Government of Western Australia
Department of Treasury

Costing and Pricing Government Services

Guidelines for use by agencies in Western Australian Public Sector

June 2015

Government of **Western Australia**
Department of **Treasury**

Costing and Pricing Government Services

Guidelines for use by agencies in the Western Australian Public Sector

June 2015

Costing and Pricing Government Services

1st edition April 1994
2nd edition July 1995
3rd edition December 1998
4th edition October 2001
5th edition April 2007
6th edition June 2015

Further information or enquiries related to this report may be obtained by emailing info@treasury.wa.gov.au

ISBN 978-0-7307-4557-0

Contents

Preface

This edition supersedes the fifth edition of the Guidelines (published in April 2007). Significant changes in this edition are:

- clarification of fees and charges, i.e. fees and charges in subsidiary legislation must be set at a level that is authorised by statute under which the subsidiary legislation is made;
- insertion of a section on the role of Parliament;
- inclusion of annual leave (including loading) and long service leave entitlements expense in direct staffing costs – the estimation of relief requirements (e.g. to replace staff absent on annual leave, long service leave, secondment, etc.) is no longer considered relevant;
- revision of the Superannuation section to include the new GESB Superannuation Scheme and the introduction of Choice;
- inclusion of depreciation (of physical assets) and amortisation (of intangible assets) charges in Indirect Costs;
- the opportunity cost of capital methodology to be based on the State of Western Australia;
- inclusion of a simplified and integrated case study; and
- introduction of guidance for charging credit and debit card administration fees on the collection of fees and charges.

Whenever a costing exercise is considered, the reason for engaging in the exercise should be clarified before deciding how to approach the task. The purpose of the costing exercise may influence the range of factors ultimately taken into consideration in decision making processes and may affect judgements about the treatment of some expenses. It will also determine the extent to which approximations of some components of cost are acceptable, or whether more detailed analysis is required.

1. Introduction

Public Sector Commissioner's Circular 2009-12 'Costing and Pricing Government Services' requires all public sector agencies to accurately determine the cost of their services. Determining the full cost of services enhances:

- resource allocation within agencies;
- decision-making by Ministers concerning policy options;
- the ability of Government to allocate resources through the budget process;
- setting appropriate prices for agencies where Government has decided to recover costs; and
- benchmarking (where appropriate) with the private sector or with agencies in other jurisdictions.

While costing of services requires the identification of all costs associated with service delivery, the pricing of services relates to the amount customers will be required to pay for each service. **Unless Government approves otherwise, prices should be set at levels that reflect the full costs of providing the services.**

1.1 The Purpose of the Guidelines

The Guidelines are intended to assist agencies to better understand their costs and the factors that have the greatest influence on those costs (i.e. the cost drivers).

The Guidelines should be regarded as an illustrative guide to the factors to be taken into account when undertaking a costing exercise, as no single costing methodology can be applied universally. They also incorporate policy information relating to the treatment of some items.

The Guidelines should be read in conjunction with[1]:

- 'Public Sector Commissioner's Circular 2009-12, 'Costing and Pricing Government Services', Public Sector Commission, 9 July 2007;
- 'Premier's Circular 2014/01, 'Subsidiary Legislation – Explanatory Memoranda', Department of the Premier and Cabinet, 15 February 2014;
- 'Strategic Asset Management Framework', Department of Treasury, 2014;
- 'Outcome Based Management, Guidelines for use in the Western Australian Public Sector', Department of Treasury and Finance, November 2004;

[1] Publications produced by the Department of Treasury (and Finance) and the State Supply Commission may be found at http://www.treasury.wa.gov.au and http://www.ssc.wa.gov.au respectively.

- competitive tendering and contracting information produced by the State Supply Commission; and
- any other relevant principles, policies, practices or pronouncements issued by Government.

1.2 How to use the Guidelines

Sections 2 and 3 provide information on how to determine the cost of government services. Section 4 discusses when to charge for government services and factors to consider when setting prices. Section 5 details a number of costs (in addition to the merchant service fee) that may be included in the reasonable cost of acceptance when charging credit and debit card administration fees.

1.3 Fees and Charges in Subsidiary Legislation

Where provision is made by subsidiary legislation (i.e. regulations, rules, etc.) in respect of fees and charges, the subsidiary legislation may provide for:

(a) specific fees or charges;

(b) maximum or minimum fees or charges;

(c) maximum and minimum fees or charges;

(d) *ad valorem* fees or charges;

(e) the payment of fees and charges either generally or under specified conditions or in specified circumstances; and

(f) the reduction, waiver or refund, in whole or in part, of such fees or charges.

Subject to any other relevant legislation, fees and charges in subsidiary legislation must be set at a level that is authorised by statute under which the subsidiary legislation is made.

If there is any doubt as to whether the level of a particular fee or charge is authorised, legal advice should be sought from the State Solicitor's Office. In particular, legal advice should be sought if it is proposed that a fee or charge be set at a level that is likely to exceed 'cost recovery'[2].

[2] In the case of a fee or charge for a licence, cost recovery can include payment for improving or replacing an existing system (*Interpretation Act 1984*, Section 45A) but does not include payment for systems unrelated to that to which the fee/charge relates.

1.4 Review of Fees and Charges

Treasurer's instruction 810 'Review of Fees and Charges' requires agencies, in respect of the services for which they provide, to conduct regular reviews (at least once a year) of fees and charges. In some instances, this requirement is also specified in subsidiary legislation such as Regulation 55 of the *Planning and Development (Development Assessment Panels) Regulations 2011*. For the purpose of the budget process, agencies may be required under the *Government Financial Responsibility Act 2000* to undertake a review of their fees and charges.

The review process is designed to give reasonable assurance that the level at which a fee or charge is set is consistent with the cost recovery policy and not likely exceed full cost recovery. The objective of undertaking regular reviews is to ensure that the fees and charges:

- reflect movements in the input costs;
- achieve, or make adequate progress towards achieving, full cost recovery where appropriate;
- are not over-recovering costs;
- are fair and equitable, and recognise household capacity to pay;
- are competitive, in comparison to service providers locally and in other jurisdictions; and
- are comprehensive in that new fees and charges are designed and introduced in a timely manner.

The relevant Treasury analyst should be notified of any proposed changes in fees and charges, particularly those that require Economic and Expenditure Reform Committee (EERC) consideration. The proposed increases in fees and charges must be submitted to EERC for consideration in circumstances where:

- fee/charge is included in the 'household model' (i.e. electricity charges; water, sewerage and drainage charges; public transport fares; emergency services levy; third party insurance; motor vehicle registration; and driver's licence fees); or
- greater than 100 per cent cost recovery is likely to be achieved; or
- fee/charge is increased by a factor greater than the Consumer Price Index (CPI) to maintain or achieve full cost recovery; or
- fee/charge is considered contentious; or
- a new fee is proposed.

The reference to CPI should only be read as a threshold that when exceeded requires the proposed fee/charge increases to be brought to EERC's attention. It is not to be construed as authority for agencies to automatically increase fees and charges by CPI without undertaking an appropriate review.

Where fees and charges are not subject to EERC consideration, Treasury may only require certification by the CEO and the Minister that the above circumstances do not apply and that the methodology for costing of individual services (and setting of fees and charges) is robust.

Agencies should note that this process may be subject to change and Treasury will provide advice in the annual budget process guidelines.

1.5 The Role of Parliament

The Joint Standing Committee on Delegated Legislation (the Committee) scrutinises all regulations, by-laws, rules, local laws, major metropolitan region schemes and other subsidiary legislation made by agencies on behalf of the Parliament of Western Australia.

The Committee's view regarding fees (and charges) and cost recovery is:

Where a fee or charge outlined in subsidiary legislation results in greater than 100% cost recovery, there will be a rebuttable presumption it is a tax. If there is no taxing provision in the relevant legislation, the agency will need to persuade the Committee the fee or charge is valid.

Treasury's requirement for agencies to have appropriate and rigorous costing systems have been in place for some time. The Committee expects agency costing systems to determine the costs associated with a fee/charge to the lowest organisational structure that is realistically practicable and reasonable. This means that for each fee/charge, the Committee expects agencies to provide data to support their assertions about cost recovery, having regard to what is practicable and reasonable.

Agencies should note that the Committee's minimum requirement for an Explanatory Memorandum relating to fees and charges is contained in Attachment 1 of Premier's Circular 2014/01 'Subsidiary Legislation – Explanatory Memoranda'. In the Committee's view, failure to provide information in accordance with the Premier's Circular regarding costs, costing methodologies and cost recovery percentages constitutes a valid reason for the Committee to recommend to Parliament that the relevant subsidiary legislation be disallowed. If disallowance occurs, the subsidiary legislation ceases to have effect[3].

---

3 Section 42 of the *Interpretation Act 1984*

1.6 The Role of Treasury

Treasury's role is to:

- provide agencies with advice and assistance in resolving practical difficulties which they may encounter when undertaking a costing exercise or determining prices for their services; and
- provide information about relevant policies.

Agencies should refer enquiries to their Treasury analyst in the first instance.

2. Costing Concepts

2.1 Defining the Service to be Costed

Services provided by government agencies can range from those that are relatively easy to define and measure (such as registration of land titles, student places, police patrols, etc.) to others that are more abstract in nature (e.g. policy advice, administration of regulations, etc.).

Developing an unambiguous description of the service or the process used to deliver the service is an essential prerequisite to any costing exercise[4]. Without a clear definition it is impossible to verify costs, compare alternatives or make comparisons over time.

A consideration of the following factors can assist in developing a clear description and understanding of the service that is to be costed:

- what is the context within which the service is delivered (i.e. relevant policy issues, government goals, directives, standards or principles of operation)?
- what government desired outcome does the service address?
- is the service measurable in a verifiable and consistent manner?
- what are the processes associated with delivering the service and where do they begin and end?
- does the service cover an entire function? and
- who has responsibility for delivery of the service?

When carrying out a costing exercise the primary aim should be to focus on the services rather than the processes and/or relationships to the organisation's structure. So, for example, the focus should not be on 'administering the payroll system' or 'the Payroll Branch' but rather on 'the provision of payroll services'.

2.2 Cost Information and Accounting Systems

It is important for the difference between cash and accrual accounting to be well understood before commencing a costing exercise. Under accrual accounting all expenses and revenues relating to a given period are recognised in that period, even if cash has not changed hands. Depreciation/amortisation of assets is a good example of a non-cash item that nevertheless qualifies as an expense under accrual accounting.

[4] For more information on the definition and specification of services, see "Outcome Based Management (OBM) – Guidelines for use in the Western Australian Public Sector", Department of Treasury and Finance, November 2004.

In some costing exercises it will also be necessary to calculate the opportunity cost of capital invested in the delivery of a service. As it is an economic concept, accounting systems do not explicitly identify this cost and it will need to be calculated separately (see Section 3.5).

When undertaking a costing exercise, agencies should also determine whether costs associated with the service are met by other agencies, and if so, these should be separately identified.

All costs must be verifiable, i.e. capable of being confirmed independently, and adequately documented. Documentation includes the explicit purpose of the costing exercise, the approach used, and the assumptions made.

2.3 Definitions of Cost

The glossary at the end of the Guidelines provides definitions of several types of costs.

The interrelationships between some of the cost concepts need to be understood.

Some costs are sub-sets of others. For example, full cost includes all variable and fixed costs while direct costs may be fixed or variable. The relationship can be shown as follows:

Direct Costs	Mostly variable	Little fixed
Indirect Costs	Some variable	Some fixed
Opportunity Cost of Capital	Little variable	Mostly fixed

3. Determining the Full Cost of a Service

Costing exercises should explicitly state any assumption as to whether service delivery is ongoing or for a discrete period. It may be appropriate to conduct the exercise for a range of time periods.

The full cost of a service must be determined by considering all of its components, i.e. its direct costs, indirect costs (which may include services received free of charge and taxation) and opportunity cost of capital.

3.1 Direct Costs

Direct costs are costs that can be attributed directly and unequivocally to a service. They are the costs that can most easily be identified when examining the service that is to be costed. Direct costs are also the most likely to be considered as variable costs, i.e. they will change in direct proportion to changes in the quantity of service provided.

In the public sector, where labour is often the dominant input, direct costs are usually divided into direct staffing costs and other direct costs (e.g. direct materials costs).

Process costing and job costing (cost accounting approaches that allocate direct costs to production processes or to individual jobs) can be usefully applied to the identification of direct costs.

Direct Staffing Costs

Direct staffing costs include the wages or salaries of staff and on-costs such as annual leave (including loading) and long service leave entitlements expense, superannuation, workers' compensation insurance, fringe benefits tax, shift penalties, etc. Expenditure on protective clothing, training and allowances also falls under direct staffing costs.

The starting point when identifying staffing costs is to determine the method to be used in deciding whether or not a staff member's time should be allocated to the relevant service. If it is too difficult or too costly to estimate a time allocation for each employee then it should be possible to at least identify the extent to which groups of staff are associated with the service.

The ease with which direct staffing costs can be determined will depend on the nature of the service being costed and, in particular, whether there is a neat match between the service and the structure of the organisation. Direct staffing costs are easily identified when the whole of an organisation unit or the whole of a function or activity is included in the cost analysis. However, when staff in an organisation unit contributes to the delivery of more than one service then the basis for attributing direct staffing costs to a particular service would need to be determined on a rational basis.

If it is unclear whether a staff member or a group is exclusively associated with the service then it may be necessary to establish some basis for estimating involvement in the delivery of different services. This type of work analysis has been undertaken quite successfully in government agencies and is usually based on data collected during a survey period of relatively short duration. The approach taken is usually to request staff to keep a record of their time involved in a predetermined and defined range of activities supporting the delivery of various services.

The estimation process can serve several purposes, including information for performance indicators required for an agency's annual report. It is important that the basis of any estimation of staff involvement in the delivery of different services be verifiable.

Some staff time may be spent on overheads (for example administrative tasks or training). Systems for the allocation of staff costs should be capable of distributing these costs amongst services as appropriate.

While direct wage and salary costs are relatively easy to identify, there is a significant additional cost incurred by all organisations in relation to the employment of staff. These supplementary costs relate to the provision of additional benefits, other award payments, training, insurance etc. These on-costs can be very significant.

Because there can be significant differences in on-costs between different types of employees it is recommended that agencies develop their own models for estimating staffing on-costs. The following factors should be incorporated into the model if they are pertinent:

- annual leave (including loading) and long service leave entitlements expense, overtime, shift work;
- superannuation;
- workers' compensation insurance premiums;
- Fringe Benefits Tax;
- Payroll Tax;
- training;
- uniforms and/or protective clothing;
- costs related to motor vehicles and employee travel; and
- housing costs including air conditioning/water consumption subsidies.

A number of these factors are relatively straightforward. Other factors are further explained later in the Guidelines.

When estimating future payments for annual leave and long service leave, consideration should be given to expected future wage and salary levels including non-salary components such as employer superannuation contributions as well as the experience of employee departures and periods of service.

It is important to note that the appropriate on-cost factor will vary between different costing exercises, due to:

- different employment circumstances; and
- differences in the extent to which other costs are already accounted for in the costing exercise.

As an illustration, in considering the full cost of a new clerical employee subject to a general salary/wage agreement, the annual base salary could be adjusted in the first instance by a factor of 20 per cent, reflecting immediate employment on-costs such as annual leave and long service leave entitlements expense, employer contributions to superannuation, workers' compensation premium, overtime, and staff training.

However, for employees engaged in other more diverse service delivery areas, the direct employment on-costs may be higher, caused by the need to also recognise costs such as shift penalties, district allowances, uniforms/protective clothing, housing, and possibly relocation expenses. For example, in determining the level of grant funding, AusIndustry (a division of the Commonwealth Department of Industry and Science) has set an on-cost rate of 30 per cent to cover all of an employee's direct staffing costs.

While a standard or uniform on-cost factor is attractive (in terms of simplicity), given the diversity of employment circumstances it is the responsibility of each agency to accurately estimate on-costs using cost information relevant to the circumstances in which their services are delivered.

In addition to the direct salary on-cost factor, a loading will also typically be required to account for the indirect costs (e.g. corporate overheads) associated with service delivery. These indirect costs are discussed in Section 3.2.

Examples of Staff On-Costs	
Annual Leave	As a general rule, public sector employees are entitled to four weeks paid leave for each year of service. A loading of 17.5 per cent will be paid in the first pay period in December in the calendar year in which the leave accrues.
Long Service Leave	Employees who have completed a period of 7 years of continuous service in a permanent capacity (or 10 years of continuous service in a temporary capacity) are entitled to 13 weeks of long service leave on full pay.
Overtime	If the employee(s) work on more than one service, only include the employees' overtime associated with the service being costed.
Shift Loading	Ensure that the shift penalties reflect the staffing roster that is being proposed for delivery of the service.
Superannuation	Generally speaking, the cost of superannuation in an accounting period, in respect of current employees, is the cost of employer contributions to Gold State, West State, GESB Super and/or other fund providers.
Training	Training costs included here should exclude the costs attributed to wages and salaries paid to staff while they are attending training courses.
Travel Expenses	Include all relevant expenses, especially allowances payable under award provisions.
Housing	If housing is provided to an employee through the Housing Authority then the cost included in the analysis should be an estimation of the net cost to Government of providing the housing (i.e. net of rent paid by the staff but inclusive of the annualised cost of Government providing the housing).
Other	These could include workers' compensation premiums, fringe benefits tax, payroll tax, uniform/protective clothing allowance, etc.

Superannuation

The Government Employees Superannuation Board (GESB) and other fund providers administer superannuation arrangements for the Western Australian public sector. Eligibility criteria for membership in particular schemes for public sector employees vary according to commencement and implementation dates.

Eligible employees contribute to the Pension Scheme, a defined benefit pension scheme closed to new member since 1987, or the Gold State Superannuation Scheme (GSS), a defined benefit lump sum scheme closed to new members since 1995. Since July 2001 agencies have been required to make employer contributions for the GSS. From the point of view of calculating the cost of services Government concurrently funds the GSS, even though in practice the GESB returns GSS employer contributions to the Consolidated Account.

Employees commencing employment prior to 16 April 2007 who were not members of either the Pension Scheme or the GSS became non-contributory members of the West State Superannuation Scheme (WSS). Employees commencing employment on or after that date became members of the GESB Superannuation Scheme (GESBS). From 30 March 2012, existing members of the WSS or GESBS and new employees have been able to choose their preferred superannuation fund provider. Agencies make contributions to the GESB or other fund providers on behalf of employees in compliance with the Commonwealth Government's *Superannuation Guarantee (Administration) Act 1992*.

Process for calculating superannuation expense

Given the complexity of superannuation, officers engaged in costing exercises should use judgement concerning the degree of accuracy warranted by the materiality of superannuation.

For each service being costed, the size of the wage/salary bill for employees in the GSS, WSS, GESB and other schemes should be calculated or estimated. The bill for each type of employee, referred to below as the 'base', excludes allowances such as overtime.

West State/GESB/Other Superannuation Scheme

The superannuation cost for these schemes is the employer contributions made to it. If this is not known, for example when forecasting the cost of a new service, it may be calculated by multiplying the projected base by the superannuation guarantee rate.

Gold State Superannuation Scheme

The cost of this scheme is the employer contributions made to it. When unknown, it may be calculated by multiplying the projected base by the GSS employer contribution rate. The employer contribution rate for GSS members is reviewed each year by the GESB and their actuary.

Pension Scheme and Pre-transfer Benefits

Where material, movements in liability balances for pension and pre-transfer benefits due to CPI increments, changes in life expectancy etc. (actuarially assessed) are to be recognised as expenses for the purpose of costing government services.

Superannuation costs associated with the Pension Scheme (including pre-transfer benefits that currently form part of the Gold State Scheme) and Gold State may still be significant for some agencies. However, as these schemes have been closed to new members, their costs will become less significant over time.

It is noted that for departments and other budget-funded agencies that no longer receive notional liability reports from GESB an estimate may be required.

Other Direct Costs

Other direct costs are those identified as being directly related to the service. Examples of such costs may include:

- assets expensed on purchase;
- communication services such as telephones, internet and couriers;
- consultants or contractors;
- consumable supplies; and
- the cost of inventory consumed in the course of producing a service.

The dominance of some direct costs (particularly staffing costs) may result in those costs being used as the basis for estimating the extent of indirect costs, which are discussed in the next section.

CASE STUDY

Computer West is a department providing information technology to other government agencies, including in remote areas.

The Department's services are shown in the Budget Statements as 'Installation' and 'Training'.

The Department operates from a large building located in Perth. The building has an underground storage area for vehicles and supplies of electronic equipment, an electronic security system, offices and communication equipment for providing support throughout the State.

Its **direct costs** are as follows:

	Installation $	Training $	Total $
Wages and salaries (including leave entitlements)	636,757	569,002	1,205,759
Superannuation	33,000	30,000	63,000
Other staffing costs	1,089	990	2,079
Communications	16,302	14,820	31,122
Consultants and contractors	15,318	13,925	29,243
Consumables	8,910	8,100	17,010
Materials	19,591	17,810	37,401
Other direct costs	770	700	1,470
TOTAL	**731,737**	**655,347**	**1,387,084**

3.2 Indirect Costs

Indirect costs are costs that are not directly attributable to a particular service. They are sometimes referred to as overheads and can include, for example, 'corporate' costs such as the chief executive officer's salary or costs associated with executive administration, financial services, human resources, records management, information technology, accommodation (e.g. rental[5] of real property and maintenance), and depreciation and amortisation charges (relating to assets employed in service delivery). Consistent with the objective of reporting on the full cost of services, wherever possible these indirect costs should be allocated to the relevant service where there is a rational basis for doing so. Depending on the circumstances of individual agencies, some of these costs may be regarded as direct costs.

The fact that indirect costs are more difficult to attribute to the service being costed does not make them any less relevant. They frequently make a significant contribution to the full cost of a service and should not be ignored.

Asset Valuation

The valuation of the assets employed in the delivery of a service is an important matter because the valuation has a significant impact on the depreciation/amortisation charge. A consistent approach should be taken in costing exercises. The mandatory methodology applied for financial reporting should be used as a guide to costing exercises.

5 Whenever possible, the cost of the real property (i.e. buildings and land) component of a government service should be valued on a market basis. For properties that are leased by government, this is simply a matter of identifying their gross rental.

Physical assets are initially valued at the cost of their acquisition, which includes both the purchase price and associated costs. For subsequent revaluations, Treasurer's instruction 954 'Revaluation of Non-Current Physical Assets' requires that land and buildings are valued at fair value. Other assets are revalued either at fair value or cost in accordance with the accounting standards.

Intangible assets are valued at cost. The cost model is applied for subsequent revaluations requiring the asset to be carried at cost less any accumulated amortisation and accumulated impairment losses. Intangible assets can only be revalued to fair value where an active market exists.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Depreciation

The depreciation method should reflect the pattern in which the asset's future economic benefits are expected to be consumed.

Two common methods of determining the depreciation charge are:

- the prime cost or straight-line method, which allocates the cost of the asset's depreciable amount (i.e. the difference between the asset's original cost, adjusted for any revaluations, and reasonable value at the time it is expected to be disposed of) uniformly over the number of years of useful life. This method is more suitable when the benefits that can be derived from an asset are distributed uniformly over time; and
- the diminishing balance method, which allocates a higher proportion of the asset's depreciable amount to the earlier years of its life. This method is more suitable when the distribution of benefits that can be derived from an asset is skewed towards the earlier years of its useful life.

Amortisation

Amortisation for intangible assets with finite useful lives is usually calculated for the period of the expected benefit (estimated useful life which is reviewed annually) on the straight-line basis. Intangible assets with indefinite useful lives are not subject to amortisation but must be tested annually for impairment.

The useful life of an asset is the overall driving criterion for determining an appropriate depreciation/amortisation rate. Although the depreciation/amortisation schedules produced by the Australian Taxation Office may serve as a useful general guide, they should not automatically be relied upon.

The method used to estimate indirect costs needs to be carefully considered and explicitly identified so that independent verification is possible.

The identification and inclusion of indirect costs will involve a trade-off between accuracy and the cost of producing the cost information. Care should be taken to avoid devoting resources to the allocation of a small indirect cost pool at the expense of the analysis of more significant factors.

The following two methods of estimating indirect costs may be considered:

- a ‘usage’ or ‘benefit’ approach; and
- a ‘pro-rata’ approach.

There are several matters to be considered for each method.

The ‘Usage’ or ‘Benefit’ Method

This approach is concerned with measuring or estimating the actual usage of resources. If costs are measurable, the ‘usage’ or ‘benefit’ method is the most accurate method available for presenting information about indirect costs.

Actual resource usage may be estimated in several ways. Examples of methods of apportioning an indirect cost pool are direct observation, time records (in the case of indirect staff costs), sampling techniques or assigning costs to services as they are incurred. The method used must be well documented, verifiable and efficient.

Activity Based Costing (ABC) provides a detailed and accurate method of determining the actual attribution of costs in an indirect cost pool. It closely examines the activities undertaken within an organisation, determines what drives or causes the activities to be used in the production process, and then allocates costs on the basis of the resource consumption of each activity. The aim is to dissect the resources in an indirect cost pool and allocate to an individual service through the use of cost drivers[6]. The accuracy and reliability of cost allocation results under ABC are enhanced if individual activities are costed and then those activities are linked to services.

6 A cost driver is the factor or variable which has the greatest effect on the level of activity.

CASE STUDY

***Computer West** also incurs a number of indirect costs:*

	Total $
Accommodation	
Lease rentals	9,954
Repairs and Maintenance	2,772
Cleaning	567
	13,293
Depreciation	
Plant, equipment and vehicles	6,974
Buildings	35,361
Infrastructure	17,387
Leased plant, equipment and vehicles	6,481
	66,203
Amortisation	
Licenses	30
Computer software	917
	947
Other indirect costs	**25,300**
TOTAL	**105,743**

The Department delivers two services. Assume the delivery of 'Installation' and 'Training' requires 2,000 FTEs and 1,500 FTEs respectively. The indirect costs are to be allocated to those services.

Under an activity based costing approach, the Department has determined a principal cost driver for the allocation of the following costs:

	Cost Driver
Accommodation	Number of staff
Depreciation and amortisation	Number of deliveries
Other indirect costs	Number of orders

The indirect costs of $105,743 can be allocated to the two services by analysing known information about the cost drivers associated with each service. So, for example, because it is known that the accommodation costs vary in accordance with the number of FTEs delivering each service, these costs ($13,293) can be allocated to each service as follows:

Accommodation:

$$\frac{\textbf{Service-related staff}}{\textbf{Total staff}} \times \textbf{\$13,293}$$

Therefore we have:

Installation $\frac{\text{2,000 FTEs}}{\text{3,500}} \times \$13,293 = \$7,596$

Training $\frac{\text{1,500 FTEs}}{\text{3,500}} \times \$13,293 = \$5,697$

Depreciation and amortisation:

Assuming Installation performs 350 deliveries and Training performs 500 deliveries, total 850 deliveries:

Installation $\frac{\text{350 deliveries}}{\text{850}} \times \$67,150 = \$27,650$

Training $\frac{\text{500 deliveries}}{\text{850}} \times \$67,150 = \$39,500$

Other indirect costs:

Assuming Installation has 1,300 orders and Training has 1,200 orders, total 2,500 orders:

Installation $\frac{\text{1,300 orders}}{\text{2,500}} \times \$25,300 = \$13,156$

Training $\frac{\text{1,200 orders}}{\text{2,500}} \times \$25,300 = \$12,144$

The total allocation of the **indirect costs** ($105,743) is therefore:

	Installation $	Training $	Total $
Accommodation	7,596	5,697	13,293
Depreciation and amortisation	27,650	39,500	67,150
Other indirect costs	13,156	12,144	25,300
TOTAL	**48,402**	**57,341**	**105,743**

Although more accurate, it should be noted that ABC systems are more expensive and complex to establish and maintain, and require a better understanding of processes and cost behaviour than for traditional costing methods. It may not be appropriate for all services to be costed using ABC – materiality of costs and relevance of information to decision making should be considered before embarking on an ABC exercise. Typically, ABC is not practical in an organisation with a lack of diverse services and/or a relatively low proportion of indirect costs.

The Pro-Rata Approach

This approach may be used where it is not possible or is too costly to identify actual resource usage from an indirect cost pool. The costs in the pool are allocated on a proportionate allocation basis to services by using measures such as:

- staff involved in delivery of the service as a percentage of total staff; or
- direct resource use in the delivery of the service as a percentage of total resource use; or
- the budget for the service as a percentage of the total budget.

The same type of pro-rata allocation can be used for indirect cost pools of different types. A simple approach to allocating indirect costs is to group all the costs into one pool and use a proportionate allocation basis similar to those outlined above. However, the more disaggregated the approach (i.e. the greater the number of indirect cost pools used) the more likely it is that the pro-rata method will yield results similar to those achieved under the 'Usage' or 'Benefit' approach. Where the nature of the service's production process is reasonably straightforward, the pro-rata approach may represent a reasonable allocation of indirect costs.

It is the responsibility of each agency to adopt a methodology that reflects as accurately as possible the circumstances in which their services are delivered.

Using the Computer West case study above, the total indirect costs could be treated as one pool and then allocated to each service on a pro-rata basis in accordance with staff numbers involved in delivery of each service (previously identified as 2,000 and 1,500 FTEs respectively). The cost of $105,743 would then be allocated as follows:

PRO-RATA ALLOCATION OF STAFF COSTS	
Installation	2,000/3,500 FTEs x $105,743 = $60,425
Training	1,500/3,500 FTEs x $105,743 = $45,318

This differs from the results achieved under the ABC approach (the variation being in the order of 20 per cent – 25 per cent). Estimates of indirect costs can differ significantly depending on the approach taken. As the ABC approach is considered to be more accurate, it should be used wherever practicable.

Under either approach, where the basis for allocation is staff time involved in the delivery of a service, agencies must adequately reflect non-productive staff time in determining the basis for allocation of indirect costs.

More generally, as service levels can change over time it is very important that appropriate and relevant service levels be specified when determining the basis for allocating indirect costs. In this regard, levels of service that have been experienced in the past may no longer be appropriate as a basis for allocating costs in the future if service levels have significantly changed over time.

3.3 Services Received Free of Charge

Any resources received free of charge from other government agencies should be allocated to each of the services.

CASE STUDY

Computer West is assumed to receive services free of charge (e.g. legal services) in the order of $3,045. This amount is allocated as follows:

Installation	2,000/3,500 FTEs × $3,045 = $1,740
Training	1,500/3,500 FTEs × $3,045 = $1,305

3.4 Taxation

Only those taxes (net of GST input tax credits) or tax equivalents that are actually paid by a government agency on its inputs should be allocated to the services. Where competitively neutral pricing is applicable, agencies would estimate and allocate a notional amount of those taxes to the services.

3.5 Opportunity Cost of Capital

Inclusion of the opportunity cost of capital recognises that funds invested in assets used in the supply of a service have alternative uses. For the purpose of determining the opportunity cost of capital involved in the supply of a service, assets should include current assets (such as cash assets, inventories, and receivables) and non-current assets (such as land and buildings, plant and equipment, infrastructure, and intangibles) associated with the service being costed. Restricted cash and holding account receivables are excluded as they are considered to have no alternative use.

When costing existing services, the opportunity cost of capital rate should be applied to relevant assets net of liabilities (such as payables, borrowings, and provisions), in order to prevent benchmarking distortions caused by differences in the size of gross assets. If the assets were funded by borrowings, finance costs should have already been included in indirect costs.

The recommended rate to be applied to an agency's net assets is based on the State's weighted average cost of borrowing, which is the cost that would be saved by Government if the assets were liquidated and the cash used to repay debts. The current rate is available within the Financial Administration Bookcase (FAB) at http://www.treasury.wa.gov.au/Treasury/Legislation/Financial_Legislation/. The case study uses an opportunity cost of capital of 5 per cent for illustrative purposes only.

When net assets are used in the production of more than one service it will be necessary to allocate the opportunity cost of capital to each of the services in much the same way that indirect costs are allocated.

CASE STUDY

The rate is applied to the net assets of **Computer West**, as illustrated below:

	Total $
Assets	
Cash assets	10,900
Inventories	34,685
Receivables	10,705
Property, plant and equipment	1,388,699
Infrastructure	1,233,567
Intangibles	1,463
	2,680,019
Liabilities	
Payables	4,827
Borrowings	5,675
Provisions	45,517
	56,019
NET ASSETS	**2,624,000**

Opportunity cost of capital = 5 per cent × $2,624,000 = $131,200

Installation 2,000/3,500 FTEs × $131,200 = $74,971

Training 1,500/3,500 FTEs × $131,200 = $56,229

3.6 Summarising Costs

The full cost of a service is represented by the aggregation of direct, indirect and opportunity cost of capital. While most of these costs will be attributable to the agency delivering the service, some costs may be met by other agencies. Some costs will be represented by cash transactions while others will represent the potential for a future call on expenditure (e.g. accrued annual leave and long service leave). The finer details of any costing exercise will depend on the nature of the service being costed and the purpose of the costing exercise.

CASE STUDY

The full cost of **Computer West's** services is therefore:

	Installation $	Training $	Total $
Direct costs	731,737	655,347	1,387,084
Indirect costs	48,402	57,341	105,743
Services received free of charge	1,740	1,305	3,045
Opportunity cost of capital	74,971	56,229	131,200
TOTAL	**856,850**	**770,222**	**1,627,072**

The table below provides a summary of various costs. Most of the examples may, depending on individual agencies' operational circumstances, be regarded as either direct or indirect costs.

Summary of Types of Costs
Direct Costs
Staffing Costs
Base wage or salary
Overtime
Allowances
Shift loading
Annual leave and long service leave entitlements
Housing
Uniforms
Superannuation
Travel expenses
Training
Protective clothing
Fringe benefits tax
Air conditioning/water subsidies
Workers' compensation insurance premiums
Other Direct Costs
Assets expensed on purchase
Communication services such as telephones, internet and couriers
Consultants/contractors
Consumable supplies
The cost of inventory consumed in the course of producing a service
Indirect Costs
Corporate service costs
Accommodation
Depreciation and amortisation
Services Received Free of Charge
Valuation services
Legal services
Taxation
Commonwealth goods and services tax (where no input tax credits are available) and excise
State taxes (such as payroll tax)
Local government rates
Opportunity Cost of Capital

The estimation of the cost of a service should be only the first step in the analysis of costs. At the end of an accounting period actual costs should be compared with the cost estimates to assist with improving costing procedures. In some circumstances, costing and pricing a service should be estimated over a period of multiple years (i.e. a business cycle) in order to minimise the impact of demand volatility year on year.

4. Determining the Price for Services

This Chapter deals with the setting of prices that government agencies should be charging for the supply of services.

Costing a service requires the identification of all relevant costs (direct, indirect and opportunity cost of capital) associated with delivery of the service. Pricing a service, on the other hand, refers to the amount that the customer is required to pay for the service.

Treasurer's instruction 903 'Agency Annual Reports' requires each agency to include details of its pricing policies in its report on operations, which forms part of the agency's annual report. In addition, agencies (where applicable) are required to annually review fees and charges as part of the budget process (see also Treasurer's instruction 810 'Review of Fees and Charges').

4.1 When to Set Prices to Recover Costs

Whether or not to charge for services, and whether a fee or charge should be set to fully recover costs, are decisions to be taken by Government. **In general, fees and charges should be set at a level that reflects the full costs of providing the services, unless Government lawfully approves otherwise.** Charging full cost, in the absence of any reason to provide a discount or free service, is justifiable on the grounds of allocative efficiency (i.e. resources are not allocated inefficiently) and equity (i.e. taxpayers are not paying for services they are not choosing to use).

Advice to Government on whether a fee or charge should be set at full cost recovery should reflect the principles discussed below.

Why the Service is Provided?

Consideration should be given to the reason for government provision of the service. This will generally be due to some form of 'market failure', in which the private sector either does not provide the service, or does not do so at optimal prices and quantities. Examples are where the service is a natural monopoly, it has public good characteristics or there are significant positive externalities (such as the benefit to the wider community of people being educated). Governments also provide services to achieve social welfare outcomes.

The analyses below should be modified when a service is provided for more than one reason, e.g. it may be both a natural monopoly and provided to achieve social welfare outcomes.

As a basic rule, a natural monopoly is said to exist if, given a level of demand, one organisation or firm can produce required services at a lower cost than two or more other organisations. Typically, a natural monopoly will exhibit a number of basic conditions, including significant capital cost, economies of scale and high barriers to entry.

When a service is only provided by Government, because it is a natural monopoly, the same price and quantity outcomes should be reproduced as if the service was provided competitively, in order to prevent distorted price signals and a misallocation of resources.

A public good is characterised by consumption, which is:

- Non-rival (an additional consumer does not reduce the amount of the service available to others); and
- non-excludable (making the service available to one consumer automatically makes it available to others).

However, while a service may be provided because it has public good characteristics, few goods are a pure public good, so some charges may still be appropriate.

Externalities are generated when the consumption of services has significant effects beyond the parties delivering and receiving those services. For example, delivering education not only benefits the students receiving it, but also the entire economy as the workforce is educated.

Governments also provide services to optimise social welfare. Charging for the service could mean that too little will be consumed.

Other Considerations

If a substitute is available from the private sector, then any decision not to impose user charges should be reviewed. In the absence of full cost charging the private sector provider could be facing unfair competition, which may violate competitive neutrality.

Where the total cost of charging for a service, including both administrative costs incurred by Government and the consumer's compliance cost, is high relative to the cost of providing the service, a decision to charge for the service should be reviewed.

This discussion is not meant to be exhaustive, but is intended to assist agencies to outline all the factors they consider relevant in support of their recommendations regarding charging for services.

4.2 Competitively Neutral Pricing

If competitively neutral pricing is applicable, then under the Competition Principles Agreement the prices charged for an agency's relevant services must not only reflect the full costs faced by Government in providing the service, but must also be adjusted to take account of any competitive advantages and/or disadvantages experienced by the agency as a result of its public ownership.

Agencies for which competitively neutral pricing may be appropriate are likely to comprise those in the public sector which compete, or have the potential to compete, in open markets. Before an agency is required to price on this basis, the following conditions must be satisfied:

- the agency must undertake a review of all the costs and benefits to the general community of removing those competitive advantages and disadvantages arising from its public sector ownership;
- this review must be submitted to the agency Minister and EERC for consideration; and
- having considered the report, EERC authorises the implementation of competitively neutral pricing.

Advantages Due to Government Ownership

An agency may experience competitive advantages as a result of efficiencies in its operations or its ownership by Government. It must be stressed that only the latter advantages need to be taken into account when developing competitively neutral full cost pricing.

Common examples of such advantages include exemptions from:

- State taxes (such as payroll tax);
- local government rates;
- commercial rent (or rent is charged at a concessional rate); and
- regulations.

Information about State taxes, including tax rates, may be obtained from the latest 'Overview of State Taxes and Royalties', which is available from the Department of Treasury website.

Information about local government rates may be obtained from the relevant local government authority.

This list is by no means exhaustive, and agencies should review their activities to identify any others peculiar to their circumstances.

Disadvantages Due to Government Ownership

Any disadvantages due to government ownership must also be accounted for, such as higher levels of employer contributions to superannuation in the public sector (e.g. Gold State Scheme).

4.3 Multiple Services

When agencies produce services for which different policy decisions have been made concerning pricing (e.g. full cost pricing for one service and no charge for another), or when competitive neutrality principles are applicable to at least one service, cross subsidisation issues become more sensitive.

Under these circumstances it is more important to appropriately allocate indirect costs as discussed in Section 3.2.

CASE STUDY

Prices are set by **Computer West** to recover the full cost of services as follows:

	Installation	Training
Full cost of services	$856,850	$770,222
Estimated number of orders to be delivered	320	240
Price per order	**$2,680**	**$3,210**

5. Credit and Debit Card Administration Fees

Credit and debit card payment systems are regulated by the Reserve Bank of Australia (RBA). In 2001, the RBA 'designated' as payment systems a number of common credit card schemes in Australia. Designation is the first step in establishing standards and access regimes for a payment system to deal with public interest issues. In 2003, it introduced standards to remove the restrictions on merchants passing on the merchant fees of accepting credit cards directly to customers, and subsequently removed similar restrictions in debit card schemes. The aim of these reforms was to increase competition and transparency between cards and other payment systems such as EFTPOS, BPAY and Australia Post.

Most agencies in the Western Australian public sector have the authority to charge a card administration fee for accepting card payments under Section 5A of the *State Trading Concerns Act 1916*, subject to the fee not exceeding the amount determined in a manner that has been approved by the Treasurer.

The Treasurer has approved the maximum rate for the credit or debit card administration fee to be set at 1% of the card payment amount.

The card administration fee is also limited to cost recovery. That is, in charging a card administration fee, an agency will need to determine whether its 'reasonable cost of acceptance' is below, at or above the maximum rate. For example, if an agency's reasonable cost of acceptance is calculated to be 0.5%, the agency would only be allowed to charge 0.5% and not the maximum rate of 1%. On the other hand, if the reasonable cost of acceptance is 1.5%, the agency is subject to the limit of 1%.

The RBA has provided a Guidance Note[7] which sets out the RBA's views on the costs, beyond the merchant service fee, that may appropriately be included in the reasonable cost of acceptance if the agency chooses to do so.

The additional costs (beyond the merchant service fee) include and are limited to:

(a) Other costs payable to payment service providers. This cost category includes, and is limited to: fees for the rental and maintenance of payment card terminals; scheme fees incurred in processing card payments and levied by the provider (e.g. international service assessments or cross-border transaction fees); and other fixed fees for providing payment acquiring equipment and services (e.g. other monthly or annual fees that are included on the agency's card processing statement).

(b) Costs payable to other providers. This cost category includes, and is limited to: gateway fees; switching fees; and fees for the provision of equipment and/or services required to accept card payments.

[7] Publications produced by the Reserve Bank of Australia may be found at http://www.rba.gov.au.

(c) Agencies' own costs related to card acceptance. This cost category includes, and is limited to: the agency's costs of purchasing and maintaining their own card acceptance infrastructure; scheme fees levied on the agency by the scheme; and line rental and communications charges directly related to the use of payment card terminals.

(d) Fraud costs related to card acceptance. This cost category includes, and is limited to: any fixed equipment, systems or development costs that are incurred by the agency to implement fraud mitigation procedures, including those mandated by scheme rules, apportioned over a period of five years from the date when the cost was incurred; and the transaction value of any fraud-related chargebacks or chargeback fees charged by the provider, provided that the agency has adopted generally available fraud mitigation procedures.

(e) Any fixed equipment, systems or development costs, not already captured in paragraphs (a) to (d) that are incurred by the agency as a direct result of compliance with scheme rules or mandated requirements, apportioned over a period of five years from the date when the cost was incurred.

For the avoidance of doubt, costs that are not considered to form part of the reasonable cost of acceptance include but are not limited to:

(i) Any fines levied by a provider for non-compliance with any rules or standards.

(ii) General business costs, such as staff training, electricity and premises costs. For instance, staff time employed in operating payment terminals or training to operate payment terminals would not be eligible.

In addition, the RBA publishes quarterly data on average 'total merchant fees' (merchant service fees and other merchant fees) for credit and charge cards in Statistical Table C3[8].

[8] http://www.rba.gov.au/statistics/tables/xls/c03hist.xls

Glossary of Terms

Accrual Accounting	Recognition of the financial effects of transactions or other events in the periods in which economic value is created, transformed, exchanged, transferred or extinguished, to the extent that those financial effects can be recognised and measured, irrespective of whether cash has been received or paid.
Activity Based Costing	An approach to costing which focuses on identifying activities required to produce services.
Competitive Neutrality	The nullification of any net competitive advantage to an agency arising purely from its ownership by Government.
Cost Driver	The factor or variable that has the greatest effect on the level of activity.
Current Asset	An asset that, within the normal course of events, is expected to be converted into cash within the next 12 months.
Depreciation/Amortisation	The systematic allocation of the cost or value of an asset over its useful life. Depreciation/amortisation recognises that assets generally have a limited life and that the declining life span of an asset is an expense to an entity.
Direct Costs	The costs, which can be directly and unequivocally attributed to the service being costed.
Fair Value	The valuation approach, which takes account of the current use of an asset and the various restrictions, which may apply to its current and future use.
Fixed Costs	Costs that remain unchanged in total for a given time period despite fluctuations in service level.
Full Cost	The total value of all of the resources used in the production of a service over a period.
Indirect Costs	The costs, which, while related to a service, are not directly attributable to it.
Non-Current Asset	An asset that, within the normal course of events, is not expected to be converted into cash within the next 12 months.
On-Costs	Labour-related costs which are incurred in addition to direct salary or wage costs.
Opportunity Cost of Capital	That which is forgone by investing in an asset rather than using for other purpose such as investing in an alternative investment or paying off debts.

Outcome Based Management	The Western Australian public sector's framework for managing the performance of agencies. It identifies the outcomes desired by Government that agencies are expected to contribute to, and the services to be delivered to help achieve the desired outcomes.
Overheads	The fixed and variable costs of an organisation which are not directly attributable to a particular service.
Variable Costs	Costs that fluctuate in direct proportion to changes in the level or volume of service.