P3 BUSINESS CASE MARCH 2011

Government of Alberta ■

Department Address

APPENDIX D.2

P3 Business Case Template

Project Name

NOTE TO READER:

This document is to be used to justify a P3 approach to a project. Projects should have government commitment through the Capital Planning Process. It is an extension of the analysis and ideas submitted in the P3 Opportunity Paper.

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Executive Summary

[Project Name]

Purpose of an Executive Summary:

The purpose of an Executive Summary is to provide a concise summary of the key highlights of the P3 Analysis. The reader should have a brief description of the project and understand how the project improves the overall efficiency and/or effectiveness of the public sector if delivered by a P3 procurement method.

Description:

While the Executive Summary appears at the beginning of the P3 analysis, it is written last.

The Executive Summary will describe the objective of the project, the current state of the problem and the resulting P3 opportunity. It outlines the scope of the project, provides a brief description of the business impact, and the risks of undertaking the project as P3 procurement. Finally, it concludes with recommendations and the financial impact of the project. This summary should also be written with the media in mind as this is often the only part of a report that the media read. The Executive Summary is also often used to prepare a press release.

The summary should be a maximum of 2 pages in length.

Checklist for Executive Summary:

- 1. Does it provide an overall summary of the contents of the P3 Analysis?
- 2. Does it contain any information that is not contained in the body of the P3 Analysis? (should not)
- 3. Is the Executive Summary less than 2 pages?
- 4. Can the Executive Summary be treated as a stand-alone document?

Business Need & Project Description

Business Problem / Opportunity

Briefly, outline the underlying business problem or opportunity that the project will address. This may originate from either a program or infrastructure perspective. For example, the need for a new building may be based primarily on increasing cost to maintain or may be primarily based on supporting a program need. Include both program and infrastructure needs.

Project Description

Describe the project. Include how the project will address the business problems/opportunity.

Project Objectives

This section outlines what the project will accomplish, in clear and measurable terms within a specified time frame.

Scope

This section defines parameters of the project, including cost, time, tasks and results.

Out of Scope

This section includes items that are specifically excluded from the project from both a program and infrastructure perspective.

Stakeholders

Identify any stakeholders that may only be involved in certain procurement alternatives. Include any information that may indicate the level of interest from the private sector to participate in a P3 approach.

Project Team

Identify the proposed project team that will be responsible for the project. Identify any prior P3 procurement experience.

Checklist for Business Need & Project Description Section:

- 1. Is it clear what the project will accomplish from both a program and infrastructure perspective?
- Are the general project elements understood in enough detail to provide the reader with adequate context?
- 3. Is it clear what is not included in the project and what it will not accomplish from both a program and infrastructure perspective?

Strategic Alignment

Purpose of the Strategic Alignment Section:

The reason for writing the Strategic Alignment Section is to provide the reader with an understanding of how the project aligns with the Capital Plan and the overall business plan of the ministry. The project should align with the business plan goals for the service delivery ministry, the program ministry and, where appropriate, the Supported Infrastructure Organization (SIO). This section should clearly identify that the project is supported by all stakeholders and contributes to their long-term business direction and strategy. The section also identifies how a P3 would further support the goals of the department, program ministry/SIO and why other forms of alternate financing, such as capital bonds or debt financing are not appropriate.

Description:

Review the business plans of all internal stakeholders and identify specific goals that the project will help achieve. Identify the extent to which the project will help achieve the various business plans' goals by scoring it using the following guidelines:

- 1 indicates a high extent.
- 2 indicates a medium extent.
- 3 indicates a relatively low extent.

Goal from Ministry Business Plan	Level of extent	Explanation (if required)

Describe why undertaking a P3 approach will further support the strategic direction.

Describe how well the project meets the scope of a Government of Alberta P3. Describe why other alternatives to traditional procurement are not appropriate.

Checklist for Strategic Alignment:

- 1. Have business plan goals from both the service delivery and the program ministry/SIO been included?
- 2. For goals that have been assigned a high level of impact, is the project truly critical to achieving the goal?
- 3. Does the explanation support the evaluation of how the project impacts the goal?
- 4. Does the project align with the current Capital Plan, business strategy and business plan?
- 5. Will there be support for this project using a P3 approach?
- 6. Does the explanation support the elimination of other forms of alternative capital funding?

Procurement Options

Purpose of the Procurement Options Section:

This section should consider all procurement approaches that could deliver the project. It should include the methodology adopted including the detailed information on delivering the services. The different approaches should be compared to each other and include a qualitative description of the benefits and drawbacks of the adopted approach.

This section should clearly identify that the approaches considered are viable to deliver the project within the allowable time frame and financial constraints.

The benefits and drawbacks should be clearly identified

Traditional Procurement by GOA	Design-Build approach by GOA	P3 procurement as Design- Build-Finance- Operate/Maintain approach
•	•	•
•	•	•
•	•	•
•	•	•
•	•	•

Business & Operational Impacts

Purpose of the Business & Operational Impacts Section:

The Business & Operational Impacts Section provides the reader with a list of all business and operational impacts for each stakeholder. Each impact is described and analyzed for each alternative (P3 and traditional).

Description:

For each stakeholder (outlined in Section 2) identify all impacts from the project. For a capital project these will include the following categories of impacts: technical, operational, acceptability, implementation and timing.

For each impact identify the magnitude of impact (high, medium, low, or none) for each alternative using the following guidelines:

High indicates that the magnitude of impact is significant and stakeholder support and preparation is critical to the alternative's success

Medium indicates that there is a manageable impact to the stakeholder

Low indicates the alternative will have a minor impact to the stakeholder

None indicates that the stakeholder will not be impacted by the alternative

If necessary, document the rationale for the evaluation.

Impact & Description	Alternative 1	Alternative 2	Alternative 3
Stakeholder 1:			
Technical Impacts			
Operational Impacts			
Acceptability Impacts			
Implementation Impacts			
Timing Impacts			
Stakeholder 2:			

Checklist for Business & Operational Impacts Section:

- 1. For each stakeholder, have all business & operational impacts been identified?
- 2. Has the magnitude of impact been accurately evaluated for each alternative?
- 3. Have all stakeholders been considered?
- 4. Have risks that specifically relate to each alternative been included?

Project Risk Assessment

Purpose of the Project Risk Assessment Section:

The Project Risk Assessment Section provides the reader with an understanding of the risks that are related to the P3 and traditional model alternatives and how these risks may vary by viable alternative. This section includes a risk mitigation strategy for each risk.

Description:

Identify and allocate all risks that may relate to each alternative (P3, traditional). A risk is a factor or event that may jeopardize the project from achieving the anticipated benefits or increase the cost of the project.

Risk Identification

Project risks have been identified and categorized by other agencies. The following table provides a checklist in helping to identify the risks a project can present.

Risk Category	Description of risk	
Commissioning risk	The risk that the infrastructure will not receive all approvals to satisfy an output	
	specification, such as expected changes in legislation which allow for a specific	
	output specification not materializing	
Construction risk	The risk that the construction of the assets required for the project will not be	
	completed on time, budget or to specification	
Demand (usage) risk	The risk that actual demand for a service is lower than planned	
Design risk	The risk that the proposed design will be unable to meet the performance and	
	service requirements in the output specification	
Environmental risk	The risks that the project could have an adverse environmental impact, which	
	affects project costs not foreseen in the environmental impact assessment	
Financial risk	The risk that the private sector overstresses a project by inappropriate financial	
	structuring	
Force majeure risk	An act occasioned by an unanticipated, unnatural or natural disaster such as war,	
	earthquake or flood of such magnitude that it delays or destroys the project and	
	cannot be mitigated	
Industrial relations risk	The risk that industrial relations issues will adversely affect construction costs,	
	timetable and service delivery	
Latent defect risk	The risk that an inherent defect exists in the structure being built or equipment	
	used, which is not identified upfront and which will inhibit provision of the required	
	service	
Operating risk (service under-	The risks associated with the daily operation of the project, including an	
performance)	unexpected change in operation costs over budget	
Performance risk	The risk that the operator will not perform to the specified service level, such as a	
	power generator supplying less power than demanded	
Change in law risk	The risk that the current regulatory regime will change materially over the project or	
	produce unexpected results	
Residual value risk	The risk that the expected realizable value of the underlying assets at the end of	
	the project will be less than expected	
Technology obsolescence	The risk that the technology used will be unexpectedly superseded during the term	
risk	of the project and will not be able to satisfy the requirements in the output	
	specification	

Upgrade risk	The risks associated with the need for upgrade of the assets over the term of the
	project to meet performance requirements

Having identified and allocated the risks engendered by a project the next task is to establish the expected value of those risks. A possible approach to estimating the value of the risks could include assessing their costs and probability of the risks. These costs should be reflected in the Value Analysis Section.

For each risk, identify the probability of the risk occurring and the financial impact it may have on each alternative, using the following guidelines:

Impact of Risk (\$)

High indicates that the event has a significant impact to the project Medium indicates that the event will impact the project Low indicates that the impact is relatively minor to the project None indicates that the risk will not impact the project

Probability of Risk (%)

High indicates that the event is high likely to occur Medium indicates that the event is likely to occur Low indicates that the event is not likely to occur

Expected Value (\$)

Is the weighted average of dollar value impacts
(i.e. [High Impact (\$) x High Probability (%)] + [Med Impact (\$) x Med Probability (%)] + [Low Impact (\$) x Low Probability (%)] = Expected Value (\$))

Allocation

Government – Government retains responsibility for managing the risk.

Private Sector – Risk is transferred to the Private Sector. They are responsible for managing the risk.

Shares – Government and Private Sector shares responsibility for managing the risk

If necessary, document the rationale for the evaluation. Typical risk to consider in capital projects would be: commission risks, construction risks, demand (usage) risks, design risks, environmental risks, financial risks, force majeure risks, industrial relations risks, latent defect risks, operating (service under-performance) risks, performance risks, change in law risks, residual value risks, technology obsolescence risks, and upgrade risks.

Risk	lm	pact (\$))	Probability (%)		Expected	Allocation	
	High	Med	Low	High	Med	Low	Value (\$)	
P3								
Risk 1 /Risk 1 Mitigation								
Risk 2 /Risk 2 Mitigation								
Risk 3 /Risk 3 Mitigation								
etc								
Traditional								
Risk 1 /Risk 1 Mitigation								
Risk 2 /Risk 2 Mitigation								
Risk 3 /Risk 3 Mitigation								
etc								

Checklist for Project Risk Assessment

- 1. Have all risks been identified?
- 2. Have all risks specific to each alternative been identified?
- 3. For each risk has the specifics of each alternative been taken into consideration when evaluating the probability and impact?
- 4. Has the value and allocation of each risk been supported?
- 5. Has a risk mitigation strategy been identified for unacceptable levels of risk?

7 Value Analysis

Public Sector Comparator:

Wherever possible, the costing for the public sector comparator (PSC) is based on previous infrastructure projects. The service delivery ministry can provide benchmark costing that may help in identifying the costs. These costs should include the internal cost of undertaking the project. The public sector comparator alternative is used to establish the full and true cost of providing a facility and/or a service under a traditional procurement model. It will serve as a "benchmark" to evaluate the P3.

The PSC is an extension of the preliminary analysis completed during the feasibility assessment

Shadow Bid

The PSC establishes a benchmark for comparison purposes. However, the PSC alone does not allow an estimation of potential P3 costs/benefits. As part of the Detailed P3 Analysis, the detailed Shadow Bid is developed to estimate the potential costs and to identifying areas where expected benefits could occur. This Shadow Bid is developed by modeling the project as if it were delivered as a P3 procurement. The analysis should include one-time costs of establishing the partnership, including the procurements process, as well as, costs associated with monitoring the contract and liaising with the partner through the life of the contract.

The detailed shadow bid should be prepared with the assistance from experts in financial modeling, cost management and project delivery. Private sector advisors may be used but they cannot then participate on a Proponent team.

The shadow bid is an extension of the preliminary analysis completed during the feasibility assessment

Quantitative Analysis - Financial Cost & Benefit:

Full Life Cycle Cost Analysis

The detailed analysis will include a full life cycle cost analysis. All costs and expected benefits resulting from the P3 alternative should be analyzed and compared to the costs and benefits of a PSC. This methodology provides the reader with a total cost picture and includes both capital and operating expenditures.

The full life cycle cost analysis is an extension of the preliminary analysis completed during the feasibility assessment.

Sample of a Summary Cost Benefit Template:

Summary of Quantitative Cost/Benefit	PSC	P3
Capital Items		
Annual Items		
Leases		
Program		
Building Operations		
Cyclical Items		
Receipts		
Residual Value		
Total NPV over 25 years		

Sample Costing Template for each Alternative:

Quantitative Analysis – Alternative 1	Year 0	Year 1	Year 2		Year 25
Capital Items:					
Planning and bridging					
Construction					
Building Purchases					
Land Purchases					
Specialized equipment					
Information Technology					
New Furnishings					
Change Orders/Scope					
Changes					
Annual Operating Items:				l	
Program Salary and					
Benefits					
Program Supplies and					
Services					
Leases					
Building Operations					
Cyclical Items:					
Building maintenance					
Information Technology					
Furnishings					
Receipts:					
3rd Party Lease					
Revenue					
Parking Revenue					
Sale of existing land					
Sale of existing buildings					
Residual Value:					
Buildings					
Land					
Net Cost (Revenue):					
Net Present Value					
(X%):					

Provide a projection of the total annual payments, including annual operating and maintenance costs, which would be incurred over the concession period and how these costs will be accommodated within the Ministry's Business Plan and the government's fiscal plan.

Sensitivity Analysis

The estimated NPV life cycle cost will be based on a number of assumptions. A sensitivity analysis should be undertaken to show the effects of different assumptions on the relative value for money of the procurement options. This analysis should be used to identify the changes in assumptions that are significant enough to potentially change the recommendations. The analysis should assess the change to one or other of the procurement options (traditional or P3) but not both at the same time. The assessment should also identify which assumptions are most likely to change, the level of uncertainty and whether these assumptions are significant in the value for money estimate.

The business case should include a summary of the impact of changes in assumptions that are significant. A table is often effective in illustrating the impact. Separate tables should be used to illustrate the impact of changing assumptions and could be presented in the following format.

[Description of Table (e.g. Expected NPV with Different Credit Spread and Debt/Equity Ratio)]

[Description of Assumption that will be Changed]	Base Case		ion that Assumption Change A (e.g.		Assumption Cha	
	VFM	%VFM	VFM	%VFM	VFM	%VFM
Assumption Change 1 (e.g. credit spread)						
Assumption Change 2						
Etc.						

There should be a written explanation of the results of the analyses.

Qualitative Analysis - Non-Financial Benefits & Costs:

Some of the costs and benefits may not be quantifiable (difficult to attach a dollar value).

Examples of non-financial benefits typically associated with a P3 alternative are:

- Improved service quality
- Increased innovation resulting in more effective and/or efficient delivery of service
- Additional social and economic benefits
- Risk transfer as a benefit

Examples of non-financial costs typically associated with a P3 alternative are:

- Loss of control or accountability
- The change associated with partnering
- Loss of in-house expertise
- Risk transfer as a liability

All non-financial benefits and costs should be outlined for each alternative

Qualitative Summary	Description	Stakeholder(s) Impacted
Benefits:		
Benefit 1	Description of benefit 1	
Benefit 2	Description of benefit 2	
Costs:		
Cost 1	Description of Cost 1	
Cost 2	Description of Cost 2	

Assumptions

All assumptions used to determine, both quantitative and qualitative, costs and benefits should be clearly documented. This would include general assumptions as well as assumptions specific to each alternative. Any assumptions used to forecast the status quo, develop the public sector comparator, and establish the P3 alternative should be well documented. These assumptions will be re-visited as the project moves through the various stages of implementation and may be changed or removed.

Checklist for Cost/Benefit Analysis Section

1. Has a Public Sector Comparator been included for comparative purposes?

- 2. Are assumptions applied equally across alternatives?
- 3. Has the discount rate been identified and consistently applied to each alternative?
 4. Has an inflation factor been used fairly and consistently across each alternative?
- 5. Is sensitivity analysis required and, if so, has it been conducted and the results documented and explained?

Section Section

Conclusions & Recommendations

Purpose of the Conclusion & Recommendation Section:

The Conclusion & Recommendation Section provides the reader with a selected alternative based on an overall evaluation of the alternatives in terms of impact, risk, and cost/benefit. Specific recommendations for moving the project forward are also presented.

Conclusions

Description:

This section will recap each of the alternatives based on their Business & Operational Impact, Project Risk Assessment, and Value Analysis. Based on these results, a conclusion on which alternative should be chosen is made.

	Traditional	P3
Business &	Describe overall	Describe overall
Operational Impact	assessment	assessment
Risk Assessment	Describe overall	Describe overall
	assessment	assessment
Quantifiable Value	Describe overall	Describe overall
Analysis	assessment	assessment
Non-quantifiable	Describe overall	Describe overall
Value Analysis	assessment	assessment

Choose the recommended alternative based on the above recap, selecting the alternative that maximizes the effectiveness and efficiency, minimizes the government's exposure to risk, and clearly shows value for money.

Identify how payments will be accommodated within the Ministry's Business Plan and the government's fiscal plan.

Recommendations

Description:

This section will make specific recommendations on proceeding with the project using a P3 approach.

The extent of the recommendation may range from recommending approval for full project implementation to recommending a more detailed requirements analysis be done to validate some key P3 analysis components.

Implementation Strategy

Purpose of the Implementation Strategy Section:

The Implementation Strategy Section is to ensure that those approving the P3 Analysis understand the resources they must allocate (people, dollars, time) to complete the recommended next steps of the project, and ensure successful implementation of the project.

Description:

Outline the proposed implementation plan for the recommended next steps at a high level.

This section should include:

- Major project phases
- High-level work plan, deliverables and target dates for completion
- Costs (\$) required to carry out the implementation plan
- Personnel (departments, roles, competencies) required
- Outside resources required (consultants, etc)
- Proposed implementation project structure
- Assign responsibility for implementing and monitoring the risk mitigation strategies.
- Post Implementation Review approach

Review & Approval

Purpose of the Review & Approval Process Section:

The purpose of writing the Review & Approval Section is to clearly present the reader with whom and how the business case has been reviewed and approved. This section will also contain the final outcome of the business case. If the business case is approved the evidence of the approval should be included. If the business case is not approved, the business decision behind either rejecting the project or deferring the project should be documented.

Review Process

Description:

Who will review the business case?

Approval Process

Description:

What is the approval process and who is involved?

Business Case Signoff

Description:

The business case should be signed and dated by the approving person(s), indicating whether or not the business case is approved. If applicable, approval conditions should be identified. If the business case is not approved, reasons for the decision should be documented.