

WOLLONGONG CITY COUNCIL CASE STUDY ON STRATEGIC, TACTICAL AND OPERATIONAL SERVICE LEVEL DEVELOPMENT USING NAMS.PLUS TEMPLATES

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Abstract

Wollongong City Council is undertaking a major internal project – the Infrastructure Management Framework (IMF) to deliver a range of asset, operational, and supporting systems management objectives. Part of the IMF project is the delivery of Asset Management Plans by June 2011. The IMF project supports Councils parallel Integrated Planning and Reporting (IPR) framework project.

WCC has chosen to use NAMS.PLUS as the base for the asset management plan writing, building on the success of this approach with other Councils. The NAMS.PLUS templates have been used for guidance, base plan structure and asset lifecycle analysis.

The IMF project incorporates improvements in project management, asset management, operational management, and supporting information systems. As a result of the wider corporate focus of the IPR/IMF projects WCC has extended the NAMS.PLUS service level guidance to consider operational service levels, and associated service standards in the asset management service level development.

This operational analysis builds on Wollongong City Council strengths in operational service delivery, and will ultimately lead to Community, Technical and Operational Service Levels being delivered, managed and reported within a fully integrated framework.

The case study briefly introduces the IMF project, and then examines Councils journey in considering and documenting strategic, tactical and operational service levels. The methodology used to gather service level information will be outlined, and the project results to date analysed. The case study will conclude with a brief examination of the service level improvement items that have been added to the asset management plans.

Key Words: Level of Service – Strategic, Tactical, Operational. NAMS.PLUS Template Integration. Integrated Management Framework

Introduction

As part of the Wollongong City Council Infrastructure Management Framework (IMF) Project asset management plans were developed using the NAMS.PLUS template as a base. Asset Management Plans have also been integrated with Integrated Planning and Reporting service areas.

Asset Management Service Levels were documented at a Strategic and Operational level and then translated to tactical service levels for the asset management plans. The processes used for the documentation of the service levels have been outlined in this case study, and the results of this process,

including asset management improvement items have been analysed.

Wollongong CC IMF Project

The Wollongong City Council Infrastructure Management Framework (IMF) project commenced in July 2010 and is expected to conclude December 2011.

The objectives of the IMF Project are to develop a comprehensive, fully integrated infrastructure management framework that enables the planning, delivery and resourcing of Council's Infrastructure delivery programs, supporting processes and information management systems by July 2011.

To implement the adopted infrastructure management framework through a systematic change management process including delivery of system, process and structural modifications and comprehensive training and support programs within agreed timeframes.

The agreed outcomes of the IMF Project are the delivery of an Integrated Infrastructure management framework which will provide the following outcomes –

1. Asset management policy, strategies and plans to address Integrated Planning & Reporting requirements
2. Asset management processes, systems and resources to support the developed asset plans
3. Project Management processes and supporting systems for all Council projects
4. Governance framework for management and oversight of all infrastructure programs
5. System and process improvements requirements
6. Resource requirements to support the above; and
7. Related training and development programs for staff

Asset Management Plans have been developed during the project as part of good business practice and to support the Integrated Planning and Reporting requirements. A central part of the development of Asset Management Plans has been the collation and documentation of WCC service levels.

IMF Project Governance

The governance of the IMF Project has been achieved using a Project Control Group (PCG) which has met monthly, with specific approval meetings held more frequently as required. Given the organisation wide scope of the IMF Project the PCG has included the Director Infrastructure and Works (Project Sponsor and Chair); Manager Infrastructure; Manager Works; Manager Property and

Recreation; Manager Finance; IMF Project Manager; Manager Infrastructure Systems and Support; and Business Improvement Advisors (JRA)

Having effective project governance arrangements has been extremely useful in the delivery of the IMF Project, and in ensuring organisation wide decision making and adoption.

Using the NAMS.PLUS Templates

Council joined NAMS.PLUS, and Council staff have been trained in the use of the NAMS.PLUS template, spread sheets and associated guidance.

The NAMS.PLUS template and data analysis spread sheets have been used as the base documents for the development of the Wollongong City Council Asset Management Plans. As a result of the Integrated Planning and Reporting requirements, and Councils Service Plan requirements, the NAMS.PLUS template was adapted, and added to as the asset management plan writing developed.

The NAMS.PLUS template provided a very good starting point and guidance, even for a Council the size of Wollongong City.

The NAMS.PLUS Template Service Level format and guidance was used to develop the Strategic and Operational service level data capture forms (attached) and to inform the development of the tactical service level tables inserted into the asset management plans.

Councils Journey in considering Strategic, Tactical and Operational Service Levels

Councils have been delivering services at broadly agreed community levels since they were first started. Over time community requirements for services, and willingness to pay have changed – and again this has been reflected in the services Council delivers.

As Wollongong City Council embarked on the IMF Project, and the writing of Asset Management Plans, it was known that a

range of service levels were being delivered in each asset / service area – with the rationale for these service levels documented in strategic planning documents; individual asset service plans; leases and community agreements; legislative requirements; work cover agreements and a range of other documents and plans.

Regular IRIS Research Community Surveys have demonstrated that apart from a few specific minor areas, Council has been broadly delivering the services required by the community.

The task for the asset management plan writers was to capture these service levels at a strategic, tactical and operational level – using the NAMS.PLUS template for guidance and then document them.

Given Wollongong City Council's strengths in the City Works division in the actual delivery of service levels the decision was taken to involve key City Works supervisors in discussing and documenting the service levels currently being delivered.

Thirroul Community Centre, Wollongong



Methodology used to gather service level information

Asset Management Plan writers conducted a literature search in Councils document management system to ensure that all strategic and planning documents that contained or set service levels were referenced. Subject Matter Experts were used for asset management plan writing, and this allowed for the capture (from experience and referencing) of legislative and regulatory

service level requirements. Checks to ensure all relevant strategies and plans had been considered were also completed with service delivery managers, and planning staff.

The capture of operational service levels was commenced using the attached data capture form, and by interviewing operational supervisors, community centre managers, and facility managers to ensure that relevant and up to date information was captured.

Service Level Discussions with City Works staff



Operational service delivery is a strength of Wollongong City Council. It was found that there was a range of documentation, schedules, and operational planning documents – but that there were also some gaps in documentation. Further updating of operational service level documentation will be attempted as part of the asset management improvement plan.

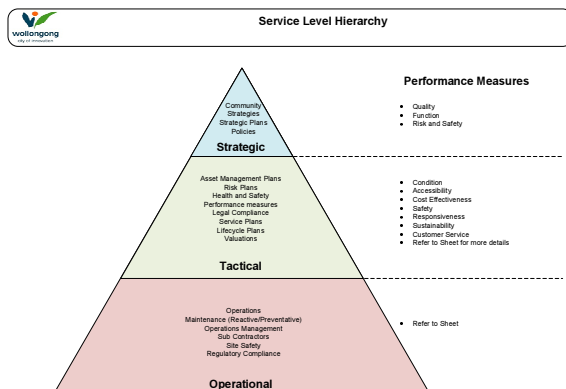
The Operational Service Delivery data capture was considered a success involving staff across City Works in the service level discussion.

Developing Tactical Levels of Service for Asset Management Planning

Having collated the strategic service levels – (from legislation, regulations and a range of planning documents), and also developed the operational service levels delivered by collecting information from City Works the asset management plan writers set about developing tactical service levels using the NAMS.PLUS template for guidance. Tactical service levels act to translate strategic

statements to operational actions and service delivery as shown in the diagram below.

Service Level Hierarchy



For each asset service area, service levels were documented as Community Levels of Service and as Technical Levels of Service.

The asset service areas have been aligned with the Integrated Planning and Reporting requirements.

The translation of strategic and operational service levels into tactical service levels took some time and provoked much discussion between IMF Project team members, PCG members and other key stakeholders.

There is a real temptation to develop service levels that are higher level covering words. The IMF Project was determined to apply more robust processes to service level documentation and development to ensure that Wollongong City Council has a strong platform for service delivery, measurement and future adjustment of service levels as required.

Project Results

The IMF Project delivered first draft Asset Management Plans at the end of June 2011.

These plans are currently being consulted on internally, and then will be integrated into the Asset Strategy and Integrated Planning and Reporting outputs.

Service level documentation and development has been an integral part of this project.

The adoption and delivery of service levels is part of an on-going organisational discussion that is occurring within the IMF and IPR Project frameworks.

To date the IMF Project has been successful in delivering the required outputs, and it is expected the development of asset management maturity and practice will continue for some years to come.

Asset Management Improvement Items – Service Levels

As is typical with asset management plan development, the IMF Project team identified a number of asset management improvement items that will be incorporated into work programmes in the coming years as asset management maturity, practice and planning is improved. Examples of the Asset Management Improvement Items that relate to Service Levels are:

Review IRIS survey categories and identify refinements necessary to allow current performance against identified service standards without necessarily losing the value of historical results

Establish and implement performance measures to report against service standards and performance targets

Review the current service standards to determine cost implications and current performance against these standards

Develop activity based service standards at an operational level for maintenance and asset operations and allocate budgets accordingly to ensure these standards can be met

Further develop performance measures to allow current performance against identified service levels to be consistently measured

Review business processes for leases/licences to ensure maintenance and renewal requirements are being met – consistent with service standards currently being developed

These service level improvements will be considered by Wollongong City Council management and Councillors, and have yet to be approved. They are offered as examples only.

Conclusion

Wollongong City Councils IMF Project has successfully delivered asset management plans within the required timeframes.

The IMF Project has involved staff from across Council to document and develop service levels in each asset service area.

The use of the service level data capture forms, developed from the NAMS.PLUS template guidance, allowed asset management plan writers and key operational supervisors to document the operational and tactical service levels being delivered.

The involvement of planning, service delivery and operational staff in documenting service levels has started a service level discussion that continues within Council.

Service Level improvement items have been identified as part of the asset management planning process, and once agreed and adopted, will be implemented in the coming years.

reference as to how this data capture developed during the project.

References

Wollongong City Council's Strategic Directions 2011-14

Wollongong City Council's Management Plan 2011-14

Wollongong City Council Infrastructure Management Framework Project documentation

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

IPWEA NAMS.PLUS Template and associated documentation.

Acknowledgements

Peter Koford, Director Infrastructure and Works, Wollongong City Council for support and permission to publish this paper.

Appendix – Service Level Capture Forms

The capture of service levels was based on an adaptation of the NAMS.PLUS template. The partially completed data capture form for Plant and Equipment is included below for



					
Service:	Plant and Equipment	Activity:		Code:	
Area:		Input Area:		Date:	

SERVICE LEVEL DETAILS

Activity Definition

Provision of Plant and Equipment Assets to Council (Major & Minor Plant/Equipment and Motor Vehicle Fleet Assets).

Excludes Rural Fire Service and SES Assets

Performance Distress & Defects

Performance Criteria

Performance Standards

Legislative and Technical Constraints

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
Community Levels of Service						
Quality (Service Delivery)	Provision of a modern safe well maintained and visually presentable plant & equipment asset fleet that effectively supports council service delivery programs.	Community perception of Plant & Equipment Assets in service delivery. Community Survey. Replacement program maintained.	<i>Positive Community Survey results in service delivery quality and perception of plant.</i> <i>Performance against scheduled replacement programs 6 -12 months of scheduled replacement.</i>			Examples of quality response – Quality of ground care of sporting and playing fields, Cleanliness of streets after sweeper cleaning, Life guard services ability to respond etc.
Function (Service Delivery)	<i>Ensure the functionality of the plant & equipment meets the operational demands required to support service delivery of council</i>	<i>Plant acquired against specification determined by service level requirements and specific operational needs and performance.</i>	<i>Percentage of plant that is acquired using developed service level specification.</i>			
Risk and Safety	<i>Apply risk management principles in the acquisition and operational use of</i>	<i>Incident / accident reports relating to plant.</i> <i>Scheduled</i>	<i>Risk Management principles applied to every purchase.</i> <i>Number of</i>			Service and Inspection & testing regimes specified in Hansen

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
	<p><i>council's plant assets to reduce hazards and increase safety standards.</i></p> <p><i>Plant & Equipment is maintained and inspected on regular basis and complies with all relevant legislation.</i></p>	<i>maintenance and inspections performed</i>	<p><i>injuries/Incidents reported relating to plant.</i></p> <p><i>Maintenance and inspections completed as scheduled</i></p>			
Technical Levels of Service						
Lifecycle Management	<i>Provision of a modern safe well maintained Plant & Equipment Assets.</i>	<i>Renewals program is maintained.</i>	<p><i>Replacement of scheduled renewals</i></p> <p><i>within 6 – 12 months of end of life</i></p>			

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
Utilisation (Operational and Availability) Use	<i>Ensure that plant is available and meets the operational demands of council</i>	<i>Operational Utilisation Availability of Major plant</i>	<i>Annual Operational Utilisation target of 70% 90% availability</i>			Performance Statistics measurement monthly through Hansen statistics report
Acquisition (Functionality)	<i>Ensure functionality of plant and equipment assets in the acquisition process effectively support operational demands specified by service level delivery programs. Emphasising efficiency gains and increase safety levels</i>	<i>Develop specifications for the acquisition process ensuring functionality for Plant & Equipment is specified through services levels agreements, consultation & agreement with end users.</i>	<i>Apply Acquisition procedure for all procurement actions.</i>			

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
		<i>Sustainable Financial Management</i>	<i>Compliance with financial capital budget.</i>			Finance One reports
Disposal	<i>Disposal of expired and surplus plant & equipment assets</i>	<i>Income generated from sale of assets</i>	<i>Meet projected income budget for plant & equipment</i>			Finance One reports
Maintenance/Service	<i>Servicing and corrective maintenance schedules performed in accordance with Manufacturers</i>	<i>Maintain schedules forecasted are maintained</i>	<i>Number of Monthly completion rate</i>		<i>90% completion on time.</i>	Performance Statistics measurement monthly through Hansen statistics report

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
	<p>recommendations.</p> <p>Plant & Equipment are maintained to an appropriate standard.</p>	Requests for unscheduled repairs	Number of Monthly Plant & Equipment breakdowns		Number of monthly breakdowns	
Condition	Monitor condition of plant & equipment through Inspection & testing regimes	Condition assessment of plant & equipment recorded in asset management system.	Number of recorded condition assessment results for plant & equipment		70%	Performance Statistics measurement monthly through Hansen statistics report
Safety	Ensure plant & equipment for safe to operate and minimises risk of injury to council employees and public.	Use Plant Assessor to complete static risk assessment report – as scheduled through Hansen	Completion of all reports as scheduled in Hansen	Plant Inspected every 2 years and is currently complete for all major plant	100% completion by due date	Reports are managed through external service provider “Online Assessor”

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
Compliance	<i>Ensure plant & equipment complies with all relevant Federal, State and local laws including Occupational Health & Safety Acts and regulations.</i>	<i>Any non compliances or infringement notices</i> <i>RTA safety inspection completed by scheduled date</i>	<i>WorkCover non conformance notices for unsafe plant & equipment</i> <i>Number of inspections completed by due date</i> .			Hansen schedule for RTA inspections completed
Cost Efficiency / Operating costs	<i>Optimise the cost efficiencies through effective maintenance and service levels</i>	<i>Compliance with budget & volume of work completed</i>	<i>Operating & Maintenance costs within budget.</i>			
Operational Levels of Service						
Customer Service	Provision of mechanical support service operation for repair & maintenance	Ability to respond to the scheduled and unscheduled maintenance requirements of council's plant &	Number of completed maintenance activities performed each			

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for
	of council's plant & equipment assets.	equipment assets	month			
Operating, maintenance and cleaning	Provide manufacturers operational & maintenance manuals for newly procured assets.	Ability to provide manuals for all procured plant & equipment assets.	Number of plant procured without manuals			
Training	Provision of initial induction training for plant & equipment during the acquisition/installation process	All relevant staff inducted and trained on new plant and recorded				
Environmental	Ensure environmental compliance of plant & maintenance activities.	Environmental risks for plant & equipment identified and controlled	Implementation of control measures recommended by risk management plan for plant & equipment.			Environmental Risk assessments for plant and Council sustainability policy.

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response	Star Rating Aiming for

ACTIVITY SPECIFICATION

<div></div>					
Service:		Activity:		Code:	
Area:		Input Area:		Date:	

Work Method Requirements			
Checklist			
Item	Description	Yes	No

Comments

Work Locations

Area Name	Sector Number	Output Reporting Units	Job ID	Date

Performance Requirements

Classification	Distress/Need Level	Recording	Response Time	Compulsory Level	Intervention

Existing Services	Description	Community Expectation	Performance Measure Process	Performance Target	Current Service Level Response	Acceptable Level of Service Response

Brief biography on the Presenter:

Ross Waugh, Director, Waugh Infrastructure Management



Ross is the founder of Waugh Infrastructure Management and is an asset management and systems integration specialist with over 25 years experience in local government infrastructure asset management and engineering. Ross has been consulting in infrastructure

management for 12 years, in the areas of transportation, utilities, community facilities and property. Ross has contributed to a number of New Zealand national data capture, advisory and infrastructure standard setting projects, and is a section review author in the current IIMM update.

Ross is passionate about assisting people to practice infrastructure asset management holistically and comprehensively yet practically. His strategic analysis of client practices is balanced with a strong practical background that always ensures results not theory. Ross has experience of four cycles of integrating infrastructure asset management planning with long term financial planning within the New Zealand context.

Ross takes an active interest in on-going International infrastructure asset management trends. Ross has presented internationally on infrastructure asset management, most recently in October 2009 at the US Transportation Research Board of the National Academies, National Transportation Asset Management Conference. Ross has also provided input into International Asset Management Practice Reviews.

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Mike Dowd, IMF Project Manager, Wollongong City Council



Mike is a qualified civil engineer with over 20 years experience in engineering, project management and change management. Mike has worked for 15 years in state government agencies including the Roads and

Traffic Authority and Sydney Catchment Authority in engineering, project delivery and information system improvement roles. He has also worked as a contract project manager in Australia and overseas in fields as diverse as motor finance, telecoms, retail, ICT and traffic management.

Mike has worked in local Government at Wollongong Council for the last 3 years managing civil construction and maintenance programs and park management functions. In June 2010 he was seconded to lead a team to develop and implement Council's Infrastructure Management Framework (IMF), incorporating asset management, project management, capital works planning and operational, information and system improvements.

Mike is passionate about organisational improvement and his broad and diverse experience provides his strong focus on improving the relationships and links between organisational strategic and corporate planning and the practical, operational and delivery programs.

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