

Fact Sheet: Economic Concurrence Report of Project Cost-Benefit Analysis

Economic Advisory
Finance and Investment Division



1. Economic appraisal is the heart of the Business Case

Transport for NSW (TfNSW) plans and delivers infrastructure and services across all modes of transport, including road, rail, bus, ferry, light rail and active transport (cycling and walking). It contributes to economic growth in NSW by delivering services, managing assets, and improving the transport system to enable the community to live, work and play.

A **business case** is a key decision-making and management tool that demonstrates the purpose, justification, deliverability, benefits, and outcomes of potential investments. Strong evidence-based decision-making is a key contributor to the realisation of outcomes through successful delivery of transport investments.

The **economic appraisal** or **Cost Benefit Analysis** is the heart of the business case. An economic appraisal is required as part of a business case to support funding proposals, in line with NSW Government policy. It aims to measure the full impacts - economic, social and environmental - of a decision on the NSW community, including individuals, firms and the government.

2. Economic Concurrence Report

Due to the importance of economic appraisal in supporting investment decisions, NSW Treasury and Transport for NSW set out mandatory requirements of economic appraisal of investment projects. Economic Advisory within the Investment and Assurance Branch undertakes **Economic Concurrence Review** (the Review) to assess the compliance and the quality of TfNSW CBAs. The Review can be undertaken at various stages of the project, generally following the production or an update to a CBA:

- **Gates 1 and 2:** the Review is undertaken in conjunction with / as part of a TfNSW Assurance Review.
- **Gates 3 to 5:** as a stand-alone Review of BCR updates due to changes in circumstances such as scope or cost.
- **Other circumstances:** special requests such as deep-dives of the project's economics and value-for-money.

The outcome of a Review is documented is an **Economic Concurrence Report** (the Report), which is issued to the project team at the end of the review period. It is also used in the close-out process.

The Review assesses alignment with the mandatory and quality requirements set out in the following NSW Government Cost-Benefit Analysis guidance (the Guides):

- NSW Government Guide to Cost-Benefit Analysis (TPG23-08).
- Transport for NSW (TfNSW) CBA Guide 2023.
- Transport for NSW Economic Parameter Values 2023.
- Other guidance within the [Transport for NSW CBA Guide Ecosystem](#).

All projects with an Estimated Total Cost (ETC) more than \$10M in the project planning and delivery period require an Economic Concurrence Review. The review will be undertaken for all Tiers 1-4 projects. A light review, in that compliance with mandatory requirements are checked, can be more appropriate for those Tiers 3 and 4 projects.

3. Process of an Economic Concurrence Review

The Table 1 below provides the key steps involved in a Review.

Table 1: Key steps of an Economic Concurrence Review

| Key steps | Description |
|---------------------------------|--|
| Engagement | Project team to approach Economic Advisory and arrange an engagement meeting. The meeting aims to cover: <ul style="list-style-type: none"> • Project background / context • High level summary of CBA results • List of documents in the submission • Project timeline • Any other issues related to the CBA |
| Documents suitable for a review | Economic Advisory advises if the submission contains all required documents to commence a Review, and to determine the suitability of submitted documents for commencing economic concurrence review. |
| Timeframe and level of review | Economic Advisory determines the level of review applicable and the timeframe in consultation with the project team. |
| Economic Concurrence Report | Economic Advisory reviews the submission and provides the Report to the project team. |
| Close-out | The project team responds to and acts on the recommendations. Economic Advisory to verify, accept and close out. |

The following documents are required for a Review to commence. The **final version or an advanced draft** of CBA documents should be submitted. Where the CBA documents are in an earlier stage of development, the project teams may opt to engage the Economic Advisory for economic advice instead of a Review.

- **Economic Appraisal Report:** a standalone report (Gate 1 or Gate 2), or CBA report addendum (post Gate 2 to Gate 5).
- **CBA Model:** full, formulae driven model without password lock. **Macros** needs to be removed prior to submission to comply with Group IT policy. It is a minimum requirement for

the model to present a table with cost breakdown (base estimate, contingency, project estimate, escalation, outturn costs), itemised benefits, and the results (BCR and NPV).

- **Business Case:** business case report with the value-for-money chapter completed.
- **Relevant supporting documents:** such as cost estimates report, transport modelling report, safety analysis etc.

The Review timeframe is determined at the inception of the engagement with the Economic Advisory. In general, the review period is two weeks, which commences once the Economic Advisory receives all required documents (see Section 3). However, a number of factors influence the Review timeframe. These include the project teams' needs, government prioritisation, the complexity of the project and the review pipeline of the Economic Advisory. Note that this agreed review period excludes the close-out phase and project teams should allow additional buffer for such.

4. How does Economic Advisory undertake the Economic Concurrence Review?

4.1 Mandatory CBA requirement and compliance

A CBA must fulfill the following mandatory requirements set out in the Guides to be compliant with TfNSW and NSW Treasury requirements:

1. Clearly and concisely define the problem, or opportunity, that the initiative is attempting to address, and how it will work.
2. Define a base case and present CBA results relative to the base case.
3. Assess at least two realistic options (in addition to the base case).
4. Estimate benefit-cost ratio (BCR) and net present value (NPV) results for the NSW referent group for each option at 5% discount rate for the core analysis.
5. Undertake sensitivity analysis on the BCR and NPV results for key risks and for the social discount rate sensitivities set in the Guide (3% and 7%, 4% for projects with Federal funding).
6. Provide a distributional analysis of the initiative (this can be quantitative, qualitative, or a combination of both).
7. Include an "executive summary" that summarises the initiative's objectives, base case, project options, key categories of benefits and costs, critical assumptions, economic appraisal results including BCR and NPV and key risks and distributional impacts.

4.2 Focus areas of economic appraisal

Further to the mandatory requirements, the Economic Advisory assesses the quality of the CBA for each of the eight steps involved in a CBA development. The observations and recommendations are summarised in an Economic Concurrence Report. The table below outlines the focus areas of the assessment.

Table 2: Key focus area of an Economic Concurrence Review

| Criteria | Key review questions |
|---|---|
| <p>1. Stating the Objectives</p> <p>Clearly and concisely define the problem, or opportunity, that the initiative is attempting to address, and how it will work</p> | <ul style="list-style-type: none"> Is the objective linked to achieving outcomes, rather than delivering a pre-determined output? Has the case for change (e.g. market failure or equity goal) been established? Note: this is often part of the broader business case, prior to beginning the CBA. |
| <p>2: Define the Base Case & Develop Options</p> <p>A. Define a base case and present CBA results relative to the base case</p> | <ul style="list-style-type: none"> Is the base case a <u>realistic</u> state of the world if no options proceed? Does the base case include relevant investments and policy changes that would affect the base case assumptions and forecasts? |
| <p>B. Assess at least two realistic options (in addition to the base case)</p> | <ul style="list-style-type: none"> Are there options missing from the analysis that may change the findings of the CBA? Considering the stage of the analysis, have these options been 'eliminated' at an earlier stage analysis? Is the scope of options appropriate to the stage of initiative development? e.g. early investigations, such as a Strategic Business Case, should canvass a broader range of options than at investment decision (Final Business Case) <p>In rare cases, such as grant programs or an ex-post CBA, it may be appropriate to assess only one realistic option.</p> |
| <p>3. Identify and describe all costs and benefits</p> <p>Accurately identify direct and indirect benefits and costs</p> | <ul style="list-style-type: none"> Are all significant costs and benefits (including unintended consequences) described? CBA should consider economic, social, cultural and environmental impacts. Are significant costs and benefits that cannot be quantified described qualitatively and presented in addition to the main CBA results? Are the costs and benefits: attributable to a change caused by the initiative, accruing to NSW residents, not purely transfers, and supported by evidence? Are the P50 and P90 estimates presented clearly, broken down by base estimate, contingency, escalation, and outturn cost? |
| <p>4: Forecast all quantifiable costs & benefits</p> <p>Rigorously forecasts cost and benefit quantities and attributes outcomes to the options assessed</p> | <ul style="list-style-type: none"> Are the data sources, methods and assumptions underpinning the forecasts presented transparently? Is the choice of model and modelling area suitable for the project context and economic appraisal? Are forecasts built on relevant and valid evidence? Is there other robust evidence that should be incorporated? Do the forecasts: identify which changes are additional to the base case, avoid double counting the same outcomes under different cost or benefit lines and exclude 'economic multiplier' effects? Is construction impact accounted for and shown separately as a dis-benefit in the analysis? |
| <p>5: Value quantified costs and benefits</p> <p>Robustly values the stream of costs and benefits using appropriate prices in real terms</p> | <ul style="list-style-type: none"> Have key costs and benefits been valued in real dollars (i.e. excluding inflation) where feasible? Are the parameter values correctly applied, and sourced from the TfNSW EPV or other credible sources (such as ABS, ATAP)? Are outcomes valued using willingness-to-pay principles? If an alternate approach has been used, is it relevant and valid? Have resource costs been valued at their opportunity cost (i.e. the value of that resource in its next best use)? Have market goods and services been valued at market prices? If not, what is the reason for varying from market price? Have non-market goods and services been valued using the best available valuation techniques? |

| Criteria | Key review questions |
|--|--|
| <p>6: Assess Risks & Test Sensitivities</p> <p>A. Net present value and benefit-cost ratio are correctly calculated</p> | <ul style="list-style-type: none"> • Are results for each option calculated as incremental changes from the base case? • Are results based on costs and benefits in present value terms (i.e. their value in the base year of analysis)? • Have the NPV and BCR formulas been applied correctly? • Is the base year and appraisal period assumption correctly defined? |
| <p>B. Sensitivity testing is undertaken on assumptions and inputs, and is linked to key risks and uncertainties identified</p> | <ul style="list-style-type: none"> • Has the sensitivity analysis tested the effect of variations in the most impactful or high-risk assumptions, parameters, risks or uncertainties identified in the analysis? • Has the sensitivity analysis tested realistic scenarios (e.g. a realistic worst case scenario) using combinations of changes in assumptions and inputs, specific to the project? |
| <p>7: Assess distributional and equity impacts</p> <p>Distributional analysis is undertaken, highlighting the impacts to different stakeholder groups</p> | <ul style="list-style-type: none"> • Will different groups have significantly different outcomes due to the initiative? If so, has this been captured in the distributional analysis? • Costs and benefits should not be weighted differently for different groups in either CBA results or distributional analysis |
| <p>8: Report the Results</p> <p>A clear, concise summary of the key information and results of the CBA</p> | <ul style="list-style-type: none"> • Does the “executive summary” include the following mandatory components? <ul style="list-style-type: none"> ○ the intended purpose of the initiative ○ key features of each option and the base case ○ central BCR and NPV results for each option, including a breakdown of the value attributed to each key cost and benefit stream ○ significant costs and benefits that could not be quantified and an estimate of their expected impact ○ a breakdown of P50 and P90 cost including base estimate, contingency, escalation and outturn cost. ○ BCR and NPV results of key sensitivity analyses key risks and distributional impacts decision-makers should consider • Are the P50 and P90 results presented with cost and benefit breakdowns? |

5. Close out recommendations of the Economic Concurrence Review

The Report contains recommendations for the project team to action upon. Key findings, compliance issues and recommendations in the detailed assessment, which are identified in Chapter 2, 3 and 4 of the Report, must be addressed.

Once the changes are actioned, the project team should provide a revised CBA report and model for the Economic Advisory to verify, accept and close out the recommendations. In many cases, it is insufficient that the project proponent provides response of the planned actions. The Economic Advisory will issue a final Report to the project team as Economic Concurrence.

Document control

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