY ABOUT P3S?

Several professional groups have cautioned against the use of P3s – including engineers, architects and auditors. Engineers have criticized P3s which include design-build because they lose control over project quality to contractors. Quebec government engineers were vocal against developing Autoroute 30 as a P3, citing excessive and under-recorded consultancy fees, and fictional cost savings.¹²⁹

Architects have also raised cautions, complaining about high “pursuit” costs (front-end transaction costs of seeking to win P3 bids), their costs not being covered for unsuccessful bids, and cash flow problems. Any cost pressures that arise from a P3 involving design-build or from building delays are often pushed back onto architects, who are not able to absorb them. They also complain about the “frantic pace” of design-build activity which is bundled into a P3. Each of these pressures raises “quality challenges,” given fixed construction budgets. Even without these pressures, architects are critical of P3 projects. They say P3s favour cost saving over aesthetic appeal, and often make it difficult for architects to interact with final users of the facilities.¹³⁰

Federal and provincial government auditors have long been critical of Canadian P3s. They have raised and continue to raise concerns about:

- dubious accounting approaches that attempt to place P3s off-book (Winnipeg, Charleswood Bridge; Canada, Confederation Bridge; Alberta, long-term care homes);
- sole sourcing and non-competitive bidding (Ontario, Business Transformation Project; New Brunswick, Shannex nursing homes; Saskatchewan, Amicus long-term care);
- the lack of adequate public sector comparators, and/or failure to demonstrate or deliver value for money or risk transfer (Canada, Champlain Bridge; Nova Scotia, schools; New Brunswick, Evergreen School, Eleanor W. Graham Middle School and Moncton North School, Fredericton-Moncton Highway; Alberta, long-term care homes, Southeast Edmonton Ring Road; Quebec, data processing; Ontario, Brampton Hospital);
- excessive costs of private borrowing (New Brunswick, Fredericton-Moncton Highway, Evergreen School; Nova Scotia, Highway 104; Canada, Confederation Bridge);
- poor contract specification and inadequate systems of monitoring and compliance (Ottawa, all P3s; Nova Scotia, schools; Ontario, Business Transformation Project, Brampton Hospital; British Columbia, Academic Ambulatory Care Centre).

Some recent auditor general reports have exposed overarching deficiencies in the financial assumptions used to justify P3 projects. For example:

- The Auditor General of Ontario's 2014 report found that the province paid \$8 billion more for 74 P3 projects than it would have if the projects had been procured publicly. Crucially, \$6.5 billion of this total resulted from the higher costs of private sector financing. The report concluded that the province's financial assumptions, which had justified the choice to use P3s, were not supported by evidence.
- A report the same year from the Auditor General of British Columbia came to similar conclusions, finding that the financing costs of 16 P3s were approximately twice as high as they would have been had the province used public procurement.
- In 2015, a report from the Provincial Auditor of Saskatchewan found that the provincial P3 agency SaskBuilds had overvalued the savings from risk transfer by a factor of six.
- In the 2017 follow up to her 2014 report, the Ontario auditor general found that virtually no progress had been made in addressing earlier recommendations, including used adequate data to calculate the value of risk transfer to the private sector. The report also identified over \$36 billion in long-term P3 liabilities facing the government.

Criticism of questionable P3 practices by auditors general has had an impact on formalizing P3 procedures in Canada but, as the list above shows, even very recent P3s have been found lacking. The real problem is that federal and provincial auditors only get to critique P3s after they have been implemented. What is needed is a transparent and accountable institutional process that stops questionable projects before they are implemented.

36. HOW EASY IS IT TO DISENGAGE FROM P3S?

If a municipality decides to withdraw from a P3 before the end of the contract, it will be very expensive. The private sector engages in long-term P3 arrangements because of the high returns on equity investment, and the higher than normal returns to holders of debt. They will need to be compensated if these returns are threatened. The level of compensation can be very high.

In the case of the Charleswood Bridge, researchers used freedom of information provisions to obtain details of the City of Winnipeg's costs to purchase the bridge before the expiry of the 30-year contract, if the city wanted to do that. In one of the options, the city would pay the discounted present value of the outstanding lease payments and option to purchase in year 30. In 2008, this would have amounted to a buy-out cost of approximately \$17.5 million. The bridge cost less than \$10 million to build, and the city had already made \$15.5 million in lease payments between 1995 and 2008.¹³¹ The city was nonetheless quite happy with the deal and has never expressed an interest in taking over the contract, which ends in 2025.

Termination of contracts can be very expensive. Even disengagement before a P3 gets off the ground can be costly. In Ottawa, a city council decision to cancel a light rail P3 project in 2006 led to a \$175 million claim for breach of contract from Siemens, and an eventual settlement of \$37 million.¹³² On the other hand, there could be net savings to the public sector. Nguyen and Hébert have calculated that Quebec could have saved as much as \$4 billion by terminating the contracts for the CHUM and MUHC P3 hospitals in Montréal.¹³³

In considering P3 contracts, therefore, municipalities should also consider possible exit strategies if the P3 does not live up to expectations. It is better that disengagement take place before the municipality has actually signed the contract, which means that municipalities should proceed cautiously in the negotiating stage, retaining as much discretion and flexibility as possible. But if the project goes ahead, the municipality should seek to protect the public interest by minimizing the length of the contract, stipulating periodic performance reviews, and negotiating release clauses that are mutually acceptable and sensible.

Apart from buyouts or voluntary terminations, once a P3 is in place the other potential ways of reducing costs by ending a P3 are through termination for cause, renegotiation, and taking projects back into public hands. There have been some notable terminations for cause at the municipal level in the United Kingdom, the largest being for the London Tube lines. Eight of 10 London Underground and Docklands light rail P3s set up between 1995 and 2008 at a cost of £20.2 billion were brought back into the public sector between 2008 and 2011 for a value of £19.6 billion.¹³⁴ The £638 million contract of the Greater Manchester Waste Disposal Authority with Viridor John Laing was also terminated in 2017.¹³⁵ While such terminations can often deliver significant savings through “refinancing and operational efficiencies,”¹³⁶ they rely on specific P3s encountering problems. Renegotiating P3 lease payments is a third possible way of reducing costs to the public of P3 contracts, but it is not obvious why the private sector would reduce its profits in this way.

Perhaps the best that can be done, therefore, is taking back P3s into public hands at the as contract expire. This has happened in Nova Scotia. In 2016, the provincial government announced it would purchase O’Connell Drive Elementary School and Riverside Education Centre, taking the schools back in July 2018 when the leases for the P3s expired.¹³⁷ The buy-back cost \$12.8 million but saved \$20 million compared to extending the leases.¹³⁸ The following year, a further 10 P3 schools were bought back from developers Nova Learning and Ashford Investment for \$49.3 million. In the end, the government purchased 37 of 39 schools from private operators, at a total cost of \$215.9 million.¹³⁹ The government concluded it was cheaper to own these buildings than to continue to lease them.¹⁴⁰

There is a danger that international trade and investment agreements may present problems for municipalities attempting to cancel a P3 or take services back into public hands. These deals include the former North American Free Trade Agreement (NAFTA), the World Trade Organization's Government Procurement Agreement, the Trade, Investment and Labour Mobility Agreement (TILMA) between Alberta and BC, the New West Partnership between BC, Alberta and Saskatchewan, and the Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union which came into force provisionally in 2017. Under NAFTA and CETA, US and European corporations have the right to sue for lost future profits. These investor rights challenges target the federal government and not the municipality, placing the municipality under extreme pressure from the federal government not to cancel. The USMCA agreement which has replaced NAFTA removes Chapter 11 investor-state dispute settlement (ISDS) provisions, but it remains to be seen how such disputes will be handled in the future.

37. WHY WOULD A MUNICIPALITY DO ANYTHING OTHER THAN CONVENTIONAL PUBLIC SECTOR PROCUREMENT?

Municipalities continue to provide most infrastructure and services through conventional public sector procurement, without using P3s. There are many advantages in doing so. Conventional procurement follows well established institutional procedures, including tendering of contracts, it uses public borrowing which is much cheaper than P3 financing, it operates usually within long-standing collective agreements which recognize and respect workers' rights, and it retains public ownership and control over public assets. The 2008-2010 financial crisis made P3 financing more expensive and reduced the value for money of P3s. This created increased pressure for the public sector to use P3s but contribute more financing, to make them more attractive to the private sector.

In Canada, this gave rise to PPP Canada and the tying of federal infrastructure money to P3s and eventually to the Canada Infrastructure Bank. In the UK, this pressure to increase the amount of public financing of P3s took the form of the Non-Profit Distributing model (NPD). The model, developed in Scotland in 2008-09 differed from PFI by offering "greater transparency by having a public interest director serving on the board of the company delivering the project," as well as "transfer of risk...without the excessive private sector profits."¹⁴¹ The model uses competitive tendering and offers a fixed rate of return for contractors and lenders¹⁴² as well as greater control and transparency for the public sector

over the project vehicle, “usually through a ‘golden share’ giving enhanced voting rights on key issues.”¹⁴³ In this model, surplus profits are not distributed to shareholders. Instead, they can be taken by the public sector, used to reduce debt or other costs, or reinvested in the project. While this can be considered an improvement over the standard P3, it still retains many similar features, leading Scottish architect Malcolm Fraser to say of NPD, “we have, in Scotland, a non-profit-distributing system we might call PPP-lite.”¹⁴⁴

The Mutual Investment Model (MIM) was introduced in Wales after the Scottish government abandoned the NPD in 2015 because it did not allow off-book accounting. The MIM allows the government to take up to 20 per cent ownership of projects and hence to share any profits from projects alongside private project sponsors.¹⁴⁵ In addition, rather than the public sector exercising control over the investment vehicle, the government is allowed to appoint an observer to the project board, with the goal of ensuring access to information and transparency. In these ways, and unlike the NPD, MIM is seen to comply with European rules about off-balance sheet accounting. MIM also seeks to encourage long-term equity investment and to reduce windfall profits to private investors on secondary market sales by allowing for competitive bids from other investors even after the preferred investor has been identified.¹⁴⁶ In essence, however, MIM is close to traditional P3s and for all the reasons in this guide cannot be considered an acceptable alternative.

The alliance model is also being proposed as an alternative to P3s. It is widely practised in Australia and Infrastructure Ontario is applying the model to the Union Station expansion project in Toronto.¹⁴⁷ The most distinguishing feature of alliance contracting is the sharing of all risk management and all outcomes in major projects by the public sector owner and private sector participants.¹⁴⁸ This has proven attractive to private sector companies who have complained for some time that governments often use P3s to transfer too much risk to the private sector, and to governments who have had trouble attracting the private sector to limited-scope projects or those with small projected profit margins. In this arrangement, the public sector agency works collaboratively with the private sector parties to share the risks and responsibilities in delivering a project, and the private sector has a smoother passage in taking on public works.¹⁴⁹

In Australia, where as much as 30 per cent of infrastructure investment follows the alliance model,¹⁵⁰ projects must generally meet a minimum threshold of \$50 million, because of high start-up costs to arrange alliance contracts.¹⁵¹ Internal management resources are also required to be higher than those needed in conventional procurement because of the complexities of negotiating and collaborating with private corporations. Instead of tendering on price, a target cost is negotiated by the alliance, which proponents claim is “based on market competition and the actual production rates achieved on similar projects.”¹⁵² This approach has given rise to the criticism that there is “uncertainty in the model about the overall cost of construction and potential to put off rather than deal with risk issues early.”¹⁵³ It is also a complicated and expensive process. At root, the alliance model still encourages private sector encroachment on public services and is not endorsed by CUPE.

Where municipalities have considered large infrastructure projects, there are two other alternative European models to P3s that have been used. As both alternatives rely heavily on user fees to achieve return on investment, we see them as inferior to public procurement.

The first is the Danish State Guarantee model, which has been applied to three large transportation projects financed by users paying tolls. In this model, the state owns and controls the asset and guarantees the financing against tolls so that the state-owned company's borrowing costs are very similar to those of the state and much lower than private borrowing costs. Each project is governed by its own Act of Parliament establishing a special purpose vehicle (SPV), which has responsibility for the design, build, finance, maintenance and operation of the project (DBFMO). The SPV is a fully state-owned company, with its own board of directors and management.¹⁵⁴ Contractors are still private and bids are competitive, but the public sector plays a much more central role and financing is much cheaper than in traditional P3s. Danish labour groups do not oppose this model.

The second alternative to P3s for large projects is the Regulated Asset Base (RAB) model. Like the Danish model, governments use regulated user fees to guarantee private financing, and profits, for projects such as the Thames Tideway Tunnel in London. This arrangement brings borrowing costs close to those of the government. Under the RAB, private investors can earn a return during construction without having to wait until project completion. While this is attractive to the private funder, critics argue that it is equivalent to customers "being forced to pay for a meal at a restaurant before the restaurant has been built or opened, much less served any food."¹⁵⁵ It can also put the government in the position of having to cover revenue shortfalls or unexpected costs for the private sector, a sign that even this alternative fails to transfer risk as claimed by its proponents.

The RAB model is confined to large long-term projects such as water, wastewater, and energy that can charge regulated user fees. In addition, as with other models reviewed here, the private sector is encroaching on terrain best occupied by the public sector. Only the Danish State Guarantee model preserves the role of the public sector in the provision of infrastructure, though perhaps the RAB could be modified to do the same. We have seen the Canada Infrastructure Bank experiment with a "regulated asset" model for water and wastewater utility projects recently, but without strong guarantees of public sector control, and without the transparency that should be required of public interest infrastructure projects.

The lack of viable alternatives that serve the public interest suggests that the appropriate response to the concerns raised in this guide is for municipalities to retreat from P3s and focus on improving conventional delivery. This may mean greater use of design-build techniques with appropriate quality safeguards, improved planning and management of capital projects, and greater use of fixed price contracts with appropriate penalties and incentives. This will inevitably entail improving the planning and monitoring capacity of municipalities in these areas, strengthening staffing expertise and staffing levels, rather than cutting them back.

Municipal borrowing costs can be significantly reduced by borrowing through pooled infrastructure funds as is done through the Municipal Finance Authority in BC and its counterparts in Nova Scotia and New Brunswick. The BC MFA has provided \$5 billion in municipal loans. The financing authorities in Nova Scotia (\$800 million) and New Brunswick (\$950 million) are much smaller.¹⁵⁶ An option to consider is a national municipal financing authority. The idea of a Green Infrastructure Fund financed by senior levels of government issuing bonds is also worth investigating.

Local governments should also continue to encourage the federal government to step up to its infrastructure financing and funding responsibilities. Municipalities are very limited in their revenue sources. At the same time, local infrastructure projects encourage economic development across the country. They are in the national interest. The federal government must renew and improve its infrastructure funding for Canada's cities and communities. Communities also need access to sustainable and growing revenue sources.

During the Harper government years, a number of communities passed resolutions calling on the federal government not to tie its infrastructure funding to P3s. Restricting federal infrastructure funding to P3 projects limits the autonomy of local governments. Although the Trudeau government has eliminated the Harper-era P3 screen for large infrastructure projects, the Canada Infrastructure Bank disciplines municipal and regional jurisdictions into accepting P3s as the preferred model for infrastructure. Tassonyi and Conger have argued that the use of federal funding to force municipalities into P3s "is both controversial and questionable," so municipalities "should be able to decide whether such means of financing infrastructure are appropriate in their particular circumstances."¹⁵⁷ We would go further: the Canada Infrastructure Bank should stop financing the private sector's revenue generating infrastructure projects, and should redirect that money directly to municipalities for projects which keep community assets public.



CONCLUSION



TEN ESSENTIAL QUESTIONS TO ASK

P3s can negatively affect public services, local democracy and the public interest and are neither the best, nor the only option.

The following 10 questions should be considered by mayors, councillors and citizens whenever public-private partnerships are proposed for the delivery of local infrastructure projects:

1. Will there be full public consultation about the project, including the question of whether the project should be publicly or privately delivered?
2. Will elected officials be fully informed about the alternatives and be able to speak freely about the information they receive concerning development of the P3?
3. Have the full, lifetime costs of delivering the project through a P3 been calculated and compared to public alternatives delivering the same level and quality of service, and will the detailed information and calculations be made public?
4. To what extent does the financial viability of the P3 proposal rely on cost savings through risk transfer to the private sector, and if so, was the analysis objective and will it be made available to the public?
5. Could any promised risk transfer instead be delivered through a public procurement process that involved a fixed price contract?
6. Will the municipality be responsible for guaranteeing the private sector's profits? Who will be liable for cost overruns, or project deficiencies?
7. Does the municipality have the capacity and resources to properly evaluate, administer and monitor a contract of the length, scale and complexity of the P3?
8. Does the P3 permit the municipality the flexibility to make future changes in service delivery or other public policy decisions, to end the P3 in the procurement stage, and to terminate the contract if it is not meeting the public interest?
9. Are the private consultants involved in the project truly impartial or are they affiliated to organizations or businesses that have profited from or have an interest in the delivery of P3s? For example: the Canadian Council for Public-Private Partnerships or P3 bidders.
10. What impact will the P3 have on the local economy and on workers' jobs, pay and benefits?



APPENDIX ONE



COMMON TYPES OF P3s:

OPERATION AND MAINTENANCE (O&M)

A private corporation or consortium of corporations is under contract to operate, maintain and/or manage a public facility for a specified term.

DESIGN-BUILD-OPERATE (DBO)

The private sector enters into a single contract to both design and construct a facility, and then operate and maintain the facility for a specified term.

DESIGN-BUILD-FINANCE-TRANSFER-OPERATE (DBFTO)

The public sector contracts with a private corporation or group of corporations to design, finance and construct a facility. Once completed, ownership is transferred (by sale or some other arrangement) to the public sector. The public sector then leases the facility back to the private sector, which operates the facility. Usually, the lease is of a long-term nature so that the private partner has an opportunity to recover its investment and its desired rate of return.

DESIGN-FINANCE-BUILD-LEASE (DFBL)

The private sector is contracted to design, finance and build a new facility, which it then leases to the government or public agency. The public sector makes scheduled lease payments. At the end of the lease term, the public sector may re-lease the facility or purchase it at the cost of any remaining unpaid balance in the lease or, in extreme cases, at the fair market price. The facility may be operated by either the private or the public sector during the lease term.

DESIGN-BUILD-FINANCE-OPERATE-TRANSFER (DBFOT)

The public sector contracts with the private sector for the design, financing, construction and operation of a new project for a specified time (known as the concession period). During the concession period, which is often over 20 years, the private sector owns and operates the facility, earning a return on its investment through a lease arrangement with the public sector, or through user charges. At the end of the period, the public sector generally takes possession of the facility (though it could decide not to continue using the facility), possibly at a cost, and has the option of running the facility itself, giving another contract to the original private sector partner, or awarding a contract to another private corporation.

DESIGN-BUILD-OWN-OPERATE (DBOO)

The public sector either transfers ownership and responsibility of an existing facility to the private sector, or contracts with the private sector to design, build, own and operate a new facility. In either situation, legal title to the facility remains with the private sector, and there is no obligation for the public sector to buy the facility.



APPENDIX TWO



TYPES OF RISK

DESIGN RISK

Additional costs due to errors in the specifications of the project or in the design of structural elements.

PROJECT RISK

The project will be more costly to develop than originally planned through factors such as construction delays, environmental or technological difficulties, and costing errors.

OPERATING RISK

The project will not operate as planned, with consequent cost overruns.

DEMAND RISK

The project's revenue stream is lower than planned, affecting its overall financial viability (for example, lower than planned traffic volumes on a toll highway).

TECHNICAL RISK

Ranges from nominal to material depending on the nature and location of the project, and the service levels and technology required.

FINANCING RISK

Financiers assign a risk premium to the project, which can contribute significant additional financing costs. If the risks identified by the financiers cannot be mitigated, the transaction may not proceed. Mitigating interest rate or debt service cost risk over the life of the financing for the project is particularly critical. In addition, if the term of initial financing is shorter than the contract/concession term, refinancing risk will have to be addressed.

REGULATORY RISK

Changes in regulation may result in additional costs or reduced benefits to the stakeholders of the project, which may represent a serious risk for roads projects that require environmental impact assessments, or for projects where current or future regulation can affect the stated mandate.

PUBLIC POLICY RISK

The nature of public services provided is not in accordance with the public's wishes. Development of specific public policy objectives will be critical in assisting private sector partners to design partnering options that address the achievement of these objectives.

ENVIRONMENTAL RISK

The risk of environmental damage from the project, including risks to occupational health and safety.

LEGAL/POLITICAL RISK

This arises from the fact that projects typically require some level of legislative support, creating an embedded political risk for the project.

FORCE MAJEURE

Risk associated with, or arising from, what might be described as "Acts of God" including severe weather events brought about by climate change, or public health crises such as pandemics.

RESIDUAL VALUE RISK

Relates to the market price of the asset at the end of the lease.

Source: Adapted from Loxley and Loxley, 2010, p. 35.



ABOUT THE AUTHORS

John Loxley was a professor of economics at the University of Manitoba. He served as an economic advisor to several governments, including the Government of Manitoba, and wrote several books including *Alternative Budgets: Budgeting as if People Mattered* and *Aboriginal, Northern and Community Economic Development*. This second edition of *Asking the right questions* was completed just before he died unexpectedly on July 28, 2020. This guide is part of his legacy of a life dedicated to research and policy that advances social justice.

Salim John Loxley works in international development and spent most of the last decade in Haiti. Together with his father John, he is the author of *Public Service, Private Profits; The Political Economy of Public-Private Partnerships in Canada*, Fernwood Press, 2010.

ENDNOTES

- ¹ Mirza, Saeed, 2007. Danger Ahead: The Coming Collapse of Canada's Municipal Infrastructure. Federation of Canadian Municipalities, Ottawa.
- ² TD Economics, 2017. Banking on a New Infrastructure Bank: Some Considerations.
- ³ Mirza, Saeed and M. Shafqat Ali, 2017. Infrastructure Crisis - A Proposed National Infrastructure Policy for Canada, *Canadian Journal of Civil Engineering*. 44(7): 539-548.
- ⁴ Ibid., pp. 539-40.
- ⁵ Canadian Union of Public Employees (CUPE), 2019. Fair taxes and municipal revenues. May 27. <https://cupe.ca/fair-taxes-and-municipal-revenues>, accessed June 22, 2020.
- ⁶ See Loxley, John, 2008. Economically Targetted Investments: Union Pension Funds and PPPs in Canada, in Jack Quarter, Isla Carmichael and Sherida Ryan, eds. *Pensions at Work: Socially Responsible Investment of Union-Based Pension Funds*. University of Toronto Press.
- ⁷ In the UK, private equity returns of 13 to 15 per cent per year are built into PFI bids (Whitfield, Dexter, 2010. *In Place of Austerity*. Nottingham: Spokesman Books, p.192). In Canada, the Moncton water treatment plant returned 24 per cent per year to equity holders (Loxley, John and Salim Loxley, 2010. *Public Service, Private Profits; The Political Economy of Public-Private Partnerships in Canada*. Halifax and Winnipeg: Fernwood Publishing, p.159) while planning for the Edmonton LRT assumed a return of between 10 and 15 per cent (Loxley, John, 2013. Wrong Turn: Is a P3 the Best Way to Expand Edmonton's LRT? Parkland Institute, University of Alberta, p. 31).
- ⁸ CUPE, 1998. Behind the Pretty Packaging: Exposing Public-Private Partnerships. Ottawa: CUPE.
- ⁹ Auditor General of Ontario, 2016. *2016 Report of the Office of the Auditor General of Ontario*, Chapter 3, section 3.04, Infrastructure Ontario—Alternative Financing and Procurement, p. 234. http://www.auditor.on.ca/en/content/annualreports/arreports/en16/v2_304en16.pdf, accessed June 22, 2020.
- ¹⁰ Canada Infrastructure Bank, undated. About us. <https://cib-bic.ca/en/about-us/>, accessed June 22, 2020.
- ¹¹ Nelson, Joyce, 2019. Privatizing Canada's Water Infrastructure Should be an Election Issue. Global Research, October 4. <https://www.globalresearch.ca/privatizing-canada-water-infrastructure-election-issue/5691036>, accessed June 23, 2020.
- ¹² CUPE, 2017. Submission to the Senate Committee on Banking, Trade, and Commerce. https://sencanada.ca/content/sen/committee/421/BANC/Briefs/2017-05-23-BANC-CUPESubmission_e.pdf, accessed June 22, 2020.
- ¹³ See Loxley and Loxley, 2010; and Boardman, Anthony E., Matti Siemiatycki and Aidan R. Vining, 2016. *The Theory and Evidence Concerning Public-Private Partnerships in Canada and Elsewhere*. The School of Public Policy, University of Calgary: SPP Research Papers, 9:12, p.2. <https://www.policyschool.ca/wp-content/uploads/2016/05/p3-boardman-siemiatycki-vining.pdf>, accessed June 22, 2020.
- ¹⁴ Public Works Finance database, 2012.
- ¹⁵ Iacobacci, Mario, 2010. *Dispelling the Myths. A Pan-Canadian Assessment of Public-Private Partnerships for Infrastructure Investments*. The Conference Board of Canada. Ottawa, p. i.
- ¹⁶ Canadian Council for Public-Private Partnerships (CCPPP), 2019. P3 Spectrum. <http://www.p3spectrum.ca/>, accessed June 22, 2020. This may be an exaggeration as it is hard to reconcile this number with the sums of its parts, e.g. in a breakdown of typology of P3s, there are 22 P3s categorised as 'other,' though it is unclear what this means.
- ¹⁷ Bond Buyer, 2007. Trends In The Region: It's Quality, Not Quantity: Eying the Big Picture of California's Big Debt, October 5.
- ¹⁸ Hamel, Pierre J., 2007. *Public-Private Partnerships (P3s) and Municipalities: Beyond Principles, a Brief Overview of Practices*. Institut national de la recherche scientifique, Montreal.
- ¹⁹ Canada Infrastructure Bank, undated. Mission and mandate. <https://cib-bic.ca/en/about-us/mission-and-mandate/>, accessed June 22, 2020.
- ²⁰ Auditor General of British Columbia, 2014. *The 2014 Summary Financial Statements and the Auditor General's Findings*, Office of the Auditor General, p. 18. <https://www.bcauditor.com/sites/default/files/publications/reports/AGBC%20ROPA-FINAL.pdf>, accessed June 22, 2020.
- ²¹ Edwards, Chris, 2009. The Private Finance Initiative and the National Health Service – time to buy out the contracts?, in *Compass* 45, February. p.1. https://www.compassonline.org.uk/wp-content/uploads/2013/05/CTP45EdwardsPrivateFinancesmallpdf.com1_.pdf, accessed June 22, 2020.

- ²² This means that they met the following requirements: i) that there is a reasonable assurance that the government will own the leased property by the end of the lease, ii) that it will receive substantially all the economic benefits to be derived from the property over the life span of the lease, and iii) that the private partner would recover its investment and earn a return as a result of the lease. For P3s to be eligible for off-book accounting these requirements would not be met and payments for them would qualify as operating leases.
- ²³ Public Sector Accounting Board of Canada, 2019. *Exposure Draft, Public-Private Partnerships*. <https://www.frascanada.ca/en/public-sector/documents/public-private-partnerships>, accessed June 22, 2020.
- ²⁴ Campbell, Dennis, James Ball and Simon Rogers, 2012. PFI will ultimately cost £300 billion. *The Guardian*, July 5. <https://www.theguardian.com/politics/2012/jul/05/pfi-cost-300bn>, accessed June 22, 2020.
- ²⁵ Crawford, Alison, 2014. Federal building sell-off led to bickering and legal threats. CBC News, March 27. <https://www.cbc.ca/news/politics/federal-building-sell-off-led-to-bickering-and-legal-threats-1.2584578>, accessed May 3, 2020.
- ²⁶ Chown Oved, Marco, 2016. Canada Revenue Agency's landlord stashed money in offshore tax havens. *The Star*, December 13. <https://www.thestar.com/news/world/2016/12/13/canada-revenue-agencys-landlord-stashed-money-in-offshore-tax-havens.html>, accessed June 22, 2020.
- ²⁷ Iacobacci, 2010, p.29. There are errors in Iacobacci's calculations. What he describes as public sector transaction costs are actually private sector transaction costs and hence public sector transaction costs must be derived by deducting from these the data he presents on incremental transaction costs. This can be verified by reviewing any individual project's transactions costs on the Infrastructure Ontario website, e.g. <https://infrastructureontario.ca/Roy-McMurtry-Youth-Centre/>.
- ²⁸ Vining, Aidan, and Anthony Boardman, 2008. Public-Private Partnerships in Canada: Theory and Evidence. *Canadian Public Administration*, 51, March, p. 9.
- ²⁹ See Loxley, John, 2012. Public-Private Partnerships After the Global Financial Crisis: Ideology Trumping Economic Reality. *Studies in Political Economy*, 89:1, p 11.
- ³⁰ Mandryk, Murray, 2017. Hefty payouts for failed P3 bids invite more scrutiny for Wall's ministers. *Regina Leader Post*, May 9. <https://leaderpost.com/opinion/columnists/hefty-payouts-for-failed-p3-bids-invite-more-scrutiny-for-walls-ministers/>, accessed June 22, 2020.
- ³¹ Auditor General of Ontario, 2014. *2014 Annual report of the office of the Auditor General of Ontario*, Chapter 3, section 3.04, Infrastructure Ontario—Alternative Financing and Procurement, p. 212. <http://www.auditor.on.ca/en/content/annualreports/arreports/en14/305en14.pdf>, accessed July 3, 2020.
- ³² McQuaig, Linda, 2019. *The Sport and Prey of Capitalists: How the Rich are Stealing Canada's Public Wealth*. Excerpt reproduced in Birth of a fiasco: How the Ontario Tories completely botched the sale of Highway 407, *Hamilton Spectator*, September 3. <https://www.thespec.com/news/canada/2019/09/03/birth-of-a-fiasco-how-the-ontario-tories-completely-botched-the-sale-of-highway-407.html>, accessed June 22, 2020.
- ³³ Auditor General of Canada, 2018. Spring Reports of the Auditor General of Canada to the Parliament of Canada, 2018. Report 4—Replacing Montréal's Champlain Bridge—Infrastructure Canada. http://www.oag-bvg.gc.ca/internet/English/parl_oag_201805_04_e_43036.html, accessed April 17, 2020.
- ³⁴ Roff, Robin Jane, 2010. A White Elephant in Wine Country: The South Okanagan Event Centre P3, Penticton, BC, *2010 Privatization Report*, CUPE British Columbia.
- ³⁵ Whiteside, Heather, 2016. Austerity Infrastructure: financializing, offshoring, and tax sheltering public-private partnership funds. SSHRC Partnership Development Grant Workshop, December 14-15. <https://altausterityteam.files.wordpress.com/2016/12/whiteside-infrastructure.pdf>, accessed June 26, 2020.
- ³⁶ Ibid.
- ³⁷ Whitfield, Dexter, 2020. *Public Alternative to the Privatisation of Life*. Nottingham: Spokesman Books.
- ³⁸ Plenary Group, 2020. "CDPQ acquires Plenary Americas" March 12. <https://plenarygroup.com/news-and-media/news/2020/cdpq-acquires-plenary-americas>, accessed June 22, 2020.
- ³⁹ CCCPP, undated. Plenary Group member page. http://www.pppcouncil.ca/web/Contact_Info/Account_Page_OrgProfile_public_viewing.aspx?ID=2525, accessed June 22, 2020.
- ⁴⁰ Plenary Group, 2020. Projects. <https://plenarygroup.com/projects?region=&country=Canada&market=&project=&search=>, accessed June 22, 2020.
- ⁴¹ Guasch, J. Luis, Jean-Jacques Laffont and Stephane Straub, 2002. *Renegotiation of Concession Contracts in Latin America*. World Bank, Washington, D.C. The authors calculate that 74 per cent of transport concessions (DBFO) and 55 per cent of water concessions in Latin America were renegotiated during the 1990s.

- ⁴² British Columbia Ministry of Finance, 2002. *An Introduction to Public-Private Partnerships*. Victoria, BC, March 22, p.39.
- ⁴³ Murray, Stuart, 2006. *Value for Money? Cautionary Lessons about P3s from British Columbia*. Vancouver: Canadian Centre for Policy Alternatives, p. 7.
https://www.policyalternatives.ca/sites/default/files/uploads/publications/BC_Office_Pubs/bc_2006/P3_value_for_money.pdf, accessed June 30, 2020.
- ⁴⁴ Fidelman, Charlie, 2011. No Quebec firms in CHUM collectif building consortium. *Montreal Gazette*, February 25. Also *CBC News*, Montreal, February 26, 2011.
- ⁴⁵ Boardman, Siemiatycki, and Vining, 2016.
- ⁴⁶ Plewes, Sherri, 2003, "Richmond Airport Vancouver Project – Public Sector Comparator (PSC) Review." Memo to GVTA Board of Directors, November 21.
- ⁴⁷ Murray, 2006, p. 32.
- ⁴⁸ Loxley and Loxley, 2010, pp. 64–65.
- ⁴⁹ Infrastructure Quebec, 2010. Quebec Confirms the Choice of PPP and Budget Parameters of the CHUM, December 20.
- ⁵⁰ Scanlan, David, and Esteban Duarte, 2019. Ontario Plans to Sell More Green Bonds, Likes 30-Year Debt Terms. *Bloomberg*, April 30.
<https://www.bloomberg.com/news/articles/2019-04-30/ontario-plans-to-sell-more-green-bonds-likes-30-year-debt-terms>, accessed June 22, 2020.
- ⁵¹ Loxley and Loxley, 2010, p 64.
- ⁵² Boardman, Anthony E., Mark A. Moore, Aidan R. Vining, and Paul De Civita, 2009. *Proposed Social Discount Rate(s) for Canada Based on Future Growth: Policy Research Initiative*. Ottawa: Government of Canada.
- ⁵³ Government of Saskatchewan, 2015. Ernst & Young Report Confirms Regina Bypass P3 Saves \$380 Million.
<https://www.saskatchewan.ca/government/news-and-media/2015/november/24/regina-bypass-p3-savings>, accessed June 22, 2020.
- ⁵⁴ Auditor General of Ontario, 2014, p. 198.
- ⁵⁵ CCPPP Annual Conference presentation, November 18, 2019, video available at <https://youtu.be/esIFhAlvpfo>. See also Wall, Don, 2019. ACEC panellists warn of excess risks, insurance challenges in P3. *Construction Connect*, November 15.
<https://canada.constructconnect.com/dcn/news/associations/2019/11/acec-panellists-warn-of-excess-risks-insurance-challenges-in-p3>, accessed June 22, 2020.
- ⁵⁶ Gismondi, Angela, 2019. Ontario to address P3 risk allocation among other model changes: Infrastructure Minister. *Construction Connect*, November 25. See also Durant, David, 2019. CCPPP: Key takeaways from provincial ministers. *P3 Bulletin*, December 3.
<https://www.p3bulletin.com/features/ccppp-key-takeaways-from-provincial-ministers>, accessed July 11, 2020.
<https://canada.constructconnect.com/dcn/news/government/2019/11/ontario-to-address-p3-risk-allocation-among-other-model-changes-infrastructure-minister>, accessed June 23, 2020.
- ⁵⁷ Wall, 2019.
- ⁵⁸ Gismondi, 2019.
- ⁵⁹ Reynolds, Christopher, 2019. Aecon stands to gain from SNC's retreat from fixed-price contract construction. *The Globe and Mail Report on Business*, June 26.
<https://www.theglobeandmail.com/business/article-aecon-stands-to-gain-from-sncs-retreat-from-fixed-price-contract/>, accessed June 23, 2020.
- ⁶⁰ Winch, Graham M., 2012. Thirty years of private finance in the United Kingdom, in Graham M. Winch, Masamitsu Onishi and Sandra Schmidt (eds.) 2012. *Taking Stock of PPP and PFI Around the World*, The Association of Chartered Certified Accountants, February, p. 122.
- ⁶¹ Winch, Graham, and Masamitsu Onishi, 2012. The private finance of public infrastructure, in Winch et al, 2012, p.15.
- ⁶² Vining and Boardman, 2008, p. 10.
- ⁶³ *Ibid.*, p. 9.
- ⁶⁴ Loxley and Loxley, 2010, pp. 91-183.
- ⁶⁵ Canada Infrastructure Bank, undated. Frequently Asked Questions. <https://cib-bic.ca/en/about-us/frequently-asked-questions/>, accessed June 23, 2020.

- ⁶⁶ Fitch Ratings, 2020. *A30 Express Will Not Be Adversely Affected by Force Majeure Event*. April 20. <https://www.fitchratings.com/research/infrastructure-project-finance/a30-express-will-not-be-adversely-affected-by-force-majeure-event-20-04-2020>, accessed June 23, 2020.
- ⁶⁷ Boardman, Siemiatycki and Vining, 2016.
- ⁶⁸ James, Royson, 2020. Let the Eglinton Crosstown LRT be a lesson: beware public-private partnerships. *The Star*, Jan. 4. <https://www.thestar.com/opinion/contributors/2020/01/04/let-the-eglinton-crosstown-lrt-be-a-lesson-beware-public-private-partnerships.html>, accessed June 22, 2020.
- ⁶⁹ Knappett, John, 2009. *P3's: (Or "No Country for Old Contractors")*. Victoria, BC: Knappett Projects. http://www.cupe.bc.ca/sites/default/files/knappett-no-country-old-contractors_0.pdf, accessed June 23, 2020.
- ⁷⁰ Bagnall, James, 2020. Inside the slow-rolling disaster of Ottawa's \$9-billion LRT project. *Ottawa Citizen*, March 4. <https://ottawacitizen.com/news/local-news/blood-on-the-tracks-why-ottawas-flagship-project-crashed/>, accessed June 23, 2020.
- ⁷¹ Vlasveld, Mike, 2020. Plan to fix Ottawa LRT problems expected on mayor's desk today. *Ottawa Matters*, March 31. <https://www.ottawamatters.com/local-news/plan-to-fix-ottawa-lrt-problems-expected-on-mayors-desk-today-2214383>, accessed June 23, 2020.
- ⁷² Roff, Robin Jane, 2009. The benefits of public procurement: A case study of Whistler's wastewater treatment plant. CUPE British Columbia, p. 9.
- ⁷³ Some examples of municipal P3s or aborted P3s with cost overruns are the Southeast False Creek Olympic Village deal with Millennium Southeast False Creek Properties, the Save-on-Foods Centre in Victoria, BC, and the town centre project in Maple Ridge, BC.
- ⁷⁴ Penticton Western News, 2012. Budget provides reprieve for Penticton taxpayers, January 19. <https://www.pentictonwesternnews.com/news/budget-provides-reprieve-for-penticton-taxpayers/>, accessed July 7, 2020.
- ⁷⁵ Columbia Institute, 2009. *Public-Private Partnerships: Understanding the Challenges: A Resource Guide*. Vancouver: Columbia Institute, p. 50.
- ⁷⁶ Auditor General of Ontario, 2014, p. 199.
- ⁷⁷ Ibid.
- ⁷⁸ Bagnall, 2020.
- ⁷⁹ Dreesen, Toon, 2019. LRT – A discussion on Public Interest and P3. Ottawa: DCA Group of Architects. <https://www.architectsdca.com/lrt-a-discussion-on-public-interest-and-p3/>, accessed June 23, 2020.
- ⁸⁰ Willing, Jon, 2019. Council OKs \$4.6B Stage 2 transit contracts, the largest infrastructure approval in Ottawa's history. *Ottawa Citizen*, March 7. <https://ottawacitizen.com/news/local-news/council-approves-4-6b-stage-2-transit-contracts-the-largest-infrastructure-approval-in-ottawas-history/>, accessed June 23, 2020.
- ⁸¹ Chianello, Joanne, 2020. Why SNC-Lavalin's poor technical score for Stage 2 LRT hardly mattered. *CBC News*, March 7. <https://www.cbc.ca/news/canada/ottawa/snc-lavalin-pricing-weight-scoring-1.5488702>, accessed June 19, 2020.
- ⁸² These were not, however P3s. Carillion's P3s were taken over essentially by minority partners and outside private companies. See Loxley, John, 2020. *Ideology Over Economics: P3s in an Age of Austerity*. Halifax and Winnipeg: Fernwood Publishing.
- ⁸³ International Monetary Fund, 2004. *Public-Private Partnerships*. Washington D.C., pp. 3 and 14.
- ⁸⁴ Hall, David and Emanuele Lobina, 2005. The relative efficiency of public and private sector water. Public Services International Research Unit, Business School, University of Greenwich, September, p. 5.
- ⁸⁵ Loxley and Loxley, 2010, pp. 165-166.
- ⁸⁶ Ibid.
- ⁸⁷ Roff, 2010.
- ⁸⁸ Boardman, Siemiatycki and Vining, 2016, p. 19.
- ⁸⁹ Enoch, Simon, 2020. *A Partnership in Name Only: How the Public Sector Subsidizes the P3 Model*. CCPA Saskatchewan, p. 6.
- ⁹⁰ Auditor General of Ontario, 2017. *2017 Annual Report*. Vol. 1, Chapter 3, section 3.11, Real Estate Services, p. 573. https://www.auditor.on.ca/en/content/annualreports/arreports/en17/v1_311en17.pdf, accessed June 22, 2020.
- ⁹¹ Loxley and Loxley, 2010, Chapters 5 and 6.
- ⁹² Enoch, 2020.

- ⁹³ Murray, 2006, p. 41.
- ⁹⁴ Loxley, John, 2013. *Wrong Turn: Is a P3 the Best Way to Expand Edmonton's LRT?* Parkland Institute, University of Alberta.
- ⁹⁵ Piller, Thomas, 2014. Sask.'s new psychiatric rehabilitation hospital makes headway. *Global News*, October 7. <https://globalnews.ca/news/1603193/sask-s-new-psychiatric-rehabilitation-hospital-makes-headway/>, accessed June 23, 2020.
- ⁹⁶ Enoch, 2020.
- ⁹⁷ Sorensen, Jean, 2019. CBAs only a sign of changing P3 contracts and industry. *Journal of Commerce*. March 11. <https://canada.constructconnect.com/joc/news/associations/2019/03/cbas-sign-changing-p3-contracts-industry>, accessed June 22, 2020.
- ⁹⁸ Loxley and Loxley, 2010, pp. 171-180.
- ⁹⁹ CUPE, 2019. CUPE 7667 votes to reject EPCOR's latest offer. CUPE web site, December 2. <https://cupe.ca/cupe-7667-votes-reject-epcors-latest-offer>, accessed June 23, 2020.
- ¹⁰⁰ Enoch, 2020.
- ¹⁰¹ Gillis, Megan, 2018. Four train operators exposed to simulated smoke in LRT test mishap. *The Province*. December 5. <https://theprovince.com/news/local-news/train-operators-exposed-to-simulated-smoke-in-lrt-test-mishap/wcm/bdc8dd5e-dead-450f-a589-f0d1682bf0c1>, accessed June 23, 2020.
- ¹⁰² CUPE, 2016. Taken for a ride: The community impact of the Canada Line P3. <https://cupe.ca/canada-line-p3-highlights-dangers-liberal-infrastructure-bank-model>, accessed June 23, 2020.
- ¹⁰³ Roff, 2009.
- ¹⁰⁴ Sorensen, 2019.
- ¹⁰⁵ Reynolds, Keith, 2017. *Canada Infrastructure Bank and the Public's Right to Know*. Vancouver: Columbia Institute, p. 9. <https://www.columbiainstitute.ca/sites/default/files/resources/Columbia%20Infrastructure%20Bank%20English%20for%20signoff%20Sept%2011%202017.pdf>, accessed June 23, 2020.
- ¹⁰⁶ Infrastructure Ontario, 2007. Roy McMurtry Youth Centre, Value For Money Assessment, p.1. <https://infrastructureontario.ca/Roy-McMurtry-Youth-Centre/>, accessed June 23, 2020.
- ¹⁰⁷ Loxley and Loxley, 2010, pp. 176-177.
- ¹⁰⁸ Krawchenko, Tamara and Christopher Stoney, 2011. Public Private Partnerships and the Public Interest: A Case Study of Ottawa's Lansdowne Park Development. *ANSERJ, Canadian Journal of Nonprofit and Social Economy Research*, 2:2, p. 85.
- ¹⁰⁹ Loxley, 2013.
- ¹¹⁰ Lord, Craig, 2019. Ottawa council approves \$4.7B LRT extension despite calls for delay, more transparency. *Ottawa Business Journal*, March 6. <https://obj.ca/article/ottawa-council-approves-47b-lrt-extension-despite-calls-delay-more-transparency>, accessed June 23, 2020.
- ¹¹¹ CUPE, 2016. Comox Valley Residents Overwhelmingly Reject P3 for Wastewater. CUPE British Columbia, June 20. <https://cupe.ca/comox-valley-residents-overwhelmingly-reject-p3-wastewater>, accessed June 23, 2020.
- ¹¹² CBC News, Saskatchewan, 2013. Referendum Results in: P3 model to Fund Regina Sewage Plant. *CBC News*, September 25. <https://www.cbc.ca/news/canada/saskatchewan/sewage-plant-referendum-day-in-regina-almost-over-1.1867423>, accessed June 22, 2020.
- ¹¹³ Global News, Saskatchewan, 2015. U of R researchers critical of P3 referendum numbers," *Global News*, March 6. <http://globalnews.ca/news/1869182/u-of-r-researchers-critical-of-p3-referendum-numbers/>, accessed June 30, 2020.
- ¹¹⁴ The Economist Intelligence Unit, 2010. *Evaluating the Environment for Public-Private Partnerships in Latin America and the Caribbean: The 2010 Infrascope. A Guide to the Index and Methodology*. New York: Economist Intelligence Unit, October. <https://publications.iadb.org/en/publication/11675/evaluating-environment-public-private-partnerships-latin-america-and-caribbean>, accessed June 23, 2020.
- ¹¹⁵ Teitelbaum, Henry, 2011. Global Fraud Alert: PPP Model Boosts Fight Against Corruption. *P3 Planet.com*, February 27. <https://p3-planet.com/global-fraud-alert-ppp-model-boosts-fight-against-corruption/>, accessed June 23, 2020.
- ¹¹⁶ Ibid.
- ¹¹⁷ World Bank, 2012. *Public-Private Partnerships: Reference Guide*. Washington, DC: World Bank, p. 28.

- ¹¹⁸ Duhaime, Christine, 2014. Infrastructure Funding and Corruption in Canada. Lichfield: Financier Worldwide, August. <https://www.financierworldwide.com/infrastructure-funding-and-corruption-in-canada#.XvuW8yhKiUk>, accessed July 3, 2020.
- ¹¹⁹ Auditor General of Nova Scotia, 2019. *Report of the Auditor General to the Nova Scotia House of Assembly*, Chapter 2. Office of the Auditor General, December, p. 29. <https://oag-n.s.ca/sites/default/files/publications/Dec2019Full.pdf>, accessed June 23, 2020.
- ¹²⁰ Bildfell, Connor, 2017. P3 Infrastructure Projects: A Recipe for Corruption or an Antidote? *Public Works Management & Policy*, 23, 1 (May). <https://journals.sagepub.com/doi/full/10.1177/1087724X17709791>, accessed June 22, 2020.
- ¹²¹ World Bank, 2012.
- ¹²² PPP Canada Summary, Corporate Plan for the 2009-2014 planning period. Ottawa, p. 12.
- ¹²³ Loxley, 2020; Taylor, Greg, 2018. Contracting out Colonialism: The threat of privatization to Indigenous communities (presentation). Ottawa: CUPE.
- ¹²⁴ Halifax Water and Accelerator Inc., 2017. *Final Report. Corporate Structuring For Atlantic First Nations Water Authority*. Atlantic Policy Congress of First Nations Chiefs Secretariat, August 8, p.1. https://www.apcfn.ca/wp-content/uploads/2020/06/FINAL_REPORT_-_August_8_2017.pdf, accessed July 2, 2020.
- ¹²⁵ Columbia Institute, 2009, p. 66.
- ¹²⁶ City of Ottawa, 2013. Public Private Partnerships Policy, <https://www.yumpu.com/en/document/view/48744466/city-of-ottawa-p3-policy-the-canadian-council-for-public-private->, accessed July 7, 2020.
- ¹²⁷ Auditor General of Nova Scotia, 2010. Annual Report, Chapter 3, Education: Contract Management of Public-Private Partnership Schools. Office of the Auditor General, Halifax. <https://oag-n.s.ca/sites/default/files/publications/2010%20-%20Feb%20-%20Full%20-%20NSOAG%20Report.pdf>, accessed July 3, 2020.
- ¹²⁸ Government of Nova Scotia, 2017. Province to purchase ten P-3 schools. News release, July 19. <https://novascotia.ca/news/release/?id=20170719004>, accessed July 7, 2020. See also Patil, Anjuli. 2017. Province to buy 10 public-private partnership schools for \$49.3M. *CBC News*, Jul 19. <https://www.cbc.ca/news/canada/nova-scotia/province-to-buy-10-public-private-partnership-schools-1.4212514>, accessed June 23, 2020.
- ¹²⁹ *Le Devoir*, November 7, 2008, p. A2; and November 19, 2008, p. A1.
- ¹³⁰ Watkinson, Brian, 2008. P3 For You and Me. *Canadian Architect*, April.
- ¹³¹ Loxley and Loxley, 2010, p. 115.
- ¹³² Hamel, 2007, p. 56; and Gray, Ken, 2011. Siemens not on light-rail bid shortlist. *Ottawa Citizen*, October 21.
- ¹³³ Nguyen, Minh and Guillaume Hébert, 2014. Should the Quebec government buy back the CHUM and MUHC P3s? Institut de recherche et d'informations socio-économiques, Socioeconomic brief, October. https://cdn.iris-recherche.qc.ca/uploads/publication/file_secondary/CHU-PPP-English-WEB.pdf, accessed June 23, 2020.
- ¹³⁴ Hall, David, 2018. PPPs: issues and alternatives. Public Services International Research Unit (PSIRU). University of Greenwich, UNCTAD summer school, September, p. 66. https://debt-and-finance.unctad.org/Documents/UNCTAD_YSI_David_Hall.pdf, accessed June 23, 2020.
- ¹³⁵ Mercer, Helen and Dexter Whitfield, 2018. Nationalising Special Purpose Vehicles to end PFI: a discussion of the costs and benefits. Public Services International Research Unit (PSIRU), University of Greenwich, p.17. https://gala.gre.ac.uk/id/eprint/24507/7/24507%20MERCER_Nationalising_Special_Purpose_Vehicles_to_End_PFI_2019.pdf, accessed June 24, 2020.
- ¹³⁶ *Ibid.*, p. 19.
- ¹³⁷ Government of Nova Scotia, 2016. Province Reaches Decision on Two Nova Learning Schools, News release, July 28. <https://novascotia.ca/news/release/?id=20160728001>, accessed July 21, 2020.
- ¹³⁸ Palmeter, Paul, 2016. Nova Scotia buys 2 P3 schools for \$12.9M. *CBC News*, July 28. <https://www.cbc.ca/news/canada/nova-scotia/nova-scotia-p3-school-purchase-lease-agreement-1.3698952>, accessed June 23, 2020.
- ¹³⁹ Government of Nova Scotia, 2017.
- ¹⁴⁰ Patil, 2017.
- ¹⁴¹ House of Commons Public Administration and Constitutional Affairs Committee, 2018. *After Carillion: Public sector outsourcing and contracting*. Seventh Report of Session, 2017–19. p. 109. <https://publications.parliament.uk/pa/cm201719/cmselect/cmpublicadm/748/748.pdf>, accessed July 2, 2020.

- ¹⁴² McCann, Simon, 2016a. The NPD model: An alternative for infrastructure projects. *Construction News*, April 18 <https://www.constructionnews.co.uk/archive/the-npd-model-an-alternative-for-infrastructure-projects-18-04-2016/>, accessed June 23, 2020.
- ¹⁴³ McCann, Simon, 2016b. Is non-profit distributing PPP dead? Long live PF2? *Blake Morgan*, October 10. <https://www.blakemorgan.co.uk/is-non-profit-distributing-ppp-dead-long-live-pf2/>, accessed June 23, 2020.
- ¹⁴⁴ Bell, Sean, 2019. Unethical, unsustainable and makes no financial sense: Edinburgh Sick Kids scandal shows time's up for private financing, argue Greens. *Source News*, August 6. <https://www.commonspace.scot/articles/14565/unethical-unsustainable-and-makes-no-financial-sense-edinburgh-sick-kids-scandal>, accessed June 23, 2020.
- ¹⁴⁵ Ascoli, Luca, 2018. Ex-ante advice Welsh Mutual Investment Model (WMIM) for Public Private Partnership (PPP) Projects (letter). European Commission, Directorate D: Government Finance Statistics (GFS) and quality, June. <https://ec.europa.eu/eurostat/documents/1015035/8683865/Advice-2018-UK-Statistical-classification-of-the-Welsh-Mutual-Investment-Model.pdf/251185b8-d949-4668-895d-76bfb4aea21b>, accessed June 23, 2020.
- ¹⁴⁶ Baxter, David, 2018. PPPs and the Mutual Investment Model (MIM). *Infrastructure Investment*, August 5. <https://www.linkedin.com/pulse/ppps-mutual-investment-model-mim-david-baxter/>, accessed June 23, 2020.
- ¹⁴⁷ Mackenzie, Robert, 2019. RFQ Issued for Union Station Capacity Expansion Project. *Urban Toronto*, Nov.1. <https://urbantoronto.ca/news/2019/10/metrolinx-infrastructure-ontario-issue-rfq-union-station-expansion-project-0>, accessed June 22, 2020.
- ¹⁴⁸ Commonwealth of Australia, 2015. *National Alliance Contracting Guidelines: Guide to Alliance Contracting*. Department of Infrastructure and Regional development, September. https://www.infrastructure.gov.au/infrastructure/ngpd/files/National_Guide_to_Alliance_Contracting.pdf, accessed June 24, 2020.
- ¹⁴⁹ Ibid., pp. 13-14.
- ¹⁵⁰ de Albornoz Portes, Javier Carrillo, 2017. Alliances: An Innovative Management Model for Public and Private Investments. In Llamas, Bernardo (ed.), 2017. *Case Study of Innovative Projects: Successful Real Cases*. IntechOpen, August 30. <https://www.intechopen.com/books/case-study-of-innovative-projects-successful-real-cases/alliances-an-innovative-management-model-for-public-and-private-investments>, accessed June 23, 2020.
- ¹⁵¹ Commonwealth of Australia, 2015, p. 40.
- ¹⁵² Ibid., p. 7.
- ¹⁵³ Ibid., p. 10.
- ¹⁵⁴ Holm, Kaj V., and Thomas Horstmann Nielsen, 2018. The Danish State Guarantee Model for Infrastructure Investment. The International Transport Forum, working group paper, p. 10. https://www.itf-oecd.org/sites/default/files/docs/danish_state_guarantee_model_4.pdf, accessed June 23, 2020.
- ¹⁵⁵ Plimmer, Gill, 2018. Investors reap rewards of London super sewer long before it is built. *Financial Times*, November 7. <https://www.ft.com/content/32f0a802-d6bc-11e8-ab8e-6be0dcf18713>, accessed June 23, 2020.
- ¹⁵⁶ The Municipal Finance Corporation in Newfoundland and Labrador was never very active and was wound up in 2019-2020. See Annual Report, Newfoundland and Labrador Municipal Financing Corporation, 2018-2019. <https://www.gov.nl.ca/fin/files/NLMFCAnnualReport2018-19.pdf>, accessed April 19, 2020.
- ¹⁵⁷ Tassonyi, Almos T., and Brian W. Conger, 2015. An Exploration into the Municipal Capacity to Finance Capital Infrastructure. The School of Public Policy, University of Calgary: SPP Research Papers, November, p. 20. <https://www.policyschool.ca/wp-content/uploads/2016/03/municipal-capital-infrastructure-tassonyi-conger.pdf>, accessed June 23, 2020.

