



NSW Department of  
Community Services

# **General Costing Principles for Child and Family Services in New South Wales**

Service System Development Division

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## **SECTION 1: INTRODUCTION**

### **1.1 Purpose and objectives of the Costing Manual**

In December 2002, the NSW Government committed to a budget enhancement of \$1.2 billion over five years to improve outcomes for children and families. As a result, the Department of Community Services' (DoCS) annual expenditure has increased to \$1.35 billion in 2008/09. A significant portion of this will be spent on funding and on services purchased from external providers.

To ensure that we get the best value for money in service delivery, a sound understanding of cost drivers, cost structures and service costing is needed. However, the application of standardised costing principles, including unit costing, has been limited in child and family services. Many service providers in child and family services are not-for-profit organisations. Good quality cost information is just as important to not-for-profit service entities as it is to other organisations. Better costing of various services, managing these costs and providing the maximum quality and quantity of services with the funding available will help improve outcomes for children and their families. Basic, consistent and reliable costing data is necessary for any organisation in order for good planning to be possible.

Version I of the Costing Manual, which presented indicative unit costs in 2004/05 dollar for Out-of-Home Care (OOHC) and Early Intervention (EI) services, was published in February 2006 on the DoCS website. Version II, published in August 2007, updated unit costs in 2005/06 dollar for OOHC and EI services, and included indicative costs for Supported Accommodation Assistance Program (SAAP) services and Children's Services. This third version provides indicative costs in 2008/09 for OOHC, EI, SAAP and Children's Services.

The unit costs provided in this Costing Manual reflect the nature of service delivery across the different child and family services covered, and the way in which the unit costs may be used to inform decision-making in DoCS and NGOs. For example, hourly unit costs per child are presented for children's services, and annual costs per family are presented for EI services such as home visiting and parenting programs. The intention is to provide as detailed and comprehensive information as possible with references and assumptions so that users can adapt the information for their own purposes.

Service costs include the total and true economic cost to deliver the service, independent of funding sources. The costs reported in the Costing Manual reflect the best estimates available as at the time of publication. Indicative costs are based on data from a sample of service providers, incorporating standard caseloads and supervisor ratios, and in some cases standard non-labour operating costs for particular levels of service delivery. In other words, a combination of 'top-down' and 'bottom-up' costing methodologies was used.

The Costing Manual is intended to be a useful reference for DoCS and NGOs when planning, developing and reviewing their services to children and families. The Costing Manual does not provide a prescriptive set of costs – rather, it acknowledges that a range of costs exists. While being better able to compare proposals or budgets from different agencies seeking to provide or actually providing the same type of service,

DoCS will not expect agencies to conform to predetermined unit costs, and can allow agencies to explain variations in program or other factors, that influence their costs to be higher or lower than others.

The Costing Manual provides a starting point for development of more accurate and consistent approaches to costing in child and family services. As the degree of sophistication in costing improves in the sector, we will get better value for money in service delivery and achieve better outcomes for children and families. The key objectives of the Costing Manual are to assist DoCS personnel and NGOs in:

- improving their understanding of cost structures and cost drivers in child and family services
- developing agreed costing principles and approaches to support funding of new and existing programs
- enabling greater accuracy and consistency in costing, cost comparisons and cost management

The benefits of the development and subsequent use of this Costing Manual and the associated Costing Tools extends to both DoCS and NGOs, and includes:

Assist NGOs to:

- standardise cost grouping and budgeting across the non-government sector as far as possible
- provide a framework to enable discussion between NGOs and DoCS related to the cost required to provide child and family services
- improve cost control and linkage to service outcomes
- improve breakeven and profitability analysis by using indicative unit costs as an additional data source for analysing program viability

Assist DoCS to:

- enable comparison of relative costs between government and non-government organisations for future funding
- provide one data source to improve validation and cross analysis for NGO Expression of interest (EOI) / Request for proposal (RFP) submissions (ballpark costs)
- when combined with an evaluation of service quality, illustrate value for money and service provision efficiency for DoCS and NGO services
- enable more accurate budgeting in DoCS
- use resulting unit costs to determine program viability and to analyse cost-output breakeven relationships

## **1.2 Overall approach, roles and responsibilities**

In October 2004, the Department of Community Services (DoCS) commenced a project to develop a costing manual and costing models for child and family services based on unit costing. A working group, chaired by the Deputy Director-General, Service System Development, was established for the Costing Manual Project comprising members from DoCS and the NGO sector. The members provided comments and feedback on the unit cost analysis of a range of child and family services and the draft Costing Manual.

In March 2005, a group of consultants from Accenture was engaged to work collaboratively with DoCS to further develop this Costing Manual and to create an OOH and EI Costing Model. A series of workshops was conducted by DoCS in

collaboration with Accenture to provide guidance to stakeholders in unit costing and to gather data from stakeholders to develop the OOHC and EI costing models. The indicative unit costings presented in Version I of the Costing Manual were based on data provided in these workshops.

A series of regional workshops was then held to present the indicative unit costs and costing tools to the EI and OOHC sector, and attendees were asked to provide their costing data to develop a revised set of indicative unit costs. At the same time, DoCS commenced development of indicative unit costs for SAAP and Children's Services, with assistance from Accenture and the relevant sectors.

Ownership of this Costing Manual resides within DoCS. However, personnel from both DoCS and from external service providers have roles and responsibilities that pertain to this Costing Manual. These roles and those responsible for them are as follows:

### **Data Collection**

To develop indicative unit costs, DoCS and NGOs collect data from a variety of sources. Initial data collection is obtained from general ledgers and charts of accounts based on indicative annual data including transaction reports. Other data sources include workforce utilisation and client profile related data e.g. caseload volume per caseworker and data related to service delivery e.g. service hours per visit. For further information, please refer to the relevant tables in each section.

### **Data Updates**

Over time, the Costing Manual will be updated to:

- refine and improve the unit cost estimates wherever possible
- expand the scope of services covered by the manual in order to provide unit cost estimates for a comprehensive range of child and family services
- reflect service practice

Those responsible for providing the Costing Manual with up-to-date data on a regular basis include:

- NGO finance and front line personnel (NGO updates)
- DoCS finance and regional (operations service delivery) personnel (DoCS updates)

## **1.3 Structure of the Manual**

The Costing Manual covers costing principles, assumptions and methodologies as well as indicative unit cost estimates.

This document covers:

- common costing terms, definitions and cost classifications
- an explanation of costing principles and assumptions with a view to having a common language within the sector
- an outline of a consistent and comprehensive approach to costing
- a step by step guide to estimating unit costs
- a review of key costing issues

Other parts of the Manual present the indicative unit costs for:

- Out-of-Home Care (OOHC) services

- Supported Assistance Accommodation Program (SAAP)
- Brighter Futures Early Intervention Program
- Children's Services

## SECTION 2: GENERAL COSTING INFORMATION

### 2.1 Introduction

The purpose of this chapter is to:

- provide an overview of common costing terms and definitions
- distinguish between:
  - direct and indirect costs
  - fixed, semi-fixed and variable costs
- provide examples of cost classifications for child and family services
- outline approaches to the calculation of unit costs

### 2.2 Terms and definitions

<b>Activity</b>	An activity is a specific task, process or function that converts <b>inputs</b> (resources) into <b>outputs</b> (goods or services).
<b>Activity-based costing</b>	Activity-based costing (ABC) is a costing method used to assign costs associated with inputs to the production of goods and/or services (outputs). <b>Outputs</b> are measured in <b>unit costs</b> , which is the average cost of producing one unit of a good or service and may be goods, services, activities etc. ABC can be used with either the <b>top-down</b> or <b>bottom-up approach</b> to estimating unit costs.
<b>Actual cost</b>	An actual cost is a cost that has been <i>incurred</i> (i.e. historical costs).
<b>Bottom-up approach</b>	The bottom-up approach builds standard unit costs based on standard level of inputs and standard input prices, rather than using actual levels of inputs or prices. This approach is a forward-looking costing method as the development of standard unit costs consider current/best practice, activities, cost drivers and service level specifications.
<b>Budgeted cost</b>	A budgeted cost is a cost that is planned and is usually estimated from a predefined level of activity or output.
<b>Capacity utilisation</b>	The average number of clients using the service per day divided by the total number of clients the service can accommodate per day.
<b>Caseload</b>	At any given point in time, the number of cases/clients per FTE <b>direct worker</b> .
<b>Chart of accounts</b>	A chart of accounts is a list of general ledger accounts that subdivide basic accounting equations. It is the structure within an accounting system that lists the programs, operating centres, and categories by which the revenues and expenses will be recorded and assigns a number to each line item. The chart of accounts allows one to gather, report on and analyse costing

	<p>data. It enables the calculation of <b>indicative unit costs</b> as it is a comprehensive list of <b>cost objects</b> to which an organisation can assign costs</p>
<b>Client-related activities</b>	<p>Client related activities include face-to-face contact with clients and client related activities that do not actually involve contact with the child and family but are directly related to client work.</p>
<b>Cost</b>	<p>A cost is the dollar value of a resource that is used to achieve a specific objective. Costs are measured in the conventional accounting manner, that is as monetary units that must be paid for a good or service.</p>
<b>Cost driver</b>	<p>A cost driver is a factor that has an effect on costs (either immediately or over a given time span), e.g. the level of activity or the volume of goods produced or services rendered.</p>
<b>Costing</b>	<p>Costing is the process used for determining the cost of performing a given activity, e.g. manufacturing a good, rendering a service or performing a function. For child and family services, costing involves the detailed analysis of all costs associated with <b>service delivery</b>, including mapping service processes and activities and determining their costs.</p>
<b>Cost object</b>	<p>A cost object is anything for which a separate measurement of costs is desired. Common cost objects measured by more traditional costing systems include goods and services, responsibility centres (e.g. departments, business units or branches within an organisation) and specific projects. Other cost objects that are measured by more modern costing systems include activities that make up part of a business process (e.g. paying creditors) and customers (i.e. the cost of servicing a particular customer).</p>
<b>Direct cost</b>	<p>A direct cost is a cost that is easily traceable to a particular <b>cost object</b>.</p>
<b>Direct worker</b>	<p>A direct worker spends the majority of their time working with the clients in a service.</p>
<b>Economic cost</b>	<p>Economic costs include all <b>financial costs</b>, but also include non-financial costs e.g. the external costs to the community of increased crime.</p>
<b>Economies of scale</b>	<p>Economies of scale occur as <b>unit costs</b> decrease in response to increases in the level of activity or <b>output</b> of an organisation.</p>
<b>Effective service hours</b>	<p>Effective service hours are the working hours for direct-client activities excluding weekends, public holidays, all types of leave, training and non-<b>client related activities</b></p>
<b>Establishment cost</b>	<p>An establishment cost is an up-front capital and/or operating cost that is incurred to set up the provision of a new good or</p>

	service or expand the provision of an existing one. They may be classified as direct or indirect costs
<b>Financial cost</b>	Financial costs are costs that have a monetary (dollar) value.
<b>Fixed cost</b>	A fixed cost is a cost that does not change in response to changes in the level of <b>activity</b> or <b>output</b> in the short term.
<b>Full cost attribution</b>	Full cost attribution is the identification of all costs incurred by an agency on the <b>cost object</b> ; this includes all <b>direct costs</b> and <b>indirect costs</b> . These costs are also referred to as fully distributed costs.
<b>Full-time equivalent</b>	A computed statistic representing the number of full-time employees that could have been employed if the reported number of hours worked by part-time employees had been worked by full-time employees. This statistic is calculated by dividing the "part-time hours paid" by the standard number of hours for full-time employees and then adding the result to the number of full-time employees.
<b>Indicative unit cost</b>	The average cost to deliver a unit of a particular good or service.
<b>Indicative hourly unit cost per child</b>	The average cost per utilised service delivery hour.
<b>Indirect cost</b>	An indirect cost is a cost that is not easily traceable to a particular cost object, generally because the cost is associated with more than one <b>cost object</b> .
<b>Input</b>	An input is a resource used in an activity to produce a good or service, e.g. labour, materials and capital.
<b>Loaded direct worker unit cost</b>	Loaded direct worker unit costs include the costs related to providing client support work which have been 'loaded' to the direct worker (e.g. caseworker) based on allocations for indirect support and other <b>overhead costs</b> (e.g. IT network, corporate overheads, etc).
<b>Non-client related activities</b>	Non-client related activities are activities that do not concern specific clients, but are essential to the overall running of the service e.g. team meeting, supervision and general administration.
<b>Output</b>	An output is a final good or service that is provided for external consumption, e.g. to children, young people, families and/or Communities
<b>Overhead cost</b>	An overhead cost is a type of indirect cost associated with support services that contribute to the operation of goods or service provider. These costs can be significant and need to be allocated to <b>cost objects</b> .

<b>Professional Support</b>	Indirect support staff such as accountants and human resource personnel, but not any admin or management staff
<b>Semi-fixed cost</b>	A semi-fixed cost is a cost that has both fixed and variable components in that the cost is fixed up to a certain level of <b>activity</b> or <b>output</b> , but once that level is exceeded the cost becomes variable. In other words, the cost is variable in steps
<b>Service</b>	A service is a non-material equivalent of a good, e.g. general foster care services, home visiting, parenting programs etc.
<b>Service delivery costs</b>	Service delivery costs include costs associated with providing placement services and may include carer costs, client costs or other costs specifically related to service delivery.
<b>Standard cost</b>	A standard cost is a labour, operating or <b>overhead</b> cost that is expected to be incurred under ideal operating conditions and/or best practices.
<b>Top-down approach</b>	The top-down approach for estimating <b>unit costs</b> assembles all relevant expenditure at agency or cost centre level and divides it by units of activity. This approach relies on the use of historical information or an agency's budget (i.e. financial and client information). All costs (direct and indirect) are identified and allocated to the activities.
<b>Unit cost</b>	A unit cost is the cost of providing one unit of a good or service. It is calculated by dividing the total cost of providing a good or service (inputs) by the level of activity or <b>output</b> . Unit costs include <b>fixed</b> , <b>semi-fixed</b> and <b>variable costs</b> . They may be calculated for a particular service delivered by either a single provider or all providers in the sector.
<b>Utilised service delivery hours</b>	These are calculated as the product of service opening hours per day, opening days per week, operating weeks per year, maximum number of places available per day, and the <b>capacity utilisation</b> rate.
<b>Variable cost</b>	A variable cost is a cost that changes in response to changes in the level of <b>activity</b> or <b>output</b> .
<b>Workforce profile</b>	The workforce profile includes the direct staff, the supervisor(s), and management and administrative staff (indirect support staff).

## 2.3 Cost classifications

A good understanding of how costs behave in response to changes in operations or external factors is highly desirable for officers and practitioners within DoCS and across the sector who are involved in planning, delivering and monitoring child and family services. Costs can be measured and classified in different ways to meet the information

needs of managers and organisations. This section will outline the most common dimensions along which costs can be classified.

### Direct costs and indirect costs

Whether a cost is classified as direct or indirect depends on (1) the choice of cost object (2) the nature of the good or service and (3) whether it is a relatively significant amount.

**Direct costs** A direct cost is a cost that is easily traceable to a particular cost object. For example:

- the salary of an Early Intervention Caseworker (cost) can be traced to the Early Intervention Program (a cost object)
- motor vehicle expenses (cost) used to provide a mobile children's service can be traced to that mobile children's service (cost object).

**Indirect costs** An indirect cost is a cost that is NOT easily traceable to a particular cost object, generally because the cost is associated with more than one cost object. For example:

- meeting expenses, such as room hire and catering, that are incurred by individuals from various programs at different points in time
- expenses for a motor vehicle that is shared by multiple caseworkers from different programs.

Indirect costs need to be apportioned to the relevant cost objects on an appropriate basis, such as based on some activity-related measure or by each cost object's percentage of total direct costs.

#### Notes:

- If tracing the cost to the cost object in question is too complex, the costs are likely to be indirect.
- A cost may be both a direct and an indirect cost, depending on the cost object chosen. For example, the salary of a financial controller (cost) would be a direct cost of the finance department (cost object) but also an indirect cost of each of the goods or services that organisation provides.

### Fixed costs, semi-fixed costs and variable costs

Whether a cost is classified as fixed, semi-fixed or variable depends on how the cost changes in response to a change in the activity level or output of a particular cost object. Units of goods sold, hours worked or clients serviced are example of ways to measure the activity level or output of a cost object.

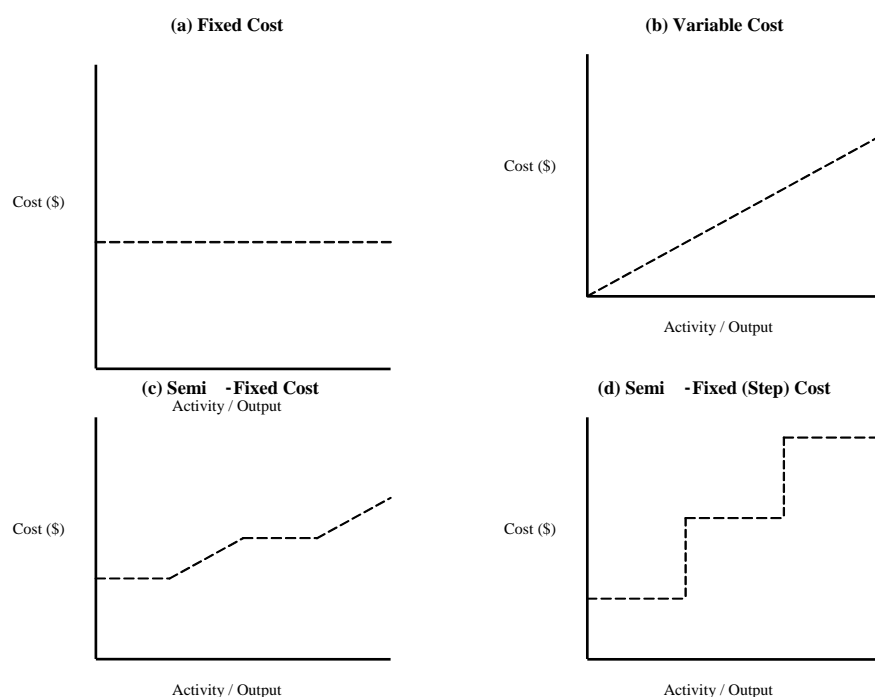
**Fixed costs** A fixed cost is a cost that does not change in response to changes in the level of activity or output in the short term. For example:

- the expenses associated with running head office (cost) are fixed costs as they would not change in response to changes in the number of individuals or families serviced.

This can be seen in Figure 2.1 where the cost stays the same regardless of the level of activity.

- Semi-fixed** A semi-fixed cost is a cost that has both fixed and variable components in that the cost is fixed up to a certain level of activity or output, but once that level is exceeded the cost becomes variable. In other words, the cost is variable in steps. For example:
- caseworker expenses are semi-fixed as the number of caseworkers may not change in response to a moderate change in the level of activity (e.g. if the number of cases increased from fifty to sixty), but would change in response to a larger change in the level of activity (e.g. if the number of cases increased from fifty to one hundred and fifty), as more caseworkers would need to be employed.
- Step costs** Step costs are a type of semi-fixed cost. What differentiates step costs from other semi-fixed costs is that the variable component of the cost does not change in gradual small amounts, but in steps. This can be seen in Figure 2.1, where the lines representing the variable component are horizontal (flat) rather than sloping. For example, if residential care services were to be expanded and current accommodation is able to be expanded to 'flex up' to meet the new demand, then rent costs are semi-fixed.
- Variable costs** A variable cost is a cost that DOES change in response to changes in the level of activity or output. For example:
- carer allowance is a variable cost as it changes in response to changes in the number of children in foster care
  - the cost of providing material aids (e.g. nappies) to families is a variable cost as it changes in response to the changes in the number of families participating in the program and their needs.
- This can be seen in Figure 2.1 where the cost increases as the level of activity increases.

**Figure 2.1 – Fixed, variable and semi-fixed costs**



**Establishment cost (capital expenditure)** An establishment cost is an up-front capital and/or operating cost that is incurred to set up the provision of a new good or service or expand the provision of an existing one. Establishment costs may be classified as direct or indirect costs. Average unit establishment costs may be estimated and included as a service cost.

**Full cost attribution** Full cost attribution is the identification of all costs incurred by an agency on the cost object; this includes all direct costs and indirect costs. For example, the cost to the agency of providing a service includes both the direct costs (employee and other costs that can be traced directly to the service) and indirect costs (such as corporate services and building costs that must be allocated to the service).

Fully distributed costs are used when we need to know the “true” or full costs incurred by an agency. This includes reporting of output costs for undertaking of benchmarking studies.

**Avoidable costs** Avoidable costs are those costs that would be avoided if a good or service was not produced. Avoidable costs are typically used to make decisions about future courses of action, e.g. to decide whether to contract out a particular activity.

**Cost-output breakeven relationships** Cost-output-breakeven analysis is important in understanding cost behaviour and the response of costs to a variety of influences. The Children’s Services model includes a function for users to examine their financial viability when costs and incomes change.

For some services, there is a threshold output level at which the

provision of services will be financially sustainable i.e. the 'breakeven point' in financial terms. The breakeven point analysis is based on the relationship between costs, income, and output levels. A highly simplified example is given below.

Assume a service provider specialises in parenting programs. It employs a coordinator to run the program. It incurs fixed costs such as direct labour costs associated with the coordinator and the costs of the venue (rental and maintenance). The main variable cost is the cost of the program material. The service receives a service fee per client from the Government.

The breakeven point is the level of output at which total income equals total costs. The organisation starts to generate a surplus above that level.

For the example above, if we assume the following:

X = number of clients to be serviced

Variable costs = \$50 per client

Fixed costs = \$60,000

Service fee = \$150 per client

Then:

Total income =  $\$150 \times X$

Total cost = Fixed cost + Variable costs  
=  $\$60,000 + \$50 \times X$

So, the breakeven output is given by X where

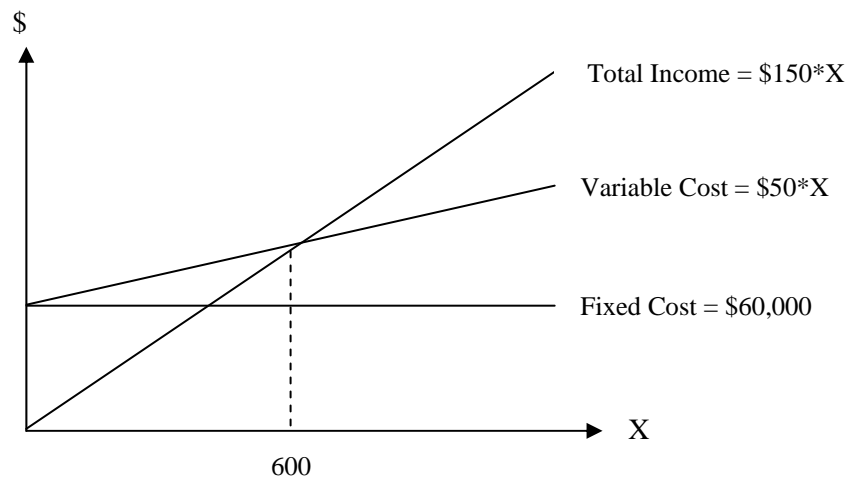
$150X = 60,000 + 50 \times X$  or

$100X = 60,000$

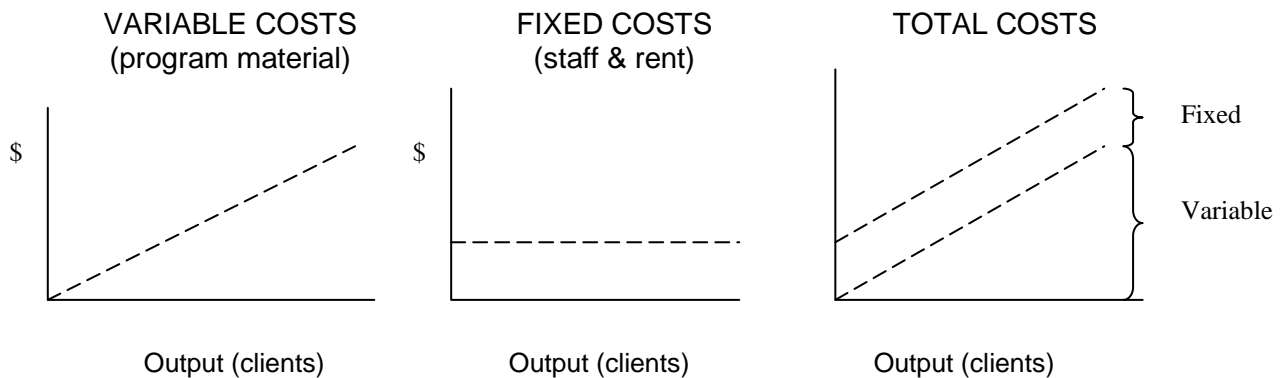
$X = 600$  clients

Therefore, the breakeven point is 600 clients.

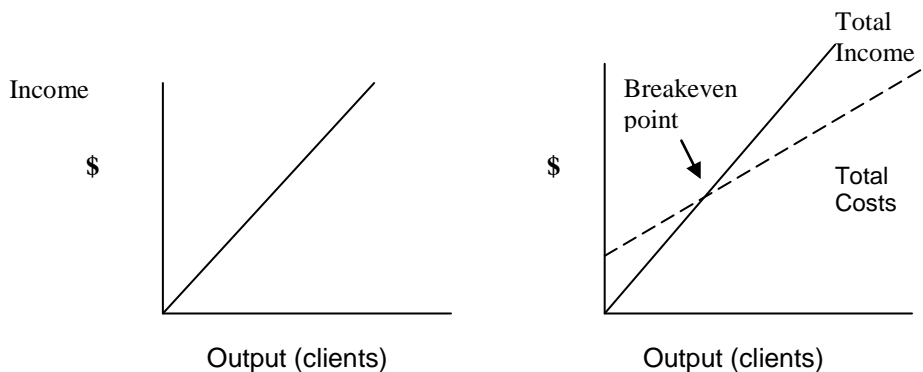
The breakeven point analysis is shown diagrammatically in Figures 2.2 and 2.3.



**Figure 2.2: Relationships between costs and output levels**



**Figure 2.3: Breakeven point analysis**



## 2.4 Determining unit costs

This section introduces the concept of unit costs and outlines the broad methods used to determine unit costs. The next section (3) will provide details of the principles and assumptions applied to the determination of unit costs in child and family services.

### 2.4.1 What is a unit cost?

A unit cost is the cost of providing one unit of a particular service. The units may be expressed in various ways:

- Hours of counselling
- No. of care days
- No. of families serviced
- No. of home visits
- No. of hours of children's services

Unit costs facilitate cost benchmarking across services and can be used in developing cost estimates for new programs and enable better cost control by monitoring trends in unit costs over time. However, unit costs must be interpreted in the context of the quality of service. Service quality is affected by factors such as qualifications and skills of staff, quality of therapeutic treatment and behaviour management, among others. For example, variations in unit costs for OOHHC may be due to:

- different levels of service intensity and program management support
- staffing requirements
- caseload ratio (i.e. client to direct staff)
- differences in client costs, agency overheads and wrap-around services
- differences in payment to carers

## 2.4.2 Methods

### Top-down or bottom-up

There are two broad approaches to estimating unit costs, top-down or bottom-up. Generally, a flexible approach based on the above two methods would need to be applied to service costing, depending on the needs of a project.

#### **Top-down approach**

This approach assembles all relevant expenditure at agency or cost centre level and divides it by units of activity. An agreed set of activities will be required to reflect the nature and scope of service provision. This approach relies on the use of historical information or an agency's budget (i.e. financial and client information). It does not require the collection of financial information to exactly mirror service models.

All costs (direct and indirect) are identified and allocated to the activities. For existing programs, it may be necessary to establish a "base line" cost associated with the current level of service delivery using a top-down approach. This will enable assessment of cost effectiveness of proposals on new practice and/or service models.

#### **Bottom-up approach (standard unit costs)**

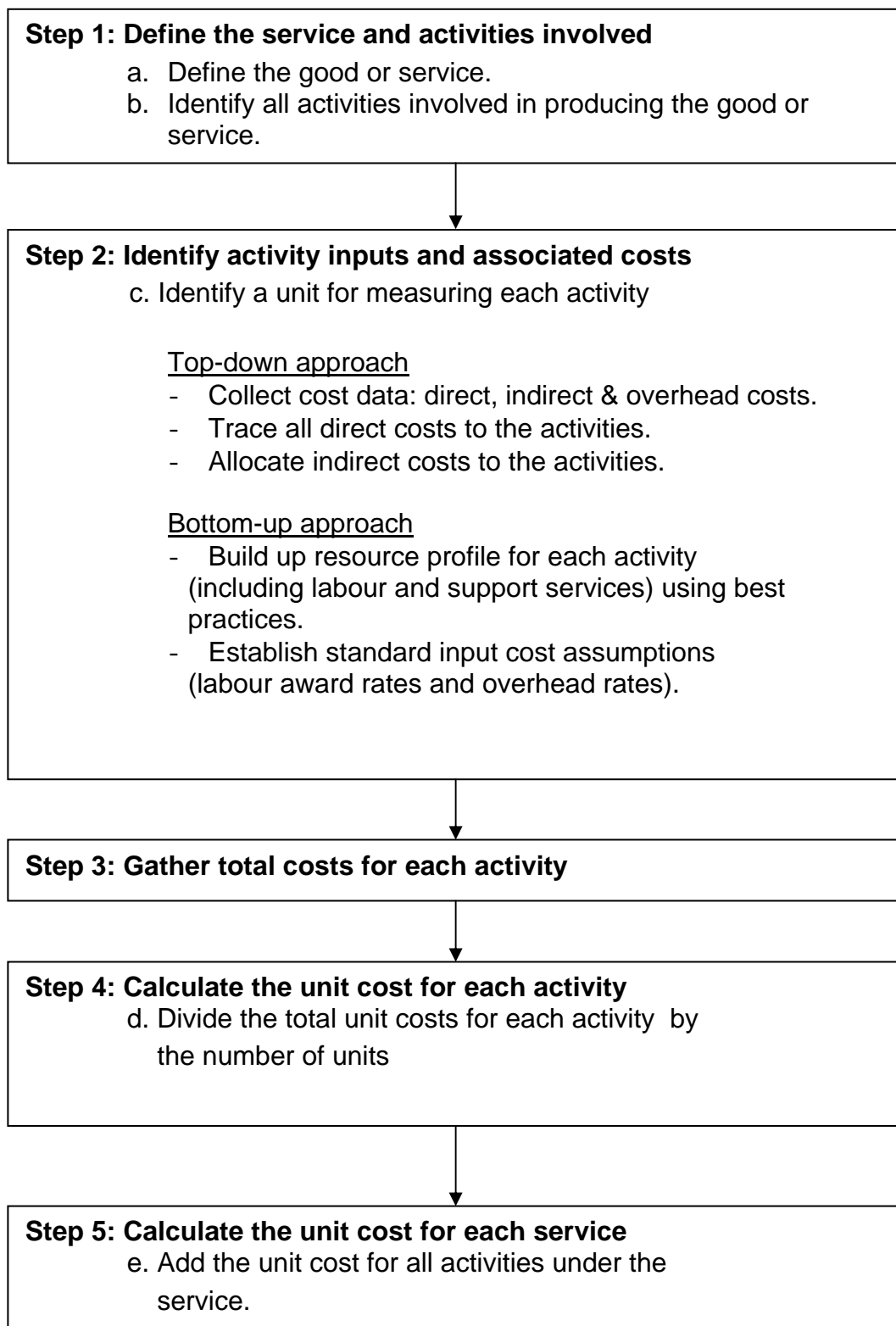
The bottom-up approach builds standard unit costs based on standard level of inputs and standard input prices, rather than using actual levels of inputs or prices. This approach is a forward looking costing method as the development of standard unit costs considers current/best practice, activities, cost drivers and service level specifications.

The value of the bottom-up approach is that it encourages a sound understanding of the services being costed and careful consideration of the way services are delivered. It can be used to examine why variations in cost are occurring and whether there are good reasons for these variations.

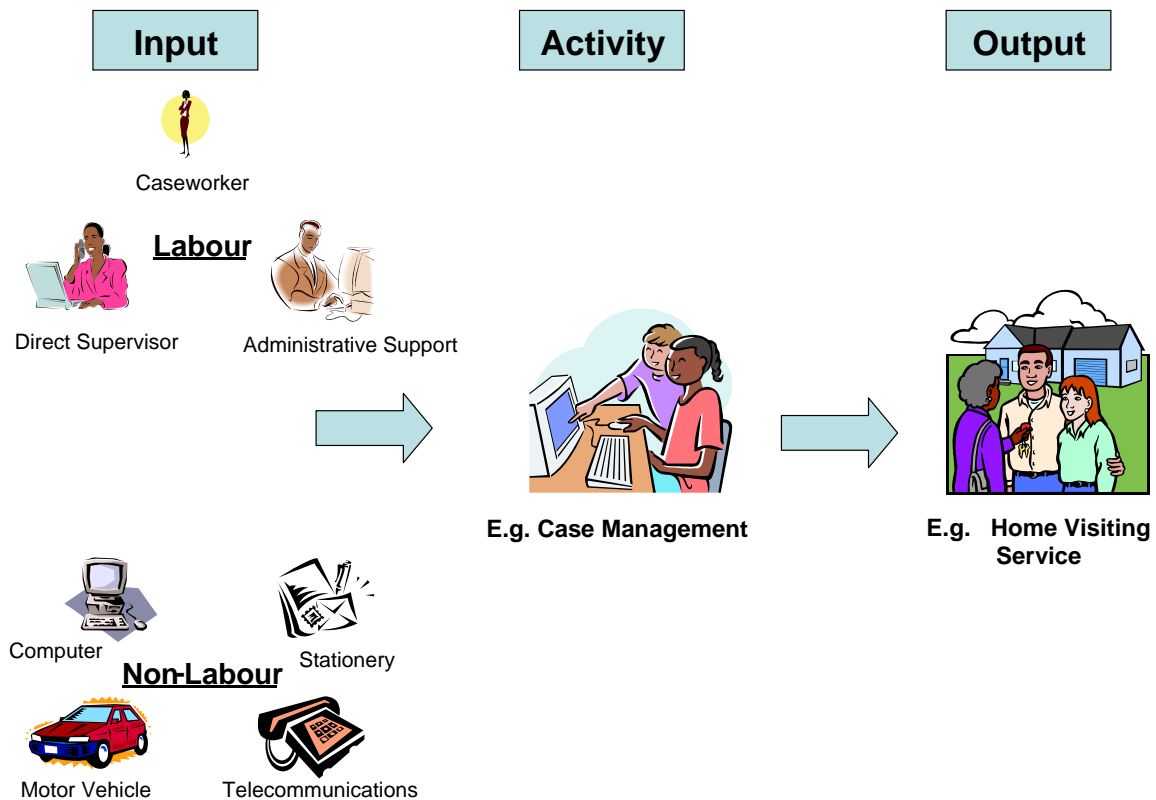
### Activity-based costing

Activity-based costing (ABC) is a costing method used to assign costs associated with inputs to the production of goods and or services (outputs). Outputs are measured in unit costs, i.e. the average cost of producing one unit of a good or service and may be goods, services, activities etc. ABC can be used with either the top-down or bottom-up approach to estimating unit costs. Figure 2.4 illustrates the steps in ABC costing and Figure 2.5 provides examples of inputs, activities and outputs for child and family services.

**Figure 2.4 - Steps in estimating unit costs**



**Figure 2.5 - Relationship between inputs, activities and outputs for child and family services**



### Overheads

As overhead costs are indirect costs, and thus not easily traceable to a particular cost object, a systematic and rational allocation of overhead costs to cost objects is needed to identify the full cost of providing a service. Overheads may include costs associated with: administration and management, service management and development, governance and business planning, quality assurance and compliance with government regulations, government relations and agency liaison, human resources management, finance, accounting and audit, etc. This section sets out ways of allocating overheads to cost objects.

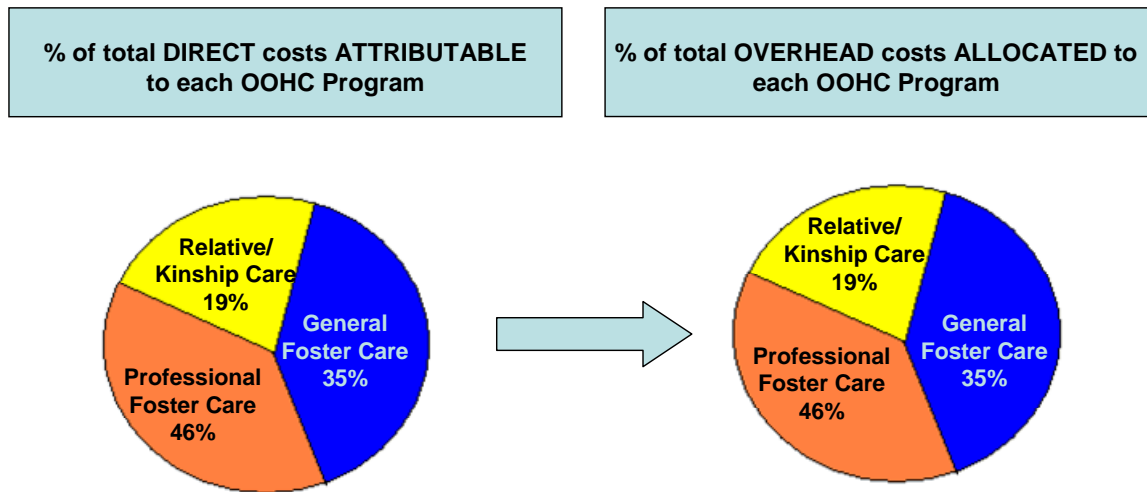
Overhead costs are generally allocated to cost objects in proportion to some base measure or cost associated with the cost object. The most common bases for allocation are:

- direct costs
- revenue
- staff number or direct personnel costs
- office space

An agency may determine a single overhead allocation rate through an analysis of its financial data, using a single allocation base, such as direct costs. The percentage of total overhead costs allocated to a particular cost object is determined by the percentage of total direct costs that are attributable to that cost object. For example, if 35% of total direct costs are attributable to the General Foster Care component of the OOH

program, then 35% of the total overhead costs associated with the OOH program will be allocated to General Foster Care. This example is illustrated in Figure 2.6.

**Figure 2.6 – Allocation of overhead costs**



In addition to the percentage of total direct costs attributable to a particular cost object, the percentage of total overhead costs allocated to that cost object may also be determined by the percentage of revenue generated by the cost object, the percentage of staff salaries associated with the cost object, or a number of other factors.

Clearly, depending on the base measure used for allocating overheads, different results will be obtained. Therefore, it is important to try identifying a base measure that reflects the variation across the cost objects/services of the contribution of the overheads to the delivery of the service.

For example, allocating based on office space is usually most appropriate for office accommodation, facility and property management costs. Allocating overheads based on direct personal costs works well if staffing costs represent the largest component of costs and if the average full time equivalent staff cost is about the same in all services.

#### Treatment of capital costs and establishment costs

Capital costs are costs associated with the purchase of capital assets such as buildings, office equipment/systems, vehicles, household furniture or equipment. While capital costs are required for establishing or expanding services, there are other kinds of establishment costs such as staff recruitment and training, etc as well.

Capital assets need to be replaced when they reach the end of their lives. Financing of capital assets has implications for an agency's cash flow and needs to be carefully considered. In addition to outright purchase of capital assets, there are alternatives such as leasing arrangements and financing of capital assets (e.g. debts). These are financial management matters for the agencies to decide.

Information on costs associated with capital assets (office equipment, land and building in which a service is located) may be available in financial accounts as depreciation allowance and/or interest costs. The cost implications generally are:

- If an agency decides to purchase capital assets at its own cost, depreciation of those assets and any interest costs need to be included in the cost of services. Depreciation, rather than the full cost of the capital asset is included in the calculation. This is because the capital asset is used every year after it is purchased until it has exhausted its useful life. Therefore, the asset is regarded as having a cost every year.

Often, the annual rate of depreciation is calculated simply as the total purchase cost divided by the lifespan of the asset. For example, if a motor vehicle was purchased for \$20,000, and the expected lifespan of the asset is 5 years, then the annual depreciation of the motor vehicle is \$4000 per year. That is, the cost of the motor vehicle is \$4000 per year.

- If a service provider decides to lease capital assets, the leasing cost would be included as an operating expenditure.

## SECTION 3: ASSUMPTIONS AND PRINCIPLES

### 3.1 Key assumptions

In the Costing Manual, indicative unit costs were derived using a combination of the 'top-down' and 'bottom-up' costing methodologies. Standard inputs and service delivery assumptions, eg caseloads and supervisor to direct worker ratios were informed by available literature on best practice levels of service delivery and relevant legislation. The estimates in this document need to be considered with this in mind.

When using the estimates in this document, it is important to take note of the following additional points:

- this Manual represents an attempt to pull together cost estimates for child and family services. The estimates are based on the data available to DoCS at the time of publication and a number of assumptions, as outlined in the individual estimates. They will need to be reviewed and refined in conjunction with the sector and informed by data collected over time on actual costs. It will take time, effort and commitment to establish good quality cost information that can be used to improve service delivery
- a range of data sources in the literature have been used both directly and indirectly as a basis for the estimates in this Manual. These include research reports, results of previous studies in DoCS and/or other jurisdictions, and information from participating organisations as part of the Costing Manual Project
- variations to the indicative costs outlined in this manual can be expected based on service location and specific needs of the client group

### 3.2 Methodology

This section describes the methodology that has been used to derive indicative unit costs for providing a service. Costs were calculated for the loaded cost of the direct worker and for additional service delivery costs. These costs were then combined together to determine the total cost of service delivery i.e.

Total cost of service delivery = loaded cost of the direct worker + additional service delivery costs

Note that in some cases, only the loaded cost of the direct worker may be relevant to deriving the total cost of service delivery.

#### A. Loaded cost of the direct worker

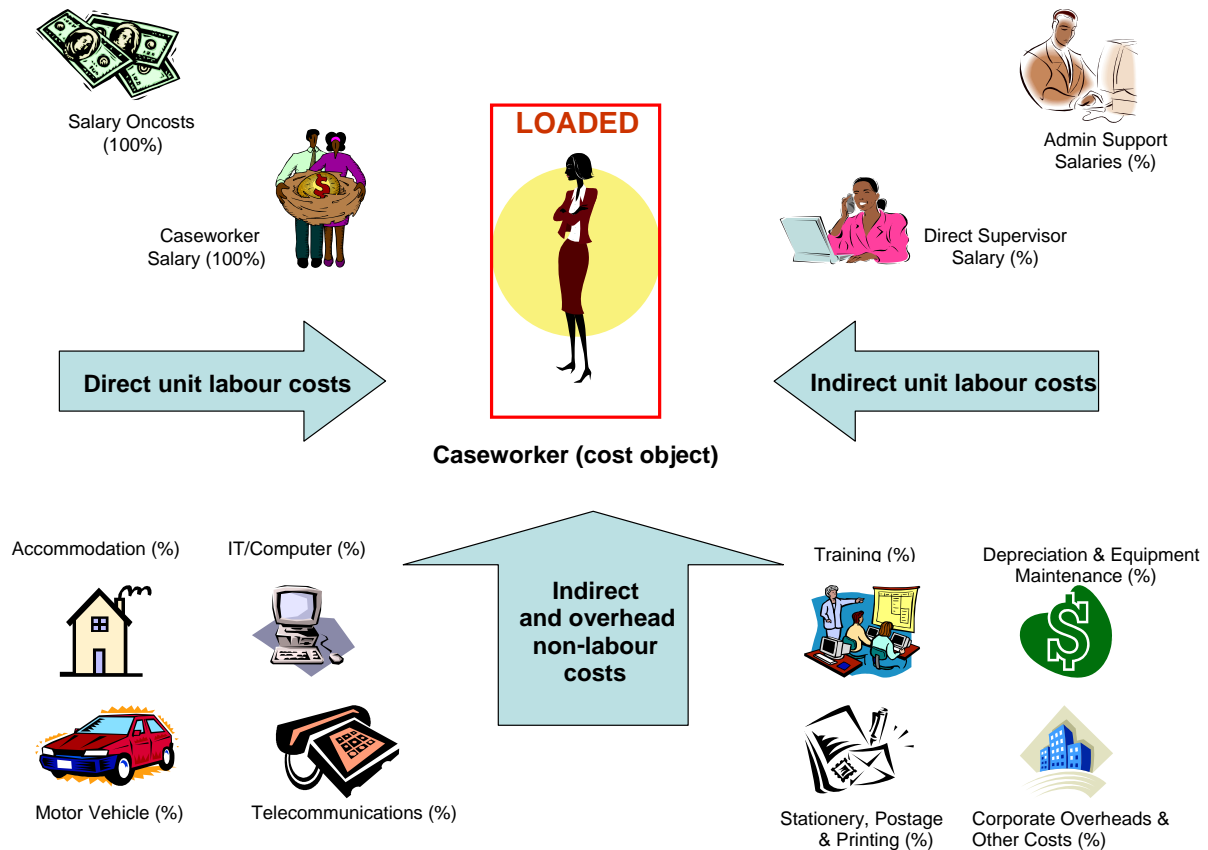
The costs related to the direct worker such as indirect staff support costs (e.g. administration and professional support costs) and other overhead costs (e.g. IT network, motor vehicle costs, accommodation, corporate overheads, etc) have been 'loaded' on to the direct worker.

In other words, the cost of a direct worker e.g. a caseworker or an Early Childhood Teacher is more than their salary. They would generally require the support of a supervisor and administration staff (labour costs), and other non-labour costs such as a

telephone, IT/computer, motor vehicle, etc to undertake their daily work with clients. All these associated costs are added to the direct worker's salary to give a total 'loaded' cost.

Figure 3.1 explains how the total loaded costs associated with one type of direct worker, a caseworker, are derived.

**Figure 3.1 – Loaded direct worker costs e.g. caseworker**



Total caseworker loaded unit costs are then divided by direct client service time available to derive the indicative cost per hour for direct client activities.

This loaded cost per hour is then used as the basis to estimate costs associated with delivering a service to a client (e.g. casework support undertaken by a caseworker).

### B. Service delivery costs

Service delivery costs are costs associated with the direct care of the child and/or young person or direct services to families. Figure 3.2 provides examples of costs allocated to service delivery. Figure 3.3 illustrates the total costs of service delivery.

Figure 3.2 - Costs allocated to service delivery e.g. foster care

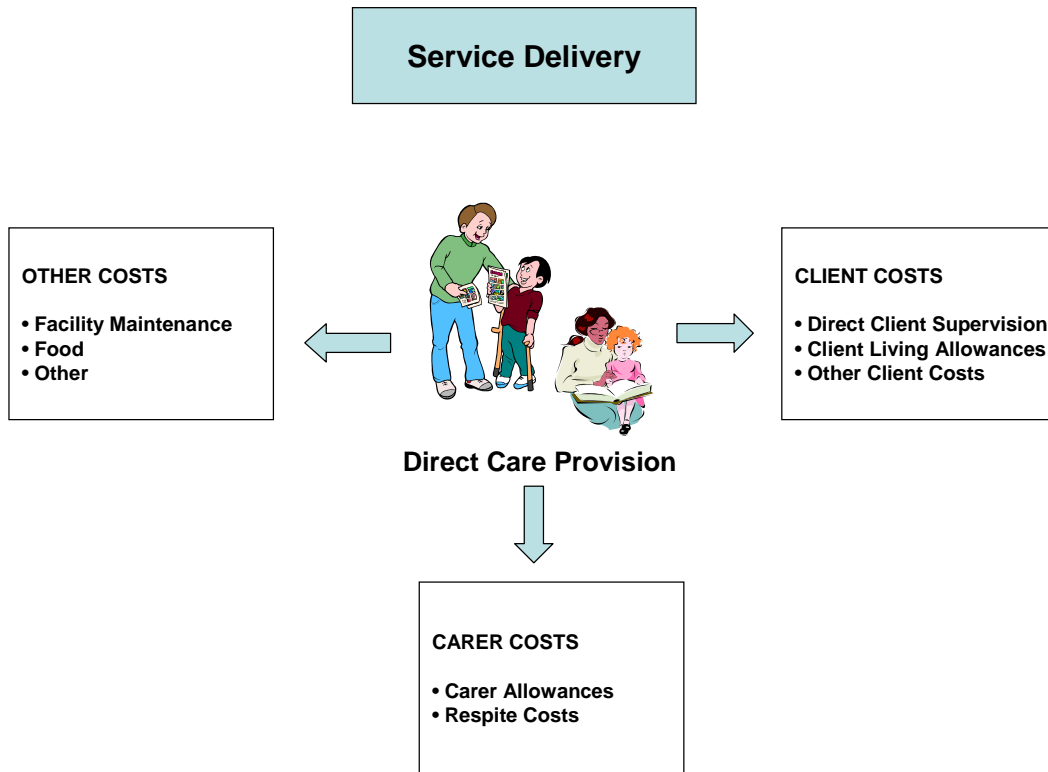


Figure 3.3 – Allocation of a loaded direct worker and service delivery costs

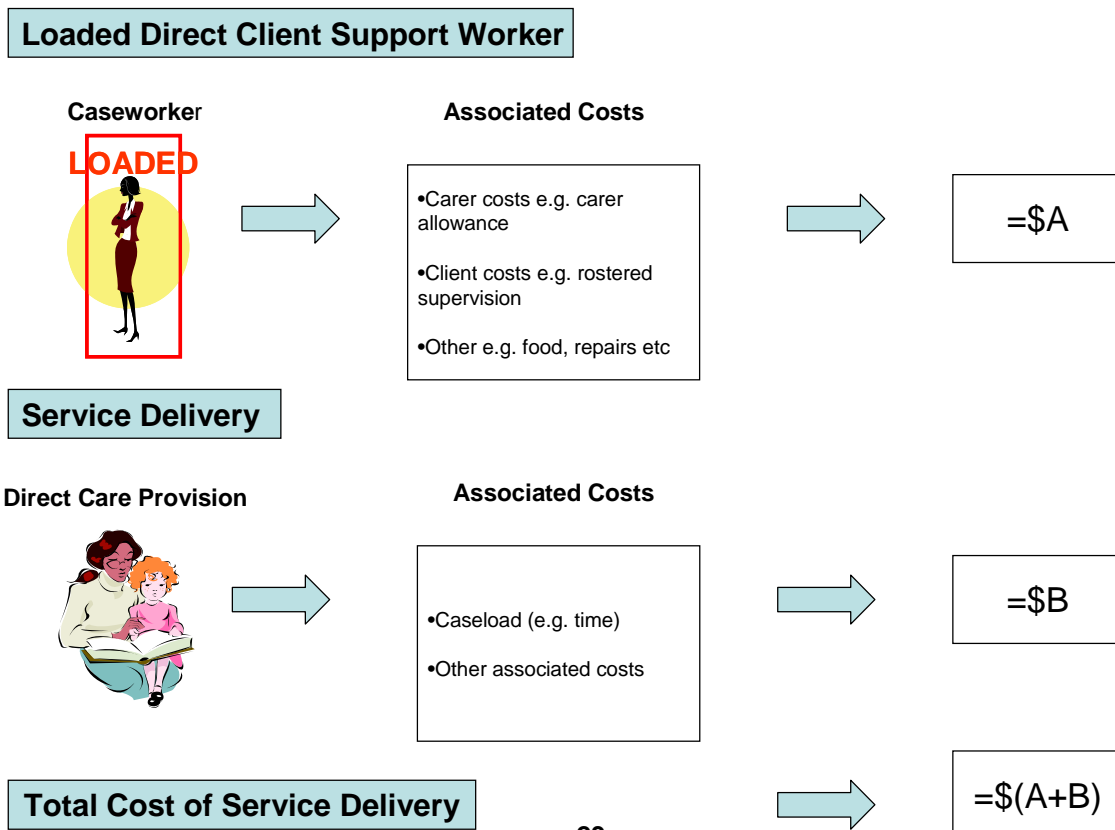


Table 3.1 shows how indirect non-labour operating costs were classified in the analysis.

**Table 3.1 Defining Non-Labour Operating Costs**

Motor Vehicle	The average annual cost of all motor vehicle expenses such as depreciation, fuel and oil, maintenance/repair, insurance, registration and lease payments.
IT/Computer	The average annual cost of all IT/Computer related expenses including IT equipment, maintenance & support, software, consultancy services, internet and information system costs.
Telecommunications	The average annual cost of all telecommunications related expenses, including mobile and fixed line calls, fax charges, and any reimbursements for telephone costs.
Stationery/Postage/Printing	The average annual cost of all stationery, postage, courier, freight, printing, and office supplies.
Depreciation and Equipment Maintenance	The annual plant and equipment depreciation costs (excluding motor vehicle, IT/Computer and building), assets purchased for less than \$5,000, and any equipment hire/lease.
Training	The average annual cost of staff training and development, and employment support and supervision costs.
Accommodation Costs	The average annual cost of all accommodation expenses including cleaning, building depreciation, rates and taxes, market rent (where depreciation has not been entered), repairs and maintenance, security expenses and utilities.
Program Costs	The average annual cost of all client support services and consumables including educational material, activity materials and supplies, food and medical supplies, sport/recreational, excursion and travel expenses.
Corporate Overheads	Corporate Overheads are a type of indirect cost associated with the operation of the service. They include the average annual costs of accounting fees, advertising and promotion, audit fees, auspicing fees, bank charges, bad debts, business planning costs, consultancy fees, donations paid, insurance (excluding workers compensation), legal fees, loss on sale of non-current assets, management fees, memberships and publications, fundraising, meeting expenses, recruitment expenses, staff amenities, sundry expenses, travel and accommodation and volunteer costs.

Note: the non-labour operating cost line items in Table 3.1 are consistent with the *Standard Chart of Accounts for Non-Government Organisations Data Dictionary*. A full description of all cost line items in the data dictionary is available at: <http://www.mob.com.au/mob2007/COA.html>.

### 3.3 Principles

The focus of the unit cost estimation in this document is on the financial costs of providing care and services to children and families. This differs from the economic costs used in full economic evaluations. In addition to the assessing the monetary value

of financial costs, economic costs include imputed costs associated with indirect non-financial impacts, also known as spill over effects. For example, a successful home visitation program may lead to reductions in the costs of child abuse and neglect because of the program's direct influence on the quality of parental care. The broader economic costs and benefits associated with child and family services are addressed in the DoCS report 'Benefit Assessments in Child Welfare, Technical Report 1 (2004) available at:

[http://www.community.nsw.gov.au/DOCSWR/assets/main/documents/BenefitsAssessment\\_report.pdf](http://www.community.nsw.gov.au/DOCSWR/assets/main/documents/BenefitsAssessment_report.pdf)

The following principles should apply to unit cost estimation:

- unit cost calculations should include full costs of service delivery
- unit costs should reflect at least minimum service standards as defined by legislation and policy principles
- unit costs should reflect the way services are used, e.g. residential care can be measured in resident-days and casework support can be measured in service hours
- unit costs should be developed at a sufficient level of disaggregation so that care package costs for different levels of need or for different contexts (e.g. rural/urban) can be readily developed
- the methodology should be able to reflect cost changes over time
- data should be accurate and up-to-date and include data for a full year i.e. financial or calendar year
- the costing process should be transparent with clear documentation of sources of data, assumptions and parameters
- the costs of services include full economic costs, which cover actual financial costs, actual nominal impact and property rent subsidy
- service costs should be indicative and include the total and true cost to deliver the service, independent of funding sources

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