

BUSINESS PLAN GUIDELINE FOR CAPITAL PROJECTS



**Ministry of Finance
&
Infrastructure BC**



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1. HOW TO USE THIS GUIDELINE

Treasury Board Staff (TBS) prepared this guideline with assistance from Infrastructure BC (previously known as Partnerships BC) as an additional resource to the [Capital Asset Management Framework](#) to help ministries and agencies develop business plans for capital projects and provide clarity on how to meet existing and emerging requirements for capital planning and approvals. This document does not apply to information technology projects.

The contents of the guideline align with the recommended sections for a business plan. TBS expects all business plans or equivalent, regardless of author, format or label, to contain the following content:

- Executive Summary;
- Approach;
- Part A: Need for Investment;
- Part B: Service Delivery Options and Project Scope;
- Part C: Procurement Options;
- Part D: Procurement Plan and Funding Analysis; and
- Part E: Decision Request.

[Appendix A](#) outlines the table of contents for a business plan. Throughout the document, key questions are also embedded within the sections to assist project teams in the development of a business plan. [Appendix B](#) provides these questions in the form of a checklist.

This document was developed to provide guidance and best practices to address a wide variety of capital projects, but TBS recognizes ministries and agencies may need to adjust and structure the content of their business plans to match the size, complexity and unique aspects of specific projects.

Ministries and agencies are encouraged to seek additional expertise and support for their capital projects while using this document. This may include internal experts, or for larger projects, consultants external to the Province of British Columbia (government) and/or [Infrastructure BC](#).

2. BUSINESS PLAN PROJECT PLANNING

2.1 PURPOSE OF A BUSINESS PLAN

Capital asset management is the process of identifying current and future capital needs and developing strategies and projects to address those needs. A business plan is a key element of the capital asset management planning process.

Ministries and agencies may receive direction from Treasury Board, executive staff (or in the case of agencies from their responsible ministries) to develop a business plan for a specific project. This generally occurs during the capital planning process as part of government's budget cycle. See the [CAMF chapter on consolidated capital planning](#) for more information. Project teams should discuss requirements with decision makers if there is uncertainty regarding the need for a business plan.

The purpose of a business plan is to provide decision makers with enough information to approve the scope, budget, timing and implementation of a capital project.

A business plan:

- Identifies the need and rationale for investing in the project;
- Reflects relevant government priorities and strategic direction;
- Outlines the service delivery options and recommends the best option to address the project need;
- Analyzes the procurement options and presents the most appropriate and effective procurement model;
- Outlines the procurement implementation plan, project budget, funding/financing sources and the timing of cashflows; and
- Requests formal approval to proceed with the project and project budget as described in the business plan.

The level of analysis required in a business plan depends on the complexity, risks and scope of the project. Larger projects may require analyses supported by advice and input from independent experts and third-party validation of findings and recommendations.

Larger projects, such as those with an estimated value greater than \$50 million, or smaller complex projects that are complicated to implement, may also require a Treasury Board approved [concept plan](#) before moving to the business plan stage.

If required, the concept plan provides decision makers with information about the need to address service demand pressures and an analysis of potential service delivery options to meet the need before formally proceeding to a business plan. The concept plan may also include more than one service delivery option for more detailed analysis in the business plan.

The business plan updates and expands upon the concept plan (where applicable) by expanding on the scope of the approved service delivery option(s) and provides a more thorough analysis to support decision making, particularly for procurement model options and funding analysis. The business plan also seeks formal approval from Treasury Board to proceed with delivery of the project.

For projects that move onto business plan development, project teams may need to update the content carried over from the concept plan depending on how much time has lapsed between documents, whether circumstances have changed, or new information is available. The concept plan is meant to inform the business plan but there may be significant changes between the two documents which should be identified and explained in the business plan.

If a project does not have a concept plan, all the requisite analysis is captured in the business plan.

Does the project require a concept plan first? Does the project already have a concept plan? If so, how does this affect the analysis and information required in the business plan?

2.2 GOVERNANCE

Ministries and agencies should establish a governance structure to support effective planning and project delivery proportionate to the size and complexity of the project. Common governance structures include steering committees, project boards or working groups. For smaller projects, it may be appropriate for a project owner or executive sponsor to fulfill the governance function.

Project boards may oversee one or several major capital projects currently under development by the ministry or agency. The composition of the governance structure varies depending on the needs of the project (e.g. representation from the regional hospital district or school board) and may include deputy ministers, executives of agencies and other senior executives. Ministries and agencies may also consider gender and diversity when establishing a governance structure to ensure different perspectives are recognized and incorporated into decision making and project design.

Ministries may also need to clarify governance roles, responsibilities and expectations with agencies if applicable.

Has a governance structure been established? Does this governance body represent the diversity and interest of user groups and key stakeholders?

2.3 IDENTIFY APPROVAL REQUIREMENTS

Ministries and agencies should identify the approvals required for each stage of their business plan and determine how long approvals are expected to take. This includes any approvals required by governance bodies, other levels of government, ministry or agency executives, boards of directors, ministers, Treasury Board or Cabinet.

Government uses a risk-based approach to capital project approvals. This means submission, approval and reporting requirements vary according to individual project, ministry or agency risk profiles.

Approval processes may also vary depending on the project complexity and the specific ministries or agencies involved. For example, internal approvals for a steering committee may only require two weeks, while the approval process for Treasury Board may take six weeks or more.

The project team should consult with relevant staff, such as the ministry TBS analyst, to determine specific approval conditions and to identify anticipated timelines. Ministries responsible for the oversight of agencies will need to clarify their own capital-related approvals with those agencies.

The project team will benefit by planning approvals efficiently and should consider adding these milestones to the detailed planning schedule in a purposeful manner. For example, the guiding principles, project objectives, criteria and measurement methods for service delivery options may all be approved at the same time although they are presented linearly in this document.

Failure to plan decision points and schedule meetings to obtain approvals well in advance may result in project delays.

Have the appropriate project approvals been identified, mapped out and scheduled?

2.4 PROJECT LEADERSHIP

In addition to a robust governance structure, ministries and agencies should establish a project team to support the development of a detailed business plan.

The project team, typically comprised of ministry or agency employees, is a dedicated project resource. The project team is responsible for identifying approvals, coordinating consultations (e.g. user groups and executive), managing professional consultants (e.g. architects and engineers) and drafting the business plan for government approval.

Ministries and agencies should also ensure project teams include staff with expertise in developing business plans for capital projects. Ministries and agencies may consider hiring external experts if the internal capacity does not exist.

At minimum, the project team should include the following roles:

- **Chief Project Officer or Project Director:** Takes ultimate responsibility for the project scope, budget and delivery schedule. Represents the project team to the ministry and agency executive, other decision makers (e.g. Boards of Education) and user groups, and reports to the project's governance body;
- **Program Lead:** Manages the project's associated public program or the development of the program if applicable and coordinates user group sessions;
- **Technical Lead:** Manages the team of architects and engineers during the development of the indicative design (or equivalent); and
- **Administrative Coordinator:** Assists in managing schedules, consultant contracts and provides other administrative support.

Does the project team include staff with the required expertise? Have roles and responsibilities been clearly defined and communicated?

2.5 ADVISORY CONSULTANTS

The project team is supplemented by external advisors as needed. Legal advisors are not usually required for the development of a business plan.

Key consultants such as architects, engineers and cost estimators should be engaged early in the business plan process to help develop the project's requirements and budget.

Common advisory consultants employed throughout the project may include:

- **Architect and Engineering Team:** Prepares the project's indicative design or equivalent, identifies the primary building material (e.g. mass timber, steel and concrete), performs energy modelling and analysis, determines civil and municipal requirements on and off site, plans mechanical and electrical systems and informs construction assumptions such as the schedule;
- **Quantity Surveyor / Cost Estimator:** Produces the Class "C" cost estimate ([see Infrastructure BC's guidance document](#) on infrastructure capital budgeting for more information);
- **Health and Accommodation Programmer:** Develops the functional program;
- **Information Management and Technology Security Consultant:** Assists in the development of the indicative design (or equivalent) and project requirements;
- **Special Advisors (e.g. heliport, geotechnical, environmental):** Assists in the development of the indicative design and project requirements.
- **Equipment Advisors (e.g. medical equipment, food services):** Prepares and price equipment lists; and

- **Business Advisor:** assists with procurement models which involve private financing (e.g. Design-Build-Finance).

Have the required consultants been determined and engaged to help develop the business plan development?

2.6 DEVELOP A WORK PLAN

A work plan assists business plan development by incorporating project management best practices. To create a work plan, the project team identifies the key deliverables and milestones needed to complete the business plan, usually in consultation with user groups, advisory consultants, key stakeholders and Indigenous representatives. The work plan should include the approvals identified in section [2.3](#).

In the context of capital projects, a deliverable is any output created during business plan development such as an indicative design drawing or a construction cost estimate. A milestone is a specific point in time used to measure the progress of a project such as completing a deliverable on schedule or obtaining an approval.

To create a detailed work plan the project team identifies the specific tasks needed to achieve deliverables, the dependencies between them, responsibility for the task, duration and any key dates to consider. Project teams may find project management tools and software useful aids to complete work plans.

Project teams should be realistic about the time and effort required to develop a business plan. A project team may take longer than one year to develop a business plan for a major capital project depending on complexity and experience. This includes time to develop the major components of the business plan, work with consultants and secure approvals.

Has the project work plan been developed in consultation with relevant stakeholders and consultants? Does it outline key deliverables and milestones?

3. BUSINESS PLAN DOCUMENT - INTRODUCTION

3.1 EXECUTIVE SUMMARY

The purpose of an executive summary is to introduce decision makers to the main elements of the project such as the service delivery and procurement model recommendations, the proposed project budget and the decision request. Although presented first, executive summaries are typically drafted once most of the business plan has been prepared to ensure the content is consistent throughout the document.

Executive summaries should be concise and focused; best practice suggests the executive summary should be no more than ten percent of the total length of the business plan. The project team should organize the executive summary to mirror the structure of the business plan as outlined in this guidance document.

Does the executive summary provide a succinct overview of the key elements and scope of the project, the recommended service delivery and procurement model options and the decision request?

3.2 APPROACH

The business plan should include a brief section outlining the organizations represented on the project team and the main tasks and approach used in developing the business plan. This section may be separate from, or contained within, the executive summary. The project team should also identify any consultants involved in preparing and writing the business plan.

For example, a statement outlining the approach used to determine the functional program may state “used the demand forecast and workload projections to develop a functional program to describe the services required over a 25-year horizon.”

This section may also highlight whether quantitative and/or qualitative analyses were used and in what sections.

Is a high-level description of the analytical framework the project team used to develop the business plan included?

4. BUSINESS PLAN DOCUMENT – PART A: NEED FOR INVESTMENT

The purpose of Part A of the business plan is to provide background information and rationale for the project. Part A should provide relevant context and clearly demonstrate how the existing infrastructure does not meet the needs of current or future service demand in its present state. This is accomplished by describing the capital asset's current condition (including functionality) and future demands on the existing infrastructure and the services it supports (including any capabilities and limitations).

It is important to outline the main reasons for the proposed capital investment to facilitate decision making and to support the further development of service delivery options in Part B of the business plan.

For those projects with an approved concept plan, Part A of the business plan should be carried over and updated from Part A of the concept plan as required. This is particularly relevant if a year or two has lapsed since the project team developed the concept plan or if Treasury Board placed any conditions on the concept plan's approval.

4.1 BACKGROUND AND CONTEXT

Decision makers need relevant background information to make sound choices. The content of this section will vary by project but generally includes identifying the project owner, key user groups and stakeholders, the ministry's or agency's mandate to deliver services or programs, any direction from senior levels of government and references to other strategic plans, programs and key initiatives.

First, clearly identify the project owner (e.g. ministry or agency) and describe its mandate or authority for providing the program or service. Identify any user groups and key stakeholders or partners that need to be consulted or involved during the project, including consultations with equity-seeking groups and the potential to partner with Indigenous communities.

Second, identify any linkages to strategic plans or direction from government, ministry or agency leadership. This may include references to broad government priorities, mandate letter direction or key goals in a service plan. It may also include any public commitments made by government or the ministry or agency relevant to the services provided through the infrastructure. [Appendix C](#) outlines some government priorities which may be applicable to capital projects.

Finally, provide any other relevant contextual information as necessary. This may include assumptions, constraints, critical timing issues, commitments by partners or other requirements that affect the project, including conditions imposed by Treasury Board.

Project teams should limit the background information in the body of the business plan to what decision makers need to understand the proposed project. However, project teams must demonstrate due diligence by providing relevant information in appendices to the business plan and maintaining project documentation in accordance with government policy. Although each

project is unique, [Appendix D](#) provides examples of typical appendices in capital building and transportation projects. The [Capital Project Documentation Checklist](#) helps ministries and agencies record the key capital project documents in a project file and determine who should keep them.

Have the project owner, key stakeholders and project partners been clearly identified? Have the project's drivers and strategic linkages been explored and identified? Are there any important assumptions, constraints or other contextual information that should be communicated?

4.2 CURRENT CONDITION, DEMAND AND NEED FOR INFRASTRUCTURE

The purpose of this section is to establish a baseline understanding of the current infrastructure and its ability to meet program requirements or deliver services. This section should clearly identify the current condition of the existing asset and program, any problem that requires a solution and the need for capital investment by identifying:

- The asset(s) currently used to support program delivery, including the date of construction, renovation or addition, and current asset condition, service demand and needs;
- Any significant risks or issues that have emerged with service delivery, including inequitable access to services and climate risks such as wildfires and/or floods; and
- How the owner is managing these risks and any outstanding concerns (e.g. client/staff safety, negative effects on service quality, over-crowding of facility space, lengthy travel times on roads/ bridges, high vehicle accident rates, backup power supply, cross-dependencies with other infrastructure).

The assessment should also include a broad enough geographic region to understand how neighbouring facilities or infrastructure may be influencing the current situation.

For those projects with an estimated total capital cost over \$50 million, the business plan should include a detailed analysis of the expected asset condition, any related capacity constraints/risks and proposed risk management arrangements for the status quo option over the long term (e.g. twenty years). This will include identification and quantification, wherever possible, of the following:

- Current and forecast asset condition over the long term, referencing the Facility Condition Index where appropriate, assuming regular/routine maintenance levels;
- Key risks that may emerge over the forecast period (e.g. client/staff safety risks, climate risks, facility condition concerns and legal/policy standards for service delivery);
- Proposed mitigation strategies (e.g. significant upgrades to building systems and roads); and

- Residual/remaining risks.

What is the current facility status? Is there a Facility Condition Index (if existing infrastructure)? Have the program demand requirements been established? What are the main risks and problems with the current infrastructure and how are they being mitigated?

4.3 FUTURE DEMAND OR NEEDS REQUIREMENTS

This section summarizes the future demand forecast and whether the existing infrastructure supports future program needs as demonstrated by available data such as: demographic forecasts (including for different subpopulations), changes to service levels or programs, anticipated changes in the future use of assets over the long term, or climate considerations that may affect the infrastructure or critical systems.

This data should be presented via a comprehensive analysis that justifies the need for a capital investment. For example, information should include:

- Forecasted demand for the government service (e.g. client caseload growth and composition, forecast traffic volumes) over the medium or long term with a description of the extent to which the capacity and/or functionality of the existing asset(s) can or cannot meet the forecasted demand or purpose (e.g. forecast changes in facility space utilization rates, change in program policies, travel times on transportation corridors). Efforts should be made to identify trends such as technological or climate trends that may materially affect future need; and
- Condition of the existing asset(s) using established measures (e.g. facility condition index, road/bridge condition indices) to determine whether the condition of the asset(s) can adequately meet future service needs.

Does the demand forecast demonstrate the inability of existing infrastructure to meet future needs?

4.4 CONCLUSION

The conclusion should clearly state the need for investment by demonstrating how the existing infrastructure fails to meet the needs of current and/or future program demand due to condition, functionality and/or capacity. The conclusion may include an assessment of whether the existing infrastructure aligns with strategic plans. The project team should also distinguish between current needs and future needs to allow for the prioritization and phasing of projects across government.

Is enough information available for Treasury Board to prioritize or phase the project in the context of competing funding demands?

5. BUSINESS PLAN DOCUMENT – PART B: SERVICE DELIVERY OPTIONS ANALYSIS AND PROJECT SCOPE

Part B sets out the key aspects of the project consistent with the need for investment identified in Part A. This includes the project principles and objectives, functional program, service delivery options analysis, primary project schedule, high-level cost estimate and recommendation for the preferred option for project service delivery.

Finally, the scope of the recommended service delivery option is presented and tested in the indicative design or other evidence to support a Class “C” cost estimate in the procurement options analysis.¹

5.1 GUIDING PRINCIPLES AND PROJECT OBJECTIVES

This section identifies and describes the guiding principles and objectives for the project to inform decision making and support the evaluation of project success during project close out.

Guiding principles are qualitative, high-level statements of values used to steer decision making for the project. For example, a guiding principle for a hospital project may be “delivery of high-quality health services” with a brief explanation to ensure its meaning is clear.

Public policies and initiatives reflect the overarching priorities of government and should be incorporated into the guiding principles and project objectives as appropriate. Examples include delivery of gender inclusive, mass timber and/or climate resilient buildings and culturally appropriate spaces. Project owners may elect to include public policies in the guiding principles or project objectives for a project. Treasury Board budget and approval letters may also outline requirements.

Project objectives are specific goals used to measure the success of a project. Objectives should be as focused, precise and limited to a reasonable amount. The project objectives should be measurable and outcomes-based to support the criteria required for the service delivery options analysis, and a performance management and reporting framework for the project.

Project teams should also describe how each of the objectives will be measured following completion of the project. Table 1 provides an example of how the project objectives, service deliver options analysis criteria, criteria definition and measurement method may be reflected in the business plan.

¹ Transportation projects may use a scope statement identifying specifically what is and is not included in the scope of work for the project to prepare for a cost estimate. Elemental parametric estimating and detailed costing may be used in transportation projects instead of an indicative design for planning and approval purposes. See the [MOTI-Project Cost Estimating Guidelines](#) for more information.

Table 1: Example of Project Objectives, Options Analysis Criteria and Measurement Methods

PROJECT OBJECTIVE	CRITERIA	CRITERIA DEFINITION	MEASUREMENT METHOD
Incorporate evidence-based design features that support trauma-informed services, improve the healing environment, enable culturally safe care for Indigenous people and are welcoming to all communities served by the project.	Provide quality healthcare.	<p>Create an environment that is conducive to recognizing and responding appropriately to the needs of trauma survivors.</p> <p>Create a patient-centred environment through exposure to nature and sunlight that can help patients and families cope with the stress that accompanies illness.</p> <p>Create an environment that respects the Indigenous culture and enables culturally safe care.</p> <p>Create an environment that is welcoming to all communities served by the new hospital.</p>	Client survey with questions related to the project's objectives every three years.

The project team should develop guiding principles, project objectives, criteria and measurement methods in consultation with the governance body established for the project. Ministries and agencies should also ensure all key stakeholders and partners have a consistent understanding of what is to be achieved from the project.

Have the guiding principles and project objectives been established in consultation with the governance body? What outcomes-based criteria have been provided to measure the attainment of the project objectives?

5.2 PROJECT FUNCTIONAL PROGRAM

A functional program is a pre-design document that describes the functional requirements for the various program components to be included within the scope of a project. It is a detailed description of the service delivery activities with an estimate of the space² and staff resources

² Describes space requirements, adjacencies and spatial relationships. If a project has a concept plan that involves more than one facility, a master program and master plan would have been developed to

needed to operate. The functional program remains the same regardless of what service delivery option is recommended (e.g. build new or renovate) to meet the future demand forecast and need for investment identified in Part A.

The functional program provides a vital link between operational planning and project implementation. Depending on the project type, functional program considerations may take many forms as illustrated by the examples below.

- **Transportation Sector:**
 - **Transportation projects:** requirements such as length of road/highway, number of lanes, HOV lanes and number of interchanges; and
 - **Transit projects:** requirements such as route, number of stations/stop and schedule of service.
- **Health Care Sector:**
 - **Hospital projects:** number of inpatient beds, operating rooms, department adjacencies, and other relevant components; and
 - **Long term care projects:** component sizes (e.g. size of residential care units), number and types of beds (e.g. dementia, complex care, assisted living), mobility needs, parking spaces and other relevant components.
- **Energy Sector:**
 - **Generating station projects:** requirements of major facility components and systems such as water conveyance, bypass system, hydraulic transient management system, environmental flow release system; and
 - **Worker accommodation projects:** lobby and registration, guest rooms, food services, fitness facilities, general recreation and training.
- **Public Safety Sector:**
 - **Correctional facilities:** the number of cells, security classification of cells and a general description of the programs.
 - **Courthouses:** the number, classification, and security of courtrooms, hearing rooms, and a general description of the components within the building supporting court activities.

provide a conceptual configuration for the project. For the business plan, a functional program provides more detail to enable an architect to begin designing the building or space.

- **Education Sector:**

- **K-12 schools:** number of students, special purpose rooms, outdoor facilities and gathering spaces.

The above is not a comprehensive list and varies significantly by sector. Project teams should use internal (e.g. user group consultation) and external expertise as necessary to identify any additional requirements (such as industry standards for education and health care) relevant to their specific circumstances to capture program elements.

The overall description should be as comprehensive as possible to inform decision making without resulting in unintended constraints for the procurement phase of the project.

Has the Functional Program (i.e. accommodation schedule or space needs) been summarized in the business plan?

5.3 SERVICE DELIVERY OPTIONS ANALYSIS

Linkage to Concept Plan

For projects with a [concept plan](#), project teams should use professional judgement to determine what information from the concept plan relating to service delivery options should be transferred to the business plan to reduce repetition while providing relevant context and any updates as required.³

For example, if one service delivery option was recommended in the concept plan, the project team may choose to carry over the information to the business plan and provide more detail (e.g. create a functional program based on the master program, update financial information, scope and timelines etc.).

If more than one service delivery option was contemplated in the concept plan, the project team may decide to start with the shortlist of options for further analysis, while providing some reference to how the scope was narrowed in the concept plan. In some cases, it may be appropriate for the project team to include the concept plan as an appendix for reference.

Regardless, Part B of the business plan must conclude with only one recommended service delivery option.

For those projects without an approved concept plan or similar document, the project team should complete the service delivery options analysis as outlined below in the business plan.

³ For example, Treasury Board may have provided direction to inform the service delivery options in the business plan.

Service Delivery Options Analysis Process

The service delivery options analysis should first consider non-capital strategies before capital strategies. Identifying feasible non-capital strategies can save ministries and agencies significant time and resources. If a non-capital service delivery option is identified and shown to meet the need and project objectives, ministries and agencies may stop the business plan development process to pursue operational strategies accordingly.

If capital strategies are pursued, project teams should identify all viable capital service delivery options and define the preliminary project scope before assessing the capital service delivery options against defined, qualitative criteria to produce a short list of options within the scope of the project.

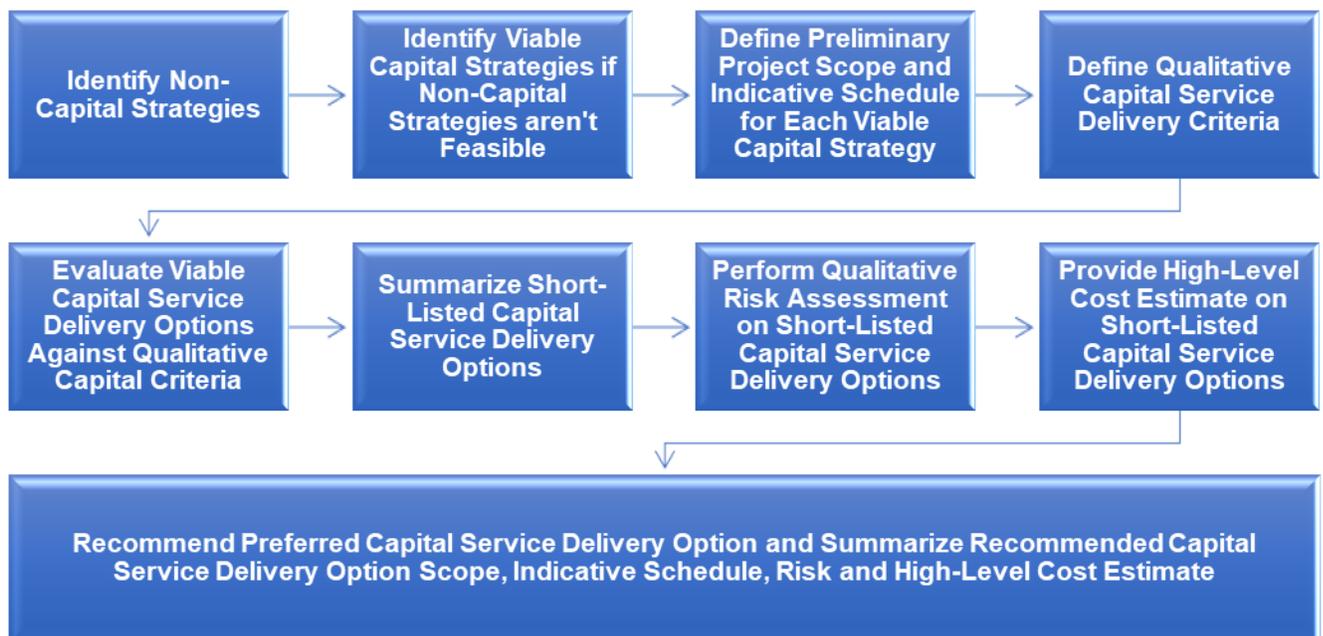
Next, the project team should perform a qualitative risk assessment and a minimum Class D or equivalent order of magnitude cost estimate on the short-listed capital service delivery options to determine the recommended option.

The conclusion to the service delivery options analysis should recommended the preferred capital service delivery option and summarize the recommended option's project scope, indicative schedule and cost estimate.

Ultimately, the recommended option will form the basis for further analysis in Part C and Part D of the business plan.

Figure 1 outlines the service delivery options analysis.

Figure 1: Service Delivery Options Analysis Process



5.3.1 NON-CAPITAL STRATEGIES

The service delivery options analysis section should begin by identifying non-capital strategies which may meet the need for investment established in Part A, the project objectives and the functional program described above. All viable options should be identified and evaluated.

Examples of alternative strategies include extending a lease, program redesign and reconfiguration of existing infrastructure or of program service delivery arrangements (e.g. moving program/service to larger facility, redirecting clients to other locations with capacity or extending hours of service delivery, technological solutions).

If no alternative strategies are identified, the project team should provide a description of the non-capital strategies considered and justification to support the decision not to proceed with the non-capital strategies before continuing the business plan.

Have all viable non-capital strategies that meet the need for investment established in Part A been considered? Is there enough justification to proceed with a capital strategy?

5.3.2 CAPITAL SERVICE DELIVERY OPTIONS

After the guiding principles/project objectives are established and the project team confirms there are no feasible non-capital strategies, the project team should identify and describe the service delivery options it will assess.

The project team should collectively select options unique to the specific project being analyzed. Typical service delivery options include:

- Status quo (as a basis of comparison);
- Renovate/remediate/expand existing infrastructure;
- Build new infrastructure on existing site; and
- Build new infrastructure on a new site.

New infrastructure may include temporary, short-term, consolidated or modular buildings where appropriate. The potential for using a repeat design should also be considered.

If some options are considered but then dropped from the analysis, the project team should provide the justification for removing them from further consideration. The project governance body (as established under section [2.2](#)) should approve the range of capital service delivery options identified. The project team may seek to obtain approvals for the options at the same

time as the capital service delivery criteria they will use to evaluate those options under the chosen decision-making framework.

Have all relevant service delivery options been considered in consultation with the governance body? Which options were dropped and why?

5.3.3 PRELIMINARY PROJECT SCOPE SUMMARY

This section should summarize the key elements of the functional program outlined in [5.2](#). In addition, this section should describe the scope (at a high-level) for each viable capital service delivery option including an indicative schedule for design (including tenders) and construction.

If any of the options include plans to build on the existing site, the concept plan should also include a description of the new construction's potential effect on the existing facility's operations and how that could be managed during construction.

In addition, legislation such as the *Wood First Act* may apply to specific projects and necessitate additional analysis. Ministries and agencies should seek advice where appropriate to determine what legislation applies to their projects.

Treasury Board direction or Ministry budget letters may also outline additional requirements the ministry or agency must include in the project scope (e.g. energy efficiency requirements, community benefits, gender and equity group analysis, climate considerations).

Does the preliminary project scope capture the requisite legislation and Treasury Board direction?

5.3.4 CAPITAL SERVICE DELIVERY CRITERIA: QUALITATIVE

Next, the project team should identify the qualitative capital service delivery criteria to evaluate the viable service delivery options. Project teams should avoid using criteria in which the assessment does not differentiate between options as similar outcomes do not add much value to the analysis.

The criteria are unique for each project and should link directly to the project objectives, guiding principles and associated measurement methods (i.e. success factors).

Each criterion should be clearly defined and documented. Examples include:

- **Public interest:** how the service delivery option meets the needs of different populations within the public;
- **Strategic alignment:** how the service delivery option contributes to the government's and project owner's strategic goals, objectives and priorities, including the ministry goals as defined in service plans;
- **Legislative and regulatory:** how the service delivery option meets current legislation, regulation, permit or policy requirements and potential changes in these areas including examples with specific application such as the *Hospital Act* (in the case of hospitals) and those with more general application such as the *Wood First Act* (in the case of all publicly funded buildings);
- **Service delivery gap:** how the service delivery option meets the future service demand for the infrastructure identified in Part A of the business plan;
- **Quality of service:** how the service delivery option affects the service quality from the end users' point of view (e.g. less waiting time, convenience and safety);
- **Site specific considerations:** how different sites impose different limitations or opportunities relevant to service delivery;
- **Expected life of the asset:** how long the service delivery options establish service delivery comparatively;
- **Effect on operations:** how the service delivery option affects an operating facility (e.g. how does new construction or renovation impact the existing and operational facility);
- **Attract and retain employees:** how the service delivery option affects the retention, hiring and diversity of new employees;
- **Functionality and flexibility:** how the service delivery option may be altered over time to meet future change and growth; and
- **Operational efficiency, effectiveness and value for money:** how the service delivery option impacts the cost of providing the services and whether efficiencies can be implemented.

Do the qualitative criteria used to assess the viable service delivery options highlight the differences between options and link to the project's overarching guiding principles and objectives?

5.3.5 QUALITATIVE ASSESSMENT METHODS

There are many qualitative methods to assess service delivery options. Regardless of the method(s) project teams use it is important to clearly describe the assessment methodology in the concept plan so readers may understand how the project team arrived at the short-listed service delivery options resulting from the analysis.

Project teams should develop a process complementary to their project. Smaller, less complex projects may benefit from one assessment method such as a Multiple Criteria Analysis and larger projects may benefit from a combination of assessment methods used for different decision points as part of a larger decision-making framework.

The following are examples of assessment methods that may be used or amended as required.

5.3.5.1 SCORED ASSESSMENT

Under the scored assessment method, all options are contrasted against each discrete objective and subsequently scored based upon the extent to which they satisfy or achieve the respective criteria. The options with the higher overall scores will ultimately be the short-listed service delivery options. Typically, specific objectives are not ranked or weighted, and all objectives carry an equal value; however, that approach may change depending on the project objectives and the governance body's direction.

Table 2: Scored Assessment Example

OBJECTIVES	OPTION 1	OPTION 2	OPTION 3	OPTION 4
Operational efficiency, effectiveness and value for money	75	65	30	45
Service delivery gap	30	45	15	35
Efficient use of capital	45	50	25	40
Total	150	160	70	120
Note: All Objectives scored out of 100; highest possible score is 300.				

5.3.5.2 WEIGHTED ASSESSMENT

Prior to scoring, individual objectives are weighted (out of a total of 100%) for their relative importance. Following the weighting exercise, all options are contrasted against each discrete objective and subsequently scored based on the extent to which they satisfy or achieve the respective criteria. Scores are then adjusted based upon the pre-established weighting methodology. Again, the option with the highest overall weighted score is the successful option.

Table 3: Weighted Assessment Example

OBJECTIVES	WEIGHT	OPTION 1		OPTION 2		OPTION 3		OPTION 4	
		S	WS	S	WS	S	WS	S	WS
Operational efficiency, effectiveness and value for money	50%	80	40	60	30	30	15	50	25
Service delivery gap	25%	30	15	40	20	20	10	30	15
Efficient use of capital	25%	40	20	60	30	20	10	40	20
Total Weighted Score	100%	75		80		35		60	
Note: All Objectives scored out of 100; due to weighting highest possible score is 100.									

5.3.5.3 RANKED GATING

Under the ranked gating method, objectives are ranked by descending order of importance; however, the values associated with each objective remain equal and constant. Once the ranking process is complete, each discrete objective is subsequently evaluated based upon the extent to which they satisfy or achieve the respective criteria. Unlike the whole assessment method, the lowest scoring option under each objective is abandoned and does not proceed to the next stage or 'gate' in the analysis. Objectives are not weighted under the ranked gating method and ultimately only two options may be fully scored.

Table 4: Ranked Gating Assessment Example

OBJECTIVES	OPTION 1	OPTION 2	OPTION 3	OPTION 4
Operational efficiency, effectiveness and value for money	75	65	30	45
Service delivery gap	30	45	XX	35
Efficient use of capital	XX	50	XX	40
Total	XX	160	XX	120
Note: All Objectives scored out of 100; highest possible score is 300.				

5.3.5.4 MULTIPLE CRITERIA ANALYSIS (MCA)

The MCA method is also often used to assess procurement options in Part C of the business plan. Applying an MCA requires professional judgement to determine how well each option meets the criterion's need. The primary benefit of the MCA is flexibility. Using a numerical scoring system is not recommended as it can obscure the nuance of analysis. The following scoring system for evaluating how well the option meets the criterion's need is recommended.

Table 5: MCA Scoring Example

X	✓	✓ ✓	✓ ✓ ✓
Option fails to meet basic service or program requirements.	Option minimally meets the service or program requirements.	Option adequately meets the service or program requirements.	Option strongly meets the service or program requirements.

Results of an MCA are typically presented in a table format and show the scoring of each criterion for each option. A summary table should be included in the body of the business plan, with any critical explanatory comments. More detailed qualitative commentary to justifies scores should be provided in an appendix. A consistent and robust rationale should be provided to support the scoring.

Table 6: MCA Assessment Example

CRITERIA	OPTION 1	OPTION 2	OPTION 3
Operational efficiency, effectiveness and value for money	✓	✓ ✓	✓ ✓ ✓
Service delivery gap	✓ ✓	✓ ✓ ✓	✓ ✓
Efficient use of capital	✓	✓ ✓ ✓	✓

5.3.5.5 MULTIPLE ACCOUNT EVALUATION (MAE)

Transportation projects may use multiple account evaluations which is a multi-criteria decision matrix tool that systematically looks at four ‘accounts’: financial, customer service, environmental and social. A fifth account, economic development, may apply. See the Ministry of Transportation and Infrastructure’s [Options Evaluation Guidelines](#) for more details and example tables.

5.3.6 CONCLUSION OF THE QUALITATIVE CAPITAL SERVICE DELIVERY ANALYSIS

The conclusion of the qualitative capital service delivery options analysis should summarize the short-listed options that meet the project objectives/criteria.

The conclusion should also describe those capital service delivery options that do not meet the project objectives/criteria and recommend they be dropped from future consideration.

5.3.7 OPERATIONAL RISK ASSESSMENT

Risk assessment is an important part of the decision-making framework. Risk is defined as the effect of uncertainty on objectives. Risk management is the structured and disciplined effort to understand and treat risk, reduce uncertainty and better meet or exceed goals and objectives.

In practice, risk management is the action, or planned action, that may affect the probability and/or consequence of a risk event occurring to ensure the level of assumed risk falls within the acceptable limit for the ministry and agency.

Risk assessments in Part B entail a qualitative assessment which documents risks, their probability of occurrence (rare, unlikely, moderate, likely or almost certain), a range of possible consequences, strategies to prevent negative risks from occurring and mitigation if the risks do occur.

The risks identified in Part B are used solely for analyzing service delivery options and should focus on risks to operations and construction. A separate, more robust risk assessment which focuses on project delivery is performed in Part C as part of the procurement options analysis. Risk assessments are typically presented in a risk matrix. The risk matrix may be accompanied by a risk report which describes the approach taken for assessing risks. These may be included as an appendix. The summary results of the risk assessment are usually presented in a table format in the business plan.

Table 7: Risk Summary Table Example

RISK	DESCRIPTION	OPTION 1	OPTION 2	OPTION 3
Existing Operations	Construction negatively affects existing operations.	Medium	Low	Low
Renovation Risk	Risk associated with the general unknowns associated with a renovation project.	High	Low	Low
Environmental Assessment	Unknown contaminants are discovered during construction.	Low	High	Medium

Wherever possible, analysis and conclusions should be supported by documentary evidence such as technical reports which support the risk assessment or attest to the levels of service that may be achieved by different options.

Projects teams with projects that exceed a total capital cost of \$50 million with high-ranking risks (i.e. high probability of occurrence and high impact) should provide a high-level description and assessment of key risks to present a range of likely cost outcomes between options. Project teams may base these estimates on recently completed projects if available.

For projects with a concept plan, the risk assessment may be carried over to the business plan and expanded if necessary.

Project teams are encouraged to consult with specialists to conduct a thorough risk assessment of the project’s service delivery options and the procurement model options explored in Part C. Ministries and agencies may contact the [Risk Management Branch & Government Security Office](#) for advice and assistance when conducting a risk assessment related to government programs or procurement initiatives. [Infrastructure BC](#) may also assist.

Has an operational risk assessment been performed and summarized in the business plan?

5.3.8 CAPITAL SERVICE DELIVERY CRITERIA: QUANTITATIVE

Project teams are also expected to use quantitative methodologies to assess the short-listed service delivery options resulting from the qualitative assessment to provide high-level order of magnitude cost estimates which as a minimum may be expressed as an indicative Class “D” estimates or equivalent.

Project duration has a significant effect on cost. The cost estimates should be based on the relevant preliminary project schedules outlined in section 5.3.3. and on a Design-Bid-Build procurement model to maintain procurement neutrality between options.

The preliminary project schedules should outline the key assumptions or factors relevant to the schedules such as construction duration, program or delivery constraints, seasonal and weather impacts, permits, re-zoning (if required), coordination with other projects or initiatives and government commitments. The project’s cash flows should also be presented.

Part B of the business plan should describe the short-listed service delivery options and that description should be as comprehensive as possible to support a Class “D” cost estimate at this stage of analysis.

Has a Class “D” cost estimate (at minimum) with the corresponding cash flow and project schedule been provided? Was a Design-Bid-Build model used to neutrally compare options?

5.3.9 RECOMMENDED SERVICE DELIVERY OPTION

Finally, the service delivery options analysis should conclude with a recommendation for the preferred service delivery option that clearly flows from the analysis. The conclusion should state the recommendation, the justification and the relative importance of specific criterion or other considerations from the assessments. There must be only one recommended service delivery option on which to base the analyses in Part C and D.

Does the service delivery options analysis conclude with one service delivery option?

5.3.10 ADDITIONAL PROJECT DETAILS / PROJECT SCOPE SUMMARY

This section should include a summary of the comprehensive project scope before moving on to the description of the recommended service delivery option via the indicative design.⁴

⁴ Reference Concept is the term most commonly used in transportation. Other evidence to support a Class “C” cost estimate may also be used instead of an indicative design such as plans for a comparable project or detailed architectural descriptions. For the purposes of this document, indicative design is used to refer these design tools.

Has the project scope for the recommended service delivery option been clearly and thoroughly explained?

The project scope may include additional details not captured in the project's functional program such as parking requirements, sustainability assessments and site analyses.

5.3.11 INDICATIVE DESIGN OF RECOMMENDED SERVICE DELIVERY OPTION

This section describes the recommended capital service delivery option, connects it directly to the identified need for investment and project objectives and includes the indicative design or equivalent.

An indicative design includes the total building envelope, including exterior walls, site implications and general size and placement of the project. The indicative design or equivalent presents a summary picture of the physical project, including characteristics of the building appearance such as layout, building height, primary building material (e.g. mass timber, steel, concrete), building orientation, massing and relation to existing infrastructure.

The main purposes of the indicative design or equivalent at the business plan stage are to: test fit the program to the site; verify viability of the adjacency requirements; support a Class "C" cost estimate for funding approvals; and to assist with risk assessment. Energy and emissions modelling reports may also be summarized and costed in this section.

Project teams should only invest as much design work as is necessary to obtain a Class "C" cost estimate, which is expected to be within +/- 15% of the total actual costs. These estimates are typically prepared by professional cost estimators retained for the project as part of the procurement options analysis (Part C).

Does the indicative design connect to the need for investment and project objectives? Is there enough information in the indicative design (or equivalent) to conduct a Class "C" cost estimate in Part C?

6. BUSINESS PLAN DOCUMENT – PART C: PROCUREMENT OPTIONS ANALYSIS

The purpose of this section is to guide decision makers through the procurement options analysis so they may endorse the recommended procurement model for the project. The analysis is only performed on the preferred service delivery option identified in Part B, unless otherwise directed by Treasury Board.

For those projects with a concept plan, Part C of the business plan will need to be further developed. The project team should thoroughly explore the procurement models described in the concept plan and additional models if necessary.

The procurement options analysis in the business plan should include for each of the short-listed procurement models: a market sounding to determine the feasibility of procurement models; identification of procurement objectives; description of viable procurement models; qualitative assessment of the procurement options (typically in a MCA format); and quantitative assessment of the procurement options, including the risk assessment.

This enables the project team and decisions makers to evaluate how different procurement models may deliver the project in the most efficient and effective way while meeting the project's overall objectives and service demand requirements.

6.1 MARKET SOUNDING

Market sounding is a process used to test project assumptions (e.g. procurement model options, construction schedule) to determine if the market is supportive of the project. The market sounding process is generally conducted through interviews with senior officials from relevant private sector design and construction contractors, who may later participate in the proposal processes of the procurement phase.

Market sounding indicates whether market competition for a specific project is likely and whether the different procurement options are feasible. Market interest and capacity is one of the recommended criteria for use in the Multiple Criteria Analysis referenced below. The interviews may also solicit private sector impressions on the project's schedule, risk profile and other attributes to inform business plan planning.

The project team should document any meetings or communications with market sounding participants, typically on a not for attribution basis, and provide a summary of key findings from the market sounding in the business plan. For projects not yet approved, the project information shared with the market is provided in confidence. Fairness in future procurements must also be maintained. For example, estimated project costs may be given as a range and not an exact figure.

If the project team pursues a market sounding process, it should seek advice from Infrastructure BC or internal staff with capital construction procurement experience.

Would the project benefit from a market sounding to determine if there is any market interest in, or capacity to build, the infrastructure?

6.2 PROCUREMENT OBJECTIVES

This section identifies the key procurement objectives⁵, which relate to the overall project objectives. As with the project objectives, procurement objectives should be developed by the project team in consultation with the project's governance body.

Objectives, and the level of assessment, may be tailored to suit the unique needs of a project, examples include:

- **Schedule certainty:** how the option affects the ability to complete the project on schedule;
- **Cost certainty:** how the option provides the project owner with price certainty during the design and construction phase, as well as over the long-term operations;
- **Opportunity for innovation in design:** how the option affects the ability to encourage innovation which may result in achieving government policy goals (e.g. use of mass timber), cost savings or schedule improvements or improvement of project outcomes (e.g. health outcomes for patients);
- **Market interest and capacity:** how robust the market is across the various options;
- **Optimizing risk management and allocation:** how the option affects the ability to optimize risk allocation, including risk management, between the project owner and the contractor;
- **Operational efficiency:** how the option ensures long-term maintenance;
- **Optimization between capital, maintenance and life cycle costs:** how the option affects the ability to optimize upfront capital cost investments with long-term operating and life cycle implications;
- **Service disruption and transition:** how the option influences the delivery of services during procurement, construction and transition;

⁵ In procurement options analysis, procurement objectives and procurement criteria are functionally the same.

- **Functionality and flexibility:** how the option meets key functionality specifications and the option's adaptability for future changes and growth, for instance, the process and cost of change orders;
- **Facility commissioning and completion of deficiencies:** how the option affects the ability to successfully complete commissioning and resolve deficiencies on schedule and on budget; and
- **Staff impact:** how the procurement option allows for the recruitment, training and retention of new staff and how the procurement option impacts existing staff both directly and indirectly.

Which of the recommended procurement objectives are suitable for the project? Are any unique procurement objectives needed to align with the overarching project objectives?

6.3 PROCUREMENT MODEL OPTIONS

Once the procurement objectives are established, the project team identifies the procurement models for further analysis. Procurement models are also selected in consultation with the governance body established at the beginning of the project.

Project teams are expected to consider all viable procurement models for qualitative analysis before shortlisting to two or three models for quantitative/risk analysis. If some procurement models were not considered, the business plan should explain why. If the project has a concept plan, the procurement models from the concept plan should be carried over or a rationale provided if a specific model is no longer under consideration.

Project teams may use several different types of procurement models. These models are grouped into traditional and partnership procurement model categories, with many procurement models existing along the spectrum (depending on where risks and responsibilities are allocated).

Traditional procurement models generally involve ministries and agencies retaining the design firm separately from the contractor while being directly responsible for financing, maintenance and operations (a.k.a. design segregated). Traditional procurement models result in the ministries and agencies retaining more of the risk throughout the capital asset's life cycle, including risks related to project design and construction.

Partnership procurement model options generally involve a greater transfer of risk from the public to the private sector. Partnership procurement models integrate the design team with the contractor (a.k.a design integrated). This arrangement transfers the responsibility of designing and building a functional, constructible asset to the private sector. It also provides increased opportunity for private sector innovation. In partnership procurement models, the ministries and

agencies may also share responsibility for financing, maintenance, and operations with the private sector.

Decision makers select the appropriate model depending on the unique characteristics of each capital project such as: cost, size, asset type, complexity, risk profile, operating requirements and the capacity and experience of the ministry or agency delivering the project.

Standard procurement models are described more extensively [here](#); however, project teams are encouraged to consult with internal or external experts in capital construction procurement to help identify and understand which procurement models should be considered as project options and whether two or three models should undergo quantitative/risk analysis.

Were all viable procurement models considered for preliminary analysis? What models were not considered and why?

6.4 PROCUREMENT OPTIONS ANALYSIS

In this section, the project team presents the procurement options analysis used to support the recommended procurement model to decision makers.

Best practice is for project teams to use a comprehensive qualitative analysis method (typically the MCA) to identify a shortlist of procurement models that meet the procurement objectives. The project team then conducts a quantitative analysis on the two to three shortlisted options and brings it all together for a final recommendation.

The procurement options analysis may differ from the decision-making framework for service delivery options if more than one qualitative assessment method, or an assessment method other than the MCA, was used in Part B.

The procurement options analysis also includes a more robust quantitative analysis that focuses on a financial assessment. For larger or complex projects, project teams should perform a quantitative risk assessment to provide risk-adjusted project costs.

Same as other analyses in the business plan, this document provides guidance and best practices to address a wide variety of capital projects and acknowledges ministries and agencies may need to scale the content of their business plan to match the size and complexity of specific projects.

6.4.1 QUALITATIVE ANALYSIS

The procurement objectives the project team developed in consultation with the governance body in section [6.2](#) also serve as the criteria by which to assess the procurement options.

Best practice is to use the MCA method for procurement options analysis. The MCA process for procurement model options is the same as for service delivery options as outlined in section [5.3.5.4](#) but uses the procurement objectives to compare the procurement model options (as opposed to the service delivery criteria to compare the service delivery options).

Does the qualitative analysis (e.g. Multiple Criteria Analysis) frame the project objectives against the procurement options? Is a summary table and conclusion included in the main body of the business plan? Were two to three procurement models (representing a range of models) shortlisted and presented for further consideration?

6.4.2 QUANTITATIVE ANALYSIS

The procurement options quantitative analysis is comprised of a financial assessment and a risk assessment that ideally results in risk-adjusted project capital costs.

6.4.2.1 FINANCIAL ASSESSMENT

This section includes the methodology and key financial assumptions used to perform the quantitative analysis as well as the construction cost summary, escalation rates and any other pertinent information.

Methodology

Quantitative analysis for partnership procurement models that involve long-term private sector financing (i.e. beyond the construction period) uses a Net Present Value (NPV) analysis⁶. NPV analysis is a tool by which the cost of different options is compared on a like-to-like basis. NPV is defined as the present value of all expected project costs incurred during the construction and operations periods, if applicable.

NPV is calculated by taking all the expected cash flows over the same time frame associated with each procurement model option and discounting them back to a common point in time, usually present day. Stating project costs at a common point in time allows decision makers to directly compare procurement model options on a life-cycle cost basis.

Traditional procurement models and partnership models that do not use private financing and rely on public sector financing may use a nominal cost approach. Partnerships models that use construction-period only private financing (e.g. Design Build Finance) may also use a nominal cost approach. Nominal cash flows reflect the true dollar amount of the project, adjusted for construction escalation⁷ and are summed instead of being discounted.

⁶ Also called Net Present Cost. For transportation projects, it may be referred to as Present Value.

⁷ Construction escalation is inflation specific to goods and services related to construction.

Key Financial Assumptions

A summary of key assumptions should be included as part of the quantitative analysis. This may include things such as the length of the project term, construction duration, start dates, insurance premiums, interest rates and choice of discount rates.

Construction Costs

Construction costs are typically prepared by professional estimators retained for the project and are expressed as Class “C” estimates⁸. The project team should also include assumed construction escalation rates over the project’s construction horizon in this section.

Further guidance on conducting quantitative analysis, including the appropriate discount rate to apply, is available through Infrastructure BC: [Methodology for Quantitative Procurement Options Analysis Discussion Paper](#).

Are the quantitative methodology and financial assumptions explained? Are the construction costs presented as Class “C” estimates?

6.4.2.2 RISK ASSESSMENT

Project teams should fully understand the allocation of risks under the shortlisted procurement model options and conduct a risk assessment of those options, ideally to produce risk-adjusted costs for the project.

Although the focus of the risk assessment in the procurement options analysis is quantitative, the project team may also identify significant qualitative risks in the process worth noting. These qualitative risks can factor into the procurement options analysis MCA and help inform the recommended procurement model. Qualitative risks may also be reported on throughout the project’s implementation outside of the business plan process.

At this stage of the business plan, risks are mostly related to design and construction and may include the risk of delays, unforeseen ground conditions, permitting and approvals, the potential for design flaws, supply chain disruptions and limited market interest in construction of the project etc. The risk assessment may also evaluate the demonstrated capacity and experience of the local industry and the ministry or agency.

6.4.2.2.1 ALLOCATION OF RISK

The allocation of risks defines the various procurement models. The following table illustrates how various risk may be allocated for one project under three different models.

⁸ Class C cost estimate is based on a full description of the project, for example the indicative design and indicative design report and should be sufficient for government to make an investment decision. Some refer to this as the +/- 15% estimate.

Table 8: Summary Risk Allocation Matrix for DBB, DB and DBF

RISK	ALLOCATION OF RISK					
	DESIGN BID BUILD		DESIGN BUILD		DESIGN BUILD FINANCE	
	CONTRACTOR	PROJECT OWNER	DESIGN BUILDER	PROJECT OWNER	PARTNER/DESIGN BUILDER	PROJECT OWNER
Approval of the Business Plan		x		x		x
City Permitting		x	x		x	
Design		x	x		x	
Construction	x		x		x	
Scope Changes by Project Owner		x		x		x

6.4.2.2.2 RISK QUANTIFICATION

Risk quantification enables project teams to adjust the NPVs or nominal costs determined in the financial assessment to account for risk. Quantifying select risks increases the likelihood there is enough contingency funding in the project budget to successfully deliver the project.

Depending on the size and complexity of the project, risk quantification may be performed by a cost estimator or through more robust financial modelling. Regardless, the risk-adjusted costs included in the project budget should account for transferred risks (which the contractor will include in its bid) and retained risks (which will form part of ministry's or agency's project reserve).

Only those project risks which are considered quantifiable can be incorporated into the risk-adjusted cost. The risk quantification section should outline which risks the project team assigned an expected dollar value, what type of analysis was used and the risk-adjusted capital cost for the various cost categories for the shortlisted procurement options.

Ministries and agencies may contact the [Risk Management Branch & Government Security Office](#) or [Infrastructure BC](#) for further guidance.

Has a thorough risk assessment been performed to identify the project's key material risks and enable cost adjustments in the quantitative analysis?

6.4.2.3 SENSITIVITY ANALYSIS

The sensitivity analysis tests the effect of changes on key financial assumptions such as the discount rate and interest rate. The project team should clearly outline the method used to test the sensitivity of various assumptions and present the findings in the business plan.

Have the financial assumptions been tested for sensitivity?

6.4.3 RECOMMENDED PROCUREMENT OPTION

Part C concludes by summarizing the qualitative and quantitative analyses and contrasts the procurement model options according to the established procurement objectives/criteria to support the recommended procurement model for the project.

This is achieved by bringing the procurement MCA and the (risk-adjusted) NPVs or nominal costs together into one table for comparison.

Table 9: Sample Procurement Option Summary Table

CRITERIA	OPTION 1	OPTION 2	OPTION 3
Criterion 1	✓	✓ ✓	✓ ✓ ✓
Criterion 2	✓ ✓	✓ ✓ ✓	✓ ✓
Criterion 3	✓	✓ ✓ ✓	✓
Net Present Value or Nominal Cost (\$,000)	\$150,765	\$175,243	\$155,962

The project team then ranks the options from a qualitative perspective and summarizes the quantitative analysis. The findings may be tested with the market through a market sounding exercise as described in [6.1](#) to ensure viability from the market’s perspective.

Next, the project team states which of the criterion used in the procurement analysis was quantified and accounted for in the (risk-adjusted) NPV or nominal value in the table above.

Finally, the project team may identify which qualitative criteria are not fully accounted for in the NPV or nominal cost and performs a high-level analysis to determine how the procurement models rank based on those remaining criteria to inform the procurement recommendation.

The information presented in this section should lead to a logical conclusion regarding the recommended procurement model option the project team will use to develop Part D (Procurement Plan and Funding Analysis) and present for approval in Part E (Decision Request) of the business plan.

Does Part C include a summary table that ranks the qualitative criteria and presents the Net Present Value or nominal cost for each of the shortlisted procurement model options? What risks are not captured in the Net Present Value or nominal cost? Does Part C conclude with a procurement model recommendation that flows logically from the analyses?

7. BUSINESS PLAN DOCUMENT – PART D: PROCUREMENT PLAN AND FUNDING ANALYSIS

The purpose of this section is to describe the procurement implementation plan based on the recommended procurement option. This includes outlining the procurement process, schedule and budget.

Part D also contains the funding analysis, sources of funding, accounting treatment and debt implications.

7.1 PROCUREMENT PLAN

The project team should include a detailed procurement implementation plan for the recommended procurement option in the business plan. Elements of a procurement implementation plan include:

- Procurement strategy and process;
- Project governance model;
- Procurement schedule;
- Design and construction project management budget; and
- Communications plan for announcing project implementation and procurement contract award.

Key elements of the procurement implementation plan, such as the schedule, budget, implementation phases and key processes should be developed or reviewed by an experienced capital construction project manager to confirm the assumptions and whether the plan is achievable.

The business plan should also include a governance structure for the next phases of the project (i.e. procurement and implementation) suited to the size and complexity of the project and the procurement option selected.

The project team should describe the decision-making process and outline the expected contractual structure for the project in the procurement implementation plan. Governance may be an important issue when the project is presented to the marketplace. If the governance structure is not clearly addressed and articulated, potential proponents, bidders or vendors may perceive this as a risk.

Additionally, key stakeholders and their relevant roles or interests should be identified and captured in an engagement strategy described in the procurement plan.

Does the procurement implementation plan clearly present the project schedule, budget and implementation phases? Is there a governance structure for project implementation?

7.2 FUNDING ANALYSIS

This section should identify the funding sources (and timing) available for the project and confirm the ability of the ministries, agencies and/or private sector to fund the project.

The project team should present a detailed analysis indicating the expected funding requirements for the project. This includes a breakdown of all the cost elements that make up the total funding requirements as well as distinguishing between capital, ongoing operating and one-time costs such as land acquisition.

Any approvals required from Treasury Board or other governance bodies should be noted. The sources and amounts of all funds committed or available for the project should be identified, including the structure, timing and any restrictions or conditions of the funding.

Along with the funding requirements, the business plan should also describe the sources of funding (e.g. federal funding, regional hospital districts, ministry, philanthropic contributions) and any commitment letters, agreements or contracts required to access funding.

Funding requirements should be presented on a total and on an annual basis for each year of the term of the project. Any potential funding gaps or shortcomings should also be identified.

Additional considerations to include in the funding analysis are any portion of risks to be held as project contingency within the budget, effect of the project on debt and cash flow and non-cash implications associated with project capital and operating costs. Any limitations to the accuracy of funding requirement estimates should be clearly identified.

Approval of funding for a capital project does not include approval of any operating expenses associated with the capital asset (e.g. caseload or staffing increases) unless the project team has incorporated the request into the business plan in consultation with Treasury Board Staff.

The funding analysis should also contain any accounting implications, if applicable. See the [CAMF section on accounting](#) for more information.

Does the funding analysis include the funding sources, breakdown of the cost elements and distinguish between capital, operating and one-time costs (if applicable)? Are there any commitments or agreements needed to access funding? Are there any timing or other restrictions in the funding? Are there any funding gaps?

8. BUSINESS PLAN DOCUMENT – PART E: DECISION REQUEST

This section presents a summary of the decision request and the required approvals for each of the key decision points presented in the business plan.

Typically, this section is quite brief. Approval to proceed with the project may include the following decision points:

- Approval of the procurement strategy including the following cost items: capital cost, affordability ceiling (if applicable), reserves, provincial funding and other sources of funding (e.g. federal);
- Approval to enter into agreements with funding partners;
- Approval of the scope and schedule;
- Approval of operating cost items (if applicable) such as the one-time operating costs or amortization schedules; and
- Approval of the project governance model for project implementation and the resources/budget required to support it.

Finally, Part E should include a clear indication the project has been signed off and approved by the relevant governance authority for the project (e.g. Board of Education, executive sponsor, project board).

Does the decision request clearly seek approval for relevant factors such as: the procurement model; project scope, schedule and budget; agreements with funding partners; operating costs and the project implementation governance model? Is it clear the business plan has received the appropriate approvals before submission to Treasury Board? Has due diligence been demonstrated by providing all the relevant appendices to support the decision request as appendices to the business plan?

APPENDIX A: BUSINESS PLAN CONTENT OUTLINE

SECTION	CONTENT	NOTES
Executive Summary	<ul style="list-style-type: none"> • Project description • Project need • Project objectives • Service delivery options • Procurement options and plan • Cost estimates and funding sources • Decision Request 	<ul style="list-style-type: none"> • Identifies the purpose of the business plan and outlines the key information. • Should be written so that a busy decision maker can understand the most important facts and analysis to inform decisions.
Approach	<ul style="list-style-type: none"> • Organizations represented on the project team • Main tasks and approach used in developing the business plan 	<ul style="list-style-type: none"> • Identifies project team participants at a high-level (main consultant, ministry, health authority etc.). • Outlines approach to developing the business plan
PART A: Need for Investment	<ul style="list-style-type: none"> • Background and context • Description of current condition and demand • Description of future demand needs 	<ul style="list-style-type: none"> • Identifies the need for the project and the rationale for investment. • Provides relevant context and linkages to strategic direction.
PART B: Service Delivery Options and Project Scope	<ul style="list-style-type: none"> • Guiding principles and project objectives • Functional Program • Service delivery options analysis (non-capital and capital) • Qualitative and quantitative service delivery criteria • Operational Risks Assessment • Recommended service delivery option • Additional project details and summary project scope • Indicative design or equivalent 	<ul style="list-style-type: none"> • Analyzes options for achieving project objectives based on established qualitative and quantitative criteria. • Recommends one service delivery option and describes indicative design (or equivalent) and project scope for this option.
PART C: Procurement Options Analysis	<ul style="list-style-type: none"> • Market Sounding • Procurement objectives • Procurement model options analysis: <ul style="list-style-type: none"> ○ Qualitative (e.g. MCA) ○ Quantitative analysis, including financial - and risk assessment resulting in risk-adjusted costs ○ Sensitivity analysis of financial assumptions • Recommended procurement option 	<ul style="list-style-type: none"> • Outlines result of market sounding if required. • Analyzes options for procurement based on procurement objectives and qualitative, quantitative and risk assessments. • Recommends a procurement model option.

SECTION	CONTENT	NOTES
PART D: Procurement Plan and Funding Analysis	<ul style="list-style-type: none"> • Procurement Plan • Funding analysis 	<ul style="list-style-type: none"> • Outlines procurement process, schedule and budget. • Identifies funding sources, timing of funding and a breakdown of cost elements that distinguish between capital, ongoing operating and one-time costs presented in a total and on an annual basis.
PART E: Decision Request	<ul style="list-style-type: none"> • Approval of business plan request 	<ul style="list-style-type: none"> • Summary of request for approvals for key decision points such as the procurement strategy, agreements with funding partners, scope, schedule, governance model etc. • Includes sign off by governance body before submission to Treasury Board.

APPENDIX B: BUSINESS PLAN DEVELOPMENT KEY QUESTIONS

BUSINESS PLAN DEVELOPMENT KEY QUESTIONS	YES/NO
BUSINESS PLAN PROJECT PLANNING	
Does the project require a concept plan first?	
Does the project already have a concept plan? If so, how does this affect the analysis and information required in the business plan?	
Has a governance structure been established? Does this governance body represent the diversity and interest of user groups and key stakeholders?	
Have the appropriate project approvals been identified, mapped out and scheduled?	
Does the project team include staff with the required expertise? Have roles and responsibilities been clearly defined and communicated?	
Have the required consultants been determined and engaged to help develop the business plan development?	
Has the project work plan been developed in consultation with relevant stakeholders and consultants? Does it outline key deliverables and milestones?	
BUSINESS PLAN DOCUMENT - INTRODUCTION	
Does the executive summary provide a succinct overview of the key elements and scope of the project, the recommended service delivery and procurement model options and the decision request?	
Is a high-level description of the analytical framework the project team used to develop the business plan included?	
PART A - RATIONALE OF THE PROJECT	
Have the project owner, key stakeholders and project partners been clearly identified?	
Have the project's drivers and strategic linkages been explored and identified?	
Are there any important assumptions, constraints or other contextual information that should be communicated?	
What is the current facility status? Is there a Facility Condition Index (if existing infrastructure)?	
Have the program demand requirements been established?	
What are the main risks and problems with the current infrastructure and how are they being mitigated?	
Does the demand forecast demonstrate the inability of existing infrastructure to meet future needs?	
Is enough information available for Treasury Board to prioritize or phase the project in the context of competing funding demands?	
PART B – SERVICE DELIVERY OPTIONS AND PROJECT SCOPE	

BUSINESS PLAN DEVELOPMENT KEY QUESTIONS	YES/NO
Have the guiding principles and project objectives been established in consultation with the governance body?	
What outcomes-based criteria have been provided to measure the attainment of the project objectives?	
Has the Functional Program (i.e. accommodation schedule or space needs) been summarized in the business plan?	
Have all viable non-capital strategies that meet the need for investment established in Part A been considered?	
Is there enough justification to proceed with a capital strategy?	
Have all relevant service delivery options been considered in consultation with the governance body? Which options were dropped and why?	
Does the preliminary project scope capture the requisite legislation and Treasury Board direction?	
Does the qualitative criteria used to assess the viable service delivery options highlight the differences between options and link to the project's overarching guiding principles and objectives?	
Has the qualitative assessment method been clearly described and the outcome summarized?	
Has an operational risk assessment been performed and summarized in the business plan?	
Has a Class "D" cost estimate (at minimum) with the corresponding cash flow and project schedule been provided? Was a Design-Bid-Build model used to neutrally compare options?	
Does the service delivery options analysis conclude with one service delivery option?	
Has the project scope for the recommended service delivery option been clearly and thoroughly explained?	
Does the indicative design connect to the need for investment and project objectives?	
Is there enough information in the indicative design (or equivalent) to conduct a Class "C" cost estimate in Part C?	
PART C – PROCUREMENT OPTIONS	
Would the project benefit from a market sounding to determine if there is any market interest in, or capacity to build, the infrastructure?	
Which of the recommended procurement objectives are suitable for the project? Are any unique procurement objectives needed to align with the overarching project objectives?	
Were all viable procurement models considered for preliminary analysis? What models were not considered and why?	
Does the qualitative analysis (e.g. Multiple Criteria Analysis) frame the project objectives against the procurement options? Is a summary table and conclusion included in the main body of the business plan?	

BUSINESS PLAN DEVELOPMENT KEY QUESTIONS	YES/NO
Were two to three procurement models (representing a range of models) shortlisted and presented for further consideration?	
Are the quantitative methodology and financial assumptions explained?	
Are the construction costs presented as Class “C” estimates?	
Has a thorough risk assessment been performed to identify the project’s key material risks and enable cost adjustments in the quantitative analysis?	
Have the financial assumptions been tested for sensitivity?	
Does Part C include a summary table that ranks the qualitative criteria and presents the Net Present Value or nominal cost for each of the shortlisted procurement model options?	
What risks are not captured in the Net Present Value or nominal cost?	
Does Part C conclude with one procurement model recommendation that flows logically from the analyses?	
PART D – PROCUREMENT PLAN AND FUNDING ANALYSIS	
Does the procurement implementation plan clearly present the project schedule, budget and implementation phases?	
Is there a governance structure for project implementation?	
Does the funding analysis include the funding sources, breakdown of the cost elements and distinguish between capital, operating and one-time costs (if applicable)?	
Are there any commitments or agreements needed to access funding?	
Are there any timing or other restrictions in the funding? Are there any funding gaps?	
PART E – DECISION REQUEST	
Does the decision request clearly seek approval for relevant factors such as: the procurement model; project scope, schedule and budget; agreements with funding partners; operating costs and the project implementation governance model?	
Is it clear the business plan has received the appropriate approvals before submission to Treasury Board?	
Has due diligence been demonstrated by providing all the relevant appendices to support the decision request as appendices to the business plan?	

APPENDIX C: GOVERNMENT POLICIES OR STANDARDS THAT MAY APPLY TO CAPITAL PROJECTS

This is not an exhaustive list may be updated as required. Last Update: March 15, 2021.

POLICIES AND/OR REQUIREMENTS	HIGH-LEVEL DESCRIPTION	POTENTIAL SOURCE(S) OF DIRECTION	POTENTIALLY AFFECTED BUSINESS PLAN SECTION
Community Benefits Framework (CBF)	<p>Policy aimed at achieving objectives related to capital projects providing additional benefits and opportunities for communities.</p> <p>The CBF is applied through two streams: Community Benefits Agreement (CBA) and Procurement and Contract Terms (P&CT).</p>	<p>CBF will apply to most capital projects once the P&CT are completed, they are currently under development. The CBA applies only to select projects.</p> <p>Concept Plan Approval Letter may request CBA be considered during the development of the business plan.</p>	<p>Part B (Project Parameters):</p> <ul style="list-style-type: none"> • May include community considerations as a measurable project objective. • Indicative Design may need to accommodate community considerations, if applicable. <p>Part C (Procurement Options):</p> <ul style="list-style-type: none"> • Market Sounding • Procurement Options • Procurement Options Analysis • Value for Money • Risk Assessment <p>Part D (Procurement Plan and Funding Analysis):</p> <ul style="list-style-type: none"> • Procurement Plan • Procurement Budget and Schedule • Funding Analysis (effect on capital funding ask)
Gender-Based Analysis Plus (GBA+)	Comprehensive approach to policy development that is people-centred and evidence-informed.	This government-wide policy should be applied to all business plans.	<p>Project Planning:</p> <ul style="list-style-type: none"> • Structure the project’s governance body to reflect a diverse range of perspectives (where possible). <p>Part B (Project Parameters):</p> <ul style="list-style-type: none"> • May incorporate GBA+ considerations into the guiding principles to help direct the decision-making process. • May include GBA+ considerations as a measurable project objective to ensure all subpopulations are contemplated while developing the program and infrastructure. • Functional Program and Indicative Design will need to accommodate GBA+ analysis considerations, if applicable. • Incorporate into service delivery options risk assessment, if applicable.

POLICIES AND/OR REQUIREMENTS	HIGH-LEVEL DESCRIPTION	POTENTIAL SOURCE(S) OF DIRECTION	POTENTIALLY AFFECTED BUSINESS PLAN SECTION
CleanBC	<p>Includes policies related to energy efficiency, reduction of Greenhouse Gas (GHG) Emissions and Climate Adaptation.</p> <p>Sets specific Public Sector GHG reduction targets.</p>	<p>Long standing expectation that new Provincially funded buildings must meet the requirements of LEED ® Gold or equivalent sustainable building standard.</p> <p>Ministry budget letters and concept plan approval letters may provide direction on additional analysis expected in business plans for new Provincially funded buildings or major renovations.</p>	<p>Part B (Project Parameters):</p> <ul style="list-style-type: none"> • Indicative design documents how LEED Gold may be achieved. • May include GHG emission reduction considerations and sustainable building standard requirements as project objectives. • Energy and emissions modeling, low carbon heating and cooling systems, and the sustainable building standard approach with details on costs and benefits may be summarized and attached as appendices to the business plan.
Use of Wood in Building Construction	<p>Requires use of wood as the primary building material in all new Provincially funded buildings, in a manner consistent with the provincial building regulations.</p>	<p><i>Wood First Act</i></p> <p>Ministry budget letters and concept plan approval letters may provide direction on additional analysis expected in business plans for new Provincially funded buildings or major renovations.</p>	<p>Part A (Advisory Consultants)</p> <ul style="list-style-type: none"> • Mass timber expertise required by Architectural and Engineering advisors <p>Part B (Project Parameters):</p> <ul style="list-style-type: none"> • Will affect the Indicative Design. • Should be addressed in the Qualitative Capital Service Delivery Criteria <p>Part C (Procurement Options Analysis)</p> <ul style="list-style-type: none"> • Degree of desired design innovation may be significant factor in procurement objectives. <p>Part D (Procurement Plan and Funding Analysis):</p> <ul style="list-style-type: none"> • May affect costs. • Procurement plan may require tailoring to reflect limited pool of expertise, supply chain limits, and the nature of integrated design and off-site manufacturing of mass timber structural building systems.

POLICIES AND/OR REQUIREMENTS	HIGH-LEVEL DESCRIPTION	POTENTIAL SOURCE(S) OF DIRECTION	POTENTIALLY AFFECTED BUSINESS PLAN SECTION
Childcare Spaces	<p>Creating a universally accessible, quality and affordable childcare system is a government priority.</p> <p>Including childcare spaces in new capital construction will support achieving this mandate.</p>	<p>Ministry budget letters and concept plan approval letters may provide direction on additional analysis expected in business plans for Provincially funded buildings.</p>	<p>Part A (Advisory Consultants, Context and Need for Investment)</p> <ul style="list-style-type: none"> • Will require childcare expertise to design and plan childcare space (i.e. identification of age cohorts, indoor and outdoor square meter requirements, space configuration and layout, etc.) • Linkages to government priorities may be highlighted. • Will require demand forecasts etc. <p>Part B (Project Parameters):</p> <ul style="list-style-type: none"> • Will affect the functional program and/or Indicative Design. <p>Part D (Procurement Plan and Funding Analysis):</p> <ul style="list-style-type: none"> • May affect costs. • Will require coordination of capital projects, funding and timelines for multiple purposes (e.g. housing and childcare; hospital and childcare; school and childcare)

APPENDIX D: COMMON APPENDICES FOR BUILDING AND TRANSPORTATION PROJECTS

BUILDING
Demand Report
VFA Report (Facility Condition Assessment)
Service Delivery Options MCA
Functional Program
Indicative Design Brief
Procurement Options MCA
Market Sounding Report
Financial Report (Includes Level of Private Finance)
Quantity Surveyor Report
Risk Report
Funding Analysis (Funding Model)
Post Construction Operating Estimate (may be included in Funding Model)
Communication Plan
Stakeholder Consultation Reports
Funding Commitment Letters (e.g. Foundation)
Capital Cost Ceiling Report
Insurance Approach
Energy Modeling and Sustainability Reports
TRANSPORTATION
Strategic Plan
Regional Growth Strategy
Transportation Strategy
Public Sector Report
Maintenance Report
Project Definition Report
Traffic Forecast
Cost Report
Procurement Options Qualitative Assessment (e.g. Multiple Criteria Evaluation)
Risk Report
Financial Model Assumptions
Market Sounding Report
Eligible Cost Definition
Service Delivery Options Assessment
Communication Plan
Insurance Approach
Technical Due Diligence Reports (for large projects only)