The Canadian Council for Public-Private Partnerships



PUBLIC-PRIVATE PARTNERSHIPS A GUIDE FOR MUNICIPALITIES











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The Canadian Council for Public-Private Partnerships



In partnership with:



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Preface and Acknowledgements

As municipalities make significant investments to renew and develop public infrastructure, they are considering public-private partnerships (PPP) as a way of delivering these projects, much as the provincial and federal governments have been doing for many years. Although there are now some 150 projects in Canada that have been procured through PPP approaches, undertaking a PPP for the first time can seem daunting as stakeholders try to navigate the jargon, structures and instruments which can seem so different from traditional procurement approaches.

To help demystify PPPs for municipal stakeholders, the Canadian Council for Public-Private Partnerships, in partnership with PPP Canada, has developed *Public-Private Partnerships: A Guide for Municipalities*, which provides an overview of PPPs and presents some of the issues important or unique to municipal governments. The Guide also outlines the broad steps in considering and implementing a PPP and gives examples which illustrate how PPPs have been used to successfully procure municipal infrastructure in Canada and elsewhere in the world. The Guide also includes references to resources with specialized skills and expertise which can provide assistance to you and more detailed and technical information on PPP analysis and procurement. A list of regional resources is included in Appendix 2.

The Canadian Council for Public-Private Partnerships (CCPPP) was established in 1993 as a member-sponsored organization with representatives from both the public and the private sectors. The organization's mission is to promote innovative approaches to infrastructure development and service delivery through public-private partnerships with all levels of government. CCPPP promotes collaborative partnerships between public sector agencies, departments and industry. 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 P3s. CCPPP's activities include strategic research, an annual conference and regional events, a national awards program and a national P3 project database.

The CCPPP often draws on the extensive experience of its members to conduct and participate in its research program. For this particular report, CCPPP turned to a number of its stakeholders to assist in the development of the Guide. CCPPP wishes to acknowledge and thank Larry McCabe, Clerk/Administrator, Town of Goderich and a director on CCPPP's Board and Lisa Mitchell, Director, Strategy and Policy at PPP Canada for their valuable input along with the following:

- The Federation of Canadian Municipalities;
- Partnerships British Columbia, Alberta Treasury Board, Infrastructure Ontario and Infrastructure Québec; and
- Municipal and local governments across Canada.

Our partner on this project, PPP Canada, is a federal Crown Corporation with a mandate to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers through P3s.

PPP Canada was created to deliver better P3s by promoting P3 best practice and capacity-building through its business lines: P3 Leadership; Advancing Provincial, Territorial, Municipal and First Nations P3s; and Advancing Federal P3s

CCPPP would also like to extend its sincere appreciation to PricewaterhouseCoopers LLP for working with us and the above-noted stakeholder groups in the development of this document and to PPP Canada for its generous support. A special thanks to PwC's project leads Bruce Anderson and Joanne Mullen. Ms Mullen is also a director on CCPPP's Board.



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Executive Summary

Canada's public infrastructure is aging, adversely affecting our daily lives and impacting the economy. Growing populations require more and improved services at the same time as municipalities struggle to balance operating budgets and manage municipal debt levels. Diverting funds from maintenance and infrastructure renewal leads eventually to even costlier repairs—in 2007 Canada's municipal infrastructure backlog was estimated at \$123 billion, and today the need is even more critical.

A public-private partnership (PPP or P3) can offer more effective project and lifecycle cost control and risk management than a traditional procurement method, while improving governance and increasing innovation. PPPs have become a common tool for delivering infrastructure and services around the world, and communities across Canada are now using PPPs to build roads, hospitals, light rail transit, water and waste treatment facilities and other infrastructure.

PPPs build on the expertise of both public and private partners to best meet clearly defined public needs. Under traditional procurement, there is little or no relationship between payment and performance. Under a PPP, the private sector assumes financing and risk for the delivery and the performance of the infrastructure, from its design, architectural and structural plan to its long-term maintenance.

The essence of a public-private partnership is the sharing of risk. By transferring risk and responsibility to the private sector, the public-private partnership framework helps control factors leading to cost overruns and delivery delays that commonly occur under traditional procurement, especially with large and complex projects. The public partner will specify not how to develop the project, but what it wants from the project, expressed as measureable and objective performance or availability criteria. A private partner committing to a decades-long operating period will design for operational and whole-life cost efficiencies and contribute ideas to improve service quality—the public will receive value for money while the private partner will get a fair return. Payment is the tool that gives the public partner the leverage it needs to secure the desired outcomes from the private partner. Paying only when the private partner delivers exactly what has been contracted for, the public partner is not responsible for financing or for cost overruns.

The most significant advantages to PPPs are associated with whole lifecycle planning, pay for performance and marshalling the knowhow and ingenuity of the private sector. Projects with quantifiable output specifications, distinct services or facilities, that call for new rather than refurbished buildings, ones with market capacity and for which the private sector can best manage project-specific responsibilities and risks may be suitable for PPP procurement.

As with a traditional procurement, implementing a PPP requires preparation and planning. The realities of the legislative framework in which a municipality operates its resources, financial and borrowing capacity, and its staff's knowledge, skills and experience will all have a material impact on whether a PPP program is suitable for a given municipality. Municipalities will still need support from professional and technical advisers, and it is important to know when PPPs are not the right solution. But opposition to and confusion about the use of PPPs are often based on misconceptions. PPPs are not the same as privatization—assets procured through a PPP remain under public-sector control and are owned by the public. A PPP is a procurement vehicle, and the choice of delivery model will be based on the business case that best secures value for taxpayers' money. All PPP procurements follow an open and transparent process, and are subject to intense public scrutiny. In Canada, federal and provincial governments are encouraging the consideration of innovative procurement methods to address our growing infrastructure gap. PPP Canada, a Crown Corporation with a mandate to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers through PPPs, oversees the \$1.2 billion P3 Canada Fund. Ontario, Quebec, Alberta, British Columbia and New Brunswick all have active PPP programs, and agencies dedicated to overseeing PPP procurements. Each has developed unique processes and standardized documents that can be readily adapted for municipal projects.

Public-private partnerships are an important procurement option for governments across all jurisdictions seeking to build or rehabilitate infrastructure assets. With more than 150 projects built or underway by 2011, PPPs are already delivering Canadian infrastructure and public service solutions—and helping to build Canada's future.

PPP Glossary

The following terms are commonly used to describe partnership agreements in Canada, although this should not be considered a definitive or complete listing:

Alternative Finance and Procurement (AFP): The Government of Ontario's program to deliver public infrastructure using private finance. Known elsewhere in Canada as Public-Private Partnership (PPP).

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.

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 PPP.

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 PPPs.)

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.

Lifecycle: 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.

PPP: Public-Private Partnership

P3: Public-Private Partnership

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

Public Sector Comparator (PSC): A detailed analysis carried out by the public partner or its advisers to determine the all-in lifecycle 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 PPP 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 PPP, 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 PPP 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?**

1.1 Public-Private Partnerships: The Context

Public infrastructure impacts every facet of our lives, from the water we drink to the roads we use to the arenas where future Sidney Crosbys lace up their skates. Infrastructure is an enabler of economic development and growth—roads without potholes facilitate 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.

Unfortunately, Canada's public infrastructure is aging. The need for new infrastructure is increasing and governments at all levels, especially municipalities, are struggling to keep pace with public demands for greater and improved infrastructure and services. At the municipal level, the Federation of Canadian Municipalities reported that as of 2007, the municipal infrastructure backlog was estimated at \$123 billion, and that \$115 billion in new municipal infrastructure was required. Today those numbers are undoubtedly even higher.

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

 Funds are diverted away from maintenance and renewal to address more urgent needs, leading to a growing backlog of repair and renewal projects which leads to costly repairs and compounds the investment requirement; and 2. As populations grow, municipalities need to improve and expand service.

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.

In many jurisdictions around the world, PPPs have become a common tool for delivering projects, building infrastructure and delivering services. In Canada, in addition to robust PPP programs at the provincial and federal levels, municipalities are increasingly turning to PPPs as an alternative means of procurement to help address the infrastructure funding deficit. In communities across Canada, new roads, light rail transit, recreation and cultural

1 Federation of Canadian Municipalities, "Danger Ahead: The Coming Collapse of Canada's Municipal Infrastructure" (November 2007).

centres, water and waste treatment facilities and housing have and are being built as PPPs. A more comprehensive list of Canadian municipal PPP projects is provided in Appendix 3.

The procurement approach and contractual structure of a PPP can offer many benefits, including:

- Faster access to new infrastructure and services; this can contribute to a municipality's economic growth, employment and competitiveness and can free public funds for core economic and social programs;
 - » PPPs bring together the strengths of both public and private sectors
 - » PPPs include incentives that lead to on-budget and on-time delivery
- Improved governance through greater transparency, accountability and in-depth cost/benefit analysis and scrutiny of proponents offering the best value;
- Greater sharing of the risks and responsibilities between the public and private sector partners;
- More effective risk management and cost control; and
- Where the PPP spans the lifecycle of the asset, adequate funding of maintenance and lifecycle costs.

1.2 What are Public-Private Partnerships?

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

"A long-term performance-based approach for procuring public infrastructure where the private sector assumes a major share of the responsibility in term of risk and financing for the delivery and the performance of the infrastructure, from designing the concept, architectural and structural planning to its long-term maintenance."

– PPP Canada

"A legally binding contract between government and business for the delivery of services and the provision of assets, such as roads, bridges and hospitals. The contract allocates responsibilities and business risks among the various partners."

- Partnerships BC

While these definitions illustrate the broad concept of a PPP, the following table presents some of the essential differences between PPP and traditional procurement with the objective of defining PPP from a practical perspective. Simplified examples have also been provided to illustrate the concepts being presented.

What vs. How

Rather than specify how the asset or services should be delivered, such as specifying the materials, machinery, and finishes, the public partner specifies its requirements by way of performance and availability criteria. The private partner must then develop its own approach to delivering the asset or service to ensure that it is meeting the public partner's requirements and desired outcomes.

| TRADITIONAL | | РРР | | |
|---|-----|--|--|--|
| 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 identifiess 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. | | |

Full Lifecycle Planning vs. Truncated Planning

Under a PPP model where the private partner assumes responsibility for maintaining and renewing the asset over the long term (30 years, for example), the private sector partner will need to guarantee the performance of the asset and meet the availability and service requirements set out by the municipality. 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 make sure that choices made with respect to equipment and materials will allow them to meet the municipalities' performance standards over time.

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

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

11

| TRADITIONAL | | PPP | Pay for Performar | 10 |
|--|-----|--|---|----|
| Example 1 | | | Under a PPP, payment is t | he |
| Example 1 A road construction project is planned to fit within a specified capital budget. Design and materials are selected to fit within this budget. Recurring annual maintenance costs and lifecycle costs are not considered. | | The public partner defines its requirement in terms of the availability and condition of the road over a 30-year period. As a result, the private sector team responsible for O&M (and for ensuring that the road is available as required) works with the private partner's design and construction team to select construction materials. The private partner decides to use a particular type of backfill which will lead to a longer- lasting surface and lower lifecycle costs, and decrease the time when the road must be closed for works. From a whole lifecycle cost perspective, this option is | TRADITIONAL 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 | |
| Example 2 | | | holdback (typically 10%). | |
| The municipality must invest in a new light rail transit line to bring public transportation to a new and growing area of development. The project is constructed, but once it is in operation, maintenance and renewal budgets are constrained and necessary work is not carried out. This results in breakdowns in service and delays for passengers. | VS. | The private partner is responsible for the project over a 30-year period and must respect performance standards in terms of the timeliness of the service and the number of allowable interruptions. The contract covering the 30-year term will specify the maintenance, renewal and operating services that will be provided by the private partner as well as the public sector cost of that service. The public partner has a contractual obligation to pay its private partner for that service over time and has budgeted accordingly. | 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. | v |

ce

tool which gives the public partner are the desired outcomes from the tional procurement, there is little or yment and performance.

| TRADITIONAL | | РРР | | |
|--|-----------|---|--|--|
| 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%). | VS. | The municipality will only pay for the asset once it has been delivered and only if it meets its 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 | 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 diagram 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 PPP approach, because the private partner can only receive payment once the asset is delivered, there is a very strong incentive to deliver on time and the private partner must absorb all cost overruns.

1.3 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.

Governments in Canada and around the world have turned to PPPs 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 been positive, as demonstrated by several empirical studies as follows:

| | STUDY | SAMPLE | RESULTS | | |
|--|--|---|--|--|--|
| | UK – Comptroller and Auditor General ² | 37 capital projects | Traditionally procured: 73% had cost overruns, 70% had delays PPP: 22% had cost overruns, 24% had delays (8% had delays greater than 2 months) | | |
| | UK – HM Treasury ³ | 61 operational PPP projects | 12% had delays, none incurred construction cost overruns that were borne by the public partner | | |
| | Australia – The Allen Consulting Group report to Infrastructure Partnerships Australia⁴ | 33 traditional capital projects and 21 PPPs | Traditional: from original approval of the project to final actual cost, cost overruns of 35.3% PPP: during the same period, cost overruns of 11.6% | | |
| | Canada – Conference Board of Canada ^s | 19 PPP projects | Cost savings measured between 1% and 61% relative to traditional procurement 17 projects delivered early or on time. 2 projects delivered up to 2 months late | | |

2 National Audit Office, "PFI: Construction Performance" (February 2003). 3 HM Treasury, "PFI: meeting the investment challenge" (July 2003). 4 The Allen Consulting Group, "Performance of PPPs and Traditional Procurement in Australia" (November 2007). 5 The Conference Board of Canada, "Dispelling the Myths: A Pan-Canadian Assessment of Public-Private Partnerships for Infrastructure Investments" (January 2010).

Compared to traditional procurement, PPPs 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:

Design and Construction Period

Operating Period

| Risks | Sources | Risks | Sources |
|--------------------------|---|---------------|--|
| Results not achieved | Poor conception and planning | Cost overruns | Poor cost estimation Design is developed to minimize |
| Poor quality of works | Poor designPoor managementErrors by the contractors | | construction costs Errors in construction lead to higher than expected maintenance and lifecycle spend |
| Cost overruns Delays | Poor definition of the project Change orders Insufficient due diligence prior to commencemen of works (geological, environmental, etc.) Contract not fixed price Poor planning of works Inefficient processes Poor cost estimation Unexpected inflation Errors in design Poor interface amongst trades on the site Poor definition of the project | t | |
| | Change orders Poor planning No incentives to maintain the original schedule | | |
| | D | Drivers | |

Affordability pressures: the project is sized to fit affordability but is insufficient to meet the requirements. Accelerated schedule to meet political (or other) timetable, which squeezes the planning and development process

Indecision on the part of stakeholders

Users change the requirements

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

In the case of capital projects:

- 1. In a PPP, 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. 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. If there are cost overruns, the public partner is not responsible for them.
- 3. 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.
- 4. This also means that the public partner has to be very clear about what it wants. 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.
- 5. To develop reliable estimates of the total lifecycle 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 lifecycle cost of the project. This militates significantly against optimism bias and other factors that lead the public partner to underestimate project costs.

6. 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. Performance and availability criteria must therefore be objective and measurable to avoid conflicts.

In the case of a services contract:

- 1. The private partner must deliver the service according to predetermined performance criteria.
- 2. Payment is made only if the service is provided according to the agreed terms. Deductions are applied based on agreed terms.
- 3. As with capital projects, for PPP to work, planning is key. Because payment is tied to performance, the performance standards must be well thought out, measurable and objective. They must also focus on outcomes rather than means, which leads the public partner to plan its requirements much more carefully than under traditional procurement.

1.4 When to Consider a Public-Private Partnership

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

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

Quantifiable Output Specifications: You can measure performance objectively based on quantitative parameters. For example, the temperature in the room must not be below 18

degrees Celsius and no higher than 22 degrees Celsius; a water treatment facility must maintain a minimum pressure in the water delivery system; the ice rink must be available for us between 6 a.m. and midnight 7 days a week;

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

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

Distinct Service or Facility: When specifications and performance measurement can be clearly set for the service or facility in question. For example, it would be difficult to set energyefficiency 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 PPPs is also enhanced when:

Project Term: Terms of 20 and 30 years, driven by long-term demand for the asset and a sufficient operating period to allow the private partner to recover its investment;

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

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

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

Does size matter?

There is considerable debate with respect to a minimum project size above which a PPP will generate value for the public sector. Most Canadian provinces have set a threshold of \$40 M in capital costs before requiring a value for money analysis. Most projects concluded to date in Canada have been large and complex, with capital costs ranging from \$100 M to well over \$1 billion.

The most significant factor to consider when assessing the feasibility of a PPP as it relates to project size is transaction costs relative to the value generated by the PPP. 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 design of the procurement process, there has been a great deal of standardization in documentation and process, and a large number of precedents exist from which to draw. These factors have contributed to reducing transaction costs. In addition, there are an increasing number of smaller projects that have been or are in procurement as PPPs (capital costs of \$10M to \$20M) where the documentation and process have been streamlined and adapted. Bundling of projects has also been used to create a critical mass and implement a more typical PPP. One interesting example is the Alberta Schools Alternative Procurement. Two phases have been concluded and a third is underway. Each phase allowed school boards to procure a number of new schools.

1.5 Is This a New Concept?

No! In fact, PPPs have a long and successful history of use. The United Kingdom has the most mature PPP market—it is generally regarded as the birthplace of PPP procurements and has implemented hundreds of projects in a large variety of sectors. Many European countries have also turned to PPP, such as France, Italy, Spain and Portugal, as have other regions including South Africa, Mexico, Australia and the United States, all of which have successfully delivered infrastructure projects and services using public-private partnerships. Types of projects successfully concluded under a PPP approach include:

- Social housing;
- Waste to energy or anaerobic digestion;
- Transit, including light rail and rail projects;
- All types of municipal accommodations including recreational facilities, libraries and city halls;
- Water and wastewater facilities;
- Street lighting;
- Road construction and refurbishment.

Case studies illustrating a variety of municipal PPP projects can be found in Appendix 1.

In Canada, PPPs are an important procurement option for governments seeking to build or rehabilitate infrastructure assets. Alberta, Ontario, Quebec, and British Columbia were among the early adopters of a formal PPP procurement policy, and the latter three provinces and New Brunswick have created dedicated agencies to oversee PPP procurements. In 2009, PPP Canada was established by the federal government to oversee the \$1.2 billion P3 Canada Fund. As PPP expertise and procurement capacity has increased, recourse to PPPs is both expanding across sectors and moving into the municipal market. The Canadian Council for Public Private Partnerships reports that between the early 1990s and 2011, more than 150 PPPs were concluded in Canada.

1.6 Public-Private Partnerships – the Misconceptions

Despite the wide use of public-private partnerships across Canada and the efforts of provincial and federal governments to use innovative procurement methods to address our infrastructure gap, there remains opposition to and confusion about the use of PPPs as a procurement option. Confusion and criticism often revolve around some misconceptions about PPPs:

PPPs = Privatization

Public-private partnerships are not about the privatization of public assets—under public-private partnerships, the public partner retains a substantial role in the project or service and retains ownership of the assets.

PPPs increase private sector profits

Traditional public procurement already utilizes the private sector to design, construct and often maintain assets. Engineering and architecture firms are given mandates to develop the designs and the functional and technical programs during the development phase. They will also work with the contractors during construction to ensure delivery. The private sector is often involved in providing services to maintain and refurbish public infrastructure. As we will see in a later section, PPPs uses these same resources, but in a different manner. PPPs are procured under competitive tension which should help produce value and eliminate the risk that the private partner makes excessive profits. Further, PPPs are typically structured to allow the public partner to share in any refinancing gains and to prevent windfall profits for the private partner.

PPPs are long and complicated

PPPs do require the public partner to spend more time in planning and preparing for a project than under traditional procurement. That being said, delivery is accelerated significantly under a PPP and the total time to achieve substantial completion has been demonstrated to be shorter than under traditional procurement.

In fact, Canada has been recognized internationally for having the most efficient PPP procurement processes and the shortest times from project initiation to delivery. Of the 19 PPP projects included in the Conference Board of Canada's study, 17 were delivered early or on time. Only two projects were delivered up to two months late and for those two, no payments were made until the projects were delivered.⁶ There have now been so many PPPs concluded in Canada and around the world that processes and documentation have been standardized. In Canada, each province with active PPP 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 very similar, making it easy for the municipalities 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 PPP arrangement.

PPPs are expensive because there is private financing

The cost of private financing in PPPs 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. 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. When total project costs are considered, including the potential costs of risks materializing and the cost of private finance, a project should be done as a PPP if it creates value by helping to mitigate those risks.

PPPs make projects affordable because they will be financed by the private sector

Depending on the structure of the PPP, the timing of cash flows to pay for the project will be different than under a traditional approach because under a PPP, 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 PPP 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 PPP 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.

PPPs are unpopular

While P3s have made a significant contribution to upgrading infrastructure and enhancing quality of life for residents in Canada, this approach has not met with universal support. Some have expressed concerns about the private sector taking on roles traditionally held by the public sector and the long term obligations these arrangements place on taxpayers. Public opinion surveys indicate that Canadians recognize that governments are having trouble keeping pace with the need for new and improved infrastructure and are open to new ways of involving the private sector in meeting these challenges. Since 2004, CCPPP has been conducting polls to assess how Canadians feel about public-private partnerships. In its 2010 report,⁷ CCPPP concluded that:

- Two-thirds of Canadians support public-private partnerships to assist governments in the delivery of infrastructure and public services;
- Youth are the strongest supporters of public-private partnerships; and
- Well over half of union members support public-private partnerships.

CCPPP also concluded that as Canada has gone from a handful of projects in the early 1990s to over 150 projects in 2011, the PPP concept after 20 years has proven to be effective and successful, and public-private partnerships are now an established way of providing infrastructure and public services to build Canada's future.⁸

⁶ The Conference Board of Canada, "Dispelling the Myths" (Jan. 2010). 7 The Canadian Council for Public Private Partnerships, "Building Canada's Future: Canadian Attitudes to Public-Private Partnerships, 2004–2010" (November 2010). 8 CCPPP, "Building Canada's Future" (Nov. 2010).

Chapter 2 Public-Private Partnership Models

2.1 PPP 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. There are a range of PPP models that 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.



Degree of Private Sector Involvement

2.2 The Traditional Approach: Design-Build/Design-Bid-Build

Design Build (DB), also referred to as Design-Bid-Build (DBB), has typically been the most common method of traditional infrastructure procurement by the public sector. Under this approach, the public sector is responsible for the design of the asset with the design development being in-house or contracted to private design firms. The 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

2.3 The PPP Approach: Design-Build-Finance

Under the Design-Build-Finance (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 that 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 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



In Canada, the DBF approach has been used on a number of municipal PPP projects including the SHOAL Centre in Sidney BC, the various Pan Am Games projects in Toronto and the AMT Maintenance Centre and Garage in Montreal. The typical DBF project is one where there are little or no demonstrated efficiencies to be gained by involving the private sector during the operating period or more commonly, where the projects consist in refurbishment or expansion of existing assets where it is difficult to transfer maintenance and lifecycle risks and responsibilities over the long term. For a more detailed listed of Canadian municipal PPP projects, see Appendix 3.

2.4 The PPP Approach: Design-Build-Finance-Maintain

The Design-Build-Finance-Maintain (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.

Under a DBFM, multiple groups come together and collaborate by creating a consortium to design, construct and operate the facility and this offers the advantage of a fully integrated process which leads to innovative solutions that consider 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



In Canada, the DBFM approach has been used on a number of municipal PPP projects including the Disraeli Bridge, Charleswood Bridge, Chief Peguis Trail extension in Winnipeg and the Ottawa Paramedic Services Headquarters. For a more detailed list of Canadian municipal PPP projects, see Appendix 3.

2.5 The PPP Approach: Design-Build-Finance-Operate-Maintain

In a Design-Build-Finance-Operate-Maintain (DBFOM) contract, tenders are sought for an integrated service to comprise design construction and maintenance of an asset and long-term operation by the contractor to meet defined specification objectives.

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



In Canada, the DBFOM approach has been used on a number of municipal PPP projects including the VIVA bus rapid transit project in suburban Toronto, the Powerade Centre in Brampton, the John Labatt Centre in London, the Greater Moncton Water Treatment Facility in New Brunswick, the Britannia Landfill Gas to Electricity project in Mississauga and the Barrie Transit Facility Project. For a more detailed list of Canadian municipal PPP projects, see Appendix 3.

2.6 Alternative Service Delivery (Operations and Maintenance)

While not all in the industry would consider Alternate Service Delivery a PPP, some believe that not all PPP projects need to involve the construction of new assets. In some cases, PPPs can also be used as a procurement approach where a public entity contracts with the private sector solely for the delivery of services. This is especially true in the municipal sector where the outsourcing of facility operations and maintenance or the delivery of select services is becoming fairly common. Municipal services that can by procured through a PPP 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.

In Canada, the outsourcing of operations and maintenance approach has been used on a number of municipal PPP projects, primarily in the water and wastewater sector, including the Canmore Water and Wastewater System in Alberta, and the Goderich Water and Wastewater System and the Brockton Water and Wastewater System in Ontario. For a more detailed list of Canadian municipal PPP projects, see Appendix 3.

Chapter 3 The PPP Process

3.1 Overview

There are many assets and services common to municipalities that have the potential to be procured using a PPP 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.

When embarking on a PPP, municipal governments must adopt plans, policies and procedures to govern their internal process. Many of these can be adapted for public-private partnerships from existing procurement policies and procedures with only minor adjustments that generally do not require an organizational restructuring. In addition, municipalities should consider the following issues:

- Identifying who within the organization will be responsible for the PPP or PPP 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; and
- Establishing procedures to enable the delivery of services through PPPs.

The implementation of a PPP can be broken down into three principle phases, as follows:

- 1. Planning (pre-procurement)
- 2. Procurement:
 - a) Request for Qualifications
 - b) Request for Proposals
 - c) Negotiations and Close
- 3. Contract management (operations)

Each of these phases is described below.

3.2 The Planning Phase

Prior to embarking on a public-private partnership, a municipality must first identify services or projects that have the potential to be delivered through PPPs. Public-private partnerships are not appropriate for all infrastructure projects. In fact, the Royal Institute of Chartered Surveyors found that in jurisdictions with active PPP procurement programs, PPPs account for only 20 per cent of public infrastructure procurements⁸.

So how do governments identify projects that are suitable for a PPP? Most Canadian jurisdictions with active PPP procurement programs (BC, Alberta, Ontario, Quebec, New Brunswick) have published frameworks for assessing procurement options. It is important to recognize that while procurement methodologies and requirements differ across provinces, the initial step of identifying, defining and scoping a project must be done regardless of the provincial procurement methodology to be followed. The planning process begins with the identification of an investment need: for example, a water plant is no longer capable of meeting the demands of a municipality or is no longer able to meet provincial standards. Once the need has been established, the municipality must determine if the most appropriate solution is to refurbish the existing facility or construct a new plant. Once the preferred solution has been identified, it is then defined in the form of a project

Once a project has been defined, it should undergo a qualitative assessment:

- To identify the options which are available for its procurement; and
- To assess the potential of delivering the project as a PPP (project size, complexity, ability to transfer risk and other issues identified in section 1.4).

If the results of the initial project screening efforts indicate that PPP is a potential procurement option, a municipality should progress to a full business case and quantitative value for money analysis that compares PPP to traditional procurement.

The identification, scoping and screening of a project is a multi-step process, as set out below.

Project Scoping

Task: Defining the Scope of a Project

- 1. Needs analysis (e.g., need for new service, existing facility is at capacity, asset needs major refurbishment).
- 2. Identify possible solutions to meet the need.
- 3. Rank solution options and select preferred solution.
- 4. Develop base costing, functional plans and initial schedule for the preferred solution.
- 5. Analysis of affordability and rescoping as required.

Outcome: Decision to proceed with the project as defined

Project Screening

Task: Preliminary Screening and Selection of Procurement Models

- 1. Gather information from scoping phase (cost, functional plan, schedule).
- 2. High-level preliminary risk assessment.
- 3. Determine stakeholder requirements.
- 4. Apply the information gathered above against the PPP suitability criteria to identify the models available for procuring the project.
 - a) Can we quantifiably and objectively measure the performance of a private sector partner?
 - b) Are there precedents for doing a similar or comparable PPP?
 - c) Is it a distinct service or facility?

Outcome: Decision on PPP suitability and need to move on to business case and Value for Money analysis.

After identifying those services or projects that have the potential for a public-private partnership but before embarking on the detailed quantitative assessment, a municipality needs to consider the following questions:

- What are the potential obstacles and constraints for a publicprivate partnership?
- What have the experiences of other municipalities on similar projects been?
- Is there market interest for delivering the service or project?
- Is a public-private partnership really the best method of procuring the services or project?

Involvement of PPP Canada:

PPP Canada is the federal Crown Corporation created to deliver more PPPs by leveraging incentives, demonstrating success, and providing expertise and to deliver better PPPs by promoting PPP best practices and capacity-building. PPP Canada oversees the P3 Canada Fund, a \$1.2 billion infrastructure funding program that specifically targets PPP projects. A detailed description of PPP Canada's role and the P3 Canada Fund can be found in Appendix 2.

If the screening exercise demonstrates that procurement as a PPP is feasible and a municipality wishes to pursue PPP Canada funding through the P3 Canada Fund, which provides support for up to 25% of the capital costs of the project, a municipality should complete an application to the P3 Canada Fund prior to embarking on the completion of a full business case.

Involvement of Provincial Agencies

British Columbia, Ontario, Quebec and New Brunswick have standalone PPP agencies and Alberta has a PPP division within Treasury Board. These agencies offer a wealth of experience, specialized technical resources, procurement templates, and have a valuable role to play in municipal PPP procurements.

The process for involving provincial agencies differs from province to province and we encourage you to read Appendix 2 for more information on the roles of these organizations. However, if after defining the project and completing the initial screening a municipality wants assistance from its provincial agency, or if the involvement of a provincial agency is mandatory, it would be beneficial to involve the provincial agency prior to embarking on the development of the formal business case.

The Business Case and Value for Money

PPPs are a procurement vehicle for implementing projects that fulfill a need to replace or improve existing public infrastructure and/or services. Once a project has been defined, screened and selected as a candidate for procurement using PPP, and a decision has been made regarding a project's feasibility and affordability, the case for proceeding with the project and deciding on the optimal procurement approach is the next step.

The Business Case

The goal of a PPP is to deliver a project on time and on budget, and to provide real cost savings to the public sector. The assessment of PPP as a procurement option requires rigorous financial and risk analysis and the development of a detailed business case for alternative service delivery methods. Through this analysis a municipality will be able to demonstrate that the chosen service delivery model provides the best opportunity to achieve value for money. The required rigour improves the information available and supports the municipality's decision, regardless of whether a PPP is the best service delivery option or not.

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 lifecycle 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 allows 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 analysis does not attempt to quantify the qualitative benefits that may result from using a PPP approach for delivering a project. The ultimate goal of the business case is to identify which procurement option delivers the best value for money, which in the case of a PPP means, "Is private sector involvement in the project likely to deliver value for money?"

PPP Canada has developed a Business Case Development Guide that can assist project sponsors in developing a comprehensive and robust P3 business case.

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 public-private partnership 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 various procurement options. This information is a key component of the value for money 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

A key component in the development of the business case is the value for money analysis.

A value for money 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 (also known as 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 PPP.

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

Total Costs

The value for money 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 lifecycle 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 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 lifecycle costing also offers predictability of costs and funding throughout the life of the contract. In a typical PPP 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.

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 PPP. 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 value for money 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 value for money 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 PPP 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 thirdparty advisors.



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.

Note: If the municipality has approached a federal or provincial agency regarding financial support and has received a positive response following its initial inquiry, the business case will need to be submitted to the appropriate federal or provincial agency to approve funding of the project.

3.3 The Procurement Phase

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 PPP the typical procurement phase involves:

Project Development

As part of the project development process, a procurement strategy needs to be established. It is essential that a PPP procurement be fair and transparent. To ensure a fair and transparent process, the public sector "owner" should:

- Establish clear procurement rules and an objective evaluation process;
- Appoint an independent fairness adviser to monitor the process;
- Facilitate and encourage competition;
- Ensure appropriate governance during the procurement process.

During the project development phase, the key steps will include:

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

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 to be invited 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);
- 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;
- 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 qualified bidders, with the selection being 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;
- 2. **Financing capability:** Is the consortium able to raise the necessary financing and provide the security that will be required if it is 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, to assess the consortium's experience with comparable projects and in dealing with the issues and challenges posed by the project.

Unsuccessful proponents should be provided with debriefing.

The Request for Proposals Phase

This phase involves the release of the RFP document and the evaluation of the RFP responses to select a preferred bidder. The key steps during the RFP phase 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;
- Selecting the preferred proponent.

At the start of the RFP phase, the RFP document is issued to the shortlisted bidders. The document 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 with whom the sponsor intends to move forward. Typically, the RFP process allows for negotiation after a preferred proponent is selected. 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.

Finalizing the Project Agreement and Commercial 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 and 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 very rapid succession (no more than a few days apart).

3.4 The Contract Management Phase

Once commercial and financial close have been achieved, the private partner begins the development of the project—this is when the real work begins and is also 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 PPP has three distinct stages:

- Construction;
- Operations;
- Contract expiry/termination.

During the contract management 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 the internal resources to become familiar with some of the key principles of the PPP contract, including the information required from the private partner, the governance protocols, the completion and commissioning program and the handback protocols.

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.

Contract Administration: All PPPs will be 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 lifecycle of the PPP contract and should be reviewed on an ongoing basis to ensure all emerging risks and issues are appropriately considered. **Governance:** Committees will be established and both public and private sector partners will appoint 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).

Commissioning and Completion: 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 public partner will approve the plan, monitor the private partner's progress and deal with any issues that arise. Often an external adviser is engaged 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.

Chapter 4 The Roles of Government Organizations

Federal and provincial PPP organizations are invaluable resources in the procurement of any PPP project—you don't have to go it alone! These organizations bring deep project experience, offer specialized technical resources (project procurement, project delivery, project finance, legal), market-tested procurement templates and possible financial assistance. In addition, the provincial agencies work within a provincial legislative framework and can assist municipalities to put the right legislation and policies in place to undertake a PPP program.

For municipalities wishing to learn more about public-private partnerships or wanting to leverage the extensive experience and expertise that is available, there are two important sources of information and support—PPP Canada and the provincial agencies.

At the federal level, PPP Canada has been created with a mandate to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers through PPPs. PPP Canada, a Crown Corporation with an independent board of directors, became operational in February 2009.

PPP Canada is authorized to perform four principal functions:

- **P3 Canada Fund:** Invest \$1.2 billion to catalyze the use of PPPs by other levels of government (provincial, territorial, municipal and First Nations);
- **P3 Screen:** Review large infrastructure projects over \$50 million from other levels of government seeking funding from federal programs;
- Federal Projects: Assess procurement opportunities at the federal level and advise on public-private partnerships;
- **Expertise and Advice:** Act as a source of expertise and advice on PPP matters.

Of key interest for municipalities is the P3 Canada Fund, a merit-based program launched in September 2009 that provides

funding for eligible projects. To be eligible for a P3 Canada Fund investment, the infrastructure project must be procured and supported by a province, territory, municipality or First Nation (i.e., a public authority).

The P3 Canada Fund is administered through public calls for projects. The first call closed in October 2009 and the second call closed in July 2010. Round Three was launched in May 2011 and Round Four is expected to be launched in spring 2012. Detailed information on PPP Canada, the P3 Canada Fund, project eligibility requirements, submission instructions and key contacts can be found in Appendix 2.

At the provincial level, stand-alone PPP agencies have been established in British Columbia, Ontario, Quebec and New Brunswick. In Alberta, PPPs are overseen by the Alternative Capital Financing Office of the Alberta Treasury Board. At their core, Canada's PPP agencies exist to aid in the delivery of provincial and other public sector infrastructure initiatives. One of their primary roles is to lead in managing the planning, design and delivery of infrastructure projects. For municipalities, these agencies can be an invaluable source of information and support as projects evolve, including the provision of procurement oversight. The agencies have specialized project delivery, procurement, project finance and legal teams that play an active role throughout the life of a project-from initial conception and planning to commissioning and service delivery. The agencies have developed template documents to streamline the development of a project's RFQ, RFP and concession agreements.

Detailed information on Partnerships BC, Alberta's Alternative Capital Financing Office, Infrastructure Ontario, Infrastructure Québec and Infrastructure New Brunswick can be found in Appendix 2 of this guide.

Chapter 5 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 PPPs. 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 PPP 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 PPP procurement:

Planning and Procurement

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

A **cost consultant** to develop preliminary project cost information; A **risk adviser** to assist in the identification and quantification of

the key project risks (especially those that impact pricing);

A **design consultant** to create a preliminary design and space plan and assist in the technical evaluation of proponents;

A **technical adviser** to assist with the development of the output specifications and key performance indicators and assist in the technical evaluation of proponents;

A **financial adviser** to develop the project financial models, determine value for money, develop the payment mechanism and assist in the financial evaluation of proponents;

A **legal adviser** to assist in the development of the project documents (RFQ, RFP and project agreement) and advise on the procurement process; and

A **fairness monitor** to oversee the process to ensure fairness and transparency.

While the list may appear daunting, many of the roles noted above can be provided by a single adviser. In addition, third-party advisers bring a wealth of knowledge and experience and their involvement can be well worth the cost.

Operations

Throughout the operations phase right through to contract expiry, 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; 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.

Contract Expiry

For projects involving the construction, operation or maintenance of a physical asset by the private sector, not just the provision of services, there will be additional tasks that should be undertaken by external advisers prior to the expiry of the contract. In the period leading up to contract expiry, 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.

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 PPP program, consideration should be given to establishing a vendor of record for third party advisers, to which all RFPs are disseminated.
Chapter 6 Resource Requirements

Implementation of a PPP requires careful planning. Depending on the complexity and nature of the project, the period from project inception to contract execution can vary from 18 to 36 months. For a project to be successful, internal resources must be committed. Although the initial planning and procurement is longer than for traditional procurements, PPPs reduce resource requirements over the long term and save the municipality money, generating value for its taxpayers.

The Local Government

Relevant municipal acts govern the authority of a municipal administration to enter into a PPP contract, and although electors may need to be consulted before specific projects are undertaken, more usually the council or a duly appointed board has the power to direct staff to execute a contract. Regardless of the ultimate authorizing body, the process for internal approval of a project and contract must be established before any projects are pursued. The steps for obtaining the requisite internal approvals and the associated timelines must be communicated to the proponents to ensure they have a clear picture of the procurement and decisionmaking process. Since the final decision-making body will likely be the municipal council, the municipal project team must keep the council fully informed throughout the procurement process and ensure that any emerging issues that require council attention and input are dealt with in a timely manner.

The Project Team

Once a project has been identified as a PPP candidate, the first step in pursuing a public-private partnership is to create a project team with an identified team lead, who will champion the project both internally and externally. The project team will assume overall responsibility for the PPP project and will be responsible for project planning, from procurement to contract award, and where appropriate, to contract monitoring during the operations and even the handback phases. The project team will be involved with the project over an extended period of time and should consist of staff from the procuring entity who have direct knowledge of the project, the procurement process and PPPs. Ideally, the project team will include members who have experience with, for example, project procurement, contract administration, finance, and legal issues. It is also important to include team members who have technical knowledge and an understanding of the services to be delivered.

Key considerations when selecting the project team include:

- Does the team have the necessary technical expertise to guide the project?
- Do project team members have the required time to devote to the project to ensure it stays on course?
- Do any team members have potential conflicts of interest (actual or perceived)?

A local government, depending on its size, may not have expertise on staff in the areas required for a PPP. Where a local or municipal government lacks the necessary resources to fill out a project team, or team members lack the necessary PPP experience, the project team can be augmented by external advisers to provide the necessary expertise and experience. The Canadian Council for Public Private Partnerships has found that leveraging the services of external advisers can save local governments time and money. It is considered best practice, since external advisers can:

- Provide arms-length advice that will be viewed as unbiased with respect to the project;
- Keep local governments updated on evolving legal, financial, policy or other aspects of PPP procurements;
- Assist in the development of project documents and the development and execution of a negotiations strategy;
- Teams inexperienced in PPP procurements should also look to the provincial agencies and PPP Canada as valuable sources of training, information and knowledge transfer.

The Team Lead

The team lead will be the ultimate champion of a project and the resource who will shepherd the project from planning through procurement to operation. The selection of a team lead should be based on his or her understanding of the PPP process, familiarity with the project, and understanding of the sponsor's procurement policies. The team lead will be expected to dedicate a significant amount of time to the project and during certain phases may need to be fully dedicated.

It will be of utmost importance that the team lead have the necessary authority to deliver the project, since any lack of authority may delay project delivery and undermine the private partner's confidence in the project.

The Political and Administrative Champions

Every project needs a political champion to own the project at the council level and an administrative champion to lead the project within the senior administration. Moving a project forward as a PPP can be extremely challenging without committed political and administrative champions, who, working in parallel, must also be prepared to take the lead in bringing the various players to the table when required—council, staff, employees, the public—to keep a project on track and on schedule.

Chapter 7 Communication and Engagement Strategies

Real estate is all about location, location, location, but PPPs are all about communication, communication, communication. PPPs 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 PPP projects, the economic, social and environmental concerns of those directly affected must be taken into account. To that end, it is critical that an effective communications strategy be established early that proactively communicates to the various stakeholders and also establishes a protocol for how to manage communications in a comprehensive manner. For a project to be successful, the communications strategy—from planning to delivery to project expiry—must be open and transparent.

As discussed in Chapter 1, PPPs can suffer from public misconceptions, and may be the subject of politically motivated media coverage. Effective communication is key to the public's understanding of a project, and municipalities contemplating a PPP procurement should be proactive, with an effective communications strategy that invites community engagement and dialogue. There are many examples, especially at the local or municipal level, of projects that stalled when the communities affected, because they were not engaged early on, did not develop a sense of ownership of or commitment to it.

Consultation is an integral component of any communications strategy throughout a project's life, but especially early on, it is essential. Public consultation must begin during a project's planning phase and should include open public meetings where the procuring agency can articulate the purpose for a particular project, its costs and the progress made, and where the public's opinions can be heard. Best practices gleaned from successful procurements and from projects that never made it to procurement include:

- Public consultation meetings must be open to all, and information about the meetings can be disseminated on municipal websites and in local newspapers. Public meetings must be held before a project is approved;
- When presenting information on a project, whether to the public or to council, transparency is key—the information presented must be balanced and fair, and should articulate the strengths and weaknesses or the pros and cons of the recommended option(s);
- Council decisions approving a procurement method and then approving the execution of a contract are best made in meetings open to the public and not in camera. Again, transparency is key;
- Where staff are being transferred to the private sector operator, their early engagement will be critical. Transferred staff must not be worse off as a result of the transfer, so benefit and pension obligations must be clearly communicated to all proponents. Transferred staff should have the opportunity to contribute their input to the structuring and procurement of the project;
- When engaging the private sector, it is critical to listen to its feedback to ensure a project is structured in the most efficient and cost-effective manner possible;
- Throughout the entire planning and procurement process, the decision-makers, usually council, must be kept up to date on the progress of the project throughout the planning, procurement and operations phases;
- A written communications protocol should be drafted at the outset of all projects.

Chapter 8 Issues Common to Municipalities

Alternative procurement, and more specifically, the public-private partnership, is now an important option for the procurement of public sector infrastructure and services in Canada. PPPs have been successfully delivered across Canada and are increasingly being used to help governments address Canada's infrastructure deficit. However, while there are many characteristics common to PPPs that do not depend on location or the level of government procuring the project, there are unquestionably issues that are unique to PPPs procured at the municipal level. It is also clear that issues facing larger and smaller municipalities differ. When establishing alternative procurement policies and guidelines, municipal governments must be aware of constraints that will commonly need to be addressed, including:

The Legislative Framework

A municipality is governed by the provincial legislative and regulatory framework in which it operates. While such frameworks are often fairly flexible, they include constraints and requirements that will impact the ability of a municipal government to undertake alternative procurements of infrastructure and services, including PPPs. Further, the provincial legislative and regulatory framework governing a municipality often varies by sector and cannot be assumed to be uniform across all asset classes. A municipal government must understand the legislative environment in which it exists—whether its own procurement policies and procedures are constrained by provincial or federal laws and regulations, whether enacting a PPP policy is allowed, and what assets/services can be provided by the private sector without regulatory change.

Conflicting Priorities

Much of the infrastructure in Canadian municipalities is aging, nearing its end of life and requires significant capital investment just to maintain current service levels. Today, many municipalities are facing budget pressures and operating shortfalls, and maintenance and capital budgets are usually the first to be reduced and operating budgets given priority. Delaying maintenance, repairs and replacements simply exacerbates the situation of aging infrastructure, and widens the infrastructure gap. By transferring maintenance and lifecycle obligations to the private sector, PPPs can remove some of the risk that future maintenance budgets will be used instead to support operations.

Municipal Government Policy

Unlike a provincial government, 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 and must consider local community objectives when establishing those policies. Municipal governments, by their nature, are more accessible to the average citizen, and elected officials are arguably more responsive to public concerns. Before embarking on a PPP program, municipal governments need to adopt procurement policies to guide any alternative procurement efforts. Such policies can promote a consistent approach to decision-making and procurements, including the role of council in approving such arrangements. These policies can help ensure that the public interest remains parmount and good governance, accountability, transparency and value for money is maintained,. A sample of a municipal policies on P3s is included in Appendix 5. Smaller municipalities may find that they do not have the resources to research and draft detailed alternative procurement

policies. Experience has shown that the procurement processes that must be followed by municipal governments are different from those for provincial or federal projects. This fact may not always be fully understood by provincial PPP agencies that tend to favour templated procurement approaches and project documents. Therefore, municipalities will need to tailor their approach to the specifics of the project and the realities of the legislative framework in which they operate.

Financial Capacity Constraints

A municipality's means to generate revenues are set out in the relevant provincial legislative/regulatory framework. In Canada, a municipality's revenue-generating abilities are generally limited to the imposition of property taxes-unlike municipal governments in other parts of the world, Canadian municipalities do not have the ability to generate revenues through sales or income taxes. Any obligations committed to under a PPP agreement will have to be met through property tax revenue, so it is imperative to ensure that a municipality has adequate revenues to commit to a project. While PPPs may reduce the amount of upfront capital a municipality is required to spend or finance, the annual service payment still has to be met each year. Therefore there will be a limit to how many availability-based PPP projects can be done without new sources of revenue. In recognition of this fact, the City of Winnipeg, with one of Canada's most active municipal PPP programs, has placed a cap on how much money it can allocate to financing the annual availability payments of PPP projects.

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 more and more expensive.

Knowledge, Skills and Experience

PPPs are by their nature complex projects whose procurement is complicated and technically sophisticated. Some municipalities may lack staff with the skills to oversee PPP projects. The lack of employees with deep PPP experience and expertise is a major barrier to establishing an effective PPP program. Many municipalities turn to provincial PPP agencies, and more recently to PPP Canada, for support and resources. Although this can help move a project forward, it does not solve the underlying problem. If the right people are not in place, it will be imperative to build such capacity early in the pursuit of a PPP program.

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 PPP program is suitable for a given municipality.

Project Size vs. Procurement Costs

PPPs tend to be more appropriate for larger projects where the impact of the additional procurement costs under the PPP 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 PPPs, Infrastructure Ontario for example notes that its AFP methodology should be considered on projects greater than \$20 million. The P3 Canada Fund, while not having minimum or maximum project sizes, does note 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 PPP method can be material and can have a direct impact on the ability of a project to generate value for money. As an example, a recent project in the Maritimes for a civic building had a projected cost of approximately \$45M

and procurement expenses under the PPP model of \$1.3M. The additional procurement costs associated with the PPP model made it difficult for the project to show positive value for money and a decision was made not to procure the project as a PPP.

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 PPP 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.

Chapter 9 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 PPP projects. There are also a number of PPP projects that were initiated but derailed somewhere along the procurement line. An assessment of both the successful and the planned but never executed municipal PPP projects provides some insights into best practices and lessons learned. Some common themes from recent municipal PPP projects include:

Communication, Communication, Communication

PPPs continue to be controversial and subject to misconceptions and fears. This is especially evident at the local level where services are more public facing, there is a high degree of public awareness, and municipal governments are more accessible. The most important driver for a successful project is proper communication with council, with affected employees, and with the public. Municipal governments should ensure that:

- The public understands that even under a PPP procurement, the assets will remain under municipal control and will still be owned by the municipality;
- All meetings are open to the public and well-publicized on municipal websites and in local newspapers;
- The public and council understands what is being proposed and why (e.g., "the ultimate goal of this project is to build a new police station for our town");
- The community is engaged early on. For example, if the public supports a project early on, a change in council as a result of an election is less likely to impact the future of a project.

Unfortunately, there are many examples of projects that were derailed because the public did not feel a sense of ownership or commitment.

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 PPP. 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.

Develop an Internal Alternative Procurement Policy

Best practices indicate that a municipality considering alternative procurement options must have a formal alternative procurement/ PPP 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 Project Screening Procedure

An effective screening procedure will help to identify those projects that are potential PPP 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 PPP procurement or not.

Educate Council

Council will need to understand the basic concepts of PPP procurement 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. PPP best practices show that an executive summary-style presentation highlighting the difference in costs and timing between a PPP 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

PPPs are still relatively uncommon at the municipal levels and many municipal governments lack in-house expertise and experience with PPP procurements. Many early adopters of municipal PPPs 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 PPP are, and so on. Before starting a project, it is advisable to reach out to the relevant provincial agencies to understand what PPP training is available and approach external advisers to see what training and knowledge transfer they can provide.

Engage External Advisers

PPP projects require significant time and resource requirements. Many municipalities, especially smaller ones, can lack the resources or the experience to effectively deliver a PPP project. External advisers, whether they are technical, financial or legal, bring deep transaction experience, an understanding of the evolving PPP 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.

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 at a minimum, there should be at least three proponents with the ability and capacity to deliver. The procurement becomes much 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 PPP, such municipalities may have to look nationally for proponents.

Real and Effective Risk Transfer

In a properly structured PPP, 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 were seen in early municipal PPP projects. During the procurement phase, PPP 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. 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.

Patience and Team Continuity

Regardless of whether infrastructure or services are involved, PPPs 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. PPP 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.

Openness and Transparency

All public procurements, and especially PPP procurements, are subject to intense public scrutiny. An open and transparent procurement process is paramount. Experience has shown that:

- All meetings must be open to the public and widely advertised;
- Council meetings discussing a project or deciding on the fate of a project should not be held in camera;
- Public meetings, including council meetings, should always present the strengths and weaknesses or pros and cons of the procurement options being considered—information should never be biased;
- Municipal governments are open and accessible and as a result, they often attract interest groups that seem to oppose municipal (or the council's) plans. Openness and transparency is the best way to manage such a situation.

Conclusion

Canada's existing public infrastructure is aging, the need for new infrastructure is increasing and governments at all levels, especially municipalities, are struggling to keep pace with public demands for greater and improved infrastructure and services. Municipalities face a particularly difficult challenge in funding their infrastructure needs, given the need to balance operating budgets and manage municipal debt levels.

Alternative procurement, and more specifically, the public-private partnership, is now an important option for the procurement of public sector infrastructure and services in Canada. In many jurisdictions around the world, PPPs have become a common tool for delivering projects, building infrastructure and delivering services. PPPs are not new, and globally PPPs have a long history of successfully delivering projects. In Canada there are robust, longestablished PPP programs at the provincial and federal levels and municipalities are increasingly turning to PPPs to help address the infrastructure funding deficit.

The essence of a public-private partnership is the sharing of risk. By transferring risk and responsibility to the private sector, the public-private partnership framework helps control factors leading to cost overruns and delivery delays that commonly occur under traditional procurement, especially with large and complex projects. A well-structured PPP will also improve project governance because it gives a municipality the tools to ensure that its requirements are met over the long term and provides for a structured reporting and oversight process.

The most significant advantages to PPP are associated with whole lifecycle planning, pay for performance and marshalling the know-how and ingenuity of the private sector for a project. The procurement approach and contractual structure of a PPP can offer many benefits, including:

- Faster access to new infrastructure and services; this can contribute to a municipality's economic growth, employment and competitiveness and can free public funds for core economic and social programs:
 - » PPPs bring together the strengths of both public and private sectors; and
 - » PPPs include incentives that lead to on-budget and on-time delivery
- Improved governance through greater transparency, accountability and in-depth cost/benefit analysis and scrutiny of proponents offering the best value;
- Greater sharing of the risks and responsibilities between the public and private sector partners;
- More effective risk management and more effective cost control; and
- Where the PPP spans the lifecycle of the asset, adequate funding of maintenance and lifecycle costs.

There are many common municipal assets and services that have the potential to be procured as PPPs, including civic buildings, community and recreation centres, convention centres, public utilities such as water, wastewater, energy and electricity, transit, roads, housing, parking, and more. But implementing a PPP requires preparation and planning.

PPPs 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 PPP 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 PPP 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 PPP 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 PPP. Yet despite these constraints and challenges, there is a growing roster of PPP projects in Canada and from those projects, common themes for success are emerging, including:

- Communication, communication, communication;
- Understand the regulatory and policy framework you are governed by;
- Develop an internal PPP policy;
- Develop an effective project screening process;
- Educate council;
- Build in-house expertise;
- Engage external advisors;
- Understand private sector interest; and
- Be patient, open and transparent.

Public-private partnerships are an important procurement option for governments across all jurisdictions seeking to build or rehabilitate infrastructure assets. With more than 150 projects built or underway by 2011, PPPs are already delivering Canadian infrastructure and public service solutions—and helping to build Canada's future. By ensuring the ideal conditions for success are in place, and by leveraging the experiences from Canada's growing roster of successful PPP projects, municipalities now have another option for meeting growing community needs.

Appendix 1 Case Studies

| | QUICK FACTS | |
|-------------------|---|--|
| Procurement Model | Operation and Maintenance | |
| Location | Goderich, Ontario | |
| Project Sponsor | Town of Goderich | |
| Proponent | Veolia Water Canada | |
| Capital Cost | N/A | |
| Agreement Value | Initially \$1.03 million per annum, subject to escalation | |
| Contract Term | 5 years, with option for 5 year renewals | |

| TIMELINE | |
|-----------------|---------|
| RFQ Issued | 09/1999 |
| RFQ Closed | 10/1999 |
| RFP Issued | 12/1999 |
| RFP Closed | 02/2000 |
| Financial Close | 12/2000 |
| First Renewal | 12/2005 |
| Second Renewal | 12/2010 |
| Contract Expiry | 12/2015 |

| PUBLIC SECTOR CONTACT | PRIVATE SECTOR CONTACT |
|------------------------|---------------------------------|
| Larry McCabe | Mark Rupke |
| Clerk-Administrator | Canadian Area Manager |
| Town of Goderich | Veolia Water Canada |
| Tel: (519) 868-9683 | Tel: (905) 868-9683 |
| E: Imccabe@goderich.ca | E: mark.rupke@veoliawaterna.com |



Goderich Water and Wastewater System

Project Description

The fully automated water treatment system processes and distributes 900,000 gallons per day from Lake Huron to the 8,000 residents of Goderich. The wastewater treatment plant treats 2–5 million gallons per day using a secondary activated sludge process.

Project Background

As a result of the restructuring of the electricity sector in the late 1990s, the Town of Goderich reorganized its Public Utility Corporation into a local electricity distributor and separated out of the water/wastewater functions. The size of the customer base (3,500 users) and the scale of the operations made the service challenging to deliver, given increasingly stringent provincial standards. The separation of the water/wastewater functions from other town utilities and the desire to create long-term value from the operations prompted the municipality to enter into a contract with a private sector operator that could bring expertise and efficiency to the system.

Commercial Terms

The agreement with USF Canada (now Veolia Water Canada) included the operation and maintenance of the water and wastewater treatment facilities, water distribution system and components of the wastewater collection system. The Town of Goderich, through Goderich Hydro, retained responsibility for billing and also carried the majority of the equipment risk for the water distribution system while all servicing and associated risks were transferred to Veolia. Goderich and Veolia shared the risks for the variable costs for chemicals and energy. The town owns the plant and all associated assets and sets the water quality standards. (Initially the town set higher standards than the provincial regulations, based on historical performance. In the last renewal, the town essentially adopted the province's standards for drinking water but the wastewater standards remain more stringent). The original agreement term was from December 1, 2000 to November 30, 2005, with the option to renew. The contract has been renewed twice, most recently in December 2010.

The original eight municipal staff were transferred and reduced to six through attrition. They received equal or better wages, benefits and pensions and are not represented by a public service union. The agreement is available for public viewing at the town hall.

Financial Terms

Monthly payments are made to Veolia, amounting to \$1,034,000 annually. The majority of the fee is fixed (\$874,270 in 2011) and escalates with CPI. There are also variable components (e.g. volumetric charges that are applied for both water and wastewater.) A performance regime is in place with associated penalties that range as high as contractor default should Veolia not meet the required water quality standards.

Results and Lessons Learned

To date, Veolia has continued to operate the facilities and distribution system to the town's expectations and satisfaction. The town completed a thorough independent performance audit of the assets and the operations in 2006, which reviewed contract compliance and asset condition. A recent initiative to eliminate bypasses (overflow of sewage system due to heavy rainfall) was dealt with cooperatively and professionally between town staff and Veolia, resulting in additional treatment capacity. The town has been happy with the working relationship and has seen efficiency improvements due to the skills transfer among employees. Given the excess capacity available at both the water and wastewater treatment facilities, the town has been in discussions with neighbouring municipalities to expand service to additional users through boundary adjustment.

Innovations

As a result of the contract, the town now has a tax paying business that has expanded to selling additional service to other communities and clients.

As a result of an open communications protocol, Veolia has been able to put forward recommendations on facility redesign and equipment upgrades (e.g., more efficient pumps that save on operating costs) that have increased the quantity of water going through the facility and improved operating efficiency to the financial benefit of both the town and Veolia.

| QUICK FACTS | | |
|-------------------|------------------------------|--|
| Procurement Model | Design-Build-Finance-Operate | |
| Location | Moncton, New Brunswick | |
| Project Sponsor | City of Moncton | |
| Proponent | Veolia Water Canada | |
| Capital Cost | \$25 million | |
| Agreement Value | \$85 million | |
| Contract Term | 20 years | |

| TIMELINE | |
|-----------------|-------------|
| RFQ Issued | 08/1996 |
| RFQ Closed | 12/1996 |
| Pref. Proponent | End of 1997 |
| Financial Close | 04/1998 |
| Construction | 10/1999 |
| Contract Expiry | 10/2019 |

| PUBLIC SECTOR CONTACT | PRIVATE SECTOR CONTACT |
|-------------------------------|---------------------------------|
| Ensor Nicholson | Mark Rupke |
| Director of Water Systems | Canadian Area Manager |
| City of Moncton | Veolia Water Canada |
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Moncton Water Treatment Facility

Project Description

The water treatment facility opened in October 1999 and serves approximately 100,000 residents of the City of Moncton, the adjacent City of Dieppe and Town of Riverview. It processes 50 million litres per day from the Turtle Creek Reservoir with an expansion capability to 136 million litres per day. Eight nonunionized employees work at the facility and are employed by the operator.

Project Background

The City of Moncton had no central water treatment facility and was finding it increasingly difficult to maintain water quality levels, with several boil-water orders having been issued. After unsuccessfully applying for government grants to pay for the facility, the City looked at other models in the late 1980s and ultimately decided to tender a DBFO contract.

Commercial Terms

In 1998, the City of Moncton entered into separate development and operating agreements with US Filter Corporation (now Veolia Water Canada) for a water treatment facility. The first contract involved the design, construction and financing of the facility at a fixed capital cost and within 500 days of the agreement being signed. The 20-year operation and maintenance contract is also a fixed value, and gives Veolia the exclusive right to supply treated water to the City. The City retained ownership of the water and the treatment facility for the duration of the contract.

The agreement includes strict facility maintenance and operating specifications, including water quality standards that, if not met, result in penalties. There are also provisions that penalize the operator for not having the facility operational. Financial operational and volume risks were all transferred to Veolia throughout the agreement. The City retains responsibility for source water, the water transmission and distribution system, rates and water quality standards.

Financial Terms

The capital cost of the facility was \$25 million. The City makes volume based payments to Veolia amounting to approximately \$4.25 million per year (plus inflationary costs), with no minimum volume requirement. Veolia Water Canada originally financed the capital costs through a local financier but refinanced the project in 2003.

Results and Lessons Learned

It is estimated that the contract, in real terms, will save \$9 million in capital costs and \$12 million in operating costs (approximately \$600,000 per year) over the 20 year life of the contract.

The staff and management have a good working relationship, driven by open, continuous 360° communication, which results in an efficient-running system.

The contract is governed by a performance regime that encourages Veolia to perform according to the requirements of the contract. To date, no material penalties have been incurred by Veolia during the course of operations and the plant remains well maintained.

A well structured contract has allowed minor issues to be dealt with in a manner that was satisfactory to both the City and Veolia and avoided the need for arbitration.

| QUICK FACTS | | |
|-------------------|-------------------------------|--|
| Procurement Model | Design-Build-Finance-Maintain | |
| Location | Ottawa, Ontario | |
| Project Sponsor | City of Ottawa | |
| Proponent | Forum Equity Partners | |
| Capital Cost | \$19.9 million | |
| Agreement Value | N/A | |
| Contract Term | 30 years | |

| TIMELINE | |
|-----------------|---------|
| RFQ Issued | 06/2003 |
| RFQ Closed | 07/2003 |
| RFP Issued | 09/2003 |
| RFP Closed | 12/2003 |
| Financial Close | 08/2004 |
| Construction | 12/2005 |
| Contract Expiry | 2034 |

| PUBLIC SECTOR CONTACT | PRIVATE SECTOR CONTACT |
|---------------------------|----------------------------------|
| Gerry Mahoney | Richard Abboud |
| Manager, Treasury | President, Forum Equity Partners |
| City of Ottawa | Toronto |
| Tel: (613) 580-2424 | Tel: (416) 947-0389 |
| E:gerry.mahoney@ottawa.ca | E:richard@foruminc.ca |



Ottawa Paramedic Service Headquarters

Project Description

The Ottawa Paramedic Service Headquarters is a 100,000 squarefoot, two storey state-of-the-art facility located on City property in the Ottawa South Business Park. The facility is disaster-resistant and is the City of Ottawa's first facility to be LEED-certified.

The facility provides a central location from which to deploy paramedics, and consolidates all paramedic training in one location. In addition, the facility provides centralized processing of all emergency vehicles and equipment along with improved facilities for public training programs and houses the Paramedic Command Centre where disaster services are coordinated.

Project Background

Ottawa paramedic services were operating from a leased facility that did not meet long-term operational requirements.

In October 2002, Ottawa Council approved the new paramedic facility as one of five City projects to be delivered under a PPP arrangement.

The project was delivered as a DBFM with a 30 year term. A brief timeline of the project follows.

RFQ – RFQ was issued on June 5, 2003 and closed on July 7, 2003. Eight firms responded to the RFQ and four firms were shortlisted.

RFP – RFP was issued on September 26, 2003 and closed on December 4, 2003. All four shortlisted firms responded to the RFP.

Preferred Bidder – Forum Equity Partners was selected as the preferred bidder. In January 2004 city staff were authorized to enter negotiations with Forum. The Forum consortium included Griffiths Rankin Cook (design), Aecon Westeinde (construction) and Trammell Crow (facility management).

Construction and Completion – During the RFQ stage, proponents were given the opportunity to propose their own site or a larger development with possible complementary usage.

A larger development with complementary usage could increase the City's benefits in terms of gaining additional revenue sources. However, none of the shortlisted firms proposed these options. Eventually, the facility was built on City-owned property with the City as the only tenant.

Construction began in September 2004. The facility was ready for occupancy in December 2005.

Commercial and Financial Terms

The objective of the project was to build a new facility for paramedic services that would provide long-term, secure, efficient and effective support for centralized operations of emergency vehicles, administration, paramedics and other staff.

As part of the agreement, the City entered into a lease with the Preferred Bidder to occupy the building. At the end of the 30-year term, the ground lease will expire and the facility will transfer to the City for \$1.

The project was executed under a Municipal Capital Facilities Agreement. As the facility is built on land owned by the City, the private partner was exempt from development charges and property taxes. A total price of \$19.9 million was negotiated with the private partner, subject to steel price variation and design drawings adjustments. Steel prices had increased from 30% to 100% in previous years and the private partner could not guarantee the final price until all the legal agreements were in place.

The Preferred Bidder is responsible for managing the facility and is paid an annual management fee. The fee is subject to 10% escalation every 5 years. All costs associated with the operation of the facility are borne by the city.

Financing for the project was obtained by the Preferred Bidder and was based on a spread over Bankers Acceptance. To address interest rate risk, the city provided loan guarantees which helped the private partner secure the lowest interest rates and optimize the city's annual lease payments.

The facility was completed on time and on budget in December 2005.

Results and Lessons Learned

The PSC was developed by Delcan Corporation, assisted by Pelican Woodcliff Inc. The PSC was estimated at \$20.1 million, approximately \$140k higher than the negotiated price with the private partner.

Additional value adds included:

- Quick and timely delivery of the facility;
- Firm price contract subject to minor variation;
- Confirmation of requirements and design due to extensive discussions between the private partner and the City;
- Facility management by the private partner with agreed-upon service levels;
- Design and construction risk transferred to the private partner;
- Competitive process and slightly better price than the traditional procurement;
- Lease to own type arrangement;
- Lowest possible lease payments since the City provided loan guarantees and helped the partner in securing the lowest possible interest rates; and
- Flow of operational costs to the City without any additional mark-ups.

| QUICK FACTS | | |
|-------------------|----------------------|--|
| Procurement Model | Build-Own-Operate | |
| Location | Delta, B.C. | |
| Project Sponsor | City of Vancouver | |
| Proponent | Maxim Power Corp. | |
| Capital Cost | \$10.3 million | |
| Agreement Value | \$7.7 million (est.) | |
| Contract Term | 20 years | |

| TIMELINE | |
|------------------|---------|
| RFQ Issued | 01/2001 |
| RFQ Closed | 04/2001 |
| Pref. Proponent | 08/2001 |
| Commercial Close | 02/2002 |
| Financial Close | 01/2003 |
| Construction | 09/2003 |
| Contract Expiry | 2022 |

| PUBLIC SECTOR CONTACT | PRIVATE SECTOR CONTACT |
|---|---|
| Lynn Belanger Manager, Transfer and Landfill Operations City of Vancouver Tel: (604) 940-3201 E: lynn.belanger@vancouver.ca | Rob Watson Director, Canadian Facilities Maxim Power Corp. Tel: (403) 750-9317 E: rwatson@maximpowercorp.com |



Vancouver Landfill Gas Cogeneration Project

Project Description

The Vancouver landfill is owned and operated by the City of Vancouver and is located in the southwest corner of Burns Bog in Delta, BC. An active landfill gas (LFG) collection and control system has been operated at the landfill since 1990 to prevent odour and reduce greenhouse gas emissions. Since 2003, a beneficial use system owned by Maxim Power Corporation has been in operation. This cogeneration facility is located at at Village Farms Canada Inc. in Delta, BC, not far from the landfill site. The facility converts the landfill gas into electrical power (approximately 56,000 megawatts per year), which is sold to BC Hydro. It also recovers waste heat in the form of hot water, which is delivered to Village Farms for use in its greenhouses. The project consists of three main components:

- A gas conditioning system at the landfill site that removes water and compresses the gas;
- A 2.8 km pipeline between the landfill site and cogeneration facility; and
- A powerhouse with four engines, each capable of producing 1.85 megawatts of electrical energy and 2 megawatts of thermal energy.

Project Background

The City of Vancouver had been flaring gas from its landfill in neighbouring Delta since 1990. In order to meet its greenhouse gas emission reduction goals and to take advantage of the energy available from burning landfill gas, the City of Vancouver wanted to develop a landfill gas cogeneration facility. The City required a private provider with expertise in landfill gas processing and utilization that could also look after finding third-party customers for the energy. It wanted to optimize the economic, environmental and community benefits to the City.

Commercial Terms

The project entails three agreements:

1. A 20-year landfill gas supply agreement between the City and Maxim.

The City agrees to supply gas to Maxim, provides an easement for infrastructure and will operate the gas collection system. Maxim has first right to use up to 3,000 standard cubic feet per minute of gas.

 A 20-year green electricity purchase agreement between Maxim and BC Hydro. This was negotiated under BC Hydro's Green Energy Program, which buys green energy from independent power producers at a premium price. Another 2-year agreement was signed in 2003 for BC Hydro to purchase the additional electricity generated by the fourth engine at the cogeneration plant.

3. A 20-year thermal energy sales agreement between Maxim and Village Farms.

Maxim financed the cogeneration facility and owns it during and after the 20-year agreement. It must ensure gas utilization of 70-75%, which is required to meet debt repayment obligations. Risks for construction, operation and gas supply were assumed by Maxim. Political risk (e.g., landfill shut-down) is shared by the project participants.

Results and Lessons Learned

The City will receive net revenues each year for 20 years (after accounting for the annual cost to operate the landfill gas collection system). The environmental benefits are significant. The facility produces enough energy for 5,000 homes and enough thermal energy to meet 30% of Village Farm's energy requirements. The incremental greenhouse gas reductions resulting from the beneficial use of the landfill total about 27,000 tonnes per year. The amount is in addition to the greenhouse gas reductions resulting from the collection of the gas (capture of methane rather than venting to the atmosphere).

| | QUICK FACTS | |
|-------------------|-------------------------------|--|
| Procurement Model | Design Build Finance Maintain | |
| Location | Woking, Surrey, U.K. | |
| Project Sponsor | Woking Borough Council | |
| Proponent | To Be Determined | |
| Capital Cost | Confidential | |
| Agreement Value | Confidential | |
| Contract Term | 30 years | |

| TIMELINE | | | |
|----------------|---------------|--|--|
| Project Launch | 2008 | | |
| RFP Issued | 04/2009 | | |
| BAFO Issued | 2011 | | |
| Final Bids Due | 2012 | | |
| Fin'l Close | 2012 | | |
| Construction | To start 2013 | | |
| Contract Exp | TBD | | |

PUBLIC SECTOR CONTACT

Paola Capel-Williams PFI Project Manager Woking Borough Council Tel: 011–44–1483-743-257 E: paola.capel-williams@woking.gov.uk



Priority Homes (U.K.)

Project Description

The project is a housing Private Finance Initiative (PFI) designed to provide much needed affordable housing.

The project involves the building of approximately 190 homes which will be let at affordable rents to applicants on the Council's Housing Register. The homes will be part of a mixed tenure development of around 400 homes built on a single site.

The project will include a range of property types and sizes, in accordance with the Borough's demand for housing but most will be family homes. The development will be a mix of social rented and private sale housing.

Project Background

Providing affordable housing is one of Woking Borough Council's highest priorities. Currently there is a greater need for affordable homes in Woking than there is supply. Housing prices in Woking are higher than the national average and this means that average incomes in Woking are not enough for people to buy a family home in the area. Research indicated that Woking is one of the 40 least affordable local authorities to buy a home.

Woking Borough Council has recently introduced measures to increase the supply of affordable homes in the Borough. The Priority homes PFI is one of those measures. PFI is one form of public-private partnership that is used in the U.K. for projects that require substantial amounts of financing. PFI is a government program to bring private investment into social housing by allowing local authorities to work with a partnership of specialist organizations to build new homes or improve properties already owned by the Council.

In a housing PFI, the private partnership typically includes:

- A housing association, registered social landlord or housing provider;
- A construction company; and
- A funder.

Commercial and Financial Terms

30 year term all in—3 years for construction phase and 27 years for operating phase.

Woking has secured approximately £44 million worth of funding 'credits' (PFI Credits) from Communities and Local Government, following submission of an outline business case.

Once the houses have been built, the PFI credits will be paid directly to the council by the government over the term of the contract. The council will then pay these credits, plus a local contribution to the PFI contractor.

Financial Terms

In June 2008, the Council advertised for a private sector partner to take the development forward. Eight responses were received from potential partners.

An RFP was issued in 2009 and after various stages of selection prescribed by European legislation, there are now two remaining bidders.

After a very thorough competitive process, the Council is now working with the two bidders to become the preferred bidder.

A preferred bidder is expected to be selected in 2012. Financial close is expected in 2012 and construction is projected to commence in 2013.

Lessons Learned

The project was being developed as a mixed tenure development that included both market and affordable housing components. Feedback from the market indicated that the market preferred a development agreement that separated the market component from the affordable component to ensure no cross contamination, default hair triggers etc. The sponsor needed protection to include a measure of cross-incentivization to ensure performance.

| QUICK FACTS | | | |
|-------------------|--|--|--|
| Procurement Model | Design-Build-Finance-Maintain (P3) | | |
| Location | Winnipeg, Manitoba | | |
| Project Sponsor | City of Winnipeg | | |
| Proponent | DBF2 Limited Partnership (DBF2) | | |
| Capital Cost | \$108.5 Million | | |
| Agreement Value | NPV of payments to DBF2 is approximately \$83.3 Million | | |
| Contract Term | Construction plus a 30-year maintenance term | | |

| TIMELINE | | | |
|------------------|----------------|--|--|
| RFQ Issued | 02/2009 | | |
| RFQ Closed | 05/2009 | | |
| RFP Issued | 09/2009 | | |
| RFP Closed | 06/2010 | | |
| Pref'd Proponent | 07/2010 | | |
| Financial Close | 09/2010 | | |
| Expiry | 12/2041 (est.) | | |

PUBLIC SECTOR CONTACT

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Chief Peguis Trail Extension Project

Project Description

Chief Peguis Trail is intended to form part of the City of Winnipeg's Inner Ring Route. The first section of Chief Peguis Trail was built in 1990 and the Chief Peguis Trail Extension Project is the second phase of construction of the Chief Peguis Trail.

The project involves the construction of a new segment extending the Chief Peguis Trail roadway between Henderson Highway and Lagimodiere Boulevard. This new extension, when completed, will run for a length of 3.7 kilometres in an east-west direction within a designated right-of-way, and will be a four-lane, divided roadway. The design of the roadways includes a grade separation (underpass), pedestrian bridge and allows for expansion to 6 lanes in the future. This new section of roadway will be designated as a truck route thereby removing truck traffic from many of the surrounding residential streets.

Project Background

The Project is intended to improve traffic flow and reduce congestion on residential streets. The lack of an east-west arterial roadway has resulted in high traffic volumes on residential streets, especially since the opening of the first section of the Chief Peguis Trail. The residential streets in the area also serve as a truck route and have a significant volume of truck traffic.

The Project is intended to provide a safe, efficient, direct link from the Kildonan Settlers Bridge to Lagimodiere Boulevard, improving travel times as well as alleviating congestion on residential streets. The Project will also achieve safety benefits via intersection improvements as well as the reduction in east west traffic on residential streets (including trucks).

The Project will achieve social and environmental benefits through time and fuel savings (reduced vehicle emissions), and encouragement of active transportation through the new multi-use pathway developed alongside the roadway as part of the Project. The design also included a tree preservation plan. The addition of a grade separation (underpass) at Rothesay Street was a response to safety concerns expressed by the public during the public consultation process. The grade separation will improve safety for the two schools and two churches which are in close proximity to this intersection. This addition of the grade separation to the project was made possible by funding from PPP Canada Inc.

Commercial and Financial Terms

The City of Winnipeg has entered into a public-private partnership (P3) with the private sector consortium DBF2 Limited Partnership (DBF2), for the development of the Chief Peguis Trail Extension Project. DBF2 is required to design and construct the Chief Peguis Trail Extension and maintain the roadway and structures for a thirty-year term.

DBF2 is responsible for most key risks related to the design, construction and long-term maintenance of the asset, including risks of construction delay, cost overruns, and construction defects.

Financial Terms:

The City will pay DBF2 over the term of the DBFM Agreement, which is more than 30 years in duration. The majority of the City's payment to DBF2 is not provided until DBF2 has completed construction of the roadway and structures sufficient for commissioning. The payments to DBF2 are as follows:

- Milestone Payments: \$20 Million (approximately 20% of financing)
- **Commissioning Payment:** \$30 Million (approximately 30% of financing)
- Annual Service Payments: Average of \$6.5 Million per year (approximately 50% of financing)

The Milestone Payments are based on construction progress and do not commence until construction is 51% complete. The Commissioning Payment is triggered by substantial completion and safely opening the roadway and structures to the public. As such, the payment structure provides significant incentive to meet or better schedule. The Annual Service Payment includes a capital component for repayment of the remaining capital costs of construction as well as a maintenance component to pay DBF2 for its annual cost of maintaining the project. The Annual Service Payment is performance-based and subject to deductions under the contract if the roadway does not meet the performance specifications set by the City. The maintenance component is adjusted annually for inflation.

The City has also specified in detail the condition that the roadway and structures must be in upon expiry of the 30 year maintenance term. If the roadway and structures fall short of the hand-back requirements, DBF2 must repair the deficiency or the City is entitled to holdback monies from payments to DBF2 and carry out the work itself.

Results and Lessons Learned

- The City has obtained funding from PPP Canada Inc. for 25% of eligible costs up to a maximum of \$25 million. This funding has had a significant impact on the project as it has enabled the City to respond to feedback from the public consultation process and add a grade separation at Rothesay Street.
- The Final VFM result, as measured by Deloitte & Touche LLP., demonstrates that the City has achieved significant value for money by following the P3 approach in comparison to the traditional delivery method.
- The City and DBF2 were able to value-engineer certain components of the project in order to add a multi-use pedestrian bridge to the project.

Appendix 2 Provincial and Federal Resources

PPP Canada

About PPP Canada

In 2008, PPP Canada was established by an Order in Council, to build P3 procurement knowledge and capacity federally, and leverage greater value for money from federal investments in provincial, territorial, municipal and First Nations infrastructure through the P3 Canada Fund. With the appointments of the chair of the board of directors and the chief executive officer, PPP Canada became operational in 2009.

As a Crown Corporation with an independent board of directors, PPP Canada reports to Parliament through the minister of Finance.

PPP Canada's Mandate

- PPP Canada's mandate is to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers through P3s.
- PPP Canada was created to deliver more P3s by leveraging incentives, demonstrating success, and providing expertise, and to deliver better P3s by promoting P3 best practices and capacity-building.

PPP Canada's Business

P3 Leadership

- Engage with public sector stakeholders, industry players, and First Nations communities by providing educational workshops;
- Study and analyze municipal and provincial capital plans to identify new jurisdictions and potential partnerships;
- Support stakeholders with sectoral studies, P3 resources and guides, and other research tools.

Advancing Provincial, Territorial, Municipal and First Nations P3s

- P3 Canada Fund Project Investments;
- Capacity-Building;
- P3 Screening.

Advancing Federal P3s

- P3 Screening;
- P3 Business Case;
- P3 Procurement and Execution;
- P3 Guidance, Tools and Capacity-Building

The P3 Canada Fund

The P3 Canada Fund is the first infrastructure funding program in Canada that specifically targets P3 projects. The Fund was initially launched in October 2009 with the Round One call for proposals and has now successfully conducted three rounds of applications. PPP Canada will continue to launch rounds annually with Round Four to be launched in spring 2012. As of October 15, 2011, PPP Canada has funded six P3 projects with a total funding contribution of approximately \$120 million:

- Evan Thomas Water and Wastewater Plant, Kananaskis Country, Alberta;
- Lac La Biche Biological Nutrient Removal (BNR) Wastewater Treatment Facility, Alberta;
- Lachine Train Maintenance Centre, Quebec;
- Chief Peguis Trail Extension, Winnipeg, Manitoba;
- Maritime Radio Communications Initiative, PEI, New Brunswick, Nova Scotia;
- Barrie Transit Facility Project, Ontario.

For more information please visit http://www.p3canada.ca/ investment-project-map.php

Funding Contribution Limits

The amount of funding support, in combination with any other direct federal assistance, may not exceed 25 per cent of the project's direct construction costs. The level, form and conditions of any funding support will vary depending on the needs of a given project.

Eligibility

The P3 Canada Fund supports public infrastructure projects for the construction, renewal or material enhancement in multiple public infrastructure categories and subcategories.

The following public authorities may apply to the P3 Canada Fund:

- A province, territory, or a municipal or regional government;
- A public sector body established by or under provincial or territorial statute or by regulation or that is wholly owned by a province, territory or municipality (e.g., provincial public universities, municipal airports, etc.);
- On-reserve and on-Crown land First Nations;
- A private sector body, including not for profit organizations, whose application has been sponsored and submitted by a provincial, territorial, municipal or regional government, or First Nations referred to above.

Eligible P3 Procurement Models

To be eligible to receive funding from the P3 Canada Fund, a project needs to have meaningful private sector involvement in at least two of four structural elements, one of which must include the "Operate" or "Finance" element:

- **Design:** The private sector will be responsible for all or almost all design activities;
- **Build:** The private sector will be responsible for all or almost all construction-related activities;
- **Operate:** The private sector will be responsible for all or almost all activities related to the operation of the infrastructure asset. (For greater clarity, the "operate" refers to the operation and/or maintenance of the infrastructure asset.);
- Finance: The private sector will be responsible for arranging private financing that will be used to ensure performance during the construction and/or maintaining/ operating period of the project.

Submitting an application to the P3 Canada Fund

PPP Canada accepts applications to the P3 Canada Fund on an annual basis. To assist in the application process for future project submissions, PPP Canada's Application Guide is available on its website as a reference. The Guide provides applicants with the necessary guidance and direction to complete an application to the P3 Canada Fund and the necessary contact information for PPP Canada and provincial representatives.

To apply you must submit an application form to your designated contact. Application forms can be submitted to your contact by mail, fax or e-mail.

Capacity-Building

In 2010–2011, PPP Canada identified a need for P3 planning and capacity-building products and services that would support the adoption of P3 procurement and accelerate PPP Canada's ability to consider projects for investment. To provide these services, PPP Canada allocated funds to co-fund, with applicants, the costs of necessary background studies.

PPP Canada is now evaluating options based on last year's pilot project and hopes to share the results of this analysis in the coming months.

Contact

PPP CANADA

100, Queen Street, Suite 630 Ottawa, Ontario K1P 1J9 Canada Tel: (613) 947-9480 FAX: (613) 947-2289 Toll Free: (877) 947-9480 E: info@p3canada.ca

Partnerships British Columbia

About Partnerships BC

Partnerships BC was created in May 2002 to support the Province of British Columbia's commitment to sound fiscal management in the delivery of affordable, performance-based infrastructure that meets the needs of British Columbians. Partnerships BC is a company owned by the Province of British Columbia and is governed by a board of directors reporting to its sole shareholder: The minister of Finance. The company is incorporated under the British Columbia Business Corporations Act.

Partnership BC's Mandate

- Plan and structure partnership delivery solutions for public infrastructure that are expected to achieve value for money;
- Successfully implement partnership delivery solutions for public infrastructure through leadership in procurement, practices and market development; and
- Maintain a self-sustaining organization and provide added value to an increasingly diverse client base.

Partnerships BC's Vision

Partnerships BCs vision is to be a recognized leader in evaluating, structuring and implementing partnership delivery solutions for public infrastructure that achieve value for money. The company is focused on delivering consistent value to its clients and is committed to its long-term viability.

Partnership BC's Board

The company is overseen and governed by a board of directors representative of a variety of industry sectors and technical areas. The board has significant experience in developing and managing joint-venture projects and partnerships in both the public and private sectors.

Partnerships BC's Services

Partnerships BC's clients include public sector ministries and agencies across all levels of government.

Partnerships BC supports its clients in the planning and procurement of complex capital projects, specifically those involving the use of private sector expertise, services and capital.

The company provides a full spectrum of services ranging from business planning and procurement management to advisory services during the design, construction and operations phases. Its core business is to:

- Provide specialized services identifying opportunities for leveraging infrastructure and developing partnership delivery solutions;
- Foster a business and policy environment for successful partnerships and related activities by offering a centralized source of procurement knowledge, understanding, expertise and practical experience in these areas; and
- Manage an efficient and leading-edge organization that meets or exceeds performance expectations.

Partnerships BC's Achievements

To date, each completed partnership project in British Columbia has achieved value for taxpayers, including:

- Quantitative factors such as lifecycle savings;
- Qualitative factors such as appropriate risk transfer, innovations from the highly competitive nature of the procurement process, and performance-based contracts that ensure high-quality infrastructure and services are provided on time and on budget.

Contact

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| | |

Alberta Alternative Capital Financing Office (ACFO)

About ACFO

Alberta Treasury Board through the Alberta Alternative Capital Financing Office published an updated Public-Private Partnership Framework and Guideline in March 2011 to be used as a guide within the Government of Alberta (GOA) in assessing capital projects for potential public-private partnerships procurement and, after the appropriate approvals, in procuring a capital project as a PPP. The framework and guideline outlines Alberta's principles for PPPs and the assessment and procurement frameworks for PPP projects.

Applicability

The framework and guideline applies to PPP projects of the Government of Alberta (GOA) ministries and supported infrastructure organisations that:

- Require GOA capital and/or operating financial support;
- Involve private financing; and
- Are for the provision of capital assets and associated long-term services.

Municipalities, housing authorities and other not-for-profit organizations requesting provincial funding are not required to follow these principles, although they are encouraged to let these principles guide their PPP projects.

ACFO's Role

- Collaborate with stakeholders and other ministries and jurisdictions to develop opportunities to pursue alternative financing options such as PPPs and implement where cost effective and feasible; and
- Lead the development of PPP guidelines and processes to provide consistent standards, policies and accountabilities across capital projects and ministries.

ACFO's Services

- Initial high-level feasibility assessment to determine if there is any potential for value in a PPP procurement;
- Preparation of an opportunity paper (if required) which is a more in-depth look at the project's PPP potential than the initial assessment, but does not require extensive work to complete;
- Assist ministries in preparation of a business case when the opportunity paper validates the project's P3 potential;
- Guide ministries through the GoA's P3 project approval processes; and
- Assist ministries in procurement and project execution.

Contact

ALBERTA

Faye McCann

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Infrastructure Ontario (IO)

Introduction

IO is a Crown Corporation delivering excellence in project delivery, lending, real estate management and asset planning. IO is driven to provide value for money and exceptional service to its customers and supports Ontario's position as a North American leader for infrastructure delivery and innovation.

IO's Services

IO has four lines of business that deliver results directly to clients:

Projects

The Alternative Financing and Procurement (AFP) and Major Projects group is responsible for managing the planning, design and delivery of major public infrastructure projects, supported by project finance and project legal. The work includes managing procurement, negotiating contracts with private sector consortia and project management from procurement through construction completion. AFP uses private financing to strategically rebuild infrastructure, on time and on budget.

Loans

IO's Loan Program provides long-term financing to eligible public sector clients to help renew infrastructure and deliver value to customers and residents. To date, IO has committed to the financing of more than \$4.5 billion in infrastructure, including the construction of roads, bridges and facilities and the acquisition of assets, such as vehicles and equipment.

Buildings

The Real Estate Management (REM) division is composed of three groups: Asset Management, Realty Services and Client Program Delivery.

The Asset Management group works closely with and oversees various private sector service providers to leverage their expertise in the delivery of front line services to clients and tenants. These services include facility management, leasing, project management, real estate due diligence reviews, municipal planning approvals, design, construction and environmental management, and asset and long-term capital investment programming.

The Client Program Delivery group works closely with client ministries and develops real estate accommodations options and capital program planning requirements to deliver efficient, quality projects and solutions. The Realty Services team also ensures the Ontario government's broader commitments are also supported by developing, recommending and implementing real estate programs and initiatives, including sustainability.

Lands

The Ontario Lands group is responsible for managing the provincially owned and leased real estate portfolio in a manner that both maximizes value for taxpayers and supports client ministries' long term program delivery needs. Ontario Lands leads strategic portfolio reviews and is responsible for the implementation of real estate development opportunities. The group is also tasked with the acquisition of land on behalf of client ministries and the disposition of provincially-owned properties.

Contact

ONTARIO

www.infrastructureontario.ca Tel: (416) 212-7289 E: info@infrastructureontario.ca

Infrastructure Québec

About Infrastructure Québec

In November 2009, Bill 65, an Act respecting Infrastructure Québec, was adopted, conferring on Infrastructure Québec the functions previously exercised by the Agence des partenariats public-privé du Québec. Moreover, several of those functions are extended to public infrastructure projects where a different project delivery approach—such as the traditional, management contract or turnkey approach—is used. Infrastructure Québec falls under the responsibility of the minister responsible for Government Administration, president of the Treasury Board, Ms. Michelle Courchesne.

Infrastructure Québec's Mission

To contribute, through its advice and expertise, to the planning and carrying out of major public infrastructure projects by public bodies in order to obtain quality infrastructure, ensure the optimal management of risks, costs and scheduling, and to take part in the planning of infrastructure maintenance, all of which to ensure the sound management of public funds.

Infrastructure Québec's Role

- In collaboration with the public bodies, use the rigorous methodological framework policy for the development of business cases, including assessing the project relevance, identifying the options available to meet the need with due regard for the functional, durable and harmonious nature of the proposed infrastructure, and determine which option (traditional, management contract, turnkey or public-private partnership approach) provides the most benefits for citizens and the greatest value for public money invested;
- Coordinate the selection process for projects to be delivered through turnkey or PPP models;
- Advise the government on any matter relating to public infrastructure projects; and
- Act as an adviser to public bodies, while these entities remain at all times responsible for their projects and in charge of the project oversight.

Infrastructure Québec's Services

- Provide expert services to public bodies in respect of any public infrastructure project, in particular with regard to identifying the elements to be considered in assessing project relevance, identifying options available to meet the need with due regard for the functional, durable and harmonious nature of the proposed infrastructure, and determining the preferred option and delivery approach;
- Provide strategic, financial and other advice to public bodies in respect of public infrastructure projects;

- Participate in the meetings of the committee responsible for the follow-up of public infrastructure projects, including scheduling and budget control; and
- Operate a documentation centre accessible to all interested persons on matters relating to the planning, carrying out and management of public infrastructure projects. For that purpose IQ collects and analyses information on similar experiences in Canada and abroad.

Contact

QUÉBEC

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Partnerships New Brunswick

About Partnerships New Brunswick

Created in 2011, Partnerships New Brunswick is a branch of the New Brunswick Department of Transportation. Partnership New Brunswick's team of 40 members advise government departments and municipalities on the procurement of infrastructure through the use of PPPs.

Partnerships New Brunswick's Role

- Administer existing PPP projects;
- Provide a consulting service to the Department of Transportation and other branches of the provincial government, municipalities and sectors of the energy industry on how to procure PPPs in the transportation, energy, water and sewage sectors; and
- Write contracts that meet industry standards.

Partnerships New Brunswick's Services

- Advice on PPP projects including project screening and assessment of viability;
- Assistance with project structuring;
- Consulting services related to the development, structuring and procurement of PPP projects;
- · Assistance with managing the procurement process; and
- Assistance with the drafting and execution of project contracts.

Partnerships New Brunswick's Projects

Partnerships New Brunswick currently has four projects in various stages of procurement:

- Trans-Canada Highway upgrade from Longs Creek to the Quebec border,
- Fredericton to Moncton highway improvements,
- · Gateway 1 Highway expansion, and
- Princess Margaret Bridge upgrade in Fredericton.

Contact

NEW BRUNSWICK

Mr. Fred Blaney

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Appendix 3 CCPPP's Inventory of Municipal PPP Projects in Canada

| PROJECT NAME | MODEL | CURRENT STAGE | OWNER | LOCATION |
|---|--------------------------|---------------|--------------------------------------|-----------------|
| ENERGY | | | · | |
| Calgary Transit Ride the Wind Project | Build-Own-Operate | Operational | City of Calgary | Calgary, AB |
| ENVIRONMENTAL | | | | |
| Vancouver Landfill Gas Cogeneration Project | Build-Own-Operate | Operational | City of Vancouver | Delta, BC |
| Canmore Water & Wastewater System | Operation & Maintenance | Operational | Town of Canmore | Canmore, AB |
| Moncton Water Treatment Facility | DBFOM | Operational | City of Moncton | Moncton, NB |
| Goderich Water & Wastewater System | Operation & Maintenance | Operational | Town of Goderich | Goderich, ON |
| Sooke Wastewater System | Design-Build-Operate | Operational | District of Sooke | Sooke, BC |
| Okotoks Water & Wastewater System | Design-Build-Operate | Operational | Town of Okotoks | Okotoks, AB |
| Enwave | Corporatization | Operational | City of Toronto and OMERS | Toronto, ON |
| Algonquin-Peel Energy From Waste Facility | Design-Build-Own-Operate | Operational | Regional Municipality of Peel | Brampton, ON |
| Port Hardy Water & Wastewater Treatment System | Design-Build-Operate | Operational | District of Port Hardy | Port Hardy, BC |
| Brockton Water & Wastewater System | Operation & Maintenance | Operational | Municipality of Brockton | Brockton, ON |
| Britannia Landfill Gas to Electricity Project | DBFOM | Operational | Regional Municipality of Peel | Mississauga, ON |
| Waterloo Landfill Gas Power Project | DBFOM | Operational | Regional Municipality of Waterloo | Waterloo, ON |
| Winnipeg Wastewater System | Service Contract | Operational | City of Winnipeg | Winnipeg, MB |
| Sudbury Biosolids Management Facilities | DBFOM | RFP | City of Greater Sudbury | Sudbury, ON |
| HOSPITALS & HEALTHCARE | | | | |
| Ottawa Paramedic Service Headquarters | DBFM | Operational | City of Ottawa | Ottawa, ON |

| PROJECT NAME | MODEL | CURRENT STAGE | OWNER | LOCATION |
|--|--------------|---------------------|---|----------------------|
| JUSTICE/CORRECTIONS | | | | |
| Five Corners Project | Design-Build | Operational | City of Chilliwack | Chilliwack, BC |
| RECREATION & CULTURE | | | | |
| John Labatt Centre | DBFOM | Operational | City of London | London, ON |
| Red Ball Internet Centre | DBFOM | Operational | Moncton 4lce Sports Inc. | Moncton, NB |
| Bell Sensplex | DBFOM | Operational | City of Ottawa | Ottawa, ON |
| Shenkman Arts Centre & Orléans Town Centre | DBFOM | Operational | City of Ottawa | Ottawa, ON |
| Powerade Centre | DBFOM | Operational | City of Brampton | Brampton, ON |
| SHOAL Centre | DBF | Operational | Town of Sidney | Sidney, BC |
| Prospera Place | DBFOM | Operational | City of Kelowna | Kelowna, BC |
| Charles Jago Northern Sport Centre | Design-Build | Operational | University of Northern British Columbia | Prince George, BC |
| Pan Am Games Aquatics Centre, Field House & CSIO Project | DBF | RFP | University of Toronto | Toronto, ON |
| Pan/Parapan American Athletes' Village Project | DBF | Preferred Proponent | Toronto 2015 | Toronto, ON |
| Pan Am Games Hamilton Soccer Stadium, Hamilton Velodrome and York University Athletics Stadium | DBF | RFP | City of Hamilton and York University | Greater Toronto Area |
| TRANSPORTATION | | | | |
| Viva | DBFOM | Operational | Regional Municipality of York | York Region, ON |
| Charleswood Bridge | DBFM | Operational | City of Winnipeg | Winnipeg, MB |
| Sheppard East Maintenance & Storage Facility | DBFM | RFP | Toronto Transit Commission | Toronto, ON |
| Chief Peguis Trail Extension | DBFM | Under Construction | City of Winnipeg | Winnipeg, MB |
| Disraeli Bridges | DBFM | Under Construction | City of Winnipeg | Winnipeg, MB |
| AMT Maintenance Centre & Garage | DBF | RFP | Agence métropolitaine de transport de Montréal | Montreal, QC |
| Ottawa Light Rail Transit Project | DBFM | Short List | City of Ottawa | Ottawa, ON |
| Canada Line | DBFOM | Operational | Translink | Metro Vancouver, BC |
| Golden Ears Bridge | DBFOM | Operational | Translink | Lower Mainland BC |

Source: CCPPP Database 2011.

Appendix 4 Public-Private Partnerships FAQs

What exactly is a Public-Private Partnership?

Public-Private Partnerships (P3s) are contracts between government and private-sector partners that use creative approaches to enable the design, building, financing, operation and/or maintenance of facilities that serve the public. Sometimes municipal P3s also involve federal and/or provincial government partners. P3 approaches enable a municipality to offer residents new or better facilities that it could not afford to undertake on its own, or that it does not have the specialized skills to undertake.

Why should a P3 be considered for new municipal infrastructure?

A P3 contract can offer strong value for money, including price and schedule certainty, reduced risk exposure for a municipality, as well as specified quality and availability requirements. The P3 method is efficient and is expected to result in lower lifecycle costs.

What are the benefits of a P3 approach for residents?

This approach provides residents with an ability to access new state-of-the-art facilities, faster design and construction of new facilities, continued access to programming and services, projects that reflect residents' priorities and can help to stimulate economic growth and employment, minimize the impact on resident taxes and free up public funds for other core services.

What are the benefits for municipalities?

P3s provide municipalities with an opportunity to:

- Share risk and responsibility with the private sector partners;
- Access new sources of funds and new specialized skills;
- Reallocate resources to core areas under government responsibility, thereby improving the use of assets;

- Increase efficiency and effectiveness;
- Create high-quality infrastructure;
- Promote transparency, accountability and in-depth cost/benefit analysis and scrutiny of proponents offering the best value;
- Obtain private-sector investment in public-sector infrastructure;
- Enhance competitiveness.

How are P3 projects selected?

As new needs arise for public facilities of all types, such as recreational, healthcare, learning, safety or emergency services facilities, housing and transportation infrastructure, city staff review and prioritize needs and develop a list of potential P3 projects. Each of these projects undergoes an initial assessment of urgency, cost, timeline and other factors, and a shortlist of potential P3s is generated and submitted to committee and council for action. Once approved, each P3 is then submitted to detailed needs and cost analysis, and once again submitted to committee and council for inclusion in budgets and authority to proceed with procurement of a private-sector partner.

How is the private sector partner selected?

Once approved for advancement by committee and council, every P3 project undertakes a competitive bidding process where private sector companies are invited to qualify and then submit their detailed proposals for the project. The proposals from qualified firms are assessed, and a preferred partner is chosen. Once that partner is selected, final aspects of the agreement structure are worked out and a contract is finalized. Committee and council review and approve this final contract, after which construction can begin.

How would a municipality ensure that the private sector partner is delivering the value promised?

A municipality would closely monitor the progress of each P3 project from beginning to end. Specific aspects of the private sector's reporting and monitoring activities are written into each P3 agreement. If there are any concerns by a municipality that value is not being delivered as promised, the municipality and the private sector partner work together to make appropriate adjustments to ensure that value is being delivered to both parties.

Is the operational cost for a P3-operated project higher than a municipally-operated project?

The project costs can be less when delivered as a P3 because of the additional competitive pressures, collaboration and innovation present in this form of procurement. While operating costs might be higher, and financing rates are greater in a P3 procurement than in a traditional (non-P3) procurement, savings through design, construction and reduced risk to a municipality more than offset these costs.

One of the key advantages of a P3 project is cost certainty. Once a winning proposal has been selected, the municipality's costs for construction and operations will be fixed—which means the preconstruction budget will never be exceeded. With traditional procurement, construction costs are only partially fixed, and so there is much greater possibility that the preconstruction budget will be exceeded.

How does the financing work?

The municipality pays the private partner for a portion of the capital cost of the infrastructure during construction, and the partner finances the balance of the capital cost. Over the 25-year operating period, the municipality pays the contractor back the privately-financed portion, much like a mortgage.

What happens if the private partner goes bankrupt or can't finish the work?

If a private partner doesn't finish the work for any reason, the contract usually includes provisions that allow a municipality to either step into key subcontracts to complete the work or terminate the contract and bring in a new partner. In either case, performance security arrangements would protect the municipality from additional cost.

What happens if the costs of the project go up?

The private partner will be paid under a contracted fixed price for the services it provides, with some items indexed to inflation. The private partner, not the municipality, is responsible for any cost increases that it may experience related to the design, financing, construction, operations or maintenance of a project, including any schedule delays, overruns on materials or labour, or repair problems.

What happens if the private partner doesn't perform as it is supposed to?

The private partner is ultimately responsible to a municipality. Contractual safeguards include financial penalties if performance requirements are not met, the ability for the municipality to step in if required at the private partner's cost and default provisions and remedies that favour the municipality.

What recourse will be available if a municipality and a contractor disagree on the contract terms?

Most contracts contain a detailed dispute resolution procedure to resolve any disagreements on the contract terms.

Is there a "right" way of doing a public-private partnership?

There are many types of public-private partnerships. The "right" public-private partnership is the one that best meets the needs of the partners in the local context. One size does not fit all.

 $Source: http://www.ottawa.ca/business/bids_contracts/p3/about/faq=en.html http://www.abbotsford.ca/stave_lake_water/faq_s/community_questions_answers.html http://www.abbotsford.ca/s$

Appendix 5 Municipal PPP Policies

In recent years, a number of municipalities have adopted procurement policies relating to public-private partnerships to ensure transparency and public engagement and to promote consistency. A sample of municipal PPP policies:

City of Calgary

Calgary's City Council adopted a P3 policy in 2008 to provide a framework for a consistent approach to the: identification and evaluation of potential P3 opportunities; decision-making; and procurement processes. The policy is available at: http://www.pppcouncil.ca/pdf/calgary_p3policy_122008.pdf and includes the following guiding principles:

- 1. The public interest is paramount;
- 2. Appropriate public control must be preserved;
- 3. Accountability must be maintained;
- 4. The project must be a priority as determined by the capital plan.
- 5. The project must be approved within both the capital plan and the projected operating budget of the relevant business unit;
- 6. The P3 procurement process must be competitive, equitable, transparent, accountable and timely; and
- 7. The selected P3 delivery model must provide best value for money over the project lifecycle with appropriate consideration of risk transfer, opportunities for innovation, and community issues.

City of Edmonton

In 2010, the City of Edmonton adopted a policy on public-private partnerships. It provides process certainty and clarity for all stakeholders as well as a framework for the selection, evaluation, approval, delivery and monitoring of P3s. The policy is available at: http://www.pppcouncil.ca/pdf/edmonton_p3policy_052010.pdf. An excerpt from the policy:

Policy Statement

The City of Edmonton is committed to achieving value for money in public infrastructure and service delivery while ensuring the public interest is protected and Council's priorities are met. Public Private Partnerships (P3s) will be considered where the P3s will serve to:

- 1. Deliver improved services and better value for money through appropriate allocation of resources, risks, rewards and responsibilities between the City and private sector partners;
- 2. Enhance public benefits through clearly articulated and managed outcomes;
- 3. Leverage private sector expertise and innovation opportunities through a competitive and transparent process;
- 4. Create certainty around costs, schedule, quality and service delivery; and
- 5. Optimize use of the asset and included services over the life of the P3. The Public Private Partnership (P3) Policy will apply to large-scale (2010 benchmark-\$30 million), complex, public infrastructure projects.
Extra copies of this publication may be purchased by contacting:

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