

Asset Management Policy, Strategy and Plan

Guidelines for Developing an Asset Management Policy, Strategy and Plan



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1. Introduction

This document supports the policy document *Sustaining Local Assets*¹ that sets out the policy framework for local government asset management.

The Department for Victorian Communities, Local Government Victoria (LGV) with local government peak bodies, the Municipal Association of Victoria (MAV) and Local Government Professionals (LGPro) are working together to coordinate a program of initiatives to assist councils with their asset management responsibilities.

This coordination is reflected in this document, which draws on the MAV 'Step' Program and the LGV Asset Management Performance Measures project that complement each other.

The Asset Management Performance Measures project has developed a methodology to enable councils to measure improvement in managing their infrastructure assets. The project will also develop and implement a means to measure that the local government sector, as a whole, is effectively managing its infrastructure assets and that there is continuous improvement in the way that is done.

The 'Step' Program Asset Management Framework² sets out the foundations for councils to improve their asset management:

"As a minimum, councils need to have an asset management policy and strategy to provide direction and guidance for asset management planning. Asset management tactics translates the broad strategic goals to specific goals and objectives, generally through the development of asset management plans, which provide more detail and long-term projections. Operations comprise detailed action plans and information with a one to three year outlook to provide for the delivery of the defined level of service.

Operations collect and record data related to the activities involved and feeds them into information systems. Analysis of this information provides the necessary knowledge which adds to the wisdom of the organisation and assists in providing future policy direction".

Infrastructure assets are typically, large interconnected networks or portfolios of composite assets. They are generally comprised of components and subcomponents that are usually renewed or replaced individually to continue to provide the required level of service from the network. These assets are generally long lived, fixed in place and may have no market value.

Victorian councils' infrastructure assets – roads, bridges, drainage, buildings, parks and recreational facilities – represent a vast investment, built up over many generations. 'Facing the Renewal Challenge'³ valued Victorian councils' infrastructure assets in 1998 at \$23.3 billion (in current replacement terms).

¹ *Sustaining Local Assets*, Department for Victorian Communities, 2003

² *The Step Program Asset Management Framework*, Municipal Association of Victoria 2003

³ *Facing the Renewal Challenge*, Victorian Local Government Infrastructure Study, Department of Infrastructure, December 1998

The goal of asset management is to meet a required level of service in the most cost-effective way through the creation, acquisition, operation and maintenance, renewal and disposal of assets to provide for present and future customers/communities. The life-cycle approach is central to asset management by taking account of the total cost of an asset throughout its life. A better service, not a better asset, is a key indication of successful asset management.

This document provides a framework for asset management in the context of Best Value Victoria. It is to guide councils in the preparation of their asset management policy, strategy and plan. It does not limit councils who wish to use innovative or more sophisticated techniques. Councils are encouraged to participate in the MAV 'Step' Program and avail themselves of the *International Infrastructure Asset Management Manual*⁴ prepared by INGENIUM New Zealand and the Institute of Public Works Engineering Australia.

About these guidelines

These guidelines cover four areas:

- development of an asset management policy
- development of an asset management strategy
- development of an asset management plan
- details of the stages of the asset management life cycle.

⁴ *International Infrastructure Asset Management Manual*, INGENIUM New Zealand and the Institute of Public Works Engineering Australia 2002

2. Developing an asset management policy

Sustaining Local Assets provides the policy framework for local government asset management. It provides high-level guidance to assist councils to develop their own asset management policy. An integrated and multidisciplinary approach is recommended highlighting 'principles' including

- 'ensuring service delivery needs form the basis of asset management'
- 'informed decision-making, incorporating a life-cycle approach to asset management'
- 'sustainability, providing for present needs while sustaining resources for future generations'.

The asset management policy is a key element of the council plan. The policy provides a clear direction for asset management and defines the key principles that underpin asset management for a council.

Every council is exposed to considerable political, managerial and financial risks due to its scale of investment in infrastructure assets. A council is better able to manage these risks and obtain better value for money in the delivery of services to the community by applying a strategic approach to asset management.

The benefits of a strategic approach to establishing the asset management policy, together with the asset management strategy and asset management plan, include:

- better allocation of limited council resources
- improved alignment of assets with services and community expectations
- reduced demand for new council assets through better integration of service planning and asset planning
- more effective use and maintenance of existing council assets
- improved processes and accountability for capital and recurrent works
- use of non-asset solutions to meet service demand
- increased use of sustainable development solutions.

The 'Step' Program Asset Management Framework outlines that the typical contents of an asset management policy are:

- organisational context and importance of asset management
- organisation's vision and goals for asset management
- asset management responsibilities and relationships
- broad time frames and deadlines
- integration of asset management into the organisation's business processes
- audit and review procedures.

At the strategic level, the service delivery objectives and requirements of the asset management policy are set out in the council's plan. At the operational level, they are converted by the asset management plan into specific actions involving both asset and non-asset alternatives. This delivery of the asset management plan is combined with ongoing monitoring to verify its implementation in accordance with the parameters set by the asset management policy and strategy.

Performance measurement links the strategic and operational levels to assist council to determine if it is achieving its desired outcomes in the most effective manner. Through the use of evaluation and reporting, performance measurement raises the council awareness of the responsibilities, opportunities and risks inherent in asset management.

Figure 1 draws together the strategic and operational levels as well as the performance measurement of council planning. It illustrates the relationship between the council plan, incorporating the asset management policy, other key planning instruments, and the asset management strategy and asset management plan.

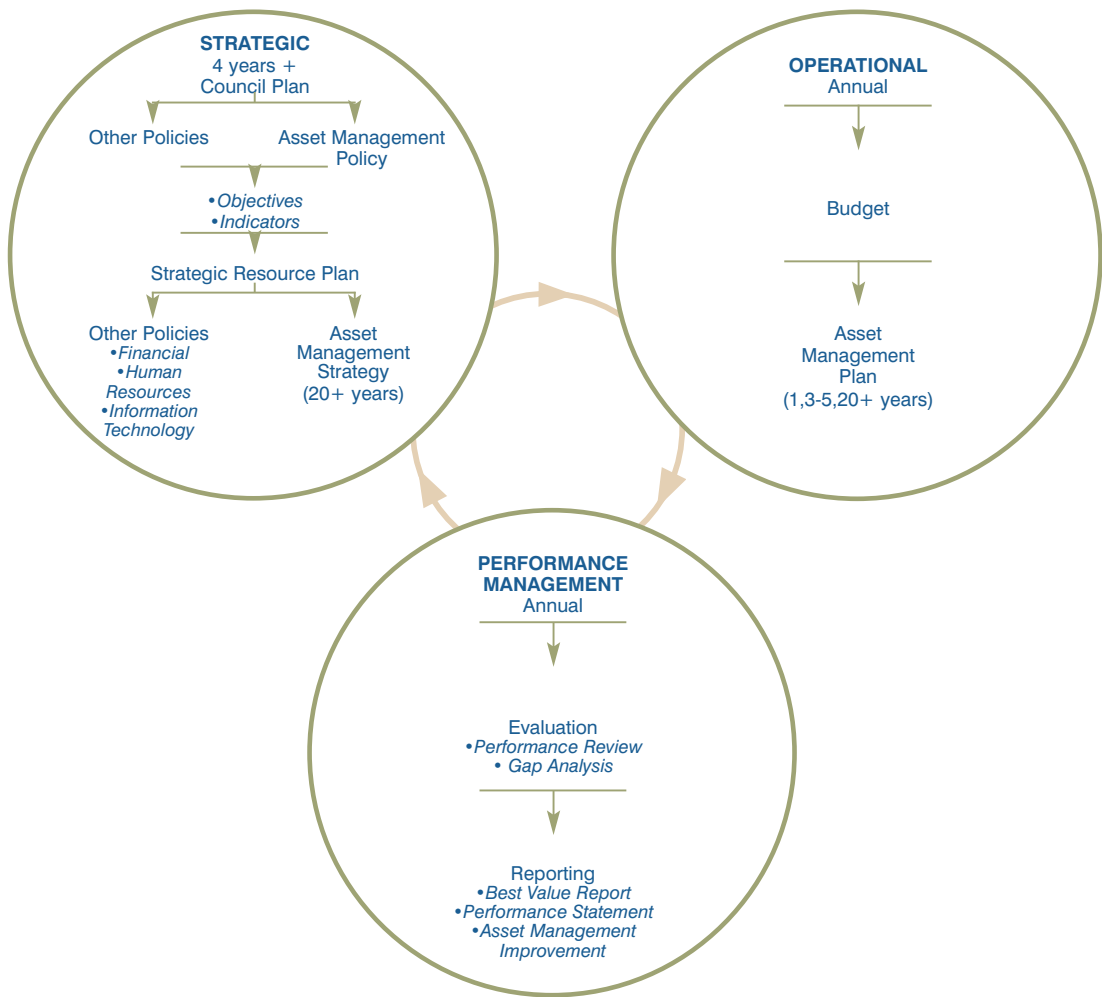


Figure 1. Council planning framework

3. Developing an asset management strategy

The asset management strategy is a key element of the Strategic Resource Plan.

The strategy provides a better understanding of how to align the asset portfolio so that it best meets the service delivery needs of the local community, both now and in the future, to enable the council's asset management policy to be achieved.

3.1 What is our current situation?

The first step in developing an asset management strategy is to get a clear understanding of the current situation of the council's assets and their management. What condition are they in? Do they meet the current and forecast future needs of the council and its community? Is the funding base for operation, maintenance and renewal appropriate and affordable? What is the state of the procedures, systems and training?

These questions need to be answered from a strategic perspective – they are 'big picture' questions. Typical elements of the current situation assessment are:

- current asset stock
- condition of current assets
- operating and maintenance costs
- utilisation of existing assets
- user satisfaction with service provision
- future renewal profile.

What is needed is a coherent, but simple, strategic picture of the current asset stock, its contribution to service delivery and the current costs of providing the assets. The information can be presented at the aggregate level, preferably by service stream.

What is also required is an understanding of the procedures, systems and training in place. Procedures are needed for acquisition, operation and maintenance, renewal and disposal. Appropriate systems must exist for capturing and recording information about each asset. (Typically, the information recorded will enable the asset to be readily identified including its value, condition, operating and maintenance costs, and other useful information to support the systems for asset performance measurement.) Details about the level of training (in asset management) of both staff and councillors, is a vital part of understanding the current situation.

3.2 Where do we want to be?

The council's asset management strategy must fit with the goals and objectives of its council plan. That is the clear starting point.

If the asset management strategy does not fit with the vision and objectives expressed in the council plan, it is on the wrong track. Similarly, the council plan needs to respond to council's asset management realities.

Central to the process are forecasting the service delivery needs and the capacity to meet them on a short, medium and long-term basis.

The answer to the question 'Where do we want to be?' lies in the outcomes wanted and may challenge current attitudes and practices. The key outcome is the provision of services responsive to the community's needs within available resources. This outcome sets the framework for strategic planning. It identifies the strategic considerations to be met.

Typical elements of the future considerations are:

- unchanged outcomes
- new outcomes
- outcomes that will cease to be met
- broad information on changing demographics and industry
- likely technological changes.

3.3 How will we get there?

A comparison between the current situation and the proposed future will highlight where strategies will need to be developed to cater for the changes, in accordance with economic, social and environmental considerations.

The asset management strategy, will guide on matters such as:

- increasing the effectiveness of the existing asset base
- reducing the reliance on assets as solutions
- seeking out new technologies to extend asset life.

The strategy will be converted into action through the asset management plan. Both documents should be approved and adopted by council.

3.4 Key objectives for the time frame

Broad full costs need to be understood in the asset management strategy. Costs need not be so detailed, however, as to detract from the direction-setting purpose of the strategy document. The asset management strategy requires a 20+ year planning time horizon.

Not every element of the strategy will have the same weight or importance in achieving the council's outcomes. There will be those that are critical to service outcomes and the sustainability of the council's asset stock and others that will have less impact. For this reason, it is essential to set priorities to ensure the most important elements of the strategy are achieved.

4. Developing an asset management plan

A major use for asset management plans is to communicate information about assets, including particular actions required to provide a defined level of service in the most cost-effective manner.

With a 20+ year forward plan, elected members of council and staff are in a better position to appreciate their current position and to be in a position to ensure any decisions take into account the impact on future generations. A council should not face any surprises in managing its assets.

The following describes key elements that need to be present in the asset management plan.

4.1 Define the service levels

An asset management plan should define the level of service required of the asset. Service levels are defined in the International Infrastructure Management Manual as '...defined service quality for an activity or service area (for example, the Road Network) against which service performance may be measured'.

Service levels offered should be determined through community and/or customer consultation consistent with the council's 'Best Value' program. Service levels relate to, for example:

- quality
- quantity
- safety
- capacity
- fitness for purpose
- aesthetics
- reliability
- responsiveness
- environmental acceptability
- costs

The impact of changes in demand over time on the service level offered should be regularly established and accounted for to provide a clear understanding of cost implications across the whole life cycle of a higher or lower service quality.

Expressing services in user terms and quantifying different levels of service in user terms helps to examine the range of service levels. The range of service levels provides a measure of the different levels of 'outcomes' that council can provide recognising budgetary constraints.

4.2 Define the time frame

The asset management plan generally requires three (3) different planning horizons, as identified in the Council Planning Framework, Figure One, namely, 20+ years for forecasts, 4 years+ tied to the council plan, and annual planning tied to the council budget.

4.3 Adequately describe the asset

The asset management plan is to include data and information on:

- physical identification – quantity, location, construction materials, year built (or estimate to closest five(5)-year time block), condition, capacity, performance, estimate of remaining life
- financial information – original cost (if known), renewal cost, written down current cost replacement cost (see also section 4.5)
- links with service and performance levels.

4.4 Incorporate strategies for the management of risk

Every council is exposed to considerable political, managerial and financial risks due to their scale of investment in infrastructure assets. The type of risk events that might impact on assets include:

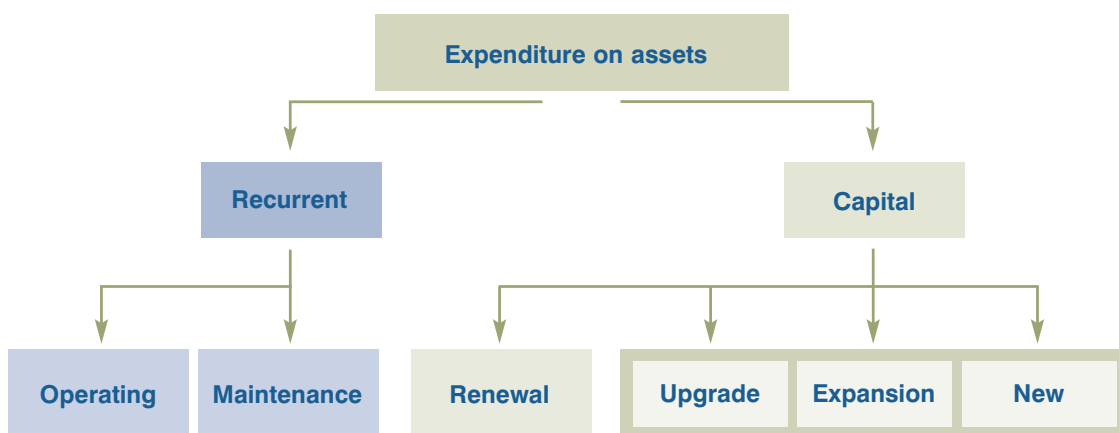
- natural events, for example, bushfires
- external impacts, for example, power supply failures
- operational and physical failure risks.

A council is better able to manage these risks, sustain business continuity and obtain better value for money in the delivery of services to the community by applying a strategic approach to asset management. The asset management plan should incorporate strategy for the management of risk associated with the assets involved. The strategies should be consistent with the overall risk policy of council. The *Australian Standard for Risk Management (AS/NZS 4360 1999)*⁵ is a useful guide.

4.5 Include financial information

The asset management plan should include financial estimates and cash-flow forecasts in relation to the assets for at least the ensuing 20 years (preferably longer). The forecasts should include all life-cycle costs and cover both maintenance and capital expenditures. **Figure 2** categorises types of expenditure on infrastructure assets and how these impact on council's future performance.

Figure 2. Types of expenditure



Further detail regarding these expenditure definitions is available in *Accounting for Infrastructure Assets - A Guide 2003* from the Department for Victorian Communities

⁵ *Standard for Risk Management (AS/NZS 4360 1999)*

Assumptions underlying the financial forecasts are to be made explicit and the degree of confidence placed in them should be made transparent. These forecasts assist the preparation of the annual budget and 4 year+ planning. Where financial information about critical assets is subject to uncertainty, sensitivity analysis should be undertaken.

Estimated costs must:

- provide clear links to the council plan
- be based on known and provable unit asset costs
- be logically and clearly compiled, with clear audit trails
- be updated regularly
- be recorded in present day (real) costs and cash flows
- use real discount rates consistent with investment analysis guidelines
- be assimilated into financial recording systems.

4.6 Recognise changes in service potential of assets

Service potential describes the output or service capacity of an asset. Decline in service potential is usually a function of usage or time. Service potential can change through the following factors:

- changes in the service level to be provided
- the impact of technical or commercial obsolescence
- the maintenance given to the asset
- improvements in the technology applied to maintain the asset.

The asset management plan should include information about likely changes to service potential.

4.7 Set assumptions and confidence levels

The asset management plan should:

- list all assumptions and provisos under which it is prepared
- indicate the degree of confidence of the reliability of the data underpinning the information presented, for example, accuracy of asset inventory, accuracy of data on condition of assets, accuracy of asset performance data or; and demand/growth forecasts
- confirm the estimates for remaining useful lives of assets
- on the basis of the preceding assumptions and confidence of underlying data, provide a level of precision, or confidence, on the forecasts of renewal and maintenance expenditure for the asset.

4.8 Outline an improvement program

All asset management plans should outline options and recommendations for necessary actions to improve procedures, systems, training, data, commercial tactics, etc.

- what are the strong areas
- what are the weak areas
- what is doing well
- what are the improvement and sustainability targets
- the actions needed to address the 'gaps'
- the timeframe over which the improvements require to take place
- the resources (human and financial) needed
- the contingent plan of action for critical and essential priorities if resource shortfalls occur.

The improvement program should be consistent with the council's continuous improvement program, required by 'Best Value'.

4.9 Be prepared by competent persons

As for the preparation of the asset management policy and strategy, an integrated and multidisciplinary approach is recommended for the preparation of the asset management plan.

The person who has primary responsibility for the performance of a specific asset should ideally contribute to the asset management plan. However, where necessary, technical and financial support must be provided by the council. The use of a multidisciplinary asset management team has proven to be a successful approach.

The process should be peer reviewed and/or prepared/facilitated in conjunction with a competent person or organisation experienced in the issues under consideration.

4.10 Have clear linkages to other council strategic documents

Elected representatives should provide oversight of the asset management plan and the plan should be approved and adopted by council.

This approval includes consideration of the improvement, sustaining and contingent actions of the plan. The asset management plan should have a connection with the council corporate plan, the Best Value program, the Strategic Resource Plan and other council plans.

The asset management plan improvement actions need to include the medium-to-longer-term management actions to achieve appropriate sustainability in services valued by the community. Actions may include enhanced demand management and community consultation, asset rationalising and changed internal management processes and decision-making prioritisation.

Elected representatives should seriously strive to ensure council works hard to facilitate access to assets for the community and not just continue to provide assets for service based on a historic rationale. The challenges to be faced by council require strategic and paced governance control by elected representatives.

4.11 Be regularly reviewed

The asset management plan is not a static document and will be significantly revised in the light of experience gained and lessons learnt by council. The improvement program will likewise evolve and become more refined, and value-adding consistent with management and community understanding and the 'buy-in' generated by council. An early plan may have a low degree of confidence; that confidence, however, builds as council moves from the initial reviews to becoming more informed and experienced in asset management planning.

Strategic oversight by a member of the corporate team should see the plan evolve and be revised to improve reliability.

The review of plans should be considered an ongoing 'continuous improvement' activity initially and should be nurtured until such time that it is fully integrated into the routine operation of council at all levels.

Plans should be reviewed and updated annually and changes in the council plan that affect levels of service should be directly reflected in the asset management plan and the budget.

The LGV Asset Management Performance Measures project has developed a methodology to enable councils to measure improvement in managing their infrastructure assets. It will also measure how effectively the local government sector as a whole is managing its infrastructure assets and that there is continuous improvement in the way that is done.

5. The asset management life cycle

This section identifies and describes the four key phases of the asset management life cycle of local government assets, namely: acquisition, operation and maintenance, renewal, and disposal.

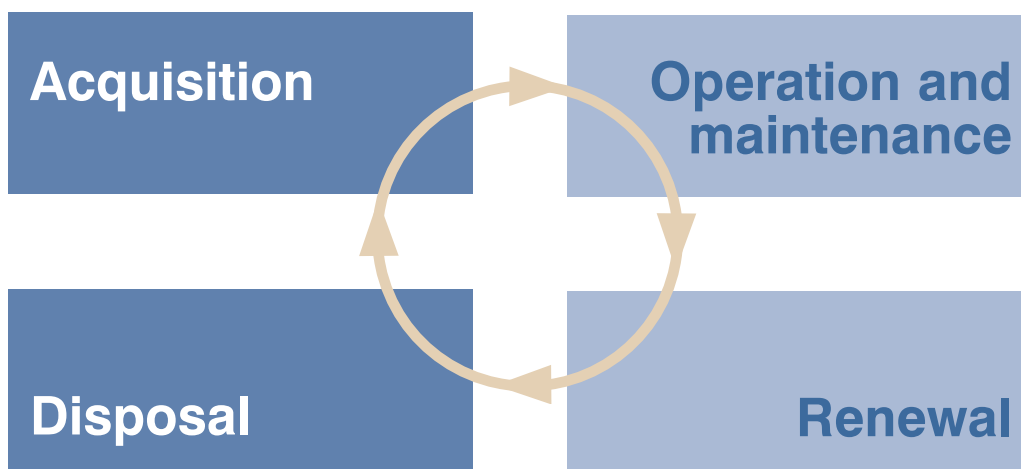


Figure 3. The asset management life cycle

5.1 Phase 1. Acquisition

There are six elements to the asset acquisition phase of the cycle. They are:

- planning
- assessment of requirements
- feasibility study
- acquire (procure or construct)
- asset identification, recognition and recording
- recording and accounting

These elements are not carried out in an entirely sequential manner; some elements overlap and the planning element should be evident in other elements.

5.1.1 Planning

Congruence of the asset management process with all stages of planning is vital to ensure that the process adds value to an organisation. Ad hoc asset management processes are unlikely to result in optimum asset management ie to have assets acquired, maintained or disposed of in accordance with the organisation's goals and objectives. It can have serious consequences for council, particularly in longer-term sustainability.

Sound and effective use of planning in all phases of the asset management cycle will assist in:

- setting levels for service delivery
- assessing the functional adequacy of existing assets
- identifying surplus or under-performing assets
- assessing the assets required for new policy initiatives
- evaluating options for asset provision (for example, private versus public investment)
- evaluating options for funding asset acquisition
- ensuring funds are available when required
- ensuring assets are maintained and disposed of in an optimum manner
- evaluating asset management performance, with the goal of continuous improvement.

The development of an asset management plan as part of the organisation's planning processes provides the best means of delivering value-added asset management. The plan must cover the complete asset management cycle and be integrated with council's strategic and other planning documents. The main objectives of such a plan are to ensure that assets acquired support and meet the strategic and annual objectives of the organisation and that the cost of providing the service to clients does not outweigh the benefits.

Preferred practice. Financing new assets or the renewal of existing assets can be an expensive process. The development of a comprehensive asset management plan, with a long-term focus provides early warning of potential peaks and troughs in expenditure on assets and allows for sound financial planning to be undertaken to ensure that funds can be obtained at the best rates.

Example. A council that was experiencing urban growth near one of its boundaries, a river, was able, through the forward planning of traffic demands, to identify that a bridge would be needed to replace the existing ford when urban density reached a particular level. By demonstrating this need to the developer of the area, the council was able to get a financial contribution from the developer to assist in providing the bridge as a trade-off for benefits the developer was seeking.

5.1.2 Assessment of requirements

Assessing council's requirements for assets is a major and evolving council challenge. It involves making judgements on future services and organisational direction and the making of predictions that may change at the next election.

Appropriate and effective asset planning, however, is driven by the longer-term balance-sheet management requirements that must transcend the impacts of elections. Council should deliberately apply strategic thinking in making predictions to minimise risk and uncertainty.

The potential for error can be minimised by the development of contingency plans for different policy outlooks. The use of sensitivity analysis on the quantitative elements of the plan, such as population projections with different growth factors, can be analysed to determine whether a faster or slower growth rate suggests that another course of action might be more suitable.

Typical questions that must be satisfactorily answered are:

- what alternatives are available for service delivery?
- what changes can be expected to service demand over the planning time frame?
- what is the condition of existing asset holdings?
- what are the short-term asset requirements?
- what are the long-term asset requirements?
- what existing assets meet the requirements?
- what further assets are required?
- does council need to acquire further assets or can the service be met by a service provider?
- what assets are no longer viable to retain?
- what alternatives are available for asset provision (public or private)?
- what alternatives are available for asset acquisition (purchase or construct)?
- what new skills will be needed to operate new assets?.

Requirements need to be regularly reviewed, particularly as circumstances change. Such review should be part of the ongoing planning processes of council.

5.1.3 Feasibility study

The purpose of a feasibility study is to provide a sound basis for decision-making. The best decisions are made with the benefit of a high level of information.

The feasibility study examines the options for the provision and acquisition of assets. The feasibility study comprises both specification and appraisal.

Specification. This involves the detailed examination of service demand, the assessment of options for service delivery against service delivery levels and emerging environmental factors. It also involves the development of an asset acquisition brief that identifies alternative courses of action to meet the service demands and the training requirements for staff if new skills are involved in the assets operation.

Preferred practice. The benefits from a well-considered specification are that the real needs of the task or service will be reliably assessed and reflected to secure an asset that is fit for its intended purpose.

Appraisal. This involves the identification of available opportunities and constraints; the costing of the components of the asset acquisition brief, including a sensitivity analysis of the costing and timing; and an assessment of the costs and benefits of the alternatives identified in the asset acquisition brief.

Preferred practice. The benefits from sound appraisal are that poor alternatives will be discarded, technological alternatives will be assessed and needs and solutions will be well matched.

5.1.4. Acquire/Construct

Once requirements have been defined and the options costed, a decision on the best option can be made. This decision will be the beginning of further planning – the plan to acquire the asset.

Firstly, decide whether the asset will be permanently acquired – bought or built, or whether it will be temporarily acquired – rented or leased. If the decision favours a buy scenario, then consideration will also be given to whether the purchase will be of a new asset or a second-hand asset.

Next develop a purchasing/design and/or construction specification and a budget for the asset, a time frame for its acquisition and obtaining the necessary funding. A realistic budget, cash flow and timetable must be set as insufficient funds or project management might seriously jeopardise the asset acquisition process.

The key to adding value to the organisation in the asset acquisition element is project management. Once the broad asset requirements are known, the process should be managed through a project team that has the necessary skills and experience to ensure that all aspects of the acquisition process are completed in a way that meets the service delivery and economic objectives of the organisation.

Example. Partnerships Victoria policy applies to public infrastructure projects and related ancillary services such as maintenance. The policy is about creating partnerships between the Government and private business in which improved value for money is achieved. The concept and policy has potential for local government projects.

5.1.5 Asset identification/recording

Australian Accounting Standards require local governments in Australia to identify, value and record all of their assets. A common problem has been identifying what assets the local authority controls or 'owns'.

Ways in which asset registers are created and maintained range from the manual recording of basic details in a series of bound volumes, to the use of specifically designed asset management software. The method used by a council should meet its existing and likely statutory and management reporting needs for information about its asset base.

The more sophisticated the asset management planning, the more developed the asset recording system will need to be. There is no one solution and each council needs to implement a system that meets its requirements and a member of the executive team needs to continually focus on the adequacy of how effectively asset identification and recording contributes to the achievement of council goals and objectives.

There is much information that can be recorded about assets. Council needs to be diligent and apply a strategically driven approach to the data held and used. Data held needs to be regularly subject to executive management scrutiny so that information can be reliably provided without the unnecessary overhead of gathering, storing and cleansing data that is not explicitly used by council and is not required for decision-making or reporting purposes.

Example. Many local governments have assets that are 'restricted'. If the nature of the restriction is recorded in the asset register, it will avoid the sort of embarrassment and cost one council suffered when it attempted to sell off a sports field for which it did not have freehold title. Control of an asset does not always mean an exclusive property right or the legal ownership benefits of privately held assets.

5.1.6 Recording/Accounting

Councils are custodians of a significant portfolio of community assets for which they are held accountable. Councils therefore need information about the portfolio to fulfill this reporting duty and also to enable them to manage the assets effectively. In order for this information to be provided efficiently and effectively it is highly desirable that it be kept in one integrated data set.

Whilst recording or accounting for assets may be regarded by some as an issue for accountants, it is important to recognise that engineers and asset managers utilise the same information. It is important, therefore, that the professions work together to establish accepted methodologies and approaches. The asset management policies and processes developed by the multidisciplinary team should be documented to assist consistent decision making and reporting.

*Accounting for Infrastructure Assets – A Guide*⁶ issued by the Department for Victorian Communities 2003 provides further guidance on good practice in accounting for infrastructure assets.

On acquisition, an asset is usually valued at its purchase price. The purchase price includes any costs necessary to place the asset into service. For instance, in the case of a second-hand asset, any costs incurred to restore the asset to operating condition would be included in the initial asset value.

It is important that a value is placed on all assets, as the value and its diminution over time, provide information for decisions made about the contribution, or otherwise, by assets to an organisation's goals and objectives from an economic perspective.

5.2 Phase 2. Operation and maintenance

Council's asset management plan will have a significant focus on asset maintenance issues. Most public-sector assets, particularly long-lived assets such as buildings, roads and footpaths require maintenance over their lives.

There are basically five matters for asset maintenance consideration. They are:

- planned maintenance
- unplanned maintenance
- maintenance of asset records
- revaluation
- reassessment.

Planning is an important part of the maintenance phase. The time frame over which some assets are to be maintained adds a degree of complexity to the planning involved.

⁶ *Accounting for Infrastructure Assets – A Guide*, Department for Victorian Communities 2003

5.2.1 Planned maintenance

All physical assets will require some maintenance over their useful lives, even land (fencing, mowing, weeding). In the case of plant and equipment, the manufacturer will often provide service schedules that can assist in planning. Experience with other like assets can guide their maintenance requirements. Where an asset management information system has been used to record previous experience with similar assets, so much the better.

The development of planned maintenance schedules should involve a multidisciplinary approach. For all councils, the maintenance plan will be a key undertaking. It is critical that the planning is undertaken, as the resources required to maintain the assets in optimum condition for the least cost will require the evaluation of a range of factors for different assets. The selection of appropriate maintenance schedules is crucial to minimise asset maintenance costs while prolonging the service effectiveness of assets.

5.2.2 Unplanned maintenance

It may appear to be a paradox to plan for unplanned maintenance, but 'failing to plan means planning to fail'. Unplanned maintenance consumes resources. It is essential that provision be made for time, money and skills to be available to quickly restore assets that fail in service to their operating effectiveness. Alternatively, contingency plans (business continuity planning/disaster recovery planning) should be made where catastrophic failure of major infrastructure assets has the potential to severely disrupt the provision of services to communities.

Preferred practice. The availability of financial resources and skills to cover unplanned maintenance minimises the loss to the community of the services provided by infrastructure assets.

5.2.3 Maintenance of asset records

In addition to the financial and technical information requirements for statutory reporting and to enable effective management, asset records should be kept. Maintenance of asset records adds value to the asset management process. Appropriate asset records that record relevant acquisition, operation maintenance, renewal and disposal information can be invaluable sources of information throughout the asset management process. The benefits of comprehensive asset records include:

- a record for each asset ensures that every asset is included in the asset management plan
- recording maintenance performed ensures that it is not done twice and enables review that it has been carried out

- a comprehensive asset record provides useful information for planning purposes at all phases of the asset management process
- on disposal, the price achieved may be improved if evidence of regular maintenance can be provided.

Preferred practice. Where the assets are employed in activities where user charges are made, the information available from asset records can be particularly useful in assisting in the setting of prices. The greater the capital component, the more useful the information.

5.2.4 Revaluation

Australian accounting standards require assets to be revalued on a regular basis. This requirement ensures that assets are recorded in the books of account at a value that reflects what the market would pay to acquire the asset or what it might cost to replace the asset in its present form.

The value of asset holdings recorded in the books of account provides an indication of the level of resources that might be required to replace those assets in their current form. Although a crude measure, it is one useful to users of general purpose financial reports, including other levels of government and clients of the organisation. For those assets that the organisation is contemplating disposing of, it may also provide a guide to the potential income stream from the sale of the assets.

Preferred practice. Care needs to be exercised that the basis of valuation remains consistent with the use being made of the information. For example, the value of an existing swimming pool presently held in the books of council at written-down replacement cost was consistent with its value-in-use to the community at year end. A council policy decision last week, however, changed the status of that pool – it is now surplus to demand and will be sold. The basis of the value of that pool has now changed. The basis of its value is now the net market-selling price. The net market selling price of the pool, not its written down replacement cost, should therefore be used to guide further asset management decisions.

5.2.5 Reassessment

The reassessment of an asset's usefulness to a council should be made on a regular basis, on two criteria. They are:

The need for the asset. Does the organisation have a continuing need for the asset? Is the asset still providing a required service to the community? Is that service provision what the customers expect? Is there a more cost-effective way to provide that service?

The useful life of the asset. At acquisition, the asset will have been designed for a useful life, dependent on the factors outlined in the section on useful life. Where factors change, the useful life of the asset should be reassessed. Usage of the asset may have been more or less than planned. The condition of the asset may be better or worse than expected at this point in its life. Any change in the expected useful life of an asset will have accounting implications – the value of the asset in the books of account may need to be adjusted.

Preferred practice. The reassessment of the need for an asset, and its expected life, provide valuable information that assist councils in optimising their asset holdings.

5.3 Phase 3. Renewal

Renewal is the periodic replacement of assets or asset components. It is the renewal of existing assets that returns the service potential or the life of the asset to that which it had originally. Renewal profiles are important tools for planning asset renewal.

5.3.1 Condition assessment

In the asset operation and maintenance phase, there will have been assessment of the asset on a continuous basis. This history of assessment provides valuable information as the asset nears the end of its life, and during its life at times when major expenditures are approaching. Council armed with such information may choose to seek alternate asset options to support services rather than to continue with more of the same as used in the past.

The usage of the asset, the regularity of its maintenance, the extent of unplanned maintenance and any associated downtime, can help to determine the retirement or disposal date of the asset. The current value of the asset is also a factor that should be considered. Its value may be such that an earlier or later disposal date is indicated.

Two other factors that must be carefully considered in assessing the condition of an asset are the technical and commercial obsolescence aspects of an asset's condition:

Preferred practice. Many councils plan their asset disposal programs around the expected useful life of the asset. The assessment of the condition of an asset, however, provides better information about the economic benefits or costs to the organisation of holding or disposing of the asset.

5.3.2 Renewal profiles

In developing an asset renewal profile, there are a number of concepts to consider.

- Asset age – the elapsed time since the asset was constructed or acquired and brought into service.
- Current replacement cost as new – the cost to reconstruct/renew the asset completely. This cost is calculated on a full-cost attribution basis, particularly where the organisation performs its own reconstructions. In the case of major infrastructure assets, the cost will include the cost of design and construction and the indirect costs of the construction/acquisition.
- Useful life of the asset (as referred to in section 5.1.6)

Generally, there are two approaches typically used to develop the asset renewal profile. One uses the age of the asset, in conjunction with its useful life and current replacement cost as new, to develop the profile. The other uses the current replacement cost of the remaining asset and its remaining useful life in lieu of asset age.

Once the renewal profile is created, consideration can be given to strategies to deal with expenditure peaks and troughs. Typically, the strategies could include:

- extending the life of existing assets by specific maintenance strategies
- renewing some assets earlier than planned
- where the increase in expenditure appears to be of a permanent nature, planning for the transfer of funds from other areas or additional rate revenue
- planning to borrow to meet expenditure peaks or saving for the future.

5.4 Phase 4. Disposal

Disposal, retirement or rationalisation of assets generally will occur due to changes in community demands or needs. Assessment of the need for assets is a part of the council Best Value review process that determines whether it is meeting the needs and expectations of the community. Challenging the status quo and investigating innovative options for meeting the community service needs is all part of this process.

Extensive community consultation is required to confirm community acceptance of disposal. As with acquisition decisions, to dispose of an asset requires thorough examination and must be taken within the integrated planning framework of council that takes account of service delivery needs, corporate objectives, financial and budgetary constraints and the overall resource allocation objectives.

Disposal options including transfer for alternative use, rental, sale and/or leaseback, and demolition should be considered at the outset when completing the acquisition plan. The preservation of some assets means that, while the asset life cycle applies to all assets, some may not be considered for disposal for cultural or heritage reasons.

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