Building Queensland acknowledges the following work which has informed this document:

- Project Assessment Framework, Queensland Treasury
- Investment Management and Better Business Case Guidance, The Treasury, New Zealand
- Assessment Framework, Infrastructure Australia.

Disclaimer: While every care has been taken in preparing this publication, Building Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. This material is provided as a guide only and is subject to regular review and updates.

Attribution: Unless otherwise noted, content from the Business Case Development Framework should be attributed to: Building Queensland Business Case Development Framework.

V1 December 2016
CONTENTS

1. Introduction ........................................................................................................................................ 3
   1.1. Purpose of this Document ................................................................................................................. 3

2. The Business Case Development Framework ..................................................................................... 3
   2.1. Purpose ........................................................................................................................................... 3
   2.2. Application ....................................................................................................................................... 4
   2.3. Structure .......................................................................................................................................... 4

3. The Business Case Development Framework and the Broader Environment ........................................... 5
   3.1. Queensland Government Project Assessment Framework ................................................................. 5
   3.2. Infrastructure Australia’s Assessment Framework ............................................................................. 6
   3.3. Building Queensland’s Infrastructure Pipeline Report ....................................................................... 7
   3.4. Queensland State Infrastructure Plan ............................................................................................... 8
   3.5. Other Frameworks and Coordination Activities .............................................................................. 8

4. Business Case Development Principles ............................................................................................... 9

5. Business Case Development Framework Key Features ........................................................................ 9
   5.1. Benefits Management for Business Case Development ................................................................... 10
   5.2. Risk Management for Business Case Development ........................................................................ 11
   5.3. Stakeholder Engagement in Business Case Development ................................................................. 11
   5.4. Fundamental Conditions .................................................................................................................. 12

6. Business Case Development Governance ............................................................................................ 14
   6.1. Engaging with Building Queensland ............................................................................................... 14
   6.2. Quality and Project Assurance ......................................................................................................... 14

7. Resources .............................................................................................................................................. 15
   7.1. Publications ....................................................................................................................................... 15
   7.2. Building Queensland Information and Support ................................................................................ 15

Appendix 1: Establishing a Risk Management Framework ......................................................................... 16

Appendix 2: Stakeholder Engagement and Social Licence .......................................................................... 22
1. INTRODUCTION

Infrastructure investment decisions have a direct impact on Queensland’s economic and social domain. Good decision making relies on quality proposals, well-developed Business Case documentation and effective review processes.

Building Queensland has been established under the Building Queensland Act 2015 (the Act) to provide independent expert advice about infrastructure to the Queensland Government. In accordance with the Act, the Business Case Development Framework (BCDF):

- supports the development of high-quality Business Cases
- enables Building Queensland to complete the following activities required under the Act:
  - provide independent expert advice to the State and government agencies ... based on rigorous analysis taking into account ... economic, social and environmental sustainability; and cost benefit analysis; and community benefits, including social return on investment (s10)
  - assess the costs and benefits of infrastructure projects (s11)
  - evaluate proposals for investment in new infrastructure or enhancements to existing infrastructure (s13)
  - assist or lead the development of business cases (s14)
  - enable infrastructure proposals to be compared (s14).

1.1. Purpose of this Document

This document provides an overview of the BCDF including:

- how the BCDF integrates with other government frameworks
- overarching principles
- structure
- key features
- governance arrangements.

This overview details the systems through which the BCDF contributes to the development of high quality, robust Business Cases both within Building Queensland and in the broader environment.

2. THE BUSINESS CASE DEVELOPMENT FRAMEWORK

2.1. Purpose

The BCDF provides detailed, section-by-section guidance on the requirements for Building Queensland Business Cases. Specifically, the BCDF aims to:

- reduce the costs of developing Business Cases
- reduce the time taken to develop Business Cases
- align with best practice to ensure Business Cases meet state and federal government requirements (e.g. Queensland Government’s Project Assessment Framework (PAF) and Gateway assurance activities)
- enable government to assess Business Cases consistently and compare investment opportunities
clarify Building Queensland’s expectations for Business Cases (including those contained within the Infrastructure Pipeline Report).

The BCDF guides a proposal from conceptualisation (Strategic Business Case), to options generation and analysis (Preliminary Business Case), and finally to the detailed analysis of the preferred option/s (Detailed Business Case). Supplementary guidance is provided for Cost Benefit Analysis and Social Impact Evaluations.

2.2. Application

The BCDF applies to nominated government-owned corporations in addition to government agencies. The BCDF is used for infrastructure proposals (led by Building Queensland) which have an estimated capital cost of $100 million or more, or if the net present value of financial commitments entered into by the state for the proposal is estimated to be $100 million or more.

The templates and guidance may also be used for proposals below this threshold, and their use is encouraged for projects where Building Queensland assists in the preparation of Business Cases (those with an estimated capital cost or net present value of state financial commitment of $50 million to $100 million).

2.3. Structure

The BCDF focuses on the development of the following core Business Case documents:

- **Strategic Business Case (SBC)**—aims to ensure the service need is substantiated and effectively articulated, and the benefits sought are achieved through the proposed initiatives

- **Preliminary Business Case (PBC)**—aims to progress the concept documented in the SBC through an options generation and assessment process which culminates in a preferred option/s for analysis within the Detailed Business Case

- **Detailed Business Case (DBC)**—aims to provide evidence for investing in the Reference Project/s.

These documents are supported by a number of other documents:

- **Investment Logic Mapping Guide (ILM)**—supports practitioners to use the Investment Logic Mapping approach to investigate and articulate the service need in the SBC, and to subsequently identify potential initiatives that address the service need and effectively achieve the benefits sought

- **Social Impact Evaluation Guide (SIE)**—provides practitioners with a standard methodology and approach to conducting an SIE at both PBC and DBC stages

- **Cost Benefit Analysis Guide (CBA)**—provides practitioners with a clear view of the CBA framework that Building Queensland applies to assess the economic viability of investment proposals at both PBC and DBC stages

- **Benefits Management Framework (BMF)**—provides information on benefits management and how benefits are managed within the BCDF

- **Business Case Development Framework—Overview (this document)**—provides an overview of the Business Case development system within which the BCDF operates.
3. THE BUSINESS CASE DEVELOPMENT FRAMEWORK AND THE BROADER ENVIRONMENT

The Building Queensland BCDF has been developed to support, augment and integrate with existing frameworks and infrastructure investment systems at both state and federal levels. Key frameworks that the BCDF currently integrates with include:

- Queensland Government Project Assessment Framework
- Infrastructure Australia’s Assessment Framework
- Building Queensland’s Infrastructure Pipeline Report

3.1. Queensland Government Project Assessment Framework

The foundation for the BCDF is the Queensland Government’s Project Assessment Framework (PAF). BCDF supplements the PAF by providing substantially more detailed guidance on how to complete the assessments required to develop robust Business Cases. The alignment between the BCDF and the PAF is illustrated in Figure 2.
The BCDF differs slightly from the PAF at the Strategic Business Case (SBC) and Preliminary Business Case (PBC) stages. In the BCDF, the SBC culminates in identifying high-level initiatives only, leaving the identification of detailed options and shortlisting to the PBC. This is designed to minimise the work required in the SBC before a decision is made to progress. It also encourages authors to focus on articulating the service need rather than on potential solutions.

### 3.2. Infrastructure Australia’s Assessment Framework

Infrastructure Australia (IA) is an independent statutory body with a mandate to prioritise and progress nationally significant infrastructure. IA’s Assessment Framework sets out the approach used to identify potential infrastructure solutions that address nationally significant infrastructure problems and opportunities, for inclusion in the IA Infrastructure Priority List.

The BCDF supports investment proposals that seek IA involvement by generally aligning to IA’s Assessment Framework (illustrated in Figure 3). Building Queensland provides guidance to proponents on the additional details required by IA.
3.3. Building Queensland’s Infrastructure Pipeline Report

The Infrastructure Pipeline Report presents Building Queensland’s independent, expert view of priority infrastructure proposals under various stages of development by the Queensland Government.

The BCDF supports Building Queensland’s Infrastructure Pipeline Report by articulating what is expected at various stages of development.

Figure 4 illustrates how the Pipeline relates to the State Infrastructure Plan (SIP), and indicates the alignment of the different stages—the Strategic Business Case with Identify the Need (in orange), the Preliminary Business Case with Assess the Options (in yellow), and the Detailed Business Case with Undertake Detailed Analysis (in green).

Figure 4: BCDF Support for the Infrastructure Pipeline
3.4. Queensland State Infrastructure Plan

The State Infrastructure Plan (SIP) outlines the strategic direction for the planning, investment and delivery of infrastructure in Queensland. The SIP identifies what the government ultimately wants from its infrastructure and how this can best be achieved. Importantly, it is designed to provide confidence and certainty to business, industry and the community by confirming the government’s investment program over the next four years.

The BCDF supports the alignment of investment proposals and Business Cases with the SIP’s options assessment and options alignment processes (SIP Part A) (Figure 5).

Figure 5: SIP Priorities for Infrastructure Options

3.5. Other Frameworks and Coordination Activities

Other frameworks and processes the BCDF incorporates include:

- Gateway Reviews, Queensland Treasury
- Gate Reviews, Queensland Government Chief Information Office.

The BCDF aims to integrate effectively with the existing systems and processes of government agencies and government-owned corporations to ensure the development of investment proposals and Business Cases and minimise the likelihood of additional administrative burden.

Contact Building Queensland concerning any questions regarding the integration of processes.
4. BUSINESS CASE DEVELOPMENT PRINCIPLES

The following principles underpin the development of Business Cases using Building Queensland’s BCDF:

- **Service need led**—investment proposals and Business Cases must address a clearly defined and articulated service need.
- **Benefits driven**—the achievement of benefits should be the primary goal underpinning the investment design and Business Case.
- **Evidence based**—the service need, assessment and advice to decision makers must be supported by the best available data and information.
- **Robust**—assessments that form the body of the Business Case must utilise a precise analytical approach to ensure the outcomes are valid and reliable.
- **Risk focused**—risk must be effectively considered and managed throughout proposal development to ensure risks are effectively recognised and accounted for.
- **Holistic**—investment proposals must be cognisant of the broader environment/system they fit within and consider integration to maximise benefits.
- **Fit-for-purpose**—the extent of the assessments for elements of the Business Case and the level of detail in the Business Case should match the scale and complexity of the investment opportunity.
- **Stakeholder engagement**—stakeholder views and needs are a critical part of understanding the service need; stakeholders’ expectations and requirements for potential solutions should be included.
- **Strategically aligned**—investment proposals must be strategically aligned to agency, state, federal, regional and local priorities where appropriate, and contribute positively to strategic outcomes.
- **Lifecycle cognisant**—investment proposals and Business Cases should be developed with an overall investment lifecycle view including a focus on sustainability.
- **Net benefit**—the investment must result in a net benefit to Queensland in a way that aligns with the Queensland Government’s policy priorities and agenda.
- **Fundamental conditions**—the BCDF highlights critical decision points where an investment proposal may need to be reconsidered if it fails to meet set conditions.

5. BUSINESS CASE DEVELOPMENT FRAMEWORK KEY FEATURES

The Building Queensland BCDF supports the development of quality Business Cases through a specific focus on benefits and the ongoing management of risk. This focus aims to ensure that investment proposals are effectively targeted and can be reasonably expected to deliver the required outcome/s for stakeholders. Key features of the BCDF include:

- benefits-driven options development and assessment
- a continual focus on the effective management of risk
- ongoing stakeholder engagement
- application of quality-assurance and project-assurance mechanisms (refer to Section 6.2)
- critical decision points where the viability of the investment decision is reassessed.

Figure 6 illustrates how these key features apply throughout Business Case development.
5.1. Benefits Management for Business Case Development

Focusing on realising benefits (social, economic, environmental and financial) during Business Case development generates investment proposals that are directed towards outcomes that are of value to stakeholders and contribute to strategic priorities.

The high-level benefits-management activities undertaken during the development of BCDF Business Cases are illustrated in Figure 7.

Building Queensland's Benefits Management Framework provides further detail on how benefits-management activities integrate into the BCDF.
5.2. Risk Management for Business Case Development

Risk is an inherent part of any investment project. A risk-management approach should underpin the development of all Business Cases to provide a framework for the identifying and assessing project and ongoing risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of the objectives and outcomes intended by the investment proposal.

Risk assessments are undertaken across all aspects of Business Case development, including:

- identifying proposal risks—i.e. risks associated with any changes to the proposal background, service need, stakeholders, options generated, or strategic and political context
- identifying Business Case development risks—including methodology, assumptions and practices underpinning the assessments (social, economic, environmental and financial), data reliability, accuracy and currency
- identifying process risks—including stakeholder engagement activities, timing etc., to ensure the process for developing the Business Case maximises its outcomes
- identifying potential project risks—including timing, delivery, funding and governance arrangements.

The PAF explicitly requires a risk assessment to be conducted and a project Risk Register to be developed.

Business Case development should utilise an agency’s risk management framework. If the agency framework is not considered appropriate for the investment proposal, refer to the guidance on developing a suitable framework (Appendix 1) and the Australian Standard (AS NZS ISO 31000:2009 Risk management—Principles and guidelines). The PAF and National PPP policy (if applicable) also provide guidance on risk assessment.

5.3. Stakeholder Engagement in Business Case Development

Stakeholder engagement is critical for a social impact evaluation and is a key principle of the Social Return on Investment Analysis approach. Stakeholder engagement enables an understanding of the relationship between the objectives of the investment and the outcomes to be experienced by stakeholders.

Stakeholder engagement is critical for:

- understanding the problem
- identifying the benefits sought
- identifying potential partners
- ensuring the Reference Project design responds effectively to needs
- maintaining ongoing support during development and delivery
- undertaking an effective social impact evaluation.

5.3.1. Key points for Engaging with Stakeholders

There are many opportunities for stakeholder engagement during the Business Case development process. Key points include:

- problem and/or benefits-sought identification (Strategic Business Case)
- strategic-initiatives generation (including potential delivery partners)
- options generation (Preliminary Business Case)
- options filtering (Preliminary Business Case)
- public-interest considerations (Preliminary Business Case)
- social-impact evaluation (both Preliminary and Detailed Business Case)
- Reference Project design (Detailed Business Case).

Further information on stakeholder engagement is provided in Appendix 2; links to relevant resources are provided in Section 7 (Resources).

5.4. Fundamental Conditions

The BCDF includes a number of critical decision points where an investment proposal may need to be reconsidered if it fails to meet the conditions set.

Table 1: Critical Decision Points within the BDCF

<table>
<thead>
<tr>
<th>BCDF DOCUMENT</th>
<th>CRITICAL DECISION POINT</th>
<th>FOCUS OF THE DECISION POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Business Case</td>
<td>Establishment of the service need (Section 2)</td>
<td>The proposal must establish that a response to the identified problem/opportunity is necessary, and demonstrate understanding of the impact on Queensland.</td>
</tr>
<tr>
<td></td>
<td>Contribution to strategic objectives or plans (Section 2)</td>
<td>The proposal should contribute to strategic objectives/priorities.</td>
</tr>
<tr>
<td>Preliminary Business Case</td>
<td>Service need (Section 5)</td>
<td>The proposal must address a service need. Where there has been a material change in the environment which supported the service need since the SBC, consider whether to progress the proposal. Consider whether the proposal has momentum bias.</td>
</tr>
<tr>
<td></td>
<td>Strategic considerations (Section 7.1)</td>
<td>Options should be modified or discarded if they fail to align with the strategic objectives of the agency, government and national program, or if they conflict with established policy and standards.</td>
</tr>
<tr>
<td></td>
<td>Legal and regulatory considerations (Section 7.2)</td>
<td>Options should be modified or discarded if they fail to align with legal and regulatory requirements, or if they may experience significant impediments due to approval processes or other legal matters.</td>
</tr>
<tr>
<td></td>
<td>Market considerations (Section 7.3)</td>
<td>Options should be modified or discarded if the market considerations review identifies design or deliverability concerns.</td>
</tr>
<tr>
<td></td>
<td>Public-interest considerations (Section 7.4)</td>
<td>Options should be modified or discarded if significant stakeholder impacts, public access issues, equity issues, breaches of consumer rights, privacy concerns, or safety and security concerns are identified.</td>
</tr>
<tr>
<td></td>
<td>Environmental considerations (Section 10)</td>
<td>Options should be modified if any environmental concerns beyond legal and regulatory requirements are identified.</td>
</tr>
<tr>
<td></td>
<td>Selection of preferred option/s (Section 16)</td>
<td>Options that fail to demonstrate net economic benefits should not be considered further.</td>
</tr>
<tr>
<td>BCDF DOCUMENT</td>
<td>CRITICAL DECISION POINT</td>
<td>FOCUS OF THE DECISION POINT</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Detailed Business Case</td>
<td>Service need (Section 5)</td>
<td>The proposal must address a service need. Where there has been a material change in the environment which supported the service need since the PBC, consider whether to continue to progress the proposal. Consider whether the proposal has momentum bias.</td>
</tr>
<tr>
<td></td>
<td>Preferred option/s (Section 5.4)</td>
<td>Preferred option/s recommended for further investigation by the PBC must be reconsidered to establish their ongoing validity (e.g. in light of any changes to the general environment, underpinning demand data, or implementation of other programs/initiatives).</td>
</tr>
<tr>
<td></td>
<td>Strategic considerations (Section 8)</td>
<td>The Reference Project/s should be modified or discarded if it fails to align with the strategic objectives of the agency, government and national program, or conflicts with established policy and standards.</td>
</tr>
<tr>
<td></td>
<td>Legal and regulatory considerations (Section 9)</td>
<td>The Reference Project/s should be modified or discarded if it fails to align to legal and regulatory requirements or may experience significant impediments due to approval processes or other legal matters.</td>
</tr>
<tr>
<td></td>
<td>Market considerations (Section 10)</td>
<td>The Reference Project/s should be modified or discarded if the review of market considerations identifies design or deliverability concerns.</td>
</tr>
<tr>
<td></td>
<td>Public-interest considerations (Section 11)</td>
<td>The Reference Project/s should be modified or discarded if significant stakeholder impacts, public access issues, equity issues, breaches of consumer rights, privacy concerns, or safety and security concerns are identified.</td>
</tr>
<tr>
<td></td>
<td>Environmental considerations (Section 14)</td>
<td>The Reference Project/s should be modified if any environmental concerns beyond legal and regulatory requirements are identified.</td>
</tr>
<tr>
<td></td>
<td>Conclusions (Section 20)</td>
<td>Reference Project/s that fail to demonstrate net economic benefit should not be considered further.</td>
</tr>
</tbody>
</table>
6. BUSINESS CASE DEVELOPMENT GOVERNANCE

Business case development is undertaken within broader governance arrangements.

6.1. Engaging with Building Queensland

Building Queensland has produced four guides to clearly articulate the role of Building Queensland within the Queensland Government infrastructure landscape and throughout the various stages of project development. These guides are:

- Engaging with Building Queensland: Project Governance

The guides provide governance information for government agencies and government-owned corporations that work with Building Queensland. They detail governance structures, roles and responsibilities, and how Building Queensland engages with agency-specific processes.

Contact Building Queensland for further details.

6.2. Quality and Project Assurance

Good assurance provides an independent assessment of whether the elements that are fundamental to successful business delivery are in place and operating effectively. Assurance is part of corporate governance in which management provides accurate information to stakeholders about the efficiency and effectiveness of its policies and operations, and the status of its compliance obligations. In itself, assurance does not deliver the business or project, but it can identify and help mitigate any risks to successful delivery.

Building Queensland, through its Project Internal Assurance Framework, provides additional guidance to support the development of the assurance aspects of quality Business Cases.

Specific attention to quality and project assurance activities aims to improve the efficiency and effectiveness of a project and the quality of its outputs. Building Queensland engages a number of project assurance mechanisms in the development of Business Cases, namely:

- Project Health Review
- Project Governance Review
- Business Case Development Framework Alignment Review
- Focused Technical and Peer Reviews
- Gateway Review.
7. RESOURCES

7.1. Publications


Social licence resources:
- http://sociallicense.com/
- http://learningforsustainability.net/social-license/


7.2. Building Queensland Information and Support

Contact Building Queensland on 07 3237 7500 for further information and assistance on:
- Strategic and Preliminary Business Case development (Early Stage Project Development Group)
- Investment Logic Mapping (Early Stage Project Development Group)
- Detailed Business Case development (Business Case Group)
- Social Impact Evaluation (Social Benefits Manager, Frameworks Group)
- Cost Benefit Analysis (Cost Benefit Analysis Manager, Frameworks Group)
- Quality and Project Assurance (Internal Assurance Manager, Frameworks Group)
- Feedback or clarification on any BCDF document (Frameworks Group)
- Infrastructure Pipeline (Strategy Group).
APPENDIX 1: ESTABLISHING A RISK MANAGEMENT FRAMEWORK

Risk management undertaken within the BCDF process should utilise the relevant agency’s risk management framework. When the agency’s framework is not considered appropriate for the investment proposal, a suitable framework should be developed in line with the Australian Standard (AS NZS ISO 31000:2009 Risk management–Principles and guidelines).

Risk Management Process

The risk management process involves:

1. Establishing the risk criteria—including defining the criteria for likelihood and consequence, defining their timeframes, establishing risk tolerance and describing how the level of risk is to be determined.
2. Risk identification—identifying and documenting risks to which the project could be exposed, ensuring that a wide range of risks are considered (e.g. political risks and compliance with legislation).
3. Risk analysis—conducting assessments of the materiality of the risks and the likelihood and consequences of the risks occurring; this analysis is completed with the involvement of stakeholders.
4. Risk evaluation—comparing the level of risk found during the analysis process (step 3) with the risk criteria (step 1).
5. Risk treatment—developing risk management strategies and contingency planning approaches to mitigate the risks.

Risk Criteria

If not previously established, risk criteria should be established for the investment proposal. The criteria should reflect the context and scope of the project and the proponent’s risk appetite. The categorisation of likelihood and consequences may, therefore, vary from project to project. Any project risk criteria should be consistent with the agency’s risk management policy. Typical risk likelihood ratings are outlined in Table 2.

<table>
<thead>
<tr>
<th>Level</th>
<th>Descriptor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Almost Certain</td>
<td>Occurs in most circumstances or the issue is expected to occur very frequently (e.g. at least once in every 3 months).</td>
</tr>
<tr>
<td>4</td>
<td>Likely</td>
<td>Likely to occur or the event is expected to occur regularly (e.g. at least once in every 12 months).</td>
</tr>
<tr>
<td>3</td>
<td>Possible</td>
<td>Might occur or the event is expected to occur occasionally (e.g. at least once in every 1 to 5 years).</td>
</tr>
<tr>
<td>2</td>
<td>Unlikely</td>
<td>Could occur but unlikely or is expected less frequently (e.g. at least once in every 5 to 25 years).</td>
</tr>
<tr>
<td>1</td>
<td>Rare</td>
<td>Occurs only in exceptional circumstances or is expected to occur infrequently (e.g. once in 25+ years).</td>
</tr>
</tbody>
</table>

Ratings of risk consequence should be included as part of the risk criteria. Definitions for ratings of consequence may vary between projects and organisations. Criteria should reflect the organisation’s values, objectives and resources. They may be imposed by, or derived from, legal, regulatory and other requirements. An example of risk consequence ratings is provided in Table 3.
Table 3: Example Risk Consequences Ratings

<table>
<thead>
<tr>
<th>RISK CONSEQUENCE RATING</th>
<th>Level</th>
<th>Descriptor</th>
<th>Financial</th>
<th>Strategic</th>
<th>Environment</th>
<th>Delivery</th>
<th>Social</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>Severe</td>
<td>&gt;$Z</td>
<td>Fails to align with strategic context</td>
<td>Long-term (5–10yrs) environmental harm</td>
<td>Delay in delivery &gt;12months</td>
<td>Irreversible changes to social characteristics or values</td>
<td>1 or more fatalities</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Major</td>
<td>$Y to $Z</td>
<td>Some elements conflict with strategic context</td>
<td>Significant environmental harm (1–5yrs) and costly restoration</td>
<td>Delay in delivery 6–12 months</td>
<td>Long term recoverable changes to social characteristics or values</td>
<td>Extensive serious or permanent injuries or disabilities</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Moderate</td>
<td>$X to $Y</td>
<td>Some elements do not align to strategic context</td>
<td>Some limited environmental impacts</td>
<td>Delay in delivery 1–6 months</td>
<td>Medium term recoverable changes to social characteristics or values</td>
<td>Individual major injury requiring hospital attendance</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Minor</td>
<td>SW to $X</td>
<td>Minor misalignment to strategic context</td>
<td>Limited impact which is fully recoverable</td>
<td>Delay in delivery 1–2 months</td>
<td>Short term recoverable changes to social characteristics or values</td>
<td>Minor injury—medical treatment</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Insignificant</td>
<td>&lt; $W</td>
<td>Aligned to strategic context</td>
<td>Minor transient environmental harm</td>
<td>Delay in delivery &lt;1month</td>
<td>Local small scale impact of social characteristics or values</td>
<td>Minor injury—first aid treatment</td>
</tr>
</tbody>
</table>

Other categories for risk consequence ratings may include reputation, compliance, resources, performance, demand, service interruption etcetera.

The risk likelihood ratings and risk consequence ratings combine into a risk matrix, which is developed with consideration of the risk appetite and scope of the project. An example risk matrix is provided in Table 4.

Table 4: Example Risk Matrix

<table>
<thead>
<tr>
<th>RISK MATRIX</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insignificant</td>
</tr>
<tr>
<td>Likelihood</td>
<td></td>
</tr>
<tr>
<td>Almost certain</td>
<td>Medium</td>
</tr>
<tr>
<td>Likely</td>
<td></td>
</tr>
<tr>
<td>Unlikely</td>
<td></td>
</tr>
<tr>
<td>Rare</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
The risk criteria and risk matrix should be approved by the business owner or Project Steering Committee before any risk assessment is undertaken.

**Risk Identification**

Risk identification and assessment is undertaken across a broad range of activities in the development of any Business Case. Risk identification involves determining what, why, where, when and how events could prevent, degrade, delay or enhance the project outcome. Risks include (but are not limited to) the risk types illustrated in Table 5. These risks include:

- **Project risk**—all risks associated with the design, procurement, construction, and commissioning of the asset.
- **Ongoing risk**—all operating risks associated with the operation of the asset from commissioning, to maintenance, to end of life.

**Table 5: Example Risk Categories**

<table>
<thead>
<tr>
<th>Identifying Risk</th>
<th>Ongoing Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Risk</td>
<td>Ongoing Risks</td>
</tr>
<tr>
<td>price risk—the price and or quantity of inputs required</td>
<td>technology and obsolescence risk</td>
</tr>
<tr>
<td>schedule/program risk</td>
<td>demand risk</td>
</tr>
<tr>
<td>contractual and legal risk</td>
<td>commissioning risk</td>
</tr>
<tr>
<td>health and safety risk</td>
<td>operating risks including maintenance</td>
</tr>
<tr>
<td>political risk</td>
<td>legislative change</td>
</tr>
<tr>
<td>environmental risk</td>
<td>health and safety risk</td>
</tr>
<tr>
<td>approval risk</td>
<td>approval risks</td>
</tr>
<tr>
<td>community and stakeholder risk</td>
<td>performance and availability risk</td>
</tr>
<tr>
<td>design and other technical risk</td>
<td>community and stakeholder risk</td>
</tr>
<tr>
<td>legislative and regulatory risk</td>
<td>political risk.</td>
</tr>
<tr>
<td>project finance risk—funds not available</td>
<td></td>
</tr>
<tr>
<td>market risk—insufficient skilled suppliers.</td>
<td></td>
</tr>
</tbody>
</table>

A variety of techniques are used to identify risks, such as structured review meetings, risk interviews and risk workshops. These techniques can be applied to any type of project.

For significant projects or projects considered to be high-risk, risk identification with stakeholders and subject-matter experts should be undertaken, usually through a workshop. This will help to capture all risks identified during the development of a Business Case.

**Risk Analysis**

Once identified, risks must be analysed. Risk analysis involves developing an understanding of risk, the causes and sources of risk, the positive and negative consequences of risks, and the likelihood that those consequences will occur. Risks should be analysed and rated according to the criteria established and documented in the Risk Register. Effective risk analysis includes considering the potential interdependencies between key risks.

Risk-analysis techniques range from assessments based on experience with similar projects, to computer-based simulations. The approach adopted for a particular risk will depend on the significance and complexity of the shortlisted option and the relative impact of the risk.
Quantitative Risk Assessment

Quantitative assessment of risk involves quantifying the likelihood of the risk occurring and its associated financial consequences. Likelihood and consequence of risk will vary due to the delivery models considered. Quantifying risk comprises the product of:

- the likelihood (probability) of costs, revenues and benefits being different from their expected values
- the consequences of differences between the actual and expected values.

Quantitative risk assessment is a mandatory part of developing the PBC and DBC. It enables risk to be quantified and applied to costed items, to support the economic, financial and commercial analyses. Risk assessment will also identify and, where possible, quantify the risks associated with proposed options. Quantitative risk assessments are used to:

- adjust cost and revenue estimates
- adjust wider economic benefits and costs
- inform the risk-management strategy for project implementation.

Risk assessment also includes a risk allocation to the party (public or private) best placed to manage the risk.

Qualitative Risk Assessment

Qualitative risk assessment involves determining, for each identified risk:

- the triggers of the risk
- the impacts of the risk and the likelihood of those impacts occurring
- the consequences of the risk.

The combination of the risk likelihood and consequences determines the materiality of the risk, and hence the level of risk analysis required (including the need for mitigating strategies).

Risk Rating Calculation

The risk rating is the combination of the risk likelihood and risk consequence. The risk rating can either be 'low', 'medium', or 'high' (Table 4). The risk rating affects how a risk will be treated and any requirement for reporting or escalation. Details of risks should be included in a Risk Register (example Table 6).
Table 6: Example Risk Register

<table>
<thead>
<tr>
<th>RISK REGISTER</th>
<th>Risk Category</th>
<th>Risk Description</th>
<th>Trigger</th>
<th>Impact</th>
<th>Likelihood</th>
<th>Consequence of Risk</th>
<th>Risk Rating</th>
<th>Mitigation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>There is a risk that ...</td>
<td>... caused by ...</td>
<td>... resulting in ...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>There is a risk that construction is delayed</td>
<td>caused by extended periods of rain</td>
<td>resulting in an extended construction period which may impact on ...</td>
<td>Likely</td>
<td>Major</td>
<td>High</td>
<td>Ensure that the project schedule includes sufficient float to account for potential weather delay</td>
</tr>
<tr>
<td></td>
<td>Demand</td>
<td>There is a risk that local growth strategies may change under the newly elected local council</td>
<td>caused by new local councillors having a stronger preference for urban containment</td>
<td>resulting in lower traffic volumes and toll revenue</td>
<td>Likely</td>
<td>Major</td>
<td>Medium</td>
<td>Agency to keep in close and regular contact with council</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Risk Register may also include the date the risk was identified, who identified the risk, due dates for implementing mitigation strategies, residual risk rating, and the action officer responsible for the mitigation.

Risk Evaluation

The purpose of risk evaluation is to assist in making decisions about which risks need treatment and the priority for treatment implementation. Risk evaluation involves comparing the level of risk found during the risk analysis with the risk criteria. Based on this comparison, the need for treatment can be considered.

Risk Allocation

Responsibility for risk is a critical decision involving consideration of who is responsible for risk (the public or private sector) and who is best able to manage it. Traditional or PPP delivery should be considered during both the qualitative and quantitative risk assessments. This is an important step in risk analysis, as it determines how the quantified risk values are applied to develop the risk-adjusted project cost.

When a PPP is proposed and a value-for-money assessment is required, the risk-allocation analysis is used to determine which risks will be retained by the state and which risks will be transferred to the private sector. A percentage is allocated to the public and private sectors for each risk and included in the Risk Register. This allocation is revisited and refined though the risk-analysis process.

The National PPP policy and supporting PAF guidelines require an assessment of whether the public or private sector is best placed to manage risk. Allocation of risk should be summarised in a table that clearly identifies the risks retained by the state and those transferred to the private sector (Table 7).
Table 7: Risk Allocation Summary Template

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Risk (nominal $ million)</th>
<th>Total Risk as % of Raw Capex (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Benchmarking of the risk allocation should be undertaken against precedent and similar projects (if available) to determine whether the proposed risk allocation is broadly consistent. Benchmarking assists in providing further confidence to decision makers that costs are realistic and not overly influenced by bias.

Risk Treatment

Risk treatment involves selecting one or more strategies for modifying risks, and implementing those strategies. Once implemented, treatments provide or modify the controls. Selecting the most appropriate risk treatment involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements (such as social responsibility and protection of the natural environment). Any costs involved in the treatment of risk should be reflected in the financial cash-flow estimates.
APPENDIX 2: STAKEHOLDER ENGAGEMENT AND SOCIAL LICENCE

Effective stakeholder engagement requires considering:

- who the stakeholders are
- how best to engage with them
- how to effectively manage their expectations.

Identifying Stakeholders

A stakeholder is ‘an individual, group, or organisation, who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project’\(^1\).

Stakeholder identification primarily takes place in the initial stages of Business Case development. However, it should be an ongoing activity which ensures that emerging stakeholders are effectively catered for in all project stages, including the design of the Reference Project and the delivery of the investment.

Different types of stakeholders may be relevant at different stages of the proposal lifecycle (i.e. during Business Case development, delivery or business-as-usual). All stakeholder types should be considered during the conceptualisation and design of the investment to ensure end-user stakeholder needs are incorporated into the design. Types of stakeholders include:

- public: service users, investment users, neighbours and special interest groups
- internal: delivery teams and performance monitoring groups
- external: potential delivery partners and sector experts
- government: relevant Ministers, other agencies, potential partners, central agencies and other levels of government.

Engaging with Stakeholders

Authentic and effective stakeholder engagement must be tailored to suit the needs of the stakeholders and the situation. Ineffective stakeholder engagement wastes resources, creates mistrust and potentially leads to erroneous consultation results and a faulty project design. Poor stakeholder engagement can render the project unable to proceed.

Engaging with stakeholders may include considering:

- What is the purpose/s of the engagement?
- Who are the relevant stakeholders for each purpose noted?
- What level of engagement is necessary to achieve the purpose?
- What method would best achieve the purpose?
- When should engagement take place?
- Who is responsible for the engagement?
- What are the key messages?
- What are the risks associated with the engagement and how will they be managed?
- How will success be measured?

The responses to these questions should be documented in a Stakeholder Engagement Plan, which can be appended to the completed Business Case.

**Levels of Engagement**

The Queensland Government groups engagement into three types:

- **Inform**—provide information to stakeholders
- **Consult**—seek information, opinion or advice from stakeholders
- **Active participation**—enables stakeholders to contribute to design, planning and/or decision-making processes.

The choice of engagement activity varies according to the purpose, the group and the situation. The level of engagement required may also vary for each stakeholder group. Stakeholders with high levels of influence or interest in the investment may require more communication and collaborative activities than stakeholders with lower levels of interest and influence. An example of how engagement may differ by stakeholder interest and influence is illustrated in Table 8.

**Table 8: Engagement Types by Stakeholder Interest and Influence**

<table>
<thead>
<tr>
<th>Stakeholder Interest</th>
<th>Stakeholder Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

**Expectation Management**

Communication and transparency are critical aspects of effective stakeholder engagement and expectation management. Proponents must be clear about the extent to which stakeholders are involved in the project and they must regularly report on progress.

Stakeholders and their expectations may change during the development of the Business Case and the life of the investment. For this reason, it is important that stakeholder-engagement activities are continually reviewed to remain relevant and focused on achieving the engagement goals.
Social Licence

Social licence (or ‘social licence to operate’) is the state that exists when a proponent or project has the acceptance and ongoing approval of the local community and other stakeholders.

Social licence operates across a continuum: ‘approval’ may range from favourable regard through to the community being pleased with the project; ‘acceptance’ may vary from tolerated to positive consent. Social licence is dynamic and an ongoing relationship is required to build and maintain it.

Stakeholders and the broader community should be given an opportunity to provide input through a community-consultation process. This involves confirming the impacts of the investment on stakeholders and understanding any new concerns. The consultation process should seek to understand whether the project is likely to receive a ‘social licence to operate’ from the community. If not, the project owner should consider whether it is worthwhile to progress.

Establishing ‘Social Licence’

Social licence is created by:

1. Establishing legitimacy—the project/proponent must be seen as legitimate. Achieving legitimacy requires an understanding of the community’s values, norms and social capital, and ensuring the project/proponent operates in a manner that aligns with those values, norms and social capital.

2. Establishing credibility—the project/proponent is credible. Credibility can be achieved through the careful management of expectations. Formal arrangements with clearly defined roles and responsibilities can help to establish credibility.

3. Developing trust—the community trusts the project team. Trust is pivotal to gaining and maintaining social licence. Activities that build trust are often those that involve shared experiences generated through participatory processes rather than the simple transfer of information (these fit in the Active Participation quadrant in Table 8).

Links to further information on stakeholder engagement and social licence can be found in Section 7 (Resources).