

# Cost-benefit analysis at the NSW Department of Communities and Justice

This Snapshot provides an overview of Cost Benefit Analysis (CBA) and its application to business cases and economic program evaluation across the NSW Department of Communities and Justice in accordance to the NSW Treasury Guidelines.

### What is cost-benefit analysis?

CBA is a systematic method for evaluating and comparing the costs and benefits of a program. It can be completed:

- before a program or intervention starts to compare cost estimates with predicted benefits to provide evidence on why funds should be spent on that particular program as opposed to other programs, or
- after a program has commenced to compare actual costs with actual outcomes and is often used as the economic evaluation part of program evaluation.

### What are the steps in performing the cost-benefit analysis according to NSW Treasury Guidelines?





#### STATE THE **OBJECTIVE**

defining the problem and specifying the intended objectives and outcomes of the proposal to demonstrate a direct connection between the units of inputs to the units of outputs to the expected outcomes





#### ASSESS RISKS AND **TEST SENSITIVITIES**

demonstrate that the risks of the proposal and the sensitivity of results to assumptions have been considered by reporting key risks identified, plan for mitigation and sensitivity tests for key assumptions





#### **ASSESS THE NET BENEFIT**

comparing benefits to costs in dollar terms, to demonstrate the net impact of the preferred intervention relative to the base case and the other options considered, building evidence for the preferred intervention



#### **DEFINE THE BASE CASE AND DEVELOP OPTIONS**

allows comparisons of the preferred intervention to the world "without" the preferred intervention and other feasible options, demonstrating the suitability of the preferred intervention



#### **IDENTIFY QUALITATIVE FACTORS** AND DISTRIBUTIONAL IMPACTS

discussion of the costs and benefits identified in Step 3 that cannot be quantified i.e. broader economic costs and benefits. Also discuss distributional impacts i.e. who pays cost, who benefits







#### REPORT THE RESULTS

clear documentation of the process and results of the CBA form part of the evidence base for business cases and evaluations - it is critical information that Treasury and ERC looks for to inform their funding decisions



#### **IDENTIFY AND FORECAST COSTS AND BENEFITS**

understanding who is impacted, how and whether that impact can be quantified in dollars or will be qualitatively addressed (e.g. which benefits are avoided costs as opposed to broader economic benefits)



#### **VALUE THE COSTS AND BENEFITS**

for the costs and benefits identified in Step 3 as relevant and quantifiable. each should be quantified according to FACSIAR methodology, using \$ as a common unit for comparison



#### **UNDERTAKE POST EVALUATION**

when actual data is available (rather than forecasts), evaluation should be done in order to track whether the program actually has the expected impact and whether it actually provides a net benefit

More details on each of these nine steps can be found in NSW Government Guide to Cost-Benefit Analysis (TPP17-03).

### How is cost-benefit analysis used?

All Government actions have associated costs, so action should only be taken when it improves the wellbeing of an individual, family or community (net improvement of 'social welfare'). By weighing up costs against benefits in monetary terms, cost-benefit analysis can be used by decision-makers to understand whether the benefits of a program outweigh the costs and inform funding decisions through comparison across a number of options.

CBA helps us to focus on client outcomes including:

- Identifying the benefits of a program for clients so we can be sure that our services are making a positive impact.
- Demonstrating value for money so we can be sure that client needs are met in the most efficient and sustainable way.

For business cases, and other situations where a CBA is being done before a program has commenced, CBA can help to:

- Determine whether a program should be funded, e.g. a new community service program. Do the expected benefits exceed the estimated costs?
- Compare the proposed program to similar existing or proposed programs, e.g. comparison between new initiatives like Their Futures Matter against existing child protection programs. Will this program deliver better outcomes than other options?
- Systematically organise the available information on costs and benefits to help us make spending and investment decisions.

For economic evaluation during the program or at the conclusion of the program, CBA can help to:

- Understand whether the program was good value for money, e.g., for a child protection program, how much did it cost to keep one additional child safe?
- Compare the program to other programs with similar objectives, e.g. how does Brighter Futures compare with Their Futures Matters programs?
- Understand if the assumptions of the CBA conducted for a business case have been validated at program implementation.

## An example of using cost-benefit analysis

The following is an example of using cost-benefit analysis in a simple post-implementation evaluation of Program X.

Program X is not a real program. Due to the confidentiality and complexity of the data that goes into CBA, we cannot provide a real example here. This is a stylised example of how the CBA can be used.

Program X is aimed at reducing the number of children entering out-of-home care (OOHC). Following the evaluation plan that was established before the program started, you have been collecting data on costs and outcomes. After Program X has been running for a year, you have been asked to demonstrate the impact of the program and the value of the investment into the program.

39-2020\_Cost-benefit analysis at DCJ Snapshot\_23-06-20

You have been collecting data on the costs of delivering the program, what services have been delivered (e.g. how many hours of counselling services), the number of clients and client outcomes (e.g. how many children have avoided OOHC compared to similar programs over the same time period) and the avoided costs as a result of positive client outcomes (e.g. the cost of entering OOHC). You collect similar data for the 'base case' i.e. another program that has similar target outcomes so that you can compare Program X to the base case.

Using this information, you can perform cost-benefit analysis following the 9-steps outlined above to compare the costs of the program to the benefits of the program. The results of the CBA will help to determine whether the benefits of the program have exceeded the investment into the program.

### When is cost-benefit analysis not appropriate?

There are several scenarios where cost-benefit analysis is not appropriate. Some examples include:

- Low risk initiatives or initiatives with low or no additional funding requirements.
- Programs that do not meet a reasonable materiality threshold.
- Where there is insufficient information or data available. Some examples include, lack of data about which clients have received a service, which services clients have received, vague service provision guidelines that do not clearly identify the quantum of hours or items received by each client.
- Where cash flow is of more interest, in which case financial evaluation should be used.
- Where there is extreme difficulty in quantifying benefits in dollars, in which case cost effectiveness analysis should be used.

### Looking ahead: cost-benefit analysis across DCJ

In order to facilitate future CBA in line with NSW Treasury requirements, the NSW Department of Communities and Justice has projects underway to strengthen data collection, both internally and from our service provider partners. The resources and data collection projects are critical steps towards meeting NSW Treasury requirements for demonstrating impact and value of public services.

### More information

- NSW Government Guide to Cost-Benefit Analysis (TPP17-03)
   http://treasury.nsw.gov.au/finance-resource/guidelines-cost-benefit-analysis
- Or contact FACSIAR Economic Analysis team (<u>facsiar@facs.nsw.gov.au</u>)



#### Produced by

The Economics Analysis Team
Family and Community Services Insights Analysis and Research (FACSIAR)
NSW Department of Communities and Justice
320 Liverpool Rd, Ashfield NSW 2131

www.facs.nsw.gov.au

Email: facsiar@facs.nsw.gov.au