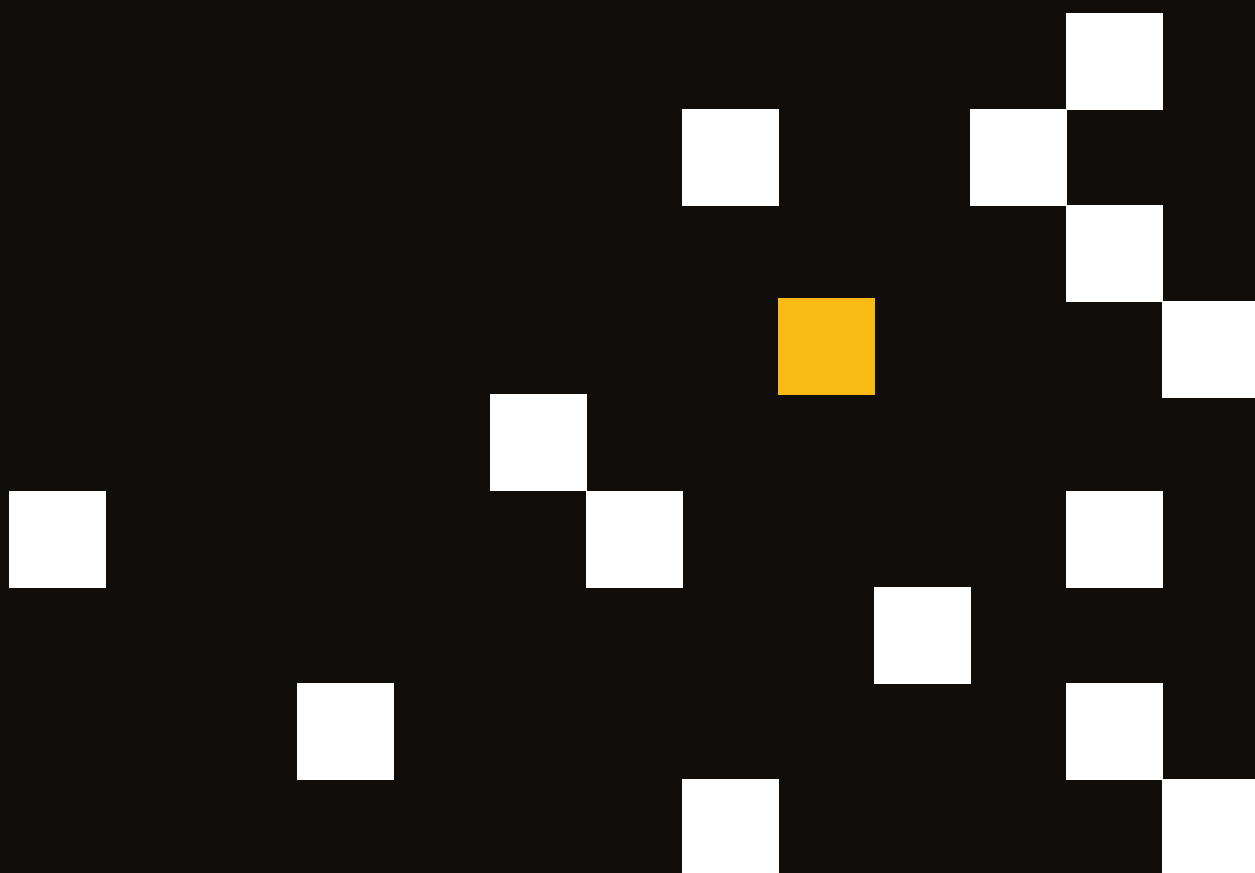


Public-Private Partnerships

A GUIDE FOR MUNICIPALITIES



THE CANADIAN COUNCIL FOR PUBLIC-PRIVATE PARTNERSHIPS



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Executive Summary

Municipalities throughout Canada play a critical role in delivering and maintaining core infrastructure to Canadians. In 2023, Statistics Canada reported that core public infrastructure in Canada, excluding hospitals, schools, courthouses, and affordable housing, had a total replacement value of \$2.1 trillion at the end of 2020. Municipalities owned 61.7 per cent of that total estimated replacement value – \$1.328 trillion!

In 2024, against the backdrop of a growing infrastructure deficit, Canadian municipalities face broad challenges of market fragmentation, conflicting priorities, limited funding models, and increasing demand for housing and infrastructure. It is becoming more and more difficult to meet the infrastructure needs of Canadians by conventional means alone.

Purpose of the Guide

The Canadian Council for Public-Private Partnerships (CCPPP) initially developed and published *Public-Private Partnerships: A Guide for Municipalities in 2011*, in collaboration with P3 Canada, a former federal Crown Corporation. At first publication, this Guide was intended to demystify the use of public-private partnerships (P3s) for municipal stakeholders, with the intent of making this procurement model more accessible for public infrastructure owners and funders seeking to leverage private sector expertise as a tool in closing the infrastructure gap.

Since that time, the P3 model has evolved significantly and has become an increasingly important tool for municipalities as significant investments are required to develop public infrastructure projects. In response to increased interest in the P3 model from municipal decision-makers across Canada, CCPPP formed the [Municipal Engagement Advisory Group \(MEAG\)](#) in 2023, bringing together public and private expertise from across the nation to assist CCPPP in influencing policy and improving accessibility for P3 projects at the municipal level. P3s are particularly relevant in our current economic climate, where the need for large, capital-intensive projects is so great.

Although the Canadian market has seen a flurry of new procurement models in the past five years, the focus of this Guide remains on tried and tested P3 models that harness private capital

and include operations and/or maintenance to maximize Value-for-Money for Canadian taxpayers. To date, more than 300 P3 projects are in operation or under construction across Canada, with a value of more than \$140 billion. Of that total, more than 50 are municipal projects, ranging from water/wastewater to biomass and transportation to community centres.

The Municipal P3 Opportunity

The intent of this guide remains the same as it was upon its initial publication: to demystify the P3 model, improve accessibility for municipal stakeholders across Canada and ensure that the unique jargon, structures, and instruments — often seen as distinct from traditional procurement approaches — do not deter public servants from meeting their communities' infrastructure needs.

Since P3s were first introduced in Canada in the early 1990s, we have witnessed the continual evolution of the market and the model to reflect new government priorities and market realities. What has remained consistent, however, is that successful P3s depend on strong partnerships, appropriate risk allocation and shared benefits. With an ever-increasing demand for investments, growing debt, inflation, trade labour shortages and other market conditions affecting infrastructure delivery in Canada, governments — more than ever — need tools to ensure maximum value for taxpayers.

Unlike traditional procurement approaches, P3s involve the public sector integrating multiple aspects of a project into a single contract, most commonly including these four attributes:

- Allocate the appropriate risk transfer to the party best suited to manage it
- Consider the whole life cycle of the asset
- Drive innovation and efficiencies; and
- Leverage private capital and expertise.

New asset classes, emerging market conditions, public interests and the needs of governments at all levels require an evolution in our approach to infrastructure procurement across models, including P3s to ensure they remain a trusted and viable option in the procurement toolbox. This updated Guide reflects that evolution, with significant updates including additional information on the range of “Progressive” and collaborative delivery models that are becoming more commonplace in our industry. It also provides more detail on risk allocation and deal structuring, which are heavily interrelated with the model section, and places greater emphasis

on case studies illustrating the use of the P3 model at the municipal level in Canada. The goal is to increase clarity, improve accessibility and ensure the success of the P3 model in Canadian municipalities can be expanded upon in the years to come.

The Council maintains private capital is a critical component of P3s, enabling public owners to do more with public funds by using private capital to stretch those scarce tax dollars further. This financing brings enhanced oversight by investors since they have “skin in the game” to deliver on time and on budget. The private capital component is also the key differentiator between the P3 model the Council advocates for and other alternative procurement models, such as Alliance and Integrated Project Delivery (IPD), in which no private capital has been invested to date in this country. While these models continue to evolve in Canada, the Council will work closely with members to better understand their application, when and where they may be the optimal procurement model for a project and assess whether integrating private capital is possible to ensure governments are maximizing value for taxpayer dollars.

About CCPPP

Established in 1993, CCPPP is a national not-for-profit, non-partisan, member-based organization with broad representation from across the public and private sectors – representing all facets of the industry from architects and engineers, developers and contractors, operators and maintenance providers, to legal, financial, and technical advisers. The Council’s mandate is to collaborate with all levels of government, Indigenous communities and the private sector to enable innovative, sustainable approaches to developing, constructing, maintaining and operating infrastructure that achieve the best outcomes and enhanced quality of life for Canadians.

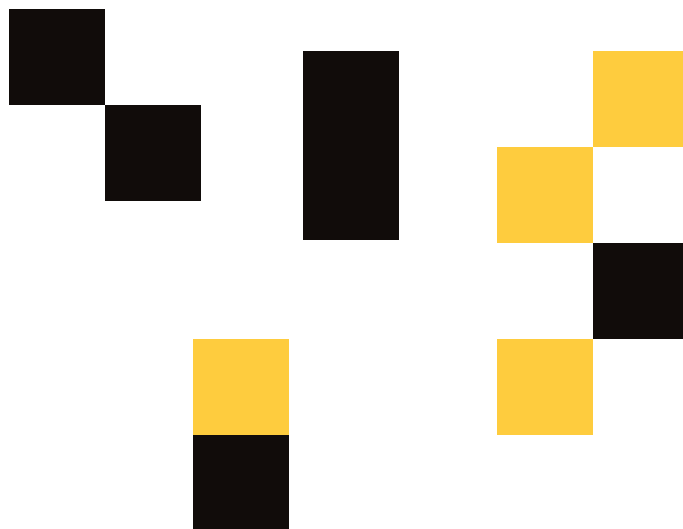
The Council advocates for evidence-based public policy in support of P3s, facilitates the adoption of international best practices, and educates stakeholders and the community on the economic and social benefits of public-private partnerships.

We invite you to visit our website to learn more about the Council’s mandate and mission at <https://www.P3council.ca>

Acknowledgements

We sincerely thank the dedicated members of CCPPP’s Municipal Engagement Advisory Group subgroup who volunteered their time and expertise in redeveloping this guide. These members include Amico Affiliates, Bird Capital, the City of Calgary, the City of Vancouver, the City of Winnipeg, Ernst and Young Canada, Fasken, Graham Capital and PricewaterhouseCoopers LLP, as well as CCPPP staff. Their collective knowledge and experience in the P3 and infrastructure industries, as well as municipal government, have been invaluable in ensuring the relevance and applicability of the guidance within this document.

We also thank CCPPP’s broader membership, Board of Directors and committee members for their ongoing support and dedication to advancing best practices and knowledge. Their efforts help create an enabling policy environment that will secure and enhance Canada’s infrastructure investment landscape for the long-term benefit of Canadians.



Glossary

The following alphabetized terms are commonly used to describe partnership agreements in Canada and throughout this guide; however, this list is not exhaustive or definitive:

Alternative Finance and Procurement (AFP): A term occasionally used as an alternative to P3.

Alternative Service Delivery (ASD): A procurement approach where a public entity contracts with the private sector for the delivery of services, typically involving the outsourcing of operations and maintenance of a facility or the provision of specific services.

Best and Final Offer (BAFO): A contractor's final offer following the conclusion of contract discussions with a government agency.

Build-Finance (BF): The private sector constructs an asset and finances the capital cost only during the construction period.

Build-Own-Operate (BOO): The private sector finances, builds, owns and operates a facility or service in perpetuity. The public constraints are stated in the original agreement and through ongoing regulatory authority.

Business Case: A document prepared by a municipality, or other project owner, to support decision making by describing the need and costs/benefits of a project, the procurement method and the financial and other impacts the project may have.

The Canadian Council for Public-Private Partnerships (CCPPP/ the Council): Established in 1993, CCPPP is a national, non-partisan not-for-profit with members from both government & the private sector. Virtually all major players involved in public infrastructure in Canada are members of the Council. Together, we work to shape the future of our country's infrastructure and services by delivering value to Canadians through public-private partnerships (P3s).

CMAR: A construction manager acting as a general contractor on behalf of the contracting authority.

Commercial Close: The date at which the partners sign the original agreement.

Concession: A private sector concessionaire undertakes investments and operates the facility for a fixed period of time, after which the ownership reverts back to the public sector.

Consortium: Group of private sector entities who together intend to deliver a P3.

Design-Build (DB): The private partner designs and builds infrastructure to meet public partner performance specifications, often for a fixed price, so the risk of cost overruns is transferred to the private partner. (Many do not consider DBs to be within the spectrum of P3.)

DBB: Traditional delivery model where the contracting authority hires key design, engineering and construction contractors to perform the work sequentially.

Design-Build-Finance (DBF): The private partner designs, builds and finances an asset.

Design-Build-Finance-Maintain (DBFM): The private partner designs, builds and finances an asset and provides maintenance services under a long-term agreement.

Design-Build-Finance-Operate (DBFO): The private partner designs, builds and finances an asset and operates the asset (i.e., provides services) under a long-term agreement.

Design-Build-Finance-Operate-Maintain (DBFOM): The private partner designs, builds and finances an asset, provides facility management services as well as operations under a long-term agreement.

Discount Rate: The rate used to calculate the present value of future cash flows.

Fairness Monitor: An independent third party that verifies the fairness of the procurement process.

Finance Only: A private entity, usually a financial services company, funds a project directly or uses various mechanisms such as a long-term lease or bond issue.

Financial Close: The date at which the partners sign the agreement that includes final financing.

Force Majeur: The occurrence of unexpected and uncontrollable natural and/or man-made conditions, such as earthquakes, typhoons, flooding or war, which may negatively affect the construction or operations of a project.

Guaranteed Maximum Price (GMP): The maximum price agreed upon for a project, established after final design and cost estimates, ensuring costs will not exceed this limit.

IPD/Alliance: Collaborative models where key project participants, including the owners, form an integrated team to execute all phases of the project and share in the risk (design, build risks — does not

include private capital, operations or maintenance) and rewards for projects.

Life cycle: The long-term requirements to maintain and rehabilitate an asset.

Net Present Value (NPV): The sum of the present values of all aspects of the project (design, construction, maintenance and financing) expressed in today's dollars.

Operation & Maintenance Contract (O&M): A private operator, under contract, operates a publicly-owned asset for a specified term. Ownership of the asset remains with the public entity.

Output Specifications: A document that sets out the outputs and performance levels required for the construction of a project and the services to be provided for the project.

P3: Public-private partnership.

Pre-Development Agreement (PDA): A contractual arrangement between the public and private partners that outlines the terms and responsibilities for the early stages of a project, including design development, permitting, and other preparatory activities. Upon completion of the PDA, the standard P3 project agreement is finalized and takes effect, allowing the project to proceed to construction and implementation.

Preferred Proponent: The shortlisted bidder selected, upon completion of the RFP evaluation stage, to advance to the negotiation and close stage.

Privatization: A private party takes full ownership of the project, either through an acquisition or a revenue risk concession tendered by the public sector.

Progressives: This approach involves bringing in private partners earlier in the process, before a procurement model is selected, to collaboratively develop market-viable solutions, focusing on selecting and scoping economically feasible projects while managing scope, size, location, timing, and risk.

Public Sector Comparator (PSC): A detailed analysis carried out by the public partner or its advisers to determine the all-in life cycle cost of providing the project or service. The PSC can then be measured against the private sector proposal to determine the quantitative benefit to the public sector.

Retained Risk: The value of those risks retained by the public sector under a P3 procurement.

REOI/RFI/RFEI: Request for Expressions of Interest

RFQ: Request for Qualifications

RFP: Request for Proposals

Special Purpose Vehicle (SPV): An entity created by a consortium solely for a single transaction, and in the context of a P3, whose operations are limited to the construction, financing and operation of specific assets. Also known as a "bankruptcy-remote entity."

Traditional Procurement: The delivery of infrastructure and services by the public sector using the design-bid-build method.

Transferred Risk: The value of those risks transferred to the private partner under a P3 procurement.

Value-for-Money (VFM): Describes the quantitative and/or qualitative benefits to the public expected from a particular procurement method. Quantitative value is achieved through lower cost of a particular procurement method, whereas qualitative value is achieved when a procurement method better supports the goal of the project without costing more.

Whole Life/Whole-of-Life: The total cost of ownership of an asset over its life. Reflects the integration of design and construction with ongoing maintenance and life cycle.



Chapter 1 What is a Public-Private Partnership (P3)?

Canada's Infrastructure Backlog & The Application of P3s

Public infrastructure affects every aspect of our lives, from the water we drink and the roads we travel to the recreation centers where people of all ages gather for sports, cultural activities, and community events. Infrastructure is an enabler of economic development and growth — roads without potholes facilitate the movement of people and goods; efficient public transportation improves productivity; social housing, community centres and recreational centres provide much-needed services to support families and workers and help to create a sense of community and belonging for citizens.

Canada's public infrastructure is aging, and Canada's population is growing — this dual challenge is driving significant demand for new and upgraded infrastructure. Governments at all levels are struggling to keep pace with public demands for infrastructure and services. This challenge is particularly pronounced for municipal governments. In 2023, Statistics Canada reported that core public infrastructure in Canada, excluding hospitals, schools, courthouses and affordable housing, had a total replacement value of \$2.1 trillion at the end of 2020. **Municipalities owned 61.7 per cent of that total estimated replacement value — \$1.328 trillion.**¹

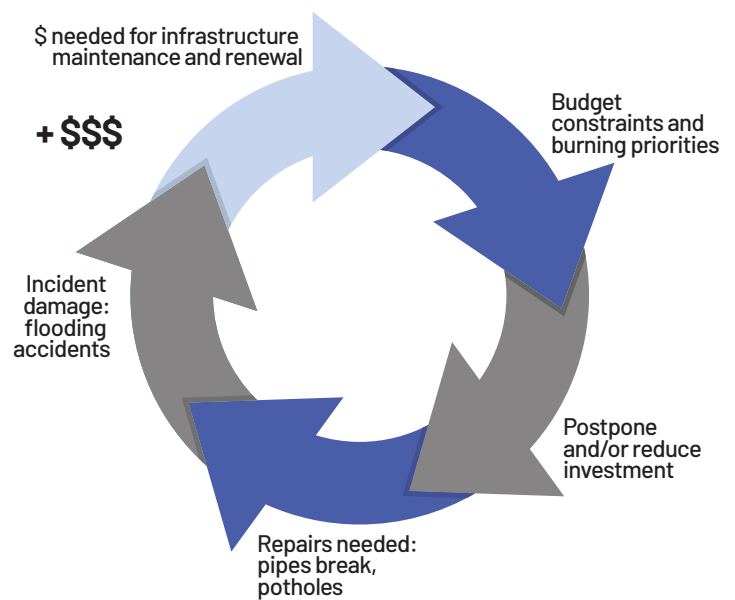
With aging infrastructure, growing populations, expanded responsibilities to address social services, climate change and homelessness, and the need to balance operating budgets and manage debt levels, Canadian municipalities, large and small, are faced with complex, difficult decisions. Methodologies for estimating both the replacement value of public infrastructure and the associated infrastructure deficit vary widely. Still, at the time of publication, Canada's infrastructure investment gap is estimated to be hundreds of billions of dollars.

Municipalities face a particularly difficult challenge in funding their investment needs, given the requirements to balance operating budgets and the need to manage municipal debt levels. The consequence is twofold:

1. Funds are diverted away from maintenance and renewal to address more urgent needs, creating a growing backlog of repair and renewal projects that lead to costly repairs and compounds the investment required; and
2. As populations grow, municipalities need to improve and expand services.

The Vicious Circle

This critical infrastructure backlog has necessitated a broader consideration of the models available for procuring infrastructure in a manner that meets the needs of stakeholder and user groups and is financially and economically efficient. Governments have increasingly been turning to collaborative procurement and delivery models that properly harness the expertise of both the public and private sector to deliver the growing backlog of public infrastructure projects.



In many jurisdictions around the world, P3s have become a common tool for delivering projects, building infrastructure and delivering services. In Canada, P3s have been in use for more than 30 years and are utilized by governments at all levels. Other public sector institutions, such as universities, colleges and hospitals, have also relied upon P3s with success to meet their growing infrastructure needs.

¹ Statistics Canada. "Canada's Core Public Infrastructure Survey: Replacement values, 2020," March 20, 2023.

Effective P3s embody four essential attributes:

1. They allocate appropriate risk transfer to the party best suited to manage it
2. They consider whole life-cycle costs of the asset
3. They drive innovation and efficiencies; and
4. They leverage private capital and expertise.

P3s are well suited to a wide variety of asset classes. Civic buildings, community and recreation centers, convention centers, water utilities, wastewater utilities, energy & electrification projects, transit, roads, bridges, housing, and parking are all examples of municipal infrastructure where the P3 model has been utilized with success in Canada.

Defining a Public-Private Partnership

At a high level, a public-private partnership is any transaction structure involving both private and public parties working together towards a common goal. Selected definitions include:

“A cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards.”

The Canadian Council for Public-Private Partnerships

“An infrastructure project in which a private contractor provides some or all of the financing for the project; designs and builds the project, often providing operations and maintenance for the project; and receives payments from government over an extended period of time, subject to deductions for failing to meet contractually defined performance standards.”

Alberta Infrastructure

Under P3s provincial ministries and/or project owners establish the scope and purpose of a project, while design and construction work is carried out — and often financed — by the private sector. Typically, only after a project is completed will the province complete payment to the private-sector company. In some cases, the private sector will also be responsible for the maintenance of a physical building or roadway. For some complex projects, there are situations where even after extensive planning and due diligence, there remain significant risks that are difficult to quantify or manage in advance

of a project beginning. In cases like this, the partnership may require the public and private partners to share such risks.”

Infrastructure Ontario

While these definitions (and many others) illustrate the broad concept of a P3, common themes tend to emerge:

1. A focus on risk management and allocation
2. Long-term arrangements that may include operations, management, and renewal activities
3. Early involvement in the project by private sector partners driving innovation, value engineering, and other efficiencies with a focus on achieving best value; and
4. The use of private capital to finance the infrastructure project or service.

Chapter 2 of this Guide is reserved for an in-depth discussion of the first point—risk allocation and management—given its fundamental importance to model selection and project structuring. Chapter 3 provides an in-depth discussion of the fourth point—use of private capital. Simplified examples for points two and three are provided as follows to illustrate the concepts and how they compare to more traditional project procurement and delivery approaches.

As a point of clarification — the majority of P3s deployed in Canada have been implemented using **availability-based** models. In these P3 models, payments are made to the private sector by governments or other public sector institutions based on the availability of the asset. In cases where the asset becomes unexpectedly unavailable, the private sector can be penalized contractually and financially.

In some cases, P3s can include user fees, such as toll roads — these fees can be used, in part or in full, as part of the payment to the private sector. These are referred to as concessions arrangements, as opposed to availability-based arrangements. Given the dominance of the availability-based model in Canada, this is the model generally addressed throughout this Guide.

Whole Life Cycle Asset Costing

Under a P3 model where the private partner assumes responsibility for maintaining and renewing the asset (30 years, for example), the private sector partner will need to guarantee the asset's performance and meet the municipality's availability and service requirements.

As a consequence, the private sector team responsible for the operations and maintenance (O&M) of the asset will work side-by-side with the private partner's design and construction team to ensure equipment and material choices will enable them to meet the municipality's performance standards over time.

Under a traditional procurement, the public sector focuses almost exclusively on the capital project and the capital budget. Whole life cycle cost and performance are not typically part of the planning, decision making, or budgeting process.

In addition, under the P3 approach, the public sector contracts with a single entity, which is responsible for assembling a project team composed of all of the necessary disciplines (e.g., design, construction, maintenance, life cycle). Under the traditional procurement approach, the public sector must contract separately with each discipline. **The efficiencies created through the P3 approach can yield significant savings for the public sector, both through a simplified management structure and by mitigating the risks of interface between disciplines.**

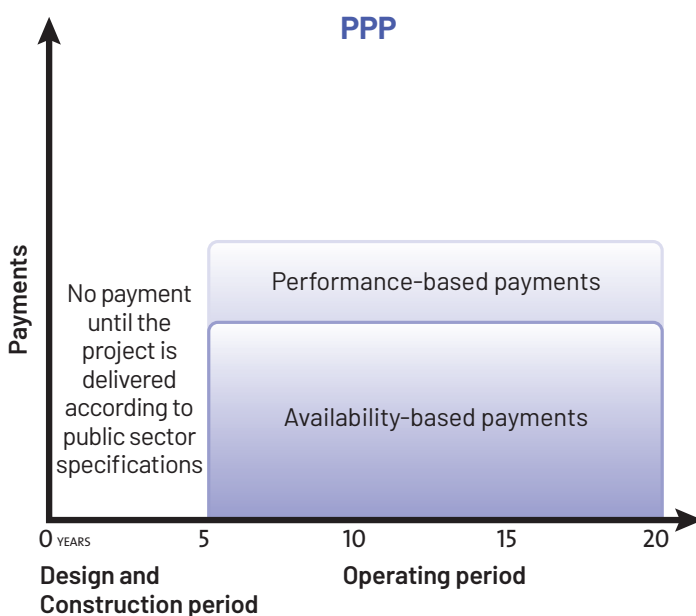
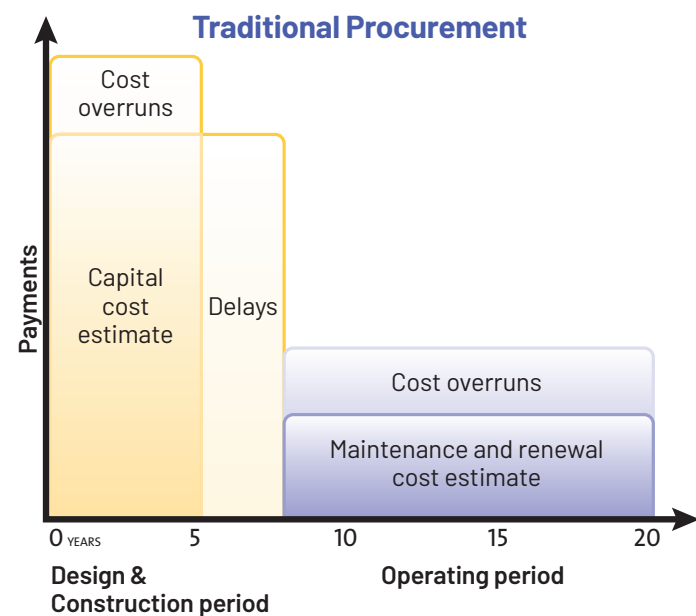
Traditional		P3
Example 1		
The municipality identifies the type of equipment to install in a new wastewater treatment facility, including the size and grade of the machinery.	Vs.	The municipality specifies the volume of water that must be treated and the norms and standards which the treated water must meet before being released into the public waterway. The private partner is responsible for selecting the processes and equipment which will allow it to unfailingly meet these standards.
Example 2		
The municipality specifies that the buildings in a new social housing development project will have carpeting. Carpeting is chosen because it is a cost-effective option compared to alternatives such as wood, cork or vinyl.	Vs.	Among the many performance criteria determined by the municipality, it specifies that the homes must be maintained over a 30-year period to the same standards as when originally built. It also identifies the expected tenant rotation over that period. As a result, the private partner decides to install durable vinyl tile flooring that resists damage and will need to be replaced much less frequently than carpeting, although the initial capital cost is higher, it is more cost-effective over the lifecycle of the project.

Driving Innovation & Efficiencies – Pay for Performance

Under a P3, payment is the tool that gives the public partner the leverage it needs to secure the desired outcomes from the private partner. Under traditional procurement, there is little or no relationship between payment and performance.

Traditional		P3
Example 1		
A municipality is building a new city hall. Payment will be made to the engineers and contractors based on construction advancement with a small holdback (typically 10 per cent).	Vs.	The municipality will only pay for the asset once it has been delivered and only if it meets its performance specifications. In addition, the price of the project is committed to at the time of the proposal. The private partner assumes all cost overruns and commits to a firm delivery date. In addition, the cost of the O&M over the term of the project is also set in the contract, subject to escalation.
Example 2		
A municipality outsources the operation of its bus maintenance. The contract does not link payment to performance and there are no incentives to improve service quality.	Vs.	Payment by the municipality to the service provider is directly linked to the quality of the maintenance work and the efficiency and effectiveness of the service. Failures, such as bus breakdowns or buses not ready for service, lead to deductions. The contract also includes incentives in the form of bonuses to perform better than the desired service level.

The principle of “pay for performance” is best illustrated in the diagrams below:



Under the traditional procurement approach, the lack of financial incentive to deliver on time and on budget can lead to change orders, cost overruns and delays. Under a P3 approach, the private sector is responsible for raising the capital for the project, and the government repays the consortium over time against project completion or performance milestones (amortizing project costs), enabling governments to address more immediate needs instead of postponing projects due to existing public funding shortages. Putting private capital at risk in a P3 project enhances accountability, ensuring the asset is constructed to perform as intended and is delivered on time and on budget.²

Why do Public-Private Partnerships Work?

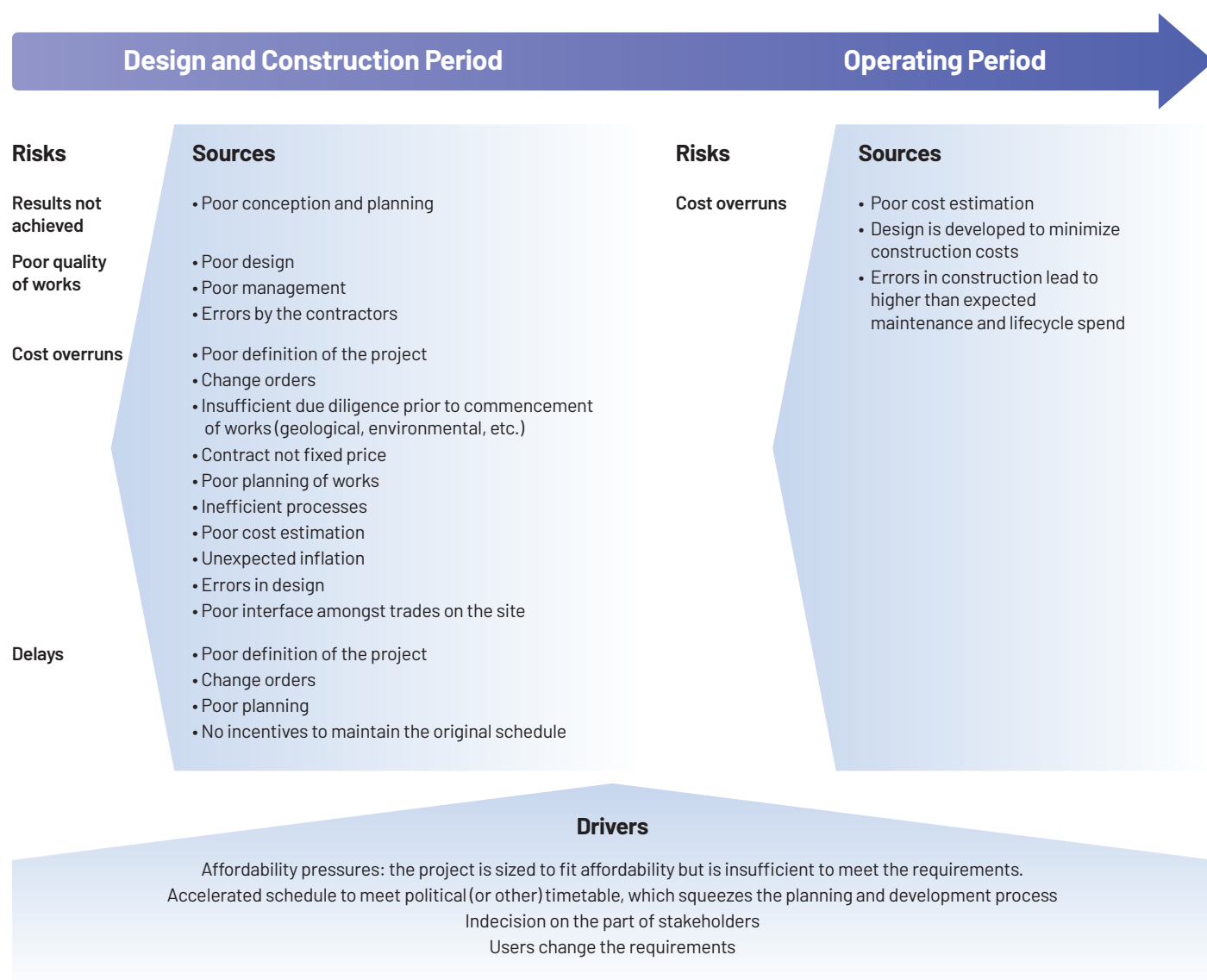
There is considerable evidence that when the public sector procures capital projects, those projects often incur significant delays in completion and delivery and incur material cost overruns, especially when the projects are large and complex. The problems of delays and cost overruns on traditional public sector procurements have occurred consistently in jurisdictions across the world (Canada has not been immune) and were two of the key drivers that caused the public sector to look at new methods of procuring infrastructure and services in the early 1990s.

Governments have turned to P3s because they offer a framework that imposes discipline to help control the factors leading to cost overruns and delivery delays under traditional procurement – and the results have largely been positive, as demonstrated by several empirical studies as follows [see next page]:

² The Council firmly believes risk should be borne by the partner, whether public or private, best equipped to manage it with due consideration to prevailing market conditions. Ultimately, this approach protects taxpayers and enables better project outcomes. The Council and its members stress the need for a renewed, “First Principle-driven” approach to risk management, with a greater focus on aligning incentives to reduce risk for both the private and public sectors. We invite readers to learn more about recommendations in our 2024 publication, [Modernizing Canada’s Approach to P3s](#).

Study	Sample	Result
Australia - Infrastructure Partnerships Australia (2007)	21 P3 projects and 33 Traditional projects	<p>Traditional & P3 projects (per cent): value weighted time over (under) run</p> <p>Full Period: Original Approval – Final</p> <p>Traditional: 25.6 per cent</p> <p>P3: 13.2 per cent</p> <p>Stage 3: Contract – Final</p> <p>Traditional: 23.5 per cent</p> <p>P3: -3.4 per cent</p> <p>Cost Overruns</p> <p>Full Period: Original Approval – Final</p> <p>Traditional: 35.3 per cent</p> <p>P3: 11.6 per cent</p> <p>Stage 3: Contract – Final</p> <p>Traditional: 14.8 per cent</p> <p>P3: 1.2 per cent</p>
Australia - Improving Public Private Partnerships: Lessons from Australia – Study by University of Melbourne (2008)	25 P3 projects and 42 traditionally procured projects	<p>Average Construction Phase Delay</p> <p>Traditional: 25.9 per cent</p> <p>P3: 1.4 per cent</p> <p>Construction Cost Overruns</p> <p>Traditional: 18 per cent</p> <p>P3: 4.3 per cent</p>
Canada - World Bank (2017)	P3 projects reaching Financial Close	Cost savings of CAD \$27 billion and 13 per cent time savings over traditional procurements.
Canada - Infrastructure Ontario Track Record 2018 Report (2018)	Analysis of 62 P3 projects that had reached substantial completion by the end of the 2018 calendar year	<p>95 per cent of projects completed on-budget</p> <p>69 per cent of projects completed on-time</p> <p>Performance results exceed generally accepted industry standards for capital projects.</p>
Canada - Infrastructure Ontario Value-for-Money (VfM) Analysis (2022)	P3 project VfM analysis completed at Financial Close	<p>Analysis of sample of past Infrastructure Ontario projects that underwent a VfM analysis at Financial Close indicated VfM of:</p> <p>0 per cent to 10 per cent using Build-Finance (BF)</p> <p>10 per cent to 15 per cent using Design-Build-Finance (DBF), and</p> <p>15 per cent to 22 per cent using Design-Build-Finance-Maintain (DBFM),</p> <p>When compared to conventional project delivery.</p>
Are private investors overcompensated in infrastructure projects? – ScienceDirect, Transport Policy, Study performed by researchers from Stanford and the universities in Finland and South Korea (2024)		<p>Researchers from Stanford University and universities in Finland and South Korea utilized a lengthy time series of financial data from P3s to compute the financing cost. They found that the 'extra financing cost of the P3s is a justified compensation for the risk transfer.'</p>

Intuitively, the results reflected in the table above make sense — improving collaboration between public and private counterparties to a project, better leveraging private-sector expertise and aligning incentives should lead to improved project outcomes. Compared to traditional procurement, P3s create value by transferring risk and responsibility to the private sector. The public partner pays for the availability and/or performance of the infrastructure rather than paying a supplier to complete activities or tasks. The following diagram illustrates the types of risks that can occur during the two main project phases, as well as the potential drivers of these risks:



P3s can be efficient at dealing with the factors described above. Why?

1. In a P3, the private partner must make a contractual commitment to deliver what has been asked for inside a fixed budget and at a predetermined date.

2. The private partner is generally an integrated team, with all parties (design, construction, finance, and long-term operations and maintenance) working together early in the project development phase. This naturally leads to better definition of the project, better planning and reduced interface risk.

3. During development, there is necessarily a larger focus placed on risk allocation between the public and private sectors, and more proactive management of risk.
4. As presented in the previous section, the public partner does not pay for any of the design or construction costs before it has been determined that the private partner has delivered exactly what has been asked for. If there is a delay, the public partner does not pay until the project is completed, and if there are cost overruns, the public partner is not responsible for them (to the extent that the delays and cost overruns are the responsibility of the private sector partner in accordance with the P3s risk allocation).
5. The private partner must arrange financing so that it can pay for the design and construction costs, and financing is scheduled to be repaid in whole or in part when the project is delivered. If the private partner is late, it will have to make the payments to the lenders even though it has not started to receive payment from the public partner. This is the most powerful incentive for on-time delivery. It also forces lenders to be diligent about the private partner's ability to deliver on its commitments.
6. The utilization of private capital to deliver a project results in an additional layer of oversight being added to project performance — as investors want to ensure a return, technical and legal advisers are typically engaged to conduct extensive due diligence on the project during development, as well as monitoring during construction.
7. More time is invested up front in defining the requirements and expressing them as performance or availability criteria in measurable and objective terms. The public partner will not specify how to develop the project — it will define what it wants from the project.
8. To develop reliable estimates of the total life cycle costs of the project, planning on the part of the municipality is also key. **Because the private partner will have to make a commitment with respect to costs and schedule over a long term, the municipality must plan and have the authority to make a contractual commitment to assume the total costs of the project for the term of the contract. Therefore, the municipality must seek the appropriate authorizations, recognizing the total life cycle cost of the project.** This militates significantly against optimism bias and other factors that lead the public partner to underestimate project costs.
9. If the private partner is also responsible for maintenance and operations after the project is delivered, it will receive payments to repay the debt incurred during construction and pay for the provided services. The public partner will only make payments if the private partner provides the services according to the specifications and when the asset is completed and available for use based on agreed criteria. Otherwise, deductions will be taken — and these deductions are agreed in advance as part of the project's development phase commercial negotiation. Performance and availability criteria are objective and measurable to avoid conflicts.

When and Why Public-Private Partnerships Should Be Considered

Public-private partnerships are a proven procurement option and offer many benefits to municipalities — drawing on private expertise and private capital to deliver public infrastructure. With omnipresent funding challenges, infrastructure gaps growing, and municipal budgets under pressure, other mechanisms for attracting capital — including P3s — should be considered.

P3s are not a panacea for Canada's infrastructure deficit and are not suitable for every infrastructure project. **Ultimately, P3s are the right option when they offer greater Value-for-Money for taxpayers compared to traditional methods.**

Generally, the characteristics that make a project suitable for P3 procurement include:

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

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

Degree of Risk Transfer: The public sector can extract value from transferring *appropriate* responsibilities to the private sector because the latter can best manage those responsibilities and associated risks. Conversely, P3s will *not* generate value if the private partner takes on responsibilities and risks for which it is

ill-suited. For example, it would be difficult to ask the private partner to pay entirely for a social housing project from the proceeds of the rental revenue if the private partner does not have control over the parameters that influence that revenue, such as the location of the project, soliciting and managing tenants, and setting rents and rental increases. Typically, given their commitment to the social housing mission, the public partner retains these responsibilities;

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

The value generated by P3s is also enhanced by:

Project Term: Terms of 20 to 40 years, driven by long-term demand for the asset and a sufficient operating period to allow the private partner to recover its investment.

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

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

Collaboration & Flexibility: Projects generally excel at capturing value from a partnership-style arrangement when the public-sector partner is open to entertaining input that the private-sector partner provides. Innovation is maximized with two-way collaboration and flexibility, within the constraints of the project requirements.

Does size matter?

There is considerable debate with respect to a minimum project size above which a P3 will generate value for the public sector. The more common P3 projects in Canada have tended to be large and complex, with capital costs ranging from \$100 million to more than \$1 billion. However, there are smaller projects that have been or are in procurement as P3s where the documentation and process have been streamlined and adapted.

The most significant factor to consider when assessing the feasibility of a P3 as it relates to project size is transaction costs relative to the value generated by the P3. Transaction costs include the costs associated with internal and external resources, such as financial, legal and technical advisers, who may be required to

plan and develop the project specifications and documents and to participate in the procurement process.

While these costs vary based on the project and the procurement process design, there has been a lot of standardization in documentation and processes, and many precedents exist from which to draw. Other strategies, including bundling smaller projects into one larger project, and the utilization of progressive P3 models – discussed further in Chapters 2 and 3 of this Guide – can help streamline transaction costs and enable the use of the P3 model on projects with lower capital costs.

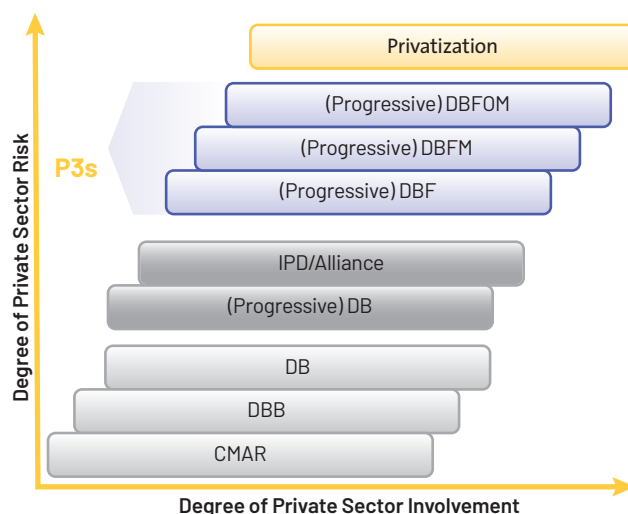
In short, the P3 model can be appropriate for use on projects big and small, so long as the expected benefits outweigh the implementation costs.

Chapter 2 Delivery Models and Risk Transfer

Procurement Model Overview

In procuring a municipal asset, selecting the appropriate procurement model is one of the major early decisions that municipalities must make. Depending on the public sector's requirements and the project's characteristics, a variety of different project delivery or procurement methods can be employed.

Each of the models allocate varying degrees of responsibility and risks between the public and private partners. The following chart shows different delivery models with increasing levels of private sector involvement and transfer of risk and responsibility from the public partner to the private partner.



Some of the delivery models available to contracting authorities include:

CMAR: A construction manager acting as a general contractor on behalf of the contracting authority.

DBB: Traditional delivery model where the contracting authority hires key design, engineering and construction contractors to perform the work sequentially.

DB: Traditional delivery model where a single contractor is engaged to deliver the design and construction scope under one contract.

(Progressive) DB: A variation of the design-build model wherein the design and development of the project is advanced substantially by the contracting authority, design team, and construction team prior to the cost and schedule for the project being set.

IPD/Alliance: Collaborative models where key project participants, including the owners, form an integrated team to execute all phases of the project and share in the risk (design, build risks – does not include private capital, operations or maintenance) and rewards for projects.

Alternative Service Delivery (ASD): A procurement approach where a public entity contracts with the private sector for the delivery of services, typically involving the outsourcing of operations and maintenance of a facility or the provision of specific services.

DBF: A form of P3, similar to a design build project, where the contractor delivering the project finances some or all of the capital costs.

DBFM: A form of P3 where the private partner designs, constructs and maintains the project. The private partner also finances some or all of the delivery of the project, with private capital amortizing over the life of the maintenance phase of the project.

DBFOM: A form of P3 where the private partner designs, constructs, operates and maintains the project. The private partner also finances some or all of the delivery of the project, with private capital amortizing over the life of the operations and maintenance phase of the project.

(Progressive) DBF, DBFM, DBFOM: An evolution of the established Canadian P3 model, being used in jurisdictions like Ontario, for construction and long-term maintenance of exceptionally large and/or complex projects. This approach involves bringing in private partners earlier in the process, before a procurement model is

selected, to collaboratively develop market-viable solutions, focusing on selecting and scoping economically feasible projects while managing scope, size, location, timing and risk.

Privatization: A private party takes full ownership of the project, either through an acquisition or a revenue risk concession tendered by the public sector.

A detailed discussion of the procurement models above, including key nuances, features, and high-level risk allocation can be found in Chapter 3.

Procurement Model Selection

Selecting the right procurement model is fundamental to the successful delivery of critical public infrastructure. Given that each project has unique challenges, circumstances and objectives, there is no “one size fits all” approach to major project delivery. The choice of appropriate procurement model depends on a wide variety of factors. Some of these include:

- Size of the project
- State of development of output specifications and project scope
- Risk profile from a procurement, design, construction, operation and maintenance perspective
- Procurement authority strategic objectives, capability, and constraints
- Market interest and capacity

Procurement authorities consider these factors in detail through the development of comprehensive business cases.

Business Case Development

The business case is a key driver in supporting investment decisions. Each municipality will have its own best practice guidance for the development of a business case, which should:

- Summarize the project objectives and the project scope
- Summarize the projected base costs
- Validate the shortlisted procurement options. Are there precedents? Is there market appetite?
- As applicable, undertake a market sounding program to validate market appetite for the project and summarize the results

- Include a detailed screening of the shortlisted procurement options that identifies which model best achieves the objectives of the project, sets out a risk-adjusted present value analysis of the capital, operating, maintenance and life cycle components under various procurement options, and includes a risk analysis identifying all material project risks associated with each procurement option, and
- Identify the preferred delivery model.

The business case also enable a municipality to consider and acknowledge qualitative issues such as the benefits of having a project delivered on time. However, as these qualitative benefits cannot always be accurately quantified, the Value-for-Money (VfM) analysis does not attempt to quantify the qualitative benefits that may result from using a P3 approach for delivering a project. The ultimate goal of the business case is to identify which procurement option delivers the best VfM, which in the case of a P3 means, "Is private sector involvement in the project likely to deliver Value-for-Money?"

Canada has a number of procurement agencies and government ministries with deep knowledge of how P3s work, templated agreements and other resources that can potentially be shared with municipalities to advance their understanding of P3s and their capacity to deliver them. We recommend contacting CCPPP and its public sector members when guidance, case studies and best practices are required.

Qualitative Assessment

A qualitative assessment will enable contracting authorities to develop a shortlist of procurement models for further consideration. This analysis evaluates each procurement model against a set of high-level criteria developed by the procurement authority. These criteria are often related to the procurement models' alignment with the procurement authority's strategic goals and objectives, and the need for price and schedule certainty at all stages of the project life cycle, the degree of flexibility required by the contracting to make scope changes pre- and post- contract award, as well as procurement authority capacity and experience, among others. Typically, the top two alternative procurement delivery models are shortlisted to proceed to the quantitative risk assessment stage where they are assessed against the procurement authority's traditional delivery model, also known as a Public Sector Comparator.

Quantitative Risk Assessment

Prudent risk management is fundamental to the success of any public sector procurement, and central to any successful procurement is the identification of risk associated with each component of the project and the allocation of that risk to the party best able to manage it.

The most effective way of identifying and quantifying the project risks is through a risk workshop in which subject-matter experts work with key project stakeholders to answer the key question: "What could go wrong?"

To answer this question the following steps are taken:

Risk Identification: Risks present in every category: legal, governance, design, construction, environmental, regulatory, and so forth.

Risk Assessment: The impact (effect, timing and severity) and likelihood of each.

Risk Allocation: To the party best able to manage and mitigate it. The essence of a P3 is the sharing of risk.

Information gathered during the risk workshop is consolidated into a risk register. The risk register is a tool used to quantify the value of the risks retained by the public partner under the shortlisted procurement options. This information is a key component of the VfM analysis. The risk register not only documents risk during the business case stage but also allows for the continued monitoring of project risks throughout a project's life.

Value-for-Money (VfM)

A key component in the development of the business case is the VfM analysis. Historically in Canada, a VfM analysis is the process of developing and comparing total project costs, measured at the same point in time under the following delivery models:

1. **Traditional Procurement:** The estimated total costs to the public sector of delivering the project using the public sector comparator.
2. **Alternative Procurement:** The estimated total costs to the public sector of delivering the same project to the exact same specifications using an alternative procurement model such as a P3.

VfM exists when the risk-adjusted costs of the alternative procurement option are less than the risk-adjusted costs of traditional procurement.

The VfM analysis reflects the total costs associated with providing the asset or service and must reflect the scope of responsibilities that would be transferred to the private sector partner. For example, in the case of a VfM analysis for the construction of a new recreational facility, the VfM analysis would compare the risk adjusted cost to the public sector of designing, constructing, financing, maintaining and undertaking life cycle investments according to the required service levels under a traditional procurement approach and would compare these costs to the costs of the alternative delivery approach, including the cost of private financing, if applicable.

The evaluation is performed on a Net Present Value (NPV) basis to ensure an “apples to apples” comparison. This provides a municipality with a full picture of the true cost of offering the asset or service. Full life cycle costing also offers predictability of costs and funding throughout the life of the contract.

In a typical P3 transaction where a municipality makes annual payments, there is the additional advantage of spreading the costs of the investment over its life, improving its ability to match costs to service delivery.

It is important to note that some jurisdictions are moving away from traditional VfM methodologies as they do not quantify the social benefits of P3s. The Council believes there is an opportunity for government officials across all levels to explore modernizing their approach to established VfM beyond the conventional “lowest net present value” metric and increasing their focus on qualitative factors from a whole-life cycle project investment.³

The Building Blocks of Value-for-Money

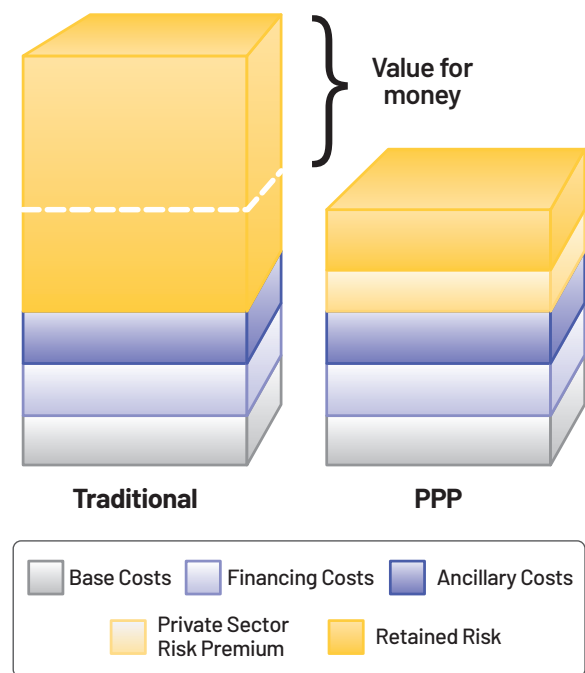
The cost components in a VfM analysis should include only those project costs that are being delivered using a P3. Costs that would be the same under any procurement approach, such as land acquisition, furniture, fixtures and so on should be excluded from the VfM analysis.

The components of a typical VfM analysis are set out in the diagram below. Some of the factors that influence VfM include the choice of the discount rate, risk quantification, key financing assumptions (structure and cost of the financing), the estimation of the private sector risk premium and the estimation of the ancillary procurement costs.

In a VfM analysis, the base costs are assumed to be the same for each procurement option. The financing and ancillary costs are higher under alternative procurement – the private partner includes a risk premium under alternative procurement and the value of the risks retained by the public partner is calculated through the risk assessment. Project risks are potentially adverse events that could have an impact on project costs.

Under traditional procurement, the risks retained by the public sector are material and P3 procurement transfers some but not all of the project risks to the private sector partner.

As part of a VfM analysis, project risks must be identified, allocated to the party best able to manage them and accurately quantified, typically with the input of experienced third- party advisers.



Upon its completion, the business case must be presented to the ultimate approving body (in the case of a municipality, the Council) charged with approving the project and the recommended procurement approach.

³ Canada's established VfM approach enjoys global recognition and has been well-understood by the industry. In its August 2024 published recommendations: [Modernizing Canada's Approach to P3s](#), CCPPP recommends the public sector work collaboratively across jurisdictions to update P3 documents to reflect these new approaches.

Market Soundings

Market soundings are a key component to a comprehensive business case and enable procurement authorities to tap private sector participants' knowledge and experience to gain additional insights with respect to market perceptions of a given project. Among others, this can include market views on the shortlisted procurement models, initial views on key risks and risk allocation, insight into market interest for the project, as well as capacity to deliver the project in the context of the current infrastructure market, the availability of private capital to fund the project and participant views on ways to increase the likelihood that the procurement authority's key goals and objectives are met.

Strong participation and representation from key contractors and stakeholders is critical to an effective market sounding. Participants typically include:

- Construction groups/firms;
- Engineering, architectural, and cost consultancy firms;
- Banks, private lenders and equity providers;
- Operations and Maintenance providers;
- Other industry stakeholders as necessary.

Chapter 3 Procurement and Delivery Model Procurement and Delivery Models

Depending on the public sector's requirements and the project's characteristics, a variety of different project delivery or procurement methods can be employed. Chapter 2 provided high-level definitions for the range of procurement models available to municipalities that allocate varying degrees of responsibility and risks between the public and private partners. This chapter looks at each more closely.

Traditional P3 Models: DBF, DBFM and DBFOM

Design-Build-Finance (DBF)

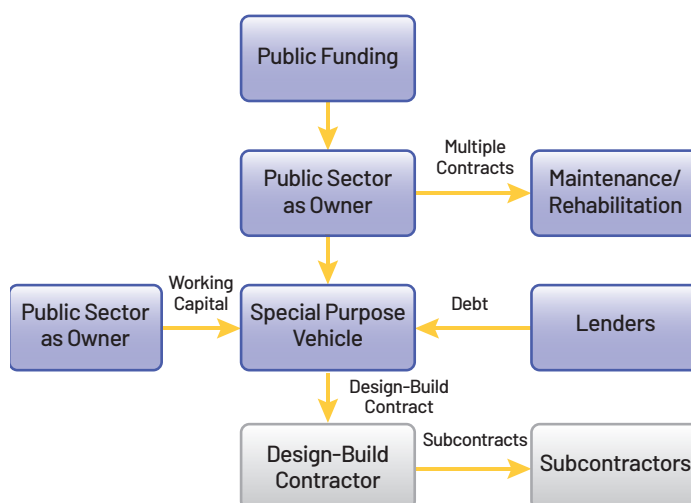
Under the DBF model, contracts are awarded to the most suitable bidders through a competitive tender process. However, a municipality transfers the responsibilities and associated risks for the design, construction and financing of an asset to the private sector.

Upon satisfactory completion of construction, the municipality makes a single payment to its private sector partner. In this manner, the private partner is incentivized to complete construction on a timely basis and ensure the public partner's specifications for the asset are met, since payment is linked to satisfactory completion.

With the DBF model, the contractor does not retain responsibility for the operation or maintenance of the asset, which limits the private partner's incentive to deliver operational efficiencies in the design and construction process.

What distinguishes this from the Design-Bid-Build (DBB) model is that the private partner takes the risk associated with financing the asset until the completion of the project/construction and handover. By linking payment to construction completion and satisfactory acceptance, the private partner is incentivized to ensure successful handover of the asset.

DBF Project Delivery Structure



The typical DBF project is one where there is little or no demonstrated efficiencies to be gained by involving the private sector during the operating period.

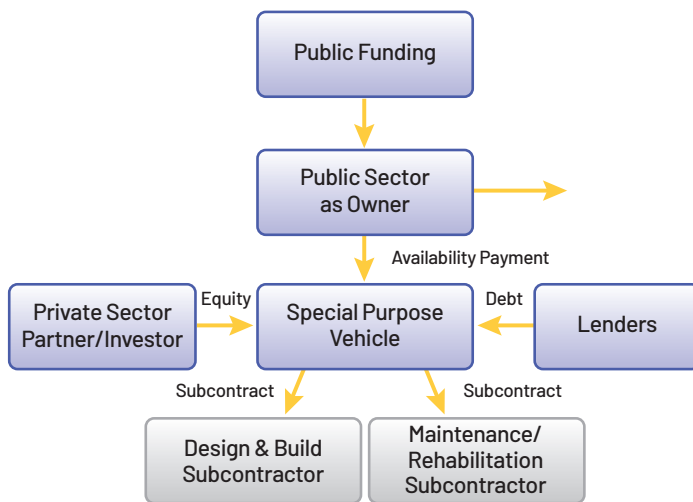
Design-Build-Finance-Maintain (DBFM)

The DBFM model is an integrated approach through which a private sector partner is identified through a competitive tendering process to design, finance, construct and maintain the asset in a manner that meets the requirements and specifications of the public partner. The project agreement can vary in length — the average in Canada is usually 30 years.

Under a DBFM, multiple groups come together and collaborate by creating a consortium to design, construct and operate the facility. This offers a fully integrated process that can lead to innovative solutions considering the whole-life cost of the asset, which is absent from traditional procurement.

While some elements of operations, such as cleaning, may be transferred to the private sector under a DBFM, these services are typically limited in scope and, in general, the operating responsibilities for the asset are retained by the public sector.

DBFM Project Delivery Structure

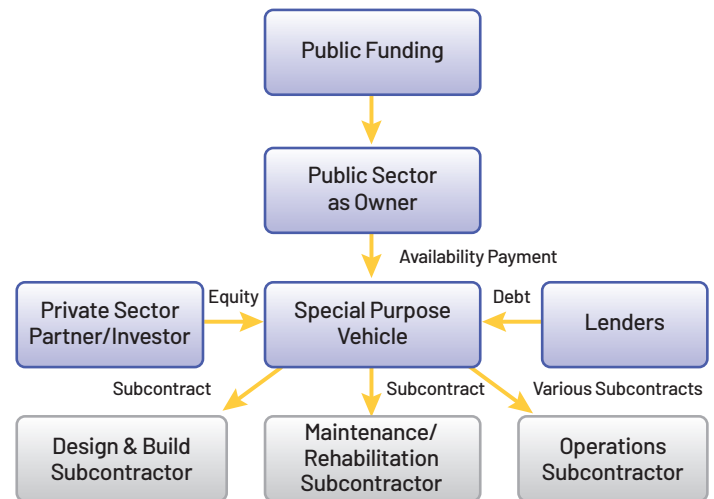


Design-Build-Finance- Operate-Maintain (DBFOM)

The DBFOM model is an integrated approach through which a private sector partner is identified through a competitive tendering process to design, finance, construct, operate and maintain the asset in a manner that meets the requirements and specifications of the public partner. The project agreement can vary in length — the average in Canada is usually 30 years.

DBFOM differs from DBFM in that it transfers greater operational responsibilities and related risks to the private sector. This approach has been successfully used on projects such as roads and other transportation infrastructure as well as municipal facilities such as arenas and community centres where there are significant operating responsibilities that can be transferred, including the provision by the private sector of a broad range of services to the public. In the case of arenas and community centres, this can include security, cleaning, waste management, food services, facility operations and scheduling and program development and delivery.

DBFOM Project Structure



Progressive P3 Models: PDBF, PDBFM and PDFOM

Progressive P3s are a new evolution of the P3 model. A handful of jurisdictions, most notably Ontario, are leading the exploration of this approach, which is being deployed for **complex projects** (factoring scope, size, location, timing and risk).

The progressive approach adjusts the procurement strategy of the P3 model to involve a private partner earlier in the process. It aims to identify market-viable solutions and prioritize selecting and scoping economically feasible P3 projects.

The whole point is that the government picks its partner sooner, and the public and private sectors work together to more adequately define and de-risk the project so that when the government is ready to fix the price, the risks have been identified, agreed upon and allocated appropriately.

However, this approach requires upfront resources and intensive work to ensure all parties have a clear understanding of the project's scope and risks from the outset.⁴

Whereas in the traditional P3 procurement model, financing is structured solely by the private party and committed before a private party is selected, in progressive P3 models the financing is structured collaboratively in stages allowing for adjustments as the project proposal progresses. Once a final fixed price is agreed upon, the financial structure and contracts can be completed according to the traditional P3 models allowing for a similar financial close.

The Progressive P3 model offers unique advantages, particularly in situations where early contractor involvement can drive better project outcomes including:

1. Streamlined Procurement

- When utilizing a progressive approach, the private sector consortium team is typically engaged earlier on in the project development cycle, on the basis of qualifications and other qualitative factors rather than a hard-bid quantitative evaluation.
- This generally allows for a much more simplistic, streamlined procurement process that can make the use of P3 models more accessible to public agencies that lack the financial capacity and expertise to run long and complex tender arrangements that typically require significant stipends to generate private sector interest.

2. Early Contractor Involvement

- By engaging the contractor early in the design process, the progressive P3 model ensures practical construction expertise is integrated from the start, improving constructability and reducing the risk of costly design changes later.
- The early involvement of the contractor helps the project stay on schedule and within budget, as it is actively guided through development with consideration of pre-established affordability criteria.
- Additionally, risk management practices are shifted from a focus on allocation to a focus on mitigation and elimination, leaving the project less vulnerable to disruptions during the delivery stage.

3. Collaborative Price Development

- The progressive P3 model enables the owner and contractor to work together to develop a mutually agreed-upon fixed price at a later stage of design development. This ensures transparency in cost estimation and allows for adjustments as the design evolves, before a fixed price is agreed.

- This collaboration ensures strong alignment between the project's budget, the scope of work and the schedule for project delivery, which is beneficial in setting realistic expectations for project stakeholders, including the public.
- An additional benefit of this extensive front-end collaboration is a potential reduction in changes, claims and disputes during and following construction.

4. Flexibility in Project Delivery

- PDBF offers greater flexibility in adapting the project design and construction plan to accommodate changes, making it well-suited for projects with evolving requirements or complex conditions.
- Simultaneously, it aims to protect the private sector from taking on an unreasonable amount of risk. The whole point is that the government picks its partner sooner, and the public and private sectors work together to more adequately define and de-risk the project so that when the government is ready to fix the price, the risks have been identified, agreed upon, and allocated appropriately. Though it is important to keep in mind, the Progressive model does not necessarily address market competition.⁵
- Importantly, the public sector counterparty in a progressive P3 typically retains off-ramps that can be exercised prior to the construction stage of a project being reached. This is a benefit for public sector agencies wishing to control their exposure and stage-gate their commitments to challenging infrastructure projects while scope, cost and schedule considerations are analyzed in detail.

⁴ CCPPP supports a flexible, "First Principle driven" approach to risk allocation that aligns incentives for both sectors, ensuring better management throughout the project's life cycle. This is especially true for municipalities who would benefit from greater flexibility in P3 contracts in order to adapt to changing community needs, regulatory shifts and other unexpected events. For more insights into CCPPP's recent risk management recommendations, please refer to [Modernizing Canada's Approach to P3s](#).

⁵ The Progressive P3 approach, supported by some in the contractor industry, emphasizes market-viable solutions, balancing feasible projects with fair risk-sharing. Some members see it addressing risk management and attracting companies back to the P3 market, while others caution it may not improve market competition. For more information, download: [Modernizing Canada's Approach to P3s](#)

Traditional Procurement Models: DB, DBB, CM and EPC

This section discusses both traditional procurements and newer delivery models such as progressive design-build, integrated project delivery and alliances.

Traditional procurements have typically been the most common method of traditional infrastructure procurement by the public sector. Under these approaches, the public sector is responsible for the design of the asset with the design development conducted in-house or contracted to private design firms.

Design-Build (DB)

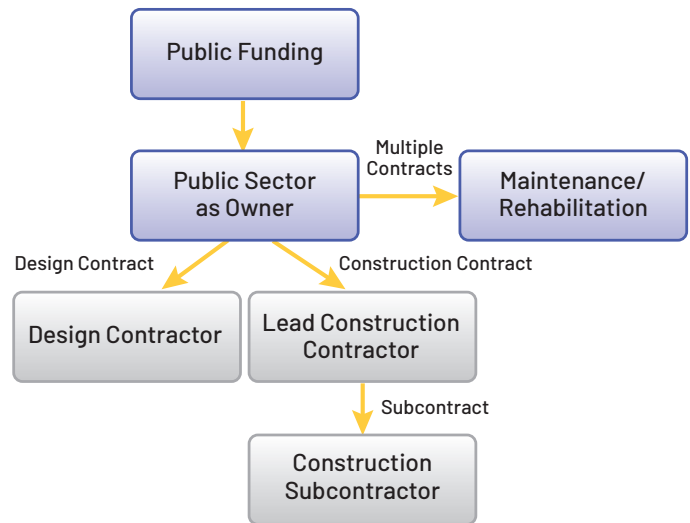
The Design-Build (DB) model transfers more risk to the general contractor who is responsible for the detailed engineering and construction work including performance by the engineers and subcontractors. The DB model could be best suited for owners who have identified their functional performance requirements and are looking for an opportunity for innovation and flexibility in delivering a solution. The model is also useful for owners who have developed a well-defined and prescriptive specification and seek cost and schedule certainty through risk transfer to the general contractor.

Design-Bid-Build (DBB)

The Design-Bid-Build (DBB) procurement model requires the development of detailed designs for the project according to stated specifications and the preparation of contract documents for all the design specification elements of a project. This documentation forms the basis of the competitive process against which tenders are then invited for the works to be contracted. Contracts are awarded to the most suitable bidders through a competitive tender process.

During the construction phase, the selected general contractor along with any subcontractors carrying out the work detailed under the contract will be monitored by the public sector. Following completion of the construction and a commissioning phase, the asset is handed over to the public sector for the operation and maintenance of the facility and paid for in full after the defects liability retention period.

DBB Project Delivery Structure



Construction Management (CM)

Under the Construction Management (CM) model, the owner retains many of the risks typically taken on by the general contractor, and the general contractor coordinates the construction by trade contractors on the owner's behalf. The general contractor's basic scope of services is limited to constructability reviews during design development, preliminary scheduling and budgeting, procurement planning, cost control, progress tracking, and coordination of inspection, commissioning, and handover.

Engineering, Procurement and Construction (EPC)

The Engineering, Procurement and Construction (EPC) model is generally used to describe a turnkey project, usually for highly sophisticated manufacturing or industrial facilities and large-scale, complex infrastructure projects.

Other Delivery Models: PDB, IPD and Alliance

Similar to traditional models, PDB and IPD/Alliance models have not, to date in Canada, included private capital investment in project delivery, operations and/or maintenance. This is a key differentiator from established P3 and Progressive P3 models, where private capital plays a crucial role, enabling governments to maximize taxpayer funds and achieve more.

Progressive DB

The Progressive DB model employs a target-price similar to a traditional Design-Build model, rather than the fixed price enabled under a P3 model. The Progressive Design-Build (PDB) model offers a flexible approach that engages the general contractor early in the project, typically through a two-step process:

Step 1: Early Contractor Involvement

In the first phase of PDB, the owner selects a general contractor through a qualifications-based competition. This step focuses on the contractor's experience, expertise, and ability to collaborate effectively.

Collaborative Design Development: Once selected, the contractor works closely with the owner and design team to develop the project's design. This early engagement ensures that the contractor's input is incorporated from the beginning, improving constructability and cost control.

Step 2: Cost Estimation and Target Price

After the design phase, the project team collaborates to develop a mutually agreed-upon fixed price or Guaranteed Maximum Price (GMP). This target price serves as the budgetary limit for the construction phase. In the case of a PDBF however, the price is fixed before financing committed.

A PDB, unlike the PDBF, often uses a cost-plus model with a GMP or target price. This flexibility allows the project team to adapt to unforeseen challenges while maintaining budgetary control.

IPD and Alliance

The IPD and Alliance models, introduced in Canada in 2020, emphasize a non-adversarial relationship between contracting parties, featuring no-dispute provisions that foster collaboration and shared responsibility. At the time of publication, there were no IPD/Alliance projects that had reached completion or included private capital or operations and maintenance in Canada.

While these models continue to evolve in Canada, CCPPP will work closely with members to better understand their application, when and where they may be the optimal procurement model for a project and assess whether integrating private capital is possible to ensure governments are maximizing value for taxpayer dollars. With that context in mind, it is still important for municipalities to understand the structures of these models as they perform their procurement options analysis.

Some important considerations to note regarding these two models:

- A culture shift is required: An adversarial approach is not conducive to successful Alliances. Both the public and private sector partners have to select the right people and the right partner organizations.
- Complex governance models need to be implemented.
- There is an open book policy amongst public and private sector team members on financial management of the project — personnel and material.

"Alliances are suitable for use by informed, mature practitioners or by newer practitioners that surround themselves with the right advice to compensate for their lack of experience...It is hard for an Alliance to perform if employees have to fight internal silos and politics to get anything done inside their own organizations."⁶

– Alain Mignot

Executive Director And Co-Founder
of the Alliancing Association of
Australasia (AAA)

Key Participants in IPD/Alliance Contracts

The IPD/Alliance model typically involves the following key participants:

- **Government Owner:** The public sector entity responsible for overseeing the project.
- **Private Sector Designers:** Architectural and engineering firms tasked with design.
- **Construction Contractors:** Firms responsible for executing the construction work.
- **Suppliers:** Providers of materials and equipment.

⁶ Mignot, Alain. *"Alliancing benefits and challenges in infrastructure projects"* Project Manager.com.au. Published March 31, 2011 (Accessed on September 25, 2024). At the time of publication, Mignot was executive director and co-founder of the Alliancing Association of Australasia (AAA).

- **Stakeholders:** Including community groups, funding organizations, and other local entities that may have an interest in the project's outcome.

Together, these parties work in a collaborative manner to plan, design, construct and commission the capital project.

Compensation Structure in IPD/Alliance Models

Compensation under an IPD/Alliance contract is directly tied to achieving key milestones related to:

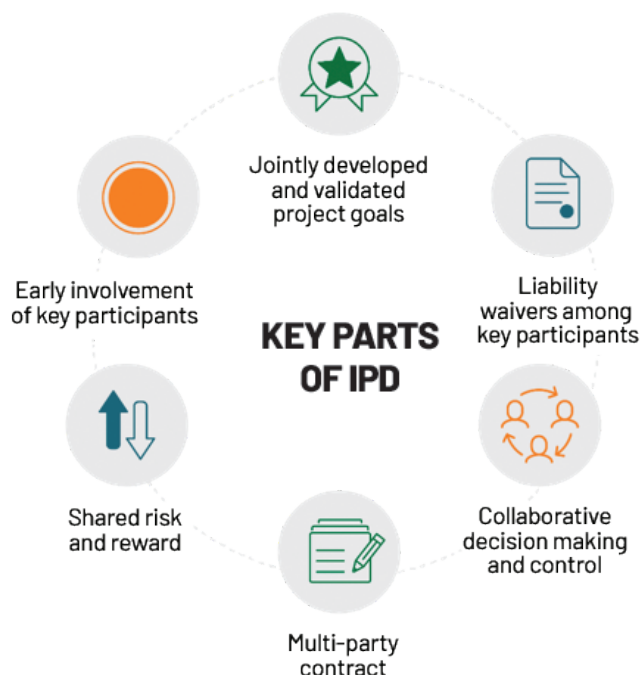
- **Cost:** Keeping the project within budget
- **Schedule:** Meeting agreed upon timelines
- **Profitability:** Achieving specific financial performance targets

These models are particularly suited to projects where owners seek innovative solutions or anticipate challenges that require flexibility and early collaboration.

IPD Project Structure

In an IPD project, the various contracting parties (owner, engineer, general contractor, and trade contractors) enter into a single agreement known as a “poly-party agreement.” This structure promotes transparency and shared responsibility among the parties.

Subcontracts: The general contractor remains responsible for entering into direct subcontracts with non-IPD team members and ensuring their performance on the project.



Alliance Project Structure

In an Alliance model, the owner, engineer, and general contractor sign a single “project alliance” agreement. The key difference from IPD is that the general contractor administers subcontracts on behalf of the alliance, ensuring that all subcontracted work aligns with the alliance’s overall goals and standards.

Similar to the Progressive approach, Alliance/IPD integrates early collaboration with private sector contractors, offers:

1. Enhanced Collaboration

- All key stakeholders — owner, designers, contractors, and suppliers — work together under a single agreement, fostering transparency and shared decision-making.
- No dispute provisions create a non-adversarial environment, reducing the risk of conflicts and litigation.

2. Risk Sharing

- Risks and rewards are shared among the project team, aligning interests in the success of the project.
- If cost overruns or delays occur, all parties are jointly responsible, encouraging proactive problem-solving.

3. Cost and Schedule Control

- Compensation is tied to key milestones, such as cost savings, schedule adherence and profitability, incentivizing the team to meet these goals.
- Early collaboration reduces the likelihood of design and construction errors, leading to better project outcomes and reduced rework.

4. Innovation and Flexibility

- The collaborative nature of IPD and Alliance models fosters innovation, enabling teams to explore creative solutions to challenges.
- These models are particularly well-suited for complex or first-of-a-kind projects, where traditional contracting models may not offer the necessary flexibility.

Innovative ‘hybrid’ approaches are emerging that combine the collaborative principles of these Progressive, IPD/Alliance models with that of a P3 project financing. Public entities, such as municipalities, can use project financing based on a target price. Lenders are reassured that any cost overruns will be covered by the municipality or other financial mechanisms, making the project more attractive for investors.

Alternative Service Delivery/ Concession (Operations and Maintenance)

In some cases, Alternate Service Delivery/Concession can be used as a procurement approach where a public entity contracts with the private sector solely for the delivery of services. Municipal services that can be procured through this model include:

- The operations and maintenance of recreational facilities
- The delivery of services to animate civic facilities (e.g., programming municipal recreational facilities)
- The operations and maintenance of municipal water and wastewater systems
- The delivery of municipal or regional transit services, including the maintenance of rolling stock and equipment
- The operation of municipal parking operations
- The provisioning of municipal IT equipment and services.

At the municipal level, alternative procurement typically involves the outsourcing of the operations and maintenance of a facility or the delivery of a service. In an alternative procurement, while there may be some sort of capital investment required by the private sector partner, the investment is typically small and the municipality is essentially outsourcing the delivery of a service on a pay-for-performance basis. When undertaking an alternative procurement strategy, a municipality sets the performance criteria for the O&M or service delivery as it would for the services portion of a DBFM contract. A penalty regime for poor performance is established and included in the contract to set out the impact on the private sector partner if performance criteria are not met. In addition, alternative procurement contracts often include a bonus structure if the private sector partner overachieves and surpasses “stretch” targets.

Chapter 4 The P3 Procurement Process

Overview

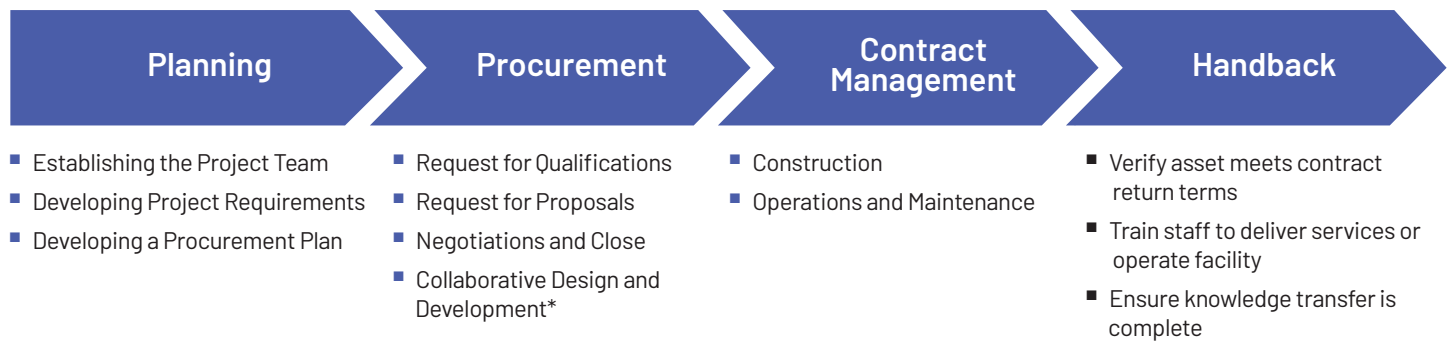
There are many assets and services common to municipalities that have the potential to be procured using a P3 model, including civic buildings, community and recreation centres, convention centres, public utilities such as water, wastewater, energy and electricity, transit, roads, housing, parking, and more.

For public sector projects, the procurement process is typically an open competitive process of soliciting or purchasing goods or services to develop and deliver an infrastructure project. When embarking on a P3, municipal governments must adopt plans, policies and procedures to govern their internal process. Many of these can be adapted for P3s from existing procurement policies and procedures of which there are provincial frameworks and a small handful of existing municipal policies (Appendix 3).

In undertaking a P3 procurement process, municipalities should consider the following factors:

- Identifying who within the organization will be responsible for the P3 or P3 program and who will have ultimate authority for project approval
- Establishing policies to guide the decision-making process
- Identifying how to develop and leverage the required expertise necessary to plan and procure projects
- Establishing evaluation procedures and processes
- Establishing resources and procedures to enable the delivery of services through P3s over the long term
- Establish resources and procedures for the handback process, which in a DBFM or DBFOM project starts approximately five to seven before the end of the P3 agreement. At this time, the public sector prepares to resume total responsibility for the ongoing maintenance and/or operation of the asset without the involvement of the private sector partner. It may also choose to extend the agreement with its private sector partner or go back out to market to procure a new partner to continue the operations and/or maintenance of the asset for a new period of time.
- Assessing the overall success of the project. Did it have a significant positive impact on the community and meet/exceed the municipal’s original goals? Did it deliver efficiency and Value-for-Money for taxpayers?

The implementation of a P3 can be broken down into four (4) principle phases aligned with the infrastructure project life cycle, as follows:



Each of these phases are described below.

The Procurement Planning Phase

The potential for project delivery through a P3 would be determined as part of the Procurement Model Selection process (Chapter 2). Over the years, several jurisdictions have established P3 frameworks for assessing procurement options. These currently include provinces such as Alberta, Ontario and Nova Scotia. Additionally, a few municipalities, including Calgary, Edmonton and Ottawa, have implemented similar policies (please refer to **Appendix 3** for resource links). It is important to recognize that while procurement methodologies and requirements differ across provinces, the initial step of identifying, defining and scoping a project should be done regardless of the procurement methodology to be followed.

An effective procurement process is essential to a successful project. Once a municipality has approved a project to proceed, if the project is being procured as a P3 the typical procurement planning phase involves the establishment of a procurement strategy.

During the procurement planning phase, the key steps include:

- Assembling resources, including the project team, team lead, external advisers
- Defining operational and service requirements, and further developing design requirements and project documents, and
- Developing a project procurement plan, including setting out timetables and other procurement issues.

Establishing the Project Team

In establishing the required resources for an effective P3 procurement process, it is important for municipalities to consider the key stakeholders that must be involved, consulted or informed of the project and its outcomes. Key resources or stakeholders in a municipal P3 project can include, but are not limited to:

- Staff and resources
- Decision-makers (including elected officials, boards and other governing bodies)
- Residents
- Indigenous communities
- Businesses and market participants
- Provincial agencies
- Advisers and consultants
- Other impacted parties

Project Governance Structures

In planning for a P3 procurement process, it is important to establish a documented and well understood governance structure. The governance structure represents decision-making authority related to the procurement process and potential resolution of challenges and issues that may arise. Municipalities should consider including resources with direct connection with the project and authority within the municipality to support project delivery.

Selecting the P3 Project Team

The Project Team should include municipal staff and resources (i.e., internal groups including procurement, legal, finance, etc.) also include external consultants and advisers to support the procurement process, lending additional market expertise and experience to the procurement process. In facilitating a fair and

* For Progressive PPP's

transparent procurement process, municipalities should also consider the appointment of an independent fairness adviser to monitor the process.

Engagement with local Indigenous communities

Canada is home to a diverse group of Indigenous communities, reflecting the country's rich cultural and linguistic heritage. CCPPP recommends early and ongoing engagement with Indigenous communities to foster more inclusive and successful project outcomes while respecting Indigenous rights, interests, and perspectives. Some of the key benefits include:

1. **Building Trust and Relationships:** Early and ongoing engagement allows for the development of trust and constructive relationships between project proponents and Indigenous communities. This trust forms the foundation for collaboration and effective communication throughout the project life cycle.
2. **Respect for Indigenous Rights and Knowledge:** Early and ongoing engagement demonstrates respect for Indigenous rights, cultures, and traditional knowledge. It provides an opportunity for project proponents to understand and incorporate Indigenous perspectives into project planning and decision-making.
3. **Enhanced Project Understanding:** Indigenous communities have valuable insights into the local environment, land use and cultural significance of the project area. Early engagement facilitates the exchange of information, helping project proponents gain a deeper understanding of community concerns and priorities.
4. **Minimizing Risks and Delays:** By addressing potential concerns and issues early in the project development phase, early engagement can help foster project support. Proactively identifying and mitigating concerns can lead to smoother project approvals and implementation.
5. **Improved Project Design and Sustainability:** Incorporating Indigenous knowledge and community input from the outset can lead to improved project design and sustainability outcomes.
6. **Legal and Regulatory Compliance:** Early engagement with Indigenous communities helps project proponents comply with legal and regulatory requirements, including consultation obligations under Indigenous rights frameworks, environmental assessments and permitting processes.

7. **Long-term Relationship and Legacy:** Establishing positive relationships through early engagement can create opportunities for long-term partnerships and collaboration beyond the initial project. This legacy of cooperation can benefit future projects and initiatives.

Developing Project Requirements

The project requirements should establish clear objectives for what the project should achieve. The requirements must be defined in sufficient detail to enable potential bidders to understand the expected scope of work and performance requirements for the P3 project. Depending on the P3 model, project requirements may include project design specifications, operational and maintenance performance specifications and handback asset condition requirements. These requirements may include detailed technical requirements related to the design and function of the project. Municipalities should involve key resources and stakeholders with specialized knowledge and experience related to the project area to support the development of project requirements. **It is important to note that for P3 projects, the private sector may be able to consider innovative solutions and approaches to fulfill project requirements. As such, municipalities should consider how prescriptive or flexible the project requirements should be in order to achieve a balance between municipal project needs and private sector innovation.**

Developing a Project Procurement Plan

The project procurement plan should include timetables (including key milestones) and other procurement-related issues that may arise as a result of the P3 procurement process. Fairness and transparency are critical for success. To ensure a fair and transparent process, the public sector owner should develop a plan that:

- Establishes clear procurement rules and an objective evaluation process
- Appoints an independent fairness adviser to monitor the process
- Facilitates and encourages competition
- Ensures appropriate governance during the procurement process
- Establishes detailed requirements and performance criteria for the project
- Advertises the procurement opportunity widely to ensure broad visibility and to attract a diverse range of bidders

- Ensures the procurement process complies with relevant laws, regulations and policies, and, obtains necessary approvals and endorsements from relevant authorities
- Develops clear and objective evaluation criteria to assess proposals
- Prepares comprehensive and clear RFQ/RFP documents, including project scope, requirements, evaluation criteria and contract terms
- Forms an evaluation committee with qualified and unbiased members to review and assess bids
- Uses a transparent scoring system to rank proposals based on how well they meet the evaluation criteria, and
- Evaluates bids based on pre-established criteria, including technical, financial and operational aspects.

The project procurement plan should be developed by the project team, with consultation and approval from municipal decision-makers.

The P3 Procurement Phase

P3 procurement is a competitive process, requesting bids from the private sector to support the delivery of public sector projects. The P3 procurement process typically involves phased approach:

- Request for Qualifications (RFQ)
- Request for Proposals (RFP)
- Contract Negotiations and Close
- Pre-Construction and Design Services (for Progressive P3 projects)

The following is further details on these key components of the P3 Procurement Phase.

The Request for Qualifications Phase

The RFQ phase is the first step in the formal bidding process. The primary goal of the RFQ is to identify the best-qualified bidders and then invite them to prepare proposals for the project.

Other objectives include:

- Formally advising the market of the project
- Communicating key project information (including time frames and evaluation criteria), and
- Confirming market interest in the project and providing an opportunity for the private sector to comment on the proposed project structure.

Key steps in the RFQ phase include:

- Developing and finalizing the RFQ document
- Obtaining approval for the release of the RFQ
- Releasing the RFQ
- Evaluating responses, and
- Shortlisting bidders.

The RFQ document should include necessary information about the project, information to help bidders formulate their response and the evaluation criteria that will be applied to the responses.

The qualification process involves evaluating all of the RFQ responses against the established evaluation criteria. Typically, the RFQ is used to shortlist three (3) qualified bidders, with the selection based on the following parameters:

1. **Financial capacity:** Do the members of the consortium have the financial capacity to undertake their responsibilities over the short-, medium- and long-term? This will typically include an analysis of the historical financial statements of each of the members and their parent companies or guarantors as applicable, their credit ratings, if applicable, and their future commitments on projects. Financial capacity requirements may also include requests for performance guarantees including performance security, parent company guarantees and bonding. The level of detail and information required is subject to the needs of the municipality.
2. **Financing capability:** Is the consortium able to raise the necessary financing and provide the security required if selected? This will typically include letters of comfort provided by prospective lenders, an analysis of the equity providers to determine if they have the necessary liquidity and their experience in raising financing for similar projects.
3. **Experience, resources and track record:** The most important part of the analysis assesses the consortium's experience with comparable projects and in dealing with the issues and challenges posed by the project.

RFQ responses are evaluated based on the above noted criteria aligned with the expectations and needs of the municipality. Unsuccessful proponents should be provided with a debriefing.

The Request for Proposals Phase

This phase involves the release of the RFP document to the shortlisted bidders identified in the RFQ and the evaluation of the RFP responses to select a preferred bidder. The key steps include:

- Developing and finalizing the RFP document
- Further developing the concession agreement (the contract)
- Obtaining approval to release the RFP
- Releasing the RFP
- Participating in interactive design/project development meetings
- Evaluating responses, and
- Selecting the preferred proponent.

The RFP document, which is issued to shortlisted bidders, includes key project information such as timelines, output specifications, payment mechanism and performance requirements, contractual documentation, evaluation criteria and schedules. This document, along with the project agreement, will evolve based on interactions with and feedback from the shortlisted bidders.

During the RFP phase, shortlisted proponents will develop detailed proposals and arrange financing for the project. This phase includes an interactive process between the public partner, its advisers and the shortlisted bidders that provides bidders with opportunities to discuss the development of their designs, obtain feedback and provide clarifications. Bilateral meetings are also arranged to allow for comments and discussion of the project agreement.

In Canada, the public partner will typically issue a final amended version of the project agreement to all bidders prior to the submission of their proposals. Bidders are not allowed to ask for further changes following submission. This process has been adopted to ensure equitable treatment of all bidders.

Upon RFP submission, responses are subject to qualitative and quantitative evaluations by the public partner. Typically, separate design, technical (operations and maintenance) and financial evaluation teams are established. Each team should have access only to the section of the responses that apply to them (i.e., the financial evaluation team only sees the financial submissions).

The evaluation of the submitted proposals must follow the criteria set out in the RFP. Bids must be materially compliant, and while the procuring entity has some discretion, the evaluation must be seen as fair:

- Are the proposals materially compliant?
- Have all proponents been treated equally?
- Are evaluators properly trained and free of any conflicts of interest?
- Was the evaluation process established at the outset?
- Is the evaluation process being followed?
- What is the “best bid?”

The evaluation of the RFP responses will lead to the selection of a preferred proponent. Typically, the RFP process allows for negotiation after this selection is made. An honorarium can be paid to the losing bidders to compensate for bid development costs and the transfer of intellectual property from the losing bidder to the public partner. Debriefs should also be provided to losing bidders.

Commercial Negotiations and Financial Close

Once a preferred bidder has been identified, the municipality and the private partner will finalize the project agreement, which typically includes making final adjustments to reflect the financing structure of the preferred bidder. In addition, the preferred bidder will finalize its contractual agreements with the major subcontractors and finalize the financing documentation. Once the contracts are finalized, commercial close occurs when the project agreements are executed by the public and private partners. Financial close occurs when the funds from the project financing are received by the private partner. Typically, commercial and financial close occur simultaneously or in rapid succession (no more than a few days apart).

Under a Progressive P3 approach, there is an additional step in the contract negotiations process called the “Collaborative Design and Development phase,” in which the private partner and the public sector owner collaborate together to agree on a target price or Guaranteed Maximum Price (GMP) based on the final design and updated cost estimates. This agreement can be referred to as the Pre-Development Agreement (PDA). Upon execution and completion of the PDA, the typical P3 project agreement would take effect.

Progressive P3 Collaborative Design and Development Phase

In a Progressive P3 project, the Collaborative Design and Development Phase refers to the ongoing period during which the private partner team provides services such as design and permitting assistance to the public sector owner. Collaboration between designers and builders is key during this phase. The private

partner is compensated for services provided during this phase. The Collaborative Design and Development Phase typically encompasses the following activities in a Progressive P3 project:

- The **design-build team** begins conceptual designs based on project requirements.
- **Design and construction teams** collaborate to develop a preliminary cost estimate.
- **Design and construction teams** refine the design iteratively, incorporating feedback and improving cost efficiency and performance.
- **Cost estimators** continuously update cost estimates to ensure alignment with the project budget.
- **Design and construction teams** perform value engineering to identify cost savings without compromising quality or performance.
- **Design and construction teams** adjust the design based on value engineering outcomes and budget constraints.
- The **design team** completes the final design, including all necessary details and specifications.
- The **design team** secures the required permits and regulatory approvals for construction.
- **Project stakeholders** review the final design and cost to ensure alignment with project expectations.
- **Public and private partners** finalize the negotiation of the P3 project agreement.

The Collaborative Design and Development phase includes its own performance requirements. If these requirements are not met, or the pre-construction and design activities aren't conducted as per the municipality's expectations, there are opportunities for the municipality and/or the private partner to "off-ramp" or exit the process.

Upon completion of the Collaborative Design and Development phase, the pre-construction and design activities would be completed, and the P3 project agreement would be subject to review, acceptance and signature.

The Contract Management Phase

Once commercial and financial close have been achieved, the private partner starts project development. This phase represents the starting point of the partnership between the municipality and its private partner. It is also the moment at which the public partner

becomes responsible for monitoring and providing oversight during the contract management phase, which is crucial to ensuring a successful project. The post-procurement phase of a typical P3 includes:

- Construction
- Handover and Commissioning
- Operations
- Handback or contract expiry/termination (detailed more fully in section 4.5)

During this phase, the municipality should establish an internal risk management strategy that sets out the contract management plan and allocates internal resources to the various tasks. It will be important for internal resources to become familiar with some of the key principles of the P3 contract, including the information required from the private partner, the governance protocols, the completion and commissioning program and the handback protocols.

Key considerations related to contract management are:

- **Performance Reporting and Monitoring:** The contract will have established the information required from the private partner and its frequency and timing. Once the private sector partner has delivered the asset and started to perform the services, or in the case of an operations and maintenance contract, started to perform the services, the public partner will need to initiate processes to monitor the commissioning of the asset and the delivery of the services as per the contract. The private partner (i.e., the design-builder) will provide regular updates to all stakeholders on project progress, challenges and changes. The private partner and public sector owner must ensure there is transparency in decision-making processes, financial management and performance reporting. Both partners must maintain comprehensive records of all project activities, decisions, and changes for future reference and accountability.
- **Contract Administration:** All P3s are governed by a duly executed contract (the project agreement). Effective contract administration will require an understanding of the contract. The contract management process will evolve throughout the life cycle of the P3 contract and should be reviewed on an ongoing basis to ensure all emerging risks and issues are appropriately considered. The private

partner should conduct regular audits and performance reviews to ensure compliance with contractual terms and project requirements. The project owner may also seek to conduct audits and performance reviews (as required) to support contract administration and to ensure that project requirements and performance specifications are being met. The public sector owner and private partner should seek to address any issues or disputes promptly and fairly, using established resolution mechanisms (as per the project agreement).

- **P3 Project Governance:** Governance and decision-making committees should be established with both public and private sector partners appointing representatives to oversee the implementation of the project agreement. These committees can include a works committee (that reviews matters concerning the design, construction and commissioning of the facility) and an operations committee (that reviews matters concerning private sector-delivered services). The objective of the governance committees are to ensure the project progresses smoothly, and that the interests of both public and private sector are represented in any dispute or decision-making matters.
- **Handover and Commissioning:** As per the project agreement, the private partner will prepare a commissioning plan that describes the steps necessary to integrate completion of the asset, commencement of services and installation of equipment (if applicable). The project owner (public partner) will approve the plan, monitor the private partner's progress and deal with any issues that arise. The private partner should ensure that all final documentation, including warranties, as-built drawings, and operation manuals, are complete and accurately reflect the finished project. Often an external adviser is engaged for this process to assist in the monitoring of the commission efforts. When equipment is included in a procurement, the equipment must be procured, installed, tested and commissioned, as per the private partner's plan, which should also include a procurement and installation schedule as appropriate.
- **Communication:** While the project agreement will provide clarity as to the roles and responsibilities of the public and private sector partners, regular and ongoing communication allows each partner to proactively identify and resolve unforeseen issues. A strong relationship built

on regular communication builds trust and enhances the success of the project. Communication efforts are important between the project partners, as well as the wider network of stakeholders, including municipal residents and other impacted parties.

Handback or Contract Expiry/Termination

Given the long-term nature of P3 projects (typically 20 to 99 years or longer), handback will often involve people not part of the original creation of the agreement, collaboration and early consideration of handover logistics are key to success. **The goal of the process is the smooth transfer of operations, maintenance and management, ensuring the asset has long-term functionality.**

In the period leading up to Handback or contract expiry/termination (often five to seven years in advance of contract termination), the public partner will engage a technical adviser to assess the condition of the assets covered by the contract to ensure the return conditions meet the minimum requirements as articulated in the contract.

Further, where training of public sector staff is required to deliver services or operate a facility, the public sector agency will need to work with the private sector partner to ensure adequate knowledge transfer occurs.

Recent insights from the experience in the United Kingdom, which at the time of publication was more advanced than Canada in its handback processes, can guide this stage. Contractual agreements should include well-defined handover clauses, addressing asset transfer protocols, maintenance standards, documentation requirements, and dispute resolution mechanisms.

Regular maintenance and inspections are crucial throughout the project's life cycle to promptly detect and resolve issues, ensuring optimal infrastructure condition and facilitating a smoother handover process.

Effective collaboration and communication between the public and private sectors are essential for transparency and a seamless transition. Involvement of relevant stakeholders, such as lenders and regulatory bodies, enhances the approach's comprehensiveness. Long-term sustainability planning, including operations, maintenance, and budget allocations, is vital for post-handover infrastructure upkeep and enhancement, ensuring its long-term viability.⁷

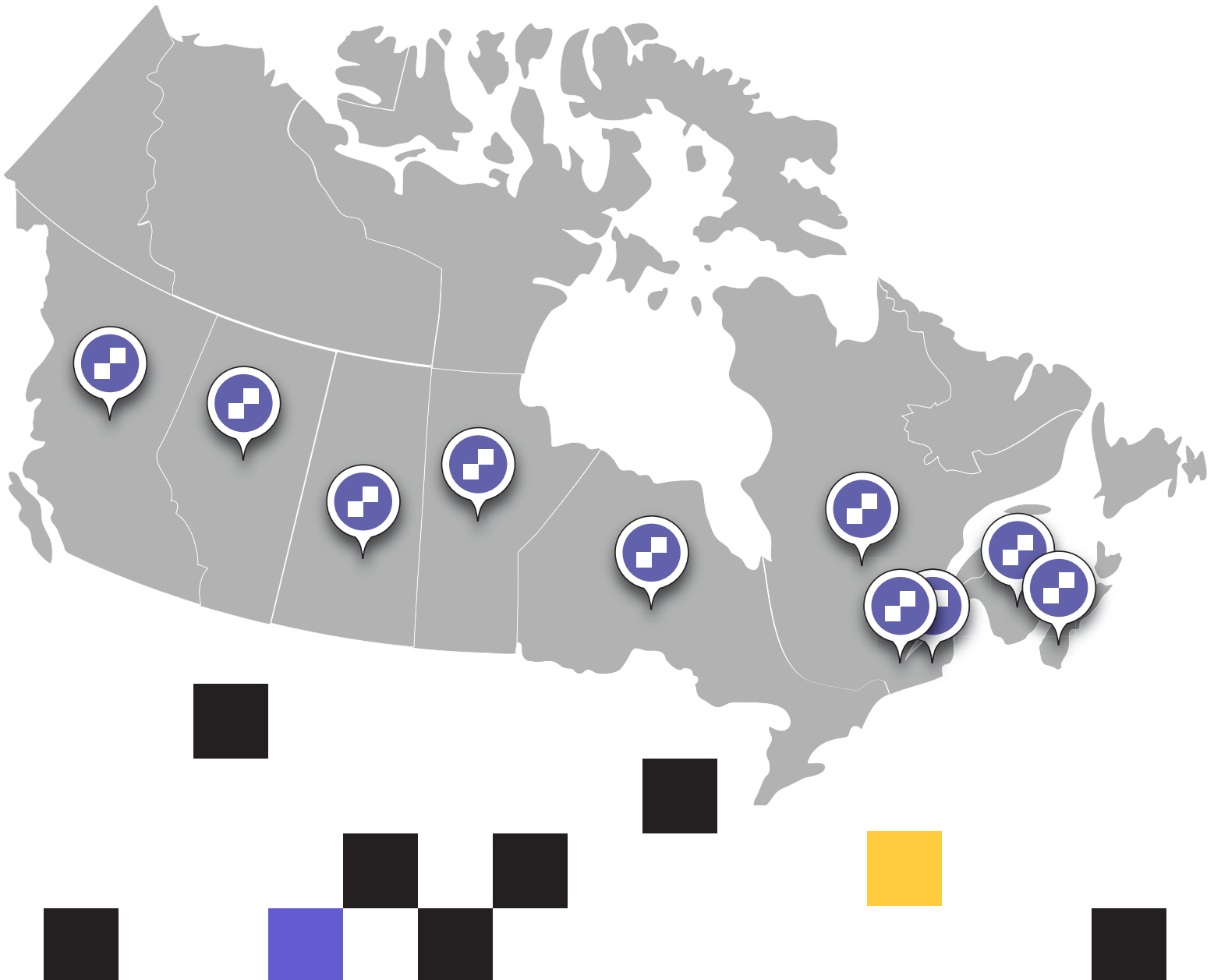
⁷ Overview of Handback Provisions in P3 Agreements: Lessons Learned from UK Projects | Bilzin Sumberg - JDSupra

Chapter 5 Municipal Case Studies: P3 Projects at a Glance

Canada's municipalities own and operate the majority of the country's public infrastructure, including roads and bridges, public transit, and water and wastewater systems.

P3s can be and have been effective tools to deliver projects and manage life cycle costs and risks by leveraging the expertise of both public and private partners. With more than 300 P3s under construction or in operation in Canada to date, and more than 50 municipal P3s conducted, there is a proven track record of delivering successful municipal assets and services across the country.

For a full list of historical Canadian municipal P3 projects, refer to Appendix 2.



Environmental Services



Regina Wastewater Treatment Plant Upgrade Project (Saskatchewan)

Procurement Model: Design-Build-Finance-Operate-Maintain

After extensive planning, analysis, discussion and debate, which included a local referendum, the city chose an innovative DBFOM approach and negotiated a 30-year agreement with EPCOR Water Prairies Inc. in 2013. The contract transferred significant risks to the private sector over the whole life cycle of the project, with estimated savings of \$138.1 million compared to traditional procurement. The project replaced aging core infrastructure, thereby improving energy efficiency, reducing greenhouse gas emissions, meeting higher wastewater effluent quality standards, and improving the water flow into Wascana Creek and the Qu'Appelle River and lake system. EPCOR successfully completed the facility on time and below budget. The City of Regina retains ownership of the wastewater treatment plant, regulated by the Saskatchewan Water Security Agency. EPCOR will manage operations until June 2044. It's important to note that the agreement between the city and EPCOR also addressed the concerns of existing employees with Regina's WWTP. The facility's unionized employees were invited to become employees of EPCOR without jeopardizing their rights, salaries, salary levels or vacation time specified under the terms of their collective agreement. The 13 employees who transferred to EPCOR received equal or better benefits through EPCOR's benefit package while forming a separate bargaining unit of CUPE Local 21.

[Read more](#)



The City of Saint John – Safe, Clean Drinking Water Project (New Brunswick)

Procurement Model: Design-Build-Finance-Operate-Maintain

The \$217-million project, completed in Canada's oldest city in 2020, is the single largest municipal infrastructure investment in New Brunswick's history and the first large-scale drinking water P3 in Canada. The project was developed using a unique P3 agreement that combined a DBFOM model for the primary infrastructure (treatment plant and reservoirs) and a DBF model for the additional infrastructure dams and distribution system. Service to residents needed to be maintained during the project's construction and care was taken to inform customers and stakeholders throughout the process about using the P3 model. The new infrastructure means residents will no longer endure boil water advisories and will be provided with high-quality drinking water for many years to come. As a result of using the P3 model, the project had an estimated total cost savings of \$24.1 million NPV. This unique approach can be helpful for other municipalities searching for a model to modernize water treatment and distribution systems. [Read more](#)



Sudbury Biosolids Management Facility

Procurement Model: Design-Build-Finance-Operate-Maintain

After 30 years of disposing of its sewage sludge into nearby mining tailing ponds, the City of Greater Sudbury embarked on its first P3 project, partnering with N-Viro Systems Canada LP to find a more environmental sustainable solution. The Biosolids Management Facility, the first of its kind in northern Ontario, opened in May

2015 on time and on budget. The newly constructed centralized wastewater sludge dewatering and stabilization facility produces Class A biosolids and, as part of the P3 agreement, the City receives revenue from sales of the biosolids end-product. The total price tag of the project was \$63.1 million, with the Government of Canada contributing \$11 million through the now defunct P3 Canada Fund. The city committed to the balance, through capital reserves over the 20-year operating term outlined in the contract. Lessons learned from its integration of small- and medium-sized local design and construction partners can be applied in similar P3 municipal projects across the country. [Read more](#)



Halifax Regional Municipality (HRM) Organics Management Infrastructure and Long-Term

Operating Contract

In December 2020, Halifax Regional Council awarded the contract for a new composting facility to replace two existing facilities (Ragged Lake Composting Facility and Burnside Composting Facility), and to support the continued success of its municipal green cart program. Harbour City Renewables, a Maple Reinders consortium, was selected to design, build, own, operate and transfer the new facility for 25 years as part of this contract. The facility follows a state-of-the-art design, with all composting activities completed indoors in order to minimize impacts on the neighbouring communities and the environment during its operation. Designed with a capacity to process 60,000 tonnes of organic waste a year, the facility will meet and exceed the *Nova Scotia Environment and Climate Change 2010 Composting Facility Guidelines*. Construction activities for the new facility started in spring 2021 and reached substantial completion in April 2024, including installation and testing of the equipment required for the operation of the facility. Hot commissioning activities are expected to continue until September 2024. Once completed, the new facility will enter its 25-year operating period. [Read more](#)

Social



Canada Life Place, formerly Budweiser Gardens and John Labatt Centre (Ontario)

Model Used: Design-Build-finance-Operate-Maintain

Opened in October 2002, the multipurpose sports and entertainment centre in London, ON is designed to be comparable to larger facilities in Toronto, Hamilton and Ottawa. As well as having a NHL regulation-sized arena, the facility was designed with the needs of entertainers in mind. To accommodate performers, the space can be transformed into a large concert hall or an intimate theatre setting with the use of screening curtains, flygrids, retractable seats and a moveable stage. It has 9,000 fixed seats for sporting events and more than 10,000 seats for concerts as well as 38 private (luxury) boxes. The centre, which had a fixed construction cost of \$41.2 million, was built on a 2.1-hectare site downtown known as the Talbot Block and includes a reassembled façade of the historic Talbot Inn on the northeast corner. At the time it opened, the P3 agreement was between the City of London and London Civic Centre Limited Partnership (LCCLP). In 2024, the facility was managed by Oak View Group (OVG). Available cash flow from operations is shared according to a prescribed formula in the agreement, which varies over the 50-year operations term. The building and land, owned by the city, were placed in the City of London Arena Trust and leased to the private sector partner. [Read more](#)



Mosaic Stadium (Saskatchewan)

Procurement Model: Design-Build-finance

The new community-owned stadium, part of Regina's most ambitious redevelopment project in its history, hosted its first events in October 2016, two years after the city selected PCL Constructors Canada Inc. to design, build and provide interim financing. It was completed on time and on budget. The \$278-million, 33,000 seat multi-purpose facility is home to the CFL's Saskatchewan Roughriders and hosts competitions by non-profit sport organizations and entertainment events. It replaced the city's storied Taylor Field, originally built in 1936 and expanded/upgraded in the late 1970s and 1990s. To help fund its long-term [Regina Revitalization Initiative](#), which includes the new stadium, the teardown of the old stadium, the creation of a new residential area, housing units and commercial outlets, city council approved a 0.45-per-cent mill-rate increase for taxpayers for a decade starting in 2012. [Read more](#)

Transportation



The City of Saskatoon's North Commuter Parkway & Traffic Bridge Project (Saskatchewan)

Procurement Model: Design-Build-Finance-Operate-Maintain

At the time it opened in October 2018, this \$293.4-million (NPV) project was the largest infrastructure project ever delivered in the City of Saskatoon and the first bundled transportation P3 in Canada. The 33-year DBFOM performance and availability agreement is comprised of two bundles: 1.) the North Commuter Parkway (8.3

kilometres of new arterial roads) and the new Chief Mistawasis Bridge and 2.) the replacement of the 109-year-old Traffic Bridge. The new six-lane bridge on the Parkway pays tribute to Chief Mistawasis, the Cree Chief who signed Treaty 6, while the modern steel-truss structure of the rebuilt Traffic Bridge uses complex engineering to preserve its historical character while meeting today's safety standards. The project's cost savings by using the P3 delivery model were estimated at \$69.4 million, compared to conventional project procurement. Graham Commuter Partners is responsible for the operations, maintenance, and repair/rehabilitation of the bridges and roadways until 2048. This project is a great example of how bundling can be used as a strategy to make project delivery more cost-effective. In this case, the City of Saskatoon needed to deliver two different transportation projects which, although both critical, were unrelated and located in different areas of the city. By bundling the work into a single project, economies of scale were achieved in procurement, design, construction, and financing, improving the overall affordability of the combined program. [Read more](#)



Chief Peguis Trail Extension (Manitoba)

Procurement Model: Design-Build-Finance-Maintain

Completed on budget in 2011, the project is an important link in the city's inner-ring and is designed to relieve traffic pressure on residential streets. It included a four-lane arterial divided roadway with a flyover roadway grade separation, sewer and water relocations, new land drainage piping, a pedestrian bridge, noise attenuation walls, multi-use paths, berms and three new intersections over its 3.7-kilometre length. Using a fast-track schedule, the project opened approximately one year ahead of schedule. Throughout the design and construction, decisions were

made based on construction efficiency while also considering life cycle cost and maintenance costs. Because of the fast-track schedule and because DBF2 Limited Partnerships, the private sector consortium, is responsible for maintenance for 30 years, the design and construction process was dynamic, compared to a traditional DBB project. The P3 model is providing an estimated savings of \$31 million (17.6 per cent) compared to a traditional procurement. [Read more](#)



Waterloo LRT ION Stage 1 (Ontario)

Procurement Model: Design-Build-Finance-Operate-Maintain

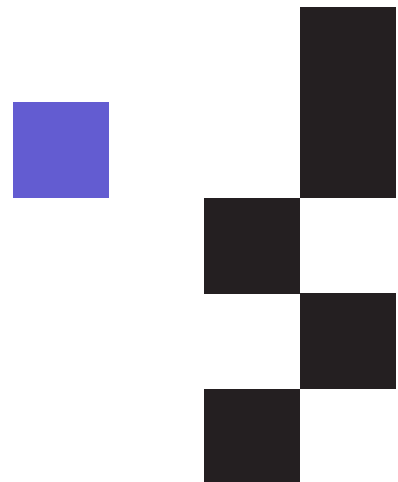
This 19-kilometre LRT system, which opened in June 2019, has transformed travel in one of Canada's key high-tech startup scenes. The ION corridor in Ontario's Kitchener-Waterloo area passes through two historic downtowns, a university campus and business parks and is fully integrated into the region's bus network, cycling and pedestrian routes. Using the P3 model achieved estimated cost savings of 12 per cent compared with traditional procurement. For the first year and a half of service GrandLinq and the OM&R provider Keolis improved system performance and met operating and maintenance targets, despite the challenges of the COVID-19 pandemic. The operations period runs for up to 30 years (minimum 10 years, renewals every five years thereafter). The LRT system is fully integrated with, and forms the spine of, the existing Grand River Transit (GRT) bus network with multiple transfer nodes, coordinated schedules and a common fare structure. [Read more](#)



Valley Line West LRT (Alberta)

Procurement Model: Design-Build-finance (partially financed)

This \$2.67-billion, 14-kilometre light-rail extension is the second stage of the City of Edmonton's Valley Line. The design-build-finance project, which entered its RFP phase and reached financial close during the pandemic in 2020, bundles together design, system integration and construction into one contract. It also is the first to embed a community benefits agreement for a major capital project in Edmonton. With its 14 street-level stops and two elevated stations, the extension will help connect city neighbourhoods and reduce congestion, with LRT stops downtown at all major city hospitals and the city's largest tourist attraction, West Edmonton Mall. Once the west line is operational, both stages of the Valley Line will operate contiguously with no transfer points or perceived break in service for passengers despite the fact both are being delivered using different P3 consortiums. [Read more](#)



Chapter 6 External Advisers

External advisers, from design consultants to legal advisers to financial advisers, play a vital role in the planning, development, procurement and delivery of P3s. This is especially true when the procuring agency is a local or municipal entity whose internal resources may be limited or lacking experience with the P3 process.

Throughout the life of a project, there are multiple opportunities for external advisers to provide guidance and expertise to the procuring entity, and while the actual roles and responsibilities will vary depending on the specifics of the project and the sophistication of the procuring entity, the following roles are typical in a P3 procurement:

Planning and Procurement

During the planning and procurement phases, a municipal agency may need to engage some or all of the following:

Project management consultant to develop a preliminary integrated project plan, to propose a workable project governance structure, and to coordinate other advisers to ensure a balanced/consistent outcome from the technical, financial and legal fronts of work.

Risk adviser to assist in the identification, quantification, allocation and mitigation of the key project risks (especially those that impact pricing).

Design consultant to create a preliminary design and space plan and assist in the technical evaluation of proponents.

Technical adviser to assist with the development of the output specifications and assist in the technical evaluation of proponents. The term “technical” is used in a broad meaning and includes demand studies and pricing mechanisms, cost estimation (for various stages including development phase if one is applicable, design, construction and operation phases), environmental/social impact assessment, key performance indicators assessment, regulatory and environmental, social, and governance (ESG) matters etc.

Financial adviser to develop the project financial models, determine Value-for-Money, develop the payment mechanism and assist in the financial evaluation of proponents.

Legal adviser to assist in the development of the project documents (RFQ, RFP and project agreement) and advise on the procurement process.

Fairness monitor to oversee the process to ensure fairness and transparency.

Cultural Liaison or Cultural Adviser for Indigenous Relations/First Nations/Indigenous Engagement Specialist to ensure culturally respectful collaboration, enhance Indigenous/First Nation participation, and influence over project outcomes.

Additional Resources:

Public Engagement Adviser to facilitate transparent communication between the project team and the public, ensuring community input is integrated into the project during project development and maintaining stakeholder trust and managing public perceptions during construction, operations and maintenance.

Facility Management Adviser to provide expert guidance on the long-term operational and maintenance needs of the facility, ensuring that life cycle costs, efficiency and performance standards are optimized within the P3 agreement.

While the list may appear daunting, some of the roles noted above can be provided by a single adviser.

Operations

Throughout the operations phase right through to Handback or contract expiry/termination, there are opportunities for external advisers to continue to assist the public partner. For example, depending on the internal resources available within the procuring entity, the project owner may elect to engage an adviser or team of advisers (depending on the project's complexity) to monitor the performance of the private sector partner during a project's operations and maintenance or service delivery phase.

The adviser's role may include:

- Reviewing the periodic reports submitted by the private partner
- Auditing the performance of the private sector partner against the key performance indicators in the output specifications, and
- Advising on the implementation of the payment mechanism and associated performance deductions.

The project owner may also want to continue to engage the financial adviser to assist in monitoring the payment mechanism and the determination of any unavailability deductions from the monthly service payment.

Considering P3s are usually long-term projects, advisers can also be hired to assist in analyzing issues related to contractual imbalances that may occur over the term of the contract. Financial and legal modeling (as well engineering assessments) can be carried out in order to reestablish the project's financial balance (through contractual term extension, tariff adjustments, etc).

Procuring Third-Party Advisers

Municipalities should procure their advisers through a competitive process that is open and transparent and that allows the municipality to verify experience and check references. If multiple projects are anticipated to be delivered through a P3P3 program, consideration should be given to establishing a vendor of record for third party advisers, to which all RFPs are disseminated. A list of potential advisers can be found on the CCPPP website.⁸ Some of the advisers are highly specialized in certain asset classes or components of P3s, while others offer a full spectrum of services and are listed under multiple areas of expertise.

Chapter 7 Resource Requirements

The resource requirements for municipalities undertaking P3s, as detailed in this chapter, reflect a broader recognition that more expertise and resources are necessary to succeed in today's market. Municipalities must proactively seek the right mix of internal and external capabilities, foster a culture of collaboration, and ensure transparency throughout the P3 process. By embracing these evolving resource needs, municipalities can better navigate the complexities of modern P3s and achieve sustainable, long-term benefits for their communities.

Implementation of a P3: Current Context and Requirements

Implementing a Public-Private Partnership (P3) requires strategic planning and an understanding of the evolving complexities of the current market. While the initial planning and procurement stages are typically more prolonged than traditional procurement methods, P3s may reduce municipal resource demands over the project's life

cycle, ultimately saving the municipality money and providing long-term value for taxpayers. Careful execution of Value-for-Money and Strategic Assessments are key to understand the viability for a P3 and decisions to move forward.

The Local Government

Municipal acts still govern a municipality's authority to enter into P3 contracts. While public consultation may be required for certain projects, municipal councils or appointed boards typically possess the decision-making power. However, the complexity of current projects necessitates a clearer, more structured internal approval process to ensure that all stakeholders are aligned from the outset.

Municipal councils must be kept well-informed throughout the procurement process, with regular updates and prompt communication of emerging issues that may require council intervention.

To improve efficiency, municipalities should establish a transparent decision-making framework with defined timelines and approval steps. This ensures proponents have a clear understanding of the process and helps build confidence in the municipality's ability to manage the procurement effectively.

The Project Team

As P3 projects grow in complexity, the need for a highly skilled project team has never been more critical. Once a project is identified as a P3 candidate, assembling an internal project team with a dedicated lead is the first priority. The team will oversee the project from planning and procurement through to contract award and, where necessary, into operations and handback phases. Given the extended timelines and complexities involved, the project team must include personnel with comprehensive expertise in project management, procurement, contract administration, finance, legal issues, and the specific technical aspects of the project.

Key considerations for assembling the project team now include:

- **Technical Expertise:** Does the team have the specialized technical expertise needed to manage the project's complexities?
- **Resource Commitment:** Can team members dedicate the necessary time to maintain project momentum?

⁸ For a list of CCPPP Adviser Members visit <https://www.pppcouncil.ca/who-we-are/our-members>

- **Conflict of Interest:** Are there any potential conflicts of interest (actual or perceived) that need to be addressed?

Municipalities may not always have the required expertise internally, particularly for larger or more specialized projects. Increasingly, municipalities are turning to external development partners and advisers to bridge these gaps. This includes leveraging national or provincial agencies that specialize in P3s, as well as private-sector partners who can offer insights into evolving legal, financial, and policy landscapes. This approach not only augments the municipality's capabilities but also ensures the latest best practices are being applied.

Role of External Advisers

Using external advisers has become a best practice in P3s. These advisers bring critical, unbiased expertise that can help municipalities navigate complex procurement processes. Key benefits of engaging external advisers include:

- **Objective Insights:** External advisers provide independent advice, which is particularly valuable in the negotiation phase and for maintaining transparency with stakeholders.
- **Knowledge Transfer:** Advisers keep municipalities up-to-date on current trends, legal requirements, and financial models, ensuring that local governments remain competitive and informed.
- **Strategic Support:** Advisers assist in document preparation, negotiations, and strategy development, which is increasingly vital as P3 projects become more sophisticated

Collaborative Procurement Models

Collaborative procurement models involve bringing contractors and other key players into the project early, such as during the design and planning stages. This approach encourages teamwork and open communication, allowing everyone to identify potential risks together and decide who is best suited to handle them. While this can lead to higher costs upfront because of the early involvement of contractors, it often pays off in the long run with better risk management, cost savings, and smoother project execution.

One of the main benefits of involving contractors early is that it helps distribute risks to those who are best equipped to manage them. Private contractors usually have extensive experience in managing construction and operational risks, which means they can offer valuable insights and solutions that might otherwise be overlooked. By planning for these risks from the beginning, projects can avoid the common pitfalls of going over budget or missing deadlines—issues that frequently plague traditional procurement methods ([McKinsey & Company](#)).

Additionally, this collaborative approach can lead to more creative and efficient project solutions. For instance, contractors can provide input on design improvements, cost-saving measures, and schedule optimizations that might not be considered in a traditional setup where they come in later. Research has shown that collaborative P3s can reduce total project costs by up to 20% compared to traditional methods because they focus on the entire life cycle of the project, not just initial construction costs ([McKinsey & Company](#), [ENISA](#)).

Overall, while starting with collaborative procurement may seem more expensive, it can lead to significant benefits down the road. The upfront investment in teamwork and early planning often results in fewer problems, better management of risks, and projects that are completed on time and within budget, making it a smart approach for complex infrastructure projects ([Procure Partnerships Framework](#)).

The Political and Administrative Advocates

Every project needs a political advocate to support it at the council level and an administrative advocate to lead it within senior administration. Advancing a project as a P3 can be challenging without dedicated political and administrative leaders. These advocates, working in parallel, must also be prepared to bring together key stakeholders—council, staff, employees, and the public—when necessary to keep the project on track and on schedule.

Chapter 8 Community and Stakeholder Engagement

Real estate may be all about location, location, location, but **Public-Private Partnerships (P3s) are all about communication, communication, communication.** At their core, P3s represent partnerships between the public and private sectors, typically involving multiple stakeholders, ranging from municipal councils to ratepayers, employees, and private sector proponents. In undertaking P3 projects, it is crucial to consider the economic, social, and environmental concerns of those directly affected.

Establishing an effective communications strategy early is essential. This strategy should not only proactively inform various stakeholders but also set a comprehensive protocol for managing communications throughout the project's life cycle. For a project to succeed, communication—from planning to delivery to project Handback or contract expiry/termination—must be open and transparent.

P3s can suffer from public misconceptions and may become the subject of politically motivated media coverage. Therefore, effective communication is key to ensuring public understanding of a project. Municipalities considering a P3 procurement should adopt a proactive communications strategy that encourages community engagement and dialogue.

Challenges often arise when communities are not engaged early. There are numerous examples, particularly at the local or municipal level, where projects stalled because the affected communities did not develop a sense of ownership or commitment due to a lack of early engagement. **Consultation is a critical component of any communications strategy,** especially early in the project's life. Public consultation should commence during the planning phase and include open public meetings where the procuring agency can articulate the project's purpose, costs, and progress, while also providing a platform for public input.

The goal must be to build and maintain public trust throughout the project. This should be the case regardless of the procurement solution selected, but it is especially critical for P3s, which are under closer scrutiny especially from special interest groups ideologically opposed to the model. Maintaining transparency with the public, especially around completion timelines and public

disruptions (likely to be caused by construction) is crucial to ensure community buy-in and support of projects that will likely take years to develop, construct, operate and maintain. At the same time, municipalities need to balance this openness by providing a clear understanding to its elected members and the public of the need to protect the bidding process and proprietary commercial information included in bids. **Shifting communications culture away from milestone ribbon cuttings as benchmarks for success** to focus more on project outcomes and long-term societal benefits promotes project collaboration and can minimize blame culture in the media, which erodes public trust in government, politicians and the private sector to deliver quality infrastructure on time and on budget.

Best practices from successful procurements, as well as lessons from projects that failed to reach procurement, include:

Public Consultation and Engagement

■ Open Meetings:

- Public consultation meetings should be open to all. Information about these meetings should be disseminated through municipal websites and local newspapers.
- Public meetings must occur before project approval.
- City staff can enhance meeting accessibility by offering hybrid options, allowing participants to join in person or online.
- Provide recordings and summaries of meetings for those unable to attend.
- Leverage targeted advertising on social media to reach specific demographic groups and drive broader participation.

■ Expand Approaches to Consultation:

- Expand consultation beyond traditional public meetings by utilizing digital engagement platforms that allow stakeholders to participate at their convenience.
- Use tools like online surveys, interactive maps, and feedback forms for continuous input and data-driven insights into community concerns.
- Consider holding focus groups or workshops with key community leaders to foster ownership and co-create solutions.

■ Leverage Digital and Social Engagement:

- Incorporate digital engagement tools alongside traditional methods to reach a broader audience.
- Utilize online platforms like social media, interactive project websites, and virtual town halls for continuous engagement.
- Capture diverse perspectives, including those who might not attend in-person meetings.

Transparency and Communication

■ Share Information Proactively:

- Transparency is paramount when presenting project information to the public or council.
- The information provided should be balanced, fair, and clearly outline the strengths and weaknesses or pros and cons of the recommended option(s).
- Use data visualization tools to present complex information in an easily understandable format.
- Interactive dashboards that allow stakeholders to explore different scenarios can increase transparency, improve understanding, and help build trust.
- Ensure all materials are available in multiple languages and accessible formats to reach diverse audiences.

■ Make Council Decisions Transparent:

- Council decisions on procurement methods and contract execution should be made in meetings open to the public, not in camera.
- Consider streaming council meetings live on the project's website and social media platforms.

■ Develop a Nimble Communications Strategy:

- Develop a nimble communications strategy that evolves with the project.
- Provide regular updates via newsletters, social media posts, and a dedicated project portal to keep stakeholders informed and engaged.
- Consider incorporating visual tools like infographics and video updates to make complex information more accessible.

■ Get ahead of Issues by Myth-Busting:

- Proactively address potential misconceptions by creating a "myth-busting" section on the project website or in communications materials.

- Engage with local media through press releases, op-eds, and interviews to ensure accurate coverage.
- Utilize social media listening tools to monitor public sentiment and address concerns in real-time.
- Develop an issues response protocol, holding lines, and FAQs.

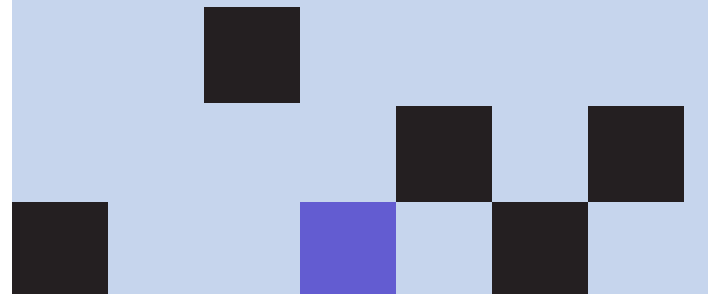
Change Management

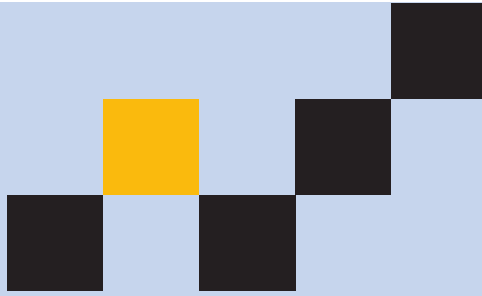
■ Staff Transition:

- If staff are being transferred to a private sector operator, their early engagement is essential.
- This is a significant change management exercise requiring early and consistent communication.

The North Commuter Parkway & Traffic Bridge Replacement Project (City of Saskatoon)

The North Commuter Parkway & Traffic Bridge Replacement Project exemplified best practices in communications and community engagement. Internal coordination was facilitated through regular meetings between the City and project partners, supported by a design and construction committee, ensuring open dialogue and effective problem resolution. Public engagement was robust, featuring frequent updates via City webpages and a dedicated project site that included design plans, live webcams, and progress reports. The community played a significant role in naming the Chief Mistawasis Bridge, guided by Métis and First Nation Elders, and supported by extensive public input. Educational vignettes and public forums enriched the naming process. Additionally, a structured dispute resolution mechanism was in place, focusing on early issue identification and escalation, which kept the project on track and free from formal disputes as of March 2019. [Read the full details here.](#)





True Partnership Fosters Innovation, Builds Safer Prairie Highway for All (Regina Bypass Project)

The Regina Bypass Project set a high standard for public and Indigenous engagement by incorporating comprehensive consultations, transparent communication, and inclusive practices. Frequent public meetings, hybrid options, and targeted outreach facilitated broad participation. Indigenous involvement was enhanced through quarterly meetings, a job fair, and procurement opportunities, including material supply and ceremonial practices. These efforts ensured community input, built trust, and fostered meaningful partnerships throughout the project's life cycle.

[Read the full details here.](#)

Taking a proactive approach to safe clean drinking water (City of Saint John, New Brunswick)

Proactive communication and coordination between the City and the public contributed significantly to the project's success. The City led communication efforts, addressing concerns about the P3 delivery model and explaining the project's benefits. This approach helped secure public approval without incident. Additionally, the City managed potential rate increases by developing a financial model to illustrate cost obligations during construction. Port City Water Partners (PCWP) further supported transparency by operating a customer-service telephone line to handle inquiries about construction schedules, work hours, and traffic disruptions. In June 2016, the City and PCWP hosted open houses to provide detailed information to residents and businesses, fostering transparency and community engagement throughout the project.

[Read the full details here.](#)

- Establish a formal transition support program with workshops, one-on-one consultations, and dedicated HR support.
- Provide regular updates on progress and promptly address concerns to maintain morale and trust.
- Consider using anonymous surveys to gauge staff sentiment and refine strategies as needed.
- Create opportunities for staff to contribute to the structuring and procurement of the project, helping them feel a sense of attachment and value.

Ongoing Communication and Protocols

■ Council Communication:

- Decision-makers, usually council members, must be kept informed throughout the planning, procurement, and operations phases of the project.
- Implement a centralized communication hub where council members can access up-to-date project information, key documents, and timelines.

■ Communication Protocol:

- Establish a written communications protocol at the outset of all projects.
- Regularly review and update the communications protocol to reflect any changes in project scope, stakeholder concerns, or emerging communication channels.
- Ensure the protocol includes crisis communication strategies to handle unexpected challenges or negative media coverage effectively.

Chapter 9 Issues Common to Municipalities

Municipalities in Canada operate within complex provincial legislative and regulatory frameworks that influence their ability to pursue alternative procurement methods like P3. These frameworks, which vary by sector and asset class, can present constraints that municipalities must navigate while balancing competing infrastructure priorities. With limited financial capacity, municipalities often face challenges in generating revenue, borrowing, and resourcing projects including, but not limited to:

The Legislative Framework

Municipalities operate within the provincial legislative and regulatory frameworks that govern them. While these frameworks are often fairly flexible, they include constraints and requirements that can impact a municipality's ability to undertake alternative procurement methods, including P3s. Additionally, these frameworks often vary by sector and cannot be assumed to be uniform across all asset classes. Municipal governments must understand their legislative environment, including whether their procurement policies and procedures are constrained by provincial or federal laws, whether they are allowed to enact P3 policies, and which assets or services can be delivered by the private sector without regulatory changes.

Conflicting Priorities

Much of the infrastructure in Canadian municipalities is aging, nearing the end of its useful life, and requires significant capital investment just to maintain current service levels. Many municipalities face budget pressures and operating shortfalls, and maintenance and capital budgets are often the first to be reduced, with operating budgets given priority. Delaying maintenance, repairs, and replacements exacerbates the issue of aging infrastructure and widens the infrastructure gap. By transferring maintenance and life cycle obligations to the private sector, P3s can mitigate the risk that future maintenance budgets will be used instead to support operations.

Municipal Government Policy

Unlike provincial governments, which can enact a single set of procurement policies for an entire province, each municipal government must establish its own procurement and service delivery policies, considering local community objectives. Municipal governments, by nature, are more accessible to the average citizen, and elected officials tend to be more responsive to public concerns. Before embarking on a P3 program, municipal governments need to adopt procurement policies to guide alternative procurement efforts. Such policies can promote a consistent approach to decision-making and procurements, including defining the role of the council in approving these arrangements. These policies help ensure that the public interest remains paramount and that good governance, accountability, transparency, and the best value for tax dollars are achieved. A sample of municipal policies on P3s is included in Appendix 1.

Smaller municipalities may find they lack the resources to research and draft detailed alternative procurement policies. Experience has shown that procurement processes for municipal governments differ from those used in provincial or federal projects. This fact may not always be fully understood by provincial P3 agencies, which tend to favour templated procurement approaches and project documents. As a result, municipalities will need to tailor their approach to fit the specifics of the project and the realities of their legislative framework.

Financial Capacity Constraints

A municipality's ability to generate revenue is determined by the relevant provincial legislative and regulatory framework. In Canada, municipalities are generally limited to property taxes as a source of revenue, unlike their counterparts in other parts of the world, where municipalities may generate revenue through sales or income taxes. With the exception of certain asset classes that generate user fee revenue, any obligations committed under a P3 agreement must be met through property tax revenue. It is, therefore, imperative to ensure that a municipality has adequate revenues to support a project. While P3s may reduce the upfront capital a municipality needs to spend or finance, the annual service payments must still be met. This creates a limit on how many availability-based P3 projects can be pursued without new revenue sources.

Another issue facing municipalities is borrowing capacity. Many municipalities are at or near their borrowing ceilings or have borrowing limits that may not be sufficient to meet the funding obligations of new infrastructure projects, which are becoming increasingly expensive.

Knowledge, Skills and Experience

One of the many roadblocks municipalities face in considering P3 and alternative finance models is a lack of experience, understanding and capacity to evaluate and deliver these projects. P3s advanced technical and procurement expertise. For municipalities that may not have in-house staff with deep P3 experience, this presents an opportunity to build capacity and enhance their ability to manage such projects. Many municipalities benefit from the guidance, support, and resources provided by provincial P3 agencies and the CCPPP, which can help them move projects forward. By investing in the right talent early in the development of a P3 program, municipalities can position themselves for long-term success and effectively navigate the complexities of P3 projects.

Misconceptions around P3 Asset Ownership and Impacts to Unionized Labour

P3 projects remain publicly owned, publicly controlled and publicly accountable. In fact, DBFOM and DBFM models can include provisions for retaining existing public sector employees or transferring them to the private partner's workforce while respecting Collective Bargaining Agreements (CBAs). These arrangements enable municipalities to benefit from private sector expertise while ensuring municipal priorities and standards are upheld. By maintaining control over assets and services, municipalities can enhance public accountability and ensure P3 projects align with community needs and expectations. The Regina Wastewater Treatment Plant Upgrade Project in Saskatchewan is a strong example of best practices for achieving these outcomes.⁹ In addition, labour unions frequently collaborate with the private sector to deliver Canadian infrastructure projects, creating desirable employment opportunities and pension investments that support tens of thousands of Canadians upon retirement.

Resource Availability

Municipalities, and in particular smaller ones, have fewer resources available to dedicate to capital projects compared to their federal and provincial counterparts. The availability of resources and the ability of a municipality to dedicate those resources for an extended period of time to the planning and delivery of a large project will have a material impact on whether a P3 program is suitable for a given municipality.

Project Size vs. Procurement Costs

P3s tend to be more appropriate for larger projects where the impact of the additional procurement costs under the P3 method do not have as large an impact on overall cost of the project. While there is no definitive level below which projects should not be considered as P3, Infrastructure Ontario for example notes that its P3 methodology is employed on projects greater than \$100 million, with similar guidance in British Columbia and Saskatchewan. The P3 Canada Fund, which was active between 2008 and 2017, also noted that larger projects have a greater potential to generate the efficiency gains needed to offset the fixed costs incurred by the public and private partners during the development and procurement phases.

Additional planning and procurement costs with the P3 method can be material and can have a direct impact on the ability of a project to generate Value-for-Money. Where a project has a relatively low capital cost, consideration should be given to bundling the project together with other assets. Without bundling, it can be hard to incentivize the private sector on smaller projects and hard for municipalities to find innovative ways to incentivize these projects. Bundling can create a project that has sufficient scope to be able to absorb the additional procurement costs associated with the P3 model. This can be accomplished either internally or by bundling your project with projects in neighbouring municipalities, although this latter option has its own set of issues and complications.

⁹ 2014-National-Award-Case-Studies-Regina-Wastewater-Treatment-Plant.pdf (P3council.ca)

Chapter 10 Lessons Learned

Across Canada, public-private partnerships have become a common and accepted alternative for procuring public infrastructure and services. There is a growing roster of provincial, federal and more importantly, municipal P3 projects. There are also a number of P3 projects that were initiated but derailed somewhere along the procurement line. An assessment of both the successful and the planned but never executed municipal P3 projects provides some insights into best practices and lessons learned. Some common themes from recent municipal P3 projects include:

Communication, Communication, Communication

P3s are often subject to misconceptions and concerns, sometimes influenced by groups that hold differing views on the model. This is particularly evident at the local level, where services are highly visible, public awareness is elevated, and municipal governments are more accessible. It is important to note that infrastructure projects, regardless of the procurement model, can encounter challenges and public criticism. Transparent and proactive communication—with council, affected employees, and the public—is therefore essential. For detailed best practices, refer to Chapter 9 and for a detailed Frequently Asked Questions template, refer to Appendix 3.

Understand the Regulatory/ Policy Framework

Prior to initiating an alternative procurement program, a municipality should do a broad-spectrum review of the provincial legislative/regulatory framework it operates in and understand what policies (if any) will have to be enacted or amended in order for the municipality to proceed with a P3. Municipal regulations often vary by sector and it is important to understand the sector-specific regulations and laws that may impact a project—otherwise delays can result. For example, before embarking on a water/wastewater project a municipality must understand what assets/services can be transferred to private sector delivery without regulatory change. In some situations, the formation of municipal consortia is the solution for implementing large-scale projects (due to municipal budget constraints) that can benefit several municipalities. Municipal consortia allow for gains in scale, as they enable the construction

and operation of units for shared use by the municipalities (water distribution and sewage treatment plants, sanitary landfills, etc). Therefore, a legal entity is created, which manages the interests of those involved. It is important to understand the regulations and laws that may impact the formation of municipal consortia.

Develop an Internal Alternative Procurement Policy

Best practices indicate that a municipality considering alternative procurement options must have a formal alternative procurement/ P3 policy in place that has been approved by council. The policy needs to cover topics such as how to evaluate projects for alternative procurement, how to prioritize projects, approval and decision-making authority, the governance structure, and so forth. The procurement policy must also be consistent with provincial regulations and laws.

Develop an Effective Procurement Options Analysis

An effective procurement options analysis procedure will help to identify those projects that are potential P3 procurements and those that are not. This will prevent wasting time and resources on projects that are not suitable for alternative procurement. In addition, the screening and business case process provides valuable insights into the key drivers of a project, thereby improving the project planning process and ultimately improving project delivery, regardless of whether a project is recommended for P3 procurement or not.

Educate Council

Council will need to understand the basic concepts of P3 procurement (which includes the progressive P3 models recently adopted by the market in general as an alternative to the traditional P3 models) and how it differs from traditional procurement before it can approve specific projects. Councillors will have different backgrounds and levels of understanding, so it is important for staff to determine what council needs to know (technical, financial, and so on) before it can make a decision. Understanding affordability and how the payment stream will be structured will be key.

Experience shows that too much technical information can have a negative effect on the decision-making process and the traditional business case is not necessarily easily understood by council members. P3 best practices show that an executive summary-style presentation highlighting the difference in costs and timing between a P3 and a traditional approach, the project's VFM, its citizenship engagement strategy, benefits and risks is the preferred approach when introducing projects to council.

Build in-House Expertise

P3s are still relatively uncommon at the municipal levels and many municipal governments lack in-house expertise and experience with P3 procurements. Many early adopters of municipal P3s have stated that training, especially for the team lead, would have been very useful and prevented project delays encountered as a result of unfamiliarity with the process and key issues. Before a project gets underway, it will be beneficial for a project team to understand the key drivers of a successful procurement, including how the procurement method impacts project scheduling, what VFM is and how it is assessed, what a Project Agreement is and how it differs from traditional contracts, what the technical requirements on a P3 are, and so on. Before starting a project, it is advisable to reach out to the relevant provincial agencies to understand what P3 training is available and approach external advisers to see what training and knowledge transfer they can provide.

Engage External Advisers

P3 projects require significant time and resource requirements. Many municipalities, especially smaller ones, can lack the resources or the experience to effectively deliver a P3 project. External advisers, whether they are technical, financial or legal, bring deep transaction experience, an understanding of the evolving P3 landscape, and credibility to a project. Advisers should be involved throughout a project's timeline, and understanding who to involve and when can ultimately save a municipal government time and money. Successful projects have more often than not relied heavily on external advisers and benefitted from their advice. (See Chapter 5 for a more detailed discussion of the role of external advisers.)

Show Value-for-Money

Recently, a number of municipal alternative procurements have not moved forward because although they demonstrated Value-for-Money during the initial project assessment, they were unable to demonstrate sufficient VFM as the project evolved and moved towards procurement. A key driver of VFM is risk allocation and transfer. The project team should spend time identifying, quantifying and allocating the key project risks, ideally with the input and support of an experienced external adviser, to ensure adequate and appropriate risk transfer is achieved. Experience has shown that some risks are project-specific, and it is appropriate to adjust any standardized risk templates accordingly (for example, from a provincial agency). The risks to quantify should be identified based on the specifics of the project—this will involve more time but will ultimately produce a more robust VFM assessment. It is important to emphasize that the VFM analysis should be just one of the steps in the project acceptance process. Relevant topics such as: (i) political and regulatory context, (ii) project size and complexity (both constructive and operational terms), (iii) project implementation schedule, (iv) risks identification, allocation and mitigation, (v) main project objectives and obstacles, and (vi) market analysis (market conditions and precedent transactions in the segment /active class), among other factors must be considered.

Understand Private Sector Interest

Best practices show that before embarking on a procurement, a municipality should gauge private sector interest in a project and its ability and capacity to deliver the project. Market sounding sessions are an excellent way to confirm interest and capacity and to understand the key issues from the private sector's point of view. To maximize Value-for-Money, it is imperative to ensure there is competition among multiple bidders and ideally, there should be at least three proponents with the ability and capacity to deliver. The procurement becomes more difficult if there are not at least three qualified proponents taken to the RFP stage, since the key is to maintain competitive tension. This may be especially challenging in smaller municipalities. If they do not have the local depth of builders and operators to do a P3, such municipalities may have to look nationally for proponents.

Real and Effective Risk Management

In a properly structured P3, private sector capital is at risk. A project must not transfer the ultimate responsibility for risk back to municipal government—financing must be non- or partial recourse. For example, there should be no municipal guarantees, such as those seen in early municipal P3 projects. During the procurement phase, P3 best practices show that a firm but fair negotiation stance is required. Municipalities can gain insight into the key issues and risks for the private sector through the use of market sounding sessions and can structure the project accordingly. This becomes even more relevant when other P3 projects in the same sector have already been implemented. The public sector can also interact with the market through public consultation sections once the preliminary risk matrix is defined. In some situations, the same risk would be allocated to both private and public sectors. For instance, the construction risk would be allocated to the private sector, but factors related to the project's geotechnical issues would be allocated to the public sector. It must be emphasized that alternative procurements are not an opportunity to push all risks onto the private sector. Some project risks, such as the risk of scope change or the risk of regulatory change, must remain with the public sector regardless of the procurement option chosen.¹⁰

Patience and Team Continuity

Regardless of whether infrastructure or services are involved, P3s typically have a long procurement cycle. Where staff and council are not familiar with the alternatives to traditional procurement, the procurement cycle becomes even longer. Patience and a commitment to team continuity are vital to the eventual success of a project. P3 best practices show that there must be continuity among staff dedicated to structuring and then delivering a project. Where the project team, especially the team lead, changes between project planning and project delivery (i.e., one team structures a project, another team delivers), there is increased handover risk and a higher likelihood for delays and cost increases. Even in smaller municipalities where resources are limited, every effort to keep a project team together from planning through delivery will benefit the project.

¹⁰ The Council and its members stress the need for a renewed, "First Principle-driven" approach to risk management, with a greater focus on aligning incentives to reduce risk for both the private and public sectors.

Maintain Public Trust and Transparency

As explored in Chapter 8, successful municipal projects thrive on strong community engagement, which is key to building public support and trust. Emphasizing openness and transparency — especially about completion timelines and potential construction disruptions — helps to ensure ongoing community buy-in and support. By addressing these aspects proactively, municipalities can leverage the benefits of P3s to develop, construct, operate and maintain infrastructure projects that meet long-term community needs. Public communications should focus on project outcomes and long-term societal benefits to boost the public's trust in government and the private sector to deliver quality infrastructure on time and on budget rather than on communications milestones tied to election cycles.



Conclusion

Canada is facing a dual challenge with respect to infrastructure across the country; our existing public infrastructure is aging and in need of renewal, while the continued growth of our nation is simultaneously driving increased demand for new and expanded infrastructure. All levels of government are struggling to keep pace with these demands for improved and expanded public infrastructure – and municipalities are feeling the pressures of these challenges more than ever, as the owners of roughly 62% of core public infrastructure in Canada, and as the level of government subject to the most stringent financial limitations.

Alternative approaches to procurement and delivery of public infrastructure are becoming increasingly common across the country as well. As individual projects become more complex, alternative project delivery models that emphasize collaboration between the public and private sector participants are attractive as a means to seek better project outcomes for all stakeholders. Public-private partnerships are an increasingly important option for governments at all levels. The Canadian Council for Public Private Partnerships is steadfast in its mission to support Canadian governments at all levels in exploring, assessing, and utilizing P3 models for infrastructure projects where appropriate.

P3s are, at their core, partnerships between the public and private sectors. The projects typically involve multiple stakeholders, from municipal councils to ratepayers to employees to private sector proponents. When undertaking P3 projects, the economic, social and environmental concerns of those directly affected must be taken into account. Every project will need a political champion to own the project at the council level and an administrative champion within the senior administration to lead the project. Moving a project forward as a P3 can be extremely challenging without committed political and administrative champions, who, working in parallel, must be prepared to take the lead in bringing the various players to the table in order to keep a project on track and on schedule.

When embarking on a P3 project or program, municipal governments must be aware of the constraints that will need to be addressed, including the legislative framework, municipal procurement policies, conflicting priorities, financial capacity constraints, resource availability, in-house knowledge and experience and the procurement costs associated with a P3.

Delivering public infrastructure projects at scale always comes with challenges – the purpose of CCPPP's Municipal Engagement Advisory Group, and of this Guide for Municipalities, is to make the P3 model more accessible, less confusing, and to provide an effective means for municipalities to overcome these challenges and deploy the P3 model with success.

Applied correctly and in the right situations, the P3 model can be an incredibly effective tool for municipalities with infrastructure needs, with the benefits far outweighing the challenges. Improved focus on risk allocation drives clearer delineation of responsibilities between public and private partners, leading to more effective risk management and more effective cost control. Whole life cycle cost considerations drive responsible decision-making in balancing short-term capital expenditures with long-term maintenance and life cycle costs, and ensures availability of the latter from day one. Most importantly, perhaps, are the innovations and efficiencies that are unlocked with a truly collaborative relationship. Access to private-sector expertise throughout the project development, construction, and operations life cycle is complementary to the skills of the public sector, with economic incentives on both sides for on-budget and on-time delivery. Improved governance, greater transparency, accountability, and scrutiny of long-term value drive success. Finally, utilization of private capital can unlock infrastructure projects and contribute to a municipality's economic growth, employment, competitiveness, and can free public funds for other economic and social priorities.

P3s are well suited to a wide variety of asset classes, and are not reserved for mega-scale projects typically delivered by Provincial and Federal agencies. The Council strongly believes that more widespread use of the P3 model at the Municipal level will significantly contribute to closing Canada's infrastructure deficit. Civic buildings, community and recreation centers, convention centers, water utilities, wastewater utilities, energy & electrification projects, transit, roads, bridges, housing, and parking are all examples of municipal infrastructure where the P3 model has been tested with success in Canada at the municipal level.

In many jurisdictions around the world, P3s and other alternative project delivery models have become a common tool for the procurement and delivery of public sector infrastructure projects and services. Canada in particular has a robust and long-established track record of utilizing P3s to address the infrastructure deficit, with 300+ P3 projects either in construction or operation in

Canada over the 30+ year use of the model to date – this model is successful in delivering core public infrastructure and services for Canadians, and critical in building Canada’s future. We hope that this Guide is useful for municipalities seeking guidance on alternative approaches to delivering core public infrastructure within their communities in the years to come.

Unlocking the Potential of P3s: CCPPP and Our Members Are Here to Help

This guide and its companion — *Empowering Municipalities: Unlocking the Potential of P3s for Community Building, Infrastructure Delivery, and Asset Management*, available under the [Research Section](#) of CCPPP’s website — have been developed as part of our commitment to advancing municipal infrastructure delivery and asset management. CCPPP’s Municipal Engagement Advisory Group will continue to create municipal tools, guidance, case studies, peer reviews, and more to support municipalities as they explore their procurement options.

Representing virtually all major players in the infrastructure sector, including public sector owners, private sector construction, engineering, legal and advisory firms, as well as banks, financiers, and operators, CCPPP is uniquely positioned to bring together the knowledge and experience necessary to help municipalities assess alternative approaches. As part of our commitment, CCPPP welcomes the opportunity to collaborate with all levels of government and key municipal stakeholders to identify gaps in capacity and knowledge. We aim to develop a new tool suite that supports standardized approaches and analysis for determining procurement options. Standardizing procurement processes and documents will help attract greater private-sector interest in municipal projects.



Appendix 1 Provincial & Federal Infrastructure/Procurement Resources

As touched on in Chapter 4, several Canadian jurisdictions have established P3 frameworks for assessing procurement options over the years. These currently include provinces such as Alberta, Ontario, and Nova Scotia. Additionally, a few municipalities, including Calgary, Edmonton, and Ottawa, have implemented similar policies (please refer to Appendix 3 for resource links). Additionally, there are

various other departments with broader mandates, encompassing public infrastructure planning, development, procurement, transportation, and asset management at federal, provincial, and municipal levels. These organizations also focus on sectors such as Indigenous communities, natural resources, housing, and facilitating P3s to optimize the delivery of large-scale infrastructure projects.

Jurisdiction	Department/Agency	Website
Federal	Infrastructure Canada (INFC)	http://www.infrastructure.gc.ca
Federal	Canada Infrastructure Bank (CIB)	http://www.cib-bic.ca
Federal	Public Services and Procurement Canada (PSPC)	http://www.tpsgc-pwgsc.gc.ca
Federal	Transport Canada	http://www.tc.gc.ca
Federal	Indigenous Services Canada (ISC)	http://www.sac-isc.gc.ca
Federal	Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)	http://www.rcaanc-cirnac.gc.ca
Federal	Natural Resources Canada (NRCan)	http://www.nrcan.gc.ca
Federal	Canada Mortgage and Housing Corporation (CMHC)	http://www.cmhc-schl.gc.ca
Federal	Canadian Commercial Corporation (CCC)	http://www.ccc.ca
British Columbia	Ministry of Transportation and Infrastructure	http://www.gov.bc.ca/transportation
British Columbia	Partnerships British Columbia (Partnerships BC)	http://www.partnershipsbcc.ca
Alberta	Alberta Transportation and Economic Corridors	http://www.transportation.alberta.ca
Alberta	Alberta Infrastructure	http://www.infrastructure.alberta.ca
Saskatchewan	Ministry of Highways	http://www.saskatchewan.ca
Saskatchewan	SaskBuilds and Procurement	http://www.saskbuilds.ca
Manitoba	Manitoba Infrastructure	http://www.gov.mb.ca/mit
Manitoba	Manitoba Public Procurement	http://www.gov.mb.ca/mps
Ontario	Ministry of Infrastructure	http://www.ontario.ca/page/ministry-infrastructure
Ontario	Infrastructure Ontario	http://www.infrastructureontario.ca
Quebec	Ministry of Transport and Sustainable Mobility	http://www.transports.gouv.qc.ca
Quebec	Société québécoise des infrastructures (SQI)	http://www.sqi.gouv.qc.ca
New Brunswick	Department of Transportation and Infrastructure	http://www.gnb.ca
Nova Scotia	Department of Public Works	http://www.novascotia.ca
Nova Scotia	Nova Scotia Lands Inc.	http://www.nslc.ca
Nova Scotia	Build Nova Scotia	http://www.buildns.ca/
Prince Edward Island	Department of Transportation and Infrastructure	http://www.princeedwardisland.ca
Newfoundland and Labrador	Department of Transportation and Infrastructure	http://www.gov.nl.ca/ti
Yukon	Department of Highways and Public Works	http://www.yukon.ca
Northwest Territories	Department of Infrastructure	http://www.gov.nt.ca
Nunavut	Department of Community and Government Services	http://www.gov.nu.ca

Appendix 2 CCPPP's Inventory of Historical Municipal P3 Projects

Municipal Projects 1993 to 2024

Project Name	Model	Current Stage ***	Owner	Location
Calgary Composting Facility	DBFM	Operational	City of Calgary	AB
Stoney CNG Bus Storage and Transit Facility	DBFM	Operational	City of Calgary	AB
Edmonton Valley Line LRT Expansion Southeast	DBFOM	Operational	City of Edmonton	AB
Edmonton Valley Line West LRT	DBF*	Under Construction	City of Edmonton	AB
North Saskatchewan Bridge project	DBfOM	Operational	City of Edmonton	AB
Lac La Biche Biological Nutrient Removal Wastewater Treatment Facility	DBOM*	Operational	Lac La Biche	AB
Wetaskiwin Water Treatment Plant	BF (D+OM remain with the City)	Operational	City of Wetaskiwin	AB
Port Hardy Water & Wastewater Treatment System	DBO*%	Operational	Port Hardy	BC
Residuals Treatment Facility	DBFOM	Operational	Capital Regional District of Victoria	BC
Prospera Place (formerly Skyreach Place)	DBF00M	Operational	City of Kelowna	BC
Golden Ears Bridge	DBFOM	Operational	TransLink	BC
Canada Line	DBFOM	Operational	TransLink	BC
Kokish River Hydroelectric Project	DBO*	Operational	'Namgis First Nation	BC
SHOAL Centre	DBF*	Operational	Town of Sidney	BC
Surrey Biofuel Processing Facility Project	DBFOM	Operational	City of Surrey	BC
Vancouver Landfill Gas Cogeneration Project	BOO	Operational	City of Vancouver	BC
Capital Regional District (CRD) Residuals Treatment Facility	DBFOM	Operational	City of Victoria	BC
Charleswood Bridge	DBFTransfer (leased back to the City)	Operational	City of Winnipeg	MB
Chief Peguis Trail Extension	DBFM	Operational	City of Winnipeg	MB
Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass	DBFOM	Operational	City of Winnipeg	MB
Disraeli Freeway and Bridges Project	DBFM	Operational	City of Winnipeg	MB
Moncton Water Treatment Facility	DBO*%	Ended in 2020	City of Moncton	NB

Please note that this list is not exhaustive and is based on publicly available information at the time of publication.

*Denotes project historically considered a P3 but that no longer meets CCPPP's definition of a project that includes long-term private finance.

In 2013, the Town of Port Hardy decided to end its 20-year agreement with EPCOR early. The agreement started in 1999. Sooke voted in 2016 to bring sewer operations and maintenance in house. EPCOR had operated the facility since 2006 under 5-year contracts.

**Lowercase "f" means partially finance.

*** As of the time of publication.

Project Name	Model	Current Stage ***	Owner	Location
Superior Propane Centre (formerly known as Red Ball Internet Centre)	DBFO	Operational	City of Moncton	NB
Avenir Centre (formerly Moncton Downtown Centre)	DBF*	Operational	City of Moncton	NB
Saint John Safe Clean Drinking Water Project	DBFOM	Operational	City of Saint John	NB
HRM's Organics Management Infrastructure and Long-Term Operating Contract	DBOwnOperateTransfer, DBOOT*	Substantial Completion	Halifax Regional Municipality	NS
Barrie Transit Bus Operations and Maintenance Facility	DBFOM	Operational	City of Barrie	ON
CAA Centre (formley known as Powerade Centre)	DBFO	Operational	City of Brampton	ON
Powerade Centre	DBFOM	Operational	City of Brampton	ON
Hamilton Biosolids Project	DBFOM	Operational	City of Hamilton	ON
Mohawk 4 Ice Centre	DBFO	Operational	City of Hamilton	ON
Tim Hortons Field (formerly Pan Am Hamilton Stadium)	DBF*	Operational	City of Hamilton	ON
Canada Life Place (formerly Budweiser Gardens and John Labatt Centre)	DBFOM	Operational	City of London	ON
Markham Pan Am Centre	DBF*	Operational	City of Markham	ON
Mattamy National Cycling Centre	DBF*	Operational	Town of Milton	ON
Britannia Landfill Gas to Electricity Project	DBFOM	Operational	Regional Municipality of Peel	ON
Toronto Power Generating Station Redevelopment	DB(reno)FO	TBC	Niagara Parks	ON
Confederation Line (West Extension)	DBF*	Under Construction	City of Ottawa	ON
Confederation Line, Phase 1	DBFM	Operational	City of Ottawa	ON
Bell Sensplex	DBFO	Operational	City of Ottawa	ON
Ottawa Paramedic Service Headquarters	DBM*	Operational	City of Ottawa	ON
Shenkman Arts Centre & Orléans Town Centre	DBFOM	Operational	City of Ottawa	ON
Trillium Line Extension & long-term maintenance of existing Trillium Line	DBFM	Under Construction	City of Ottawa	ON
Sudbury Biosolids Management Facilities	DBFOM	Operational	City of Greater Sudbury	ON

*Denotes project historically considered a P3 but that no longer meets CCPPP's definition of a project that includes long-term private finance.

In 2013, the Town of Port Hardy decided to end its 20-year agreement with EPCOR early. The agreement started in 1999. Sooke voted in 2016 to bring sewer operations and maintenance in house. EPCOR had operated the facility since 2006 under 5-year contracts.

**Lowercase "f" means partially finance.

*** As of the time of publication.

Project Name	Model	Current Stage ***	Owner	Location
Toronto Pan Am Sports Centre	DBF*	Operational	City of Toronto & University of Toronto Scarborough	ON
Waterloo Landfill Gas Power Project	DBFOM	Operational	Regional Municipality of Waterloo	ON
Waterloo Light Rail Transit (ION stage 1)	DBFOM	Operational	Regional Municipality of Waterloo	ON
VIVA, Phase 1	DBOM	Operational	York Region Rapid Transit Corporation	ON
Highway 7 West Rapid Transit Project	DBF*	Operational	Regional Municipality of York	ON
Lachine Train Maintenance Centre	DBF*	Operational	Agence métropolitaine de transport (AMT)	QC
Mosaic Stadium	DBf*	Operational	City of Regina	SK
Regina Wastewater Treatment Plant	DBFOM	Operational	City of Regina	SK
Saskatoon Civic Operations Centre Phase One	DBFM (Transit Facility) and DBFOM (Snow Management Facility)	Operational	City of Saskatoon	SK
Saskatoon North Commuter Parkway and Traffic Bridge Replacement	DBFOM	Operational	City of Saskatoon	SK



*Denotes project historically considered a P3 but that no longer meets CCPPP's definition of a project that includes long-term private finance.

In 2013, the Town of Port Hardy decided to end its 20-year agreement with EPCOR early. The agreement started in 1999. Sooke voted in 2016 to bring sewer operations and maintenance in house. EPCOR had operated the facility since 2006 under 5-year contracts.

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*** As of the time of publication.

Appendix 3 Municipal P3 Policies

Very few Canadian municipalities have adopted procurement policies relating to public-private partnerships, likely due to the infrequent P3s undertaken at the municipal-level to-date. Three municipal P3 policies which have been developed and are available publicly are:

City of Calgary

Website Reference: [City of Calgary P3 Policy](#)

Calgary's City Council adopted a P3 policy in 2008 and updated it in 2020 to use a consistent governance model and selection criteria when assessing, procuring, implementing, and managing P3s as an alternative financing and procurement approach for infrastructure and/or services.

City of Edmonton

Website Reference: [City of Edmonton P3 Policy](#)

In 2010, the City of Edmonton adopted a policy on P3s. It provides process certainty and clarity for all stakeholders as well as a framework for the selection, evaluation, approval, delivery and monitoring of P3s.

City of Ottawa

Website Reference: [City of Ottawa P3 Policy](#)

The City of Ottawa maintains a P3 policy to outline their approach to evaluating and pursuing a potential P3 option for the implementation of City projects.

Appendix 4 P3 Myths: Know the Facts

Despite the wide use of P3s across Canada, there remains confusion and misconceptions about the model. Let's get to know the facts:

P3s = privatization

This is false. Privatization involves the transfer of ownership of the asset or service. The vast majority of P3 projects in Canada are publicly owned, publicly controlled and publicly accountable.

A private sector company may enter a lease/service agreement with the public sector to maintain or operate a public asset or service. Once the contract ends, the private sector must hand back the asset/service to the public sector in an agreed-upon condition. Underlying ownership always rests with the public sector even during the length of the agreement.

P3s increase private sector profits

Profit is generated in all infrastructure procurement models, from traditional Design-Build to DBFOMs, Progressive DBs to Alliance, where the public sector engages the private sector to design, build, operate and or maintain an asset.

P3s, however, are structured so that profitability (and potential losses) are tied to performance.

Canada has a highly competitive P3 market, ensuring governments receive the best bids and, ultimately, the best value for money.

Traditional public procurement already relies on the private sector to design, construct, and often maintain assets. Engineering and architecture firms are tasked with developing designs and functional programs during the project's development phase, collaborating with contractors during construction to ensure successful delivery. The private sector also frequently provides services to maintain and refurbish public infrastructure.

As we will see throughout this guide, P3s utilize these same resources, but in a different way. P3s are procured under competitive tension, which drives value and mitigates the risk of excessive private-sector profits. Furthermore, P3 structures typically allow the public sector to share in refinancing gains and include safeguards to prevent windfall profits for private partners.

P3s are long and complicated

Non-traditional procurement models, including P3s, do require the public partner to spend more time planning and preparing for a project than under traditional procurement, as they consider the whole lifecycle of the project. That being said, delivery can be accelerated significantly under a P3 with the total time to achieve substantial completion having been demonstrated to be shorter than under traditional procurement. It is true that the P3 framework has been applied to some of the largest and most complex infrastructure projects that have been delivered in Canada – the projects are complex, but the P3 model is beneficial in delivering them.

In fact, Canada has been recognized internationally for having some of the most efficient P3 procurement processes and the shortest times from project initiation to delivery. There have now been so many P3s concluded in Canada and around the world that processes and documentation have been standardized. In Canada, each province with active P3 programs has developed its own unique processes and standardized documents and these can be readily adapted for municipal projects.

It is important to note that while each province may have its own processes and standardized documents, these processes and documents are similar – municipalities are encouraged to access and use precedents from across Canada. In fact, many smaller projects have been completed using streamlined processes and documentation to reduce the costs of preparing for and implementing the P3 arrangement.

P3s cost more than traditional procurement

The cost of private financing in P3s is typically higher than the cost of public sector debt, reflecting project risks and the cost of structuring the security needed to ensure that all protections are in place to manage cost overruns and delays.

However, taking into consideration the full lifecycle costs and the estimated savings due to risk transfer to the private sector, the overall cost of P3s is estimated to be lower than traditional procurement methods. Otherwise, the P3 approach, may not be the right fit. The introduction of private finance also introduces an additional level of oversight to a project in the form of independent technical and legal advisors, which is a value-add of private financing as well.

In addition, as government borrowing becomes more expensive due to rising interest rates and economic pressures, the gap between public and private sector financing costs is narrowing.

The cost of public sector financing reflects the risk associated with generating tax revenue and/or increasing public debt and managing public expenses in order to service the government bonds.

Leveraging private capital also allows governments to amortize the cost of the project over the life of the asset and protects from cost overruns. When government funding is at premium, the models can help governments get better bang for their buck.

P3s are P-Free

Depending on the structure of the P3, the timing of cash flows to pay for the project will be different than under a traditional approach because under a P3, payment is first made after the project commences operation and then continues over the term of the project.

A municipality must still pay for the project and consequently, while a P3 can improve a project's affordability, the municipality must still determine if it has the funding capacity to carry out the project.

In addition, the P3 approach allows a municipality to identify and transfer to the private partner responsibility for the long-term maintenance and lifecycle costs, thereby ensuring proper upkeep of the assets.

Unions do not support P3s

Labour unions routinely partner with the private sector to deliver Canadian infrastructure projects, generating highly desirable job opportunities both directly, in construction and operation, and indirectly, in related industries.

Additionally, labour unions collaborate with the private sector not only on project delivery but also as investors through their pension funds, which directly benefits the union workers involved. LiUNA and the Carpenters Union, for example, are among the labour groups that are regularly involved in P3 projects and support them.

Collective agreements are usually maintained for public sector employees in P3s and provide equivalent wages and benefits. For example, City of Regina employees transferred to the private sector company contracted to operate the new wastewater treatment plant with their collective bargaining agreements remaining intact.

Significant investments in new and refurbished public infrastructure in Canada in recent years has resulted in hundreds of new jobs, many of them unionized.

P3s shut out our smaller and medium-sized businesses

SME companies play a big role in the P3 sector in Canada, just as they do in traditional projects, particularly at the subcontractor level. Many provinces, such as Ontario already have policies in place to incentivize the participation of smaller and local contractors.

Where smaller businesses have been shut out, the problem comes back to issues at the front end – scope, size and scale of projects that are unreasonable for the asset, mega projects (\$500 million+) coming online at the same time leading to intense competition for skilled trade resources. CCPPP continues to work with our members and government decision-makers to find the “sweet spot” for project scope to ensure local contractors aren’t negatively impacted.

Challenges with transit P3s prove the model doesn’t work

CCPPP recognizes that significant challenges and negative criticisms surrounding high-profile megaprojects – transit-related, in particular – have recently tested the 30-year reputation of the P3 model in Canada.

Recent challenges in transit projects are not representative of the P3 model writ large (dozens of hospitals, schools and water/wastewater treatment projects successfully delivered) and do not reflect historical P3 transit successes such as the Canada Line (on-time and on-budget).

The sector, including both public and private leaders, is heeding these concerns and working collaboratively through CCPPP to evolve the P3 model to resolve contentious issues such as risk transfer, which can adversely impact project budgets and timelines (see [Modernizing Canada’s Approach to Public-Private Partnerships \(P3s\) and its eight recommendations](#)). This evolution seeks to put communities back at the forefront of infrastructure delivery, operation, and maintenance in Canada.

Value-for-Money analysis inflates costs to favour P3s

The VFM analysis helps governments determine what procurement model is best suited for a given project. It is a comparative analysis of both the quantitative and qualitative aspects of a project using both a traditional and P3 delivery model, using the best available information to calculate risk premiums, by participating in workshops with experts to identify risks and to develop economic models and simulations that consider possible outcomes of those risks. Should the analysis demonstrate the value of risk transfer potentially resulting in savings for taxpayers, then the P3 model may be the right delivery model.

It should be noted that these risks are rarely quantified for traditional government procurements, so P3s add an additional important level of analysis to ensure Value-for-Money.

Detailed financial information is available about P3 contracts because they are often financed through publicly rated bonds and information is also available in credit rating reports and government capital plans.



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