



Kogarah City Council

Asset Management Assessment of Kogarah City Council

June 2013

achieving
results
in the public sector

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1. INTRODUCTION

1.1 Background

Kogarah City Council wants to gain an improved understanding of their current asset management processes, current infrastructure backlog and outstanding maintenance requirements.

Council also wants to understand how their asset management practices, systems and processes compare with other councils' across NSW.

To provide this assessment, an onsite audit of Council's asset management practices and a review of the relevant asset management and financial documents has been undertaken. The work has been aligned with our standard methodology and moderated against other recent assessments, which allows for a ready comparison against other Councils.

1.2 Process and Methodology

Our methodology is based on achieving consistent and repeatable results, which can be applied across a range of councils while recognising the differences between Councils in terms of size, asset base and capacity. Our standardised assessment methodology and practices have been used as well as a standard reporting format where findings relating to each category which summarises the evidence on which the assessment was made.

Asset Management Systems and Processes

Key roles within the council that have responsibilities for asset management within the organisation (strategic, operational and financial) were interviewed over a two day period.

Council's audit assessed against the following categories and sub-categories:

<p style="text-align: center;">Asset Knowledge / Data</p> <ul style="list-style-type: none"> ▪ Asset Classification / Hierarchy ▪ Attributes and Location ▪ Condition Data ▪ Lifecycle Cost Data ▪ Valuation, Depreciation and Age / Life Data 	<p style="text-align: center;">Asset Knowledge Processes</p> <ul style="list-style-type: none"> ▪ Asset Accounting / Valuation
<p style="text-align: center;">Strategic Asset Planning Processes</p> <ul style="list-style-type: none"> ▪ Strategic Long Term Plan ▪ Asset Management Policy and strategy ▪ Levels of Service ▪ Risk Management ▪ Financial Planning and Capital Investment ▪ Asset Management Plans 	<p style="text-align: center;">Operations and Maintenance Work Practices</p> <ul style="list-style-type: none"> ▪ Operations / Maintenance Management ▪ Critical Assets
<p style="text-align: center;">Information Systems</p> <ul style="list-style-type: none"> ▪ Asset Register ▪ Systems Integration 	<p style="text-align: center;">Organisational Context</p> <ul style="list-style-type: none"> ▪ Organisational Strategy ▪ Asset Management Review/Improvement ▪ Asset Management Roles and Responsibilities

An assessment against each category based on an A – F scoring is provided as well as an overall weighted score again based on A – F.

The table below sets out the ranking system.

Assessment	Description	Standard
A	At or near best practice	≥ 9.0
B	Advanced level of competence	7.50 – 8.99
C	Core level of competence	6.00 – 7.49
D	Basic level of competence	4.00 – 5.99
E	Awareness	2.50 – 3.99
F	Nothing / limited	≤ 2.49

Physical inspection of assets

An inspection of a sample of Council's physical assets was conducted. The inspection sampled a few assets across different asset classes and reviewed the condition matrix and the most current asset inspection reports as well as field inspections to confirm the reliability of the asset registers.

Infrastructure backlog

A comparison of the Council's infrastructure backlog against our standard methodology for assessing on infrastructure backlog was also undertaken. For the purposes of this assessment, the cost to bring assets to a satisfactory condition is considered to be that cost to bring an asset up to condition rating 3. The assessment is based on condition data provided by Council and industry benchmarks.

The purpose of the assessment is to provide comment on:

- (a) Whether the infrastructure backlog is of sufficient size to be of concern to the Council
- (b) Our level of confidence in the infrastructure backlog number that Council has specified.

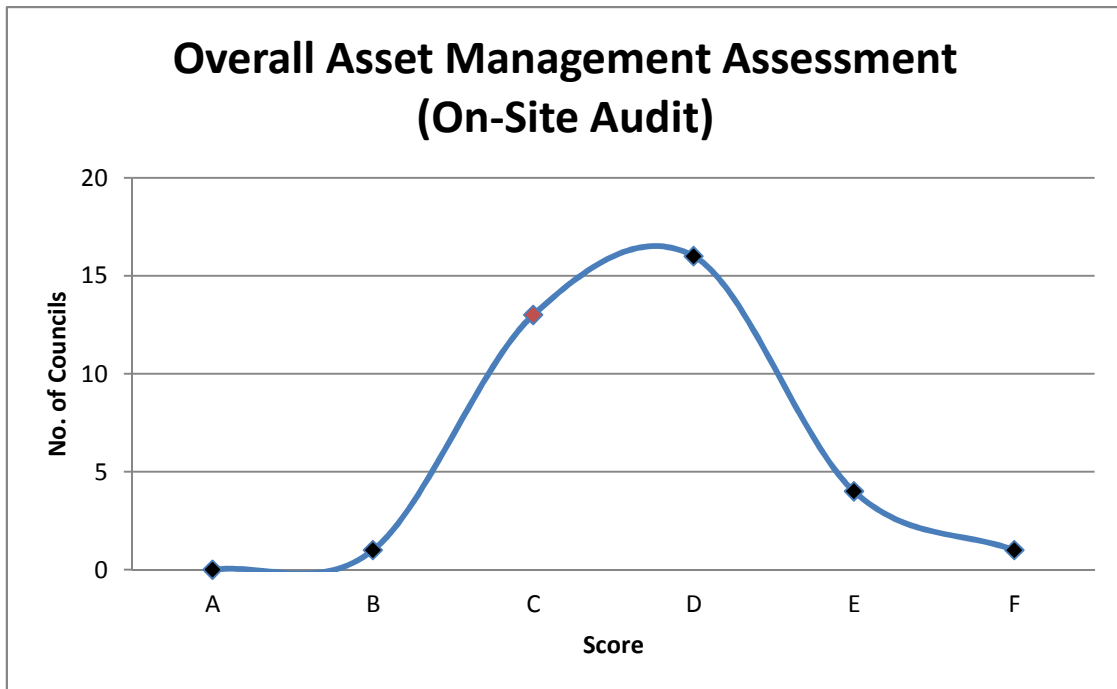
2. SUMMARY OF AUDIT RESULTS

Category	Assessment
Asset Knowledge / Data	C
Asset Knowledge Processes	B
Strategic Asset Planning Processes	C
Operations and Maintenance Work Practices	C
Information Systems	D
Organisational Context	C

Overall Asset Management Assessment	C
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The overall score of **C** would indicate that the Council is at a **Core** level of competence in asset management. Based on our recent experience across the asset management practices, systems and processes of Councils in reviewing NSW this result puts Kogarah asset management well above the average of NSW councils. The chart below shows the distribution of Councils who were part of the DLG onsite infrastructure audit and for ease of reference we have highlighted in red where this places Kogarah compared to those councils which were audited¹.

¹ Local Government Infrastructure Audit June 2013, Division of Local Government, Page 87



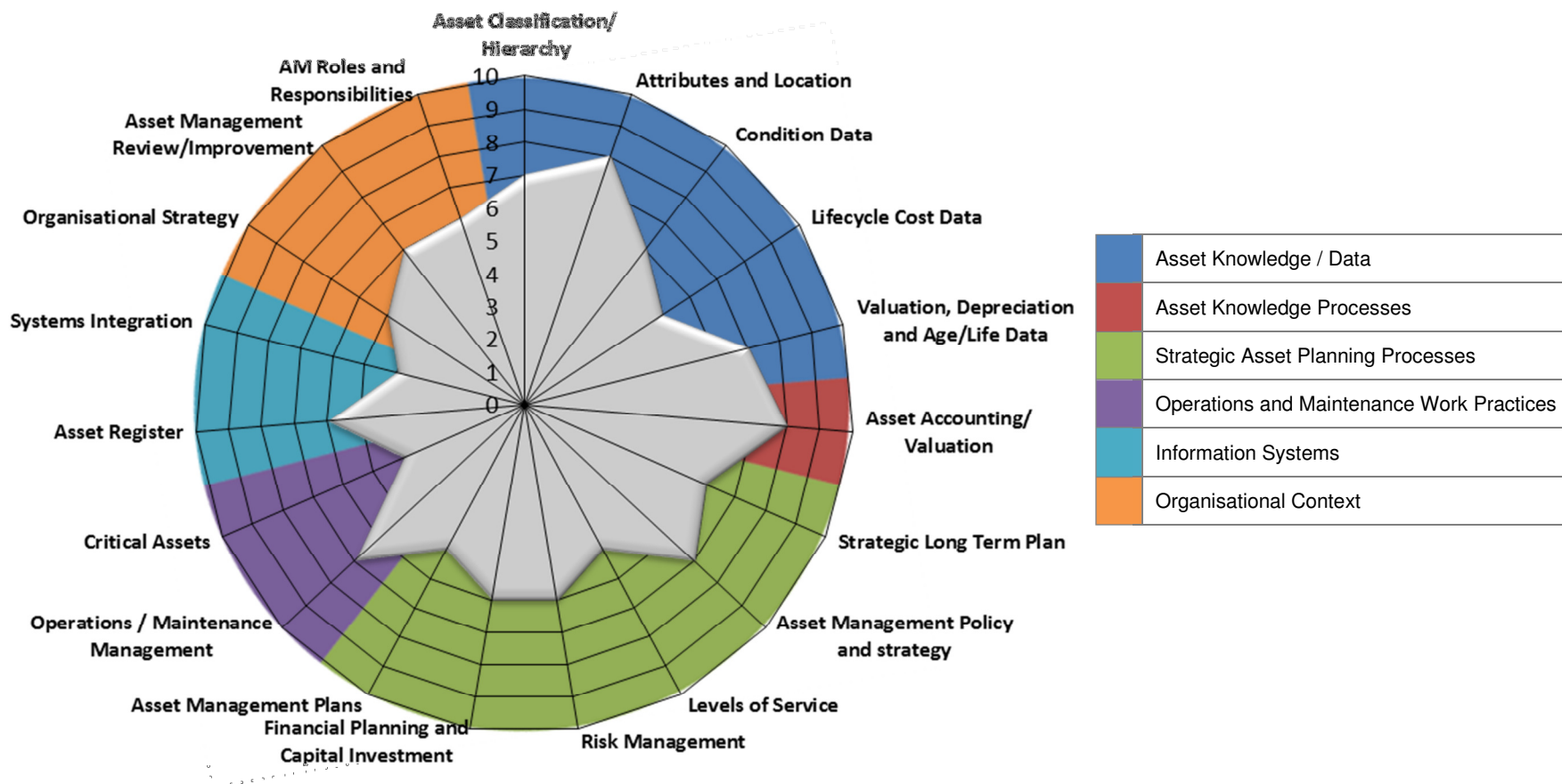
To improve in asset management, more work is required in the areas of describing the levels of service which define the provision and performance of infrastructure assets and in assessing the criticality of assets along with introducing specific risk management arrangements to match the criticality ratings. The asset information systems used are not best practice, but we understand that Council is cautious about making significant investments in this area at the present time.

3. ASSET MANAGEMENT ASSESSMENT

This information is also presented as a radar chart to enable greater visual understanding of the Council's current strengths and weaknesses.

Kogarah City Council	Current Score	Desired score 3yrs	Priority (1-3)	1	2	3	4	5	6	7	8	9	10
Asset Knowledge / Data	7.0	8.0											
Asset Classification/ Hierarchy	7												
Attributes and Location	8												
Condition Data	6												
Lifecycle Cost Data	5												
Valuation, Depreciation and Age/Life Data	7												
Asset Knowledge Processes	8.0	8.0											
Asset Accounting/ Valuation	8												
Strategic Asset Planning Processes	6.0	8.0											
Strategic Long Term Plan	6												
Asset Management Policy and strategy	7												
Levels of Service	5												
Risk Management	6												
Financial Planning and Capital Investment	6												
Asset Management Plans	5												
Operations and Maintenance Work Practices	6.0	8.0											
Operations / Maintenance Management	7												
Critical Assets	4												
Information Systems	5.0	8.0											
Asset Register	6												
Systems Integration	4												
Organisation Context	6.0	8.0											
Organisational Strategy	5												
Asset Management Review/Improvement	6												
AM Roles and Responsibilities	6												

Gap Analysis Assessment Chart - Kogarah City Council



3.1 Asset Knowledge / Data

Overall category score	C
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3.1.1 Asset Classification / Hierarchy

We would expect Council to have a logical structure to the collection and storage of its asset data including:

- Assets identified by unique IDs
- Registers segmented into appropriate classification levels

We would expect to find an asset hierarchy that covers all asset classes and is consistent with guidelines and processes.

There should be guidelines and processes for asset identification using unique IDs

Findings
<p>Asset IDs are held in common with IDs created in Authority financials. Roads, parks and stormwater assets are held in component form.</p> <p>Registers are segmented - the break-down of buildings' data into components is a work in progress.</p> <p>Guidelines and processes not reviewed, but data dictionaries have been assembled.</p>

3.1.2 Attributes and Location

We would expect asset attribute data (location, size, material, type etc.) to be in the asset register and able to be represented in a spatial format, with associated mapping guidelines and processes

Findings
<p>Asset locations are accurately mapped in MapInfo GIS, good coverage achieved. Building component attributes are being collected currently; other asset groups attributed appropriately.</p> <p>GIS displays tailored to suit different requirements for information presentation.</p>

3.1.3 Condition Data

We would expect there to be written processes for carrying out condition surveys and defect identification assessments, with data recorded in accordance with the asset hierarchy. Condition assessment guidelines and processes should be developed and used, and there should be a consistent rating system applied. Historical assessment data should be available in a consistent format.

Findings

Inspection schedules and protocols developed for roads and parks assets specifically. For other asset groups protocols not reviewed.

Service level agreements and schedules published for inspection regimes and reflect asset importance.

A dedicated resource is assigned to collection of asset information - including condition assessments. Many condition records include photographs.

Mobile data recording capability is in place.

3.1.4 Lifecycle Cost Data

There should be clear definitions of operations and maintenance, renewals and new/upgrades expenditure. Cost data should be recorded separately for each, with the data used in decision making. There should be a written lifecycle strategy and cost and planning processes which are used.

Findings

Completed works orders are entered into Authority to record costs against individual assets and reviewed by assets team for follow-up field inspection to record consequent asset information changes.

Information is collected, but policy and usage of data is unclear with respect to formal lifecycle practices.

3.1.5 Valuation, Depreciation and Age / Life Data

We would expect there to be a common data system used across all asset groups, with current depreciation and replacement cost data at the appropriate asset hierarchy level. Depreciation should be updated on the basis of annual assessments of useful asset life. Historical accounting data should be available.

Findings

Roads and parks assets valued and depreciated by component. Buildings valued as complete entities and depreciated accordingly.

3.1.6 Asset Knowledge / Data Summary

Asset classification/hierarchy	Information verified, good quality and coverage
Attributes and location	Information verified, very good quality and coverage
Condition data	Information verified, acceptable quality and coverage
Lifecycle cost data	Good level of unverified information
Valuation, Depreciation and Age / Life data	Information verified, good quality and coverage

3.2 Asset Knowledge Processes

Overall category score	B
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3.2.1 Asset Accounting / Valuation

There should be clear valuation and depreciation guidelines and accounting processes against various hierarchy levels and categorised in accordance with accounting requirements developed and used. The responsibilities for system and data management should be clearly defined. There should be data validation and audit processes developed and used.

Findings

The depreciation process uses a spreadsheet based financial register of all assets, broken down into components (apart from smaller buildings). Asset life information is updated when revaluations are done (5 yearly). New asset creation is tracked through the project costing system and incorporated in the depreciation register.

3.2.2 Asset Accounting / Valuation Summary

Asset Accounting / Valuation	Good written procedures widely and consistently used that covers all asset classes
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3.3 Strategic Asset Planning Processes

Overall category score	C
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3.3.1 Strategic Long Term Plan

There should be Strategic Asset Management Plan documents that are fully aligned with Council's other strategic documents. The documents should include or define the plan review process, long term expenditure forecasts with operations and maintenance, renewals and new/upgrade forecasts separately identified and Council's strategy for the management of Council's assets. There should be evidence that the strategy is being complied with.

Findings

The asset strategy is in place and covers all the typical aspects of asset management. The review requirement is included but the process to effect the review is not covered.

The strategic levels of service regarding asset direction to meet community objectives are not clearly presented.

3.3.2 Asset Management Policy and Strategy

We would expect there to be an Asset Management Policy which has been adopted by Council and which defines vision and service delivery objectives and reinforces the need to use a lifecycle cost approach. The policy should be reviewed annually. There should be evidence that the policy is being complied with.

Findings

The AM policy is adopted by Council. It is reviewed on a 3 yearly basis.

Life cycle considerations are taken account of in asset decisions, but not as part of a formalised process.

3.3.3 Levels of Service

We would expect that Levels of Service are clearly defined in each asset management plan and are aligned to Council's strategic objectives and legislative requirements and have been developed taking community input into account. Community and technical levels of service should be separately identified with the latter incorporated into service level agreements and operations and maintenance and renewals processes. Performance against level of service targets should be monitored in accordance with documented procedures.

Findings

The levels of service statements are shared between the over-arching asset management plan (OAMP) and AMPs for individual asset groups. Levels of service describing asset quantity (provision) and quality are not included - the focus is on maintenance and hazard removal service responses.

Limited over-arching requirements to maintain asset condition profiles at no worse than 2010 are included.

Service level agreements include for achievement of maintenance response time standards.

3.3.4 Risk Management

Council should have a corporate risk management policy and strategy and a risk assessment should exist for each asset class in accordance with them. The assessment should identify critical assets and any risk mitigation strategies or measures. Council should have emergency response and recovery and business continuity plans, taking into account each asset class.

Findings

Asset criticality has been defined at a high level by assigning assets into importance categories which reflect the risks associated with their failure in each asset group. Service levels for inspections and hazard responses are tailored to suit those categories.

Playgrounds are specifically managed with regard to risk.

The improvement plan recognises the need to take the risk assessments down to a specific asset level.

3.3.5 Financial Planning and Capital Investment

We would expect Council to have a Long Term Financial Plan (LTFP) that is based on Council's Community Strategic Plan, Workforce Plan and Asset Management Plans, The LTFP should incorporate lifecycle planning, forward capital works planning, risk and sensitivity analyses and project prioritisation processes.

Findings

The forward works programme is developed out of asset information and prioritised to reflect asset situations.

The long-term asset renewal profile in the AMPs is not aligned with the long term funding figures.

3.3.6 Asset Management Plans

There should be asset management plans covering all assets owned by Council. The asset management plans should include levels of service with performance targets and actions and costs established to achieve them together with the following:

- Demand forecasts
- Lifecycle cost plans
- Forecast costs separately identified for operations, maintenance, renewals new/upgrades and depreciation
- Asset disposals
- An asset management improvement plan

Consideration should be given to solutions not involving assets owned by Council. There should be clear evidence that they have been prepared taking community consultation into account.

Findings

AMPs have been prepared and are referenced to the OAMP for several aspects. Consequently the specific detail for individual asset groups is limited in some cases.

The target levels of service do not fully encompass all elements of asset provision and hence reporting against achievement is not available. This is acknowledged in the OAMP where utilisation information is noted as 'currently not assessed'.

Demand forecasts are given at a high level and specific asset responses are described in limited detail.

An improvement plan included and is being actively worked on.

3.3.7 Strategic Asset Planning Processes Summary

Strategic Long Term Plans	Satisfactory written procedures generally used that cover major infrastructure classes
Asset Management Policy & Strategy	Good written procedures generally used that cover major infrastructure classes
Levels of Service	Satisfactory written procedures that cover major infrastructure classes but they are not widely or consistently used
Risk Management	Satisfactory written procedures generally used that cover major infrastructure classes
Financial Planning & Capital Investment	Satisfactory written procedures generally used that cover major infrastructure classes
Asset Management Plans	Satisfactory written procedures that cover major infrastructure classes but they are not widely or consistently used

3.4 Operations and Maintenance Work Practices

Overall category score	C
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3.4.1 Operations / Maintenance Management

We would expect there to be operation and maintenance plans taking levels of service and performance targets into account for each asset class. This should be supported by processes for collecting, validating and auditing operations and maintenance data. There should be written processes for planning maintenance and works order and costing management that are used. There should be written maintenance specifications and, where appropriate, performance based contracts or service level agreements in place.

Findings

Good processes in place through work order and CRM arrangements to initiate maintenance and inspection activities. Completed work orders provide cost and asset information in a timely manner.

Capabilities to align operations and maintenance costs with achievement of specific service levels are limited.

3.4.2 Critical Assets

We would expect critical assets to have been identified taking into account risk and emergency management and written strategies established for their management, with regular written reports on their condition and performance.

Findings

Criticality of assets by broad categories in place. Individual critical assets not identified for specific treatment and mitigation approaches.

Service level responses are monitored for assets against the importance categories.

3.4.3 Operations and Maintenance Work Practices Summary

Operations / Maintenance Management	Good written procedures generally used that cover major infrastructure classes
Critical Assets	Written procedures of limited value that cover a limited range of asset classes

3.5 Information Systems

Overall category score	D
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3.5.1 Asset Register

There should be a single asset register that captures, manages and reports on asset data as required by asset management. It should be possible to sort data by different hierarchy levels and to customise reports if required. The register should integrate with other asset management systems.

Findings

The asset register is held in spreadsheets and in the GIS. Comprehensive records are held for roads and parks assets. Building information is being confirmed and assembled into a spreadsheet based register to amalgamate various existing information sets.

The interface for data with other asset activities - financial and O&M is by manual processes.

3.5.2 Systems Integration

Asset management systems should integrate or interface with corporate systems, including the customer request, document management, accounting and HR systems. There should be a spatial system (GIS) implemented with written processes that are used.

Findings

Several spreadsheet and GIS based registers are in place with quality and audit arrangements in place. However, they are not a single database and are not part of an overall integration strategy at this time. Investment in a dedicated AM system has been investigated, but is not currently identified for IT system improvements.

Information is shared between systems and the CRM system provides links into financial asset data and O&M information.

GIS data is well presented.

3.5.3 Information Systems Summary

Asset Register	Satisfactory written procedures generally used that cover major infrastructure classes
Systems Integration	Written procedures of limited value that cover a limited range of asset classes

3.6 Organisational Context

Overall category score	C
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3.6.1 Organisational Strategy

There should be evidence that asset management drives Council in terms of the use and management of its assets aligned with Council's policies and strategies. Council's structure and position descriptions should clearly identify asset management roles and responsibilities across all asset classes. There should be written processes for capital investment based on Council's strategic plans, lifecycle costs and risk assessments.

Findings

Asset management practices are being incorporated into organisation and financial planning. Limited strategic 'level of service' information in the AMPs on asset directions related to community objectives may imply a disconnection between those objectives and asset strategies.

3.6.2 Asset Management Review / Improvement

We would expect that there is a prioritised asset management improvement plan, with responsibilities and timeframes in place that is monitored and reported on. There should be a benchmarking process and regular asset management reviews in place.

Findings

The asset management improvement plan is in place and is being worked through.
Staff are attending training related to asset management.

3.6.3 Asset Management Roles and Responsibility

We would expect that asset management roles and responsibilities are clearly identified. There should be a clear training program in place for all levels in the organisation, including Council, with needs assessments where appropriate. Identified needs should be included in a workforce management plan.

Findings

Specific asset management roles have been created and staff are committed to those roles and have full senior management support. A senior management asset focused regular meeting is in place. Dedicated financial asset management capability is in place.

3.6.4 Organisational Context Summary

Organisational Strategy	Satisfactory written procedures that cover major infrastructure classes but they are not widely or consistently used
Asset Management Review/Improvement	Satisfactory written procedures generally used that cover major infrastructure classes
Asset Management Roles and Responsibility	Satisfactory written procedures generally used that cover major infrastructure classes

4. INFRASTRUCTURE BACKLOG ASSESSMENT

The assessment also considered Council's infrastructure backlog as set out in Special Schedule 7.




Our comments reflect our opinion, and are solely in relation to whether;

- (a) the size of the backlog should be of concern to Council (*Asset Rating*); and
- (b) we have confidence in the number declared by Council as the size of its infrastructure backlog (*Confidence in data*).

The results are set out in the table below and for clarity we have used indicators to demonstrate the answers to each of the questions.




Asset rating

The assessment has been made by considering the size of the backlog relative to the asset base.

	Green	In control
	Yellow	Monitor
	Red	Action required

Confidence in data

The assessment has been made in part on the robustness of the methodology that Council has used to calculate the infrastructure backlog and in part on a comparison with the standard methodology used to calculate the cost to bring the assets up to condition rating 3 taking into account the relative size of the asset base. To derive a standard methodology we have, for the purposes of this assessment, assumed that 'satisfactory' is Condition 3.

	Green	High level of confidence
	Yellow	Medium level of confidence
	Red	Low level of confidence

Assets	Replacement cost	SS7 Cost to satisfactory	Asset Rating	Confidence in data
Airports	\$-	\$-		
Roads assets	\$185,597,771	\$354,000	●	🚩
Bridges	\$-	\$-		
Footpaths	\$40,451,080	\$242,000	●	🚩
Water supply network	\$-	\$-		
Sewerage network	\$-	\$-		
Stormwater drainage	\$48,785,509	\$177,000	●	🚩
Buildings	\$55,486,310	\$387,000	●	🚩
Parks	\$17,048,147	\$-	●	🚩
Recreational assets	\$36,427,312	\$-	●	🚩
Foreshore assets	\$3,292,559	\$-	●	🚩
Any other assets	\$444,216	\$-	●	🚩
Total	\$387,532,903	\$1,160,000	●	🚩

Overall, we have a high degree of confidence in the backlog reported in Special Schedule 7 and we do not believe that the size of the backlog should be of concern to Council as it is manageable.

We have some concern with the backlog reported for stormwater where, in our view, the reported backlog is not consistent with the condition data which shows a relatively high proportion of those assets as being in condition 4. The number also has some alignment with the age profile of the stormwater assets, where about \$3m worth of assets are shown as nearing the end of their anticipated life – having been constructed before 1937. This contrasts with the \$177,000 that Council reports as the Infrastructure backlog in stormwater.

5. DATA RELIABILITY ASSESSMENT

A sample of Council's assets was inspected and the results indicate consistency between the physical assets and their description in the relevant asset registers. The asset types checked were the roading, parks and building assets. Stormwater assets were not inspected because they are typically buried.

The condition ratings recorded in the asset register matched the observed condition of the assets inspected.

6. WHAT COUNCIL IS DOING WELL

The organisation has a dedicated asset services group who are providing a Council-wide service to maintain and improve asset information. Regular inspections are made to update asset condition records for the roads & parks asset groups.

Improvements are being made to building asset records to provide a detailed inventory at component level.

The improvement plan identifies a need to develop of a more detailed/advanced risk analysis at the asset level, rather than the asset class level. This is a worthwhile improvement to Council's asset management practices and is included as a suggested high priority in the recommendations arising from the audit..

7. SUMMARY OF NEEDS, ISSUES AND BARRIERS

The Council has a relatively stable situation with a fully developed area and little opportunity or demand for significant asset expansion. In this situation it is similar to other smaller metropolitan Councils.

With respect to asset management, Council has a number of community objectives which are not reflected in the levels of service for the asset groups. The gap lies with expressing the required provision (how much is needed) and the performance (how much is currently being used) for the assets. This is indicated in the Over-arching AMP (OAMP) where levels of utilisation are noted as 'currently unassessed'. Information to support the understanding and definition of these parameters may already be included in other planning documents: in which case they should be translated into the AMPs to provide a full picture of the asset requirements within each AMP.

The proportion of the stormwater assets which are recorded as in poor condition is noted as an issue. The forward renewals expenditure forecast does not appear to reflect an increase in spending to replace the oldest pipes in the network which are approaching the end of expected life. The backlog figure reported for drainage appears to be low when compared to the asset condition profile.

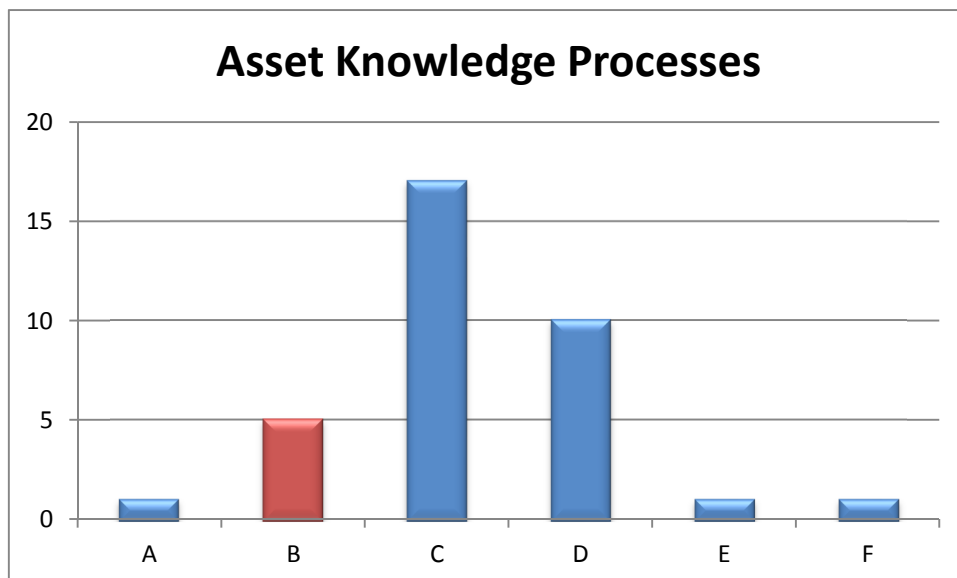
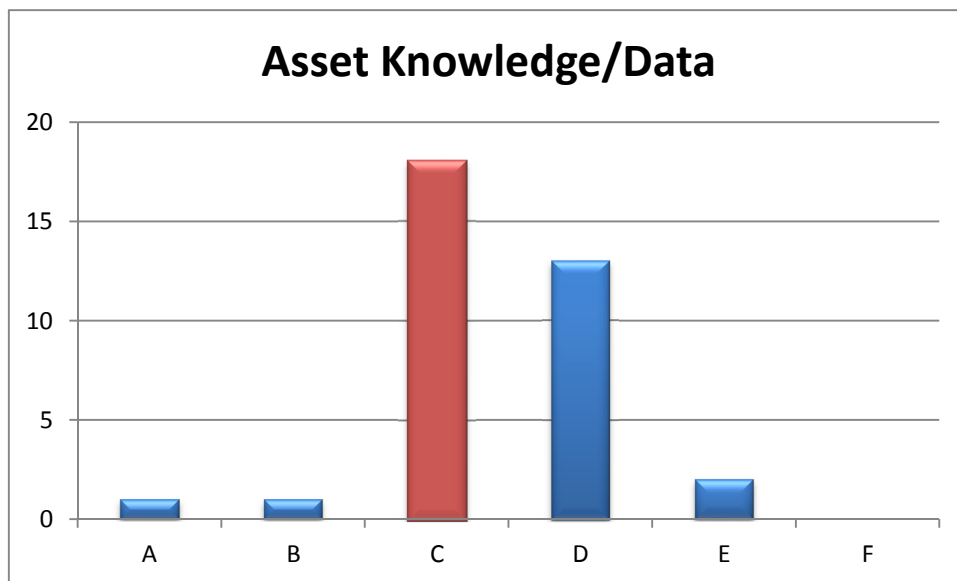
The asset management plans showed renewals forecasts which reflected the asset age profile and the future replacements as assets reached the end of their useful life. These profiles did not appear to be aligned with the renewals forecasts in the financial plans.

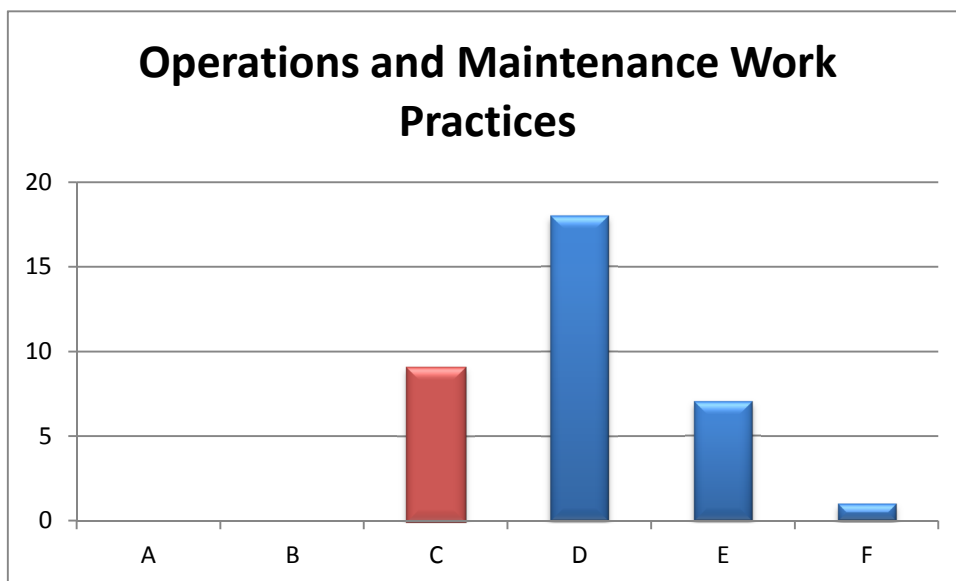
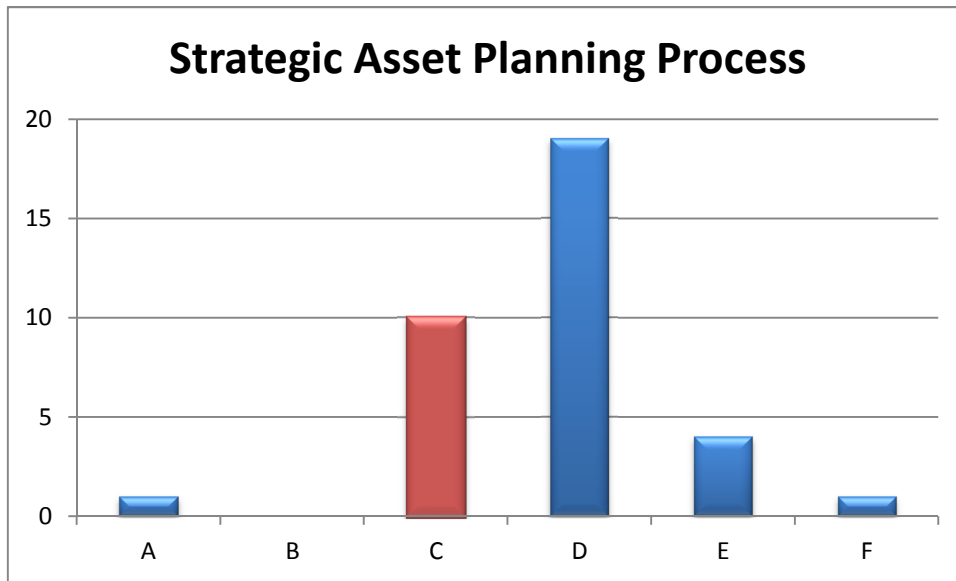
The OAMP notes that the lifecycle sustainability is low for roads and that this situation will need further work to addressed it. No information is given on this index for stormwater. We are unsure if this situation being accounted for in the current approaches to secure further special rate variation approvals.

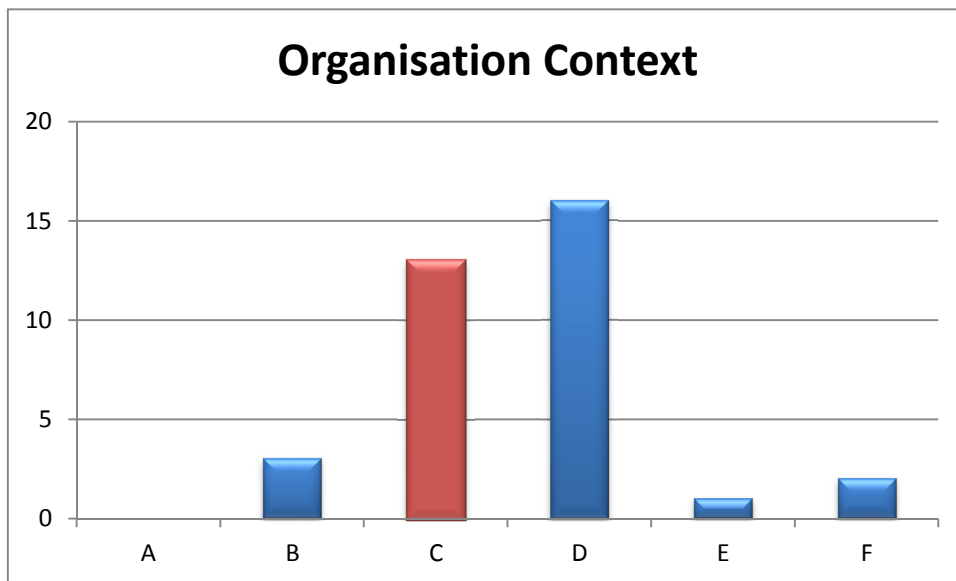
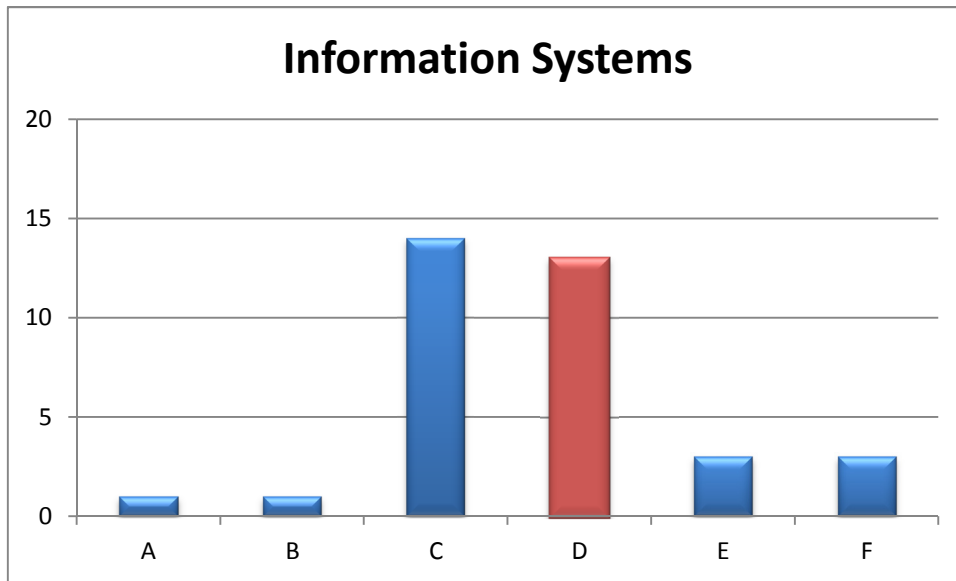
8. BENCHMARKING

The following graphs set out a comparison of the assessment of Kogarah compared to the results published by the Division of Local Government in the Local Government Infrastructure Audit June 2013. The processes and systems used to make the assessment of Kogarah are directly comparable to those used in the DLG infrastructure audit.

Each graph shows how Kogarah's assessment in each category compares to the 35 Councils that were audited. Kogarah's score for each category has been highlighted in red.







9. RECOMMENDATIONS & NEXT STEPS

Based on the observations from the onsite reviews of Council asset related documents and our understanding of practices and processes, we consider the following steps should be considered for inclusion in the next iteration of Council's asset management improvement plan.

Action	Priority
Develop more detailed understanding of critical assets so that individual assets can be managed to reflect the risks (consequences and likelihood of asset failure) associated with them. (This is already part of the current improvement plan.) Emphasis should be given to understanding the criticality associated with stormwater assets because of their condition profile and the difficulty of observing potential failure situations.	H
Continue to develop the buildings' asset register to incorporate an appropriate hierarchy of building components. The level of detail should be sufficient to reflect the specific lifecycles of the different components.	M
Expand the levels of service statements in the asset management plans to include parameters which describe the provision (how much), performance (how big, what capacity) and quality (how good) of the assets. These parameters would reflect the community objectives identified in the Community Strategic Plan.	M
Review the underlying asset data which informs the asset renewal forecasts in the AMPs and compare it with equivalent data used to prepare the LTP financial profiles so as to understand how to improve the alignment of these two forecasts.	M
Review the guidelines and processes employed for asset identification, accounting, inspections and operations and formalise them (documentation and job descriptions) as necessary.	L
Document the process for reviewing the asset management strategy and asset management plans and incorporate it in the plan(s).	L
Review the practices used to take account of asset lifecycle factors in asset investment decision making and incorporate them into the asset management strategy.	L