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MANAGING PUBLIC SECTOR BUDGETS

PART ONE

Professional Development Course Book

Presented by Mark Priadko

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# Introduction

## Learning objectives:

* Introduction to financial management basics
* Understand functions and types of budgets
* Understand government budgeting processes
* Get practical insight into managing and controlling budgets.

## Self-evaluation

My proficiency in managing budgets and financial plans is:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Low |  |  |  |  |  |  |  |  | High |  |

List of what I need to know to move up one point on this scale.

* .......................................................................................
* .......................................................................................
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## Session overview

* Introduction
* Our case study
* Financial management basics

**Break**

* Terminology
* Finance as an Expression of Strategy
* Context & Public sector finances
* Understanding costs and revenues – Zero based budgeting

These course notes are designed to support the presentation of information in the module. They are based on the knowledge and experience of Mark Priadko. These notes are not designed to present comprehensive documentation of the nature of financial management or public sector finances. References are provided for those who wish to investigate matters in more detail.

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**Introduction and initial discussion**

Finance as an expression of strategy

Understand costs and revenue – zero based budgeting

Adapt to a top-down budget (including savings)

Cash flow (or phase) your budget

Exercise control over transactions

Monitor your performance against budget

Adapt to budget variations

Seek approval to change your budget

I am more confident in my ability to manage my budget and to work with finance staff in my department.

Terminology

Financial Management Basics

### Case Study

We have been asked to establish a program to attract skilled migrants to South Australia to ensure we have the skills necessary to support public services and local businesses. We have been asked to do this by ensuring that in the first few weeks of their stay, migrants are supported by access to housing, accommodation and support services to make their settlement smooth.

What are some of our initial thoughts on the following aspects of such a program?

Inputs

Activities

Outputs

Objectives – skilled migrants are attracted to SA by making settlement smooth

Outcomes – Local businesses create jobs and grow with access to skills

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Terminology

**Financial Management Basics**

# **Financial Management Basics**

Budgeting is part of the overall financial management of an organisation.

It is my view that there are five components to good financial management:

1. Establishing the financial bottom line(s) (financial targets)
2. Do you know where you are? (reporting)
3. Are you confident in your viability? (estimating & projecting)
4. Are decisions rigorous and transparent? (budget bidding & allocation)
5. Do you have adequate control over transactions? (control & assurance)

Targeting it

Funding it

Controlling it

Knowing it

Planning it

What is your financial bottom line(s)? **Establishing financial targets**

Do you know where your finances are now? **Good financial reporting**

Are you confident in your financial future? **Good projecting and estimating**

Are the financial implications of decisions rigorous and transparent? **Good budget allocation & bids/business cases**

Do you have assurance that transactions and records are right? **Good financial controls**

**Public Money**

The basics apply to any household, business or government. While they sound basic, it cannot be presumed that all are done well.

Very often there is an emphasis on the reporting, control and planning (budgeting) components. However, the establishment of appropriate financial targets and transparency in decisions, if not done well will undermine the benefits of doing the other components well.

The quality of financial management will be related to how well each of the five steps is carried out.

What follows is based around each of these five components of good financial management.

## What is your financial bottom line(s)?

Answering this question is the first and most fundamental step to good financial management. Without answering this question properly, financial reporting and financial planning will be unfocussed.

**Targeting it**

Public money

There are many possible financial targets – profit, cash holdings, net worth, net financial worth, return on equity, return on assets, net debt etc.

The financial bottom line(s) will be different for different types of organisations and people. A primary determinant of an entities financial bottom line(s) will be the nature of its assets and liabilities.

The public sector consists of many organisations with assets that do not earn income (non-income earning assets) and organisations with income earning assets. The financial targets for each of these sectors within the government will therefore be different.

For organisations with income earning assets, financial targets will usually relate to profitability. The target level of profitability will be based around the amount of profit relative to assets (return on assets), the amount of profit relative to investments in the company (return on capital or return on shareholder funds) etc.

Organisations with assets that do not earn income will need different targets. Because assets are non-income generating, care must be taken that the purchase of assets does not lead to growth in liabilities. In these cases, organisations will need targets that focus on operating results and targets that focus on the impact of the asset purchases on liabilities and debt levels.

### SA Government financial targets

The financial targets of the South Australian Government define the financial parameters for all agencies and entities within the general government sector. The table below is an excerpt from the State budget summarising fiscal targets.

A screenshot of a cell phone

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For agencies in the South Australian General Government sector, the key financial targets are:

* Net operating result (or net cost of services)
* Net lending/borrowing
* Expenditure authority
* FTEs



**FINANCIAL POSITION**

**Assets**:

Cash

Investments

Property

*less* **Liabilities**

Loans

Provisions

Accounts payable

*equals* **Net worth**

**FINANCIAL PERFORMANCE**

**Revenue**:

Fees

Grants

Fund raising

*less* **Expenses**

Salaries

Supplies & Services

Facilities and Utilities

*equals* **Net cost of services**

Financial position is improved or deteriorated depending on financial performance. Poor financial performance (expenses greater than revenue) will result in a deterioration of financial position. Good financial performance (revenue greater than expenses) will result in an improvement in financial position.

## Financial Reporting - Do you know where your finances are?

**Knowing it**

Public money

The next step to managing finances is to know the current status of your finances. You require access to meaningful and accurate information that either gives you assurance that your finances are where you want them to be or that some intervention or action is required. This is the basis for good financial reporting. Knowing where your finances are at a point in time is critical to informing any decision with financial implications.

The act of receiving financial reports or financial statements on a regular basis is no guarantee that you will know where your finances are. Most of us have had some exposure to financial reporting. However, in too many cases, our experience with financial reports is memorable for the wrong reasons. Too many financial reports provide large volumes of information without making it clear what the status of the financial bottom line is. They provide lots of information but not lots of assurance that your finances are where you want them, or they do not make it clear where intervention is required.

An important aspect of knowing where your finances are, is being able to assess your key targets against a reference point or benchmark. Examples of reference points or benchmarks include year to date budgets or year to date actuals in previous years.

Two categories of financial reports are statutory reports and management reports.

1. Statutory reports include financial statements, primarily for those interested parties who are external to the business. The production of external or statutory reports is a function is called financial accounting. Statutory Reports are:

* Published in annual reports that are submitted to ASIC, provided to shareholders or tabled in Parliament.
* They are produced for external consumption according to accounting standards.
* They are subject to external audit by an independent auditor (e.g. the Auditor-General for Government departments).

1. Management reports are produced for internal use by managers that need both financial and non-financial information to develop and implement strategy by planning for the future; making decisions about products and services; and ensuring that plans are put into action and are achieved through requisite control. These three functions are collectively called management accounting which produces management reports. Management Reports are:

* Usually produced monthly and are provided to cost centre and division managers
* They are produced for internal consumption to track performance against targets (usually against budget) hence they tend to focus more on revenue and expenses
* They are tailored depending on the type of organisation and the needs of its decision makers.

Knowing where your finances are requires quality financial reports that, without ambiguity, show:

* **Financial performance to date** **against key targets.** In the case of the South Australian Government, this means receiving reports that show:
  + the status of an agency's net operating result (how much revenue and expenditure has been incurred to date)
  + the status of the agency's net lending/borrowing result and
  + the status of the agency's expenditure against its expenditure authority
* **Current financial position** - that is, what is my stock of assets and my stock of liabilities. Key measures will include the amount of cash held, borrowings and the level of employee provisions.

In addition to clearly reporting key financial targets, a good financial report in the public sector will also include:

* A comparison of the actual with a budget and reporting variances for these key financial targets
* Commentary on key events that have impacted on key financial targets that help the reader understand cause and effect associated with variances
* Seeing trend data to give insight into patterns over time and to get insight into causes and effects.
* Access to more detailed data with breakdowns on a transactional basis (e.g. for salaries, different expenses) and breakdowns on an organisational basis (showing the status of targets for divisions, cost centres or projects that make up your business)

Clarity of presentation and accuracy of information are critical to the effectiveness of financial reports in helping us understand the status of our finances.

An example of a layout of a monthly financial report that meets these requirements for an agency is shown below.

Good financial reporting is necessary at a number of levels in an organisation. For example, with an agency, financial reporting is required for:

* The entire agency:
  + Executive management reporting – reports delivered to the executive group to inform as to how the whole agency is tracking against budget.
  + End of year financials statements and annual reports are also required for the agency.
  + DTF reporting – monthly reporting by the agency on how it is tracking against budget.
* Directorate/division or business reporting to executive directors/General Managers
* Cost centre reporting
* Project & program reporting for project leaders and managers.

Contemporary views in management reporting believe that it is necessary to combine financial reporting with reporting of other key indicators of performance. This has given rise to triple bottom line reporting (reporting against financial, environmental and social bottom lines) and to the concept of the balanced scorecard (reporting financial performance along with other key performance indicators like employee turnover and customer satisfaction.

### Notes

## Estimating & projecting - are you confident in your viability?

**Planning it**

Public money

Having established that you know your current financial position and financial performance, what level of comfort do you have in your future financial situation? Are you confident that you can continue to operate with a minimum of risk to your financial position?

The first level of confidence in viability is in meeting targets for the current financial year. This requires projection and estimation against key financial targets to the end of the financial year.

The second level of confidence in your viability relates to being as sure as you can be about having capacity to deliver services into the future. This requires projection and estimation from the current year into the future.

It can be false in government to believe your viability is secure. Many parts of government operate projects or programs that are time limited. It cannot be presumed that they will continue beyond a given time unless steps are taken to secure a future funding source.

**If your budget in not consistent with that approved by Cabinet, it is not approved!**

Government budgets and forward estimates are approved by Cabinet and Parliament. The budgets for all government agencies are approved by Cabinet in the annual budget process. Viability in the state public sector can only be assured when each agency/region/unit has a set of forward estimates based on sound assumptions that concurs with the forward estimates approved by Cabinet in the budget process.

The South Australian Government maintains forward estimates for four years beyond the current year. Each Government department has an approved set of estimates for the current year and for each of the four years beyond the current year. **Each annual budget process approves changes to these estimates across all years in the forward estimates, not just for the next financial year.**

A key aspect of budgeting is that the onus is on an organisation to ensure that it has a transparent budget that goes out four years, that it is engaged in the budget process and that its budget is adequate to enable delivery of services (or that the consequences or an inadequate budget are specified in terms of inputs or outputs.). If a business is not viable because of an inadequate budget, the onus is on the business to take all steps possible to get the budget changed by the proper authority (that is, Cabinet approval via the Minister).

For organisations that have a high reliance on fixed assets (that is, their business is focused on assets like roads, buildings or equipment), forecasting and projecting should occur over 10, 20 even 30-year timeframes. This will identify the required maintenance and replacement of assets fundamental to service delivery.

### Understanding the keys to your viability

Confidence in future viability will be based on the degree of certainty you have over future expenses and revenues. Knowing what the future holds for key sources income is critical. In Government, because of its ability to tax, it has some control over accessing tax revenue. However, even this revenue is subject to changes in the underlying economy and political circumstances. This demands estimation and projection of key underlying parameters.

With our forecasting, we should attempt to answer two questions:

1. ***What resources do I need to deliver what is expected of me over the next few years?***
2. ***What can I deliver over the next years with the resources that have been allocated to me?***

Where there is heavy reliance on grants or appropriations, viability will depend on the future stability of the grant provider. It is critical in a Government agency to understand the parameters around grant funded programs or around time limited programs and projects funded from appropriations.

Where there is heavy reliance on the sale of goods and services in the marketplace there is a need to understand industry dynamics, customer needs and future trends.

In some cases, your delivery of services will rely heavily on property, plant and equipment that you own. In these cases, the health of the property plant and equipment becomes a key to your viability.

Key questions to ask in assessing your viability are:

* What will change in the future that will impact on your finances?
* If I continue this way, what will my full year expenses & revenue be?
* What key factors are likely to change that will change my financial circumstances?
* Do I know my budget for next year and for future years?
* If my budget for future years is changing, what action do I need to take now to deal with that?

Think in terms of tables - can you complete the following table for your directorate, cost centre or project?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Year 1**  **$'000** | **Year 2**  **$'000** | **Year 3**  **$'000** | **Year 4**  **$'000** | **Year 5**  **$'000** |
| Revenue |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| Expenses |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| **Net operating result** |  |  |  |  |  |
| Capital expenditure |  |  |  |  |  |
| **Net lending/borrowing** |  |  |  |  |  |
| **Expenditure Authority** |  |  |  |  |  |

### Notes

## Budget bidding & allocation - Are decisions rigorous and transparent?

In circumstances where you determine that additional money is required either to ensure your viability or to deliver on a new government program, the process of securing additional public money demands rigour and transparency.

**Funding it**

Public money

Budget bids and business cases that are poorly structured or that lack rigour and transparency will usually not be approved. If they are approved, they will complicate the reporting and controlling of revenue and expenditure and will complicate to future forecasting and estimating because they will create uncertainty regarding financial targets.

How can high standards of rigour and transparency be put in place for the allocation of public money?

It is essential for persons involved in some way in the process of bidding for funds or for reallocation to have an understanding of the overall process by which this happens. The section on the budget cycle will give an insight into how the budget cycle works and what that demands of those involved.

Examples of other steps taken to increase the transparency of decisions include:

* Documentation of the financial implications of budgets and budget decisions – in particular with respect to the financial bottom lines of the government
* Guidelines for the evaluation of initiatives (see Treasurer's Instruction 17)
* Cost benefit analysis for new initiatives
* Rigorous procurement process around tendering and tender evaluation (refer to State Supply Board guidelines)
* Disclosure of contracts
* Cabinet monitoring of new funding and savings measures.

Example of how rigour can be increased around budget bids and decisions:

* + Make underlying assumptions clear
  + Don't be afraid to go into detail in documenting assumptions (e.g. number of employees, number of computers, accommodation space, $ cost per square metre of accommodation etc.)
  + As with the step relating to confidence in viability, think in terms of tables. Use the following table as a template for capturing the budget implications of your initiative.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Year 1**  **$'000** | **Year 2**  **$'000** | **Year 3**  **$'000** | **Year 4**  **$'000** | **Year 5**  **$'000** |
| Revenue |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| Expenses |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| **Net operating result** |  |  |  |  |  |
| Capital expenditure |  |  |  |  |  |
| **Net lending/borrowing** |  |  |  |  |  |
| **Expenditure Authority** |  |  |  |  |  |

Many organisations will have budget allocation processes occurring at more than one level. This is true in Government. While there is a budget allocation and bidding processes at the whole of government level, similar processes exist within departments and further they will exist within directorates and across programs. In all cases, some form of prioritisation and decision-making process will be employed. Quality information regarding the impact of decisions on your key financial targets is critical to prioritisation and decision making at all levels in an organisation.

### Notes:

## Control & assurance - Do you have adequate control over transactions?

**Controlling it**

Public money

In a large organisation, the processes of ordering and receiving goods, for making payments and for receiving revenue involve many individuals. These circumstances give rise to a number of risks associated with error or with misappropriation.

The fifth element to good financial management is that organisations put in place controls to ensure that error and misappropriation are minimised. This step is also essential to ensuring the previous the steps associated with reporting and with planning can be conducted with the highest quality data.

Putting in place controls over approval processes and over transactions and data provides assurance and increases confidence in information being produced for decision-making.

### Understanding transaction processes

Examples of transactions processes in a business include:

* Receipt of cash
* Purchase of goods
* Payment of invoices
* Payment of grants
* Use of credit cards

The first ingredient to having good controls is to ensure that these processes and the approval process preceding these transactions are well documented. This documentation informs where controls are required.

### Measures to improve control

Businesses employee audit teams (both internal and external) to provide an independent view of controls within an organisation. In the Government, the Auditor-General provides independent external audit services. Agencies have internal audit teams to identify inadequate controls and to provide advice on improving controls.

Examples of measures that are taken in organisations to improve controls include:

* Systems security and access limits to transactional systems
* Segregation of duties for the handling of cash (e.g. receipting and banking done separately) and in purchasing goods (e.g. certification and approval of invoices conducted by different people)
* Reconciliation of accounts in the general ledger to ensure movement of monies through accounts can be verified
* Clear and thorough delegations
* Security over cheques
* Guidelines regarding the use of credit card
* Self-assessment check lists
* Purchasing units.

### Notes

# 

### Transactional cycles

In mature organisations, specific transactions follow agreed procedures and follow their own cycles. As described previously, this is a key element to the control element of good financial management. The table below outlines the cycles followed for key transactional areas.

Examples of transaction cycles are presented below.



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**Terminology**

Financial Management Basics

# Terminology

## Cash vs. accrual transactions and cash vs. accrual accounting

Differences between cash and accrual accounting are observable at two levels:

1. How they are reported.
2. When transactions are recognised.

With respect to reporting, cash accounting focuses on the source and application of funds, hence the movement in cash balances. However, accrual accounting focuses reports on the financial performance (revenue and expenses) and the financial position (assets and liabilities).

With respect to recognition, timing is the main difference between cash and accrual accounting. When transactions are recognised depends on the accounting method being employed.

**Cash accounting** recognises the value of a transaction when cash changes hands.

**Accrual accounting** recognises the value of a transaction when the transfer of the good or service occurs (more specifically, when there is a transfer of value or benefits).

For transactions where the receipt of the good or service occurs at the same time as cash changes hands (e.g. when we buy a sandwich at a café), the recognition of the transaction will be the same under both accounting methods.

However, where there’s a time gap between the receipt of a good or service and the handover of cash, the transactions will be treated differently in a cash system vs. in an accrual system.

When there’s a time gap between the cash and accrual recognition, it gives rise to items appearing on the statement of financial position such as accounts receivable, accounts payable and provisions. Each are an example of where transactions have occurred, but cash has not changed hands.

**Example**: Electricity bills are usually paid quarterly (i.e. cash changes hands quarterly) while the electricity is being received and used daily. In an accrual system, expenses will be recognised each month based on a reasonable estimate of electricity used during that month. On monthly basis, this would result in the cost of electricity in a cash system being different to that shown in an accrual system. Over the course of a year, it would be expected that the timing differences would even out and that the results would be similar under each method.

**Notes**

### Long Service Leave, Superannuation & Annual Leave

There are transactions that take years to 'even out'. Long service leave and superannuation are two examples that are the most relevant of such transactions in Government. Each day an employee works, the employer incurs an expense associated with long service leave and superannuation. However, the cash associated with these items will only change hands when an employee takes their long service leave (or receives a lump sum) or when an employee retires. In these examples, the cash transaction will understate the true expenses in most years. Accrual accounting will recognise the long service leave and superannuation expenses when they are incurred at the end of each pay period. This is done by the processing of a journal from the payroll system or by the accounting section within a business.

Long service leave, superannuation and annual leave are good examples of where accrual accounting gives a truer picture of the financial performance of a business. When the expenses in an accrual system are greater than the cash payments, it is necessary for a provision (a liability) to be recognised in the accounts to indicate the value of the cash owed to employees. In the case of superannuation, the government sets aside cash to maintain investment assets at sufficient levels to meet future super payments. The gap between the investment assets and the value of future payments is referred to as unfunded superannuation liabilities. These are the largest liabilities in the SA Government.

**Notes**

### Treatment of asset purchases

Cash and accrual systems also differ in the expensing of major assets. A cash system recognises the cost of an asset as an impact on the cash flow statement when it is bought. An accrual system recognises the cost of an asset as an impact on financial performance, as it is being used. Depreciation is how such an expense is recognised in an accrual system. In accrual accounting, the statement of financial position recognises the value of an assets and offsets this with the accumulated depreciation recognised for the assets.

**Example**: Purchasing a vehicle for $10,000 at the beginning of the year. The vehicle is estimated to have a useful life of 10 years. Under cash accounting the $10,000 purchase is recognised in the cash flow statement in the year of purchase. However, accrual statements will recognise the use of the vehicle in a year (that is, using straight-line depreciation, 1/10th of the vehicles value is used each year). The accrual statements will recognise a depreciation expense of $1,000 in the first year and an asset with a residual value of $9,000 (that is a purchase value of $10,000 less depreciation of $1,000).

Accrual accounting must be distinguished from commitment accounting. Being committed to future expenditure does not, in all cases, result in the recognition of a transaction. For a future commitment to be recognised in the accounts there needs to be certainty about its value and its occurrence (e.g. raising a purchase order does not result in the recognition of an expense – a purchase order can be cancelled at any time). Only when future commitments are certain or discharged (i.e. when benefits or value is transferred) is an expense recognised.

### Example – Accrual journals and GST?

An Accrued expense is an expense which has been incurred but not yet paid.

An expense must be recorded in the accounting period in which it is incurred. Therefore, an accrued expense must be recognized in the accounting period in which it occurs rather than in the following period in which it will be paid.

***An example:***

In March, a government department seeks delivery of a training program scheduled for June. They raise a purchase order in March.

I deliver a training course to a government department on 25 June at a charge of $1,100, including $100 of GST.

I send the invoice in early July.

A commitment is recognised in March.

The expense of $1,100 was incurred in June against the purchase order and so the agency will process an accrual journal for June that records:

* $1,000 of training expenses
* $100 for GST paid.

It will pay the invoice in July, sending $1,100 to the bank account I specify (i.e. cash changes hands in July).

***What happens to the GST?***

For businesses and government agencies, GST is paid but can be claimed back as an input tax credit.

In the first quarter of the next year, the agency will complete a GST return showing that it paid $100 in GST (to me as the collector of the tax). The tax office will effectively return the $100 back to the department in that quarter.

I will complete my GST return showing that I received $100 in GST and will pay that GST to the Australian Tax Office.

The bottom line for me and for the Government is that while the original transaction was charged at $1,100, the cost to Government was $1,000 and my income is recorded as $1,000.

Therefore, when preparing budgets or costing projects, most government agencies will make their estimates exclusive of GST.

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Terminology

Financial Management Basics

# Finance as an Expression of Strategy

Finances reflect how an organisation keeps count of its value – the value of its revenue and expenses and the value of its assets and liabilities. These will be an indicator of the health of the organisation – its either creating or sustaining value or its losing value.

The rationale for the existence of organisations in the public sector is fundamentally different from the rationale for the existence of organisations in the private sector.

### DISCUSSION: - How is the public sector different and how would public finances be managed differently?

### How would we expect the financial management of a project to differ from financial management of an operational unit?

## Public Sector Differences

Consider the ‘means’ and ‘ends’ of different businesses.

Typically, private sector businesses exist to generate profit for their owners and shareholders. Profit is their ‘end’. How they go about this is through the provision of goods and services.

For the public sector, this relationship tends to invert. The agencies and departments exist to deliver services, including services that would not otherwise be delivered due to market failures or that are provided to address inequities. The delivery of goods and services is the end. How this end is met is by attracting funding to support the delivery of goods and services.

This changes the relationship between finances and the strategy of the business.

|  |  |  |
| --- | --- | --- |
|  | **Means** | **Ends** |
| **Public:** | Funding – Attract $ | Deliver services/programs |
| **Private:** | Deliver services/programs | Profit - Generate $ |

For a private organisation, strategy focuses on how the firm can compete better or find unique markets to improve profitability. Finances follow good execution. Customers determine how financially successful you will be.

For public organisations, strategy focuses on how the organisation scales up or down depending on external needs and on the availability of public money. Finances precede delivery. Funders are a primary determinant of financial health.

These relationships impact on incentives.

Financial incentives in the public sector are fundamentally different to financial incentives in the private sector. In the private sector, if managers and directors stand to gain from being able to better manage money and produce financial results, budgets are more likely to be devolved to them to harness this. Where managers can own their results and benefit from their results, the circumstances lend themselves to more devolved budgets.

However, in the public sector, there are less, if any, personal incentives for managers and as a result there is less flexibility in the way finances are managed. There will still be the need for some ‘ownership’ of budget parameters. It is the case that if managers do not know the parameters of their budgets and how they have come about, they are less likely to be able to manage their programs or services within these parameters.

## Projects vs Operations

Capital budgets are often associated with projects and asset creation. Operating budget are associated with ongoing business operations and processes. Understanding the distinction between these types of budgets can begin with understanding the difference between projects and processes.

|  |  |
| --- | --- |
| Project | Operations (Processes) |
| Unique - have not been done like this before | Do the same thing repeatedly |
| Are time limited with a start date & end date. Projects come and go. | They are ongoing and at the core of the business |
| Create something new or to implement a change | Create value or deliver outputs by repeatedly performing a task |
| Project objectives and plans can be changed by whoever gives the approval | Processes can only be changed with significant investment |
| Projects create change | Standardised processes are usually designed to resist change |
| Aim to amplify variation or change | Aim to reduce variation |

#### **What is a project?**

According to the Project Management Institute, a project is “a temporary endeavour undertaken to create a unique product, service or result” and project management is “the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.”  Key terms in these definitions are “temporary” and “unique.”  Projects have defined deadlines with clear start and end points and are designed to be specific to the product or service in question.

Projects are how businesses go about making changes to the way they do business.

Project management has a definite emphasis on achieving the end result.

The unique and temporary nature of projects tends to make them inherently risky and requires significant levels of planning.

#### **What is a process?**

A business process or business method is a collection of related, structured activities or [tasks](https://en.wikipedia.org/wiki/Task_(project_management)) that produce a specific service or product (serve a particular goal) for a particular customer or customers.

Processes are not meant to be temporary or unique.  Processes are typically designed to be repeatable.  Process management involves careful planning and continuous monitoring of the performance of a given process to ensure quality requirements are met.  Change, improvement, and re-engineering are all important components of process management.  Process management has an emphasis on improving efficiency and improving quality.

Process management tends to focus on consistency, repeatability, reliability and continuous improvement to achieve efficiency. Processes tend to be at the core of how on organisation operates. Business process management activities can be arbitrarily grouped into categories such as design, modelling, execution, monitoring, and optimization.

### Implications for financial management

|  |  |
| --- | --- |
| **Projects** | **Operations** |
| Projects will be unfamiliar with budgeting going through different stages and requiring more approvals.  Tend to employ zero based budgeting. | Operations are familiar and previous years can serve as the basis for future year budgets.  Tend to employ incremental budgeting |
| Projects will usually be broken down into chunks like activities or milestones. For example, many projects will have work breakdown structures or elements that represent the tasks or activities to be undertaken. | Operational revenue and expenses are usually recorded by transaction type and by cost centres that are aligned with organisational structure. |
| However, projects can span across financial years and as such need to have expenditure recorded across financial years.  Will include inception to date reporting as well as annual reporting | Accounting for operations is typically done in financial years. At the end of financial year, accounts are reset to zero. |
| Project accounting will also want to record finances by activity or milestone requiring an additional reporting perspective. | Operational revenue and expenses will report variances between actuals and budgets a month at a time. |

Projects will therefore require reporting against milestone, the timing of which may change over the life of the project. This can result in a scenario where the budget for a milestone was set for one point in time while the actual milestone was achieved at another point in time. We could therefore be comparing the budget for one month (when a milestone was expected to be achieved) with the actuals for another (when the milestone was achieved).

See Appendix 3 for more details on project estimating and reporting.

## Approaches to projecting and budgeting

How we project, budget and forecast will depend on the nature of the organisation or unit in question. Four different approaches to estimating and projecting are presented below:

1. Incremental
2. Zero Based
3. Activity based
4. Rolling forward estimates

### Different Approaches to estimating and projecting

For ‘business as usual’ functions, because the work being done is familiar and repeated, financial projections and budgets will employ what is known as incremental budgeting.

#### Incremental Budgeting

Incremental budgeting is the most traditional style of budgeting used. Incremental budgeting involves the rolling over of the previous year’s budget into the current year after having made incremental adjustments to reflect changing activity levels, responsibilities or objectives. This has the effect of building in inefficiencies and can lead to allocation of spending to areas where money has been spent, rather than where it should be spent.

**Advantages of incremental budgeting**

* The budget is stable and change is gradual.
* Managers can operate their departments on a consistent basis.
* The system is relatively simple to operate and easy to understand.
* Conflicts should be avoided if departments can be seen to be treated similarly.
* Co-ordination between budgets is easier to achieve.
* The impact of change can be seen quickly
* Changes to the budget are incremental which enables changes to be tracked over time.

**Disadvantages of incremental budgeting**

* Assumes activities and methods of working will continue in the same way.
* Few incentives for developing new ideas.
* Few incentives to reduce costs.
* Encourages spending up to the budget so that the budget is maintained next year.
* The budget may become out of date and no longer relate to the level of activity or type of work being carried out.
* The priority for resources may have changed since the budgets were set originally
* Requires the business to maintain processes to identify inefficiencies and improvements.

#### Zero-based estimating

For projects, the work being done in unfamiliar and uncertain. Financial projections and budgeting will employ what is known as zero-based estimating. Zero-based estimating is an approach in which all expenses are justified for each new period. The process of zero-based estimating starts from a "zero base," and every element of a project or every section in an organization is assessed for its needs and costs. The downside of zero-based estimating is that it is more time consuming and can be too cumbersome for large organisations.

**Advantages of Zero-based estimating**

* Results in an allocation of resources that is based on needs and benefits
* Provides an opportunity for managers to find out cost effective ways to improve operations
* Enables detecting inflated budgets
* Useful for service departments where the output is difficult to identify
* Increases staff motivation by providing greater initiative and responsibility in decision-making
* Identifies and eliminates wastage and obsolete operations.
* When employing this way of budgeting and to ensure that benefits are realised it is advisable that budgets that are developed are compared back to actual trends for each area of the business.

**Disadvantages of Zero-Base Budgeting**

* Difficult to define decision units and decision packages, as it is very time-consuming and exhaustive.
* Forced to justify every detail related to expenditure.
* Necessary to train managers. ZBB should be clearly understood by managers at various levels otherwise they cannot be successfully implemented. Difficult to administer and communicate the budgeting because more managers are involved in the process.
* In a large organization, the volume of information may be so large that the process becomes cumbersome. Compressing the information down to a usable size might remove critically important details.
* This process can result in the organisation exceeding approved budgets due to timeframes to develop and assure budgets, divisional areas may commence spending to the inflated budgets.

#### Activity Based Estimating

For organisations where finances can be clearly linked with activity, estimates can be based on parameters that indicate that activity. The method requires that activity can be observed and measured and that reasonable estimates of cost per unit of activity can also be measured.

Activity based estimating is used in the funding models for Health and Education.

Advantages of activity-based estimating

* Allows estimates to be linked with activity and therefore have finances scale up and down
* Provides line of site between the finances of an organisation and activity
* Can enable benchmarking of cost per unit of activity to drive efficiency
* Can provide greater certainty to organisations to know the levels of activity they can afford.

Disadvantages of activity-based estimating

* Fixed costs and overhead costs are not easily accommodated in activity-based estimating
* Requires sophistication in the development of cost parameters to maintain the models. In health, there is an industry involved in coding patient data to maintain records of activity and the relative levels of complexity associated with each case
* Activity based weightings of transactions can be debated
* Subject to averaging methods - average cost per activity and will create debate on how deal with outliers or cases that are not average.

#### Rolling forward estimates

A variation on incremental budgeting where estimates are established for multiple years (in government these are referred to as the forward estimates). Estimates are established for multiple years (usually using an incremental method) and each year a new year is added at the end of the forward estimates. That year can be referred to as a horizon year.

Each year in the budget process, participants put forward submissions or bids to add to their forward estimates or savings can be sought of participants that act to subtract to their forward estimates.

This method to forward projecting is used for the budgets of state governments and the federal government in Australia.

**Advantages of rolling forward estimates**

* Provides medium to long term clarity about financial projections and facilitates longer term thinking about the direction of a business
* Is relatively straightforward to administer.
* Provides the ability to track historical changes.
* Supports staffing planning.

**Disadvantages of rolling forward estimates**

* The cumulative impacts of savings and initiatives can be masked and therefore requires the budget to be maintained at levels that reflect the business operation.
* Require more sophisticated budget management systems.
* As with incremental budgeting – this method can embed inefficiencies.

Our approach to budgeting (our budget process) and will look at how we manage our projections and budgets in an environment where the amount we are provided from a top-down budgeting process differs from the budget constructed from the bottom up.

Public sector finances use a mixture of these methods.

* At a whole of government level, the rolling forward estimates approach is used.
* At an agency level, funding models using both activity-based methods and incremental methods are used.
* Within departments for ongoing operational team, incremental budgeting will be employed
* Within agencies, zero based budgeting will be employed to produce estimates for new projects and bids and to review the finances of operational teams.

For **large multifaceted organisations**, preparing budgets and projections will require a combination of ‘top-down’ methods as well as ‘ground-up’ approaches that will demand consolidation of estimates.

### Large Multifaceted organisations and Funding Models

Many governments will have financial systems which devolve responsibility to portfolio ministers and departments to manage a global budget in delivering certain agreed outputs, programs and projects, which in turn are aligned to departmental objectives. Each department will have a Funding Model.

A **funding model** is a mechanism, usually for non-profit organisations, to determine the basis for how different sources of funding will be allocated to the organisation based on its activities or the outputs that it produces and estimates of costs of these activities and outputs.

As examples:

* A health funding model will detail the parameters for how funding is allocated based on the numbers and types of patients treated and the average cost of treating patients
* An education funding model will detail the parameters for how funding is allocated based on the numbers and types of students enrolled and the average cost of teaching those students.

These funding models support a ‘top-down’ approach to budgeting that is based on organisational parameters like the number of students and based average costs per student that will have been developed based on history and based on benchmarking with other jurisdictions.

In health, hospital funding models are linked with a National Efficient Price that reflects the costs of delivering a range of health services across Australia.

Projecting and budgeting in large organisation will see:

* The need for a budget process to guide the involvement of others in the process.
* The use of funding models
* The need to consolidate estimates.

The concept of a funding model is used applied in the Victorian Performance Management Framework. That framework refers to the need to link objectives with outputs. An excerpt from the Victorian Resource Management Framework is presented below.

A screenshot of text

Description automatically generatedLogic models like this are also used to help understand the business or operating model of an organisation.

## A Business Model Approach

Your strategy is how you go about your business. It is your approach to answering questions about what you do, how you do it, who you do it for and why you do it.

Understanding finances provides an insight into aspects of our business model.

A business model can be defined as:

*“A business model refers to the logic of the firm, the way it operates and how it creates value for its stakeholders.*

*Strategy refers to the choice of business model through which the firm will compete in the marketplace.”*

Casadesus-Masanell, R., & Ricart, J.E. (2010). Strategy to Business Models and to Tactics. *Long Range Planning, 43* (2), 193-215.

*“A business model describes the rationale of how an organisation creates, delivers and captures value.”*

Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers.* New Jersey: John Wiley & Sons.

Consider the business model below that presents the logic of an organisation in terms of what it does, how it does it, who it does it for and why it does it.

Inputs

Outputs

Structure

Policies & codes

Activities

Objectives

Outcomes

What we do

Why we do it

Beneficiaries

To achieve

How we do it

Who we do it for

Funders

Market forces

Demographic & social trends

Government & legal changes

The environment in which our business operates

### Components of a Business Model

What the business does:

* Converts inputs (people, goods and services, technology, assets)
* Into outputs (products and services)

How the business does it?

* Organisation structure - How authority is exercised and people are structured
* Policies and Codes (of conduct & practice) – how activity and behaviour are guided by values, rules and codes.
* Activities:
  + Processes - series of actions or steps taken to produce a good or service
  + Projects - individual or collaborative enterprises that are carefully planned to achieve specified objectives
  + Programs - temporary flexible organisation structure created to coordinate, direct and oversee the implementation of a set of related projects and activities
  + Workmanship & know-how – skill development and experience of staff and suppliers
  + Marketing – links made between the business and its markets
  + Support functions - HR, Finance, IT designed to support teams.

Who is involved?

* Employees – staff employed by the business to make it work
* Suppliers – goods or services purchased through contract, including contractors
* Beneficiaries – those who benefit from the goods and services produced
* Funders – those who pay to sustain the business (if a funder is also a beneficiary, they are a customer)
* Owners – those who contribute capital and then receive returns (dividends)
* Financier – lenders that expect interest and repayments.

Why?

* Purpose – visions, goals and aspirations of the business or team
* Objectives – A specific result that a person or system aims to achieve within a time frame
* Outcomes – the consequences of our work – the longer run (ultimate) impact we are trying to have.

The combination of answers to these questions starts to define the business model of an organisation. The elements of a business model can provide an insight into the finances, in particular, the financial performance of an organisation. Input and activities will incur costs, while outputs can generate revenue as can our relationship with our funders.

Understanding our business model can then help to identify what aspects of the model can change in the face of financial information that suggests the business is not performing to the standard required.

# Context - The Public Sector

**Total Public Sector**

**Non-Financial Public Sector**

**General Government Sector**

Examples:

* Education
* Health and Wellbeing
* Attorney General’s
* Premier & Cabinet
* Industry and Skills
* DEW
* PIRSA
* DIT

**Public Non-Financial Corporations**

Examples:

* SA Water
* Public Trustee
* Adelaide Venue Management
* Renewal SA

**Public Financial Corporations**

Examples:

* SAFA
* Return to Work SA
* Homestart
* Funds SA

The public sector consists of three types of businesses:

1. General Government – businesses with non-income earning assets

The General Government sector consists of departments, offices and other entities engaged in provided public goods and services free of charge or at prices significantly below their cost of production. In these businesses, assets (schools, hospitals, roads, art galleries etc.) exist to deliver services, not to generate income.

In South Australia, this is the budget sector. If your agency or business is part of the general government sector, then all expenses and revenue incurred by your agency and administered by your agency impact on the state budget.

1. Public non-financial corporations (public trading enterprises) – businesses with physical assets that generate income

Public trading enterprises are organisations primarily engaged in the production of goods and services for sale in the marketplace at prices that aim to recover most of the costs involved.

This sector includes some trading enterprises such as SA Water, Forestry SA and the Housing Trust. The assets of these businesses (housing, buses, the entertainment centre, the festival centre etc.) exist to deliver services and generate income.

1. Public financial corporations – business with financial assets that generate income

Public financial enterprises are organisations primarily engaged in providing financial intermediation services. These enterprises are trading in financial services and products like loans, deposit facilities and liability management. In these businesses, assets (loans and investments) back liabilities (borrowings). Assets and liabilities are closely linked and are considered together in the management of risk and the generation of income.

### References: [www.abs.gov.au](http://www.abs.gov.au)

# Incremental budgeting - The SA Government approach to budgeting

The more sophisticated and larger an organisation, the more difficult it is to realise the benefits of zero-based or activity-based budgeting. In these circumstances, the cost of these methods will usually outweigh their benefits. The South Australian government is a large and complex entity. The sheer number of decisions required to frame a budget demands that the government use incremental budgeting in its approach to the state budget.

The budget cycle is the process by which the government develops, approves and presents the annual state budget (in non-election years).



The budget process starts using the previous year's budget as the starting point. At this point, each department in the government has a set of forward estimates for the current year and 4 forward years.

The budget cycle begins with the initial preparation and prioritisation of cost pressures and known policies and bids in the period leading up to and including December. Budget bids represent the amounts by which each agency wishes to change its starting point budget. This initial phase culminates with a Cabinet meeting that set the financial strategy and targets for the budget and does preliminary prioritisation of bids.

**Notes**In the period between January and April, further refinement, prioritisation and negotiation of initiatives occur, including negotiation of priorities with Ministers (in bilateral meetings and in meetings with a Cabinet Subcommittee). This phase culminates in the approval of the budget by Cabinet in April each year. All amendments to this approved budget for each department (both for controlled and administered items) must be approved by Cabinet.

In parallel with and following the approval of the budget by Cabinet, preparation of budget documentation is occurring. This involves the production of portfolio statements (primarily by departments), budget documents (by Treasury and Finance) and media statements and press releases (by Minister's in conjunction with departments). The budget is normally tabled on the first or second Thursday of June.

In election years, the cycle can be delayed for two to three months from March onwards.

### Agency internal budget processes

Many agencies conduct their own budget and prioritisation processes in conjunction with the process above. Examples include the prioritisation of agency bids to be submitted to Treasury and Finance and the prioritisation of the allocation of capital expenditures within the agency.

## 2022-23 budget numbers



Source: SA Government 2021-22 Budget Statement

## Carryovers

Carryovers relate to a delay in expenses associated with a project or program causing it to slip into a future financial year. Carryover approval is required when the budget for that future financial year cannot accommodate the additional expenditure spilling over from previous periods.

A bid for a carryover in the SA Government is a bid for additional expenditure.

Cabinet determines the highest priority use of all government funds. Authority for agency expenditure is granted through the Cabinet and budget processes and includes authority for both state funded and externally funded projects. Only expenditure included in an agency's budget and forward estimates approved by Cabinet and maintained and published by Treasury and Finance, on behalf of the Government, is deemed to be authorised.

**Cabinet's approval for expenditure is specific to financial years. A change in the timing of agency expenditure requires approval from Cabinet. Even though a program or project has been previously approved by Cabinet the deferral of expenditure into different years requires Cabinet approval to be sought again.**

The carryover process is part of the budget process coordinated by Treasury and Finance on behalf of Cabinet. The carryover process applies to all agency expenses (controlled and administered, state funded and externally funded) and occurs at two points in the budget process:

1. Following the completion of a financial year

At the end of a financial year agencies become aware of expenditure delays that had not previously been expected. That is, there will be the unexpected deferral of expenditure from year A into year B. Cabinet policy requires that agencies seek and receive approval for additional expenditure authority in year B.

This process usually occurs between August and October following the end of the financial year and is overseen by the Expenditure Review and Budget Committee of Cabinet (ERBCC).

1. In the lead up to the budget

In the lead up to the budget, agencies become aware of expenditure that is likely to be deferred from the current financial year into the next financial year. Cabinet policy requires that agencies seek and receive approval for an increase in expenditure authority in the next financial year(s) for these carryovers.

This process occurs as part of the budget bidding process and the development of forthcoming financial year budgets. It usually occurs in the period between February and April.

The approval of a carryover requires evidence that the deferred expenditure is still necessary either due to policy commitments or due to contractual commitments. If these cannot be adequately demonstrated, approval for the carryover expenditure is unlikely to be provided.

The availability of cash balances does not represent approval for expenditure in a time period outside that approved. Approval for changing the timing of expenditure cannot be presumed.

The Treasurer would generally not recommend approval of any carryover of under-expenditure that falls outside the following five categories:

1. Approved major investing projects that have been delayed (excluding annual programs)
2. Commonwealth funded programs with unspent balances
3. Other joint State Government/external party agreements with unspent balances
4. Committed grant programs with unspent balances (possible from early receipts of funding) and
5. Expenditure specifically tied to a particular source of revenue for which there are unspent balances.

This process further reinforces the need for good reporting and good forecasting and projecting of expenditure.

Early communication of delays or accelerations of revenue and expenses to your agency's finance section is essential to assisting the department participating fully in carryover bidding processes.

### Notes

# Managing Budgets and Financial Plans

Managing a budget at a cost centre level involves being able to:

* Understand your costs and revenues
* adapt to being issued a top-down budget, that is lower than a zero/activity-based budget
* cash flowing the approved budget
* exercise control over transactions
* monitoring performance against budget during the year
* adapting to unfavourable variations that occur during the year
* seek approval to change our budget - developing a business case or budget bid to influence the top-down budget.

Introduction and initial discussion

Finance as an expression of strategy

**Understand costs and revenue – zero based budgeting**

Adapt to a top-down budget (including savings)

Cash flow (or phase) your budget

Exercise control over transactions

Monitor your performance against budget

Adapt to budget variations

Seek approval to change your budget

I am more confident in my ability to manage my budget and to work with finance staff in my department.

Terminology

Financial Management Basics

We will work through each of these elements using our case study.

Following are some known facts about the program and its budget:

* The program runs 20 houses.
* It is assumed that each household will consist of two adults and two children.
* Each household will have access to a car that will be owned by the Department.
* Our department already owns the houses and the cars and each house is furnished with basic furniture and white goods.
* When the program was established, it was envisaged that one case manager would be needed to oversee four houses.

## Understand your costs & revenues - Zero based & activity-based budgeting

For smaller organisations or for cost centres or projects, zero-based and activity-based budgeting creates the greatest transparency around budgets. This approach to budgeting enables a more accurate picture of a budget to be managed (or developed) and improves accountability in relation to performance against budget.

Zero-based or activity-based budgeting has the advantage of creating transparency of estimates. However, circumstances arise that require us to make estimates into the future with limited information. Creating budgets requires some projections and estimating regarding costs into the future always in the face of uncertainty. Sometimes we avoid budgeting because it is too hard to get them right.

**There is no such thing as a correct budget or correct estimates. There are varying levels of quality in budgets or estimates. Quality comes from transparency (how activities link with assumptions that link with $) and rigour (the depth in our assumptions).**

Despite deficiencies in information and uncertainties about the future, it is possible to make budgets, and the basis for making them, clear to others so that when the actual transactions differ from budget, we have some detail to explain the differences

When we estimate and project, it is important that we leave a trail showing how our estimates and projections have been derived. They can be developed using the past as a guide or they can be developed by making specific assumptions in order to construct future figures where the past is no guide. In both cases, the clarity of presenting such assumptions is critical. The quality of a budget is dependent on the clarity of underlying assumptions and the rigour associated with those assumptions.

Developing a zero-based budget occurs in three basic steps:

1. Identify as many expenses and revenues as possible for the revised initiative, program or project
2. Document assumptions in order to make estimates of revenues and expenses transparent
3. Populate a table showing all revenues, expenses and budget impacts for the item.

We can capture our budget in a table that distinguished each of these three elements. That table is shown over the page.



### Identifying revenues and expenses

This step requires that we look at the various activities and transaction that will be undertaken by this division to understand the types of revenues and expenses that it will incur.

As a minimum, we should identify the categories of revenues and expenses as per the categories shown below. This process will enable us to eliminate a number of revenue and expense categories.

|  |  |
| --- | --- |
| **Revenue** | **Expenses** |
| * Intra government transfers | * Salaries and wages |
| * Commonwealth revenue | * Depreciation |
| * Grants and subsidies | * Supplies and services |
| * Fees fines and penalties | * Grants and subsidies |
| * Sales of goods and services | * Internal expenses |
| * Interest | * Borrowing costs |
| * Other revenue | * Other government expenses |
| * User fees and charges | * Other expenses |

To develop a useful budget, it is necessary to be more specific with our expense breakdowns. It is useful to think of the different supplies and services that we will be using. Examples will include office supplies, accommodation, travel, facilities hire, software etc.

Where possible, avoid categorising budget estimates as other expenses or miscellaneous expenses. Doing so will create variances when it comes time to report actuals against budget.

### Making assumptions

Having identified the types of revenues and expenses that relate to this division, the next step is to make some assumptions about each of these to develop budget estimates.

Work on the most material items first – this will ensure rigour around the majority of the budget.

Examples of the type of assumptions for salaries and wages will be:

* The number of employees
* Their classification
* On-costs

Examples of supplies and services will be:

* Accommodation – lease cost per square metre, number of square metres (this will usually depend on the number of people)
* Travel – number of trips, average cost per trip, average accommodation cost per trip, average meal and incidental cost per trip.
* ICT – there is usually an average cost per employee for computers and mobile phones. Assuming leased computers, the cost will usually be around $1,000 per annum per computer (for more sophisticated computers the cost will be higher) and for mobile phones the cost will usually be around $1,000 per annum including calls.
* More specific supplies and services can be estimated by getting quotes from suppliers or based on recent experience in similar projects.

Where possible, avoid categorising budget estimates as other or miscellaneous. Doing so will create variances when it comes time to report actuals against budget.

This exercise is focussed on transparency of estimates. It is not always possible to accurately predict the future and get estimates right. However, it is possible to make them, and the basis for making them, clear to others so that when the actual transactions differ from budget, we have some detail to explain the differences.

For our case study, start by listing inputs or the activity base for our Migrant Housing Budget. It is recommended that these, and the assumptions associated with them, be documented using a table similar to that below:

Having documented our assumptions, we can now develop a budget, using various expenses categories to generate the total cost for a household and for the program.

Using this information, we can produce estimates for the first year of our five-year period. From this we can estimates the forward estimates by making assumptions about growth across years. **For example**, we can assume:

* Salaries and wages grow by 2% and
* Goods and services growth by 2.5%,

### Building a salaries budget

Identify staff requirements – number of staff and classification of staff. Where possible link staffing requirements with measures of activity, output or outcome.

Details the assumptions about staff classifications.

Based on the classifications, identify the base salary level for each position

For each position, apply assumptions for on-costs.

**Labour Oncost Breakdown – Example**

|  |  |
| --- | --- |
| Superannuation | 12.00% |
| Payroll Tax | 5.00% |
| Long Service Leave | 4.00% |
| Maternity Leave | 0.50% |
| Insurance (e.g. workers comp) | 0.20% |
| Leave Loading | 0.30% |
| **Total** | **22.00%** |

These calculations become more complex for services that operate outside of normal working hours and where staff are working shifts and out-of-hours rosters. For example, if when staff take leave, their positions need to be filled to enable continuity of service, estimates need to be made of the ‘backfilling’ requirements for a position. An example of a backfilling calculation is presented below.



### Building a goods and services budget

Categories for non-salary expenses will include:

* Staff related costs:
  + Training
  + Uniforms
  + Mobile phones
  + Car leases
* Vehicles (aside from staff related leases)
* Accommodation related expenses
  + Leases
  + Utilities
* Technology related expenses
  + Computers
  + Software and applications
  + Networks and cabling
  + Printers and other devices
  + Website management
* Services
  + Legal
  + Insurance
  + Freight
  + Storage
* Travel related expenses
  + Accommodation
  + Airfares
  + Car hire and taxis
  + allowances
* Asset related expenses
  + Maintenance and support
  + Repairs
  + Parts
  + Specialist equipment
* Event based expenses
  + Marketing
  + Venue hire
  + Catering
  + Security

Some departments collect information on commitments and contracts to gather much of this information as part of its zero-based budgeting.

Below is an example of a salaries build or staff establishment.



Version with allowances and backfill



Way of allowing for contingencies in our budgeting:

* An explicit Contingency line within unit/project budgets - this approach is applied as a standard in building projects where a budget is set aside for risks like not knowing what is under the ground.
* Parameter contingencies where we include conservative estimates for contingencies (e.g. fuel prices) that make some allowance for increases.
* Insurance – the most common way to financially manage uncertainty is to outsource it through an insurance policy.
* Organisational contingencies – instead of allowing for contingencies against specific projects or programs, some organisations with hold an organisational contingency that is available for units or teams to access should an unexpected event occur.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Year 1**  **$'000** | **Year 2**  **$'000** | **Year 3**  **$'000** | **Year 4**  **$'000** | **Year 5**  **$'000** |
| Revenue |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| Expenses |  |  |  |  |  |
| Where possible - specify |  |  |  |  |  |
| **Net operating result** |  |  |  |  |  |
| Capital expenditure |  |  |  |  |  |
| **Net lending/borrowing** |  |  |  |  |  |
| **Expenditure Authority** |  |  |  |  |  |

### Conclusion

Rather than focus on whether a budget is right or wrong, it is more productive to focus on the quality of the estimates. The quality of estimates can be observed in at least three ways:

1. Rigour – the extent of activity and cost drivers and detail in the assumptions made are an indicator of quality.
2. Substantiation – the extent to which assumptions can be checked or verified to reliable sources (e.g. wages to EB agreements).
3. Transparency – the observable trail from cost driver, through assumption to dollars

### Developing a Budget

**1. Identify different revenues & expense activities**

**2. Develop assumptions in priority order**

**3. Convert into dollars and inflate**

**List of transactions**

**# of units & $ per unit**

**Table showing financial impact**

# Wrap up and questions

What has been my most important learning and why?

# Appendix 1: Understand the fungibility of public money

Fungibility is the property of money that enables it to be moved from one area to another without reducing its value or failing to meet obligations. Money that is highly fungible can be interchanged and reallocated easily and therefore provides flexibility to managers. Money that is less fungible has restrictions over its movement. This money is harder to access and therefore more rigid.

The nature and implications of fungibility can be seen across different levels of government and organisations. It can be seen:

* Within the federation
* Within states
* Within agencies and departments.

## Within the federation

State Governments in Australia receive large amounts of grants from the Commonwealth Government. The Commonwealth has greater capacity to earn taxes while states have primary responsibility for the delivery of services. This imbalance is referred to as vertical fiscal imbalance. Grants from the Commonwealth to the States are categorised into:

* General Purpose Grants and
* Specific Purpose Grants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Within the Federation** | General purpose grants |  |  |  | Specific purpose grants |
|  | **Fungible** |  |  |  | **Non fungible** |
|  |  |  |  |  |  |

General Purpose Grants, primarily funded by the GST, are fungible. The State Governments can use and allocate this money to any purpose without restriction from the Commonwealth.

Specific Purpose Grants are non-fungible. These grants are tied or specified to a particular purpose. The allocation of the money from the Commonwealth to the state is conditional on the state using the money for a purpose, the details of which are captured in grant agreements. At the end of each year, or at the end of the period covered by funding agreements, the States are required to acquit that they have spent these funds as per the agreements.

## Within State Governments

State Governments, through their Treasury and Finance, receive taxes and untied Commonwealth Grants into a public account (often referred to as the Consolidated Account). The money from this account is then transferred (appropriated) to Government departments.

Money is received by agencies from Parliamentary appropriations, from the sale of goods and services or from specific levies or taxes that are passed into special purpose or hypothecated funds.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Within the State Govt** | Money from sales | Appropriation |  | Appropriation for specifically approved initiatives | Legally Hypothecated or contracted funds |
|  | **Fungible** |  |  |  | **Non fungible** |
|  |  |  |  |  |  |

For agencies, money from the sales of goods and services is highly fungible. Money appropriated from Parliament will have different grades of fungibility. The vast amount of what is appropriated will be provided to agencies for the purpose of delivering services and programs of that agency. This is documented in budget papers. Within these purposes, Chief Executive Offices are able to allocate funds within their agency with some discretion.

These can be classified as allocated funds.

Limits on this will include:

* Budget measures – money provided in the budget for specific initiatives that are detailed in budget papers. Money for these measures must be allocated for that purpose as documented.
* Cabinet approvals – money provided in the budget to fund specific measures approved by the Cabinet for the agencies. Again, for these measures must be allocated for that purpose as documented in the Cabinet submission that sought approval.

These latter examples can be classified as committed funds.

Agencies will also receive money from legislated arrangements like fees and levies that are required to be set aside into a specific fund defined in legislation. An example in South Australia is the Emergency Services Levy. These are known as hypothecated funds and are not fungible. The purposes to which the monies can be applied are typically prescribed by the legislation that enables the levy and creates the fund.

## Within Agencies

Finances are allocated within agencies across cost centres and projects usually designed to align with the organisational structure of the agency. This allocation will largely be at the discretion of the Chief Executive Officer subject to the limits described in the previous sections. The Chief Executive will delegate their authority to positions within the organisation to manage these monies and, if necessary, to reallocate these monies.

The reallocation or movement of money will therefore be subject to policies and rules within the agency.

In many cases, managers will operate to the budget bottom line (i.e. total expenses or surplus or deficit).

A budget allocated to a cost centre or project will be broken down into a budget for staff (employee expenses) and budgets for various types of goods and services. However, agencies will usually put some limits on how managers can reallocate money within their budgets.

A final category of budget is that allocated to projects or programs where contracts or agreements have been entered into. These are examples of contracted funds that are non-fungible.

A common question raised in workshops is can the budget allocated for employee expenses be reallocated by a manager to the budget for goods and services or to another cost centre or project?

|  |  |  |
| --- | --- | --- |
|  | Reallocate from employee expenses to supplies & services | **YES** |
| Employee expenses budget |  | Supplies & Services budget |
| **NO** | Reallocate from supplies & services to employee expenses |  |

Agencies will usually allow the reallocation of employee expenses budgets to supplies and services but will not allow reallocation in the opposite direction. Commitments of money to supplies and services can be limited by specific purchases and contracts, while the hiring of employees brings with it ongoing liabilities and matters of tenure.

Understanding the concept of fungibility in public money helps us understand that not all money is the same. Some can be more flexibly applied giving leaders and managers varying levels of discretion in how they apply public money.

Across all layers of government, the limits on fungibility will be captured in documentation between the relevant parties (like contracts, agreements, legislation and budget papers) and in documentation of policies and rules in agencies.

# Appendix 2: The functions that budgeting serves

### Strategy and Planning

* To outline financial objectives and the allocation of $ across functions (at whole of government and agency levels)
* Gives assurance that you or your organisation is financially viable.

### Political

* A basic mechanism for transparency in the use of public money
* Central plank of political activity – the single biggest day for political announcements

“*The business of government is the business of society…..there will be winners and losers.”*

### Accountability and control

* A systematic means of allocating resources and to assign financial responsibility
* Is a communication tool outlining commitments and allocation of resources
* Control mechanism – target against which accountability will be held.

|  |  |  |
| --- | --- | --- |
| **Key budget function** | **Instruments** | **Main aims/concerns** |
| Political | Budget speech and documentation, ministerial statements, press releases and media engagements, parliamentary debates | Reception and spend, selling and message-writing the headlines for the media, highlighting the government's record, strategies and plans |
| Economic | Midyear economic and fiscal outlook, medium-term fiscal strategy, fiscal balance | Fiscal discipline and stability, reception of the economic statement aimed at financial markets and business |
| Revenue/Income | Taxation authority and types of tax instruments, some user-charging and sales of services | Provision of resources for collective needs, notions of tax efficiency, nor arbitrariness, simplicity, fairness, compliance |
| Allocative | Strategic review, current priorities, policy review, contest ability, revenue retention, expenditure shares | Priority need, redistribution, services or targeted assistance, service providers, agencies, range and type of public goods to the community |
| Technical Efficiency | Resource management, purchase provide models, price reviews, efficiency audits, best practice guides | Productivity improvement, offsets/savings, cost effectiveness |
| Accountability | Appropriation bills and associated documents, public scrutiny, parliamentary debates | Electorate, Parliament, audit, media, pressure groups |
| Financial/Outlay | Agency resourcing (revenues and expenses), measures, and intended outcomes | Public sector, agencies and departments, performance and financial management compliance |
| Investment | Capital statements, specific policy statements/commitments | Capital works, economic and social infrastructure, asset base, equity injections |

*Source: Wanna, Kelly & Forster 2000:40*

# Appendix 3: Project Estimating and Reporting

Estimating costs for a new project is fundamentally a matter of educated guesswork. We are trying estimate:

1. The breakdown of the type of work required for our project – what are the stages, what are the tasks (these may be different from the project stages or phases).
2. The ingredients (labour, goods and services and capital) required for each of the stages and each of the tasks.
3. The time required for each of the stages and tasks and therefore the time required for labour and contractors (aligned with the school year and the budget available for each year)
4. The cost per unit for each of the ingredients required.

### The Quality of our Estimating

There are different classes of cost estimates that are defined by the level of definition that has occurred for a project or undertaking.

For a new project that is unfamiliar to the organisation and to an individual, there will be low definition and therefore cost estimating will be ‘low’ class.

At the other end of a spectrum, projects or tasks that have been done repeatedly and are therefore well specified and defined with have cost estimating that is ‘high’ class.

Engineering and construction standards refer to five classes of cost estimates:

* Class 5 (lowest quality) – used for long term planning, project and concept screening. Expected to have a low degree of accuracy.
* Class 4 – Study or feasibility and preliminary budget approved.
* Class 3 – Budget authorisation used to seek funding approval and will often be an estimate which is subject to budget control.
* Class 2 – Contractor bid/tender control – based on detailed estimates from providers that become a form of baseline.
* Class 1 (highest quality) – used for final project control and for specific items to be negotiated with contractors.

Each of these classes corresponds with the degree of project definition and maturity. At early stages of defining a project, there are higher levels of uncertainty regarding costs. As the project matures and is better defined, the levels of uncertainty around costs should decrease.

The graphic over the page attempts to capture these concepts. The graphic has been termed the cost estimating ‘cone of uncertainty’.

Accuracy range

Degree of project definition

Class 5 estimates

Class 4 estimates

Class 3 estimates

Class 2 estimates

Class 1 estimates

Global estimating

More detailed first principles estimating – unsubstantiated

First principles estimating – backed by contracts

First principles estimating – backed by quotes

Unit rate (parametric) estimating

The cone of uncertainty attempts to capture the relationship between the accuracy of cost estimates and the degree of project definition. In the early stages of estimating a project’s costs, a wider range of outcomes can be expected because we know less about the project.

The concept of the cone of uncertainty should be front and centre in the process of considering and approving projects to overcome psychological biases that are likely to be present in the consideration of projects.

The different classes of costing are presented with the cone of uncertainty. Some cost estimating standards will go so far as to assign the class of costing estimates with the extent of project definition. For example, class 5 estimates relate to projects that are barely defined (0 to 2% definition) and class 3 estimates relate to projects that are between 10% and 40% defined, while class 5 estimates relate to projects that are between 70% and 100% defined. Note that the extent of project definition is of itself an estimating process.

There are different cost estimating methods used across each stage of a project’s definition.

As the level of project definition increases, the estimating methodology tends to progress from conceptual (stochastic/parametric) techniques to deterministic/definitive techniques.

The class of estimates can be incorporated into different project planning stages.

### Global estimates

At the very early stages of estimating (class 5) the costing method applied is global estimating (or “Order of Magnitude” estimating). An order-of-magnitude estimate is prepared when little or no design information is available for the project. It is called order of magnitude because that may be all that can be determined at an early stage.

Global estimating describes an approximate or low-order method of estimating involving the use of ‘all-in’ or ‘global’ rates. The project could be considered as consisting of one or two estimating elements only and the estimate prepared on this basis.

Examples:

* A road costs $1.5 million per kilometre and we want to build 20 km. Estimated project cost is $30 million.
* Business X implemented a new IT system at an average cost of $3,000 per user across 10,000 users ($30 million). We have 8,000 users, so our initial estimate is $24 million.
* We want to build a new classroom – a global estimate is $2,500 per square metre. Our room is 650 square metres. In this case, the global estimate is $1.625 million.
* We want to run a conference – a global estimate is $300 per attendee per day. We are estimating 500 attendees for two days. In this case the global estimate is $300,000

### Unit rate estimating

Unit rate estimating calculates the cost of each element of the project by multiplying the quantity of work by historical unit rates. The project cost is then determined by the sum of the elemental costs.

This is a class 4 estimating method progressing from broad order of magnitude to the use of more sophisticated parametric estimation that add more detail to some of the parameters around the project.

This type of estimating is also referred to as parametric estimating.

For a software project, it might say that the project has the following conceptual ingredients with comparisons for comparator project:



Better estimates of each parameter could be determined based on the number of users or number of devices and the fixed and variable components of each.

### First principles estimating

The foundation of “first principles” estimating is the calculation of project-specific costs based on a detailed study of the resources required to accomplish each activity of work determined necessary in completion of the project and subsequently recorded within the project’s work breakdown structure.

The first iteration of first principles estimating is a class 3 estimate. A class 3 estimate has more detail for each of the components, supported by more detailed resource planning, but that has not yet been fully substantiated by market-based quotes. They could be substantiated from other example or from indicative quotes. Class 3 estimates reflect a significant increase in planning and costing detail.

Class 2 estimates are based in detail and are substantiated by market-based quotes from suppliers and contractors. That is, it is first principles estimates backed by specific quotes from suppliers and contractors.

A class 1 estimate will be one that has this planning detail and that is substantiated and supported by contract arrangements. That is class 1 estimates will be largely ‘locked-in’ by contractual arrangements.

At the later stages of project definition, more detailed estimating methods are used. These are referred to as definitive estimates or detailed estimates. Examples of include:

* Activity based estimates – where estimates are made for the costs of pieces of work
* Unit costing estimates – where estimates are made for each of the specified ingredients to the project based on the unit cost of each ingredient.

To achieve activity and unit-based costing estimates, a breakdown and definition of work is usually required to enable specified units of inputs to be estimated.

Detailed estimates will be required of the:

* The number of units of inputs (e.g. labour hours)
* The cost per unit (hourly rates or rates per litre or rates per kilogram)
* Escalation rates – the increases in costs over the whole of life cycle.

## Project Resource Planning

For a project that relies primarily on staff to undertake activities and deliver outputs, resource planning for staff can be done to estimate costs.

Resource planning is the process of assigning people to tasks or tasks to people and estimating the duration of the task assignment.

A resource plan will result in estimates of the number of FTEs needed at different times for a project and to provide the FTE levels linked with the project’s timetable. An example of a resource plan for an IT project is below.



The FTE estimates in the resource plan can be used to estimate the cost of the project and for costs of phases of the project by adding assumptions about the cost per role and on-costs. A version of the resource plan with cost estimates is shown below.

