

VICTORIA

Auditor General
Victoria

Management of roads by local government

*Ordered to be printed by Authority.
Government Printer for the State of Victoria*

ISSN 1443 4911
ISBN 0 7311 5988 8



AUDITOR GENERAL
VICTORIA

The Hon. B.A. Chamberlain MLC
President
Legislative Council
Parliament House
MELBOURNE

The Hon. A. Andrianopoulos MLA
Speaker
Legislative Assembly
Parliament House
MELBOURNE

Sir

Under the provisions of section 16 of the *Audit Act* 1994, I transmit my performance audit report on *Management of roads by local government*.

Yours faithfully

J.W. CAMERON
Auditor-General

4 June 2002

Contents

	Foreword	vii
Part 1	Executive summary _____	1
	<i>Introduction</i> 3	
	<i>Audit objectives and scope</i> 3	
	<i>Audit conclusion</i> 4	
	<i>Audit findings</i> 5	
	<i>Recommendations</i> 9	
Part 2	Background _____	19
	<i>The road network</i> 21	
	<i>Funding arrangements</i> 21	
	<i>Importance of asset management</i> 23	
	<i>Recent asset management reviews</i> 24	
	<i>Audit objectives and scope</i> 25	
	<i>Period covered by the audit</i> 27	
	<i>Compliance with auditing standards</i> 27	
	<i>Assistance to the audit team</i> 28	
Part 3	Adequacy of road asset management practices and outcomes _____	29
	<i>Best appropriate asset management</i> 31	
	<i>Extent of compliance with best appropriate practice</i> 32	
	<i>Weaknesses with the distribution of Commonwealth funding</i> 44	
	<i>Scope for improving departmental support</i> 46	
	<i>Effectiveness of asset management practices</i> 50	
Part 4	Public accountability framework _____	55
	<i>Introduction</i> 57	
	<i>Scope for improving accountability</i> 57	
	<i>Collection of council performance information</i> 63	

Foreword

The effective management of local roads is a core function of local government. Councils should seek to maintain road infrastructure in a condition that optimises its useful life and meets community needs over the long-term.

Improved information on the condition of major infrastructure assets would enable councils to make better informed decisions about what is required to fully maintain roads and the consequential financial impact of those decisions. While this may have been difficult during the period of council rationalisation and rate capping, those influences no longer restrict councils from addressing the important issue of road maintenance.

This audit was conducted against a background of similar recent reviews of local government asset management. The findings from this audit largely confirm the findings of the reviews of others, including local government itself. This report identifies the specific practices, both good and poor, of individual councils. However, it is important to emphasise that I am satisfied such practices are not just confined to the 9 councils covered in detail in this report.

It is my expectation that local government and those who support it will respond positively to the observations and recommendations made in the report, both through debate and through charting a course which provides a more coherent and effective long-term plan of action to this important area of local government.



J.W. CAMERON
Auditor-General

4 June 2002

Part 1

Executive summary

INTRODUCTION

1.1 The Victorian road network represents approximately 18 per cent of the Government's total investment in infrastructure with expenditure on the construction, upgrade and maintenance of roads in excess of \$600 million annually.

1.2 VicRoads is the statutory authority responsible for the construction and maintenance of all major roads in Victoria, including highways, freeways, and main arterial roads. Local government (councils) has responsibility for the development and management of the local road network. The focus of this audit was on local roads owned by councils, which represent 86 per cent of Victoria's total road network. The local road network incorporates sealed and unsealed roads, footpaths, bicycle paths, nature strips, drains and bridges, traffic signals, street lighting and other related physical assets.

1.3 At 30 June 2001, the total value of road infrastructure assets (excluding the value of land under the roads) for Victoria's 78 councils as presented in their financial statements was approximately \$14.4 billion. This represents 51 per cent of total non-current assets of all councils.

1.4 Councils fund the development and management of the road assets from rates, charges on land developers, levies and contributions from the Commonwealth and State Governments. In 2001-02, the Commonwealth and State Governments provided some \$166 million towards the construction and maintenance of roads.

1.5 Ongoing management and maintenance is vital to optimise the useful life, capability and utilisation of infrastructure assets. For roads, councils have to be aware of the condition of their road infrastructure and undertake the necessary repairs and works to ensure the long-term sustainability of the asset. Councils also need to be cognisant of their exposure to potential litigation resulting from dangerous road conditions or footpaths that may cause injuries to the users of those assets.

AUDIT OBJECTIVES AND SCOPE

1.6 This audit assessed whether road infrastructure asset management practices adopted by local councils have economically, efficiently and effectively optimised the useful life and capability of those assets. This encompassed examining:

- the condition of existing road infrastructure;
- the adequacy of processes to maintain assets and of public accountability practices of councils; and
- whether the State Government has facilitated and encouraged best asset management practices by local councils.

1.7 Nine of the State's 78 councils were selected for an examination of their asset management practices. The audit also examined the Department of Infrastructure's support for councils in this area and the funding model of the Victoria Grants Commission. The results of our audit largely confirm the results of a sector-wide study sponsored by the Municipal Association of Victoria in 2001.

1.8 For the purpose of the audit, councils were assessed against a best appropriate practice asset management framework using a methodology developed as part of this audit and described in detail in Part 3 of this report.

AUDIT CONCLUSION

1.9 Local government (councils) has been managing road infrastructure assets, including bridges, drains and footpaths for several decades. Along the way, manuals and guidelines have been developed by various industry groups to assist entities with their asset management responsibilities. In recent years, studies undertaken across the local government sector have identified asset management problems that needed to be addressed.

1.10 This audit focussed on an assessment of current asset management practices. We recognise efforts have been made by the Department of Infrastructure and the Municipal Association of Victoria to help councils improve their performance. We believe there has been some success, albeit from a low base. We noted councils were eager to learn more about best practice and displayed a genuine desire to improve. We also recognise that councils have had to cope with major reforms in recent years including amalgamations, Compulsory Competitive Tendering and rate capping.

1.11 Notwithstanding the above and the long historical association of councils in road infrastructure asset management, at the present time the practices of the sector as a whole have not yet reached a level that meets accepted best appropriate practice or properly meets the long term needs of the community. Moreover, the sector is unable to determine with any degree of certainty (and nor was audit) the overall condition of road assets or whether they will reach their optimum useful lives. This has serious funding implications in that councils and the Victoria Grants Commission cannot be certain annual allocations are sufficient to maintain assets or provide for their eventual replacement over the long-term.

1.12 The seriousness of this deficiency was highlighted by a study of all infrastructure assets undertaken in 1998 for the Department of Infrastructure. At that time, it was estimated there was a \$1.17 billion gap (covering a 5 year period to 2002) between the actual and required level of spending on infrastructure asset renewal and maintenance (of which roads is one component making up more than half of total assets.) Our audit suggests this gap could now be between \$1.4 billion and \$2.75 billion. Some councils are beginning to address the funding gap identified by the Department in 1998.

1.13 In contrast to Victoria, councils in New South Wales, Western Australia and New Zealand have been provided with a standardised condition assessment model and are required to report annually on the condition of their roads. This information assists councils to determine their capital and maintenance expenditure requirements. It is also used by funding agencies to assess funding requests and determine allocations. This approach facilitates accurate reporting on the total road network and its condition. While we acknowledge action is in train to improve Victorian asset management practices, the attention given to improving asset management practices by the Department of Infrastructure and councils is not being given sufficient priority.

1.14 The Department of Infrastructure could be more pro-active in providing training and support. This would be assisted by canvassing a broad range of councils to identify their specific needs and by analysing council performance data to identify areas of weakness. Although councils are eager to learn more about best practice and keen to improve, more effort is required to improve their practices and raise the profile of asset management. Councils also need to provide the community with better information on their performance in managing road infrastructure assets.

1.15 While we acknowledge councils have competing priorities, roads are an important community asset, particularly from a public safety perspective, and with legal ramifications. Unless asset management practices are improved, the community could ultimately be faced with undesirable consequences such as rate rises, unsafe road conditions or even loss of service.

AUDIT FINDINGS

Adequacy of road asset management practices and outcomes

1.16 Road Asset Management Plans comprise historical and current details of road infrastructure assets (e.g. physical description data, value, cost) and predicted demands on these assets (e.g. levels of service changes, growth or decline in the level of population or users of assets). Best appropriate practice plans provide stakeholders (including asset managers) with a clear understanding of the condition of the road system and the costs of maintaining it, both in the short and long term. This enables stakeholders to make decisions about the level and timing of investment in maintenance and renewal of the road system. *(para. 3.8)*

1.17 None of the 9 councils we examined had established high quality Road Asset Management Plans that showed stakeholders the current cost of providing road services and the cost of sustaining that level of service in the longer term. *(para. 3.9)*

1.18 The completeness and accuracy of information required to support a quality Road Asset Management Plan in the 9 councils we examined varied in that:

- Although all 9 councils maintained asset registers, they were of varying quality for asset management purposes. For example, all councils (except Delatite) have maintained a Pavement Management System for their “mature” high value road assets. However, that system was not fully used by all councils;
- Condition assessment varied considerably in the sophistication of the method used, degree to which it had been completed and currency of the data. Only one council (Darebin) used techniques that complied with best appropriate practice for all categories of road infrastructure assets;
- Only 3 councils (Ballarat, Darebin and Monash) were capable of identifying the impact of differing maintenance, renewal and upgrade strategies on the condition, service capacity and useful lives of their road assets;
- Limited attention had been given to identifying community needs and expectations regarding service delivery levels and standards for road assets. Best value principles which will be progressively adopted by councils over the period 2000 to 2005, will require consultation with the community on expected service levels; and
- Demand analysis processes and practices in terms of projected changes in demographic patterns, traffic type and density and technology require substantial improvement. *(para. 3.9)*

1.19 In the 9 councils examined, the quality of council policies, processes and practices were below the best appropriate practice asset management framework utilised for the purposes of this audit. For example:

- Two councils (Delatite and Towong) did not have asset management policies, 4 (Ballarat, Hume, Wellington and Whittlesea) were assessed as inadequate and the remaining 3 (Darebin, Monash and Northern Grampians) were of average quality;
- None of the policies extended to all elements of life cycle asset management;
- Eight councils did not have a policy and process manual. The manual that was maintained (Hume) was not regularly updated and of average quality; and
- Only 3 councils (Darebin, Hume and Monash) clearly defined their processes and this was of average quality. *(paras 3.10 to 3.12)*

1.20 None of the 9 councils had fully developed linkages between road asset management plans, corporate and business planning and budgetary processes. *(paras 3.13 to 3.14)* Similarly, their internal funding models were not conducive to efficient and effective road asset management, primarily due to:

- An absence of genuine forward planning - plans were little more than indexed short-term extrapolations which did not enable councils to obtain a view of upcoming renewal cycles. This creates a misleading impression that the current levels of expenditure are sustainable or adequate over the long term; *(paras 3.18 to 3.22)*

- A failure to have in place a proper mechanism to balance revenues and expenditures over time - none of the councils ensured future revenues were sufficient to meet future expenditure requirements; and (*paras 3.23 to 3.26*)
- Insufficient knowledge of depreciation and life cycle costing - councils did not always fully understand the relationship between depreciation (the allocation of replacement cost over the life of the asset) and the level of renewal expenditure required to be undertaken to sustain assets. (*paras 3.27 to 3.32*)

1.21 A benchmarking study undertaken for the Municipal Association of Victoria disclosed, in November 2001, that all 66 councils that participated in the study failed to meet best appropriate practice in infrastructure asset management. Furthermore, Victoria's top 10 per cent of councils compared unfavourably with the top 10 per cent of all other Australian States and New Zealand. (*paras 3.33 to 3.35*)

1.22 As the Victoria Grants Commission is not provided with information from councils regarding the age and useful life of their road assets, it cannot assess the accuracy of assumptions supporting its funding allocation model. (*paras 3.37 to 3.42*)

1.23 The Department of Infrastructure has established a number of initiatives aimed at improving road asset management practices, including studies to identify funding gaps, development of generic performance indicators, establishment of an asset reference group, development of asset management policy and plan guidelines, and training seminars. Many of these initiatives have not yet been completed. The Department maintains that the initiatives will be completed by 30 June 2002. Councils covered in the audit expressed concern with the timeliness and effectiveness of this support. (*paras 3.44 to 3.51*)

1.24 Due to the absence of reliable council data, the extent to which the useful lives of road assets were likely to be fully optimised, or utilised beyond their estimated useful life, could not be determined. The absence of such data inhibits effective planning for the maintenance and renewal of road assets, including the determination of future funding requirements. (*paras 3.54 to 3.63*)

1.25 Over the 4 years to 2001, only 3 of the 9 councils we examined (Darebin, Monash and Whittlesea) have, in each year, met or exceeded the rating of acceptable performance (60) of the community's level of satisfaction with local roads and footpaths. Two councils (Delatite and Northern Grampians) have virtually made no progress over the 4 year period towards improving their performance. For the other councils (69), the number that met the rating of acceptable performance were 13 (1997-98), 13 (1998-99) and 18 (1999-00). (*paras 3.64 to 3.70*)

Public accountability framework

1.26 Council's corporate plans contained only minimal information regarding road infrastructure and the level of detail was not commensurate with the value of this group of assets relative to the councils' total asset holdings. Only one annual report (Towong) had adequate comments pertaining to the importance of road infrastructure assets and the problems it presented to the Shire. *(paras 4.4 to 4.5)*

1.27 All of the councils' policy objectives and planned strategies for roads infrastructure were inadequately defined in terms of desired outcomes and achievements and how these were to be measured. *(paras 4.6 to 4.8)*

1.28 Only limited research has been undertaken by councils to determine stakeholder needs and expectations regarding the nature of road infrastructure information they would like incorporated within strategic planning documents. *(para. 4.9)*

1.29 Except for 2 of the 9 councils (Hume and Monash), the only key performance indicator presented in the performance statements relating to road infrastructure was the level of *community satisfaction with local roads and footpaths*. While the indicator is relevant to council road asset management objectives, it does not address all elements of the objectives and, in particular, the cost-effective management of the road system over the longer-term. In terms of appropriateness, one single indicator will not adequately inform readers as to whether the objective was achieved or whether assets were efficiently managed. *(paras 4.13 to 4.20)*

1.30 Although the Department has collected performance information from all councils since 1997-98, it was not intended to be used for performance monitoring purposes but rather to provide information which councils can use to understand their relative performance. A suite of 11 performance indicators (Victorian Local Government Indicators) will now be used for councils to measure their own performance and for the Minister for Local Government to monitor the overall health of the local government sector. *(paras 4.28 to 4.37)*

RECOMMENDATIONS

<i>Report reference</i>	<i>Paragraph number</i>	<i>Recommendation</i>
Adequacy of road asset management practices and outcomes	3.36	<p>Councils should:</p> <ul style="list-style-type: none"> • initiate prompt action to develop and implement asset management plans for their road assets; • establish and maintain formal policies, processes and practices that reflect best appropriate road asset management practice; • ensure asset management plans are linked to corporate and business plans and long-term budgetary requirements; and • reassess the effectiveness of their funding models. This encompasses improving their approach to long-term planning, establishing a mechanism to balance revenues and expenditure over time, and ensuring they understand the relationship between depreciation and life cycle costing.
	3.43	The Victoria Grants Commission should require councils to provide data on the age and economic life of their road assets, which can be used to assess the underlying assumptions supporting the Commission's funding model.
	3.52	<p>The Department of Infrastructure should:</p> <ul style="list-style-type: none"> • initiate action to promptly complete those initiatives that have not been completed within the specified timeframe and ensure those in progress are completed as proposed; and • consult with a broad range of councils on the nature of support and guidance they require from the Department of Infrastructure to assist them with their road asset management responsibilities and how the Department can best meet those needs.
	3.71	<p>To improve assessment of councils' performance in managing road assets:</p> <ul style="list-style-type: none"> • the Department of Infrastructure should give consideration to introducing a requirement for councils to report annually on the condition of their road infrastructure assets; • councils should regularly determine the condition of their road assets relative to their useful life using a standardised system; • those councils who fail to meet their target level of community satisfaction should identify the underlying factors contributing to this result with the view to initiating corrective action; and • councils should reassess their target level of community satisfaction with a view to ensuring it supports continuous improvement.

RECOMMENDATIONS - continued

Report reference	Paragraph number	Recommendation
Public accountability framework	4.27	<p>To enhance public accountability and operational transparency for the management of road infrastructure, councils should:</p> <ul style="list-style-type: none"> • incorporate more performance information in their strategic planning documents; • establish direct and clear linkages between their corporate plan, business plan and annual report; • incorporate additional key performance indicators within their strategic planning documents and performance statements that enable assessments of the efficiency and effectiveness with which road assets have been managed; • consider making greater use of existing mediums to disseminate asset management performance information; and • consult with the community on its preferred method of receiving information regarding councils' activities and achievements.
	4.38	<p>The Department of Infrastructure should:</p> <ul style="list-style-type: none"> • take prompt action to establish a process that provides assurance that the performance information compiled by councils in the form of the Victorian Local Government Indicators is complete, accurate and comparable; • reconsider the need to incorporate council targets for each Victorian Local Government Indicator for comparison against actual results; • ensure its review of the service provision indicators is completed as scheduled; and • utilise the council performance information as a source of input for identifying training or guidance required by councils.

RESPONSE provided by Chief Executive Officer, City of Ballarat

The report does not adequately acknowledge the progress councils have made. In the case of Ballarat, a long-term financial strategy was developed in the mid-1990s to firstly, increase expenditure on infrastructure and secondly, to reduce debt so that increased infrastructure needs in the future could be met. While this initiative is briefly mentioned in the summary of findings and recommendations issued to the council, it does not appear to be adequately acknowledged in this report. A major deficiency of the report is that it only looks at councils' performance at one point in time, rather than over a period of time.

It is considered that the emphasis in the report should be on continuous improvement, not best practice. It should be noted that the State Government's Best Value Legislation is based on continuous improvement. What is considered best practice will vary among councils, as the needs, demands and aspirations of communities vary. These differences largely influence where councils determine the level of facilities and services.

The report does not tell us anything new, and does nothing to advance the cause of improvements in asset management. Councils are constrained by boosting improvements to asset management processes by lack of resources and competing priorities. In addition, it is considered that the report does nothing to address the fundamental issue of a lack of available funds to spend on roads.

RESPONSE provided by Chief Executive Officer, Delatite Shire Council

I would express my council's concern that the audit report does not have sufficient regard for the context in which particularly rural Victorian local government found itself following the Kennett reforms for the local government sector. In particular, the necessity for relatively sparsely populated councils who operated large and diverse asset bases, to reduce rates by 20 per cent was a retrograde step which caused enormous difficulties.

The largest individual expenditure areas within these rural councils is inevitably within the local roads program, and it was in these areas that funds were drawn to meet the State Government's demand for rate reduction. Quite simply, it was impossible for rural local governments to overnight adjust their operating practices in order to generally gain a 20 per cent operational efficiency benefit. Evidence clearly suggests the cuts were made in local roads areas.

For the Auditor-General's Office to then present a report to the same Parliament that instituted these shortsighted impositions upon local government is galling to rural councils in the extreme.

Contrast the reform of the water industry undertaken shortly after the local government restructure. Water authorities were not required to reduce rates by 20 per cent but rather funds released by introducing operational efficiencies from economies of scale and other initiatives were directed into improving capital facilities, consequently leading to a reduction in unit costs and a lowering of tariffs to customers.

It would have been appropriate for the Auditor-General's report to mention these matters in setting the context for management of roads by local government in the recent past. Particularly the stark contrast in the approaches initiated by the State Government in the local government sector and the water industry.

Rural councils are now striving to improve their road management systems, procedures and practices. Again, however the Auditor-General's report fails to even mention in passing the continuing transfer of responsibilities from the State Government to the local government sector. The transfer of these responsibilities is not generally associated with funding allocations from the State Government, leaving councils with a requirement to increase rates in order to fund these additional regulatory impositions.

In an environment within many rural councils that features declining populations, higher than State average unemployment levels and a reliance of the local economy on the agricultural sector which has experienced fluctuating fortunes in recent times, the capacity to continually increase rates is significantly constrained.

A further matter omitted from considerations involves the ability of rural councils to attract appropriately skilled technical staff to enhance current knowledge of technology and advanced procedures and practices within councils. While not only confined to the engineering sector, this has resulted in limitations on the ability of many rural councils to improve the performance of the organisation.

Both the State Government and the peak local government industry body, the Municipal Association of Victoria, should assume a leadership role in providing the necessary funding, training and guidance in order to raise standards in the areas of asset management generally.

It is the council's view that, in light of the above limitation, the report is insufficiently broad in its context, narrowly focusing on the specific practices of councils in management of roads, without any comment on the underlying circumstances which have contributed very significantly to the current situation.

Finally, I must express the extreme disappointment of Delatite Shire that individual councils have been named in the audit report.

RESPONSE provided by Chief Executive Officer, Delatite Shire Council - continued

If the underlying rationale for the performance audit was to provide an overview of management of roads by the local government sector across various categories of councils, it is considered highly improper that individual councils should be named and singled out for particular criticism and comment. An objective assessment of the involvement of the State Government in the ability of the local government sector to raise sufficient funds for asset management would reinforce the unacceptability of naming specific councils in a report to be tabled in Parliament.

RESPONSE provided by Chief Executive Officer, Hume City Council

The detailed findings of the performance audit, as it is related to Hume City Council, are incorrect and understate the arrangements the Council has in place to manage its road infrastructure assets.

The audit did not allocate sufficient time to the task or approach it with an open mind and, as a consequence, failed to understand the methodology employed by the Council.

If this situation also applies to the other 8 “cross-section” councils, it is not surprising that the audit found that “... the practices of the sector, as a whole, have not yet reached a level that equates to accepted best practice ...”

In fact, the assessment of the councils’ performance was made against a suite of audit questions which reflect an idealistic and highly sophisticated model; and although it has many commendable attributes, may not be appropriate to the sector as a whole or all councils in the sector at this point in time.

In the case of Hume City Council, the current arrangements have met council’s needs in relation to understanding the task, prioritising the allocation of scarce resources and systematically addressing road infrastructure concerns raised by the community.

RESPONSE provided by Chief Executive Officer, Monash City Council

While the intent of the audit sub-objective (1) was to assess the condition of the roads in terms of the extent to which assets were expected to reach their useful life, there was only limited physical inspection undertaken and, therefore, while the “Systems” employed by councils have not been assessed favourably this does not necessarily imply that the assets are not being managed effectively, if not efficiently, in terms of actual condition.

RESPONSE provided by Chief Executive Officer, Northern Grampians Shire Council

While the issues raised in the report are accepted in principle I believe that the following points would enable local government to positively respond to the findings.

The report does not recognise that the State Government through VicRoads (formerly the Country Roads Board) funded a lot of the local government local road infrastructure, especially bridges prior to say 1985.

The report does not indicate the difference between rural and urban councils. With respect to community satisfaction ratings, as rural council has many kilometers of gravel roads and obviously receives more complaints with gravel roads in low rainfall areas. The roads become corrugated over summer, and the community satisfaction survey is taken at the end of summer and, therefore, reflects conditions that are remedied during the wetter months.

The report criticises and does not offer any realistic financial solutions. The problems caused by local government rationalisation through forced amalgamations and a forced reduction in rates, in our case by 22 per cent is not mentioned. The whole report is selective reporting, based on the need for asset management systems. The need for an asset management system is demonstrated but it does not look at the total picture of local government services.

RESPONSE provided by Chief Executive Officer, Towong Shire Council

Council acknowledges that opportunities exist for further improvement to our asset management processes. However, these are being identified and implemented at a rapid rate.

We do not agree with the audit conclusion in respect to the overall condition of road assets. We acknowledge that the condition assessment of drains and footpaths is incomplete.

However, all of council's road assets have been assessed for condition in the past 3 years. Some of these assessments were in progress at the time of the audit and have since been completed. We are now able to determine the overall condition of road assets with a high degree of certainty. We also understand the management requirements to ensure that these assets reach their estimated useful lives.

However, the major threat to the useful lives of those assets, is the availability of funds necessary to implement the required maintenance and renewal works.

Council is also disappointed that the report has not adequately acknowledged local government's attempts to raise public appreciation of this issue through projects such as the Renewal Challenge report and the MAV benchmarking study. It is also disappointing that no attempt was made to quantify the serious negative impacts of Compulsory Competitive Tendering, Rate Cutting and Rate Capping.

RESPONSE provided by Chief Executive Officer, Wellington Shire Council

Wellington Shire Council has several concerns in relation to the report to Parliament. This, it considers, presents asset management within this municipality and in local government in Victoria (as represented by the 9 councils in the report) in a way that misrepresents the situation.

By adopting an "audit snapshot" approach, there is insufficient recognition given either to the progress made to date or to the reasons why more rapid progress has not been made. In other words, a lack of context and acknowledgment make the findings, conclusions and recommendations seem bald, alarming and unpalatable.

For an assessment that has such potential to form the basis for significant advancement in asset management in Victoria, this is most unfortunate because of the likelihood of criticism or rejection without any real attempt to recognise the broader management and decision-making context and imperatives for a council such as Wellington.

Council's principal concerns with the report are that:

- 1. It fails to recognise the real resource issues that councils such as Wellington face in delivering on asset management;*
- 2. It fails to adequately acknowledge the current practices of councils such as Wellington and just as importantly its documented strategic direction;*
- 3. It fails to sufficiently recognise the competing priorities for funding faced by councils over a large range of services;*
- 4. Its basis for evaluation appears not to be predicated on Best "Appropriate" Practice principles but on an idealistic "Absolute" Best Practice benchmark;*
- 5. It fails to establish the real benefit/cost of pursuing more sophisticated information from the asset management approach advocated; and*
- 6. It fails to adequately recognise the relative differences in capacity of rural councils such as Wellington (with a huge area and a medium/small number of ratepayers) and Darebin or Monash (with a very small area and a large number of ratepayers).*

RESPONSE provided by Chief Executive Officer, Wellington Shire Council - continued

In terms of these issues, this council's comments are as follows.

RESOURCING ABILITY

Grave concerns are held regarding the financial and resource implications for councils if the report's recommendations (and particularly the following from the Part 1, Executive Summary) are implemented without a considered approach:

- (i) Council acknowledges and concurs in the principles of Recommendation 3.43 (Grants Commission data), however, the realisation of this position needs to be achieved within a non-burdensome timeframe; and*
- (ii) The impact of recommendation 3.71 (Performance in Managing Road Assets) if adopted will impose a considerable burden on council's resources to provide the data required. We also question the practical merits of annual data collection particularly for road infrastructure in large rural shires.*

The report does not address the resource capacity of council to implement these recommendations.

In relation to the revenue and resources available to council, the recommendations need to more adequately acknowledge the concept of "best appropriate practice" as well as the make up of the road infrastructure. Wellington has developed processes that enable management of its road (and its many other) assets within the current resource capacity of the council.

In the case of Wellington Shire Council the road infrastructure maintained comprises:

- 1 460 km sealed roads (1 150 km rural; 310 km urban); and*
- 1 972 km unsealed roads (rural).*

These roads are spread over 11 000 square kilometres of varying topographical conditions from dry farming, to irrigation dairy farming and mountainous forest. Many of these roads are very low traffic minor local roads (<40 vpd) but are subject to a high percentage of large commercial vehicles (45-70 tonne) related to the timber, quarrying, farming and dairy industries.

UNDERSTANDING, PRIORITIES AND CURRENT PRACTICE

The particular point made in paragraph 1.20 of the Executive Summary stating that councils do not fully understand asset management and depreciation and renewal principles is incorrect. Council is aware of the inevitable long-term implications of the ageing road infrastructure and the continual addition of new road infrastructure to council assets by the private sector, as witnessed in council's 2001-02 Asset Management Key Directions Paper.

The fact that council does not fully fund its depreciation does not reflect any lack of understanding or lack of priority, but rather council continually has to balance the need to maintain an aging road infrastructure with the need to develop and provide community, recreational, cultural and environmental infrastructure and services.

This balancing has been made increasingly difficult during the period following amalgamation when restrictions were imposed on rate incomes. This period of reduced income from rates and imposed superannuation scheme liabilities has deprived council of revenue that will never be recovered.

It is evident from the 1998 report "Facing the Renewal Challenge" that under the current sources of revenue available to the Wellington Shire Council, like many other councils it does not have the financial ability to fund the renewal gap of the road infrastructure according to asset management best practice principles. This can be contrasted with many metropolitan councils where there is a small area and large population, with all roads sealed and in good condition and with an enormous revenue raising capacity.

RESPONSE provided by Chief Executive Officer, Wellington Shire Council - continued

Wellington Shire Council does acknowledge that, in order for it and all councils to maintain and provide appropriate road infrastructure for the benefit of Victoria, best appropriate practice needs to be adopted and practiced.

This should, however, also commit the Department of Infrastructure to secure “sufficient” State and/or federal funding to ensure that councils can meet the renewal challenge.

The audit report indicates that there has been an increase of Grants Commission funding to the rural area at the expense of the urban area. If the contention is that this has been inappropriate (and we would contest such a contention), then consideration may need to be given as to whether the total grants funding pool needs to be increased to address the renewal problem.

RECOGNITION OF CURRENT PRACTICES AND DIRECTION

It is Wellington Shire Council’s view that the audit assessment of the plans, strategies and practices presently in place was very harsh, as the current practices are in context with the available resources and address best appropriate practice asset management principles. These practices are continually being improved in line with budgets and advancements in technology.

The report seems to pursue an idealistic “Absolute” Best Practice benchmark and does not adequately attempt to recognise the “appropriateness” of council’s existing practice. Wellington’s approach recognises that resources are far below those needed to maintain and develop assets to a desirable level which is related to providing a level of data commensurate with available resource levels given competing demands for other services. A higher level of sophistication of data will not enable more work to be done on the ground without more resources being made available.

The following comments relate to the audit objectives.

Sub objective 1: Condition of existing assets.

The report understates council’s current position. Council has road condition data originally collected in 1996, updated in 2000 and programmed for reassessment in 2003. This data comprises complete seal condition of all sealed roads based on 5 key assessments, with recommended treatments and a 10-year rolling renewal program. The data also includes a pavement condition index for sealed and unsealed roads that is compiled using visual observations to set rating criteria. This provides a pavement condition index or comparative condition rating for all roads in the Shire which is used in developing annual reconstruction programs. While not of a complex level of sophistication, the system provides sound data that is appropriate to the overall resource capacity of this council.

Sub objective 2: Adequacy of plans & strategies to maintain roads over duration of useful life

Wellington Shire Council has linkages from the Council (Corporate) Plan to the Business Unit Plans that define the annual actions and strategies for maintaining council’s infrastructure. Asset Management is one of the 5 key areas of focus in the 2001-2004 Council Plan and the audit fails to appropriately recognise council’s business planning process through the Business Unit Plans that are legitimised within the Council Plan.

RESPONSE provided by Chief Executive Officer, Wellington Shire Council - continued

Any inference or statement that “asset management is not recognised widely, nor is a high priority to council” is quite erroneous. Similarly, although recognising that council still has a way to go, any assertion that council has not identified its expenditure needs is understating the strategies, systems and databases that have been developed to date. Council has prepared a 2001-02 Asset Management Key Directions Paper outlining the issues facing council in the service provision and maintenance of all of its assets, including road infrastructure. This paper has provided the direction for the development of an Asset Management Strategy followed by Asset Management Plans for all asset groups, as well as further systems development and identifying immediate expenditure requirements.

Wellington Shire Council has an asset management system (Conquest software) that provides road valuation information and depreciation reports to AAS27 standards. It is being further developed to provide more comprehensive information on condition, usage and life expectancy.

Sub objective 3: Public Accountability

Enhanced public information, consultation and accountability will be provided through the progressive implementation of Best Value principles. These principles, including community consultation and reporting, as well as delivering value-for-money, have been incorporated into Units’ Business Plans to encourage continuous improvement in accountability processes.

Sub objective 4: Monitoring and Support by State Government

The recommendation of 4.38 (Department Action) should take into account best value and cost benefit when establishing reporting processes and requirements so that the cost of providing the information to the level suggested does not outweigh the benefit of the data.

Wellington Shire Council has willingly participated in this audit on the assumption that it will form a strong basis for increasing the focus on management of local government’s assets and establishing the need for higher levels of funding directed to roadworks on a sound basis.

Our concern is now that, without acknowledgement of the progress made by local government and the establishment of some context, the recommendations and findings will be alarming. The report runs a serious risk of being seen to be a call for more detailed information for its own sake and being used as a tool for inappropriate criticism of local government.

We hope these comments can be addressed to ensure the report becomes a useful document to advance the cause of better management of public assets.

RESPONSE provided by Chief Executive Officer, City of Whittlesea

The City of Whittlesea acknowledges the general direction and recommendations contained in the report. It is of concern that the report does not include a statement regarding progress made by council over the past 5 years in regard to road asset management. Council has also been ranked down due to it currently upgrading its Pavement Management System.

At the present time, council is:

- *aware of its future Road, Drainage and Bridge expenditure needs through its 2016 Infrastructure Study;*
- *well advanced in finalising an asset management framework across the organisation, linking the needs of communication, data storage, display, updating and reporting as well as converging the technologies of Geographic Information Systems (GIS), Global Positioning Systems (GPS) and Video Mapping;*
- *pro-actively taking steps to develop asset management plans for infrastructure assets;*

RESPONSE provided by Chief Executive Officer, City of Whittlesea - continued

- annually increasing funding for Road and Footpath works in accordance with programs developed and considering other service funding requirements;
- upgrading its existing pavement management system software for infrastructure assets, particularly roads; and
- about to upgrade its asset data, particularly for roads.

There is a high degree of importance placed by the City of Whittlesea on proper asset management. This is why council has pro-actively embarked on improving its systems, based on the International Asset Management Manual, and has provided resources to enable this to occur.

ADDITIONAL audit comment

I am well aware of the difficulties faced by local councils in managing their road infrastructure and balancing that with their other responsibilities. However, councils have been managing road assets for several decades so it was disappointing to find that across the entire sector no council was managing their road assets at a level that meets best appropriate practice.

Regarding concerns with the use of best appropriate practice as a standard, this assessment has been made using the same standards adopted by the Municipal Association of Victoria to assess the practices of 66 councils in 2001 which also found that all 66 councils participating in the study failed to meet best appropriate practice in infrastructure asset management.

Councils have experienced major changes over recent years and I accept that funding is an issue, particularly for rural councils, which can impact on the capacity of councils to achieve best appropriate practice asset management. I also accept that efforts to improve are in train, but believe the pace of these efforts needs to be accelerated.

Part 2

Background



THE ROAD NETWORK

2.1 The Victorian road network is one of the State's major capital assets. The network currently represents approximately 18 per cent of the State Government's total investment in infrastructure with expenditure on the construction, upgrade and maintenance of roads in excess of \$600 million annually.

2.2 Victoria's road network currently comprises approximately 160 000 kilometres of roads. Table 2A provides a description of the different road classifications and shows the split of management responsibilities for these roads between State and local government.

TABLE 2A
ROAD CLASSIFICATION AND RESPONSIBILITIES

Road classification	Declared arterial roads						Local roads
	Highways and freeways			Tourist roads	Forest roads	Main roads	Unclassified roads
	National highways	Roads of national importance	State				
<i>Length Km (Total Vic. 160 190)</i>	1 000	560	6 200	1 500	230	12 700	138 000
<i>Management responsibility</i>	State Government					State/local government	Local government

Source: VicRoads.

2.3 Victoria's roads are grouped into several classifications as illustrated in Table 2A. Under the *Transport Act* 1983, VicRoads is the statutory authority responsible for the construction and maintenance of all major roads in Victoria, including highways, freeways, and main arterial roads. Local government (councils) has responsibility for the development and management of the local road network. Several councils have entered into agreements with VicRoads to manage, on its behalf, main roads within their municipal boundaries.

2.4 The focus of this audit was on local roads owned by councils, which represent 86 per cent of Victoria's total road network. The local road network incorporates sealed and unsealed roads, footpaths, bicycle paths, nature strips, drains and bridges, traffic signals, street lighting and other related physical assets.

2.5 At 30 June 2001, the total value of road infrastructure assets (excluding the value of the land under the roads) for Victoria's 78 councils as presented in their financial statements is approximately \$14.4 billion. This represents 51 per cent of total non-current assets of all councils.

FUNDING ARRANGEMENTS

2.6 Funds for road works and maintenance comes from the Commonwealth and State Governments, local rates, charges on land developers and other local levies.

Commonwealth Government

2.7 The Commonwealth Government provides untied financial assistance to councils under the *Local Government (Financial Assistance) Act 1995*. This assistance is distributed to councils by the Victoria Grants Commission, an entity established for this purpose under the *Victoria Grants Commission Act 1976*. In 2001-02, the Commission allocated \$425 million which could be used for local roads, of which \$87.7 million was reserved for Victorian councils (2000-01, \$83.7 million).

2.8 Under the Commonwealth Roads to Recovery Program, which commenced in January 2001, councils receive further financial assistance for local roads, bridges and related road infrastructure. Over a 4 year period to 2005, funds totalling \$1.2 billion have been committed by the Commonwealth Government, of which \$250 million has been allocated to Victorian councils.

2.9 Since 1996, the Commonwealth Government has also allocated funds to all Australian councils under the Federal Road Safety Black Spot Program. The aim of this Program is to reduce the road toll through cost-efficient, safety-oriented projects. Funding allocated to Victorian councils for such projects between 1996 and 2002 was \$52.1 million.

Victorian Government

2.10 During the 1991 Conference of Premiers, it was agreed that funding for local roads was the responsibility of the Commonwealth Government and local governments, and not that of State Governments. Nevertheless, over recent years the Victorian Government has made a significant contribution to local councils for specific works and maintenance of local roads.

2.11 In 1999, the Victorian Government introduced the Statewide Black Spot Program, committing \$240 million over a 4 year period for metropolitan and country road projects. Although the majority of this funding was dedicated to main roads, 25 per cent was made available to address accident black spots on local roads.

2.12 The Victorian Government has also assisted local councils in their maintenance of local roads through the Better Roads Victoria Program. Over the last 3 years, the Government has allocated approximately \$7 million per annum across those councils that have been affected by State policy decisions. Examples include rural roads that have been impacted by increased timber and grain cartage as a result of the reduction in rail transport facilities.

IMPORTANCE OF ASSET MANAGEMENT

2.13 The *Local Government Act 1989* requires councils to “... *provide equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively*”. Accordingly, ongoing management and maintenance of all infrastructure assets is vital to optimise the useful life, capability and utilisation of those assets. In respect to road assets, councils have to be aware of the condition of their road infrastructure and undertake necessary repairs and works to ensure the long-term sustainability of the asset.

2.14 The priority of councils is to attend to roads with defects in order to ensure the maximum life of the road is realised and that the high cost of replacement is minimised. Councils also need to be aware of their exposure to potential litigation resulting from dangerous road or footpath conditions that may cause injuries to users of those assets.

Road management activities carried out by councils

2.15 Typically, councils have business units charged with the responsibility of managing infrastructure services. These business units undertake a range of functions including major capital projects such as public buildings and developments, as well as the management of local road infrastructure. These business units conduct ongoing monitoring of road infrastructure assets and make decisions to support the long-term sustainability of these assets. Through this activity, councils develop strategy documents such as asset management plans and capital works programs. These documents list and provide costings for capital works priorities that the council needs to address over a 3 to 5 year period. These priorities are usually in the form of routine maintenance, major maintenance and new capital works.

2.16 Prior to the commencement of each financial year, councils review their plans/programs in the context of their available budgets to determine what works will be undertaken during the year. Traditionally, councils employed in-house staff to undertake road maintenance and works. During the 1990s there was a significant shift towards contracting-out these activities which was brought about as a result of the previous Government’s policy on Compulsory Competitive Tendering (CCT). This policy required councils to consider contracting services to private sector providers if they were able to achieve greater financial efficiencies and/or performance gains.

2.17 Although CCT is no longer mandatory, there are many councils that continue to contract-out road works as it is not feasible for them to re-establish in-house capital works units. Several councils have retained their in-house units and use contractors to supplement existing resources in order to complete their capital works programs.

RECENT ASSET MANAGEMENT REVIEWS

2.18 Over recent years, a number of reviews relating to funding arrangements and asset management practices in Victorian local government have been conducted, including the 3 outlined below.

Victoria Grants Commission

2.19 In late 1998, the Victoria Grants Commission appointed the Australian Road Research Board and the National Institute of Economic and Industry Research to undertake a review of its methodology for determining the proportion of funding attributable to local roads.

2.20 Following the review, the Commission adopted a new formula for determining the proportion of untied funds attributable to local roads for councils, commencing from 2001-02. The new formula is based on road length (for all surfaces) and traffic volumes using average annual preservation costs for given traffic volume ranges and which take into account the concept of life cycle costing. A small pool of funds was also set aside in 1999-00 and 2000-01 to assist councils with their local road network planning and management responsibilities.

Department of Infrastructure

2.21 In January 2000, the Department of Infrastructure issued its report entitled *Facing the Renewal Challenge - Victorian Local Government Infrastructure Study – December 1998*. This study examined the funding difficulties facing councils in relation to their ageing infrastructure assets (including roads) in need of renewal. This report found that:

- councils had a significant stock of ageing assets which were becoming due for renewal within 10 years;
- if existing expenditures were extrapolated, a funding shortfall (renewal gap) of on average \$233 million per annum (over the long-term) would be generated between councils' current levels of expenditure on asset renewal and projected future requirements;
- data and information about council assets needed to be improved; and
- asset management practices needed to be improved, both at the strategic and the operational levels.

2.22 As a follow-up to this study, in August 2001 the Department surveyed all councils to establish their progress in developing infrastructure asset management plans. This survey found that, overall, councils had not made substantial progress in developing asset management plans for all categories of infrastructure assets, and that the majority of councils had not recalculated their renewal gap (funding shortfall) for their infrastructure assets.

2.23 The Department intends undertaking a further survey after the end of the current financial year to again check on the progress of councils in developing asset management plans and the impact of various Departmental initiatives.

Municipal Association of Victoria

2.24 Recognising the need for improved asset management in local government (including the management of roads), in 2001, the Municipal Association of Victoria commissioned management engineering and environment consultants, Gutteridge Haskins and Davey, to undertake a benchmarking study that would provide an accurate picture of the state of asset management in Victoria's 78 councils. The findings of the study (to which 66 councils responded) identified:

- Victoria's councils lagged behind other interstate councils in asset management, and none had achieved "best appropriate practice";
- data collected by councils was not used effectively to produce appropriate quality asset management plans;
- information systems to effectively manage assets were generally poor across the sector; and
- the Government, and municipal and professional associations to date have had little influence on improving Victoria's municipal asset management.

2.25 The Association has since been assisting councils to improve their asset management practices.

AUDIT OBJECTIVES AND SCOPE

2.26 The overall objective of this audit was to determine whether infrastructure asset management practices adopted by local government for road infrastructure assets (including bridges, drains and footpaths) have economically, efficiently and effectively optimised the useful life and capability of those assets.

2.27 In particular, the audit assessed:

- the condition of existing road infrastructure in Victoria in terms of the extent to which assets are expected to reach their useful life and are replaced when they reach this point;
- the adequacy of processes (plans and strategies) to maintain existing road infrastructure assets over the duration of their useful life;
- the adequacy of public accountability practices of local government for the management of road infrastructure; and
- whether the State Government has fulfilled its role, with regard to asset management practices, in monitoring and facilitating and encouraging best appropriate asset management practices by local councils.

2.28 For the purposes of the audit, 9 of the State's 78 councils were selected for detailed examination in relation to the above objectives. The selection criteria included:

- Location - At least one council from each of the Department of Infrastructure's 5 categories of inner/outer metropolitan, large/small shire and regional cities;
- Financial statements - Included a mix of clear and qualified audit opinions on the 2000-01 financial statements relating to road assets;
- Materiality - Included a spread of councils with high, medium and low values of roads, drains and bridges;
- Past audit coverage - Excluded councils that had been subjected to a performance audit over the last 3 years; and
- Funding - Included a spread of councils with high, medium and low levels of funding gaps as identified in the Department of Infrastructure's report *Facing the Renewal Challenge – Victorian Local Government Infrastructure Study - December 1998*.

2.29 Descriptions of the 9 councils selected for our audit examination are provided in Table 2B.

**TABLE 2B
COUNCILS SELECTED FOR AUDIT EXAMINATION**

<p style="text-align: center;">City of Ballarat</p> <p>Ballarat is a large urban regional town council covering 739 square kilometres, located 106 kilometres west of Melbourne. Its population of approximately 80 000 people is fairly concentrated within urban areas. The gold rush of the 1850s led to considerable urban development with further development in the 1950s to 1960s accounting for a further 20-30 per cent of the road network.</p> <p style="text-align: center;">Darebin City Council</p> <p>Darebin is an inner metropolitan council located 7 kilometres north-east of Melbourne, covering 54 square kilometres. Over recent years, the council has experienced a gradual reduction in its overall population, which currently is around 122 000 people. Some 30 per cent of its infrastructure assets were constructed in the late 1800s to early 1900s with the balance being constructed in the 1950s and 1960s.</p> <p style="text-align: center;">Delatite Shire Council</p> <p>Delatite is a small urban regional town council located approximately 150 kilometres north-east of Melbourne covering 6 246 square kilometres. The council's population is approximately 23 000 people, with around half living in urban areas. (Note: The council does not maintain an age profile of its road infrastructure assets.)</p> <p style="text-align: center;">Hume City Council</p> <p>Hume is a very large urban fringe council located 15 kilometres north of Melbourne, which is experiencing simultaneous growth and asset renewal. The City covers an area of 503 square kilometres and serves 138 000 people. About 50 per cent of its infrastructure is 60 to 80 years old, another 20 per cent is around 30 years old, and younger assets in growth areas represent the remaining 30 per cent.</p> <p style="text-align: center;">Monash City Council</p> <p>The City of Monash is a very large metropolitan council covering an area of 82 square kilometres, located 20 kilometres south-east of the Melbourne CBD. The council has a stable population of 161 000 residents of significant ethnic diversity. Most of its assets were constructed during the 1960s and early 1970s.</p>

TABLE 2B
COUNCILS SELECTED FOR AUDIT EXAMINATION – *continued*

<p>Northern Grampians Shire Council</p> <p>The Shire is a relatively remote rural council located 260 kilometres west of Melbourne. The council has an area of 5 903 square kilometres and a population of over 13 100 people.</p> <p>Towong Shire Council</p> <p>Towong is a relatively large rural agricultural council located on the border with NSW 370 kilometres north-east of Melbourne. Towong encompasses 6 635 square kilometres of generally mountainous terrain. It has a sparse population of around 7 000 people.</p> <p>Wellington Shire Council</p> <p>Wellington is an urban regional council about 370 kilometres to the east of Melbourne which covers a large geographic area of around 11 000 square kilometres. It has a declining population that currently stands at around 40 700 people, with a significant proportion living in urban areas.</p> <p>City of Whittlesea</p> <p>Whittlesea is a large urban fringe council located around 40 kilometres north of Melbourne, encompassing 487 square kilometres. The council has young assets and is experiencing strong growth. The council's population is currently around 110 000, but this is expected to increase to 147 500 by 2016. The oldest part of the city dates from the 1960s, but most of its infrastructure is much younger.</p>
--

2.30 For the purpose of the audit, councils were assessed against a best appropriate practice asset management framework using a methodology developed by our specialist. Each council has been provided with a summary of findings and recommendations arising from the audit for their attention.

2.31 To complement the detailed examination of council records and practices, information compiled by the Department of Infrastructure on the progress made by all councils in addressing the infrastructure renewal gap it had previously identified, and their progress in developing asset plans, was also examined. The benchmarking study of council asset management practices recently completed by the Municipal Association of Victoria was also reviewed.

2.32 The audit also covered the Department of Infrastructure in its role of supporting councils, and the operation of the funding model of the Victoria Grants Commission.

PERIOD COVERED BY THE AUDIT

2.33 The audit covered the period from 2000 to 2002. Examinations of the 9 councils, the Department of Infrastructure, VicRoads and the Victoria Grants Commission included activities up to the date of the audit, which varied from February to April 2002.

COMPLIANCE WITH AUDITING STANDARDS

2.34 The audit was performed in accordance with Australian Auditing Standards applicable to performance audits and, accordingly, included such tests and other procedures considered necessary in the circumstances.

ASSISTANCE TO THE AUDIT TEAM

2.35 Specialist assistance was provided by:

- Gutteridge Haskins and Davey Pty Ltd which undertook a detailed assessment of the 9 councils; and
- Jeff Roorda from Jeff Roorda and Associates (JRA), Dr Penny Burns from AMQ International and Mr David Hope from Skilmar Systems who assessed the funding models of the 9 councils, the Victoria Grants Commission and VicRoads.

2.36 Support and assistance was provided to my officers and specialists by the management and staff of the 9 councils, the Victoria Grants Commission, the Department of Infrastructure and VicRoads. I wish to express my appreciation to these agencies for this assistance.

Part 3

Adequacy of road asset management practices and outcomes

BEST APPROPRIATE ASSET MANAGEMENT

3.1 The audit used the *International Infrastructure Management Manual* which was prepared for the Institute of Public Works Engineering Australia and the National Asset Management Steering Group of New Zealand and issued in April 2000. In particular the following 6 key elements of best practice asset management were utilised:

- processes and practices, covering the whole life cycle of assets;
- data and knowledge available and applied to these processes;
- information systems utilised to record, manipulate and report on the assets;
- commercial tactics used to carry out the work identified;
- organisational roles and responsibilities and policies adopted on asset management; and
- people issues, such as skill and experience levels.

3.2 The 6 key elements contribute to the efficiency and effectiveness of management activities and the level of confidence in the asset management decisions made, both in the short-term and long-term.

3.3 In assessing compliance by the 9 selected councils with best appropriate practice, we sought a response to the following key questions:

- Do you know what roads, bridges, footpaths and stormwater drainage assets you own or have responsibility or legal liability for?
- Are these assets recorded at an appropriate level of detail or component (known as the maintenance managed item - MMI) in an asset register system?
- Do you monitor the replacement value, condition, depreciation, performance, utilisation, and costs of assets down to the MMI component level?
- Have you established levels of service for roads, bridges, footpaths and drains that are desired by your key stakeholders/customers?
- Do you have a plan outlining future maintenance and capital requirements for your roads, bridges, footpaths and drains, and are all stakeholders aware of these long-term (15 years) “sustainable” costs?
- Can you predict demand for service from residents and other stakeholders?
- Do you have the ability to predict the way your assets will fail to meet the service standards (failure modes) set for your roads, bridges, footpaths and drainage assets, and the ability to analyse alternative treatment options?
- Do you have the ability to rank capital works and recurrent expenditure on a cost-benefit basis?
- Do you have a budget rationalisation process that ensures funds are ultimately spent in the best way?

- Do you optimise capital investment and maintenance activities to get lowest life cycle costs?
- Do you have the ability to effectively manage the process of asset creation, rehabilitation, commissioning and handover for your roads, bridges, footpaths and drainage assets? and
- Do you have adequate processes, information systems and data and knowledge in place to facilitate consultation, analysis and decision-making efficiently?

3.4 Councils were required to rate themselves against this series of questions, and this information was then verified by the audit team. Based on the responses, a percentage rating is calculated for each element and then an overall rating which was compared with the best practice percentage rating (target). To provide more meaningful comparisons, the best practice target was adjusted to allow for differences between councils in both the size of their asset portfolio, and level of available resources. This is referred to as “best appropriate practice”.

3.5 From an audit perspective, it was pleasing that councils were eager to learn more about the concepts of best practice and displayed a genuine desire to improve.

EXTENT OF COMPLIANCE WITH BEST APPROPRIATE PRACTICE

3.6 Table 3A shows our overall assessment for each of the 9 councils examined against their best appropriate practice target.

**TABLE 3A
BEST APPROPRIATE PRACTICE (BAP)**

<i>Council</i>	<i>Municipal Association of Victoria</i>	<i>Victorian Auditor-General's Office</i>	<i>BAP</i>	<i>Comparison with BAP (%)</i>	<i>Rank</i>
Darebin	67	73	95	77	1
Ballarat	54	65	85	76	2
Whittlesea	68	62	90	69	3
Monash	-	61	95	65	4
Northern Grampians	57	48	75	64	5
Towong	-	48	75	64	6
Hume	50	53	90	59	7
Wellington	43	45	80	56	8
Delatite	40	44	80	54	9
Average	54	55	85	65	

Note: Monash and Towong did not participate in the Municipal Association of Victoria benchmarking study.

Source: Victorian Auditor-General's Office.

3.7 Table 3A shows that none of the 9 councils examined in the audit fully met best appropriate practice and that the gap ranged from 46 per cent to 23 per cent. This is unsatisfactory, as inadequate asset management can inhibit maximisation of an asset's useful service and, in turn, increase the costs (capital and operating) to councils of maintaining services to the community. Key factors contributing to this result included:

- failure to establish adequate asset management plans;
- poor quality asset management policies, processes and practices;
- failure to properly link asset management plans with planning and budgetary processes; and
- inadequate long-term financial expenditure plans and funding models.

Failure to establish adequate asset management plans

3.8 Road asset management plans should comprise:

- historical and current details of the assets, including their physical description, value, cost, condition, utilisation and performance against the service level targets (e.g. standard of the road) adopted by the council; and
- predicted demands on these assets including:
 - changes in levels of service;
 - growth or decline in the level of population or users of the assets;
 - changes in regulations such as bridge loadings;
 - the program/manner in which the asset portfolio needs to be maintained, expanded and renewed to meet these future levels of service;
 - future expenditure necessary to meet this program; and
 - a community and user consultation program that aligns these standards of service and cost of service required by the community/users with the optimal strategy for providing this service.

3.9 None of the 9 councils we examined had established high quality asset management plans that showed stakeholders the current cost of providing road services and the cost of sustaining that level of service in the longer term. We also found that the completeness and accuracy of information required to support a quality asset management plan varied between the councils examined. Specifically:

- Although all councils maintained asset registers, they were of varying quality for asset management purposes. For example, all councils (except Delatite) have a Pavement Management System for their “mature” high value road assets. However, that system was not fully used by all councils;

- Condition assessment techniques varied considerably in the sophistication of the method used, degree to which it had been completed and currency of the data. For example, Monash council had completed a detailed condition assessment in 1996 but had not continued to assess these assets since then. Best appropriate practice requires assets to be assessed at least once every 4 years. If this is extended significantly, it follows that the accuracy of information held by councils regarding asset condition is questionable. In terms of condition assessment techniques adopted by councils for each category of asset we found that:
 - Sealed roads: 6 councils (Ballarat, Darebin, Delatite, Hume, Northern Grampians and Towong) met or exceeded best appropriate practice;
 - Unsealed roads: only 3 councils (Ballarat, Darebin and Delatite) met or exceeded best appropriate practice. Two councils (Hume and Whittlesea) had no assessment techniques. One council (Monash) did not have any unsealed roads in their municipality;
 - Drains: only 4 councils (Darebin, Delatite, Northern Grampians and Wellington) met best appropriate practice. Three councils (Hume, Monash and Towong) did not have an assessment technique;
 - Footpaths: only 2 councils (Darebin and Delatite) met best appropriate practice. One council (Towong) did not have a technique; and
 - Bridges: only 3 councils (Darebin, Northern Grampians and Towong) met or exceeded best appropriate practice;
- Only 3 councils (Ballarat, Darebin and Monash) could identify the impact of differing maintenance, renewal and upgrade strategies on the condition, service capacity and useful lives of their road assets. For example, it is impossible to assess the real condition of sealed road assets by the use of simple 1 to 5 ratings as was adopted by Wellington Shire council. A more sophisticated multiple index method is desirable and is considered best appropriate practice. Without this data, the councils' level of confidence to accurately predict asset decay and the timing of interventions is reduced;



Road upgrade – Delatite Shire Council.

It is essential to differentiate between different types of expenditure. Capital upgrade, shown here, provides a higher level of service by widening an existing road.

- Limited attention had been given to identifying community needs and expectations regarding service delivery levels and standards for road assets. Some councils (Ballarat, Darebin, Delatite, Monash and Towong) had assessed ratepayer satisfaction with their road infrastructure but this had not been broken down into more detailed surveys addressing the individual elements of service delivery. For example, although ratepayers at Monash council expressed overall satisfaction with the roads, no information was provided as to whether the council could maintain this standard in the long-term, nor were the costs to maintain the roads at that standard disclosed. As such, ratepayers have limited capacity to judge whether services are providing value for money and are sustainable. Best value principles, which will be progressively adopted by councils over the period 2000 to 2005, will require consultation with the community on expected service levels; and
- Demand analysis processes and practices in terms of projected changes in demographic patterns, traffic type and density and technology were poor. Even where councils undertook such analysis, the source data was restricted to some traffic usage data and ratepayer complaints or problems. Several councils (Ballarat, Darebin, Delatite and Whittlesea) did relate road usage to VicRoads traffic volume predictions for some of their roads, but none of the councils allocated funds for comprehensive traffic counts. Failure to identify future demands may impact on a council's capacity to properly plan to meet those demands.

RESPONSE provided by Chief Executive Officer, City of Whittlesea

The City of Whittlesea does have condition assessments collected every 3 years for its sealed road network. However, council is conscious of the limitations of its current Pavement Management System software and is in the process of updating this software to allow optimisation techniques to be used for strategy development. This will allow our intermediate system to be upgraded to best practice.

Unsealed roads are obviously assessed for required maintenance through council's Operations section, but not through any formal asset management system. In terms of practicality and simplicity, it is not certain that this system needs to be altered to achieve any identifiable improvement in outcome.

Drainage infrastructure is relatively young in terms of life in this municipality and there has not been a need to concentrate resources in assessing condition of pipes that are known to be performing well and are aged at 25 per cent of the expected life. This will come in the future but is not a priority for council at this stage.

Footpaths are assessed frequently for condition. Council uses GPS data recorders to generate field instructions and has been allocating in the order of \$680 000, per annum, for footpath repair for at least 6 years.

A pilot program further extending the use of GPS and GIS reporting was completed in 2001 and this technique will be used for annual inspections from now on. A review will be required as to how the asset management system should be linked to this process, which we regard as a best practice model for the future.

Bridges are inspected annually, but it has been pointed out that council has not specifically required structural examination for load capability of all bridges. Some reports have been completed. Council does intend to have structural examinations carried out progressively based on need. The annual inspections do highlight whether any problems are evident which require further investigation.

Additionally, council has inspected the entire city with respect to nature strip subsidence, using GPS technology, and recorded the results on its GIS system. It is now considering progressing funding of remedial works in its 2002-03 budget considerations. This is best practice at the present.

Poor quality policies, processes and practices

3.10 A range of policies and processes exist to complement asset management. The primary objective of such policies and processes is to ensure that staff are provided with proper guidance with respect to their responsibilities.

3.11 We found that the quality of councils' policies, processes and practices were below best appropriate practice. Examples of shortcomings are as follows:

- Two councils (Delatite and Towong) did not have asset management policies, 4 (Ballarat, Hume, Wellington and Whittlesea) were assessed as inadequate, and the remaining 3 (Darebin, Monash and Northern Grampians) were of average quality;
- None of the policies extended to all elements of life cycle asset management;
- Eight councils did not have a policy and process manual. The manual that was maintained (Hume) was not regularly updated and of average quality; and
- Only 3 councils (Darebin, Hume and Monash) clearly defined their processes and this was of average quality.

3.12 In the absence of proper guidance, staff are susceptible to inconsistent, incomplete or even inappropriate actions when managing assets.

Absence of planning linkages

3.13 Good asset management practices require linkages between Asset Management Plans, corporate and business planning and budgetary processes. Such linkages ensure that outcomes and the funding required to achieve those outcomes are identified.

3.14 We found that only one council (Delatite) did not have some linkages between corporate and business planning and budgetary processes. However, none of the 9 councils had these linkages formally identified in their Asset Management Plans. Although all councils had a planning and budgeting process that included input from the roads asset business group, the planning was only short-term (up to 3 years). Similarly, none of the councils had given sufficient priority to the significance of road asset management in corporate and business plans.

Inadequate funding models

3.15 The funding model for roads adopted by councils and other levels of government should drive efficient and effective road infrastructure asset management. Such a model should:

- determine the level of funds required by:
 - understanding life cycle costs of assets; and
 - matching future revenues and expenditures;
- determine the source of those funds by:
 - setting rate levels commensurate with funding needs;
 - seeking contributions from elsewhere, e.g. Commonwealth/State Government; and
 - using user charges, levies, and differential rates, where different levels of service are provided, to match benefits with costs; and
- allocate those funds to recurrent or capital and to different services through:
 - using life cycle profiles to determine asset needs;
 - recognising that asset expenditures vary over the life cycle of the asset; and
 - using maintenance to optimise life cycle costs.

3.16 We found that the funding models of the 9 councils were not conducive to efficient and effective road infrastructure asset management. This undesirable position was compounded by weaknesses with the funding model of the Victoria Grants Commission (refer paragraphs 3.37 to 3.42 of this report).

3.17 Poor practices of councils are commented upon in the following paragraphs.

Absence of genuine forward planning

3.18 The strategic planning and reporting obligations of councils are specified in the *Local Government Act* 1989. Each council must submit to the Minister a 3 year corporate plan that sets out the corporate objectives of the council, strategies for achieving those objectives, and a general resource allocation plan.

3.19 We found that resource allocation plans, covering both financial and non-financial resources, prepared by all councils were little more than indexed extrapolations (i.e. the current year's revenue and expenditures multiplied by a factor representing the Consumer Price Index, plus a small growth element). There was little serious attempt to forecast changes in asset renewal requirements or to include reasonably predictable revenue changes (e.g. changes in road grant allocations resulting from increased road lengths in new developments). In only a few cases (Ballarat, Darebin, Monash and Whittlesea) did projections of revenues and expenditures extend beyond the minimum 3 year period required under the *Local Government Act* 1989. As a result, councils were not able to make funding decisions based on matching revenues with future expenditure requirements and thus potential existed for inappropriate funding decisions. The 3 year horizon required by the Act does not provide enough planning time for managing road assets.

3.20 Our examination of councils confirmed the findings of the Department of Infrastructure's report *Facing the Renewal Challenge – Victorian Local Government Infrastructure Study - December 1998*. Future asset renewal is likely to have major renewal expenditure peaks much greater than current expenditure. Forward plans covering a period of less than 10 years do not enable councils to get a view of upcoming renewal cycles and create a misleading impression that the current levels of expenditure are sustainable. This results in, for example, windfall income from asset sales such as the sale of buildings or income-generating businesses being allocated to asset expansion and upgrade rather than allocation to future asset renewal. Insufficient planning time can lead to a false sense of security, encouraging decisions to expand the asset stock, further exacerbating the future renewal liability.

3.21 On the other hand, sudden increases in funding allocations, as in the case of the Roads to Recovery funding (unexpectedly provided by the Commonwealth Government over a 4 year period commencing in January 2001) can also affect decisions of councils. In the absence of a forward plan and funding model that sets a strategy for average annual asset consumption, there is a tendency to view these funds as a "windfall" gain and to spend the money on asset upgrade and expansion rather than on required renewal projects.

3.22 Councils could improve their long-term planning by:

- extending the period covered by resource allocation plans to at least 10 to 15 years, thereby allowing sufficient time to adjust their funding levels to meet their real asset requirements, and fully integrate these plans with both technical and financial plans;

- preparing a funding strategy, as an integral part of their resource allocation plan, which addresses the need for funds, the peaks and troughs in this need, how the funds will be sourced and a plan for community consultation on the resource plan; and
- ensuring that the funding strategy is a principal part of every proposed new service (or significantly altered existing service) covering full costs (capital and recurrent) and that such service is properly justified on a cost-benefit basis, with sources of funds identified.

Lack of a mechanism to balance revenues and expenditures over time

3.23 A rigorous funding mechanism must be in place to balance revenues and expenditures over time. It should be technically auditable (i.e. the technical basis for the assumed economic lives underpinning future expenditure projections should be clearly stated so that they may be checked by reference to the best of industry practice). A funding mechanism is aimed at:

- ensuring that the optimal level of resources is available when required;
- protecting the renewal resources from being re-directed to alternative uses;
- smoothing the renewal cycles; and
- addressing the problem of “excess” rate revenues in early years and “deficient” rate revenues in the later years of the asset cycle.

3.24 We found that none of the councils had in place mechanisms to balance revenues and expenditures over time. In 2 councils (Hume and Whittlesea) that had high levels of urban growth, revenue received and receivable from new development areas will not be sufficient to sustain the services over their useful lives. Such revenue must, therefore, be supplemented through other means such as grants.

3.25 Three Councils (Ballarat, Darebin and Hume) that experienced major development 50 or more years ago now have significant parts of their asset stock near the end of its life cycle. These councils are a good example of renewal peaks that need to be planned throughout the life cycle of assets.

3.26 Balancing revenues and expenditure over time could be improved by:

- developing a realistic assessment of the average cost of owning their assets (average economic cost of operating, maintenance and renewal) and, using a sound funding model and community consultation, assessing the limits of their asset portfolio; and
- adopting a rolling 10 year plan to determine the total cost (as well as the average cost) of maintaining and renewing assets, together with the mechanism to be used to ensure the availability of funds to meet the asset costs (e.g. use of reserve funds).

Insufficient knowledge of depreciation and life cycle costing

3.27 We found that the 9 councils did not always fully understand the relationship between depreciation (the allocation of replacement cost over the life of the asset, an “annual average”) and the level of asset renewal currently being undertaken. There was a tendency in councils to downplay the depreciation figure, failing to recognise that, if the current renewal level was less than the average life cycle cost (as approximated by the depreciation amount), renewal costs would rise in the future. The depreciation figure tended to be “adjusted” downward by artificially redefining the asset lives. Thus, important information for good asset management practice was not being used and, in general, rate revenues were not being set at a level that would enable assets to be renewed when needed.



Sealed and unsealed roads – Wellington Shire Council.

Life cycle costs of sealed and unsealed roads need to be understood to make informed decisions on long term funding requirements.

3.28 We found that 3 councils (Ballarat, Hume and Wellington) have worked towards devoting additional resources and developing further information to support this area. In addition, depreciation and life cycle costing in these councils are closely aligned, for example:

- Ballarat and Wellington – the annual depreciation amount is consistent with the average annual asset consumption; and
- Hume – depreciation was adjusted slightly downwards as a result of a recent condition assessment.

3.29 However, in all councils there was a lack of reliable supporting statistical data and analysis to demonstrate, with confidence, actual economic life. For example, in:

- Darebin – the renewal expenditure needed for infrastructure is likely to greatly exceed the average life cycle cost and/or depreciation in the near future;
- Northern Grampians – the average annual cost of asset renewal was greater than council revenues could manage without significant increases in either rates or grants. This shortfall would be exacerbated if, as seemed could be the case, changes in the level of heavy traffic shortened the existing life cycles and thus brought forward the time for renewal; and
- Towong Shire – very little capital renewal/road rehabilitation is carried out, partly because of a good resealing program in past years. There is little or no capacity for funding life cycle costs into the future. This position could be exacerbated if, as could be the case, changes in the level of heavy traffic resulting from larger transport vehicles for dairying operations shortened the existing life and thus brought forward the time for renewal.

3.30 In order to track the remaining life for future renewal planning and to measure whether the assumed economic lives are being achieved, councils need to record the age of assets and their key component parts. Although the time of initial construction is occasionally recorded, the time at which renewal (e.g. re-seal, re-sheeting, re-construction) is carried out is usually not recorded, or used for economic life analysis. As capital renewal extends asset life or renews a material part of the asset, for planning purposes councils need to record the time at which this takes place so that they may adjust the age and remaining life of assets or asset components. Thus, councils need to clearly distinguish capital renewal needs from routine maintenance. However, there was a tendency for capital renewal – such as material amounts of heavy patching or “dig-outs” to be classified as maintenance without a corresponding adjustment to the asset’s remaining life.



Sealed road - Towong Shire Council.

The economic and remaining life of roads is highly variable. Dividing networks into components with separate economic and remaining lives is important to improving an understanding of future funding needs.

3.31 The failure of councils to record age and remaining life is partly due to an assumption that road networks are in a “steady state” and not subject to significant future peaks in life cycle. For this assumption to be valid, council’s road portfolios would need to have been unchanged for at least 3 life cycles to have given the natural peaks in renewal a chance to even out. While this may be the case for some “spray seals” of roads with 10 to 15 year lives, it would not be true of pavements with lives of about 60 years. Moreover, councils would need to have records confirming actual lives and none of the councils we examined have renewed more than 10 to 15 per cent of their road pavements. Councils also have no mechanisms to understand the relationship between asset condition and time, nor the actual sustainable average annual asset consumption costs.

3.32 To ensure annual renewal expenditure is closely aligned to the life cycle costs of assets, councils could:

- reconcile the recorded depreciation and the current level of renewal as part of their long-term strategic and annual planning processes and clearly identify the impact (e.g. need to use reserve funds or borrow new funds or the surplus generated);
- ensure that annual planning is based, not on the “average” rate of renewal (represented by depreciation) but rather, by the needs of the assets at their current stage of the life cycle; and
- ensure that all work that extends asset life or renews a material proportion of the asset is recorded as “capital renewal” rather than “maintenance” and that remaining life of the asset or asset component is adjusted.

RESPONSE provided by Chief Executive Officer, Monash City Council

Paragraph 3.9 makes reference to Monash completing a detailed condition assessment in 1996 and then not continuing to assess the condition of assets since that time. Monash continues to monitor the condition of its road assets through work undertaken in partnership with the Australian Road Research Board (ARRB). This research aims specifically to assess and better understand the intervention levels and standards to apply to roads that have not yet reached their useful life. The term “indefinite life” was proffered by consultant, Dr Penny Burns when conducting the audit. This research aims to identify where possible the relationship between intervention and renewal to achieve an indefinite life when infrastructure is maintained at an optimum level throughout its life.

Assessment of sector-wide management practices

3.33 In November 2001, the Municipal Association of Victoria disclosed the results of an asset management benchmarking review that was aimed at assessing the basic quality of asset management across the local government sector. All 78 councils were invited to complete an anonymous self-assessment to encourage an industry-driven improvement program. Only 12 councils declined to complete the self-assessment.

3.34 The results of this audit provided a check against the reliability of the self-assessments. In this regard, we found that councils who were best at asset management self-assessed more critically, while those with lower scores tended to be more optimistic in regards to their performance. Overall, there was a good correlation between the results of the audit and the benchmarking study.

3.35 The benchmarking study found that all 66 councils failed to meet best practice asset management in all categories of assets, including road infrastructure. The study also identified that, in terms of meeting best appropriate practice, the top 10 per cent of Victorian councils compared unfavourably with the top 10 per cent of all other Australian States and New Zealand. The overall ratings were 67 per cent, 85 per cent and 75 per cent, respectively.

Recommendations

3.36 We recommend that councils:

- initiate prompt action to develop and implement Asset Management Plans for their road assets with a 10 to 15 year horizon;
- establish and maintain formal policies, processes and practices that reflect best appropriate road asset management practice;
- ensure asset management plans are linked to corporate and business plans and long-term budgets; and
- re-assess the effectiveness of their funding models and, in particular:
 - their approach to long-term planning;
 - the need for a mechanism to balance revenues and expenditure over time; and
 - their understanding of the relationship between depreciation and life cycle costing.

RESPONSE provided by Chief Executive Officer, Hume City Council

Agreed – subject to councils being granted autonomy to implement these continuous improvement actions at a rate which is consistent with their overall corporate agenda.

RESPONSE provided by Chief Executive Officer, City of Whittlesea

The recommendations for longer range planning over at least 10 years, as contained in Recommendation 3.36 of the report, are supported. The City of Whittlesea has previously initiated a 10-year funding projection project called Innovation 2010 and is finalising the next version of this, which addresses infrastructure costs to 2016. These analyses provide an assessment of likely revenue and expenditure for all recurrent and capital works and highlight gaps in funding. A 10-year financial plan also forms part of this initiative.

The recommendation to produce 10-year rolling asset management programs should also be applied to other State Government organisations such as VicRoads. The City of Whittlesea acts as an agent for VicRoads in managing the main road network, but is constrained by an annual bidding program for works without the benefit of a 10-year rolling program developed by VicRoads. This is unsatisfactory and the whole process needs to be addressed to deliver longer-range indicative rolling programs for routine work.

WEAKNESSES WITH THE DISTRIBUTION OF COMMONWEALTH FUNDING

3.37 The Victoria Grants Commission is responsible for determining how the annual allocation received from the Commonwealth Government for the preservation of local roads is to be distributed between the 78 Victorian councils on the basis of relative need. The formula used by the Commission up to 2000-01 was largely based on population and road length, but took no account of road use, changes in road use or the cost of preserving local road assets.

3.38 As a result of a recent review conducted for the Commission by the Australian Road Research Board (ARRB) and the National Institute of Economic and Industry Research, the method of allocating road grants was changed considerably. The new formula is based on road length (for all surface types) and traffic volumes, using average annual preservation costs for given traffic volume ranges. The preservation costs were developed by the ARRB based on extensive research of road life-cycle costs in Victoria and Western Australia for broad traffic volume ranges. They are intended to better reflect the cost of local road maintenance and renewal. Commencing in 2002-03, the average asset preservation costs will be periodically reviewed by the Commission.

3.39 Under the new formula, the share of funding to rural councils will increase (56 per cent to 69 per cent) and the share for metropolitan and regional councils will decrease (33.7 to 22.8 per cent and 13.3 to 7.6 per cent, respectively). As the grants will change significantly for some councils, the Commission will phase in the new formula over a 3 year period commencing in 2001-02.

3.40 There is a risk that, as the funding formula is based on average annual costs, councils may not feel compelled to establish and maintain a good understanding of the age and remaining life of their assets. Determining “remaining lives” is essential for predicting future costs; determining “total economic lives” is necessary for determining annual costs of new or extended road services for benefit-cost analysis; and age together with useful life is essential to track whether the useful life of the asset assumed by the Commission is being achieved. Funds are allocated on an “effort neutral basis”, without regard to the policies of individual councils. However, without this information, the Commission is unable to assess whether its formula needs to be adjusted as council assets age. Furthermore, preservation needs may vary over time due to life cycle variations which can be an important factor if a major proportion of assets all need renewal in a relatively short timespan.

3.41 Changes to the formula with asset ageing would not be necessary if the formula was based on the full average annual cost. However, the Commission discounts the rehabilitation element of the annual cost because, in its view, councils in general are not yet at the peak of their asset renewal cycles. We consider that, as this situation will change with time, the formula will also need to change.

3.42 We also noted that:

- The size of the discount is not disclosed in the documentation supporting the new funding formula, nor how it was determined. Furthermore, there was no analysis within the documentation as to how the use of discounting may impact on councils, particularly those, like Hume, that are at the peak of renewal needs;
- Documentation supporting the calculation of the discount was limited. The only generally available assessment of age and economic lives for Victorian local government roads is the now outdated information in the Department of Infrastructure renewal study undertaken in 1998, which even the study reported was of exceedingly variable quality;
- The impact of discounting the cost of road rehabilitation may not give councils the correct incentive to carry out timely reconstruction, encouraging them instead to patch and re-seal over decaying pavements. This could result in shorter economic lives and wasted resources; and
- The new model does not take into account the quality standards to which assets should be managed which can result in significant waste (loss) or over-expenditure.

Recommendation

3.43 We recommend that the Victoria Grants Commission should require councils to provide data on the age and economic life of their road assets, which can be used to assess the underlying assumptions supporting the Commission's funding model.

RESPONSE provided by Chief Executive Officer, Victoria Grants Commission

The Victoria Grants Commission commenced the implementation of a new formula for allocating untied local roads funding in 2001-02.

Under nationally agreed distribution principles, the Commission is required to ensure that the policy decisions of individual councils do not affect the allocation of grants. The average asset preservation costs that are used in the new formula are, therefore, established at the State level and varied at the individual council level by those factors over which councils have no direct control (such as traffic volumes, climate and soil conditions). The condition and remaining economic life of local road assets reflects, at least to some degree, past council effort in maintaining and upgrading these assets.

The Commission has signalled that the asset preservation costs used in the funding model will be reviewed periodically from 2002-03. To ensure compliance with the national distribution principles, the Commission will continue to calculate and apply these costs on a Statewide average basis. The Commission does not believe that the provision of data on the age and economic life of all councils' road assets is required to calculate or verify these asset preservation costs.

RESPONSE provided by Chief Executive Officer, Hume City Council

The formula applied by the Victoria Grants Commission for the allocation of local roads funds has been the subject of much debate and involved many experts over the past 15 years or so. While there should be ongoing review of the formula, the work done in this performance audit would need to be considered in conjunction with views of other stakeholders prior to contemplating change.

RESPONSE provided by Chief Executive Officer, Monash City Council

The recommendation regarding formulas for grant allocations should be mindful of the significant resources required to keep the information relevant as conditions change and giving consideration to the collection of data over time. Data is expensive to collect, maintain and analyse. As conditions may not change significantly in the short term, consideration could be given to a requirement for collection and analysis of data on a 5 year basis.

SCOPE FOR IMPROVING DEPARTMENTAL SUPPORT

3.44 The Department of Infrastructure is responsible for the planning, development and maintenance of key State infrastructure, and for the management of an effective planning and local government system. Through its Local Government Division, the Department aims to achieve a whole-of-government approach from the State in relation to the local government sector. The Division supports and advises the Minister for Local Government in the administration of the Local Government Act and, in partnership with councils and local government associations, encourages and supports best practice and continuous development in local government service delivery to Victorian communities.

3.45 The Local Government Division liaises with peak local government bodies, and other agencies both State and Commonwealth, which have policy, funding or legislative links with, or interest in, councils. The Division's role is concerned with overseeing, supporting and encouraging the system of local government.

Key strategies

3.46 The Local Government Division's key strategies in relation to asset management are as follows:

- **Capacity building** - To improve the capacity of the local government sector (elected members as well as council staff) to effectively manage their infrastructure asset base. The Division has established an asset management reference group;
- **Practices and Processes** - To provide guidance on appropriate practices and processes. This has included:
 - preparing a policy document to clearly identify the relationship between the strategic plan and asset management, and guidance on what constitutes a sound asset management plan; and
 - providing additional funding through the Asset Management Grants Program to assist councils develop sound asset management plans;
- **Monitoring** - To develop methodologies to assist councils to measure their performance in asset management and to enable the Minister to report on the overall performance of the sector in asset management; and

- **Financing** - To investigate options for financing infrastructure assets and for managing assets. The Division has initiated several studies looking at financing options, including the feasibility of private/public partnerships. Councils have also been encouraged to examine their rate base, leading to a number of councils increasing their rating levels to assist in closing the funding gap.

3.47 Table 3B summarises these infrastructure initiatives from December 1998 to date, the status of those initiatives and value of funding where allocated to the initiative. We noted that an agreed timeframe for commencing each initiative had not been set by the Department.

**TABLE 3B
INFRASTRUCTURE INITIATIVES 1998 TO 2002**

<i>Financial year</i>	<i>Initiative</i>	<i>Strategy</i>	<i>Status</i>
1998-99	(Budget allocation <i>(not set)</i>)		
	Facing Renewal Challenge Infrastructure Report – released Jan. 00. Annual Community Satisfaction Survey.	Monitoring Monitoring	✓ ∞
1999-00	(Budget allocation <i>(not set)</i>)		
	Local Government Consultative Committee (LGCC) established – encouragement of regional approaches to local government. Meets 3 or 4 times a year to support regional perspectives. Annual Community Satisfaction Survey.	Processes Monitoring	∞ ∞
2000-01	(Budget allocation <i>(not set)</i>)		
	Cabinet submission for Local Government Infrastructure Strategy.	Processes	✓
	Victoria Local Government Indicators (including 3 on infrastructure) agreed by the sector.	Monitoring	✓
	Additional expertise employed in the Department to focus on local government infrastructure.	Capacity building; Processes	✓
	Asset Management Reference Group established to provide input to LGCC on implementation of strategies.	Capacity building	∞
	Asset Management pilot project established, trialed Asset Management Plan guidelines.	Capacity building; Processes	⊖
	Pilot councils selected to develop Asset Management Plans in accordance with criteria. Practical assistance provided.	Capacity building; Processes	✓

TABLE 3B
INFRASTRUCTURE INITIATIVES 1998 TO 2002 - continued

<i>Financial year</i>	<i>Initiative</i>	<i>Strategy</i>	<i>Status</i>
2001-02	(Budget allocation \$400 000)		
	Asset Management Policy and Plan guidelines issued.	Processes	⊖
	Practice notes on accounting treatment of infrastructure assets issued.	Processes; Monitoring	⊖
	Public-Private Partnerships Feasibility assessment.	Financing	⊖
	Councils surveyed as to whether or not they have Asset Management plans in place. To be conducted annually.	Processes	✓
	Asset Management Grants Program – incentive to rural councils to develop Asset Management Plans.	Processes	✓
	Good governance promotion. Workshop for councillors.	Capacity building	✓
	Good governance promotion. Joint governance survey with peak bodies of all councillors.	Capacity building	⊖
	Infrastructure seminars/workshops to elected councillors.	Capacity building	⊖
	Supported LG Pro to conduct Asset Management planning workshops for staff.	Capacity building	✓
	Conduct feasibility study into infrastructure financing options and applicability of Partnerships Victoria to local government in conjunction with the Department of Treasury and Finance.	Financing	⊖
	Study underway on developing indicators to help councils assess financial sustainability.	Capacity building	⊖
	DOI's extranet established to provide councils with a mechanism to share information.	Capacity building	✓
	Policy papers on relationship of council planning and infrastructure asset management.	Processes	⊖
	Local Government Act update – clarifies accountability requirements.	Legislative	⊖
	Assess appropriateness of the development of best appropriate practice (BAP) guidelines.	Processes	⊖
	Victoria Local Government Indicators published in councils' annual reports for 2000-01. To be published annually.	Evaluation	⊖
2002-03	(Budget allocation \$ n.a.)		
	Develop other practice notes as needs are identified.	Processes	⊖
	Investigate a methodology to help councils evaluate their infrastructure asset management performance.	Evaluation	⊖

Legend: ✓ Finalised/completed ⊖ In progress/outstanding as at April 2002. ∞ Ongoing

3.48 For the financial year 2002-03, the Division proposes to investigate a methodology to enable continuous monitoring of long-term infrastructure costs through a dynamic infrastructure study, and to continue with the Asset Management Grants Program. Both initiatives are designed to address practices, processes and monitoring. At the date of preparation of this report, budget allocations for these initiatives had not been finalised.

3.49 We support the actions taken to date by the Division to assist councils with asset management. We noted that a number of these initiatives are expected to be completed by 30 June 2002 and some have not met their completion target dates. For example, an Asset Management Reference Group comprising a range of stakeholders (including representatives from 2 councils) was established to oversee the task of improving the local government sector's:

- knowledge of asset management;
- capacity to manage the asset base; and
- ability to demonstrate asset management performance to the local community.

3.50 We found both the meeting frequency and completion dates for actions from this group had not been met. Consequently, the provision of guidelines to councils on asset management plans and practice notes on the accounting treatment of infrastructure assets has been delayed. A revised completion date had now been set for 30 June 2002.

Council assessment of departmental assistance

3.51 As part of the audit, councils were invited to comment on the assistance they had received from the Department. We recognise these comments may not necessarily reflect the views of all councils. Overall, council staff felt that the timeliness and effectiveness of support provided by the Department could be improved. Some commented that:

- Appropriate training and seminars had not been provided. Specific areas of assistance sought by council staff included advice and training in the classification of roads, data collection methods and requirements, measurement of quality in roads construction and maintenance, road condition prioritisation, standard asset management systems and how to use them, and implementation of consistent long-term road infrastructure planning; and
- Feedback was not provided by the Department on the quality of the council's annual report and other reports they submitted. Regular feedback and advice would be welcomed by councils, particularly in the dissemination of what is considered as best practice.

Recommendations

3.52 We recommend that the Department:

- initiate action to promptly complete those initiatives that have not been completed within the specified timeframe and ensure those in progress are completed as proposed; and
- consult with a broad range of councils on the nature of support and guidance they require from the Department to assist them with their road asset management responsibilities and how the Department can best meet those needs.

RESPONSE provided by Secretary, Department of Infrastructure

The Department (Local Government Division) has given a priority to encouraging and supporting councils to improve management of their whole infrastructure asset base and initiatives to do this will be completed as planned within this financial year. The Department reprioritised the allocation of \$400 000 in 2001-02 to provide support to local government in enhancing their management capacity. Such support has included an extensive grants program to assist rural councils in the development of asset management plans, and workshops for councillors and Chief Executive Officers.

The Department uses the Local Government Asset Management Reference Group to provide advice on the support the Department can provide local government. The Department will also obtain further feedback on the nature of support and guidance that the Department can best make at the infrastructure workshop for councillors and Chief Executive Officers scheduled for 30 May 2002.

RESPONSE provided by Chief Executive Officer, Hume City Council

The National “Step by Step” program being co-ordinated by the Municipal Association of Victoria, Australian Local Government Association, Department of Infrastructure and other bodies is seen to be the best method of progressing the infrastructure management reform agenda. It is absolutely essential that the sector has ownership of the process.

EFFECTIVENESS OF ASSET MANAGEMENT PRACTICES

3.53 Council road asset management practices are aimed at optimising the useful life, capability and utilisation of those assets and providing assets that meet the needs of the community. Our audit incorporated an assessment of the extent to which these aims had been achieved and hence the effectiveness of council practices.

Optimisation of useful lives

3.54 In simple terms “useful life” refers to the period of time an asset is capable of meeting a required level of service. For example, in the case of a road surface (seal), if properly maintained, and given normal wear and tear, it would normally be expected to provide 15 to 25 years of useful service.

3.55 Due to the absence of reliable council data relating to the condition of their assets, we were unable to assess the extent to which the useful lives of their road assets were likely to be fully optimised. Similarly, we were unable to identify the extent to which assets were, if at all, utilised beyond their useful life or the level of funding, if any, required to upgrade assets to ensure they reach their useful service life.

3.56 For the same reasons outlined in the preceding paragraph, we were unable to form a view across the whole of the local government sector on the extent to which the useful lives of road assets had been optimised.

3.57 We consider this is an unacceptable position. We also noted that there are no requirements for councils to disclose the current condition and rate of decay of their road assets, nor for this to be determined using the same method by all councils. Failure to know, with a reasonable degree of certainty, the condition of the asset portfolios inhibits accurate assessments of maintenance and renewal expenditure requirements. Indeed, without this data, neither councils nor the State can assess the current status of assets, future funding needs, deliverable service levels or their liabilities.

3.58 The significance of this issue was highlighted in the *Facing the Renewal Challenge* study initiated in 1998 by the Department of Infrastructure due to its concerns regarding the funding difficulties facing councils with their ageing infrastructure assets. At that time, it was estimated councils had a \$1.17 billion funding shortfall (renewal) gap (covering a 5 year period to 2002) between their current levels of expenditure on the maintenance and renewal of infrastructure assets (of which roads is one component making up more than half of total assets) and their future requirements. There is no doubt that the failure to properly assess the condition of assets on a regular basis has been a major factor contributing to this result.

3.59 At present it is not possible to estimate the size of the funding gap with any degree of certainty and even the Department acknowledges its estimate was based on data supplied by councils which was not verified. However, using the results of the Departments 1998 study, the Municipal Association of Victoria benchmarking study and the findings from this audit, we suggest that the gap could be between \$1.4 billion and \$2.75 billion.

Approaches in other jurisdictions

3.60 We noted that the position in Victoria with respect to road condition assessments contrasts with the approach of councils in New South Wales, Western Australia and New Zealand.

3.61 In the early 1990s, councils in New South Wales were provided (at no cost) with a uniform condition assessment model and requested to provide that State's Road Traffic Authority with their road condition data when seeking funding allocations. This approach enables the New South Wales Government to accurately report on and assess the overall road portfolio throughout that State from both a main roads and local roads perspective. It also allows a logical allocation of funds on a needs and cost-benefit basis.

3.62 A similar position exists in Western Australia. In 1993-94, that State's Main Roads Department provided councils with a standard condition assessment methodology that formed the basis of all council reporting to the Department on their road portfolio. Councils complete an annual condition assessment to determine their capital expenditure and maintenance cash flows, and present all of this data to the Department. The information from all councils is analysed by the Department and used to support its recommendations to the State Government on funding allocations.

3.63 In 1993-94, the New Zealand road authority, Transit New Zealand, provided councils with a standardised condition assessment tool for reporting on all local road infrastructure. Since 1997, the councils' condition reports have been used by the funding authority as a basis for assessing allocations. In 2001, New Zealand's national asset management steering committee determined to complement the assessment tool with an advanced pavement management system. Councils are now compulsorily required to implement the new system by 2003. The regulatory framework also requires councils to prepare a long-term financial strategy (10 year, renewable every 3 years) which is to be supported by long-term asset management plans (15-20 years) for all of their infrastructure services including roads, drains, bridges, footpaths etc. The plans assist the road authority in understanding the long-term sustainability and obligations associated with the country's total road network.

Community satisfaction with roads

3.64 Part 4 of this report includes comment on the limitations of the *community satisfaction with local roads and footpaths* performance indicator. In essence, the indicator does not take into account the costs to council of maintaining road assets and the costs to sustain that level of service into the future which, in turn, can impact on community satisfaction. In other words, the community is not aware of the trade-offs made or the affordable standard set by the community in making the satisfaction rating.

3.65 The Department of Infrastructure, through a market research firm, undertakes an annual survey on behalf of councils of a sample of ratepayers across all councils to assess their satisfaction with the various services provided by their respective councils. The results are provided to each council for internal and external reporting purposes. Table 3C shows the levels of community satisfaction with local roads and footpaths over the 4 year period to 2000-01 for the 9 councils covered in the audit.

TABLE 3C
COMMUNITY SATISFACTION WITH LOCAL ROADS AND FOOTPATHS
1997-98 TO 2000-01

Council	Satisfaction rating				
	1997-98 actuals	1998-99 actuals	1999-00 actuals	2000-01 actuals	2000-01 target
Ballarat	44	43	50	53	52
Darebin	61	63	64	65	65
Delatite	45	45	44	44	48
Hume	54	53	58	59	57
Monash	67	66	69	67	*
Northern Grampians	52	50	52	51	55
Towong	48	52	55	54	57
Wellington	46	43	47	49	54
Whittlesea	64	65	70	67	69
Average for all 78 councils	53	53	55		

Source: Department of Infrastructure (1997-98 to 1999-00) and council annual reports (2000-01). * Monash did not set a target in its corporate plan for the survey for 2000-01.

3.66 The following ratings developed by the market research firm in consultation with councils, which we consider are reasonable, are used to assess the survey results:

- 100 represents an excellent - outstanding performance;
- 80 represents a good - high standard performance;
- 60 represents an adequate - acceptable standard;
- 40 represents a need for some improvement; and
- 20 represents a need for a lot of improvement.

3.67 Table 3C shows that the community satisfaction ratings throughout the 4 years to 2001 in the 9 councils examined ranged from a low of 43 to a high of just 70. Only 3 councils (Darebin, Monash and Whittlesea) have, in each year, met or exceeded the rating of acceptable performance (60) for the full 4 year period. For 2000-01, only 2 councils (Darebin and Whittlesea) had set targets at or above the 60 rating.

3.68 With respect to the other 69 councils, for 1997-98, 13 met or exceeded the rating of acceptable performance (highest 68 and lowest 37). For 1998-99, 13 councils met or exceeded the acceptable rating (highest 70 and lowest 37) and 18 in 1999-00 (70 and 38).

3.69 Table 3C also shows that, although 6 councils have improved their level of community satisfaction over the 4 year period, this movement is at best only marginal and, as stated above, 6 councils are still below the acceptable standard. Two councils have virtually made no progress towards improving their performance and the other has remained relatively unchanged.

3.70 We consider that, with the exception of Darebin, Monash and Whittlesea, these results are unacceptable. It was also disappointing to note that no follow-up action had been taken by the Department in terms of ascertaining the causes of the poor performance and actions proposed by councils to redress the situation. While we acknowledge targets need to be realistic, setting a target that is below the acceptable standard agreed by the sector is not conducive to improving performance.

Recommendations

3.71 To improve assessment of councils' performance in managing road assets, we recommend that:

- the Department of Infrastructure should give consideration to introducing a requirement for councils to report annually on the condition of their road infrastructure assets;
- councils should regularly determine the condition of their road assets relative to their useful life using a standardised system;
- those councils who fail to meet their target level of community satisfaction should identify the underlying factors contributing to this result with the view to initiating corrective action; and

- councils should re-assess their target level of community satisfaction with a view to ensuring it supports continuous improvement.

RESPONSE provided by Secretary, Department of Infrastructure

The Department strongly agrees that councils should report on the condition of their infrastructure assets. The Department will consult with the sector on reporting annually to their local communities. This is in keeping with government policy that local governments must be accountable to their local communities for sound governance and service delivery.

RESPONSE provided by Chief Executive Officer, Hume City Council

Annual reporting of the condition of road infrastructure assets is supported in principle. However, if adopted, the methodology employed must be developed by, and be appropriate to, the sector. Further consideration needs to be given to the merits, or otherwise, of adopting standardised systems. In particular, the variation in asset types between councils, the freedom to innovate and explore new approaches, and the principle of local government autonomy need to be addressed.

The community does not differentiate between council roads and VicRoads roads when responding to the Community Satisfaction Survey. While the use of the survey results is informative, councils may be limited in their ability to achieve improvement due to external factors.

RESPONSE provided by Chief Executive Officer, Monash City Council

A requirement to undertake regular assessments should take account of condition deterioration and renewal programs, and the cost of data collection.

RESPONSE provided by Chief Executive Officer, City of Whittlesea

Introduction of standardised systems for undertaking regular condition assessments of road infrastructure assets requires clarification. Any condition assessment system should be outcome oriented. Organisations such as the City of Whittlesea, which is taking steps at the present time to upgrade software and carry out data upgrades, should ultimately be recognised for good asset management.

Part 4

Public accountability framework

INTRODUCTION

4.1 A number of key documents are prepared by councils to facilitate public accountability for their activities. These include:

- Planning and budget documents such as:
 - Three year corporate plans (also referred to as community or council/shire plans), prepared pursuant to the *Local Government Act* 1989. These plans set out the council’s objectives, strategies for achieving those objectives and indicators for measuring achievements against the objectives. A general resource allocation plan covering both financial and non-financial resources is also prepared. These documents are often adopted after extensive consultation with relevant stakeholders; and
 - Annual business plans and budgets that convert the longer-term aspirations of councils, contained within their corporate plans, into operational activities and the estimated costs; and
- Annual reports prepared pursuant to the Act. These reports, which are presented to the Minister for Local Government, contain 3 main segments, namely:
 - Audited financial statement, which presents the financial result for the year and assets and liabilities of the council;
 - Audited performance statement that presents a range of key performance indicators developed by the council pertaining to its corporate responsibilities (e.g. rates management, financial performance, community satisfaction) and the provision of services (e.g. cost and quality of service delivery, service quality). The statement also shows a comparison of planned with actual performance for each indicator; and
 - Report of operations which states the council’s objectives and strategies and describes various activities undertaken during the year.

4.2 This Part of the report provides our assessment of the adequacy of the public accountability documents and practices adopted by the 9 selected councils to inform ratepayers of their performance in managing road infrastructure assets.

SCOPE FOR IMPROVING ACCOUNTABILITY

4.3 All 9 councils examined actively encouraged ratepayer participation and input into council activities and sought a variety of ways to communicate information regarding their activities to their constituents. However, all councils examined had failed to provide sufficient information to their ratepayers that would enable informed assessments of the extent to which road infrastructure assets had been efficiently and effectively managed. Specific comments on the various types of documents prepared by councils are detailed in the following paragraphs.

Strategic planning documents

4.4 The primary strategic planning documents of councils are the 3 year corporate plan, annual operational plan and annual budget. These documents are made widely available to councils' stakeholders as well as placed on the councils' respective websites.

4.5 We found that corporate plans for all 9 councils contained only minimal information regarding roads infrastructure and that the level of detail was not commensurate with the value of this group of assets relative to the councils' total asset holdings. The usefulness of this information was also limited.

4.6 The councils' policy objectives and planned strategies for roads infrastructure were inadequately defined in terms of desired outcomes/achievements; nor were they accompanied by specific performance indicators for stakeholders to subsequently evaluate council performance. For example, Towong established one of its strategic goals for asset management as *"to upgrade and/or refurbish our assets as necessary to continue to meet the service needs of the community"*. This strategic goal was not supported by adequately defined strategies and initiatives to facilitate evaluation of council performance by stakeholders.

4.7 In another council (Delatite), the key policy objective for community infrastructure was *"to provide a cost effective, efficient and safe drainage system"*. However, key performance indicators to measure achievements against this objective and the target result were not specified in the corporate plan. Consequently, it will not be possible for stakeholders to evaluate council performance against this important objective. A better indicator that the council could have considered is the extent to which the drainage system is expected to reach its useful life.

4.8 The objectives and strategies contained within the councils' corporate plans, with the exception of Hume and Monash, were not clearly linked to those in the business plan and, to a larger extent, to matters disclosed in the report of operations component of the annual report. Such linkages are essential because the plans represent the councils' aspirations and the annual reports reflect the actual achievements.

4.9 Only limited research has been undertaken by the 9 councils examined to determine stakeholder needs and expectations regarding the nature of road infrastructure information they would like incorporated within strategic planning documents.

Annual reports

4.10 The annual report is the key document through which councils fulfill their accountability obligations to ratepayers and the Minister for Local Government. We found that all councils examined placed significant emphasis on the contents of their annual reports and that they were clear, well written and at an appropriate level for comprehension by stakeholders. However, scope existed for improving the usefulness of these documents.



Examples of councils' annual reports.

4.11 The operational components of annual reports provided descriptive comment regarding selected road activities. However, these comments were not supplemented by outcome-based performance data that facilitated assessment of the efficiency and effectiveness of road infrastructure management. For example, Whittlesea reported that “750 tonnes of asphalt patching works at an average 4.6. tonnes per working day” had been laid for the year. This data was not accompanied by performance indicators and targets to inform the reader as to whether or not that level of activity reflected effective and efficient asset management or was commensurate with relevant targets set by the council for the year.

Financial statements

4.12 The financial statements and performance statements of the councils for 2000-01, with the exception of Towong (financial and performance statements) and Darebin (financial statements), received clear audit opinions from my Office. Such unqualified opinions enhance the accountability of councils and the credibility of their representations. It is important for those councils who have been subject to qualifications to initiate timely and appropriate action aimed at removal of the qualification.

Performance statements

4.13 For most councils (7), the only key performance indicator presented in the performance statements relating to road infrastructure was the level of “community satisfaction with local roads and footpaths”. This data is derived from an annual survey of a sample of ratepayers across all councils to assess their overall satisfaction with the various services provided by their respective councils. The survey is conducted by a market research firm on behalf of councils and jointly funded by the Department and participating councils.

4.14 Hume also reports the level of community satisfaction and other indicators, e.g. “Target local roads as a high priority in council’s 5 year Asset Management Program”. Monash only reports on output type indicators, e.g. “Undertake road repairs and surface renewal to approximately 20 kms of local roads”.

4.15 In terms of the relevance and appropriateness of this indicator, my November 2001 Report on *Departmental performance management and reporting* presented our definitions of criteria for audit assessment of performance indicators. These criteria and definitions are presented in Table 4A.

**TABLE 4A
CRITERIA FOR AUDIT ASSESSMENT OF PERFORMANCE INDICATORS**

<i>Criterion</i>	<i>Definition</i>
“Relevant”	<p>The indicator should have a logical and consistent relationship to the agency’s objectives which are linked to the Government’s desired outcomes.</p> <p>The agency is accountable for achievement of the objective and for reporting against the indicator.</p> <p>A set of key measures which best expresses the performance of an agency/program having regard for:</p> <ul style="list-style-type: none"> • immediate deliverables; and • long-term sustainable supply including human, physical and intellectual elements.
“Appropriate”	<p>The indicator gives sufficient information to assess the extent to which the agency has achieved a pre-determined target, goal or outcome, by reference to:</p> <ul style="list-style-type: none"> • the trend in performance over time; • performance relative to the performance of similar agencies; and • performance relative to pre-determined benchmarks. <p>The indicator should be accompanied by adequate notes that assist the user to draw meaningful conclusions about the performance of the agency.</p>
“Fairly represents”	<p>In order to fairly represent performance of an agency, the information provided must be capable of measurement, represent what it purports to indicate consistently and without bias, and be accurate and auditable.</p>
“Auditable”	<p>Quantifiable, consistent and verifiable data are available.</p> <p>The information upon which the indicators are based is collected, recorded and analysed in such a way that the conclusions drawn from it can be verified.</p>

4.16 Using the criteria and definitions in Table 4A, we assessed the performance indicators relating to road infrastructure in each council. The results of our assessments are presented in Table 4B.

TABLE 4B
SCORECARD FOR SELECTED COUNCILS' PERFORMANCE INDICATORS

	Are performance indicators relevant to the council's objectives?	Criterion	
		Do the indicators provide a balanced view addressing key aspects of quality, quantity, timeliness and full accrual cost per unit?	Are performance indicators and associated targets directed at aspects of performance that are auditable (i.e. measurable)?
Ballarat City Council	⊖	⊖	✓
Darebin City Council	⊖	⊖	✓
Delatite Shire Council	⊖	⊖	✓
Hume City Council	⊖	⊖	✓
Monash City Council	⊖	⊖	✓
Northern Grampians Shire Council	⊖	⊖	✓
Towong Shire Council	⊖	⊖	✓
Wellington Shire Council	⊖	⊖	✓
Whittlesea City Council	⊖	⊖	✓

Legend: ✓ Yes ⊖ To some extent, some attributes were not addressed.

4.17 We assessed the predominant performance indicator, community satisfaction, to be generally relevant to councils' road asset management objectives. However, the single indicator does not address all elements of the councils' objectives. In terms of appropriateness, the single indicator will not adequately inform readers as to whether the objective was achieved or whether assets were efficiently managed.

4.18 For example, Delatite's objectives were:

- "to provide an effective, safe local road network to meet the needs of commercial and private users; and
- to provide a cost effective, efficient and safe drainage system".

4.19 While the community satisfaction indicator addresses the user needs element of the indicator, it does not address the effectiveness or safety of the road network or drainage system.

4.20 We were satisfied that the performance measures and targets were auditable.

Performance targets

4.21 The targets set by councils for 2000-01 in regard to “*community satisfaction with local roads and footpaths*” varied from ratings of around 50 to 70. As commented upon in Part 3 of this report, only 3 councils had set a target at, or above, the rating of acceptable performance (60). We consider this is not conducive to improving performance to the required level.

4.22 We also noted that the variance between planned (target) performance and actual performance is not calculated consistently by councils. As an illustration:

- Delatite calculates the variance as: Target rating for 2001, 48, Actual 44, equals Variance of 4 under-achievement; whereas
- Whittlesea would calculate its variance for the same figures as: Variance of 4 divided by Target rating of 48 equals 8.3 per cent under-achievement.

4.23 We consider the latter method of calculating the variance is more meaningful, and note that such differences inhibit the reliability of inter-council performance comparisons.

Dissemination of performance information

4.24 Councils used a range of mediums to disseminate information to ratepayers and the general public to inform them of their road asset management activities. These include quarterly newsletters, activity reports, websites (all except Delatite), local newspapers and leaflets with annual rate notices.

4.25 We consider the mediums were an efficient and effective mechanism for disseminating information. The extent and quality of the information was our concern. Using these mediums to also disseminate asset management performance information has the potential to enhance councils’ public accountability.

4.26 More work could be undertaken by councils to determine the community’s preferred method of receiving information relating to councils’ activities and achievements. Only 2 councils (Hume and Monash) have conducted surveys for this purpose.

Recommendations

4.27 To enhance public accountability and operational transparency with respect to the management of road infrastructure, councils should:

- incorporate more performance information in their strategic planning documents;
- establish direct and clear linkages between the corporate plan, business plan and annual report;
- incorporate additional key performance indicators within their strategic planning documents and performance statements that enable assessments of the efficiency and effectiveness with which road assets have been managed;
- consider making greater use of existing mediums to disseminate asset management performance information; and

- consult with the community on its preferred method of receiving information regarding councils' activities and achievements.

RESPONSE provided by Secretary, Department of Infrastructure

Proposed amendments to the Local Government Act 1989 strengthen the accountability framework for local government. Best Value Principles (1999) require councils to set service standards and to report against them annually to their local community and to consult with their community on their services and standards. The proposed amendments to the accountability framework require local governments to include more performance information in their council plans, budgets and annual reports.

RESPONSE provided by Chief Executive Officer, Hume City Council

Agreed – however, the extent to which this already occurs was not recognised in the review of Hume City Council practices.

RESPONSE provided by Chief Executive Officer, Monash City Council

Public accountability and operational transparency is supported, including ensuring a relationship between council's strategic planning and budgetary processes, however, the nature and type of key performance indicators being suggested to enable assessment of efficiency and effectiveness is likely to be entirely subjective and of little community interest.

Monash would welcome further discussion on this aspect of the report as there appears to be some conflict between establishment of comprehensive asset plans and processes for effective management of the infrastructure, and additional recommendations in the report to link this to funding models to be applied by the Grants Commission, while engaging in community consultation for input into determining the effectiveness of council's asset management plan.

The establishment of comparative performance measures and targets between councils is also likely to be highly subjective due to the considerable differences in the age of infrastructure assets, the priorities assigned to managing assets over time, the effect of available funding and the not insignificant geological and geographic effect on roads infrastructure across Victoria. Monash has a relatively sound geotechnical basis for a large part of its road infrastructure, however, total available road funding has been directed to one part of the City since amalgamation to ensure consistency of standards for the road infrastructure asset across the municipality. If this variable exists within Monash there would seem to be limited community benefit in making comparisons with others on the basis of statistics and formulas alone.

COLLECTION OF COUNCIL PERFORMANCE INFORMATION

4.28 From 1997-98, to 1999-00 the Department of Infrastructure required councils to provide a range of performance information in the form of corporate and service delivery performance indicators. Since 2000-01, councils have been required to submit information relating to 11 Victorian Local Government Indicators.

Corporate responsibilities indicators

4.29 The corporate indicators, which totalled 29, covered a council's corporate responsibilities (e.g. rates management, financial performance, overall community satisfaction). The information provided was collated by the Department and made available to all councils for benchmarking purposes.

4.30 In recent years, the Department has been endeavouring to reduce the quantum of information collected and improve its usefulness. The corporate indicators have been replaced by the 2001 Victorian Local Government Indicators, which are 11 indicators that measure council performance in 5 core areas of their local government responsibilities.

4.31 Table 4C shows the 5 broad areas of council responsibilities, the aim of the performance information and the indicators for each category of responsibility.

TABLE 4C
2001 VICTORIAN LOCAL GOVERNMENT INDICATORS

<i>Category</i>	<i>Aim</i>	<i>Indicators</i>
Affordability/ cost of governance	To monitor the overall costs of the local government sector.	1. Average rates and charges per assessment. 2. Average rates and charges per residential assessment.
Sustainability	To provide assurance that the system of local government is financially and economically viable.	3. Average liabilities per assessment. 4. Operating surplus/(deficit) prior to capital funding.
Services	To give an overview of the level of service provision over time.	5. Average operating expenditure per assessment. 6. Community satisfaction rating for overall performance of council.
Infrastructure	To provide an indication as to whether infrastructure assets are being maintained or eroded.	7. Average capital expenditure per assessment. 8. Renewal gap. 9. Renewal gap and maintenance gap.
Governance	To provide an indication of the democratic governance of local governments.	10. Council advocacy: Constituent satisfaction rating for council's advocacy on key local government issues. 11. Community participation: Constituent satisfaction rating for council's engagement of the public in decision making on key local issues.

4.32 Since 2000-01, councils have been required to disclose their performance against the first 7 indicators in their annual report. Reporting against the remaining indicators will commence from 2001-02. The results for 2000-01 for all councils have been collated by the Department and are intended to be made available to the public. Through the progressive implementation of these indicators, the Department envisages that it will be in a better position to monitor the overall health of the local government sector and inform the community accordingly.

4.33 Nevertheless, the Department acknowledges that there is no process in place to ensure consistency in calculation by councils of these indicators. The Department therefore cannot be certain that the information is accurate, reliable and comparable. The Department also recognises that care is needed in comparing results between councils as they can be affected by a range of factors. For example, in terms of “Average liabilities per assessment”, a council with a high level of infrastructure development may have to incur a higher level of borrowings to fund the development compared with an older, more established council.

4.34 We also noted that councils were not required to set a target for each indicator. Therefore, actual results cannot always be compared against planned results which detracts from the usefulness of the published data.

Service delivery indicators

4.35 The service delivery performance indicators developed by the Department, which numbered 47, covered such aspects as the unit cost of service delivery and service quality for the main types of services provided by councils. With respect to road construction and maintenance activities, councils have provided the following information:

- percentage of road network assessed for asset condition;
- percentage of road capital expenditure projects completed;
- community satisfaction rating for local roads and footpaths;
- cost of maintenance for sealed roads per kilometre;
- cost of maintenance for unsealed roads per kilometre; and
- ratio of roads capital expenditure to roads depreciation.

4.36 The Department is reviewing the appropriateness and usefulness of these indicators and expects to complete this by June 2002. Accordingly, councils were not required to provide this information to the Department for 2000-01.

Failure to utilise performance information

4.37 The Department has a responsibility to encourage and support best practice and continuous development, and we believe that performance data should have been reviewed and analysed more extensively by the Department to identify areas where councils require guidance or assistance.

Recommendations

4.38 We recommend that the Department:

- takes prompt action to establish a process that provides assurance that the performance information compiled by councils in the form of the Victorian Local Government Indicators is complete, accurate and comparable;
- reconsider the need to incorporate council targets for each Victorian Local Government Indicator for comparison against actual results;

- ensure its review of the service provision indicators is completed as scheduled; and
- utilise the council performance information as a source of input for identifying training or guidance required by councils.

RESPONSE provided by Secretary, Department of Infrastructure

The Department, in consultation with the sector, has developed a suite of indicators – the Victorian Local Government Indicators – which local governments include in their annual reports commencing 2000-01. The Department collates these indicators and will publish a report annually. The first report is to be published shortly.

Clear definitions have been provided to ensure that the indicators reported by local governments are consistent across the sector. Councils are relied upon to ensure that the results they report in the annual reports are accurate and complete. It is important that the onus for ensuring that such information is accurate and complete remains with the councils. However, this first year of reporting did show up a number of inaccuracies which were corrected by councils. The Department will work further with the sector to ensure that councils have appropriate processes in place to ensure that the information published in annual reports is accurate and complete.

The Victorian Local Government Indicators report is intended to show the overall position of the sector with the capacity to make comparisons over time.

The Department has facilitated the collection of a set of service indicators which local governments can use for their own benchmarking purposes to assist with continuous improvement. These indicators have recently been reviewed as to their relevance and this work has now been completed. The provision of such data is voluntary and a number of councils have developed their own benchmarking projects. A mechanism to enable councils to input their data and to access that data is currently underway.

The Department's aim has been to build a performance culture within the sector where councils implement their own continuous improvement programs.

With regard to councils' performance in maintaining their asset base, the Department's strategy does include the development of a system to help assess the overall performance of the sector and to help individual councils assess their performance. This work is scheduled for 2002-03.

RESPONSE provided Chief Executive Officer, Hume City Council

Performance monitoring by the sector for benchmarking and validation of improvement purposes is supported, however, the use of "league tables" are opposed.

**PERFORMANCE AUDIT REPORTS
of the Auditor-General
issued since 1997**

<i>Report title</i>	<i>Date issued</i>
Major civic projects: Work in progress	April 1997
Metropolitan Ambulance Service: Contractual and outsourcing practices	April 1997
Metropolitan Ambulance Service: Fulfilling a vital community need	November 1997
Victorian Rural Ambulance Services: Fulfilling a vital community need	November 1997
Schools of the Future: Valuing accountability	December 1997
Victoria's multi-agency approach to emergency services: A focus on public safety	December 1997
Victoria's gaming industry: An insight into the role of the regulator	March 1998
Child care and kindergartens: Caring about quality	April 1998
Acute health services under casemix: A case of mixed priorities	May 1998
Public transport reforms: Moving from a system to a service	May 1998
State Revenue Office: A customer service focus towards improving taxation collection	October 1998
Automating fare collection: A major initiative in public transport	November 1998
Victoria's prison system: Community protection and prisoner welfare	May 1999
Road construction in Victoria: Major projects managed by VicRoads	December 1999
Land use and development in Victoria: The State's planning system	December 1999
Represented persons: Under State Trustees' administration	May 2000
Building control in Victoria: Setting sound foundations	May 2000
Reducing landfill: Waste management by municipal councils	May 2000
Non-metropolitan urban water authorities: Enhancing performance and accountability	November 2000
Services for people with an intellectual disability	November 2000
Grants to non-government organisations: Improving accountability	November 2000
Implementing Local Priority Policing in Victoria	May 2001
Teaching equipment in the Technical and Further Education sector	May 2001
Managing Victoria's growing salinity problem	June 2001
Management of major injury claims by the Transport Accident Commission	October 2001
Teacher work force planning	November 2001
Management of injury claims by the Victorian WorkCover Authority	November 2001
Departmental performance management and reporting	November 2001
International students in Victorian universities	April 2002
Nurse work force planning	May 2002
Investment attraction and facilitation in Victoria	May 2002

The Victorian Auditor-General's Office website at www.audit.vic.gov.au contains a more comprehensive list of all reports issued by the Office. The full text of the reports issued over the past 10 years is available at the website. The website also features a "search this site" facility which enables users to quickly identify issues of interest which have been commented on by the Auditor-General.



AUDITOR GENERAL
VICTORIA

150
Years of Auditing in the Public Interest

AVAILABILITY OF REPORTS

Copies of all reports issued by the Victorian Auditor-General's Office are available from:

- Victorian Auditor-General's Office
Level 34, 140 William Street
Melbourne Vic. 3000
AUSTRALIA

Phone: (03) 8601 7000
Fax: (03) 8601 7010
Email: comments@audit.vic.gov.au
Website: www.audit.vic.gov.au
- Information Victoria Bookshop
356 Collins Street
Melbourne Vic. 3000
AUSTRALIA

Phone: (03) 1300 366 356 (local call cost)
Fax: (03) 9603 9920