

The Base Case

Introduction

Making the best decision possible within a given set of circumstances and knowledge available at the time is critical to maximising progress and positive change within our communities.

Governments make big decisions every day that affect the lives of everyone in the community. This includes funding and budget decisions that affect our collective wealth and well-being.

We believe that great decisions that are well implemented are a fundamental driver of positive progress in government, in business and ultimately in society. Over the last couple of years, big steps have been made by government to implement improvements in evaluation and decision-making frameworks for new and large projects/initiatives. This is important because, over time, all investment decisions start to add up and if some decisions are made for short term and other reasons then any long-term economic costs will ultimately be borne by the community. The long time between investing in projects and realising benefits means such costs are sometimes not fully appreciated.

Applying the principles and frameworks from economics can help decision makers make great decisions. This short non-technical guide builds on the previously released Cost-Benefit Analysis for Decision Making. It explains how CBAs can be used to inform decision making and provides an overview of the types of questions CBA can answer. We hope that this short guide provides decision makers with an understanding of how CBAs can be used and ultimately how it can help you inform, influence and make great decisions.

What is CBA?

At its simplest, Cost Benefit Analysis (or CBA) is based on the idea that any new project or policy by the public sector should contribute more to society than it costs.

To assess this, CBA attempts to sum up all of the benefits and all of the costs associated with a new project or policy to see if the benefits are greater than the costs over the life of the project or policy.

Simple enough. However, CBA attempts to sum up not only the financial costs and benefits, things like construction costs and savings that a person might gain from a specific policy setting, but also the social costs and benefits to arrive at an evaluation of the overall impact on social welfare. To do so, CBA considers costs like the reduction in air quality that might result from a project that creates pollution, or perhaps the social benefits of reducing deaths and injuries because a road has been made safer. These costs and benefits cannot typically be observed in the market place. These social costs have to be estimated using techniques that have been developed by economists over many years.

The focus of this guide is on the establishment of the base case and how projects should be framed to maximise the success of a CBA.

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The base case

All CBAs compare a base case to a project case. This helps understand the incremental benefit of the project or intervention. It ensures that there is an understanding of what is attributable to the project, or what was driven by external factors.

Defining a project case is usually pretty straightforward. We can all imagine the world of possibilities that a new project or program would deliver. But understanding what would eventuate without any intervention can be tricky.

The definition of the base case has the potential to completely change a CBA. Not only does the magnitude of impact change, but the benefit stream itself could change. Ill-defined base cases lead to impacts being missed, benefits being over- or under-stated, and misalignment of the economic analysis and the service requirements.

Most economic guidelines or business case frameworks provide an approach for defining the base case. These use different words or contexts, but ultimately aim to achieve the same thing – defining a world to use as a comparator for change.

Questions to ask when defining a base case include:

- Have the costs of ongoing maintenance, such as those associated with structural integrity and public safety, been included?
- Is the existing level service of the appraisal period maintained? If not, have attempts been made to minimise the rate of degradation in service level?
- Is the included cost modest – that is, is it of a level which is achievable in the absence of additional funding?
- Is the base case based on the most effective method of maintaining the level of service at least cost?

The project case

The project case describes the project being analysed in relation to the base case

Project cases are typically easier to define as significant effort is placed on understanding the project, including the costs, design, inclusions and risks amongst other considerations.

That said, defining the project with respect to the base case provides immense value to the CBA. It helps demonstrate where benefits and costs would eventuate, and the potential magnitude of these impacts.

Not only is it beneficial to the economic analysis, but it helps develop the investment narrative for other workstreams, such as the Business Case reporting.

In some instances, consideration of the project case and base case can be iterative. Base case definitions cannot cover everything, so the base case may require updating or future research where a project introduces a new element.

Case study

Beenleigh and Townsville Courthouse Redevelopments



NineSquared was engaged to contribute to the Beenleigh and Townsville Courthouse Redevelopment Detailed Business Cases. These projects include various infrastructure elements, such as the courthouses, watchhouse and police station. We were engaged to undertake an assessment of demand and capacity using econometric modelling, then undertake the economic and financial analyses. The economic analysis included a detailed cost-benefit analysis, while the financial analysis included a discounted cash flow analysis to determine the budgetary and affordability implications.

A key consideration throughout this project was accurately defining the base case and project case. Demand for courthouse services are increasing across the state which places strain on the existing operations. This has the potential to lead to increasing delays in time to have matters being heard. By increasing the number of courtrooms, the capacity to hear matters increases.

This led to a range of questions:

- What does reaching capacity mean?
- Who would be impacted when capacity is reached?
- How big of a problem is reaching capacity?
- What could the additional capacity be used for?
- Are there upstream and downstream impacts associated with reaching capacity?
- Are there alternative ways to address demand outside of expanding capacity?

Beenleigh and Townsville Courthouse Redevelopments

The evolution of the base case and project case definition helped address some of these issues throughout the study.

As an example, the consideration of recidivism has material impacts on both the base case and project case definition. In order to accurately account for recidivism, the base case would need to include consideration on how recidivism would change for people waiting for their matter to be heard. The project case would then also need to consider how the individual elements of the program would address this.

Providing spaces for community and volunteer groups has the potential to lower recidivism, but this requires details of the programs such as the number of people able to attend and the success rates of the programs. Providing opportunities for education rather than simply fining or imprisoning people has the potential to reduce recidivism, but this requires an understanding of how many people would have access to the program and the types of crimes they were likely to commit again. Combined with other factors, this may lead to a completely different set of demand figures in the base case and project case.

More broadly, a well-defined understanding of the timing and cost of these interventions is required to ensure that the benefits are able to be included.

Understanding each element of the base case and project case heightens the chances of accurately estimating impacts. This can often be an ongoing process, particularly as the project changes and the understanding of the problems deepens. The sooner a holistic understanding of the base case and project case is developed, the better the outcomes a CBA can achieve.

Base case checklist

The base case checklist

- Has the base case been sufficiently specified?
Have all reasonable costs been included and have the planned and committed projects been included?
 - Is there any change in performance over the evaluation period?
With population growth or other demand pressures, will there be impacts to the level of service even with appropriate maintenance?
 - Have other 'project options' been included in the base case, or is it a true representation of 'business-as-usual'?
 - Does the base case include sufficient detail to assess potential solutions?
 - Does the base case cover a sufficiently wide range of considerations?
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Contact

Got questions?
Reach out to us for answers

- 📍 L11, 239 George Street, Brisbane
L9, 31 Market Street, Sydney
- 📞 Anthony Vine, +61 431 283 697
- ✉️ cba@ninesquared.com.au
- 🖱️ ninesquared.com.au

