

PPP Canada

The Guide to the new Building Canada Fund P3 Screen – Suitability Assessment





About PPP Canada

PPP Canada is the government of Canada's centre of expertise on P3s. As a federal Crown corporation mandated to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers, through P3s. The Corporation was created to deliver more P3s by leveraging incentives, demonstrating success, providing expertise; and promoting best practices and capacity-building.

Increasing the visibility of P3s as a procurement solution for governments is one of the major accomplishments of PPP Canada. The Corporation's work and the strategies it employs on its three (3) business lines:

P3 Knowledge Development and Sharing: to serve as a source of expertise and advice on public-private partnership matters;

Advancing Federal P3s: as the lead on federal P3 matters with a mandate to assess federal P3 opportunities; and to advise on the execution of federal P3 projects; and

Advancing Provincial, Territorial, Municipal and First Nations P3s: to assess the suitability of P3 projects from provincial, territorial, municipal, and First Nations governments seeking funding from federal infrastructure programs, in particular the P3 Canada Fund.

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INTRODUCTION

Public-private partnerships (P3s) have demonstrated their ability to produce value for taxpayers in the delivery of public infrastructure. By partnering with the private sector to manage many of the risks associated with the construction, financing and operation of infrastructure, governments can build public infrastructure faster and at a lower cost to taxpayers.

In *Economic Action Plan 2013*, the Government of Canada announced that a new P3 Screen for projects with eligible costs of over \$100 million submitted for federal funding under Infrastructure Canada's New Building Canada Fund (NBCF) to determine whether better Value for Money can be achieved through P3 procurement.

The P3 Screen is divided into two parts: the P3 Screen - Suitability Assessment (SA); and the Procurement Options Analysis (POA).

Should the SA conclude that a project demonstrates P3 potential, Procuring Authorities will be required to develop a POA.

As the Government of Canada's centre of expertise on P3s, PPP Canada provides advice to jurisdictions in all levels of governments as they consider the P3 suitability of their specific projects.

Purpose

This guide is meant to assist Procuring Authorities who have applied to the NBCF in completing their P3 Screen - SA as instructed by Infrastructure Canada. This guide will walk Procuring Authorities through how to use the P3 Screen – SA and how to apply the screening criteria. **PPP Canada's review of completed P3 Screen – SAs referred to the Corporation by Infrastructure Canada, will take one to two (1-2) weeks.** However, PPP Canada will work directly with Procuring Authorities should there be incomplete information or clarifications required. Once complete, PPP Canada will communicate the results of the P3 Screen – SA to Infrastructure Canada

The screening criteria are presented in the form of twelve (12) questions related to project specifics such as: private sector capacity, potential for contract integration, and the potential for competition; market precedence; and asset complexity.

The P3 Screen – SA is designed for use by provinces, territories, and municipalities, regardless of P3 experience and expertise. However, the P3 Screen – SA outcomes can be expected to be more accurate with P3 experience. As such, PPP Canada can assist Procuring Authorities by providing expert advice as they undertake the screening of their proposed capital investments.

For Procuring Authorities required to prepare a POA, PPP Canada has developed *The New Building Canada Fund: Procurement Options Analysis Guide* to assist with the analytical process of selecting the optimal procurement option. PPP Canada has also developed a *Schematic Design Estimate Guide*, a guide to preparing cost estimates suitable for quantitative analysis when considering a P3 as an asset delivery option.



Screening Projects for P3 Potential

P3s are currently operating across the country— from bridges and roads to hospitals and fire stations, schools and prisons – and users and taxpayers are reaping the benefits with better service, lower costs, and faster delivery times. However, because the value of P3s is best leveraged in large, complex projects where innovation can reduce lifetime costs and deliver better infrastructure, the P3 market is not boundless. It is estimated that P3s are the better procurement option in only up to 20 per cent of public infrastructure procurements. As a result, P3s are only one tool of many that governments can employ to optimize the value that is being delivered in public infrastructure procurements.

Determining whether an investment could have potential for P3 delivery is only a first step in larger decision making process that concludes with a recommendation regarding the optimal approach to procurement.

IDENTIFYING P3 POTENTIAL

This section provides guidance on the application of the P3 Screen – Suitability Assessment criteria. Identifying the optimal procurement approach for a given asset can be seen as an iterative approach that applies progressively finer filters to the list of viable delivery options until one emerges as the optimum choice.

The purpose of the P3 Screen – Suitability Assessment is to raise the level of awareness and consideration of the P3 model in the procurement of provincial, territorial, and municipal projects seeking funding from federal infrastructure programs, in particular the new Building Canada Fund (NBCF). The objective of the P3 Screen is to ensure that where P3 potential exists, the P3 option is given due consideration.

There is no one overwhelming indicator of P3 suitability. It is also important to note the identification of P3 potential does not imply that the P3 approach will be the final delivery approach. Rather, it means that the P3 option must be carried forward through the next stages of the analytical process, the development of a Procurement Options Analysis (POA).

The Suitability Assessment

The P3 Screen – Suitability Assessment was developed to assist Procuring Authorities requesting federal funding from the NBCF, in assessing the P3 potential for the delivery of their infrastructure projects. The screening matrix asks the user to consider twelve (12) questions and enter a score for each question. Considerable effort has been made to ensure that users are provided with objective indicators for each question.

The evaluation criteria have been developed in order to ensure that the screening can be completed based on readily available information that would be established through the conventional investment planning process. However; some of the criteria may require a more in-depth understanding of a wide spectrum of P3 delivery models and an awareness of the P3 market in Canada. PPP Canada is readily available to provide this additional context and to provide support to Procuring Authorities as they undertake the screening of their proposed capital projects.

How to Approach the Suitability Assessment

For each of the twelve (12) questions in the Suitability Assessment, the user will be presented with a scale from one (1) to five (5). Accompanying this scale will be indicators meant to assist the reader in choosing the appropriate rating.

The user should consider the question in the context of their specific investment, then identify the indicator that best aligns with their assessment, and finally enter the rating associated with that indicator in the rating cell. The user is also asked to provide a brief rationale for their rating.

In the background, the user's scores will be modified by a weighting factor that reflects the relative importance of that criterion in determining P3 suitability. These weighted ratings are then normalized to a score out of 100, which can range from 1 to 100.

Application of the Screening Criteria

Below is a detailed overview of each of the questions of the P3 Screen – Suitability Assessment along with an indication of what the question is meant to measure, the indicators that should guide the rating, and additional context to assist the user.

CRITERION #1: ASSET LIFE	
What is Being Measured:	The expected useful life of the asset.
Question Asked:	What is the anticipated useful life (i.e., service life) of this asset?

The duration of P3 contracts tend to correspond to the useful life of the asset and, in general, longer-lived assets tend to be better suited to a P3. A lengthy contracting period allows the public partner to benefit from efficiencies, innovations, and cost certainty, while the private sector partner can rely on a long-term source of revenue that is reasonably secure and sufficient to recover its investments.

Response Indicators				
5	4	3	2	1
Asset life is 25 years and greater	Asset life is 20-24 years	Asset life is 15 – 19 years	Asset life is 10 – 14 years	Asset life is less than 10 years

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CRITERION #2: ASSET COMPLEXITY	
What is Being Measured:	Asset complexity through the delivery of multiple asset classes in one contract
Question Asked:	Is there the potential to combine the delivery of different asset classes into one contract?

The complexity of a planned investment that combines different related asset classes, or assets of a unique nature, into a single contract is greater than a planned investment that involves only one type of asset. A P3 approach is more suited to more complex investments.

Response Indicators				
5	4	3	2	1
Combines three or more asset classes (i.e. building + road + outbuildings).	The planned investment by its nature is very complex (i.e. bridge and involving two or more asset classes, or significant technology).	Combines two asset classes of medium complexity (i.e. rail line and station).	Combines two asset classes of low complexity (i.e. road and toll booths), or one asset of higher complexity (i.e., water treatment plant).	Single asset class

CRITERION #3: OUTPUT AND PERFORMANCE SPECIFICATIONS (CONSTRUCTION)	
What is Being Measured:	The availability/accessibility of output and performance specifications for the construction of the asset.
Question Asked:	What is the availability of the output specifications for the construction of the asset?

P3s are characterized by the public sector setting their desired outcomes or outputs in the form of measurable technical output/service/performance specifications that provide the basis for performance based contracts.

Output specifications will include performance specifications for the entire concession period, becoming a fundamental part of the Project Agreement between the public partner and the selected private proponent. The development of output specifications for the lifecycle of an asset requires a shift in mindset from the development traditional input specification for a single phase of the asset's life. Output specifications will allow a supplier maximum flexibility to achieve innovation and efficiency in design of the asset and service delivery, by providing a description of how the asset is to perform in each phase of the lifecycle and the condition of the asset at the end of the concession period. This requires a clear definition of the specifications/standards to be met by the private sector during not only the construction phase but in the longer term operating and maintenance phases. Inaccurate or incomplete output specifications can have lasting negative impact on the performance of an asset and how it is maintained.

Response Indicators				
5	4	3	2	1
Output specifications for same type of asset(s) exist and are available.	Output specifications for similar asset are available.	Existing conventional specifications can be converted into output or performance specifications easily.	Existing conventional specifications can be converted into output or performance specifications with some difficulty.	New technical outputs and specifications will have to be developed

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CRITERION #4: STABILITY OF OPERATIONAL & MAINTENANCE REQUIREMENTS	
What is Being Measured:	Stability and predictability of the operational and maintenance requirements for the asset.
Question Asked:	Are the long term operational and maintenance needs of the planned asset relatively stable and predictable?

Being able to forecast the maintenance and operational requirements for an asset over the long-term time is desirable in the context of long-term contracts. Most of infrastructure assets such as buildings and roads have stable and predictable operations and maintenance requirements over their life spans. However, certain types of assets may be more unpredictable in nature due to external factors such as regulatory standards. Risks which are challenging to quantify, tend to command risk premiums associated with the risk transfer and result in increased overall costs.

The relationship between contract duration, asset life-cycling, and the timing of potential external drivers will influence the scoring of this criterion.

Illustrative Example: Assuming the operating permit for a wastewater treatment facility is renewed every 10 years using the standards in force at the time of the renewal, a contract with duration of 10 years or less should score 5. By contrast, if the anticipated contract is longer than 10 years, then the score would be lower in recognition of the uncertainty related to future standards.

Response Indicators				
5	4	3	2	1
Operations and maintenance requirements are predictable and stable	Operation and maintenance requirements are predictable, but have some instability based on known factors.	Operations requirements are unstable, but maintenance requirements are predictable	Operations requirements are not stable and maintenance requirements are somewhat predictable.	Operations and maintenance requirements cannot be predicted and are unstable over the useful life of the asset.

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CRITERION #5: PERFORMANCE SPECIFICATIONS & INDICATORS (OPERATIONS PERIOD)	
What is Being Measured:	The availability of performance specifications and indicators for the operations and maintenance of the asset.
Question Asked:	What is the availability of the operations- and maintenance- related performance specifications indicators

Establishing performance specifications and monitoring performance against them using Key Performance Indicators (KPIs) is critical to the management of any performance based contract, including P3s.

The public sector must be able to articulate its required minimum operating and maintenance standards to be met in output or performance-based terms. Measurement against the minimum standards involves the development and monitoring of KPIs. Monitoring performance over the life of the P3 agreement may also necessitate change management initiatives as the public partner moves away from an input-based approach to managing performance.

Response Indicators				
5	4	3	2	1
Performance outputs and indicators for operations and maintenance activities are available	Performance outputs and indicators exist, but are not readily available	Performance outputs and indicators for comparable assets exist and are available	Performance outputs and indicators for comparable assets exist and are not readily available	Performance outputs and indicators will have to be developed

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CRITERION #6: LIFE-CYCLE COSTS	
What is Being Measured:	Whether the public sector has sufficient information to develop a profile of the life-cycle costs associated with the asset.
Question Asked:	Can most of the full life-cycle costs of the asset , mainly related to construction and fit-up (i.e., project costs) and long-term operations, including maintenance, be quantified upfront with reasonable assumptions and/or availability of historic data?

Life-cycle costs are very important factor in success of a P3. The public partner will pay for maintenance and/or operation through the P3 Agreement with the expectation that the asset will be maintained in accordance with the performance specifications.

The estimation of life-cycle costs begins with the identification of what has to be analyzed and the time period for the investment life-cycle study along with the appropriate financial criteria. Giving potential bidders as much information as possible will result in more comprehensive bids and ultimately benefit the public partner. A whole-life approach to the delivery of public infrastructure assets generates potential efficiency gains, especially where maintenance and operation of the asset become the responsibility of the private sector. Decisions relating to life-cycle costs are a major consideration for the private sector in preparing a complete and competitive proposal. The cost profile should reflect most activities occurring in technical and non-technical disciplines.

Illustrative Example: If major costs such as design, construction, energy and water, and replacement of mechanical and electrical systems can be documented fairly accurately, then the score should be 5. If costs such as design and construction can be calculated accurately, and energy and equipment replacement costs cannot be easily established due to poor quality of historic data or unpredictable operating conditions over a long term, then a score of 3 could be given.

Response Indicators				
5	4	3	2	1
The total asset life-cycle costs are well understood and accurate estimates can be developed by the public partner.	The total asset life-cycle costs are understood but estimates, while accurate are incomplete to some extent.	The total asset life-cycle costs are well understood, and can somewhat be accurately estimated by the public partner.	There is limited understanding of life-cycle costs, but costs cannot be accurately estimated by the public partner.	The total asset life-cycle costs are not well understood and cannot be estimated by the public partner.



CRITERION #7: REVENUE GENERATION	
What is Being Measured:	Whether the asset could potentially generate revenues and lessen its impact on tax payers.
Question Asked:	Does the planned investment have inherent scope to generate any revenue?

Revenue generation is not a requirement for a successful P3. However, where an asset could potentially generate revenue and reduce the burden on public funds, the P3 model is ideally suited to leveraging that potential, particularly where there is scope to transfer the risks associated with that revenue generation to the private partner.

While the proportion of federal assets with revenue generation potential is likely to be small, in some contexts, adjustments to investment scope such as a move from a single-use building to a multi-use building can sometimes create revenue opportunities.

Response Indicators				
5	4	3	2	1
The planned investment will generate revenues and the private sector may be willing to assume associated revenue risk	The planned investment could generate revenues and private sector may be willing to share revenue risk	The planned investment could generate revenues and the private sector's willingness to accept revenue risk is unknown	The planned investment could generate minimal revenues and the private sector is unlikely to accept any revenue risk.	It is unlikely that the planned investment will generate any revenues



CRITERION #8: PRIVATE SECTOR EXPERTISE	
What is Being Measured:	Whether there is sufficient private sector capacity to deliver the investment and to create a competitive bidding environment
Question Asked:	How many private sector firms have the capacity to deliver and maintain this type of asset?

The availability of private sector expertise is critical for two reasons: 1) ensuring a competitive bidding environment; and 2) ensuring that there is private sector capacity to perform the functions and manage the risks associated with the asset.

The success of a P3 is dependent upon the team that the private sector partner assembles to fulfill its obligations to the public partner. There needs to be an adequate pool of private-sector participants who would be interested in and capable of pursuing the opportunity. Currently private sector expertise exists in virtually all areas of public infrastructure, with P3 activity in most sectors including transportation, waste water and correctional facilities. If there are only a limited number of private sector companies that could deliver the investment, then there could be challenges related to a competitive bidding process, regardless of delivery approach.

Response Indicators				
5	4	3	2	1
There are more than 5 private sector firms capable of forming teams with the expertise to design, construct and maintain/operate this type of asset	There are more than 5 private sector firms capable of designing, constructing and maintaining this type of asset. Operations capability is not yet determined.	There are 3 to 5 private sector firms capable of forming teams with the expertise to design, construct and maintain/operate this type of asset	There are 3-5 private sector firms capable of designing, constructing and maintaining this type of asset. Operations capability is not yet determined.	There are fewer than 3 private sector firms capable of forming teams with the expertise to design, construct and maintain/operate this type of asset



CRITERION #9: MARKET PRECEDENTS	
What is Being Measured:	Whether the P3 market has experience with investments of a similar nature in all phases of the investment life-cycle.
Question Asked:	Have investments with similar requirements and of similar size and scale been delivered through the P3 model?

The existence of P3s for similar assets is a strong indicator of the viability of a P3.

P3s are delivered in a multitude of sectors, across Canada including bridges and roads, hospitals and fire stations, schools and prisons. Alberta, British Columbia, Ontario, and Quebec have undertaken the vast majority of P3 procurements in Canada representing a diverse portfolio of public infrastructure. P3 projects across various infrastructure asset classes such as transit, waste management and broadband have been procured across Canada and internationally.

Information related to P3 projects is available on the website of the provincial and international procurement agencies. A list of resources providing information on the Canadian and international P3 organizations can be found in the PPP Canada website – www.p3canada.ca.

Response Indicators				
5	4	3	2	1
Investments of similar size and scope have been delivered as P3s in Canada	Smaller investments of similar scope or, projects of similar size but smaller scope have been delivered as P3s in Canada.	Investments of similar size and scope have been delivered as P3s internationally	Smaller investments of similar scope or, projects of similar size but smaller scope have been delivered as P3s internationally.	Investments of similar size and scope have not been previously delivered as P3s

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CRITERION #10: NATURE OF DEVELOPMENT SITE	
What is Being Measured:	Whether the nature of the asset lends itself to the effective transfer of risk owing to the nature infrastructure site.
Question Asked:	How much of this investment involves new construction on a previously undeveloped site?

In general, investments involving all new construction on sites not previously developed (greenfield developments) lend themselves to maximizing risk transfer to the private sector. However, investments that involve existing assets are also suitable when they involve reconstruction or very extensive renovations.

Refurbishment, renovation, and facility expansion investments (brownfield developments) offer less potential for risk transfer because it may not be possible to distinguish the defects in new construction from pre-existing or latent defects in the infrastructure. Also, the private sector may be less averse in taking on risks related to existing assets over the long-term of a new P3 contract. Nevertheless, these types of investments may still make viable P3s.

Response Indicators				
5	4	3	2	1
Asset is new construction on an undeveloped site.	Asset is new construction on an already developed site	The planned investment involves at least 50% new construction and also significant renovations to the existing asset.	The planned investment involves expansion and/or refurbishment of an existing asset	The planned investment mainly involves refurbishment, modernization, minor renovation, or involves integration of new facilities with existing facilities



CRITERION #11: SCOPE FOR PRIVATE SECTOR INNOVATION GAINS

What is Being Measured:	Whether the public sector's needs or expectations are compatible with realizing gains from private sector innovation
Question Asked:	To what extent will the output-based performance contracts specify deliverables?

The scope for private sector innovation is inversely related to the public sector's need to be prescriptive.

Output-based performance contracts specify deliverables in terms of outcomes (safety, amount of lighting) rather than prescribing the inputs or materials to be used in delivering the outputs. The specifications need to reflect the final requirements of the end-user. These types of contracts encourage innovation by giving the private sector discretion over how it will deliver the required outcomes. Performance-based contracts are viable when the outputs are easily measurable and verifiable using accepted standard measures. Provisions in an output-based contract are not unique to P3s and are already used in some conventional contracts such as operation and maintenance services.

With this in mind, the public sector must consider the extent to which it must express its requirements in terms of inputs.

Illustrative Example: Expressing a requirement in output-based terms could include a statement that high speed internet access should be available 24/7 for all 1000 people in the facility. This would leave the private partner to determine how to best meet that need. By contrast, an input-based approach would involve prescribing type of cable to be used, where it should be laid out, etc. Not only does the input-based approach curtail the opportunities to realize innovation efficiencies, but it also fails to recognize that the specified technologies and approaches may be rendered obsolete by technological advances.

Response Indicators				
5	4	3	2	1
The public sector is prepared to use output specifications for all phases of the investment life-cycle.	There are very few areas where the public sector feels it must be prescriptive/use input-based specifications.	The planned investment requirements will be a mix of input-based and output-based requirements	The planned investment's design and construction will be based on input specifications.	The public sector believes it must define specific input requirements for the majority of the asset.

CRITERION #12: POTENTIAL FOR CONTRACT INTEGRATION

What is Being Measured:	The extent to which investment elements (i.e., design, build, finance, maintain, operate) can be integrated into one contract.
Question Asked:	Which elements of the potential P3 (i.e., design, build, finance, maintain, operate) can be integrated into one contract?

One of the important mechanisms through which P3s generate value is the integration of various elements of the potential P3 (i.e., design, build, financing, and operations/maintenance). The greater the potential for integration, the more likely a P3 will generate value.

The argument for integrating the elements of an investment is that it creates incentives for the private sector to minimize the total capital and facilities maintenance costs over the economic useful life of the asset. This is a challenging task that requires bringing together different disciplines (architects, builders, facilities managers, and financial experts) to decide which approaches are likely to improve financial performance and which are not.

Response Indicators				
5	4	3	2	1
All elements of a potential P3 (i.e., design-build-finance-maintain-operate) could be integrated into one contract	Design-build-finance-maintenance and some operations could be integrated into one contract	Design-build-finance and some maintenance could be integrated into one contract	At least design, build, finance could be integrated into one contract	Only two elements could be integrated into one contract

Interpreting the Results

The P3 Screen – Suitability Assessment indicates an appropriate level of P3 suitability for the project being considered and produces a final numerical output that should be assessed against the following:

Decision Range for Evaluating Investments for P3 Viability		
1	50	The P3 option should not be retained for further analysis.
51	75	The project presents a mix of favorable and unfavorable indicators for P3 delivery. Further discussion with PPP Canada is necessary.
76	100	The project shows P3 delivery potential and requires the preparation of a Procurement Option Analysis.

The accuracy of these results is a function of the degree of definition around the project and the current state of planning – clearer definition and greater understanding of the proposed project will provide better screening results.

Given the mix of positive and negative indicators that such investments present, a sound screening decision will require an in-depth understanding of P3s and the P3 market. Hence, in order to ensure that the matrix score accurately indicates the viability of the proposed projects for P3 delivery, PPP Canada will provide assistance to Procuring Authorities throughout the process of completing and finalizing the P3 Screen – Suitability Assessment.

Next Steps

Even the most positive screening result does not constitute a decision to proceed with P3 delivery. Rather, a green result simply triggers the requirement to further analyze the viability of a P3 delivery model by preparing a Procurement Options Analysis (POA). The preparation of a POA is relevant to any Project showing P3 potential as it ensures proper planning and risk assessment. It also identifies, assesses, and makes a recommendation on the appropriate procurement option that best achieves project objectives and produces Value for Money.

A POA presents qualitative and quantitative assessments of a range of infrastructure asset delivery models and recommends an optimal model on the basis of Value for Money for the public sector. It also presents the Procuring Authority's procurement plan, which identifies the roles and responsibilities of the various project stakeholders, procurement activities, key milestones and timelines. This upfront planning will help inform the decision-making process and will ensure successful procurement, effective project delivery and sustainability of the infrastructure throughout its operational period.

Procurement Authorities whose project produces a green result in the P3 Screen – Suitability Assessment will be required to develop a POA. PPP Canada can provide advice, expertise, and financial support to these jurisdictions.



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