# **COSTING POLICY**



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## 1. DEFINITIONS AND ABBREVIATIONS

- a. **Cost accounting:** As the major pillar and prerequisite for all application of good management accounting in municipalities, cost accounting can be the process of determining the cost of providing services, broken down into cost elements to enable the effective allocation in the determination of rates and tariffs
- b. **Management accounting:** Management accounting is accounting which is based on cost accounting principles and endeavours to provide information for internal decision making by management.
- c. **Financial accounting:** Financial accounting deals with the reporting information pertaining to the financial position, and performance of a municipality for a given period to particular users and the community (public in general)
- d. **Financial management:** Financial management refers to the efficient and effective management of money (funds) in such a manner as to accomplish the objectives of the organization.
- e. Cost Centre: a unit, such as a department of a municipality, to which costs may be allocated for cost accounting purposes
- f. Annual budgets: Any budget that is prepared for a 12-month period. An annual budget outlines both the income and expenditures that are expected to be received and paid over the coming year. Annual budgets are used by individuals, corporations, governments and various other types of organizations.
- g. **Basic municipal service :** A a municipal service that is necessary to ensure an acceptable and reasonable quality of life and which, if not provided, would endanger public health of safety or the environment.
- h. Financial year means a year ending on 30 June
- i. Local municipality has the meaning assigned to it in section 1 of the Municipal Systems Act.
- j. Month means one of the 12 months of a calender
- K. 'Municipal council' or 'council' means the council of a municipal referred to in section 18 of the Municipal Structures Act
- I. **Municipal Manager** means a person appointed in terms of section 82 (1) (a) or (b) of the Municipal Structures Act
- m. Standard cost: the predetermined budgeted cost of a regular manufacturing process against which actual costs are compared
- n. Variable costs: These are costs that vary with consumption or volume produced.
- o. Total cost: Is the sum of all fixed and variable costs.
- p. Direct Costs. These costs can be traced directly to one output, for example the material costs (syringe, docage) to immunise one patient.

- q. Indirect Costs. These are costs that cannot be allocated to an individual output, in other words, costs that benefit two or more outputs, but not all outputs, for example maintenance costs for equipment, storage costs, other materials, and quality assurance.
- r. General and administrative costs. These are costs that cannot reasonably be associated with any particular product or service produced or service produced, commonly referred to an overhead costs. These costs would remain the same no matter what output the activity produced. Examples are salaries of personnel in the purchasing department, depreciation on equipment, and security

## ABBREVIATIONS:

1	ABC	Activity-based Costing
2	MSA	Municipal Systems Act
3	MFMA	Municipal Finance Management Act

## 2. INTRODUCTION AND BACKGROUND

Cost accounting (also called management accounting) differs from financial accounting and financial management in that its main focus is on the internal processes of an organisation, and the management thereof. Financial accounting and financial management is mainly focussed on the external reporting of an organisation's position and performance as well as the analysis of such reports. Another attribute of cost accounting is that it is up to each organisation to establish its own methods to do cost accounting. The MFMA may, for example, compel a municipality to go through a budgeting process yearly. The format and content of the annual budgets are regulated by MFMA Circular 28, but since many principles (such as Zero-Based budgeting) necessitates a costing process, the extent and nature of the costing process is not prescribed.

The concept of delivering value for money (VFM) has been introduced in management (or cost) accounting and this can clarify the objective of cost accounting. The three components of VFM relate to the achievement of:

Economy – Using the best quality resources at the lowest possible cost (cost vs. benefit). Effectiveness – Achieve the desired end result from any given activity (doing the right things). Efficiency – Using resources in such a way that the maximum possible output is gained (doing things right).

Understanding the cost of what an organisation does, helps to price the products and services the organisation delivers. For example, if a municipality delivers a refuse collection service, it needs to understand how much it costs to provide the service. That will help them to make an informed decision about what to charge for the service. This also allows the municipality to plan and budget for expenditure and revenue for a planned or budgeted level of refuse collection service the cost of providing that level of services needs to be known.

Each municipality must determine firstly what the desired results are that they need to achieve and then decide how to obtain those results while ensuring value for money. Cost accounting gives an organisation a variety of choices in costing its products and/or services. Without calculating the costs of services, one cannot price services and therefore provide an affordable service to the consumers at cost effective levels.

Apart from pure cost collection, cost accounting can also assist with various decisions that have to be made in a municipality. For example, the cost that will be incurred to increase service levels can be determined or the cost that can be saved by providing services that are not cost effective to the municipality. Cost accounting can also identify how services can be better delivered.

Also, another important point is that the cost and pricing of a municipal service provides transparent information about which services are running at a surplus and which services are running at a deficit. This provides insight into policy decisions on cross subsidisation of services. For example, information on costing and pricing may reveal that a municipality is not recovering costs in relation to its refuse collection service and that the shortfall is being funded from other sources.

Understanding costs also assists in making decision regarding provision of basic services and subsidisation of some service receivers by others through the pricing structure for that service.

## 3. PURPOSE OF A MANAGEMENT ACCOUNTING (COSTING) POLICY

The purpose of this costing policy is not simply to collect cost data, but to management with information they can use to make better management decisions in several areas:

- Analysing the efficiency of municipal services
- Making budget decisions
- Setting tariffs for services
- Choosing amongst alternative methods of providing services such as outsourcing, municipal service partnerships etc.

A Costing policy and guideline document is a practical tool that can be used by a Municipality to improve understanding of costing processes. With the knowledge gained, a municipality can improve its service delivery; use its limited funds better and make better informed decisions.

## 4. THE OBJECTIVE OF COST ACCOUNTING

Given the nature of Municipal systems, comprehensive community involvement and political influences, accountability to the public is one of the most important objectives of municipal finance and accounting. The correct allocation of costs of support services, which can be a substantial component of total expenditure, is thus necessary to provide correct and reliable management information to managers and politicians for decision making and accountability to the public.

The three objectives of allocation of support services costs are as follows:

- To determine the full cost of the goods / products or service produced
- To motivate managers in charge of the service to manage it efficiently.
- To compare alternative courses of action for management decision making.

The method and basis of the allocation of the cost of support services should be rational and systematic to be useful for managerial planning, control and decision making.

## 5. BENEFITS OF A COSTING SYSTEM

The following benefits can be identified as a result of the implementation of a recommended Costing method:

- 1. Exercising equity and transparency when setting tariffs. Departments are costed at the same level as the promulgated service charges applicable to consumers. (Match cost with tariff)
- 2. Revenue optimisation. Once the cost of services is understood, municipality can determine an overall acceptable tariff. Smarter financial management and revenue optimisation is therefore an attribute of a Costing model).
- **3.** More accurate budgeting: By using a Costing system, a municipality will now be able to charge out. For the sake of transparency, all costs will be based on scientific cost drivers.
- 4. Accurate cost information. Subsidies can be renegotiated based on accurate cost levels.

## 6. COSTING CONCEPTS / METHODS

There are two methods to use for including indirect cost into a cost unit. The first method is through a process known as **Absorption Costing** and the second, recommended by National Treasury is **Activity Based Costing** 

(ABC). As cost and management accounting cover such a broad spectrum in operating finance and accounting, it is of importance that some costing concepts used in municipal finance and accounting be described.

#### 1. Job Costing

Job costing (piecework system) implies that costs are allocated as far as possible directly to cost carriers, for example an individual job (or service) or order for specified number of identical components or products. As the name indicates, the costs of each different product or job are accumulated and determined. Direct materials and labour costs, as well as predetermined overhead costs, are allocated to the job. The costs are usually collected per job but only finalised after the job is completed.

## 2. Activity-based Costing (ABC)

Activity-based Costing (ABC) can be described as "an accounting system that collects financial and operating data on the basis of the underlying nature and extent of activities". It is generally used as a tool for planning and control. It was developed as an approach to address problems associated with traditional cost management systems that tend to be inadequate in accurately determining actual cost. It also provided useful information for operating and strategic decisions. ABC identifies opportunities to improve process efficiency by determining the "true" cost of a product or service.

## 3. Process Costing

Process costing is in all aspects different to job costing, as the product, for example in water provision, is provided according to specific standards on a continuous basis. The product is thus identical and its provisioning (production) requires just about the same quantities of labour, materials and overheads proportionally.

Production departments (or processes) can therefore be considered cost centres (cost collection points). It is important that when process costing is required, the activities are structured to facilitate the allocation of costs accordingly.

As a standard product or service is produced or rendered by each process, the average cost per unit / service for a specific activity (department) for a specific period can be calculated as follows: Total cost (for the period) / Number of units / services (for the period).

## 4. Absorption Costing

Major bodies in the accounting profession, such as the Accounting Standard Board (ASB), believe that the absorption costing provides a more informative picture of earnings than does variable (direct) costing.

Absorption costing, also known as full costing, treats the costs of all manufacturing components (direct materials, direct labour, variable overheads and fixed overheads) as product costs.

#### 5. Unit Costing (Output Costing)

Costing per unit is applied where manufacturing is continuous and the units are identical. It is suitable for quarries, breweries and so on. The method can also be used for where similar types of products of various sizes are manufactured provided a fixed a ratio exists between these sizes, for instance cement pipes simultaneously produced in two sizes.

Unit costs are usually calculated periodically from production data supplied by the producing departments and cost data taken from the accounting records.

This costing method is often irrelevant to municipalities.

#### 6. Batch Costing

This method is used when orders or jobs are arranged in batched for convenience of production control, the batches being the units for costing purposes. It will depend upon the type of industry in which this method is employed whether process or job costing principles are used. The batch costing method is used especially where machines must reset to turn out various sizes or shapes of component parts of a product, for example the manufacture of shoes, electronic instruments and transformers. When the work regarding the products is divided into operations, each operation will be completed throughout the whole batch of products before the next operation is undertaken, that is, the batch as a whole will be transferred to the section responsible for the next operation.

This costing method is also often irrelevant to municipalities.

## 7. Operating Costing

This method of costing used to determine the costs of rendering services such as electricity, water, gas and the transport of goods or passengers, supplied by a municipality or private undertaking.

For example, with road transport the principles of job costing will be applied for the operation of each vehicle concerned. In a passenger transport company distinctions would be made between

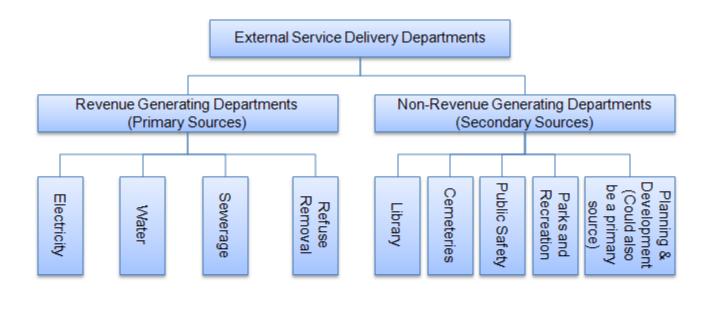
maintenance charges, running costs and administration. The maintenance charges would be subclassified into

- o Maintenance of overhead equipment / vehicles
- Maintenance of buildings
- Maintenance of rolling stock.

The most recommended Costing method is the more complex Costing system, described in detail below.

## 7. COST ACCOUNTING, UNIT COSTS AND TYPES OF COSTS

In order to isolate specific items or services to cost, it is important to understand the structure under which the item or service functions within the municipal environment. The illustration below provides an overview of possible services and functions a municipality could be required to perform. Although this format is in no way intended to illustrate the minimum or maximum scope, it does assist in creating a general understanding of a possible structure. It is also important to realise that the annual reporting framework of a municipality may exclude critical information relating to the costing process and when embarking on a costing exercise, the municipality's internal accounting structure (chart of accounts) should be used, rather than the limited and rigid format provided by the financial statements.



The structure above gives special mention to "REVENUE GENERATING DEPARTMENTS". A common omission from service costing is the role or influence the so called "NON-REVENUE GENERATING DEPARTMENTS" have on the actual cost of service delivery. This will result in under-costing, and ultimately, under-recovery of expenses during the tariff setting process.

## 8. ACTIVITY BASED COSTING (ABC) - Recommended Costing System by National Treasury

Activity based costing (ABC) has emerged as a highly effective approach to provide managers with more accurate and relevant information about the cost of an organisation's products and services. ABC is a costing methodology that assigns only those costs that are incurred through the activities that are performed to deliver a service. But it also assigns all the costs that are incurred in performing the activities to deliver a service. It removes the problem of the arbitrary allocation of cost as is done in absorption costing.

A more accurate cost management system than traditional cost accounting; ABC identifies opportunities to improve effectiveness and efficiency by determining the "**true**" cost" of a product or service. The ABC system uses cost drivers to assign the costs of resources to activities.

ABC can use the unit costing approach as a way of measuring output. The unit costing approach is a cost management methodology that is applicable to many organisations, irrespective of how operations are funded. The aim of the unit costing approach is to relate total cost to the output produced. To improve the use of resources, decision-makers must understand their goals / objectives and the work required to achieve those objectives. They must also have visibility of the total cost.

ABC encourages managers to identify which activities are adding value – in other words, those that will best accomplish a mission, deliver a service or meet customer demand. It improves operational efficiency and enhances decision making through better, more meaningful cost information.

#### Importance of ABC and relevance to Municipalities

ABC is a cost accounting methodology that defines processes, identifies the cost driver of those processed, determines the unit costs of products and services, and created reports on agency components that can be used to generate *activity or performance based budgets*. A major advantage of ABC is that it avoids or minimises distortions in product costing that result from arbitrary allocations of indirect costs. ABC generates information on how money is spent, whether a department is cost effective and how to benchmark (compare oneself against others) for quality improvement.

## ABC is used when:

- There is a tendency towards high overhead costs
- Where there is a diversity of services rendered
- Where there is a complexity in determining cost
- Where the amount for direct

The objective of ABC is to enable accurate and intelligent budgeting and improve visibility on all the costs of major services delivered to the public, thereby ensuring consistent and accurate tariff setting.

Potential benefits accruing to municipalities from the adoption of the ABC include the following:

- Improved financial reporting
- More efficient resource allocation
- Facilitating the assessment of performance and benchmarking
- Facilitating the evaluation of alternative mechanisms for delivery of services (in that there is now an effective basis for comparison) and providing a more reliable basis for reviewing opportunities for cost savings.
- Provide an improved base for determining levels of cost recovery for rate-funded services
- Facilitating organisational restructuring by providing the basis for a leaner management structure and a reduction in supervisory levels
- Promoting strategic management by assisting with the alignment of functions to municipal mission statements and strategic planning activity.

Note: Potential longer-term gains accruing from th adoption of ABC may, however, not be realised if the ABC model is not reviewed regularly.

## 9. IMPLEMENTATION OF ABC

ABC is a lot more technical than absorption costing and also more complicated to implement. There are four steps used to set up an ABC system, namely:

#### Step 1: Identify Activities

During this phase an in-depth analysis of the operating processed of each responsibility segment must be performed. This is necessary as each process may, for example, consist of one or more activities. This is probably the most involved part of the process, as the activities ultimately become the cost pools. An in-depth analysis of the operating processes of each responsible segment of the department that is going to apply ABC needs to be performed. So, if one uses the Stores Section of the municipality as an example, one need to identify all the "parts" of stores. This would include goods receiving, issuing, housekeeping, picking, etc. Each of these could represent an activity. Obviously, doing this exercise for the entire municipality could be quite demanding.

#### Step 2: Determine resource costs assigned to activities

This step is often referred to as "tracing," because it involves tracing costs to the cost objects (cost units) in order to determine why the costs occurred. The activities have now accumulated the relevant resource costs and are referred to as cost pools. During this phase the resource costs assigned to activities are determined. Costs incurred can be categorised as follows:

## Step 3: Identify Outputs

This step involves the identification of all the outputs for which an activity segment performs activities and consumes resources. Outputs may be products, services or customers (persons or entities to whom services must be provided), therefore a cost unit.

#### <u>Step 4:</u> Assign activity costs to outputs

This step requires the identification of an accurate cost driver, which can be used to assign the activity costs to the outputs based on individual output's consumption or demand for the activities. Activity cots must be assigned to outputs by using activity drivers. Activity drivers assign activity costs to outputs based on individual outputs' consumption or demand for activities. For example, a driver may be the number of times an activity is performed (transaction driver) or the length of time an activity is performed (duration driver).

The steps summarised above in implementing ABC provide only a basic framework for implementation. Notwithstanding its benefits ABC has, however, not been implemented in many municipalities because of its complexity.

## **10. SUPPORT SERVICES**

Breede Valley incur costs for two basic types of activities: those that generate revenue and those that are required to support the revenue producing activities, as the quantity and/or quality of the provisioning goods and services increases, the need for additional support services increases. A requirement of the MFMA is that municipalities must balance their budgets. The rates and tariffs charged for goods and services must be high enough to compensate for both the costs of revenue generating activities and the costs of support services.

GRAP also requires that municipalities must "present fairly" their financial position and transactions. To ensure accountability and ascertain the true operational cost for the services they provide, municipalities must allocate the appropriate cost of support services or revenue generating activities.

Support services are in general not identifiable with a particular service. Most municipal services and activities include the following support service expenses:

- Expenses to sustain the democratic processes, for example councillors remuneration
- Measurable support services expenses, for example to provide effective computer services
- The cost of centralised departments such as financial services and human resource management.
- Office accommodation, for example the administrative buildings.

## **Recommended Cost allocation process**

Standard procedures should be followed with the allocation of the costs of support services to ensure their consistent treatment and overcome double counting or the non-allocation to relevant departments. A carefully constructed cost allocation plan, agreed upon by relevant role players, is required by a municipality to allocate the costs of its support services effectively.

## The cost allocation plan should be based on the following criteria:

- The benefits received by the revenue-producing department (activity) from the support service.
- The interrelationship between activities in the revenue producing department and costs incurred in the support service department.

- The fairness or equity of the allocations between or among revenue producing departments.
- The ability of revenue producing departments to bear the allocated costs.

## **10.1** <u>Support Service Categories</u> (within the Breede Valley Municipality, and potentially to be implemented)

- Measurable support services
- Central support services

## 1. Measurable support services

Measurable support services are services that can be measured in terms of specific outputs and which can be allocated as direct overhead costs. A cost per unit of service will therefore be charged to the user of such service in order to recover its full cost.

The following are the service units at Breede Valley Municipality charged by the Costing Section – Internal Recharges

	SERVICE	OUTPUT	UNIT COST
1	Vehicle usage	kilometres travelled	R per km travelled
2	Fire Protection	Protection of property and lives	R per hour of protection
			provided
3	Mechanical workshop	actual hours booked	R320 per hour worked
4	Internal Labour: Electricity	actual hours worked	R per hour
5	Internal Labour: Water	Actual hours worked	R per hour
6	Internal Labour: Building Maintenance	actual hours worked	R per hour

## Internal recharges

The following are the service units at Breede Valley Municipality charged by the Revenue Section

- Internal Recharges (Automated billing and recoveries)

SERVICE

1	Departmental Levies: Water
2	Departmental Levies: Refuse Removal
3	Departmental Levies: Sewerage
4	Departmental Levies: Rates

The following are the service units at Breede Valley Municipality that are used to measure the service quantity in the Costing Section – Re-allocated Expenses (tariffs determined externally).

	SERVICE	OUTPUT	UNIT COST
1	Hygienic Services	Type of service rendered	R per service
2	Telephone Charges	Number of minutes	Cents per second
3	Vehicle Tracking System		
4	Printing charges (Nashua)	Number of copies printed	R0.25 per black copy
			R0.65 per colour copy
5	Vehicle Licence Costs	as determined	As determined by traffic dept.
6	Data cards / 3G	Amount of gigabytes used	Gigabytes per month
7	Frama / Stamps	Number of stamps used	R per stamp
8	Cellphone contracts	Free minutes per month	R per contract signed / package

Planning and budgeting in a functional basis assists in the determination of correct support services cost recovery rates. The user charges for the recovery of the costs of measurable support services should be regularly reviewed. Charges by measurable support services to other departments are part of the actual costs of the relevant department.

## EXPENDITURE CLASSIFICATION AND COST ELEMENTS

- 1. Trading Services
  - a. Electricity;
  - b. Water
- 2. Economic services

- a. Refuse Removal;
- b. Sewerage Disposal;
- c. Recreation resort
- 3. Community Services:
  - a. Air pollution
  - b. Building control
  - c. Cemetries
  - d. Child care facilities
  - e. Control of undertakings that sell liquor to the public
  - f. Facilities for accommodation, care and burial of animals
  - g. Fencing and fences
  - h. Fire fighting services
  - i. Fixed billboards and the display of advertisements in public places
  - j. Local economic development
  - k. Licensing and control of undertakings that sell food to the public
  - I. Licensing of dogs
  - m. Local amenities
  - n. Local sport facilities
  - o. Local tourism
  - p. Municipal parks and recreation
  - q. Municipal planning
  - r. Municipal public works, only in respect of the needs of municipalities in the discharge of their responsibilities and to administer functions specifically

## ACITIVITY BASED RECOVERIES vs ACTIVITY BASED COSTING

ACTIVITY BASED RECOVERIES (ABR)	ACTIVITY BASED COSTING (ABC)
ABR refers to transactions where a specific service is	ABC refers to transactions where a support service is
provided and for which an internal recovery needs to	provided for which a cost recovery needs to be
be generated	generated, ie a 'service charge'
Usage is much easier to determine	Usage is difficult to determine
Different unit of measurements are used (hr/km/m²)	Activities and cost drivers are used to calculate
	recharge amount