

Identifying and improving the levels of service provided by WALGA's "Report on Local Government Road Assets and Expenditure"

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Abstract

This paper describes a stakeholder consultation process that took place to review a specific technical report produced annually by WALGA. The aim was to clarify and improve the levels of service (LOS) provided by the Report. Despite its rather dry title, the "Report on Local Government Road Assets and Expenditure", the contents influence decisions and perceptions of Councils in a myriad of ways. Each year, WALGA invest \$95,000 and 0.1FTE to create this Report for its Local Government members. WALGA collates and evaluates road asset and expenditure data received from Western Australia's 139 Councils to provide technical and cost information. This study identifies how the Report is used, what it does well and opportunities for improvement. The process adapts the concept of LOS from the asset management domain to define LOS for the Report. Findings are relevant to all involved in technical report writing for government stakeholder groups.

1. Introduction

Effective Asset Management aims to minimise costs of services provided while meeting stakeholders' expectations and fulfilling the objectives of the organisation investing in the service (AustRoads 2006). One aspect of this is identifying gaps between current and desired levels of service (LOS) (INGENIUM 2006). The Western Australian Local Government Association (WALGA) is the representative industry body for the Western Australian (WA) Local Government (LG). WALGA invest \$95,000 and 0.1FTE (Full-Time Employee) annually to create the 'Report on Local Government Road Assets and Expenditure'. This annual report was initially created for Local Government users, however an increase in scope has led to a number of additional stakeholders utilising the Report. In this paper, the Report's stakeholders and LOS along with opportunities for improvement are identified and presented.

1.1 Background to the Report

Ownership and control of the Australian road network lies with the State, Territory and Local Governments. Western Australia has 139 LG Councils that hold the legislative responsibility for the delivery of a range of services to their communities including management of the local road network. Collectively, the WA LG manages road networks worth an estimated \$17.72 billion which includes over 127,000 kilometres of roads; representing an estimated 72% of the WA road network (Shepherd 2009). The LG road network is a premium asset of the State and

of great interest to many stakeholders. Along with influencing the image of Councils; the Report also provides an overall view on the state of, and funding requirements for, the WA's road network. The Report provides details on the commitment of resources by LG towards maintaining and improving the road network (Shepherd 2009). It discusses both technical and cost data and is based on expenditure statistics provided by the WA LG Councils. This data is based on three asset related values 1) Replacement Value (RV): The current cost of replacing the road assets, 2) Written down value (WDV): The current value after allowing for depreciation, and 3) Required preservation expenditure (RPE): The estimated cost of maintaining the roads at their current condition. The Report currently gets distributed as a paper hardcopy, with an online version available.

1.2 Project undertakings, associated motivations and themes addressed

The review into the Road Assets & Expenditure Report aimed to formally identify and improve the LOS provided to stakeholders. The project undertakings address the wider relevance to asset and road maintenance reporting through examining the way in which technical information is accessed by a broad range of potential users. Project specifications are listed in Table 1.

Project Undertakings	Motivated by	Relevance to asset reporting
Identify how the Report is currently used by its stakeholders, and what they like about it.	<i>Identify the LOS provided by the Report</i>	Understand how non-technical users access technical information
Make recommendations to bridge service quality gaps between current practice and stakeholder expectations of the Report.	<i>Improve the LOS provided by the Report</i>	Improve user understanding of technical details provided, Increase flexibility of data provided, Address specific stakeholder requirements.
Through the recommendations, make the Report more useful, relevant and comprehensive as a reporting tool for its stakeholders.	<i>Improve efficiency of WALGA's annual spend</i>	Improve the process of attaining data from LG, Incorporate relevant road safety information.

Table 1: Project Objectives, Motivations and Themes

1.3 Effective reporting of technical information to non-technical stakeholders

Sheppard et al. (2006) view engineering practice as being solely technical in nature, mirroring the traditional image of the discipline. However many studies have identified the importance of developing communication skills to discuss this technical information in an accessible way with non-Engineers. One example is Watson (2005) identifying that beyond documenting technical information for their own reference and technical peers, Engineers need to regularly convey information to non-technical members from the community. Zussman (1985) identifies that years of practice in a technical background leads to knowledge which Engineers believe is of general sense. Whalley (1997) acknowledged the difficulty imposed by non-technical members in understanding this technical information created and used by Engineers. Non-technical users in general tend to find the information provided by technical members hard to comprehend.

1.4 Importance of providing flexibility when distributing data

Developments in information systems and information technology have increased drastically. There is a larger use of online tools and interactive information since the Report's original inception. Banker and Kauffman (2004) identified the use of these developments to improve innovation in the transition of digital data; improving links between businesses and stakeholders. By being able to manipulate and 'play' with the data, understanding is improved by those that receive it.

1.5 Stakeholder engagement during reviews

This project used stakeholder consultation as the primary source of information to identify and improve the Report's LOS. This is because ongoing stakeholder engagement between researchers and stakeholders provide opportunities for the two groups to learn about one another (Keown et al. 2008). While conducting systematic reviews; Keown et al. (2008) identified various engagement opportunities during the life of a review. One key attribute that most successful organizations have is regular stakeholder consultation with associated feedback analysis (McPherson 2005).

2 Methodology

The stages undertaken in this project are summarised in Figure 1. For in-depth details of the methodology, including all steps taken to create the survey, hold the workshops & meetings, and the Multi-Criteria Decision Analysis; the reader is referred to the primary author's thesis.

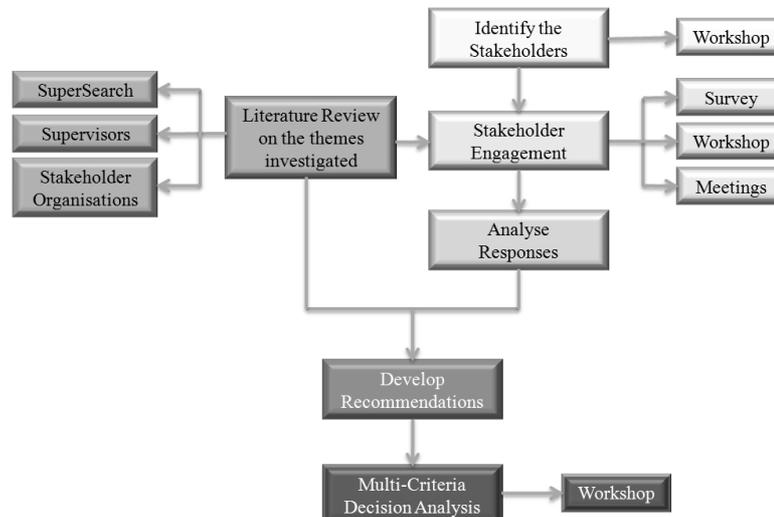


Figure 1 Project Plan

2.1 Stakeholder identification

A workshop held at WALGA was undertaken to identify the stakeholders of the Report. Scores were then assigned to each stakeholder group to determine which to approach for the project, based on the; 1) Estimated level of interest the stakeholder would have in the project, and the 2) Estimated potential benefit from the stakeholder's involvement in the review. Three Government stakeholder groups and four non-Government stakeholder groups were identified. In total, these groups included 54 stakeholder organisations other than the 139

Local Government Councils of WA. Based on the findings of the workshop, a shortlist was created, which was further split into three groups:

1. Western Australian Local Government Councils
2. High Interest Stakeholders (HIS): *This group included: The author of the Report, IPWEA, MRWA, ORS, WALGA and UWA.*
3. Other stakeholders of Interest (OSI): *This group included the: ARRB, PATREC, DLGRD, RAC, Sister Agencies and WAGC.*

2.2 Stakeholder consultation

Surveys are the most effective tool used to gather data from a diverse, large-scale audience when there is a high level of responses required and/or limitations in contacting them individually. Web-based surveys were therefore used in the project for LG. A benchmark target of 25 to 30 percent of WA LG (35 – 42 Councils) and a 50:50 Regional/Metropolitan split was set by WALGA. The survey was piloted by members from WALGA and IPWEA. A two hour workshop was held with the HIS. This required high levels of ‘idea-sharing’ to identify as many future directions as possible. The workshop was separated into three segments. The first two involved collaboratively filling in individual worksheets, whereas the final was group presentations of the major findings. The OSI were representatives from stakeholder organisations that did not know each other well. Additionally, these stakeholders were from diverse industrial backgrounds. The expected levels of interaction and difference in timetables between these stakeholders did not justify the use of a workshop. Meetings and teleconferences were held with members from this group.

79 survey responses were received from the 139 LG Councils yielding a final survey response rate of 57%. A second workshop was held with members of WALGA and HIS to assess the results of the survey process. The criteria against which each response was assessed are described below.

1. LG satisfaction (*How satisfied is LG with the recommendation?*)
2. Impact to WALGA (*What is the impact of the recommendation to WALGA?*)
3. Impact on member administration (*What are the LG requirements to make it happen?*)
4. Impact on technical requirements (*What resource changes are needed to make it happen?*)
5. Impact on WALGA administration (*What administrative changes are needed?*)

3 Project Results

This Section provides a summary of the results. For full details, refer to the primary author’s thesis.

3.1 How is the Report currently used by its stakeholders?

Survey responses revealed that 67% (53 responses) of LG use the Report, whereas 33% (26 responses) do not. The primary purpose of the Report is directed at “Expenditure Planning and Review”, and this was expected to score highly. However, only 15 of the 53 respondents (that use the Report) identified this as a use. ‘Benchmarking Councils’ was the main use of the Report by all stakeholder groups. Observing the overall state of the WA LG road network and identifying the sources of road funding were also highly rated. The HIS rank benchmarking as most important with the ‘Financial values (WDV, RV, RPE)’ rated second.

3.2 What do the stakeholders value about the Report?

The second question asked what the stakeholders liked about the Report. Benchmarking capabilities was again, the overwhelming favourite by LG and HIS. Collation of industry wide data and identification of road funding sources were also rated highly. The road preservation information provided by the Report was not highly valued through this question.

3.3 Recommendations on the future direction of the Report

Based on the stakeholder consultation, recommendations were developed for each of the themes identified. Recommendations came under three categories, modifications to the 1) Content of the Report, 2) Presentation of information and 3) Method of distribution.

3.4 How could the collection of data from Local Government be improved?

Through the survey, 61% (40 respondents) of LG said that the data sending process (to WALGA) was satisfactory and did not need to be changed. The remaining 39% (26 respondents) of respondents, however, said that the process needed to be improved due to:

- Difficulties in completing the forms provided (Due to staff turnovers etc.)
- Difficulties in contacting someone to discuss the requirements with, and
- Expectations of more interactive processing

3.5 Ranking of recommendations

The scores for each recommendation from the Multi-Criteria Decision Analysis were plot to identify the top recommendations of the project (See Figure 2). The scores represent the ‘LG score (rating)’, and the ‘ease of implementation’ to WALGA. Area 1 is the preferred quadrant as it implies the recommendation is approved by LG and provides a low impact to WALGA during implementation. This helps to identify the recommendations which are appropriate to implement. As a result of this project, ten recommendations were immediately auctioned by WALGA.

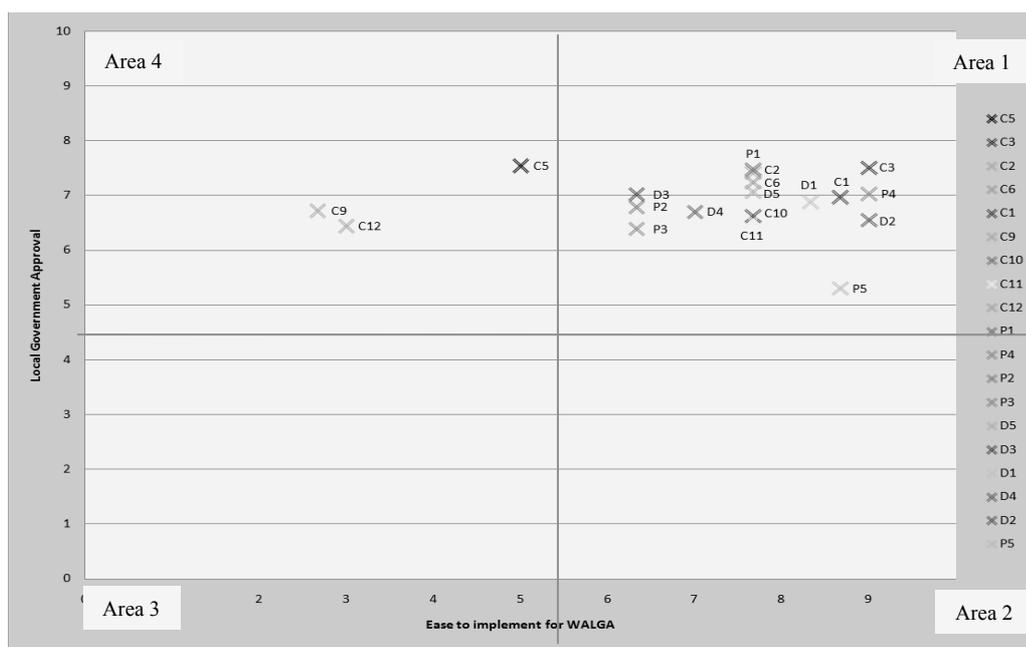


Figure 2 Two-dimensional view of assessment results

Rank	Recommendation	
1	C3	Include a definition of what is included under road assets
2	P4	Separate the body and Appendix by a cardboard break
3	C1	Include a non-technical executive summary in the Report
4	D2	Provide numerous copies of a concise document, with the executive summary, and information of where to obtain a copy of the Report
5	D1	Interactively present the information to Council members during RRG's

Table 2 Top five recommendations of this review

4 Discussion of Results

4.1 Effective reporting of technical information to non-technical stakeholders

Only 28% of those that use the Report identified using the technical information as a use. Technical details, such as of road preservation information, was ranked 11th by LG and 7th by the HIS. The technical information on the preservation of the roads is a primary purpose of the Report. This lack of use represented a major issue to be addressed to ensure WALGA maintained effective AM and efficiency on their annual investment. Stakeholders suggested providing sample calculation (to identify how the values are created) to improve the understanding of what the numbers meant, and bolster confidence in the validity of the data presented. This was reinforced by LG rating 'improved definitions' and 'sample calculations' highest when rating the content of the Report. Six of the top ten recommendations were to improve users understanding of the technical details provided by the Report. WALGA will be implementing these recommendations in the next Report.

4.2 Importance of providing flexibility when distributing data

Improving interactive capabilities was raised during stakeholder consultation. Numerous stakeholders wanted an option to sort and present data in different groups and categories. Providing an excel format for the appendices allowing it to be more interactive was strongly rated by LG. WALGA agreed to the importance of making the transition to interactive data.

4.3 Improving relationships with stakeholders through engagement in reviews

Literature on the topic, and findings of this project, has reinforced the importance of understanding the audience and engaging stakeholders in systematic reviews. Through engagement in the review, stakeholders that initially did not use the Report mentioned an improved understanding of what it provided, as well as optimism to use it following the changes made in this review.

4.4 How to effectively attain data from stakeholders

Consultation found an essential requirement for two key rules during the attainment of information; 1) There must be a means of communication to discuss the requirements, and 2) More training and guidelines need to be provided when requesting information that is to be calculated.

4.5 Limitations of this project and improvement opportunities

Limitations were primarily due to restrictions in the timescale of the project. Future reviews, however will review the timing and consultation approaches to ensure the widest possible engagement for relevant stakeholders. The major area for improvement is scoring the criteria in the analysis process. The use of alternative scoring techniques (such as the Analytical Hierarchy Process) would allow ranking to be compared and validated.

5 Conclusion

The first project objective was to identify how the Report is used by its stakeholders, and what they liked about it. Key findings are that stakeholders of the Report highly value the benchmarking capabilities provided by the Report but many do not identify the technical information in the Report as a primary use. The second project objective was to develop recommendations to bridge service quality gaps between current practice and stakeholder expectations of the Report. Most of the recommendations developed through stakeholder engagement are to be actioned. The final project objective was to make the Report more useful, relevant and comprehensive as a reporting tool for its stakeholders. Four themes were used to review the Report. These themes were identified by literature as 1) improving users understanding of the technical details provided, 2) laying the foundation for improving flexibility of the data provided, 3) investigating the possibility of incorporating road safety data information, and 4) meeting stakeholder requirements.

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