

**Cost-Benefit Analysis Review Template (TPG23-08)**

## Initiative details

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| --- | --- |
| Name of project and brief description: |  |
| Submission stage: |  |
| Estimated total cost (lifetime nominal cost of preferred option): |  |
| Reported NPV & BCR of preferred option(s): |  |

## Assessment details

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| --- | --- |
| Date of assessment: |  |
| Assessor’s name (or team name) & agency: |  |
| Peer reviewer: |  |
| Has this CBA previously been assessed? |  |
| If yes, key changes from previous assessment: |  |

## Assessor Instructions

This template supports reviews of cost-benefit analysis in line with the [NSW Government Guide to Cost-Benefit Analysis (TPG23-08)](https://www.treasury.nsw.gov.au/finance-resource/guidelines-cost-benefit-analysis), published in 2023 by NSW Treasury. Understanding of TPG23-08 is a critical requirement for undertaking a review of a CBA using this template.

The outcomes of the CBA QA:

1. Provide overall recommendations for the CBA, categorising each recommendation as “Critical” or “Important”.
   1. **Critical** recs: addresses issues that must be fixed for the CBA to provide reliable information to decision-makers.
   2. **Important** recs: will improve the reliability of the CBA in a meaningful way when implemented. Addressing important recommendations before proceeding to decision-makers will improve the reliability of the information presented.
   3. Additional suggestions that don’t meet the criteria for either Critical or Important can be listed under “Other comments” in Overall Recommendations and Finding
2. Select Overall Finding based on overall recommendations. Overall Finding is one of:
   1. "All Recommendations Addressed": no Critical or Important recs require action
   2. "No Critical Recommendations Outstanding": no Critical recs require action, but one or more Important recs do require action
   3. "Critical Recommendations Outstanding": one or more Critical recs require action
3. Step-by-step review of the CBA provides more detail on the process behind the reviewer’s conclusions.

## Overall Recommendations and Finding

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| --- | --- |
| **Overall Finding** | *Select one of:*  All Recommendations Addressed / No Critical Recommendations Outstanding / Critical Recommendations Outstanding |
| **Critical recs** | *List critical recommendations here (addresses issues that must be fixed for the CBA to provide reliable information to decision-makers):* |
| **Important recs** | *List important recommendations here (will improve the quality of the CBA in a meaningful way when implemented):* |
| **Other comments** | *If needed, include additional comments here:* |

## Step-by-step review of CBA

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| --- | --- | --- |
| **Step** | **What to look for** | **Findings** |
| 1. State objectives | **Mandatory**   * Clearly and concisely define the problem, or opportunity, that the initiative is attempting to address, and how it will work   **Critical questions**   * Is the objective linked to achieving outcomes, rather than delivering a pre-determined output?   **Important questions**   * 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. | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 2A. Define the base case | **Mandatory**   * Define a base case and present CBA results relative to the base case   **Critical questions**   * Is the base case a realistic state of the world if no options proceed? | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 2B. Develop options | **Mandatory**   * Assess at least two realistic options (in addition to the base case) \*   **Critical questions**   * Are there options missing from the analysis that may change the findings of the CBA?   + Consider the stage of the analysis – have these options been ‘eliminated’ at an earlier stage analysis?   **Important questions**   * 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 (Detailed Business Case)   \* in some cases, such as grant programs or an ex post CBA, it may be appropriate to assess only one realistic option. | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 3. Identify and describe all costs and benefits | **Critical questions**   * 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?   **Important questions**   * Are the costs and benefits: attributable to a change caused by the initiative, accruing to NSW residents, not purely transfers, and supported by evidence? | *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 4. Forecast all quantifiable costs & benefits | **Critical questions**   * Are the data sources, methods and assumptions underpinning the forecasts presented transparently?   **Important questions**   * 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? * Note: reviewers should think about forecasting in terms of the best feasible methods given the evidence available, rather than a theoretical 'ideal'. | *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 5. Value quantified costs & benefits | **Critical questions**   * Have key costs and benefits been valued in real dollars (i.e. excluding inflation) where feasible?   **Important questions**   * 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?   + Chapter 2.5 and Appendix 2 in TPG23-08 discusses some non-market valuation techniques | *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 6A. Assess net benefit (NPV and BCR) | **Mandatory**   * Estimate benefit-cost ratio (BCR) and net present value (NPV) results for the NSW referent group for each option * Use the central social discount rate set in the Guide (5 per cent real) to produce the central BCR and NPV results   **Critical questions**   * 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 (in TPG23-08, Appendix 7) been applied correctly? | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 6B. Sensitivity analysis | **Mandatory**   * 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 per cent real) * For CBAs including carbon emissions, mandatory sensitivity testing on the value of carbon is given in Technical Note to TPG23-08: Carbon value in cost-benefit analysis   **Critical questions**   * 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?   **Important questions**   * Has the sensitivity analysis tested realistic scenarios (e.g. a realistic worst case scenario) using combinations of changes in assumptions and inputs?   + Consider the use of techniques like Monte Carlo Analysis | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 7. Assess distributional and equity outcomes | **Mandatory**   * Provide a distributional analysis of the initiative (this can be quantitative, qualitative, or a combination of both)   **Critical questions**   * 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   Distributional analysis disaggregates the overall impacts of each option in a CBA by stakeholder groups, identifying those that gain and those that suffer losses or how gains are distributed across groups. TPG23-08 Appendix 5 provides guidance on conducting distributional analysis. | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |
| 8. Report results and key findings in executive summary format | **Mandatory**  Include an ‘executive summary’ that summarises:   * 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 * BCR and NPV results of key sensitivity analyses * key risks and distributional impacts decision-makers should consider | *Mandatory requirements met?*  *Critical issues:*  *Important issues:*  *Recommendations and reasoning:* |