

# DEVELOPING ASSET MANAGEMENT PLANS IN-HOUSE: THE BENEFITS AND PITFALLS

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## Abstract

This paper will focus on the in house approach Caloundra City Council took to develop its Total Asset Management Plans for all major civil infrastructure in 2004/05. It will provide an insight to the successes and failures encountered in using this approach and offer some helpful hints for those Council's about to undertake initial Total Asset Management Plans as part of the LG Asset program.

Using the International Infrastructure Management Manual basic asset management model Council's first pass Total Asset Management Plans were prepared for roads, stormwater, park infrastructure, building, cleansing, plant and land assets in 9 months. Through utilising the expertise of Council's asset managers, designers, operators, planners and accountants the plans major focuses encompassed:

- Recording the existing levels of service;
- Identifying the existing funding gap;
- Identifying any weaknesses in existing data, knowledge, systems and processes; and
- Developing action plans to address identified weaknesses and to close the funding gaps.

During the 2005/06 budget deliberations the findings of the TAMPs, specifically the existing rehabilitation and renewal funding gaps, were instrumental in Council's injection of funding to the these programs.

## Key Words: asset management plans, Local Government expertise

### Introduction

In 2004/05 Caloundra City Council City Assets Division embarked upon a mission to increase the corporate awareness of asset management by preparing Total Asset Management Plans. Utilising the framework from the International Infrastructure Management Manual, the TAMPs were prepared in-house, by a dedicated team taking a long hard look at Council's current practices, systems and knowledge.

This paper focuses on the lessons learned through this experience to assist other Council's taking the innovative step of preparing these plans in house.

### Background of Caloundra City

Caloundra City Council is located in the South East Corner of Queensland approximately 80km north of Brisbane.

In 2003/04, Caloundra City Council's assets were valued at 960 million dollars, with an additional 40 million dollars being added per annum through new capital works and donated assets.

Caloundra City has a current population of over 90,000 residents. It is part of one of Australia's fastest growing regions with an anticipated growth rate of 3.54% per annum to the year 2016. As Caloundra City's population grows, Council faces the challenges of accommodating new residents

and maintaining the high quality of life that is currently evident.

Approximately 5 years prior, Caloundra City Council invested over \$700,000 into improving asset management practices, utilising the expertise of external consultants. Not surprisingly this investment did not deliver the expectant returns as little attention was given to changing organisational culture but rather focused on the asset registers and systems.

To address both the organisational culture and the technical aspects of the asset management task, an in-house approach was recommended.

### **Asset Management Challenges**

The primary asset management challenge, simply stated, is sustaining an asset base at a desired level of service for current and future generations.

Like many Council's in the South East corner of Queensland, Caloundra City Council is currently facing:

- Rapid population growth;
- Increasing constructing costs above CPI; and
- Difficulty in securing contractors and consultants for engineering works.

The above three conditions combine to result in a challenge of increasing asset bases with effectively less money to manage these assets in a climate where contractor delays are common place.

Each Council is also faced by more unique challenges and Caloundra's are detailed below.

#### Historic Underfunding of Maintenance

In recent years Caloundra City Council has had two (2) timber bridges fail and several more have had load limits less than 10t. This is the culmination of many years of neglect in monitoring and maintaining these structures and has also resulted in great social,

economic and political impact to the affected communities. Council is now undertaking a rapid replacement program to upgrade all existing timber structures with concrete over a 10 year period.

Historically underfunding maintenance is not limited to bridges and currently affects almost all other civil infrastructure asset classes.

#### Reduced Control over Capital Funding.

Council's asset managers were also faced with the added challenge of each of Council's eleven (11) elected members having an allocation of \$500,000 each for priority projects in their Division. This represents approximately 25% of the capital budget, excluding water and sewerage. These funds had traditionally been directed towards a combination of new infrastructure and renewal and rehabilitation of existing infrastructure, however, they were now primarily being directed towards new, local capital items. The result of this strategy has had a major impact by: reducing the efficiencies of the labour force through many small projects; reducing the available funds for addressing the renewal task; and reducing Council's ability to deliver major infrastructure.

#### Increasing Levels of Service.

As a result of the new Greenfield development, the levels of service the community is expecting is also increasing. Most of these master planned communities have significant landscaping, far above Council's current standards. As the infrastructure in the older suburbs are renewed the community expectation it will be at a similar standard to the new developments. This demand for higher levels of service is equally matched with demands for minimal increases in rates, especially by those that bought before the Seachange phenomenon reached the Sunshine Coast.

#### Free and Cheap Assets

Between state and federal grants and subsidies for new capital items and developer's providing 'free' community assets Council has significantly increased its asset

base. Such assets include visitor information centres, community centres, toilet blocks etc. Whilst it must be recognised that these assets have been obtained for a greatly reduced price, the necessity of some of these assets needs to be questioned as the operational and maintenance costs of a large community centre can effectively mean a 0.5% increase to the City's rates.

### Long Term Capital Programs

Prior to the TAMPs being developed only Council's Water and Sewerage had a long term financial capital plan, identifying where expenditure peaks were likely and having financial strategies to meet these challenges. For the rest of Council civil infrastructure no long or even medium term capital programs were in place. Five (5) year capital programs have been prepared for Council, however, only one (1) year programs are adopted each year.

### **Asset Management Solutions**

To attempt to address the above challenges Council needed to review its current asset knowledge, practices, procedures to quantify the problem, develop an action plan to progress the solutions and have the problem and improvement strategy recognised and endorsed by the political and operational arms of Council.

For the action plan to be endorsed and funded by Council it was proposed that the TAMPs needed to have the same feel and present the detailed technical information in an easily readable format. It was also determined that the plans needed to be endorsed by the various City Asset units.

The solution determined by Director City Assets, Mr Andrew Ryan, and Asset and Capital Planning Coordinator, Mr Craig Young was to prepare Total Asset Management Plans for all the civil assets. The TAMPs would be prepared in house by a whole of council team and would be the collective works of the day to day operational staff and the asset managers. The aim of this was to make full use of the intrinsic knowledge within the organisation and make progress towards a more asset management

focused culture. The plans were to be high level strategic documents, identifying the existing funding, knowledge, process and system gaps facing Council and the solutions to address these.

The second part of the solution was to simultaneously run an education program to raise the profile of asset management and whole of life costing throughout the organisation.

The final part of the solution was the timing. In order to have the greatest impact, the deadline for presenting the final draft of the plans to Council was to coincide with the preparation of the annual budget.

## **Total Asset Management Plan Development – The How**

### 1. Establish a Team

With the plan of attack defined the first step was to establish an Asset Management Team, consisting of staff from across the organisation. The primary focus of this team was the development and implementation of asset management practices across Council. It was recognised that to effect organisational cultural change the team would require more than the support of the Corporate Management Team but would also require their active involvement. To address this issue an Executive Asset Management Team was set up, consisting of the Director City Assets, Director Finance and chairperson of the Operational Asset Management Team. The Executive Team met on an as needed basis to address specific challenges faced by the Operational Team. The operational team consisted of asset managers, strategic infrastructure planners, financial accountants, information technology staff, GIS staff and development assessment staff and would meet monthly.

### 2. Develop Asset Management Policy

The Operational Team developed an Asset Management Policy to recognise Council as an asset custodian with the responsibility of managing its assets in a sustainable manner for current and future generations. This policy was adopted by Council and has since

been reviewed to reflect the improvements in asset management made over the last 12 – 18 months.

### 3. Marketing and Education

Having the Asset Management Team Charter endorsed by CMT and the Asset Management Policy adopted by Council had the desired impact of raising the profile of asset management at all levels of Council.

The challenge then became to keep the spotlight on the asset management journey Council was undertaking to maintain the early momentum.

At the elected representative level an asset management blitz was undertaken. This consisted of regular reports to Council on the progress of the Asset Management Team and in particular the development of the TAMPs. Various discussion forums were also held with the Councillors, outlining the structure of the TAMPs, the anticipated outcomes, the whole of life implications of infrastructure and the need for continued investment into asset management.

The Corporate Management Team's strong support for the development of the TAMPs was made evident throughout the organisation when it was identified as a Major Project. As a Major Project, fortnightly reports were submitted to CMT outlining the progress of the project, any problems encountered and recommendations to improve Council's asset systems and processes. Bimonthly progress reports were also presented to the managers to also increase the awareness of the asset management challenge.

Each Asset Management Team member was responsible for keeping the operational staff within their respective unit informed of the strategic advances and bringing any suggested improvements to the AMT meetings.

In whole, excluding informal discussions, an estimated 20% effort associated with the development of the TAMPs was directed towards marketing the need, benefits and

outcomes to Councillors, Directors, Managers and staff.

### 4 Chapter Templates

Council adopted the 'basic' framework from the IIMM, however, to keep the same format for the TAMPs from each unit and to meet the deadline of nine (9) months, generic templates were established. Each template included the common headings, text and tables, leaving each asset manager to essentially fill in the blanks. This approach, coupled with releasing the chapter templates periodically over the nine months, provided a clear path of Council's expectations for the authors of the TAMPs and removed a large portion of the "unknown" associated with this project.

### 5. Asset Management Team Forums

During the development of the TAMPs the team met on a monthly basis. By providing a regular open forum team members were able to discuss any issues, constraints and successes they had experienced since the last month. This was particularly helpful in identifying and addressing issues quickly that would otherwise delay the project. Team members were also actively involved in assisting each other based on their own experiences and strengths.

These regular forums were also used to release and discuss the chapter templates. Discussions were focused on determining as a team what emphasis was needed for each of the chapters, for example how to present an estimated \$10M annual funding gap?

### 6. Planning and Commitment

From the outset it was known that to deliver the eight (8) TAMPs for all of Council's assets was going to be a challenge. Any delay in the delivery of the TAMPs would reduce their impact to change organisational culture. They had to be presented to Council at the commencement of the budget deliberations where the strategic direction of the budget was being set.

The project was meticulously planned and circulated to the appropriate managers to

ensure that the key staff could be made available. The regular progress reports to Council, which identified the progress of each individual unit, also served to keep the level of commitment high.

### 7. Asset Management Champion

Above all, for true organisational change to occur an asset management champion is needed. The role of the champion is to live, breathe and be asset management within the organisation, dispersing knowledge, wisdom, motivation and direction to all.

### **What Worked**

Caloundra City Council adopted the Total Asset Management Plans in March 2006, significantly changing the emphasis placed on sustainable asset management practices within the City. So what were the major factors that lead to the completion of the TAMPs in-house and resulting cultural change?

1. A cross organisational team of committed officers, given the autonomy to analyse and report on their assets. At the very start of the project it was declared that a true assessment of the current situation was required, documenting both the good and bad practices and systems. This approach encouraged the asset custodians, accountants, IT, GIS and infrastructure planners to challenge the existing asset management culture and offer solutions to move forward in an environment where support was offered from all levels within the organisation.
2. A small Executive Asset Management Team with the delegated authority to allow quick organisational decisions. The three (3) person Executive Asset Management Team was critical in the delivery of the TAMPs by providing a referee's decision on stalled issues, increasing resources, setting strategic direction and advocates for cultural change various forums. Being able to have the input of the Directors of City Assets and Finance also significantly reduced the amount of rework as the direction of each TAMP was monitored at throughout its development.
3. Preparation of chapter templates, ensured that all TAMPs had the same 'feel' and significantly reduced the uncertainty for some team members in preparing a large public document. This is where Council truly showed its innovation by making the project as easy as possible for all staff involved. Based on the basic asset management model from the IIMM, a set of generic templates were prepared by the Coordinator of the project, where the asset managers then added the specific data for their asset class. If considering preparing several asset management plans at the same time, this approach ultimately delivers a quality product in a timely manner making use of the asset technician's strongest skills – analysis of their assets.
4. An "issues car park" for those issues that were not able to be resolved immediately. These issues typically did not significantly impact on the delivery of the TAMPs as they were technical in nature and not needed for the delivery of the strategic documents. Issues such as: corporate file structure, electronic timesheets, reviewing position descriptions, is the cost of revaluation of assets included in Council's long term financial planning, etc. Often the issues that were car parked related to the next step after the TAMPs, such as comparing off the shelf maintenance management systems against developing the asset management module of the corporate application and were included as part of the action plans of the TAMPs. By addressing this trend of trying to place the cart before the horse in this way the TAMPs were kept on track throughout their development.
5. Commitment to the deadline. By running regular meetings with the asset management team, reports to CMT, presentations to SMT and Council reports, the deadlines imposed were strictly adhered to. Whilst the approach can be seen as heavy handed all the feedback has indicated that it ensured

that the officers preparing the documents were given the required assistance and resources. The regular team meetings also resulted in constructive collaboration between units.

6. Sell, sell, sell. Sell the asset management message at every opportunity in as many forums as possible. The importance of this is highlighted in such initiatives as Backroom to the Boardroom, the various STEP programs currently underway throughout Australia and most recently the release of the IPWEA's Asset Management DVD - Sustainable Communities: Critical Insights. Marketing is something that is typically overlooked, however, is vital to achieve organisational change. In this respect, while officers were able to achieve a significant improvement in awareness, having some external expertise, such as the LG Asset program, has lent credibility to what the officers were promoting.
7. Provide solutions, not just the problems. Presenting an annual funding gap of \$10M to Council can be a daunting prospect, however, with outcome focused action plans to quantify the gap and/or reduce the gap makes it politically more palatable. As this was the first draft of Asset Management Plans various assumptions were made where the required knowledge does not currently exist. Many of these assumptions were challenged throughout the project, however, as better data becomes available, these assumptions need to be retested. The Asset Management Plans also highlighted the need to reduce the Levels of Service in certain areas to better match the available funding levels. As a result of this approach, Council did increase funding levels for some asset classes, buildings especially rather than reducing the levels of service.

### **The Pitfalls**

While the success of the approach taken by Caloundra City Council has resulted in the desired changes, it was not without some challenges. The major pitfalls of preparing

the Total Asset Management Plans in house were.

1. Tight timeframes not allowing for full analysis. While a tight deadline ensured that an outcome was achieved it didn't allow for in depth analysis of some issues uncovered. This was especially true with the knowledge possessed by the field staff and in some units even twelve (12) months later we are still finding some excellent data captured by the field staff that is not passed on.
2. Political Interference. Being readily accessible to the Councillors, had the potential to result in political interference. This was especially true between sectors, such as the rural and urban factions of Council. Any political inference was dealt with quickly by the appropriate senior manager or director. However, because the processes behind the development of the TAMPs were so transparent, there was little interference throughout the project.
3. Other duties of staff. Not all units had/have an officer, solely responsible for asset management and to meet the initial deadline of the TAMPs these officers were temporarily seconded to this project. However, once the TAMPs were completed these officers had to resume their previous roles and now only provide limited support to the asset management task.
4. Staff continuity. Since the start of the TAMP project, out the total of nine (9) officers responsible for the development of the TAMPs, five (5) have either left the organisation or been promoted within Council. This obviously has impact on the delivery of the action plans and training of new staff has slowed the progress of the Asset Management Team.
5. Various conflicting agendas. During the preparation of the TAMPs it became evident that their completion would support several differing agendas. The asset accountants were keen to see depreciation kept to a minimum, the asset

custodians wanted to present the worse case scenario to maximise their future renewal and maintenance funding, politically a good report card was the goal to support further investment in new assets, finance staff wanted a definitive optimum intervention points, preferably that fitted within the existing budgets. Obviously it was not possible to accommodate all of the above agendas, however, through using a risk based approach to the asset management challenges a balance of sorts was reached.

6. Correct delegated authority? This was an issue from the beginning of the project, did the officers on the Asset Management Team have the delegated authority to make the decisions required? If not, how to ensure that the recommendations being made had the support of those with the delegated authority to make those decisions? Ultimately the authority rested with the Program Managers and the Director required that all managers were to approve the TAMPs prior to their launch.
7. Overlooking the social factors and failure to engage the community on the service levels. The TAMPs were prepared with the view of determining the existing position of Council's assets, its processes and systems. A decision was made early in the development not to address the community in determining the levels of service as most assets did not have the data available to undertake this in a meaningful manner. Understanding the community expectations was limited to the consultation undertaken by other projects / divisions of Council, reviewing customer service requests and operational knowledge.

## The Results

Since the commencement of the TAMP project Caloundra City Council has achieved the following:

- Adoption of eight (8) Total Asset Management Plans identifying a \$10M per annum funding gap.

- Council has changed its expenditure pattern, focusing on asset rehabilitation and renewal.
- Significantly increased the operation, maintenance and renewal budget of the building class assets, allowing the target levels of service for this asset class to be met.
- Increased parks infrastructure rehabilitation budget by \$500k or 250%.
- Committed to a 10 year renewal program for Council's timber bridges to a level of \$1.5M per annum.
- Whole of life template developed and WOL estimates to be included to all new capital proposals recommended to Council.
- Five year capital programs have been developed for Council's consideration.
- Caloundra City Council is taking part in the LG Asset program.
- The TAMPs have undergone desktop publishing and are publicly available on Council's website – [http://www.caloundra.qld.gov.au/websites/cityCouncil/strategies\\_plans/tamps.asp](http://www.caloundra.qld.gov.au/websites/cityCouncil/strategies_plans/tamps.asp)
- In 2006 received an IPWEAQ award of excellence for the approach taken in developing the TAMPs in-house.

## Where to Now

Council has recently completed a twelve (12) month review of the action plans. Overall, the progress has not been as rapid as it was in the development of the TAMPs. Many TAMPs identified the need for improved asset and/or maintenance management systems and progress has been made in identifying the needs for such systems, however, the recent announcement by the State government regarding Local Government review has slowed progress on such large scale system improvements.

Council has changed its focus towards verifying asset data and processes for updating this data. To this end Council has begun reviewing asset data and moving to mobile computing for data collection for some assets.

## **Conclusion**

Nobody knows your assets better than you do and no-one other than your operational staff know of the 'non corporate' systems and processes in place. These operational staff and 'non corporate' systems are where invaluable information and knowledge are stored – make use of them.

To successfully deliver asset management plans in-house support throughout the organisation is required. This includes the political and senior management levels.

Sell your product. Include the asset management message and the plans in as many forums as you can. By the time the plans are finished everyone in the organisation should be aware of them and what they are to deliver.

And finally, use all the resources available. Not many organisations are prepared to publish their old asset management plans once they are on their second or third review but if you can obtain a copy, these documents provide a good outline. Other organisations copies can also provide inspiration in how to address a particular issue as well. To make significant improvements in asset management across the local government sector it's the engineers, in conjunction with the accountants, that need to talk and share their solutions.