



## Ex-Post Cost-Benefit Analysis Review Template

Details			
Name and brief description			
Evaluation type and purpose (e.g., during or after implementation):			
Actual cost (or current estimated total cost):		Initial estimated total cost (from ex-ante analysis):	
Ex-post Net Present Value (NPV) & Benefit Cost Ratio (BCR):		Ex-ante Net Present Value (NPV) & Benefit Cost Ratio (BCR) estimate (preferred option):	

Assessment details	
Date of assessment:	
Assessor's name (or team name) & agency:	
Peer reviewer:	
If an evaluation has been previously been assessed, key changes from last assessment?	
Does the initiative have a detailed business case?	

## Instructions

### This Tool:

- Provides a consistent structure and standards to review and communicate advice on ex-post cost-benefit analysis (CBA) evaluations, in line with the NSW Government Evaluation Guidelines (TPG22-22) and Ex-post Cost Benefit Analysis Technical Note.
- Is a supporting resource that may be used by NSW Government agencies and other evaluators. It is not mandatory.

### Using the QA Tool

#### 1. Provide recommendations categorised as “Critical” or “Important”:

- a) Critical recommendations: address issues that must be fixed for the ex-post CBA to provide reliable information.
- b) Important recommendations: will improve the reliability of the ex-post CBA in a meaningful way when implemented. Addressing important recommendations will improve the reliability of the information presented.
- c) Additional suggestions that don't meet the criteria for either Critical or Important can be listed under “Other comments” in Overall Recommendations and Findings.

#### 2. Select an overall finding:

- d) "All Recommendations Addressed": no Critical or Important recommendations require action.
- e) "No Critical Recommendations Outstanding": no Critical recommendations require action, but one or more Important recommendations require action.
- f) "Critical Recommendations Outstanding": one or more Critical recommendations require action.

3. Step-by-step review of the ex-post CBA provides more detail on the process behind the reviewer's conclusions.

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

Actions	
Highest level within the organisation that the recommendations have been noted/reviewed/endorsed	
The person in the organisation that will be responsible for implementing a response to the recommendations.	

## Ex-Post Cost-Benefit Analysis QA Tool – Steps for Review

	What to look for	Issues identified	Recommendations and reasoning
<b>Step 1: Define the evaluation purpose, scope, and timeframe</b>			
<b>Critical</b>	<ul style="list-style-type: none"> <li>Has the evaluation purpose, scope and timeframe been defined?</li> <li>Evaluation timeframe: Has an appropriate period of analysis and base year have been clearly defined? Does it align with the evaluation purpose?</li> <li>Are the initiative's objectives stated in terms of welfare outcomes, and not tied to specific outputs?</li> </ul>		
<b>Important</b>	<ul style="list-style-type: none"> <li>Has any variation in objectives and initiative scope from the ex-ante analysis been clearly explained?</li> </ul>		
<b>Step 2: Define the counterfactual and assess options</b>			
<b>Critical</b>	<ul style="list-style-type: none"> <li>Has a counterfactual been established?</li> <li>Was an experimental or quasi experimental design appropriately applied to establish a control group?</li> </ul>		
<b>Important</b>	<ul style="list-style-type: none"> <li>Are there any alternative options that could have been implemented, or could be implemented going forward, to achieve outcomes with greater efficiency or effectiveness?</li> </ul>		

What to look for	Issues identified	Recommendations and reasoning
<b>Step 3: Identify and describe all costs and benefits</b>		
<b>Critical</b>	<ul style="list-style-type: none"> <li>Are all significant costs and benefits attributable to the initiative (including unintended consequences) described? CBA should consider economic, social, cultural, and environmental impacts.</li> <li>Have costs and benefits that cannot be quantified for CBA been identified and discussed qualitatively in the CBA, with supporting evidence?</li> </ul>	
<b>Important</b>	<ul style="list-style-type: none"> <li>Are the costs and benefits: attributable to a change caused by the initiative, accruing to NSW residents, not purely transfers, and supported by evidence?</li> <li>Have impacts not anticipated in the ex-ante stage been identified?</li> </ul>	
<b>Step 4: Measure or forecast all quantifiable costs and benefits</b>		
<b>Critical</b>	<ul style="list-style-type: none"> <li>Are the data sources, methods and assumptions underpinning the actuals and forecasts presented transparently?</li> </ul>	
<b>Important</b>	<ul style="list-style-type: none"> <li>Have ex-ante forecasts been updated based on relevant and valid evidence?</li> <li>Is it clearly demonstrated that impacts (actuals and forecasts) are additional to the counterfactual and attributed to the initiative? (e.g. through an outcome evaluation or performance monitoring)</li> <li>Do the actuals and forecasts avoid double counting the same outcomes under different cost or benefit lines and exclude 'economic multiplier' effects?</li> </ul>	

What to look for	Issues identified	Recommendations and reasoning
<b>Step 5: Value quantifiable costs and benefits</b>		
<p style="text-align: center;"><b>Critical</b></p>	<ul style="list-style-type: none"> <li>• Have key costs and benefits been valued in real dollars (i.e., excluding inflation) where feasible?</li> <li>• Have non-market goods and services been valued using the best available valuation techniques?</li> </ul> <p><i>Chapter 2.5 and Appendix 2 in TPG23-08 discusses some non-market valuation techniques. Refer to Step 5 in the Ex-post CBA technical note. Carbon values should be calculated per the technical note to TPG23-08</i></p>	
<b>Step 6A: Assess net benefits (NPV and BCR)</b>		
<p style="text-align: center;"><b>Critical</b></p>	<ul style="list-style-type: none"> <li>• Has a benefit-cost ratio (BCR) and net present value (NPV) been calculated for each option using the 5 per cent social discount rate?</li> <li>• Are results for each option calculated as incremental changes from the counterfactual?</li> <li>• Are results based on costs and benefits in present value terms (i.e., their value in the base year of analysis)?</li> <li>• Have the NPV and BCR formulas (in TPG23-08, Appendix 7) been applied correctly?</li> </ul>	
<b>Step 6B: Sensitivity Analysis</b>		
<p style="text-align: center;"><b>Critical</b></p>	<ul style="list-style-type: none"> <li>• Has a 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) been undertaken?</li> <li>• For CBAs including carbon emissions, mandatory sensitivity testing on the value of carbon is given in Technical Note to <u>TPG23-08</u>: Carbon value in cost-benefit analysis.</li> </ul>	

	What to look for	Issues identified	Recommendations and reasoning
Important	<ul style="list-style-type: none"> <li>Has the sensitivity analysis tested realistic scenarios (e.g., a realistic worst-case scenario) using combinations of changes in assumptions and inputs? <i>Consider the use of techniques like Monte Carlo Analysis</i></li> </ul>		
<b>Step 7: Assess distributional and equity impacts</b>			
Critical	<ul style="list-style-type: none"> <li>Has the actual distribution of benefits and costs been analysed and presented?</li> <li>Have the target beneficiaries received the expected outcomes?</li> </ul> <p><i>Qualitative distributional analysis informed by evidence may be sufficient. Quantitative distributional analysis should be considered where effects are expected to be material for the identified groups.</i></p> <p><i>TPG23-08 Appendix 5 provides guidance on conducting distributional analysis.</i></p>		
<b>Step 8: Report results and key findings in executive summary format</b>			
Critical	<p>Does the executive summary include:</p> <ul style="list-style-type: none"> <li>A comparison between ex-ante and ex-post CBA results, with an explanation of any observed divergence? <i>(If available)</i></li> <li>Factors that may have impacted the results?</li> <li>Limitations in the evaluation and key assumptions made which may impact the results. This may include significant costs and benefits that could not be quantified and an estimate of their expected impact?</li> <li>Any CBA results from sensitivity, risk or distributional analysis that decision makers should consider?</li> </ul>		

What to look for		Issues identified	Recommendations and reasoning
	<ul style="list-style-type: none"><li>• Insight into the relative effectiveness of alternative options to inform future decisions?</li><li>• Summarise lessons learnt to formulate actionable recommendations?</li></ul>		
<b>Important</b>	<ul style="list-style-type: none"><li>• Have findings and implications been well communicated and well understood by the target audience?</li></ul>		