

WHY ASSET MANAGEMENT SHOULD BE A CORPORATE FUNCTION?

[Ralph Godau](#)

Manager, Asset Services, Brimbank City Council

Abstract

Few Councils position 'asset Management' as a 'corporate function'. Most tend to develop asset management capability within their technical ranks, usually within the Engineering Services. This isolates Asset Management as a technical function rather than a broader concept that embraces the development of relationships between those who deliver services, those who maintain and develop infrastructure to support the delivery of those services and those who plan for future service provision,. In 2003 Brimbank City Council accepted the challenge of adopting a corporate approach to asset management. This paper details Brimbank's journey.

Brimbank City Council services over 180,000 residents and is the third largest metropolitan Council in Melbourne. It is a Council confronted by numerous legacy problems and issues associated with the quality and type of its asset base and its flexibility in supporting future service needs. Despite these problems and issues it has some of the leading best practice service delivery programs and state-of-the-art facilities.

Asset management has been seen as a catalyst for change across all areas of Council activity. Three years into a 5 year program, the Council has:

- implemented an improved population and service forecasting process, an improved service delivery assessment regime and an integrated Customer and Asset Management Information System;
- developed asset management plans covering roads, open space, facilities & drainage; and
- undertaken numerous data and condition surveys and improvement projects.

Reliance on the outcomes of the asset management processes affects everyone from the CEO to those who deliver the services and those who maintain assets – it is a team effort – with the real benefits going to the community through improved and sustainable levels of service.

Key Words: Asset Management, Local Government, Corporate Function, Levels of Service

Introduction

Four years ago, I was given the opportunity to work at Brimbank City Council after 21 years in the gas distribution industry. When I arrived, the CEO gave me my first 'test' which was to establish an asset management roles and accountability framework.

Based on organisational structure at the time, accountable for the development of the Facilities and Open Space Asset Management Plans was assigned the "Human Services" (who facilitate youth & family, aged care, recreation and leisure services). The concept that 'providing and maintaining assets was associated with the delivery of services' was new and needed to become embedded in the way people think. This is a very important step, a change management issue, and championed by our CEO.

Our retiring CEO when recently addressing a group of 20 representatives from Greater Shepparton stated that asset management must be a corporate function because asset management should not be confined to the domain of 'engineers'. The focus needs to be on providing improved services to the community, which encompasses the organisation as a whole, requiring a 'holistic' approach to implementation and application of asset management.

Applying a corporate ('holistic') approach involves working with representatives from across the whole organisation, while undertaking a multitude of interrelated projects, learning from the outcomes and continually evolving the asset management program to improve the evidence based planning that's needed to improve service delivery.

The paper explores Brimbank's asset management journey to date.

Asset Management is a team effort

The success to date is also due to the commitment and passion of staff that acknowledged and took on the challenge of asset management. They came from Asset Services, Finance, GIS, IT, Human Services,

Engineering & Operations, Customer Service and Risk Management to name just a few.

They were also champions and they provided the bottom up perspective that is so important in providing the building blocks to embed asset management in the organisation.

Asset management cannot be seen in isolation of the other functions the Council must undertake.

COUNCIL FUNCTION	ASSET MANAGEMENT ISSUES
<p>Social planning</p> <p>(strategic focus)</p> <ul style="list-style-type: none"> Principally designed to support growth Optimising private sector investment 	<p>What type of service delivery and level of service is needed now and into the future? And by whom? What facilities' options are available to support the various types of service delivery? What are our current and projected service levels?</p>
<p>Service delivery</p> <p>(operational focus)</p> <ul style="list-style-type: none"> Principally designed to support existing community services 	<p>How well is the existing facility supporting a specific service delivery and level of service? What is the current capability of the facility, and how well does it support future service delivery and level of service options? Is this in line with best value (e.g. have comparative studies or benchmarking been undertaken)?</p>
<p>Asset services</p> <p>(asset/facility focus)</p>	<p>How efficient and effective is the provision of asset services (undertaking capital works, maintenance programs, emergency response) required to support a specific service delivery and level of service? Is this in line with best value?</p>

Table 1: Asset management perspective in providing community services

Table 1 is an example of how asset management must be considered in the planning, service delivery and provision of asset services. The activities cannot be considered in isolation, as a change in any of them, will impact on the other. From a planning perspective, an increase in levels of

service may result in the need for greater capacity in service delivery and result in the need for more facilities and therefore increase the repair/maintenance requirements on the Council. Every time a new facility is constructed, it comes with a life time of 'costs' that the Council will need to fund.

This is complicated by the political scene by where Councillors, lobby groups, and residents will influence the planning process often resulting in less than optimal outcomes. For example, the construction or extension of facilities that will benefit only a small part of the community at the expense of other initiatives, asset management must provide the means to inform the community about the consequences of these types of decisions. The concept of financial sustainability becomes an issue and asset management is one way to demonstrate it.

Building on what was already there

Work had been done by consultants who conducted Asset Management Audit in 2002 and developed a Strategic Asset Management Implementation Plan in 2003. The emphasis and staging of the recommendations were reviewed and realigned to match the implementation program needed by Brimbank City Council.

Learning from what has already been done at other Councils

Benchmarking was undertaken of Victorian Councils associated with for key recommendations from the 2003 Strategic Asset Management Plan:

- Development of Policies, Strategies, and Asset Management Plans
- Implementation of Asset Management Information Systems
- Asset Data Collection and Condition Surveys
- Asset Management Analysis & Modelling.

What I found most disappointing is that I expected local government to much further in the application of asset management than I had perceived from the research I had undertaken when I did my PhD (1998-2003). What was written about local government asset management did not reflect what was actually happening on the ground.

The Municipal Association of Victoria (MAV) Asset Management Step Program, which just started when I arrived at Brimbank City Council in 2003, was an acknowledgement of the lack of progress in this area.

It was clear that the CEO and the Executive Team wanted to transform the council from a reactive-based organisation to one of adopting an 'enterprise' asset management approach to all levels of the organisation. This involved embracing a five-year asset management improvement program supported and driven from the top down.

Over 20 asset management improvement projects/programs were identified initially involving service forecasting, assessment of service delivery, data and condition assessment surveys and lifecycle modelling, etc. Strategic partnerships have been formed with other Councils, LGPro, CSIRO, Swinburne University and RMIT University to undertake research in areas where little analysis has been carried out (e.g. stormwater) on Council assets.

Implementation of the above asset management improvement projects/program focused on an organisational development and learning framework in order to empower the staff to take responsibility for asset management enabling a cultural change that focuses on delivering improved services in a sustainable way to the community.

Setting up asset management within of Corporate Services

The gas industry has had asset management operating as a corporate/regulatory function for over 15 years. There are clear advantages in taking an operational (bottom up) approach only to managing infrastructure.

Brimbank City Council is a large Council which has the capacity to support a corporate asset management function.

My observations of other Councils clearly highlighted the problem of lack of corporate support as a barrier to the implementation of asset management.

Timing is everything, and Brimbank was restructuring during early 2004 and the formation of Asset Services as Corporate function became a reality and the key functions of asset, spatial and demographic information management and strategic asset management was incorporated.

Brimbank wanted integration of service planning, service delivery assessment and asset management, through the involvement across the whole organisation to develop and implement asset management practices, policies, strategies and asset management plans.

The formation of Asset Services was scoped as:

Asset Services provides a range of asset, geographical (GIS) and demographic information, and asset management services to support both strategic and operational decision making across all departments to improve evidence based planning and operational performance.

Accounting for and reporting on asset management

Table 2 represents the role and accountabilities associated with asset management and highlight the cross-functional nature of asset management.

	HUMAN SERVICES	ENGINEERING AND OPERATIONS	BUSINESS AND COMMUNITY RELATIONS	CITY DEVELOPMENT AND STATUTORY SERVICES	CORPORATE SERVICES
ROADS	(SM) SD	SM TS MP ☆	SD	(SM) SD	AM SD
FACILITIES	(SM) (MP)	(SM) MP	(SM) SD	(SM) SD	SM AM AD ☆
STORMWATER	SD	SM TS MP ☆	SD	(SM) SD	AM SD
OPEN SPACE	(SM)	SM TS MP ☆	SD	(SM) SD	AM SD

Note: ☆ acknowledges the Division that is accountable for the development of AMPs.

Table 2: Asset Management Roles & Accountabilities

The establishment of an Asset Management Steering Committee (AMSC) recognises those roles and accountabilities and as such, requires the full participation of the Executive Team on this committee.

The focus of the AMSC in the earlier stages was on the implementation and management of the Asset Management Improvement Program.

Establishing a concurrent program to build asset management capability

Since the quality and availability of relevant data was poor, planning did not account well for asset management requirements. Devising a plan to move forward needed to take a more holistic approach where the development of asset management plans, data collection and condition surveys, tendering and implementing a asset management information system, forecasting etc. needed to be run concurrently (rather than sequentially) in order for the timely outcomes to benefit and input into further stages of these projects.

One of the critical factors associated with the project management of this type of program is that key outcomes have to input into the analysis phase prior to the budget process if they are going to be considered in the next financial year. The consequence of missing this process is that this information cannot be considered until the following budget year.

Development of asset management plans (AMPs)

The development of first generation asset management plans were done in parallel to the tendering process for an Asset Management Information System. The goal was to generate organisational learning through participation of key staff representing service planning/delivery who were taken out of their daily routine for over four weeks (arrangements for backfill were part of this process) to produce the AMPs and to coordinate the gathering and interpretation of any relevant data/information.

Brimbank has grouped their assets under four plans:

- Roads (RAMP)
- Stormwater (SAMP)
- Facilities (FAMP)
- Open Space (OSAMP)

Emphasis on the development of these AMPs was to reflect on what we actually deliver NOW, particularly in terms of technical levels of service (e.g. response times). For the RAMP, this was of particular importance due to the introduction of the Road Management Act in 2004.

It is interesting that the majority of technical levels of service were found to be ambitious based on the resources available and serious reviews were required to determine what we could actually deliver. The lack of accountability was evident and the need for improved information systems became a high priority.

The development of 2nd and 3rd generation AMPs are currently in progress providing strategic input into the planning and budget process.

Emerging need to handle demographics to improve long term forecasts

Basis for service planning across all areas highlighted the inconsistencies in forecasts and the inactivity in this area over the past few years. With the formation of Asset Services, the forecast data was updated (out to 2030) and key planners within Brimbank

were engaged to assist in the formulation of assumptions that underpin the forecasts.

Emerging need to improve service planning and service delivery assessments

It became clear that improvements in understanding how our service needs change over time and how well we are delivering these services through existing infrastructure is the key to well developed asset management plans. To address this issue, the implementation of two software tools by Human Services, e-Social Planning & Logometrix, is now in progress.

Emerging need to incorporate risk management in AMPs

Relationship between risks and how assets perform over their life is evident. In Victoria, Councils are regularly audited by CMP Insurers to ascertain how well they are minimising and addressing risks. A major shift in the auditing scope now incorporates adherence to asset management principles.

Asset Services partners with Risk Management Service Unit to undertake annual reviews and develop a risk register associated with each AMP and associated actions needed to reduce Council risk liability.

The difficulty is relating risk based actions to those required to address service planning, service delivery and asset based needs. These are not exclusive and must be considered in a 'holistic' manner.

Risks are addressed at three levels as part of

- asset management planning process where different long term scenarios are developed to identify the resultant differing risk profiles
- capital works business case process, where risks are included as part of the justification
- operations, where response times and interventions are within acceptable community levels.

Emerging need to fill organisational gaps: Open Space Planner & Property Manager

The ability for a Council to deal with any particular issue is highlighted when attempting to fill in the gaps in the AMPs. Two areas that lacked the resourcing were in open space planning and facilities/property management.

The challenge from an asset management point of view is to integrate the functions of asset management into these roles.

Recent success occurred with helping to translate high level open space strategies into asset management planning outcomes.

Revisiting the way we do data collection and condition surveys

This has been the most difficult area to address over the past 3 years. The replication and duplication of data collection activities, lack of data specifications, allowing data to go out of date, poor data quality practices, inability to analyse data, reliance on consultants to do the analysis, etc is an area requiring considerable improvement.

The first project was the collection of data and condition on 70,000 street trees in 2003/4. AMIS system had not yet been purchased and not much thought had gone into how we would analyse the data once collected. Fortunately, trees are not a complex area and with the involvement of Park Services, Risk Management and Asset Services were able to develop a realistic data specification. The main problems once the data was collected was (1) who was going to analyse the data and (2) how was it going to be kept up to date. Asset Services provided limited analysis, identifying high risk trees for follow-up action.

This data has since been imported into the Asset Management Information System and Asset Services is working with Park Services to ensure its ongoing upkeep.

Other areas where data collection and condition surveys are being addressed are in

the areas of roads, stormwater, facilities, open space assets.

Implementation of an Asset Management Information System (Confirm)

Brimbank City Council went 'live' with Confirm's Customer Request and Asset Management Information System in October 2006 to all staff. This process was more about generating organisational change opportunities through new technology, process and practices.

In partnership with IT, an internal audit was done to identify and report (Asset Management Information Systems & Data (2004)) on the asset data systems and sources currently held within Council.

What was found was that BCC had over 60 spreadsheets and databases of varying quality, level of duplication and currency, lack of accessibility, and as such, not used in any real form of analysis/decision making.

It was apparent that no information management framework had been developed for BCC.

The data model below was developed in conjunction with IT to explore the concept of an enterprise approach which maximises integration rather than interfacing.

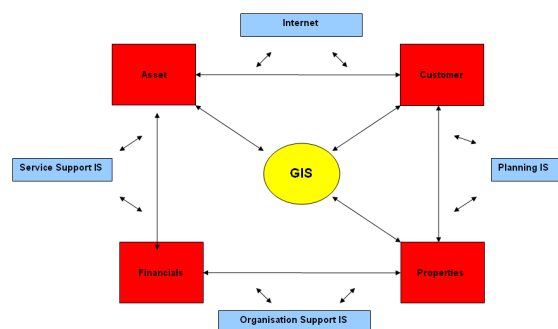


Figure1: Data Model of BCC

This concept of applying an 'enterprise approach' was demonstrated by entering a three-year contract with Southbank Systems (now MapInfo) to implement an customer service and asset information management system ('Confirm') that will be accessed by all

staff at Brimbank. This type of arrangement is one of the first of its type in Australia, moving away from the traditional pay per module/person cost model (which often limits the access to the users and rollout across the organisation).

The live date was postponed twice as the organisation was not ready to go live. The problem was one of priorities and resources required (organisational energy) to ensure operational functionality when going live. The CEO recognised this issue and the final date set was referred to as the 'drop dead' date. This sent out a clear message the priorities has to be rearranged to ensure that the new live date was met.

Before going live, over three months of intensive training of 20 expert users and a month testing the Customer Request System and Site/Asset Registers occurred. Ongoing training to Service Unit champions in the Customer Request System also occurred. But in order to go live with everything at the same time, the maintenance and condition survey modules were activated without a standard testing phase; this was incorporated in the operational phase of the first few months. This put a lot pressure on our engineering and operational staff in the early stages, so to offset this, we arranged Confirm consultants (MapInfo) to work with our engineering and operational staff in the first two weeks full time and then return twice in the next six months to review and assist further development.

Adapting to Confirm's Concept of Sites and how it flows to 'everything'

The development of the 'site register' was one of the most important tasks in this implementation. 'Sites' are geographic areas (streets, access ways, parks, stand-alone facilities and car parks, etc) associated with site specific services and features (assets).

The use of 'sites' ties into everything, where a problem is occurring, where work needs to be done, what service is being delivered from that site, who is responsible to that site, etc. and the following are examples of issues that needed to be addressed:

- 'Sites' relate to areas of responsibility and accountability. For example, even though tree reserves are maintained by Park Services, they are in existence to deny vehicular access by landowners to the road reserve, so the responsibility for these reserves lies with Engineering and to be addressed within the RAMP.
- Naming of 'sites' was the most interesting challenge as most sites had more than one way to reference it. It became apparent that a naming convention policy had to be established that insisted on only one name per site (with no aliases).
- A number of 'sites' had multiple services emanating from it and it was difficult to ascertain how to address responsibility for these sites (what is the primary service?).
- Work was being carried out on 'sites' not owned by Brimbank. For example, VicTrack land.
- Spatially mapping these 'sites' also highlighted areas that were not being maintained but owned by Brimbank.

Emerging need to utilise the Customer Request Module in Confirm

During the scoping for an Asset Management Information System, the importance of the relationship between customer requests and asset management outcomes was recognised.

Brimbank's existing customer request and work issuing system was becoming outdated and was residing on an IT platform that was no longer required.

As a result, scoping for a customer request system was included in the specifications for the new asset information system.

Customer Services was heavily involved in the evaluation of the Customer Service Module within Confirm and fully supported that adoption of this to replace the existing Customer Request System.

One of the immediate benefits of introducing the customer request system is the need to review existing service/subject categories that make up the customer service profile. The old system had over 1000 service/subjects and this was reduced to 230. One of the key business rules developed was to eliminate the 'miscellaneous' service/subject category. This put pressure on the Customer Service Officers (CSOs) to determine what service is being requested.

The concepts of allocating issues/requests to 'sites' and a system that you must allocate a 'service/subject' was a significant change, but if you ask them now, they wouldn't look back.

Another significant change was asking CSOs to allocate the street tree feature (asset) to a street tree related customer request. CSOs would ask the resident which street tree they are referring to and would locate it on the GIS and cross referenced it in Confirm. This saves time in the operations centre when the customer request is forwarded onto the action officer (inspector).

Emerging need to integrate Confirm with council's replacement for enterprise GIS and other corporate systems

Brimbank has rolled out Trim (Enterprise Document Management System) to more than half the Service Units and the ability to track information where ever it is located about a property is seen as a high priority. So whether in Confirm, the GIS platform (Exponare) or Authority (Rates/Property database) the concept of gaining access to Trim records is becoming a reality. Brimbank is working with MapInfo to facilitate the link between Confirm and Trim, and Exponare and Trim.

Real asset management has only just began

Introducing an Asset Management Information System like Confirm puts considerable pressure for the capture of field data in an accurate and timely manner. Brimbank has trialled 6 IPaqs (mobile computing) utilising Confirm's mobile

applications with varying success. It is clear that the biggest challenge for Brimbank is to take on this technology in order to deal with the massive increases in data requirements and avoid administration meltdown (continuing processing work by hand).

Improvement projects have started converting paper based process within the Confirm software involving collaboration between our Engineering and Operations staff.

Improvements in relationships between Operations and Customer Services through regular consultation and constructive feedback.

The first round of asset valuation are planned for 2006/7 to be done within Confirm (for buildings, land, footpaths and roads) and reconciled with existing registers held by Finance.

The realignment of account numbers (from Service Unit groupings) to suit activity based costing is planned to provide better information on where \$ are being spent.

Extracting data to analyse and measure our performance against our service commitments.

Improving existing records as those who rely on this information are now keen to keep it up-to-date.

These are just a few examples of what is happening now.

Benefits of applying a corporate approach to asset management

The benefits are evident from:

- the rapid improvement of our MAV 'Step' Program Asset Management Balanced Score Card from a 'D' average rating to that of As & Bs
- reduction in risk through improved management of assets

- improved service delivery through improved asset management planning and analysis; and
- changes in financial strategies to address the issue of asset liabilities.

Brimbank could only have achieved this outcome in the short time frame because Asset Management was seen as a corporate function and supported by the CEO.

It is important to realise asset management is all about change and the need to come from an unbiased position is very important. Staff are much more willing to contribute if they know that their requirements will be considered fairly and that the final decision is done in the best interest of the council.

assuring that safety management systems are in place to adequately meet the needs of the community.

Ralph has been Manager, Asset Services at the City of Brimbank since 2003 where he focuses on the strategic development of asset management that supports the delivery of services to the current and future generations of Brimbank community.

Author Biography



Ralph graduated from RMIT University in Civil Engineering (1976) and continued his education by completing a postgraduate studies in Business Administration (1984), Masters in Systems Engineering (1995) and a Graduate Certificate of Tertiary Teaching & Learning (1997). Ralph completed his PhD at RMIT University in 2003 in Infrastructure Management.

Ralph has been actively involved in facilitating learning at RMIT University for over 12 years and is currently a sessional lecturer Engineering Management.

Ralph worked for a gas distribution company for 21 years and was involved in many facets of the organisation including asset management, information technology, systems engineering, project management and day labour management. He also worked for three and half years with the Office of Gas Safety, a regulatory body responsible for