

Business Case

Development

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1.0 Introduction

This guideline forms part of the *Capital Works Management Framework* (CWMF). The CWMF is a whole-of-Government policy framework for the initiation, development and implementation of building projects. It supports the Queensland Government's model for strategic management, *Managing for Outcomes*.

The CWMF capital works management process, illustrated in Diagram 1, is a generic process that assists departments in adopting a strategic asset management approach for building projects. Its objective is to achieve consistency in the application of best practice within the operating environment of government.

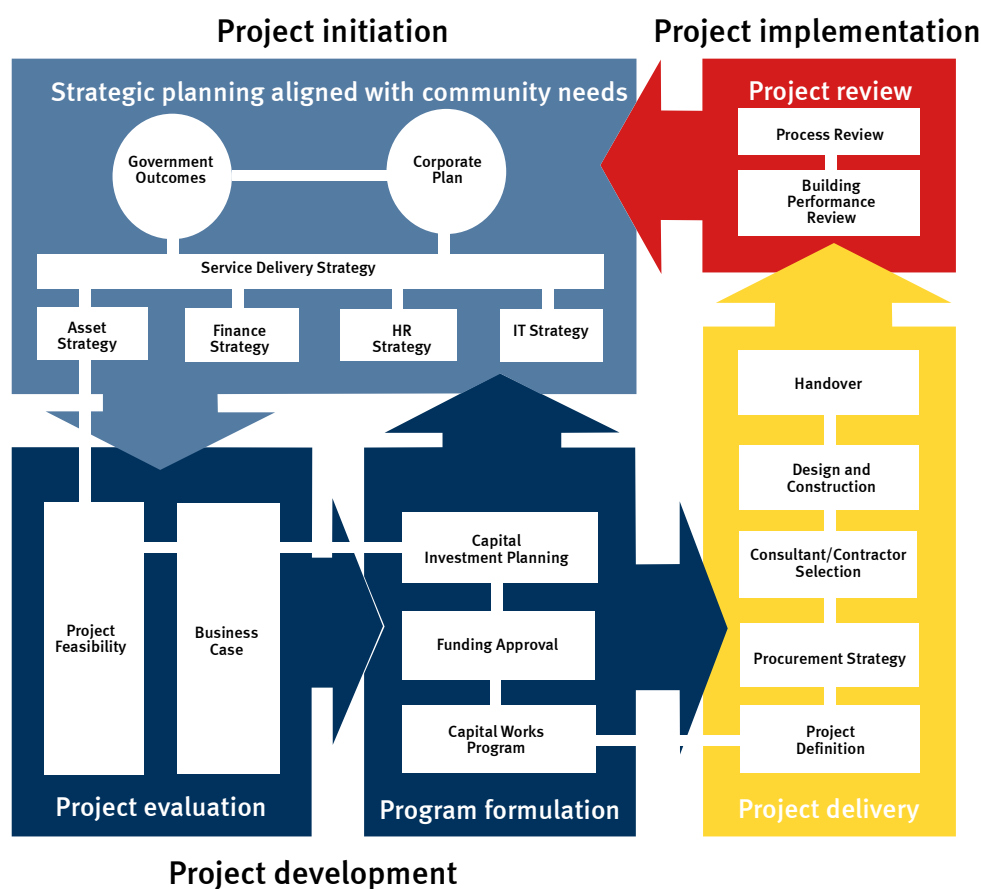


Diagram 1 - Capital works management process

Project initiation within the capital works management process encompasses the development of:

- service delivery strategies; and
- a number of operational strategies including asset strategies, which may include new building projects.

These asset strategies become the basis from which options are further developed and evaluated, and capital investment programs are formulated. These activities are undertaken as part of the project development that comprises the project evaluation and program formulation phases, as shown in the diagram.

This guideline focuses on the project evaluation phase and in particular on development of a business case produced as a result of the project evaluation process.

1.1 Objective

The objective of this guideline is to provide best practice guidance for government departments in developing business cases for building projects.

1.2 Competencies and resources required

The competencies required for developing business cases comprise a range of skills, including those for:

- facilitation and negotiation
- demand management
- risk management
- value management
- economic, social, environmental and budget analyses, and
- strategic planning.

Should departments need to engage consultants for developing business cases, the consultants would need to be appropriately qualified.

1.3 Scope

This guideline focuses on the project evaluation phase of the capital works management process and in particular on the development of business cases produced as a result of the project evaluation process.

Business cases can be used to support submissions for major building project proposals to departmental management, Ministers and the Cabinet Budget Review Committee. This allows the economic, social, environmental and budgetary impacts of projects to be reviewed and projects prioritised.

The *Financial Management Standard 1997* requires written evaluations where an investment in a physical asset is estimated to be \$1 million or more. The *Financial Management Standard 1997* also requires a submission to the Treasurer including, inter alia, the processes and results

of evaluations for projects where the investment is estimated to exceed \$5 million. There are no formal reporting requirements for projects below \$1million.

Documented business cases will satisfy the legislative requirements for written evaluation and submissions. They may also be required to support a department's capital investment plan or to justify output proposals. It is recommended that departments consult with Queensland Treasury, when necessary, to confirm the extent of reporting requirements needed for individual building projects.

1.4 Related documents

Guidelines and policies relevant to business case development include:

- *Capital Works Management Framework*, Department of Public Works, 2000
- *Financial Management Standard*, Queensland Treasury, 1997
- Strategic Asset Management (SAM) guidelines:
 - *Asset Strategic Planning*, Department of Public Works, 2000
 - *Asset Review and Analysis*, Department of Public Works, 2000
 - *Demand Management*, Department of Public Works, 2000
 - *Value Management*, Department of Public Works, 2000
 - *Location and Site Selection*, Department of Public Works, 2000
 - *Risk Management*, Department of Public Works, 2000
- *Capital Investment Strategic Plan Guidelines*, Queensland Treasury, 2000
- *Project Evaluation Guidelines*, Queensland Treasury, 1997

2.0 Project evaluation

Evaluation of building project proposals is a key element of a department's financial and service delivery planning and in the formulation of capital works programs.

Building projects are initiated where strategies selected through strategic planning involve building requirements. Planning for assets at this strategic level involves establishing what assets are required to support service and output strategies identified in a department's corporate plan and service delivery strategies. These are compared to existing available assets. Strategies are developed for acquisition of new building assets and reconfiguration, use, refurbishment and disposal of existing assets. This process includes consideration of recurrent cost implications of capital investment.

Asset strategies developed through this process and incorporated in a department's capital investment strategic plan form the basis from which options are further developed and evaluated and capital investment programs formulated. These activities are undertaken as part of the project development, which includes the project evaluation and program formulation phases in the capital works management process.

Asset strategic planning and project evaluation are undertaken in conjunction with the ongoing State Budget process and as part of the general *Managing for Outcomes* framework. This should involve ongoing consultation with Queensland Treasury and feed into the strategic and operational meetings of the Cabinet Budget Review Committee. Asset strategic planning, project evaluation and the State Budget process are key elements in determining building requirements and those building proposals that provide the best value for money and that can and should progress to funding approval in the program formulation phase. These elements are linked and interdependent and represent an ongoing process as illustrated in Diagram 2.

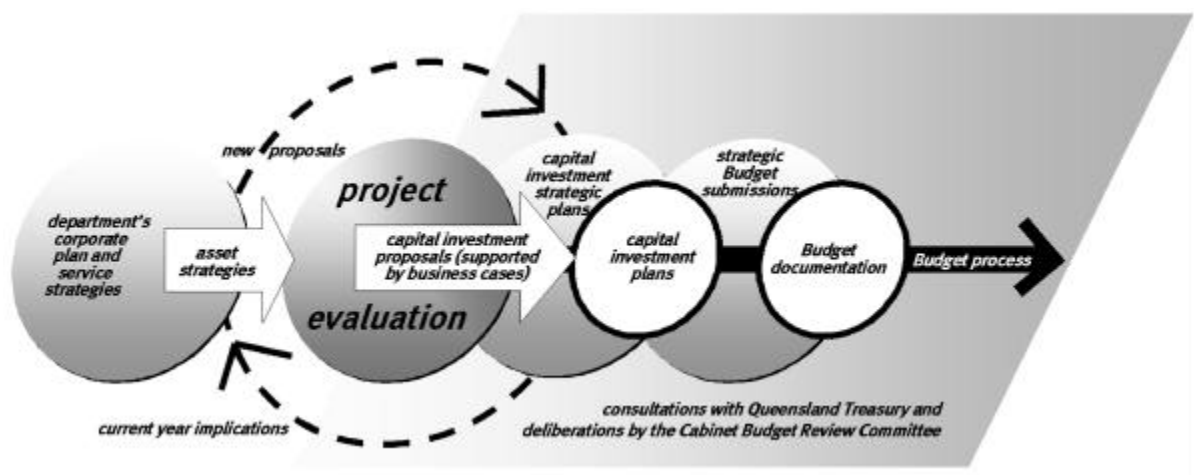


Diagram 2 - Context of project evaluation within the Managing for Outcomes framework

The project evaluation phase incorporates the project feasibility and business case stages and provides a structured approach for undertaking project feasibility studies to establish preferred options and, where required, develop a business case that supports service delivery through asset strategies. When asset strategies include building elements, the business case should establish:

- a preferred building solution that meets service delivery needs;
- the basis for funding application and inclusion in capital works programs; and
- the basis for building performance review in the project review phase of the capital works management process.

3.0 Project feasibility

Project feasibility involves:

- defining the objectives and scope of individual projects;
- identifying and selecting suitable options;
- carrying out project analyses; and
- selecting preferred options.

Project feasibility involves the comparative evaluation of 'build' and 'non-build' scenarios relating to the project and should be undertaken in accordance with the process outlined in Queensland Treasury's *Project Evaluation Guidelines*. It revisits the asset strategic planning process with input to a department's capital investment strategic plan, but at a project level. Asset strategic planning processes are described in the SAM guidelines, *Asset Strategic Planning* and *Asset Review and Analysis*, and Queensland Treasury's *Capital Investment Strategic Plan Guidelines*.

3.1 Defining the objectives and scope of projects

The purpose of the project must be defined in terms of the benefits the project will provide. These can be expressed as 'outcomes' (e.g. increased provision of government services to the region) and as an 'output' (e.g. build a new facility). These outcomes and outputs should be drawn from the department's corporate and capital investment strategic planning processes, which establish linkages with government priorities and regional strategies. Any project proposal should include specific information on the functional requirements and how it will contribute to the department's service delivery strategy.

3.2 Identifying and selecting suitable options

Departments should pursue innovative solutions when formulating options for building projects and should consider option strategies, such as joint ventures, non-building solutions, outsourcing and private sector involvement. Options should include suitable options identified through the asset strategic planning process (e.g. gap analysis may identify potential to meet building requirements through refurbishment or upgrading of existing buildings). They should always include the option to take no action. Further options may be generated through techniques suggested by Queensland Treasury's *Project Evaluation Guidelines*. Options may also be identified through value management studies as outlined in the SAM guideline, *Value Management*.

Building project options may include:

- new building construction;
- extensions to existing buildings;

- major refurbishment (or upgrading) of buildings;
- reconfiguration of existing buildings;
- acquisition of buildings;
- leasing of building space; or
- site acquisition for building purposes.

Project options should, where appropriate, take into account the disposal of existing buildings and the decommissioning of leased premises.

When a number of location and site options are available, it will be necessary to include these in project analyses.

3.3 Carrying out project analyses

Following identification and preliminary assessments of all reasonable building, non-building, location and site options, the most suitable options should be short listed for detailed analysis. The purpose of detailed project analysis is to ensure best value for money through economic, environmental, social and budget analyses of all short listed options. The degree of analysis undertaken should be tailored to appropriately manage risks associated with individual projects. In undertaking the analysis, departments should give consideration to departmental priorities, government policies and legislation. This will include consideration of the Government's priorities established by the *Charter of Social and Fiscal Responsibility* and relevant building legislation.

The *Integrated Planning Act 1997* (IPA) is the principal legislation governing development in Queensland and seeks to achieve ecological sustainability. Integration of the IPA processes and compliance with its intent in project development phases will contribute to managing the impact of buildings on the social and physical environment.

The *Building Act 1975* and the *Standard Building Regulation 1993*, which incorporates the *Building Code of Australia*, is the principal legislation relating specifically to building projects. There is a wide range of other legislative and policy requirements that may also impact on building projects (e.g. the *Environmental Protection Act 1994* may need to be considered where site options include contaminated land and the *Copyright Amendment (Moral Rights) Act 2000* may need to be considered where options include modifications to buildings). The Government's *Policy Framework for Private Sector Involvement in Public Sector Infrastructure and Service Delivery* establishes the formal process for private sector participation in the delivery of public infrastructure and services and should be considered when options other than the Government as owner or operator (such as BOO¹ or BOOT² proposals) are being analysed. Other policy requirements, such as the requirements of the Government public art policy *Art Built-in*, may also impact on particular building projects.

¹ BOO refers to build, own, operate delivery systems.

² BOOT refers to build, own, operate, transfer delivery systems.

When a number of site options are available, it will be necessary to incorporate site options analysis to determine a preferred site. The SAM guideline, *Location and Site Selection* outlines aspects of location and site selection in the context of ongoing processes for land use planning. Before proceeding with development of land, it is the responsibility of departments to ensure that the proposed development and use of land comply with requirements of the IPA. This should ensure that the project is feasible in terms of all possible impacts and is not unduly affected in project implementation.

Economic analysis

Techniques used for economic analysis such as Cost/Benefit Analysis and Cost/Effectiveness Analysis are outlined in Queensland Treasury's *Project Evaluation Guidelines*. For building projects, the net economic benefits of each option are assessed by calculating the Net Present Value (NPV) using the Cost/Benefit Analysis technique. Cost/Effectiveness Analysis is appropriate for projects with strong community or social welfare objectives that may be difficult to value and should only be used when the project and the benefits are of reasonable significance.

NPV is today's value of all future cash inflows and outflows of a project option. The NPV is the difference between the streams of costs and benefits of an option, both discounted to a present value by the application of a discount rate. Discounting takes into account the time-value of money so that options with different cash flows can be compared. Queensland Treasury's *Project Evaluation Guidelines* recommend a common discount rate for all departments. Accordingly, departments should consult with Queensland Treasury in adopting a test discount rate.

Analysis of the cost of service delivery associated with an option should consider total asset management and service delivery costs. This will involve analyses of life cycle costs including capital, recurrent and disposal costs. In some cases, such as the delivery of health services, the recurrent costs associated with projects can exceed the capital investment after a relatively short period of use.

The NPV is a key decision criterion used to rank project options. All other considerations being equal, the project option with the highest NPV represents the option with the greatest economic benefit. In these cases, social benefits and other qualitative issues may be important considerations.

As there will always be some degree of uncertainty surrounding the outcome of an evaluation, the projected outcomes should be tested under different scenarios. This may be undertaken by determining realistic ranges (i.e. worst to best) for all key variables. NPV calculations are performed using different combinations of worst and best case scenarios. These analyses can identify minimum sets of changes in key assumptions that would alter the ranking of project options. Queensland Treasury's *Project Evaluation Guidelines* outline analytical techniques that may be used for assessing risk and uncertainty of the net economic benefit (i.e. the NPV) of project options. Techniques include sensitivity analysis, risk analysis and scenario planning.

Sensitivity analysis is used to determine the sensitivity of the NPV to changes in key project variables. This process enables the identification of variables that are critical to the robustness of the estimated values. Sensitivity analyses should be undertaken to establish:

- sensitivity of the options' NPVs to changes in the discount rate; and
- sensitivity of the options' NPVs to changes in at least one key project variable.

Risk analysis can be used where there is a limited number of key variables. Major assumptions made in the analysis will assist in identifying risks associated with the options. Queensland Treasury's *Project Evaluation Guidelines* outlines the application of risk analysis in calculating NPVs. For capital building projects, risks may be associated with the following areas:

- benefits - the areas of exposure or major assumptions associated with the estimated benefits;
- time, cost and quality - the major factors in selecting either a traditional or a non-traditional form of project delivery to manage the project specific risks. Risks may be associated with reliability of cost estimates (including potential cost exposures) or with management of particularly large projects. The CWMF guideline, *Procurement Selection and Generic Contracts*, provides guidance for managing risks through procurement system selection; and
- social and environmental impacts - assumptions made in estimating the social and environmental impact of options. Risks may be associated, for example, with particular local requirements for disaster mitigation strategies, including preventative measures to safeguard or minimize impact on or of all new building projects.

The SAM guideline, *Risk Management*, provides departments with a structured approach to analysing and managing risks.

Scenario planning may also be used to assess risk associated with project options if there is a number of assumptions and variables used in the analysis. This process looks at the likely outcomes of specified scenarios and is outlined in Queensland Treasury's *Project Evaluation Guidelines*.

Clear statements of assumptions made in analyses and the reasons for making such assumptions must be given so that decision-makers are fully informed. For example, if analysis of an option for construction of office accommodation is undertaken on the assumption that office rents will increase at more than the rate of inflation, the assumption could be justified by evidence of market trends including the projected returns and demand for office space in the particular area. Where necessary, independent expert assessments should be obtained in order to develop and justify the costs and demand estimates.

Environmental analysis

An environmental analysis of each short listed option should follow the steps outlined in Queensland Treasury's *Project Evaluation Guidelines*.

Development proposed by or on behalf of the State will require an environmental impact statement under the *State Development and Public Works Organisation Act 1971* only if it is declared by the Coordinator-General as a significant project pursuant to that Act. For proposals not declared as significant projects, the provisions of the IPA provide the framework for the environmental assessment.

Social analysis

An analysis of the social impacts of each short listed option should follow the steps outlined in Queensland Treasury's *Project Evaluation Guidelines*.

The impact assessments required by the IPA will also address social impacts, such as the positive and negative impact of services, facilities and operations on the community.

Budget analysis

A budget analysis of each short listed option should follow the steps outlined in Queensland Treasury's *Project Evaluation Guidelines*. This analysis should identify outlays and revenues over the forward estimates period for all resource strategies (i.e. human resource, information technology and asset strategies) and include capital and recurrent outlays, revenues and the funding source for each project option.

The effects each option has on the State Budget should also be identified, and include consideration of the impact on the department's capital and recurrent budgets. The impact on other organisations (such as the impact of any inter-departmental charges) should also be included.

3.4 Selecting the preferred option

The short-listed options should be ranked according to the NPV when the Cost/Benefit Analysis technique has been used. For Cost/Effectiveness Analysis, the NPV of costs should be used to determine the lowest cost option.

Where the impacts of environmental, social and budget analysis have not been factored into the economic evaluation, the ranking of options established by the economic analysis should be adjusted based on a synthesis of these analyses. This may be undertaken by assessing costs associated with the major environmental, social and budget impacts to adjust the NPVs to reflect departmental and Government priorities.

The preferred option, which is the outcome of the project feasibility stage, contributes to the formulation of capital investment plans and capital works programs.

4.0 Business case

The business case stage involves documentation of the analyses undertaken in the project feasibility stage. Where required for building projects, documentation of a business case is undertaken when the project analysis has arrived at a preferred option that incorporates building elements.

In these cases, the functional requirements justified by the project feasibility and documented in the business case will form the basis of project delivery and assist in keeping building projects focused on service delivery outcomes.

4.1 A generic outline for business cases

The following generic table of contents has been developed to provide guidance on the content and requirements for business cases. Departments may choose to adopt this structure for documentation of business cases.

Table of contents

Executive summary

- 1 Project background
- 2 Objectives and scope of project
- 3 Project options
- 4 Project analysis
- 5 Preferred option
- 6 Recommendations

Attachments

Executive summary

An executive summary should provide an outline of the capital investment proposal and, consistent with the requirements for project evaluation reports established by Queensland Treasury's *Project Evaluation Guidelines*, state:

- whether the project advances government priorities and contributes to outcomes established through the department's strategic plan;
- if the project forms part of an interdepartmental strategy (such as for co-location of facilities);

- the impact the project will have on service delivery and departmental outcomes;
- how the project contributes to outputs and increased productivity;
- what budgetary impact and economic return the project will produce;
- whether options other than the government as owner and operator have been considered; and
- how the project is to be funded.

Project background

The project background should document:

- earlier planning for service delivery through corporate planning and development of service delivery and resource strategies, and in particular, identified needs for capital building elements incorporated in asset strategies;
- any earlier activities relating to project development; and
- an explanation of the process and analyses undertaken in developing the business case.

The emphasis, here, should be on the major benefits of the project, including the impact it will have on service delivery outcomes.

Objectives and scope of project

Based on the results of the project feasibility stage of project development, the purpose of the project must be defined in terms of the benefits the project will provide. The main issues to be documented relate to:

- current and projected demand for services;
- identification of functional requirements of the building project proposal; and
- the functional relationship with other infrastructure segments.

Project options

Project options identified and selected in the project feasibility stage should be documented. The concept of each option including details of joint ventures, outsourcing and private sector involvement as well as details of the take no action scenario and both building and non-building solutions should be outlined. Particular information to be included should relate to:

- meeting functional and service delivery requirements, such as location and details of space and floor area provisions;

- capital costs including land acquisition, design and construction costs, furniture and equipment costs, fees and charges, relocation and commissioning costs and allowances for contingencies;
- recurrent costs including operating costs (for the asset, human resources and information technology) and maintenance costs;
- associated financial strategies including funding of capital and recurrent costs; and
- site and other project implications.

Project analysis

This section should summarise the analysis of the building and non-building options undertaken in the project feasibility stage. It should present findings of analyses undertaken in the project feasibility stage, including:

- the economic analysis presenting a comparison of the net benefits of each option and the associated sensitivity and risk analyses;
- the environmental analysis outlining all environmental consequences and the short-term and long-term environmental effects and mitigation strategies relating to each option;
- the social analysis outlining significant social issues, impacts, costs or opportunities associated with each option as well as their impact and proposed strategies;
- the budget analysis outlining the outlays and revenues for each option over the forward estimates period and documenting the impact of each option on the State Budget and other organisations;
- any site options analysis including strategies to address requirements of the IPA; and
- the synthesis of the above analyses including results of application of performance criteria reflecting departmental and government priorities.

A suggested format for summarising the results of the project analysis is included in Table 1.

Option	NVP (worst case)	NVP (expected case)	NVP (best case)	Major environmental, social and budget impacts	Overall rank
1					
2					
...					

Table 1 - Summary of project analysis

Preferred option

A summary of the preferred option should be presented along with a statement outlining the reasons for selecting this option.

Where the preferred option includes a building solution, the summary should describe the concept including details of any joint ventures, outsourcing and private sector involvement. Particular information to be summarised should relate to:

- location and details of the building concept, including space and floor area provisions;
- capital costs including land acquisition, design and construction costs, furniture and equipment costs, fees and charges, relocation and commissioning costs, and allowances for contingencies;
- recurrent costs including operating costs (for the asset, human resources and information technology) and maintenance costs;
- associated financial strategies including funding of capital and recurrent costs as well as cash flows for each financial year over the three year forward estimates period (and subsequent years as appropriate);
- site and other project implications; and
- a procurement strategy including delivery and programming aspects.

Recommendations

The recommendations should be introduced by referring to the preferred option, the reasons for selecting this option and the impact should the project not proceed. This section should then provide specific recommendations relating to adoption of the preferred option and make further recommendations as appropriate to progress the project. Particular recommendations may relate to, inter alia:

- any site designation or approval processes, such as may be required by the IPA;
- further considerations required by government committees, such as the Cabinet Budget Review Committee; and
- Cabinet submissions required such as when the proposal provides for private sector participation.

Attachments

The extent of information required to support the project will depend on the level of analysis undertaken and, where appropriate, may be attached to the business case.