



Premier & Cabinet Division of Local Government

On-site Infrastructure Audit of Guyra Shire Council

December 2012

achieving

results

in the public sector

BRISBANE PERTH





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APPENDIX A Asset Management Questionnaire

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Document Status

Approving Director:		Date:	
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1. INTRODUCTION

1.1 Background

In 2011, the NSW Government released its State Plan - NSW 2021: A Plan to Make NSW Number One. That plan includes Goal 19: Invest in critical infrastructure. As part of its strategy to achieve this goal, as it relates to local government infrastructure, the NSW Government announced the Local Infrastructure Backlog Policy. This policy comprises four inter related elements:

- 1. An audit of each council's infrastructure backlog
- 2. A scheme to provide interest subsidies to fund infrastructure renewal works
- 3. Setting up a system for financial benchmarking
- 4. Accessing loans or guarantees from the Commonwealth Government where available

This project relates to the first element of the policy, the infrastructure backlog audit. It involves a council by council assessment of current and future infrastructure conditions and needs. The NSW Premier, the Hon Barry O'Farrell MP, stated that "The findings of the audit will assist the NSW Government in identifying precisely where the State's infrastructure needs lie – and we will work with Councils to deliver on those needs for local communities."

The objectives of the overall infrastructure audit are:

- To report to the Government on the current state of the NSW councils' infrastructure backlog, covering maintenance and renewal
- To identify trends in infrastructure needs across the state (type of infrastructure, resourcing needs, professional knowledge and skills needs)
- To identify gaps in what types of asset classes are currently recorded and maintained by different councils
- To enhance confidence and consistency in infrastructure backlog data by assessing the reliability of infrastructure backlog information that is reported by councils
- To identify current infrastructure risk exposure (financial, over-usage / over-exposure, natural disasters, climate change)
- To assist in identifying best practice infrastructure backlog management principles already being implemented by councils
- To increase awareness of infrastructure management issues and the impact of sound asset management
- To assist in meeting the Division's strategic goal that NSW is a recognised leader in Local Government infrastructure asset management

In doing so, the audit will assess the capacity of individual councils to fund infrastructure backlog, assess asset groups at whole of state and regional level and assess asset classes, but not individual assets.





1.2 Infrastructure Audit

The infrastructure audit project has been broken down into four stages:

- 1. Scoping and data collection
- 2. Desktop data review
- 3. On-site review
- 4. Aggregate data and prepare final report

Stages of 1 and 2 have been conducted by the Division of Local Government in conjunction with the councils across the state that have recently competed an Infrastructure Audit Survey and Data Collection.

The Division has selected 35 councils for an independent on-site audit. The selected councils represent a cross section of councils including those that are considered to be best practice as well as those whose Infrastructure Audit Survey and Data Collection disclosed potential issues.

1.3 Independent Audit – Process and Methodology

Our methodology is based on achieving consistent and repeatable results across a range of councils while recognising the differences between councils in terms of size, asset base and capacity. A standardised assessment has been made and reported along with 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.

The independent audit assesses each council against the following categories and subcategories.

Asset Knowledge / Data

- Asset Classification / Hierarchy
- Attributes and Location
- Condition Data
- Lifecycle Cost Data
- Valuation, Depreciation and Age / Life Data

Strategic Asset Planning Processes

- Strategic Long Term Plan
- Asset Management Policy and strategy
- Levels of Service
- Risk Management
- Financial Planning and Capital Investment
- Asset Management Plans

Asset Knowledge Processes

Asset Accounting / Valuation

Operations and Maintenance Work Practices

- Operations / Maintenance Management
- Critical Assets





Information Systems

- Asset Register
- Systems Integration

Organisational Context

- 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
Α	At or near best practice	≥ 9.0
В	Advanced level of competence	7.50 - 8.99
С	Core level of competence	6.00 - 7.49
D	Basic level of competence	4.00 - 5.99
DIE WILL	Awareness	2.50 - 3.99
Fig.	Nothing / limited	≤ 2.49

Physical inspection of assets

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

The results of the inspection are reported, however, it is acknowledged that due to the small sample size that limited conclusions can be drawn from the inspections.

Infrastructure backlog

A comparison of the Council's infrastructure backlog (as set out in Special Schedule 7 in 2010/11) against a standard methodology for assessing the Infrastructure backlog was also undertaken. For the purposes of this assessment the infrastructure backlog number is considered to be that cost to bring an asset up to condition rating 3.

The purpose of the assessment is to:

- (a) Comment, as part of the independent audit, on whether the infrastructure backlog is of sufficient size to be of concern to the Council and therefore the Division of Local Government
- (b) Comment, as part of the independent audit, on our level of confidence in the infrastructure backlog number that each Council has specified

Common questions

A common set of questions have also been answered for each council in order to provide a consistent and directly comparable set of results.





2. SUMMARY OF AUDIT RESULTS

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

Overall Asset Management Assessment	D

The overall score of **D** would indicate that the Council is at a **Basic** level of competence in asset management. To improve competence in asset management more work is required in the areas of Operations and Maintenance Work Practices and Organisational Context.





3. ASSET MANAGEMENT ASSESSMENT

Guyra Shire Council	Current Score	Desired score 3yrs	Priority (1-3)	1	2	3	4	5	6	7	8	9	1
Asset Knowledge / Data	5.0	8.0											T
Asset Classification/ Hierarchy	5	11.0											Г
Attributes and Location	7												1
Condition Data	3												Г
Lifecycle Cost Data	5												Г
Valuation, Depreciation and Age/Life Data	6	10_0							H				F
Asset Knowledge Processes	6.0	8.0										8	Ö.
Asset Accounting/ Valuation	6	0,0											H
naset Accounting, Valuation		Mari -	He I										L
Strategic Asset Planning Processes	4.0	8.0											Ī
Strategic Long Term Plan	5												L
Asset Management Policy and Strategy	6	100	- 3										
Levels of Service	3	- 30							-				
Risk Management	4	- 5											L
Financial Planning and Capital Investment	3	- 8		Ш									
Asset Management Plans	3												H
Operations and Maintenance Work Practices	3.0	8.0	1917							W.F		-,	
Operations / Maintenance Management	5												r
Critical Assets	1												t
			10							-			İ
nformation Systems	5.0	8.0											Ī
Asset Register	6	1. 11. 7											L
Systems Integration	4												
Organisation Context	4.0	8.0	100										
Organisational Strategy	4	Allego	14001										Γ
Asset Management Review/Improvement	3	10-11											Г
AM Roles and Responsibilities	5		a better										Г

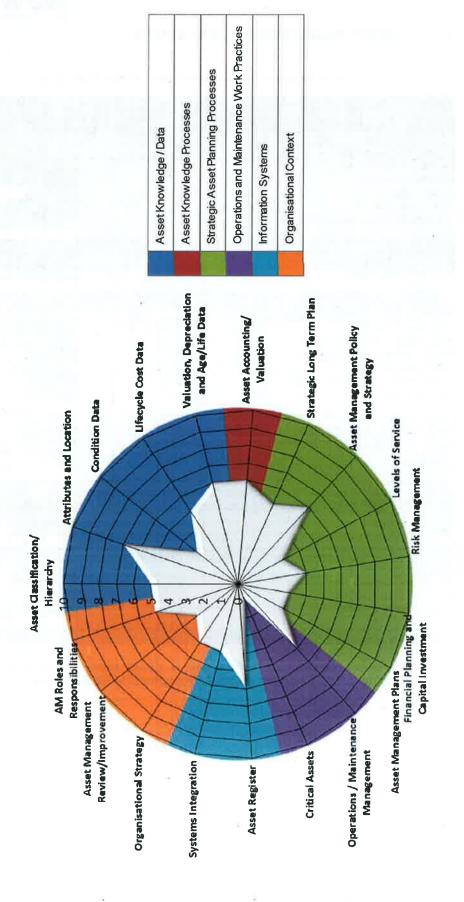
This information is also presented as a radar chart to enable greater visual understanding of the Council's current strengths and weaknesses.

Ref: 6915 DLG NSW - Infrastructure Audit Report for Guyra Shire Council December 2012

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Gap Analysis Assessment Chart - Guyra Shire Council







3.1 Asset Knowledge / Data

Control of the Contro	.O.
Overall category score	D

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

The Council has good asset data for its road assets; however other asset group data is limited, particularly in the parks and recreation asset areas. The road assets are broken down into segments as are the water and sewerage assets.

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

Council's asset data has appropriate attribute information available. The asset data is able to be queried through the Geographic Information System (GIS). No guidelines are available to ensure on-going data management responsibility.

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

Council has carried out limited asset condition testing. A common condition matrix exists for most asset classes however this is not documented and guidelines are not available to ensure condition assessments could be undertaken with consistent results.





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

Council has limited lifecycle cost data available for its assets. Capital costs are capitalised at the end of year. New and renewal asset works are able to be identified in the cost ledger. Lifecycle cost data is not generally utilised in decision making.

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

Depreciation and valuation data is generally of a good standard. Industry standard rates are utilised for valuation however there is currently no assessment of useful life for assets within the Shire.

3.1.6 Asset Knowledge / Data Summary

Asset classification/hierarchy	Information verified with poor quality/coverage
Attributes and location	Information verified with good quality and coverage that covers major infrastructure classes.
Condition data	Some unverified information that covers a limited range of asset classes.
Lifecycle cost data	Information verified with poor quality/coverage/Good level of unverified information that covers major infrastructure classes.
Valuation, Depreciation and Age / Life data	Information verified with acceptable quality and coverage that covers major infrastructure classes.

3.2 Asset Knowledge Processes

Overall category score	C
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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 asset valuations have been recorded against the asset hierarchy for most assets. Processes for capitalisation and valuation have been well developed. Guyra currently resource shares financial staff with Armidale Dumaresq Council for the preparation of financial statements and asset capitalisation.

3.2.2 Asset Accounting / Valuation Summary

Asset Accounting / Valuation	Satisfactory written procedures that are widely and consistently used which covers major infrastructure classes.
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3.3 Strategic Asset Planning Processes

Overall category score	D
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3.3.1 Strategic Long Term Plan

There should be Strategic Asset Management Plan (SAMP) 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

Council has a Strategic Asset Management Plan, however the Plan is an aspirational document and is not fully integrated with other Integrated Planning and Reporting (IPR) documents.

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

Council has an adopted Asset Management Policy that incorporates lifecycle costing and identifies service delivery objectives.





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

A number of Council's Asset Management Plans (AMPs) are in a developmental stage. Whilst these plans have some service level detail, they are at a high level and no community consultation has been undertaken. The draft service levels are not measured and not reported on. For water and sewerage assets, the NSW Office of Water reports back to Council on key performance issues such as sewer overflows etc.

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

Council has a Risk Management Policy in place but has undertaken limited risk assessment of its infrastructure assets. Critical assets have not been identified.

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

Council has a four year Future Capital Works Plan. The Plan covers most asset classes but is aspirational and dependant on funding being available. There is no prioritisation model for projects; however the LTFP incorporates the works program as it currently stands.

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

Council currently has business plans for its water and sewerage assets which are similar in nature to an AMP. Asset management plans for other asset groups are currently being developed. Significant works are required to bring the asset management plans up to an acceptable standard.

3.3.7 Strategic Asset Planning Processes Summary

Strategic Long Term Plans	Satisfactory written procedures which covers major infrastructure classes but they are not widely or consistently used.
Asset Management Policy and Strategy	Satisfactory written procedures that are widely and consistently used which covers major infrastructure classes.
Levels of Service	Unwritten procedures that covers a limited range of asset classes.
Risk Management	Written procedures of limited value that covers some asset classes.
Financial Planning and Capital Investment	Unwritten procedures that covers a limited range of asset classes.
Asset Management Plans	Written procedures of no real value that covers a limited range of asset classes.

3.4 Operations and Maintenance Work Practices

Overall category score	E
Overall category score	E





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

Council currently runs a joint maintenance management program, MatMan, with Armidale Dumaresq Council. Planned maintenance works are identified in MatMan. The maintenance management system (MMS) can identify different work types and collects various works management information. Guyra have not implemented the system to the same extent as Armidale Dumaresq however a new MMS is being introduced across the two councils.

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

Critical assets have not been identified and as such there has been no planning around maintenance and inspection regimes for these assets. There is a local understanding of the important assets and these have been incorporated into emergency response understanding.

3.4.3 Operations and Maintenance Work Practices Summary

Operations / Maintenance Management	Satisfactory written procedures which covers major infrastructure classes but they are not widely or consistently used.
Critical Assets	No discernible procedures

3.5 Information Systems

Overall category score	D

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

Council currently shares an asset management and financial system with Armidale Dumaresq Council under a resource sharing arrangement. The current register is capable of reporting as required and includes an appropriate amount of data. In Guyra's case, not all data is included in the system.

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

Currently there is very little integration between systems. As such there is no single asset register for the Council and multiple asset registers do exist. On a positive note, there is good integration with the GIS, but limited integration with the finance system.

3.5.3 Information Systems Summary

Asset Register	Satisfactory written procedures that are widely and consistently used which covers major infrastructure classes.
Systems Integration	Written procedures of limited value that covers some asset classes.

3.6 Organisational Context

Overall category score	D
Overall category score	J

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

Whilst it is clear that asset management is important to the Council, it is not a driver of organisational strategy. Service levels for assets are limited and do not drive Council expenditure on assets. Staff structure and positions are generally clear with regards to asset management responsibilities; however the joint relationship with Armidale Dumaresq is limited by the resources that can be put into the relationship.





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

Council has a high level Asset Management Improvement Plan in place which is being implemented. However, there is no on-going monitoring of the plan and no reporting back on its status.

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

Asset management roles and responsibilities are clearly identified; however Council is limited by its capacity to provide resources towards asset planning and management. Training is available where identified and is undertaken on an 'as needed' basis.

3.6.4 Organisational Context Summary

Organisational Strategy	Unwritten procedures in most parts of the organisation that covers some asset classes.
Asset Management Review/ Improvement	Written procedures of no real value that covers a limited range of asset classes.
Asset Management Roles and Responsibility	Satisfactory written procedures which covers major infrastructure classes but they are not widely or consistently used.





4. INFRASTRUCTURE BACKLOG ASSESSMENT

The independent audit also considered each council's infrastructure backlog as set out in Special Schedule 7. For comparative purposes the 2010/11 year was used as at the start of the audit all councils had reported Special Schedule 7 as of 30 June 2011 in their 2010/11 Annual Reports.

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)
- (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	
0	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.

P	Green	High level of confidence
F.	Yellow	Medium level of confidence
P	Red	Low level of confidence





Table 1 Infrastructure Backlog Assessment

Assets	Replacement	SS7 Cost to satisfactory	Asset Rating	Confidence in data
Airports	\$0	\$0		
Roads assets	\$59,472,320	\$12,158,000	•	P
Bridges	\$26,235,737	\$2,078,000	•	P
Footpaths	\$683,227	\$341,000	•	P
Water supply network	\$16,909,058	\$2,402,000	•	P
Sewerage network	\$15,650,541	\$325,000	• ,	-
Stormwater drainage	\$2,330,116	\$666,000	•	P
Buildings	\$19,022,881	\$7,000	•	P
Parks	\$5,900,495	\$0	•	-
Recreational assets	\$1,291,000	\$0	•	P
Foreshore assets	\$0	\$0		
Any other assets	\$0	\$0		
Total	\$147,495,376	\$17,977,000	•	P

Our examination of the infrastructure backlog for the Shire of Guyra indicates, we believe, that the extent of the backlog is significant and actions will be required to bring the asset backlog under control. In particular roads, bridges, footpaths, water supply network and stormwater drainage represent a challenge for the Council, given the extent of the backlog in relation to the overall value of the assets.

Whilst we have a degree of confidence in the overall backlog number reported by Council we have concerns with the methodology to determine the individual asset class backlog.





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 register.

The assets inspected included roads, buildings, bridges, footpaths, kerb and gutter and sewerage assets.

6. BEST PRACTICE

The independent onsite audit program provides a unique opportunity to highlight best practice asset management processes and systems across the state. For the purposes of this audit program, any individual component that scored a 9 is considered to be at or near best practice.

No elements were considered to be at best practice at this time.

7. WHAT ARE THE UNIQUE CHALLENGES FOR GUYRA SHIRE COUNCIL?

Guyra is a small rural shire located close to Armidale City. The council has limited resources to manage its assets however, like a lot of small councils, it uses a range of innovative measures to maximise the maintenance and performance of its assets.

8. SUMMARY OF NEEDS, ISSUES AND BARRIERS

Council is part of a shared services arrangement with Armidale Dumaresq Council, unfortunately due to the limited resources available it may not be able to keep up with the ongoing improvements to asset management that are being implemented. The implementation of the new systems will require scarce resources which may not be available.





APPENDIX A

Asset Management Questionnaire





Questionnaire

Are all assets for each asset class recorded in an asset register?	Yes
Are assets recorded in segments or components appropriately?	Partially
Is the asset register updated regularly?	Partially
Does the asset register link to the general ledger?	No
Does Council assess the condition of assets each year?	No
Is a sample of assets for each asset class assessed?	Yes
Does Council have a condition rating system?	Yes
Are condition assessments taken into account when preparing the operational plan?	Partially
Are useful lives of assets assessed each year?	Partially
Does Council have a confidence grade for asset information?	No
What database and computer systems are used to record assets?	Matman
Does Council's GIS system have the capacity to include infrastructure?	Yes
Is the GIS system linked to the asset management database?	Partially
Have any data integrity issues been identified in your review?	No
Have risk assessments been undertaken for critical assets?	No
Are working groups/committees in place to deal with infrastructure?	Partially
Are Council staff adequately trained in asset management requirements?	Partially
ls Council's backlog realistic and based on good data?	Partially
Has Council appropriate records to support all aspects of asset management?	Partially
Are the results of the audit consistent with the results of the desk-top review?	Yes

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