



Local Government Strategic Asset Management (SAM)

Strong effective and forward thinking asset management is crucially important for local government authorities, as the public demand for the services that these assets deliver is increasing. That said, central government funding has reduced considerably adding more pressure on the balance sheet. How does a local authority balance this difficult equation in an efficient and effective manner?



Strategic Asset Management (SAM) is the ability of a local government authority to maintain manage and make available the assets in their control from parks to public buildings such as museums and libraries, as well as the considerable number of buildings and infrastructure in their care.

The costs of maintaining the condition grades of these assets are considerable, and as we know in 2012-2015 local government funding has certainly felt the economic pressures and central government funding is very tight indeed, so asset management budgets are under extreme pressure.

That said, the services that are required by the general public are still required, more so now as urban development is on the increase so pressure on services is growing, and the authority must continue to deliver these services safely and in a continuous manner.

Crystal Ball Gazing – Budgets ‘v’ Condition Grades

The hardest part for asset managers in local government is establishing where to spend their hard won and very limited resources, and which of the many improvement works or maintenance tasks to do in which year. There has traditionally been a fair bit of crystal ball gazing for this equation, and it has proved very hard to maintain the condition grades of all assets with the ever reducing budgets local government have.

The trick has been to not let an asset degrade to a ‘cherry red’ (Grade 5) as this can mean the asset is almost past its useful state, and should almost be written off the financial balance sheet. Allowing assets to go past ‘the point of inflection’, usually at grade 3/yellow, is perfectly acceptable but does mean the asset has a limited life cycle without ongoing expenditure and is on the downward trend condition wise.

In an ideal world, working assets should be maintained at the black (Grade 1) level, green (Grade 2) yellow (Grade 3) or even red (Grade 4) level. This way the asset is still in full working use, and still delivers its service element, even though it may be suffering some condition and service issues.

It is cheaper to improve a grade 2/green, to a grade 1/black, than a grade 4/red to grade 1/black, but is this the best possible use of the budgets? There will be many grade 3’s and 4’s in the estate that some might say more urgently need improvement that year, so how does one judge which is the best option?

A local authority has 1,000 of properties and buildings assets to manage, so choosing the strategy that will maintain the most assets at the best servicable condition is the challenging.

Asset managers need to base these decisions on a combined assessment of condition and performance, and not just age or condition on their own.

Predictive Asset Modelling

Predictive Asset Management Modelling is the ability to apply a set of strategies to an asset or portfolio, over a chosen term, and visualise what impact your strategy actions and budget allocation will have over the 10, 15, 25 year term of the strategy.

Predictive asset modelling is very new to the UK, and is extremely powerful in showing precisely what impact your chosen strategy will have over the term, both on asset condition, effect on the estate, budget and indeed back log.



The powerful simulation capability within this predictive asset modelling solution enables you to see which assets turn from black to green to yellow or red over time, and when you have improved a chosen asset by undertaking works on it at £x or x% of your budget, what impact will that have for the other assets in the estate, the budget and indeed the back log for that year and the term as well as one off environmental impacts.

Asset managers can now finally define a true total cost of ownership for a term, without having to key in huge amounts of data, as more than 180 classes or catalogues of asset have already been built into this solution.

Eliminating the Back Log

Back log is the rate at which an asset is consumed, that is more than the capacity of replacement. Local government back logs are growing as the rate of consumption is far in excess of affordable replacement due to the economic challenges and central government cuts.

The mistake local government have historically made is that back log is not a static item, and can not be written off or quantified within a static strategy. The back log changes every year in relation to what is spent and the change in condition grades. It is also impacted by the level of consumption of certain assets and indeed the strategy being followed over that term.

Predictive asset modelling shows you the direct impact on the budget and back log, and empowers you to choose and apply a strategy that will reduce the back log over time, whilst still maintaining sufficient asset condition grades from the same budget, to deliver the services required.

Predictive asset modelling means you can now deliver the required level of service (LOS), at the lowest long term cost, that is fully predicted and all from a known pre defined budget.

Duplicate Model Testing

Predictive Asset Modelling enables you to test other options and management scenarios. Once you have developed a strategy and input all of the metrics, you then create a duplicate model of the same strategy and test a different set of what if's and but's against your chosen model, comparing the two, without impacting the original strategy.

Roads and Highways Management

The Predictive Modelling solution also has full roads and highways management metrics capability already built in, whereby it can predict failure rates and events on the road infrastructure. Linking to This means you can also see the extent of the defect, the details of the defect, and the severity of the defect. Data is always key and with the right levels of data in the solution, you can detect future failure rates and predict what is going to be needed in advance.

The solution can also take consequence of failure data and show the results of a failure of a certain type on the asset and surrounding assets or estate.

The solution can also create a detailed capital works programme if required and delivers a full maintenance management and planning solution as well, for the same cost.

Integration and Systems Management

The solution can be fully integrated with the likes of Oracle, SAP and other systems used in local government. There is also the ability to use ESRI data, for authorities using GSI/ESRI data.



Key deliverables:-

- Defines strategic whole life of costs in a single view
- Enables easy development of capital works programs
- Delivers a perfect solution for needs based projects
- A single highly effective web based predictive modelling tool
- Delivers a full accredited asset management framework
- Developed specifically for Local Government
- Fast hassle free deployment, 'out of a box' solution
- Based on 200+ local government clients expertise
- 180 different asset catalogues and classes
- Operationally it provides defence for needs based budgets
- Supports the requirement of Int. Infrastructure Manual (IIM)
- Fully compliant with SAM legislation & ISO 55000



Assets

Discount Rate: 0.00 %

Unique Asset Id	Asset Name	Network Mea...	Applied Treat...	EACF (\$)
BU88	Littlehampton ...	1,408,000.00	9	(78,268.96)
BU144	Mount Barker ...	3,491,850.00	9	(169,769.38)
BU178	Nairne Institute	3,480,000.00	8	(141,988.35)
BU129	Monarto Quar...	3,463,600.00	6	(50,958.22)
BU93	Macdesfield 1...	1,052,300.00	9	(52,182.5)
BU186	Nairne Old Pol...	3,459,200.00	5	(41,285.55)
BU136	Mount Barker ...	3,439,600.00	5	(42,668.24)
BU63	Hahndorf Bow...	4,838,000.00	6	(131,293.64)
BU191	Prospect Hill ...	3,419,900.00	6	(83,932.9)
BU69	Hahndorf Rec...	4,676,300.00	0	(114,031.58)
BU181	Nairne Recrea...	3,395,900.00	5	(40,631.94)
BU163	Mount Barker ...	3,647,600.00	6	(90,838.92)
BU48	Echunga Recr...	1,144,200.00	8	(41,676.63)
BU109	Meadows Co...	1,142,500.00	6	(35,547.46)
BU215	Mount Barker ...	1,067,800.00	8	(47,329.43)
BU42	Echunga Golf ...	4,900,500.00	7	(158,436.84)
BU112	Meadows Rec...	4,888,200.00	6	(87,052.73)
BU97	Macdesfield R...	3,441,400.00	6	(82,903.33)
BU131	Mount Barker ...	4,706,800.00	6	(102,702.38)
BU182	Nairne Recrea...	3,629,000.00	5	(45,144.76)
6013 -1	Administration...	3,344,658.00	4	(35,666.6)
BU157	Mount Barker ...	3,342,650.00	3	(27,476.58)
BU14	Brukung Hall	3,326,800.00	4	(43,938.71)
BU176	Nairne Golf C...	3,307,400.00	3	(25,152.78)
BU149	Mount Barker ...	3,275,400.00	4	(47,345.91)
BU68	Hahndorf Rec...	3,294,600.00	0	(66,633.29)
BU295	Meadows CFS	3,262,650.00	4	(48,926.7)

Simulation Name: Scenario 2- Annual budget 4% of replacement value
Create Date: Tuesday, 30 October 2012 - 2:49:10 PM

Treatment / Maintenance Cost by Year Chart | Service Score by Year | Environmental Cost by Year | Env...

Service Filter: Fitouts (Internal screens) Condition, Fitouts (Floor covering) Condition, Service (Fire) Co...

Score N/A
Score 0
Score 1
Score 2
Score 3
Score 4
Score 5
Score EoL

Year

Legend:
● Fitouts (Internal screens) Condition
● Fitouts (Floor covering) Condition
● Service (Fire) Condition
● Service (Transport) Condition
● Functionality
● OCI (Service Index)
● Component
● Services Condition (Service Index)

Data Source

BU163 - Mount Barker Showgrounds

Treatment / Maintenance Cost by Year | Service Score by Year | Environmental Cost by Year | Enviro...

Cost (\$) | Treatment Name

Year | Structural Data | Roof Damages | Fitout (Internal) | Emulsion repair

Future prediction of optimised service levels

Asset Class Central Register

Within the Strategic Asset Management suite there is also a full central asset registry module (optional) that delivers a full asset registry for all asset classes. This module includes:-

- Built in reporting - compliant with statutory & industry regulatory requirements
- Insurance compliant work tracking, inspect assets, plan maintenance work, schedule repairs & track work
- Logs and schedules maintenance work based on customer needs
- Automates valuations and annual financial reporting (IFRS & AAS)
- Life-cycle costing for all asset types, including critical failure modes
- Budget analyser – determines future budget allocations
- Produces prioritised capital works programs based on optimisation analysis

Asset Account Register

There is also the option of a central accounting tool/account register module for all classes of asset. This can import data from existing depositories and perform consumption based modelling.

- Automated valuations and annual financial reporting based on IFRS and AAS - depreciation method reflects consumption patterns
- Imports inventory, asset features and condition data from your existing system, spreadsheet or database
- Stores 'work in progress' and 'annual capital treatment costs and locations'
- Inbuilt reporting based on industry guidelines and asset management plan templates for additional regulatory requirements
- Reports on asset stock, asset performance, asset standards and asset condition
- Life-cycle costing for all asset types, including critical failure modes
- Budget Analyser - determine future budget allocations

CONTACT US

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