PUBLIC ACCOUNTS 
AND ESTIMATES COMMITTEE

FIFTY EIGHTH REPORT TO THE PARLIAMENT

Report on the Review of the Auditor-General’s 
special report no. 51 - Victorian Rural 
Ambulance Services: fulfilling a vital 
community need

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Hon. B Forwood, MLC (Deputy Chair)
Hon. B Baxter, MLC
Mr R Clark, MP
Mr L Donnellan, MP
Ms D Green, MP
Mr J Merlino, MP
Hon. G Rich-Phillips, MLC
Ms G Romanes, MLC

This inquiry was undertaken by a Sub-Committee consisting of the following Members:

Hon. C Campbell, MP (Chair)
Hon. B Baxter, MLC
Mr R Clark, MP
Mr J Merlino, MP
Ms G Romanes, MLC

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DUTIES OF THE COMMITTEE

The Public Accounts and Estimates Committee is a joint parliamentary committee constituted under the *Parliamentary Committees Act 2003*.

The Committee comprises nine Members of Parliament drawn from both Houses of Parliament and all political parties.

The Committee carries out investigations and reports to Parliament on matters associated with the financial management of the state. Its functions under the Act are to inquire into, consider and report to the Parliament on:

- any proposal, matter or thing concerned with public administration or public sector finances; and
- the annual estimates or receipts and payments and other Budget Papers and any supplementary estimates of receipts or payments presented to the Assembly and the Council.

The Committee also has a number of statutory responsibilities in relation to the Office of the Auditor-General. The Committee is required to:

- recommend the appointment of the Auditor-General and the independent performance and financial auditors to review the Victorian Auditor-General’s Office;
- consider the budget estimates for the Victorian Auditor-General’s Office;
- review the Auditor-General’s draft annual plan and, if necessary, provide comments on the plan to the Auditor-General prior to its finalisation and tabling in Parliament;
- have a consultative role in determining the objectives and scope of performance audits by the Auditor-General and identifying any other particular issues that need to be addressed;
- have a consultative role in determining performance audit priorities; and
- exempt, if ever deemed necessary, the Auditor-General from legislative requirements applicable to Government agencies on staff employment conditions and financial reporting practices.
CHAIR’S INTRODUCTION

The most important performance indicator for any ambulance service is how quickly it responds to an incident and places the patient in the care of skilled ambulance officers. For the 1.3 million people who live in rural, regional and remote areas of Victoria, it is essential for their quality of life to have access to an efficient ambulance service.

In 1997, the Victorian Auditor-General tabled special report no.51, Victorian Rural Ambulance Services: fulfilling a vital community need. The performance audit, which recommended the amalgamation of five rural ambulance services, addressed a series of major issues, including the financial viability of the rural ambulance services, the need for improved communications systems and the deteriorating infrastructure. The Committee undertook this follow-up review to determine what progress had been made in addressing the issues raised by the Auditor-General.

The Committee acknowledges that improvements have been made in many areas identified by the Auditor-General, such as Rural Ambulance Victoria now providing high quality pre-hospital medical care and transport to its clients throughout Victoria, and the introduction of more effective corporate operations and strategies. While the commitment of Rural Ambulance Victoria to serving the community and the professionalism of the service’s officers is not in question, there are matters still to be addressed. Major areas identified by the Committee include the need for a computer aided call-taking and dispatch system, better management information and funding certainty for future operations. The Committee believes it is incumbent on the Department of Human Services to maintain the existing momentum for continuous improvement of rural ambulance services delivered by Rural Ambulance Victoria.

The Committee has been assisted in its Inquiry by officers from the Department of Human Services and Rural Ambulance Victoria and I thank them for the advice and submissions they provided.

I would also like to acknowledge the significant contribution made by Mr Trevor Wood, the Committee’s specialist advisor, throughout this Inquiry. I thank him for the high quality of his assistance and support throughout the Inquiry and in the preparation of this report.

The report contains 21 recommendations directed at further improving rural ambulance operations, as well as assisting the service to be recognised as a leading example of best practice.

Hon. Christine Campbell, MP
Chair
Chapter 1: Background to the Inquiry

The Victorian Auditor-General has no power to require departments and agencies to implement recommendations contained in his reports. To overcome this situation, the Public Accounts and Estimates Committee systematically follows up audit reports in order to provide Parliament with an update on actions taken by departments and agencies to improve resource management and accountability as a result of recommendations contained in the reports of the Auditor-General.

In November 1997, the Auditor-General tabled special report no. 51 - Victorian Rural Ambulance Services: fulfilling a vital community need, which assessed the efficiency and effectiveness of the delivery of emergency services to the rural and regional Victorian community by rural ambulance services.

Overall the audit report concluded that concerns existed as to the financial viability of four of the five rural ambulance services. The services had a declining revenue base, strategic and financial planning was generally poor and major capital funding was needed to address ageing infrastructure, particularly in relation to critical communications systems. High level performance benchmarks were absent, inefficient work practices were evident and there was a poor industrial environment.

In response to the audit, the Department of Human Services indicated that the issues raised by the Auditor-General would be addressed.

In June 2002, at the request of the Committee, the Auditor-General reviewed the status of the recommendations contained in the audit report and concluded that although progress had been made in capital funding and communications systems, certain problems still remained unresolved.

This report contains the findings of the Committee’s follow-up review of the Auditor-General’s report no. 51.

Chapter 2: Overview of the operations of the Victorian Rural Ambulance Service

The Victorian Rural Ambulance Service was formed in March 1999 and represented an amalgamation of the five rural ambulance services which had operated as separate entities until that date. The amalgamation was a key recommendation of the Auditor-General and was perceived as an effective means of delivering services to the rural community as well as providing opportunities to enhance efficiency in ambulance operations.

The core business of Rural Ambulance Victoria is the initial treatment of sick and injured patients and the subsequent transport, where required, of such patients to
hospitals. The service also provides non-emergency services for semi-urgent and stable patients. Under legislation, Rural Ambulance Victoria fosters community first aid and provides support services to other emergency and community organisations.

**Chapter 3: Financial management**

A key conclusion of the Auditor-General was that in order to ensure the ongoing viability of rural ambulance services there was a need to establish a funding model. This recommendation was accepted by the Department of Human Services and work eventually commenced in 2001 on developing an appropriate model, taking into account base funding and activity costs.

The Committee is concerned that at the date this report was prepared, a funding model has still not been developed, with the responsibility for the project now transferred to the Department of Treasury and Finance.

The Committee established that under existing financial arrangements with the Department of Human Services, the service is not funded for depreciation, despite a requirement to prepare financial statements on an accrual basis. Although capital grants from the department had increased, the Committee considered that the service should be funded for depreciation in order to provide future certainty for asset renewals and replacements.

The Committee acknowledges that the Department of Human Services has provided a high level of recurrent funding for the replacement of vehicles, maintenance of ambulance stations and replacement of biomedical equipment. However, communication systems still require upgrading to new technology, similar to that utilised by all other ambulance services within Australia.

The Committee notes that the financial results for Rural Ambulance Victoria have shown improvement. However, these results were influenced by the level of capital grants each year, the absence of which would result in the service recording annual deficits on an accrual basis, given its limited ability to raise revenue other than from subscriptions and transport fees.

The Committee considers that the existing financial arrangements make it urgent that the funding model recommended by the Auditor-General in his 1997 report be developed.

**Chapter 4: Overtime and industrial relations**

The Auditor-General’s report observed that a lack of specialist expertise in industrial relations management within certain rural ambulance services was a contributing factor to poor industrial environments and inefficient work practices, including practices which contributed to high levels of overtime.
The Committee’s review established that since the Auditor-General’s report, the incidence of overtime proportionate to normal salaries had actually increased, from an average of 18.4 per cent in 1997 compared to 37.6 per cent in 2003-04, due to a variety of reasons, including a shortage of paramedics and high levels of sick leave.

Notwithstanding the existing levels of industrial action which have occurred during the negotiation of a new enterprise agreement in 2004-05, the industrial environment within the Rural Ambulance Service was seen as very positive by both Rural Ambulance Victoria and the Department of Human Services. The Committee observed that the access by operational staff to high levels of overtime and allowances was a factor in contributing to this environment, along with the standard application of award conditions across the workforce.

The Committee is of the view that Rural Ambulance Victoria faces considerable challenges in the future in maintaining a stable industrial environment, while at the same time addressing high overtime costs and certain industrial practices.

**Chapter 5: Communications**

The Auditor-General drew attention in his 1997 report to the heavy dependence of rural ambulance services on the effectiveness of communications systems in receiving and responding to emergency calls as quickly as possible. Call-taking and dispatch systems existing at the time were manual operations and it was recognised by all parties that scope existed for the use of modern technology to assist with call-taking and dispatch tasks.

The Committee established that the call-taking and dispatch systems are still largely a manual operation, with no progress made on this matter since the Auditor-General’s report. Rural Ambulance Victoria remains the only ambulance service within Australia which does not have a computer aided dispatch system, which would not only improve call-taking and dispatch performance, but be capable of collecting and disseminating management information.

The Committee established that although mobile voice communication systems and paging systems had been upgraded, problems still remained with radio black spots and inadequate redundancy and back up for existing communications systems.

Although Rural Ambulance Victoria developed a bridging strategy identifying essential work to be undertaken prior to the service becoming part of the 10 year Statewide Integrated Public Safety Communication Strategy, the Government has only partly funded the bridging strategy. The bridging strategy was costed at $11.8 million, with $5 million contributed to date by the Government.

The Committee considers that the Government should give urgent priority to improving public safety in rural Victoria by providing the Rural Ambulance Service with a computer aided dispatch system and related modern communications infrastructure.
Chapter 6: Performance management and measurement

The Auditor-General’s report drew attention to the absence of high level performance benchmarks from which the performance of rural ambulance services could be judged. This situation was attributed to inconsistencies in the preparation of operational data and inadequate systems capable of collecting performance information.

The Committee established that the service still lacks high level performance measures, with performance information in annual reports largely of a statistical nature only.

Rural Ambulance Victoria has devoted considerable attention to establishing a centralised Data Analysis Unit to collate, analyse and report data on all key aspects of administration and service delivery. The Committee commends the service on this initiative, but noted that as the collection of information is undertaken manually and uses manually prepared data, full reliance could not be placed on the accuracy of the information prepared, including time records on activation and response times for emergency calls and patient records.

The Committee recognises that Rural Ambulance Victoria will not be in a position to develop and utilise key performance measures and targets until such time as the existing inadequate data collection and recording systems can be replaced by a computer aided dispatch system in conjunction with mobile data terminals.

Chapter 7: Clinical standards

The Auditor-General’s report raised concerns about the maintenance and monitoring of clinical standards within rural ambulance services.

The Committee established that since 2000, Rural Ambulance Victoria has dedicated considerable efforts towards developing clinical practice guidelines in conjunction with the Metropolitan Ambulance Service. The conduct of clinical audits across all operational areas and skill reaccreditation regularly occurs.

The Committee understands that a Victorian Ambulance Clinical Information System will be implemented across the state in the future. The system will provide for the collection and analysis of organisation wide clinical and performance data. The data will enable the development of clinical performance measures which are currently lacking, as well as identifying training needs.

The Committee notes that, as much of the data is reliant upon information contained in manually prepared patient care records, the reliability of time critical information documented on these records will remain doubtful until such time as a computer aided dispatch system is provided by the Government.
Chapter 8: Infrastructure program

The Auditor-General’s report identified a range of problems associated with the ageing infrastructure of rural ambulance services, due to inadequate capital funding from the Department of Human Services over many years. Of particular concern was the state of the ambulance fleet, ageing communication systems and the often poor physical state of buildings, plant and equipment.

The Committee is pleased that since 2000, substantial funding has been provided by the Government to allow Rural Ambulance Victoria to upgrade its infrastructure with the limited exception of the communications systems.

Recurrent grants provided to the service now include a component of funding for maintenance, vehicle replacement and replacement of medical equipment. Capital funding has been regularly provided for the replacement or upgrade of ambulance stations and a number of new ambulance stations have been built.

The Committee acknowledges the improvements to infrastructure which have occurred or were in progress, but still considers that Rural Ambulance Victoria should be funded for depreciation to enable the service to have certainty in planning for, maintaining and replacing assets as considered necessary.

Chapter 9: Corporate and business planning

The Auditor-General drew attention to several deficiencies in business plans developed by rural ambulance services, including a lack of detail as to actions required to implement objectives, the absence of targets and financial resources required.

Following an external review in 2001, a range of actions were taken by Rural Ambulance Victoria to improve corporate and business planning.

The Committee is satisfied that the service is committed to developing high quality corporate and business plans. However, the Committee draws attention to the need for Rural Ambulance Victoria to develop measurable key performance indicators, other than statistical information, which could reflect the extent to which corporate objectives and output targets are being met in terms of quantity, quality, timeliness and cost.

The Committee acknowledges that the ability of Rural Ambulance Victoria to develop appropriate performance information has been limited as mechanisms to collect reliable performance data were restricted by the absence of a computer aided dispatch system and the completion of Victorian Ambulance Clinical Information System.
Chapter 10: Subscriptions

The Auditor-General’s report drew attention to declining ambulance service subscriber numbers and a reduction in subscription revenue despite increases in subscription fees. The Auditor-General recommended that incentives be provided for rural ambulance services to achieve higher subscription levels.

The Committee found that the administration of subscriptions was now working satisfactorily, as evidenced by ongoing increases in subscriber numbers and a new contractor complying with all contractual obligations as to performance.

The Committee’s review found that the Department of Human Services had provided a partial incentive to increase subscriber numbers as it agreed that any revenue generated above the service’s budget estimates could be retained by the service. However, the benefit was dependent on ongoing increases in revenue, as future budgets were based on new subscriber levels attained in the current year.

The strong commitment of Rural Ambulance Victoria to increasing subscriber numbers is acknowledged by the Committee. However, the Committee draws attention to the actual cost of providing free ambulance services to subscribers and queries whether the scheme will remain economically sound in the future. The Committee has recommended that research be undertaken as to whether the existing subscription scheme remains appropriate for rural Victoria.

Chapter 11: Amalgamation of ambulance services

The Auditor-General in 1997 recommended the amalgamation of the five rural ambulance services existing at the time into a single rural service. The justification given was that amalgamation was seen as the opportunity to more effectively deliver ambulance services to rural communities and to improve efficiency in ambulance operations.

The amalgamation was achieved on 1 March 1999 and has been regarded as very successful.

Victoria is the only state within Australia which does not have a single ambulance service. The Committee considers that benefits could be achieved from an amalgamation of the Metropolitan Ambulance Service, Rural Ambulance Victoria and the Alexandra and District Ambulance Service. However, the Committee in recommending a feasibility study be undertaken by the Government as to the benefits of an amalgamation, emphasises that such an amalgamation should only proceed where it can be proven that a more efficient, effective and economical use of resources would result, particularly in improving ambulance response times to regional and rural communities.
The Committee recommends that:

Recommendation 1: The Department of Human Services fund Rural Ambulance Victoria on a full accrual basis inclusive of depreciation and employee entitlements.

Page 33

Recommendation 2: Additional resources be deployed by the Department of Human Services to finalise a Rural Ambulance Victoria funding model inclusive of a base component along with activity and availability funding.

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Recommendation 3: The Government determine its expectations of Rural Ambulance Victoria in terms of RAV’s ability to respond to emergencies and provide levels of clinical care compared to best practice with other ambulance services throughout Australia. Once desired outcomes are established, the Department of Human Services and Rural Ambulance Victoria develop financial models and strategic directions in order to determine what resources and commitments are needed to achieve those desired outcomes, along with the timeframes involved.

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Recommendation 4: The Department of Human Services provide expert assistance to Rural Ambulance Victoria in negotiating a new enterprise agreement that addresses industrial practices that add substantially to overtime and allowance costs.

Page 48
Recommendation 5: The Department of Human Services provide an undertaking to Rural Ambulance Victoria as to the extent to which any employee benefit increases negotiated in future enterprise bargaining agreements will be funded by the department, after taking into account Government policy.

Page 48

Recommendation 6: The Department of Human Services give priority to the funding of computerised information systems, including a computer assisted dispatch system that will enable Rural Ambulance Victoria to more efficiently, effectively and economically manage its resources for the benefit of the rural Victorian community.

Page 49

Recommendation 7: Rural Ambulance Victoria take action to ensure that its management of occupational health and safety, including injury management and return to work programs, reflects best practice.

Page 49

Recommendation 8: Rural Ambulance Victoria include in its annual report performance data on its management of occupational health and safety, along with targets set at the beginning of each year.

Page 49

Recommendation 9: Rural Ambulance Victoria, as a matter of priority, finalise a workforce plan.

Page 49

Recommendation 10: Rural Ambulance Victoria investigate the incidence of sick leave, and subsequent overtime, at locations exhibiting levels of sick leave and overtime in excess of average levels taken elsewhere across Victorian ambulance locations.

Page 49
Recommendation 11: The Government, as a matter of urgent priority, provide funding for a CAD system for Rural Ambulance Victoria.

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Recommendation 12: The Department of Justice undertake a feasibility study of the most beneficial means of installing a CAD system with regard to issues such as:

(a) whether such a system should be specific to Rural Ambulance Victoria or be jointly operated with other emergency service organisations;
(b) the ability of a CAD system to service remote areas; and
(c) the latest developments in CAD technology and the performance of existing suppliers of the technology.

Page 62

Recommendation 13: The Department of Human Services accept that the production of timely, accurate and reliable performance information from a CAD system is a major factor in any decision making about funding for such a system.

Page 72

Recommendation 14: The operational performance of Rural Ambulance Victoria be separately disclosed from that of the Metropolitan Ambulance Service in all future reports of the Government, the Convention of Ambulance Authorities and the Productivity Commission.

Page 72

Recommendation 15: Rural Ambulance Victoria consider developing targets for activation and response times, taking into account geographical locations and population density in districts.

Page 72
Recommendation 16: Rural Ambulance Victoria undertake research into additional performance measures that could be used throughout the organisation to monitor and improve overall performance, in the event that computerised data collection becomes available.

Page 72

Recommendation 17: The Department of Human Services provide the necessary funding for the full implementation of the Victorian Ambulance Clinical Information System.

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Recommendation 18: The Department of Human Services, in any deliberations on funding for a computer aided dispatch system, take into account the benefits to be gained from the accurate measurement of responses for clinical performance evaluation purposes.

Page 77

Recommendation 19: The Department of Human Services undertake a review of ambulance funding mechanisms elsewhere in Australia with a view to determining whether the existing subscription scheme remains appropriate for Victoria.

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Recommendation 21: The Government conduct a review to determine whether the existing organisational and reporting relationship between ambulance services and the Minister for Health remains appropriate, especially in terms of the possibility of consolidating reporting responsibilities under one Minister.

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CHAPTER 1: BACKGROUND TO THE REVIEW

1.1 Introduction

The Victorian Auditor-General has no power to require departments and agencies to implement recommendations contained in his reports. To overcome this situation, the Public Accounts and Estimates Committee follows up the reports of the Auditor-General on a systematic basis in order to enhance the audit process and, at the same time, provide Parliament with an update on actions taken by departments and agencies to improve accountability and resource management.

As part of this process, the Auditor-General agreed to provide the Committee with an update on reports selected by the Committee for follow-up review in terms of:

- any unresolved issues or audit recommendations that had not been implemented;
- changes that have occurred as a result of the reports; and
- any other matters of significance arising from the follow-up.

Following a Committee request in March 2002, the Auditor-General provided the Committee on 24 June 2002 with a paper on the status of the recommendations contained in his special report no. 51 - *Victorian Rural Ambulance Services: fulfilling a vital community need*, dated November 1997.

1.2 Background to special report no. 51 - Victorian Rural Ambulance Services: fulfilling a vital community need

The overall objective of the performance audit was to identify and evaluate issues affecting the efficiency and effectiveness of the delivery of services to the Victorian community by rural ambulance services. Emphasis was placed on identifying factors relating to the:

- adequacy of performance measures to enable assessment of the effectiveness of ambulance services;
- appropriateness of communications systems and facilities used by rural services;
- effectiveness of the allocation of ambulance services resources throughout the rural area of Victoria;
- financial performance and cost of rural ambulance services; and

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1 Victorian Auditor-General’s Office special report no. 51 - *Victorian Rural Ambulance Services: fulfilling a vital community need*, November 1997, p.21
• options for the future delivery of ambulance services in rural areas.

At the time of the audit, six rural ambulance services were operating in Victoria. On 1 March 1999, five of these ambulance services were replaced with a single rural service known as Rural Ambulance Victoria (RAV). The Alexandra and District Ambulance Service remains as a separate service operated almost entirely on a voluntary basis with Government funding only provided for insurance costs and a part time Mobile Intensive Care Ambulance (MICA) paramedic to mentor and support the volunteers.

1.3 Findings of the Auditor-General

The major issues outlined in the Auditor-General’s report were the ongoing financial viability of four of the five ambulance services; a declining revenue base; poor strategic and financial planning and a need for major capital funding to address ageing infrastructure, particularly in relation to communication systems that required major technology upgrades. Further findings involved the absence of high level performance benchmarks necessary to assess the overall performance of the rural ambulance services. Comment was also made about a poor industrial environment and inefficient work practices.

1.4 Response to the Auditor-General’s report by the Secretary of the Department of Human Services

The Department of Human Services noted audit comments that, building on the significant development of performance indicators in recent times, there was a need for high level performance benchmarks. The department also noted the financial issues raised by audit and was continuing to work with rural ambulance services to address the issues. The organisational and consistency aspects raised by audit were also noted and the department indicated it was working on the issues in conjunction with the rural ambulance services.

1.5 Follow-up by the Auditor-General

In June 2002, following a request by the Committee, the Auditor-General reviewed the status of the recommendations contained in his 1997 report on the Victorian rural ambulance services. The Auditor-General concluded that:

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2 Victorian Auditor-General’s Office special report no. 51 - Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, pp.3–5
3 ibid.
4 ibid., pp.55–59
5 Letter, dated 24 June 2002, from the Auditor-General concerning the follow-up review of performance audit report no. 51, p.2
• while substantial progress in asset funding had been made since 1997, problems associated with ageing infrastructure and equipment still remained;

• an agreed output funding model incorporating activity and availability cost analysis was yet to be finalised as a basis for the future funding of RAV operations and capital infrastructure;

• despite actions by RAV to increase revenue from transport fees and subscriptions, the proportion of total revenue provided by State Government grants continued to grow;

• a lack of high level benchmarks still existed; and

• progress was being made in rationalising and improving communication processes.

1.6 Scope of the review undertaken by the Committee

Following receipt of the Auditor-General’s paper, the Committee of the 54th Parliament forwarded a list of questions on 31 October 2002 to the Minister for Health. A response dated 30 December 2002 was received from the Minister for Health. Where relevant, the response is discussed in the following chapters which outline progress by the Rural Ambulance Service in addressing the issues raised by the Auditor-General.

Following the appointment of the Committee in the 55th Parliament in April 2003, a new Sub-Committee consisting of the following Members was appointed by the Public Accounts and Estimates Committee to follow-up matters raised in reports of the Auditor-General:

• Hon. C Campbell, MP (Chair)
• Hon. B Baxter, MLC
• Mr R Clark, MP
• Mr J Merlino, MP
• Ms G Romanes, MLC

On 10 November 2003, a public hearing was held with Dr Chris Brook, Executive Director, Rural and Regional Health, Department of Human Services and Mr Doug Kimberley, Chief Executive Officer, Rural Ambulance Victoria.

Following the hearing, a letter requesting additional information was forwarded on 27 November 2003 to Dr Chris Brook. A response was received on 5 January 2004. Matters included in the response are discussed in the relevant chapters of this report.
CHAPTER 2: OVERVIEW OF OPERATIONS

2.1 Overview of operations of the Victorian Rural Ambulance Service

The Victorian Rural Ambulance Service (RAV) was formed in March 1999 and represented an amalgamation of five rural ambulance services which had operated as separate entities until that date. The amalgamation was a key recommendation of the Auditor-General, which he perceived as an effective means of delivering services to the rural community as well as providing opportunities to enhance efficiency in ambulance operations.

The Rural Ambulance Victoria annual report for 2002-03, recorded a total RAV workforce of 1,262 persons, comprising 740 full time operational staff, 335 casual or volunteer staff and a range of other positions such as medical officers and student paramedics. In 2002-03 RAV operated from 118 locations with a caseload of around 149,000 attendances, although transport by ambulance was not required in around 18 per cent of these attendances. Total vehicle fleet was 422 vehicles, including 289 ambulance stretcher vehicles and a large range of support vehicles.6

RAV has five call centres receiving 000 calls from Telstra. These centres are located at Morwell, Geelong, Wangaratta, Ballarat and Bendigo, with the latter centre also extending its coverage to around 125 kilometres north of Mildura into New South Wales. Victoria is unique in Australia in that it has three separate ambulance services, namely the Metropolitan Ambulance Service, RAV, and Alexandra and District Ambulance Service. The Metropolitan Ambulance Service and RAV are separate statutory bodies reporting to the Minister for Health. The Alexandra and District Ambulance Service is a volunteer service governed by a Committee of Management. The Minister for Health appoints the Committee of Management based on recommendations from the members of that ambulance service.

All other states and territories have a single ambulance service, either as a statutory authority as occurs in New South Wales and more recently, South Australia, or as a division of a Government department such as Health or Emergency Services.

In Western Australia and the Northern Territory, St John Ambulance, an incorporated not-for-profit organisation, provides statewide ambulance services under contract to the respective governments.7

The core business of RAV is the initial treatment of sick and injured patients and the subsequent transport, where required, of these patients to hospitals. RAV is the sole supplier of emergency ambulance services to rural, regional and remote areas within

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6 Rural Ambulance Victoria, Annual Report 2003, pp.12–14
Victoria, with the exception of a small segment of north eastern Victoria which is covered by the Alexandra and District Ambulance Service. RAV provides non-emergency transport services for semi-urgent and stable patients, supplemented by arrangements with private providers of similar services. In accordance with its legislation, RAV fosters community first aid and provides support services to other emergency and community organisations.\textsuperscript{8}

\textsuperscript{8} \textit{Ambulance Services Act} 1986, ss.15 and 18
CHAPTER 3: FINANCIAL MANAGEMENT

3.1 Development of a funding model

A key conclusion of the Auditor-General in 1997 was that in order to ensure the ongoing viability of rural ambulance services there was a need for an early review by the Department of Human Services of the basis for future funding of those ambulance services. The review needed to ascertain the feasibility of implementing more appropriate funding mechanisms, including introduction of an output based funding approach.9

The department accepted the Auditor-General’s recommendation.10 However it was not until early 2001 that a Funding and Pricing Review Project commenced to determine the basis of future funding for RAV in order to fulfil its role.11 In June 2002 the Auditor-General advised the Committee that although work was continuing, an output funding model was still to be finalised. Despite increasing revenue from transport fees and subscriptions to RAV, the proportion of total revenue provided by State Government grants to RAV was continuing to grow.

In December 2002, the Minister for Health advised the Committee that a working party had considered a range of funding models and had recommended an activity and block funding model.12 The Committee understands that this model would provide a base level of funding plus an activity component recognising the variable costs of providing an ambulance response. Ambulance services must provide a capacity to respond to calls anywhere in Victoria 24 hours a day, every day of the year. The capacity to respond must be maintained even in localities where there is low ambulance usage. For this reason an output funding model, as is widely used elsewhere within Government, would not be appropriate.

The department advised the Committee on 5 January 2004 that funding of the rural ambulance service needs to take into account the cost of providing availability, which is broadly defined as the recurrent costs of maintaining all ambulance stations and staff, which represents around 80 per cent of all costs. In addition, funding must take into account the direct costs of providing an ambulance response such as fuel, vehicle maintenance and medical consumables. These costs are referred to as activity costs.13

The department further advised that work was still continuing to identify the different cost structures of the various roster models in operation. Ambulance stations use a variety of staff rostering systems in order to attempt to match available resources with

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9 Victorian Auditor-General’s Office special report no. 51 - Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, p.4
10 ibid., p.5
11 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.3
12 ibid.
13 Department of Human Services’ response, received 5 January 2004, to the Committee’s follow-up questions, p.2
patterns of ambulance demand across locations. In addition, the progressive implementation of two officer ambulance crews to respond to calls for assistance had increased from around 50 per cent in 1999 to the existing level of 85 per cent, an action which has also necessitated roster changes.\textsuperscript{14}

The department anticipated that given the complexity of the rostering and service models operating in rural Victoria it could be up to 12 months before a funding model was developed.\textsuperscript{15} The Committee is concerned that this timeframe has become protracted with the Auditor-General recommending eight years ago that the department develop a funding model. At the time this report was prepared the Committee understands that development of the funding model was still progressing with the additional involvement of the Department of Treasury and Finance.

The Department of Human Services envisages that once the new funding model based on ambulance demand is finalised it will result in the allocation of new funds to RAV, as opposed to a reallocation of existing resources.\textsuperscript{16} This statement would appear to indicate that the department accepts that existing funding to RAV may be inadequate, but has lacked comprehensive reliable data to identify resource shortfalls.

Apart from the absence of an agreed funding model, the Committee is concerned about the impact of the department funding RAV on a cash basis, despite the Government’s adoption of an accrual output based budgeting system. Under this system, the Government funds the department on an accrual basis, including for depreciation and employee entitlements for outputs provided by RAV. However this component of the funding is not passed on to RAV. Instead, RAV receives capital grants of which the purposes, size and frequency are at the discretion of the Department of Human Services.

The department advised the Committee that since the formation of RAV, Government contributions to Victoria’s ambulance services have substantially increased. This factor is evidenced in exhibit 3.1. Government contributions to RAV have also increased relative to the increases provided to the Metropolitan Ambulance Service (MAS).
Chapter 3: Financial Management

Exhibit 3.1: Government Contribution to Ambulance Services
1994-95 to 2003-04

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RAV</td>
<td>22,789</td>
<td>24,283</td>
<td>27,952</td>
<td>33,896</td>
<td>37,711</td>
<td>48,236</td>
<td>48,246</td>
<td>65,980</td>
<td>73,664</td>
<td>73,574</td>
</tr>
<tr>
<td>Combined</td>
<td>47,783</td>
<td>63,703</td>
<td>75,502</td>
<td>91,153</td>
<td>98,131</td>
<td>118,418</td>
<td>152,323</td>
<td>182,107</td>
<td>182,482</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ambulance Services annual reports (includes operating, capital and indirect contributions).

In the past, the department’s failure to provide capital funds led to a substantial deterioration of the infrastructure of rural ambulance services, which was referred to in the Auditor-General’s 1997 report. The Committee acknowledges that in recent years capital and recurrent grants to RAV have increased and substantial improvements in infrastructure have occurred. Nevertheless the Committee noted that the RAV’s annual report for 2002-03 contained a comment that:

*although the Government provides the majority of capital funds required by RAV, the receipt of capital funding does not always match the timing of depreciation recorded in the accounts of RAV.*

The funding of depreciation is a major source of funds for asset replacement, as occurs elsewhere in the general government sector. Unlike many other statutory authorities, RAV has a very limited ability to generate a surplus to provide funds for capital purposes. Apart from Government grants, RAV’s other prime sources of income are from subscribers to the ambulance service and transport fees. Limited growth is occurring with subscription revenue as evidenced by a 4.5 per cent increase in subscribers between 2001-02 and 2002-03. In relation to transport costs around 82 per cent of these costs are not billable, because subscribers, pensioners, health care

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18 ibid., p.14
card holders and certain other categories of patients receive free transport.\textsuperscript{19} Compared with 1996-97, the ability of RAV to recoup transport costs from billable patients has deteriorated from 25 per cent of all cases as identified by the Auditor-General in 1997 to an average of 18 per cent of cases in 2003-04.

The impact of funding of RAV on a cash basis creates an anomaly as RAV must prepare its financial statements in accordance with the \textit{Financial Management Act 1994}. Without substantial capital grants exceeding the value of depreciation charged, RAV will record a deficit each year due to the funding shortfall. From the department’s viewpoint this is not important provided on a cash basis, RAV has a surplus. Exhibit 3.2 illustrates this situation as projected for 2003-04.

\textbf{Exhibit 3.2: Rural Ambulance Service Financial Summary 2003-04}

<table>
<thead>
<tr>
<th>Income</th>
<th>Cash ($ million)</th>
<th>Accrual ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating grants (DHS)</td>
<td>62,343</td>
<td>62,343</td>
</tr>
<tr>
<td>RAV subscriptions</td>
<td>21,208</td>
<td>19,609</td>
</tr>
<tr>
<td>Long service leave grant</td>
<td>-</td>
<td>2,376</td>
</tr>
<tr>
<td>Transport fees</td>
<td>21,820</td>
<td>24,800</td>
</tr>
<tr>
<td>Other revenue</td>
<td>5,552</td>
<td>5,553</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>110,923</td>
<td>114,681</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary wages</td>
<td>42,297</td>
<td>42,297</td>
</tr>
<tr>
<td>Accrued rostered days off</td>
<td>42</td>
<td>106</td>
</tr>
<tr>
<td>Accrued annual leave</td>
<td>9,569</td>
<td>9,783</td>
</tr>
<tr>
<td>Accrued long service leave</td>
<td>-</td>
<td>2,084</td>
</tr>
<tr>
<td>Other wage costs</td>
<td>21,554</td>
<td>21,553</td>
</tr>
<tr>
<td>Superannuation</td>
<td>5,055</td>
<td>5,055</td>
</tr>
<tr>
<td>WorkCover</td>
<td>2,531</td>
<td>2,531</td>
</tr>
<tr>
<td>Staff related expenses</td>
<td>3,222</td>
<td>3,222</td>
</tr>
<tr>
<td><strong>Total staffing expenses</strong></td>
<td>84,270</td>
<td>86,631</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>24,300</td>
<td>24,300</td>
</tr>
<tr>
<td>Depreciation</td>
<td>-</td>
<td>8,048</td>
</tr>
<tr>
<td>Bad and doubtful debts</td>
<td>130</td>
<td>3,610</td>
</tr>
<tr>
<td>Other expenses</td>
<td>237</td>
<td>529</td>
</tr>
<tr>
<td><strong>Total Operating expenses</strong></td>
<td>24,667</td>
<td>36,487</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>108,937</td>
<td>123,118</td>
</tr>
<tr>
<td><strong>Profit/Loss</strong></td>
<td>1,986</td>
<td>(8,437) (a)</td>
</tr>
</tbody>
</table>

\textit{Note:} (a) Figures in brackets indicate a loss

\textit{Source:} Service Agreement – Rural Ambulance Victoria – 1 July 2003 to 30 June 2004

\textsuperscript{19} ibid., p.13
As can be seen from the above table, the preparation of financial statements in accordance with the Financial Management Act 1994 and Australian Accounting Standards would result in RAV recording a loss of $8,437,000 in 2003-2004, resulting in the inability of RAV to fund asset replacements from retained earnings. The funding arrangements with the Department of Human Services would result in a cash surplus of $1,986,000.

The department accepts that Government agencies and authorities providing outputs for the department are historically funded on a cash basis. It also acknowledges that most Government agencies have the ability to generate funds from internal operations in providing services to the public to enable a level of asset replacement and maintenance. RAV does not have this capacity and maintains an increasing reliance on State Government grants to fund its operations.

By withholding funding provided for depreciation, which is a major source of funds along with annual appropriations for capital funding, the department retains control over asset investment decisions for the ambulance service. Irrespective of this policy, the department advised that a certain proportion of funding inclusive of recurrent grants provided to RAV is provided for the replacement of vehicles and biomedical equipment. Funding in the vicinity of $3.4 million to $3.6 million is provided annually to RAV for vehicle replacement. RAV confirmed that previously only a proportion of the full cost of acquiring new ambulances was provided, however the existing arrangements now cover the full cost of new ambulances.

RAV maintains reserves for motor vehicle development and replacement, into which the department’s special purpose grants are credited on receipt and subsequently utilised as required. As a result of this arrangement RAV considers it has an adequate number of emergency vehicles, but has little reserve capacity in the event of surges in demand for ambulances. At 30 June 2003 the balance in the Motor Vehicle Replacement Reserve was $3,752,000 and the balance in the Motor Vehicle Development Reserve was $275,000.

The Committee accepts that the department has recognised past shortfalls in RAV’s vehicle fleet and has provided additional capital grants in recent years to address the shortfall. Similar arrangements have occurred for the replacement of biomedical equipment. Nevertheless without funding for depreciation, RAV has to compete with all other Government agencies for capital funding for asset replacement and acquisition of new assets. As previously acknowledged, the level of capital funding provided to RAV has improved in recent years, but a large backlog of capital needs remains. The situation is particularly poor in relation to communications systems as discussed further in Chapter 4.

20 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.11
21 ibid.
22 Rural Ambulance Victoria, Annual Report 2003, p.40
The department advised the Committee that recurrent funding arrangements allow for a certain level of maintenance funding for ambulance stations. However, for other major works, such as the rebuilding of a number of ambulance stations, including Ararat, Bairnsdale, Colac, Kyneton, Hopetoun and Seymour ambulance stations in 2002-03, the department on behalf of RAV, had to go through the standard asset replacement bidding cycle conducted by the Expenditure Review Committee of Cabinet. In relation to the Bairnsdale ambulance station, most of the funding was provided from public donations raised by the Ambulance Auxiliary, thereby providing for the upgrade earlier than anticipated.

Although RAV is a separate statutory authority its funding is controlled by the Department of Human Services as the parent entity. Given the current cash based funding arrangements, the decision of the Government not to fund RAV for depreciation means that each year the ability of RAV to replace assets and/or acquire new assets becomes totally reliant on capital grants provided by the department, usually for specific purposes agreed to by the Expenditure Review Committee of Cabinet in competition with the capital demands of all other Victorian Government entities.

The impact of this arrangement is that although RAV has developed a 10 year strategy for its asset requirements, which reflects best practice in capital planning, it has little certainty beyond a 12 month period as to the level of funds to be received. The Committee acknowledges that this arrangement diminishes the value of asset planning and management for future years. In the Auditor-General’s April 2003 Report – *Parliamentary control and management of appropriations* the Auditor-General commented that:

> while the practice of departments (including the Department of Human Services) not on-passing depreciation funding to service delivery agencies (including RAV) facilitates greater central control over asset investment decisions, it also has a negative effect on the capacity of delivery agency managers to exercise effective asset management and planning, given the uncertainty created about the availability of asset replacement funding.

The critical issue is whether under the existing funding model, which is cash based and which was discarded many years ago as unsuitable for Government departments, the operations of RAV can continue to be sustained in the future, particularly in view of the increasing demand for its emergency services as the Government promotes regional development.

The Committee accepts that new asset initiatives must be viewed overall by Government in the context of its priorities and the availability of funds for its capital program, after taking into account works in progress and election commitments.

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Nevertheless RAV, as an emergency organisation, needs assurances as to the level of future funding, not only for recurrent purposes, but for capital purposes in order to maintain and replace assets as their useful life expires. Funding of depreciation would provide this assurance and enable effective long term planning for the replacement of ageing infrastructure and equipment. It is relevant that under the accrual output based budgeting arrangements the department is actually funded for the depreciation incurred by RAV, but does not pass the full cash equivalent on to RAV.

The Committee recommends that:

**Recommendation 1:** The Department of Human Services fund Rural Ambulance Victoria on a full accrual basis inclusive of depreciation and employee entitlements.

**Recommendation 2:** Additional resources be deployed by the Department of Human Services to finalise a Rural Ambulance Victoria funding model inclusive of a base component along with activity and availability funding.

**Recommendation 3:** The Government determine its expectations of Rural Ambulance Victoria in terms of RAV’s ability to respond to emergencies and provide levels of clinical care compared to best practice with other ambulance services throughout Australia. Once desired outcomes are established, the Department of Human Services and Rural Ambulance Victoria develop financial models and strategic directions in order to determine what resources and commitments are needed to achieve those desired outcomes, along with the timeframes involved.

### 3.2 Operational results

The Auditor-General’s 1997 report raised serious concerns about the ongoing financial viability of four of the five rural ambulance services operating at the time. The financial pressures faced by the ambulance services arose primarily from fixed or declining revenue from subscriptions and patient transport fees, the cost implications of the implementation of a new enterprise bargaining agreement and high levels of overtime.
The Auditor-General advised the Committee in June 2002 that since its creation, Rural Ambulance Victoria was continuing to experience financial difficulties, with an operating deficit of $1.11 million in 2000-2001. Despite action by RAV which increased revenue from transport fees and subscriptions, the proportion of revenue provided from State Government grants continued to grow. The Auditor-General concluded that working capital deficits, combined with deteriorating asset infrastructure could mean that RAV will face future financial and operational difficulties, particularly given that unless RAV found other methods of increasing revenue or received additional Government funding, working capital would continue to decline.

Detailed below in exhibit 3.3 is a summary of RAV’s financial results for the past four years dating back to its first full year of operations in 1999-2000.

**Exhibit: 3.3: Summary of Financial Results for Rural Ambulance Victoria**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue</td>
<td>$81,841</td>
<td>$84,758</td>
<td>$110,268</td>
<td>$120,986</td>
</tr>
<tr>
<td>Total expenses</td>
<td>$81,361</td>
<td>$85,868</td>
<td>$105,314</td>
<td>$117,217</td>
</tr>
<tr>
<td>Operating surplus/deficit</td>
<td>480</td>
<td>(1,110)</td>
<td>4,954</td>
<td>3,769</td>
</tr>
<tr>
<td>Retained surplus/ accumulated deficit</td>
<td>144</td>
<td>(119)</td>
<td>240</td>
<td>(3,350)</td>
</tr>
<tr>
<td>Total assets</td>
<td>$69,564</td>
<td>$72,378</td>
<td>$88,888</td>
<td>$110,927</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$29,102</td>
<td>$32,999</td>
<td>$42,338</td>
<td>$48,398</td>
</tr>
<tr>
<td>Net assets/equity</td>
<td>$40,462</td>
<td>$39,379</td>
<td>$46,550</td>
<td>$62,529</td>
</tr>
</tbody>
</table>

Note: (a) Figures in brackets indicate a deficit for the particular item

Source: Rural Ambulance Victoria, annual reports 2000 and 2003

Exhibit 3.3 indicates that, between 1999 and 2003, revenue (primarily from Government grants) increased by 67.7 per cent. Over the same period expenses (primarily salary and wage costs) increased by 69.4 per cent. At the date of this report RAV was engaged in enterprise bargaining negotiations, the outcome of which will add to employee costs. The Committee also notes that RAV had an accumulated deficit of $3.35 million in 2002-03.

The department drew attention to RAV recording an operating surplus of $3.8 million in 2002-03. While this is correct, RAV in its annual report also drew attention to a capital grant received late in the financial year against which no expenditure had been

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24 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.10
recorded. Excluding the impact of this grant, RAV would have recorded a deficit of $1.23 million in 2002-03.

In accordance with Australian Accounting Standards, grants received for capital purposes are treated as revenue. In 2002-03 RAV received operating grants of $60.8 million and capital grants of $11 million. The equivalent of the capital grants is transferred to reserves after the operating results are recorded. The reserves are applied towards the purposes for which the capital grants are received, such as infrastructure development.

The Committee is concerned that were it not for the receipt of capital grants, either RAV’s recurrent operations would record substantial deficits or operational activities would be substantially reduced so as not to exceed revenue. For example in 2002-03, excluding the value of the capital grants received of $11.013 million would have resulted in RAV recording an operating deficit of $7.244 million.

This situation illustrates an underlying weakness in the recurrent operations of RAV when financial information is prepared on an accrual basis reflecting the full cost of operations, inclusive of the depreciation expense of $7.515 million in 2002-2003. The department argued that its practice of not funding depreciation is more than offset by the value of capital grants. This is correct only in some years. However capital grants, other than for motor vehicle replacement, are often for new assets such as the communications system and new ambulance stations. Accordingly these funding arrangements will not address the progressive deterioration of other assets to the stage where they must be replaced. In its annual report for 2002-03 RAV acknowledges that:

*The Victorian Government provides the majority of Capital Funds required by RAV and the receipt of these funds does not always match the timing of depreciation charged in the accounts.*

The department’s failure to adequately fund rural ambulance services in the past led to the run down of infrastructure referred to by the Auditor-General in 1997 and further confirmed in his assessment undertaken in June 2002.

The Committee considers that the Department of Human Services needs to urgently finalise the output funding model that the department has been developing over the past few years.

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25 Rural Ambulance Victoria, Annual Report 2003, p.36
26 ibid., p.24
27 ibid., p.28
28 ibid., p.24
29 Letter, dated 24 June 2002, from the Auditor-General concerning the follow-up review of performance audit report no. 51, p.2
CHAPTER 4: OVERTIME AND INDUSTRIAL RELATIONS

4.1 Review by the Auditor-General

At the time of the Auditor-General’s report in 1997 Victoria had five rural ambulance services. Overtime expenditure as a proportion of normal salaries ranged from 11.9 per cent in the South Western Region to 31.3 per cent in the South Eastern Region. On average across the ambulance services, overtime represented 18.4 per cent of ordinary salaries. The Auditor-General attributed in part the high cost of overtime, which was affecting human resource costs, to inefficient management and inappropriate employee conditions and practices.

An enterprise agreement negotiated in 1995 was intended to improve efficiency and reduce overtime levels through the introduction of more flexible working conditions. Despite this intention, the Auditor-General reported that senior management had advised that a significant proportion of overtime arose due to inefficient and inappropriate employee conditions and practices, including:

- generous overtime allowances within the enterprise agreement;
- the claiming of up to quadruple time where the same employee is recalled more than once during the same shift;
- restrictions on the use of casual or part-time staff;
- stringent application by employees in most regions of the award condition requiring an eight hour break;
- inflexible rostering arrangements; and
- the use of two ambulance officers for certain non-emergency cases even when the nature of the case required only one crew member.

Comment was also made by the Auditor-General that a lack of specialised expertise in industrial relations management within certain rural ambulance services was a contributing factor to poor industrial environments and inefficient work practices.

The Auditor-General recommended that, when negotiating future enterprise agreements, the department and ambulance services should work towards addressing the costly practices and conditions prevailing at the time.

In his follow-up review in June 2002, the Auditor-General did not examine overtime or industrial relations, although these areas were prominent in the 1997 Audit Report.
4.2 Response by the Minister for Health

In a response to the Committee dated 30 December 2002, the Minister for Health advised that an important outcome from the 2001 Rural Ambulance Victoria Certified Agreement was the allocation of 30 additional paramedics to branches which had previously generated high levels of overtime due to crewing configurations. The additional staff were to improve the level of access to uninterrupted eight hour breaks thereby reducing overtime expenditure.30

The Minister further informed the Committee that RAV was undertaking a project to analyse and contain overtime taking into account employment conditions, the use of internal relief, roster configuration, student availability and employment policies and practices. RAV had identified eleven causes of overtime, of which some were within the direct control of RAV, such as training and rostered overtime. Other overtime outside RAV’s direct control included the increase in the number of two officer responses to emergencies and the growth in caseload at on-call branches, especially in the evenings.31

RAV had initiated strategies to reduce overtime by improving resource planning for annual leave, long service leave and public duty commitments, along with improved WorkCover management. Another planned strategy was the introduction of a computerised rostering program to provide area management teams with the ability to monitor and control overtime, including the production of control reports on payroll data for Area Management Teams. The Ambulance Service of New South Wales has used a computerised rostering system for many years. The Committee noted at the date of this report that technical issues had delayed implementation of the rostering program in rural Victoria.32

The Department of Human Services further advised the Committee that, since the formation of RAV, agreement had been reached between unions and the department on a consistent approach to address the inconsistencies between the former rural ambulance services as to the use of two officer crews. A specialist Human Resources Division had been established within RAV with expertise in industrial relations management, occupational health and safety and recruitment training. It was considered that, as a result of these skills, there had been a significant reduction in industrial disputes in conjunction with a significant improvement in management practices.33

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30 Minister for Health’s response to the Committee’s questions, received 30 December 2002, p.5
31 ibid., p.5
32 Rural Ambulance Victoria, Committee of Management Report, October 2003, p.44
33 Department of Human Services’ response, received 5 January 2004, to the Committee’s additional questions, p.2
4.3  Current situation with overtime

The Department of Human Services advised the Committee in January 2004 that since 1999-2000 RAV had experienced an average annual rise in overtime costs of 21 per cent, while over the same period actual overtime hours had risen by only 15 per cent. In 2001-02, overtime hours totalled 240,076 costing $12,695,536 compared with 293,963 hours in 2002-03 costing $15,535,316, which represented an increase in overtime hours of 22.4 per cent, more than treble the increase in workload. 34 Reasons for the continuing growth in overtime were seen by the department as:

- the workload was increasing by 7 per cent per annum;
- effective full time staff numbers had increased with the number of paramedics increasing by 21.4 per cent from 519 officers to 636 officers since 1999-2000;
- an increase in two officer crewing along with the establishment of MICA units in major rural towns; and
- an increase in the kilometres travelled as a result of increasing workload.

The department further added that in the 2003-04 year to January 2004 the number of overtime hours was only increasing in proportion to caseload growth. 35 The Committee is concerned with this response which suggests that the increase in caseload is being met through ambulance officers working overtime. Apart from the costs associated with overtime as compared to the employment of extra resources, excessive overtime also has implications for occupational health and safety.

The Committee was also interested to note that the response from the Minister for Health in December 2002 stated that the employment of additional paramedics would alleviate overtime, but the subsequent correspondence from the department in January 2004 cited an increase in full time staff numbers as a major factor in the continuing growth of overtime. 37

A further factor contributing to overtime is that, despite an increase in full time staff numbers, the increase in caseload has led to vacancy levels of between 20 to 40 paramedics. These vacancies, which according to RAV form part of an Australia wide shortfall of around 600 paramedics, have resulted from insufficient numbers of paramedics graduating from universities. RAV anticipates that this shortfall will be progressively addressed over the next three years through a combination of new

34 Department of Human Services’ response, received 5 January 2004, to the Committee’s additional questions, p.3
35 ibid.
37 Department of Human Services’ response, received 5 January 2004, to the Committee’s additional questions, p.3
recruiting policies and higher numbers of graduates. In the interim period, overtime is being incurred as a direct result of the shortfall in resources.

The impact of the shortfall is that based on information in the last RAV annual report available for 2002-03, operational staff numbers had increased from 519 officers in 1998-99 to 645 officers in 2002-03, an increase of 24.3 per cent. However, during the same period total cases responded to increased from 106,557 cases in 1998-99 to 149,186 cases in 2002-03, an increase of 40 per cent. Even after allowing for some absorption of downtime, these statistics suggest that the case load is increasing faster than available resources, thereby resulting in overtime.38

An appropriate indicator of the extent of overtime being worked is the ratio of overtime costs to normal salaries. In 1997, the Auditor-General’s report identified an average ratio of 18.4 per cent, with a high of 31.3 per cent at one ambulance service. Based on the 2003-04 service agreement between RAV and the Department of Human Services, the approved budget allowed for overtime costs of $15,930,299 representing 37.6 per cent of ordinary salaries of $42,296,976.39

In summary, despite the efforts of RAV to control overtime costs, the incidence of overtime has increased by a further 19.2 per cent from the average ratio of 18.4 per cent identified by the Auditor-General in 1997. The Committee did not compare overtime ratios in other states, but noted that a March 2001 performance audit report on the Ambulance Service of New South Wales, undertaken by the Audit Office of New South Wales, identified a ratio of overtime to ordinary salaries of 14 per cent in 1999-2000.

### 4.4 Reasons for high levels of overtime

Generally, the Committee is satisfied that RAV regard the cost of overtime as a serious concern and has a stringent monitoring system in place. The Committee also accepts that overtime is unavoidable in an emergency service which must always be on-call, irrespective of often widely fluctuating demand. This situation is illustrated best by the number of small branches that are staffed for 10 hours per day, with staff on-call for the remaining 14 hours. In these branches, it is cheaper and more efficient to pay an on-call allowance and overtime if staff are called out as compared with staffing the smaller branches 24 hours per day. The challenge is to consider alternative strategies that can reduce costs without reducing responsiveness.

To monitor overtime RAV has identified 12 categories of reasons for overtime being incurred, such as replacing staff on sick leave, WorkCover absences, shift relief, staff recalls, and training days.40 Each area manager is provided with monthly overtime

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38 Rural Ambulance Victoria, annual reports for 1999 and 2003
39 Rural Ambulance Victoria, Service Agreement, Ambulance Services, Agreement No. 15811, 2003-04, approved budget
40 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.6
budgets for each of the 12 categories identified. Where budgets are exceeded explanations must be provided to the RAV Chief Executive Officer and summary information is provided to the Committee of Management. RAV also has a monitoring process that specifically reviews overtime and case demand at each ambulance branch. This analysis is undertaken on a monthly basis and the information is given to area managers for action as necessary.

Despite the concerted efforts by RAV to manage overtime, many factors contributing to overtime are largely outside of RAV’s control. These include the issues discussed in the following sections.

**4.4.1 Training**

Operational staff receive at least two days training per year. All training days are treated as overtime.

**4.4.2 Sick leave**

Ambulance officers are entitled to 21 days sick leave per year in recognition of the stressful nature of the duties undertaken. Exhibit 4.1 illustrates clearly the relationship between sick leave and the incidence of overtime:

**Exhibit 4.1: Average Sick Leave Hours and Overtime Hours attributed to Sick Leave**

Source: RAV Operational Services Dataset – October 2003

RAV is aware that there is a very high incidence of sick leave taken, particularly at the larger branches. The Committee considers that the high incidence of sick leave at such locations warrants an in-depth examination by RAV. Exhibit 4.1 discloses that operational and operations centre staff recorded an average of 1,399 hours of sick
leave per month between August 2002 and August 2003. The average monthly cost of this sick leave was $37,270. Staff working overtime covered around 67 per cent of sick leave absences during the same period. The average monthly cost of overtime directly attributable to sick leave absences was $51,326 or around 37 per cent higher than the cost of the sick leave.

Exhibit 4.1 also records that around 37 officers, or 5.4 per cent of the average staff numbers of 685 persons involved in operational and call centre activities, are absent at any given time. This ratio also impacts on productivity as available resources are constantly reduced by this level of absence.

4.4.3 Occupational health and safety

The high incidence of sick leave and consequential overtime also has a correlation with the incidence of WorkCover claims arising from occupational health and safety issues. Based on 2002-03 data recorded in RAV’s annual report, a target of 108 reported claims was established for 2002-03 as compared to actual claims totalling 164, an increase of 52 per cent.

The Committee is aware that RAV has taken some actions to improve its environmental health and safety systems. In the Committee’s opinion, it is important that development of the systems result in:

- a comprehensive safety management plan linked to the corporate plan;
- work safe method statements that are communicated to all staff and are rigorously adhered to;
- safety audit systems that meet legislative requirements;
- data collection systems that are capable of recording and analysing all accidents, injuries, incidents and WorkCover claims;
- WorkCover claims receiving regular monitoring, especially in relation to opportunities for staff to return to work on light duties;
- an environmental management plan, inclusive of targets and performance measures reflecting RAV’s environmental performance;
- continuous safety improvement action plans for all locations;
- ongoing training of occupational health and safety representatives, management and operational staff in risk management techniques and procedures;
- clear definitions of responsibility and accountabilities of all staff for occupational health and safety and injury management within RAV; and
- specific ongoing budget provision within RAV to support accident and injury prevention and injury management.
The Committee recognises the difficult environment in which ambulance officers work. Nevertheless, it is incumbent on RAV to take firm action to minimise the risk of workplace incidents involving occupational health and safety issues, some of which will lead to worker’s compensation claims, while other incidents will result in sick leave.

The Committee considers that the effectiveness of actions taken by RAV to reduce occupational health and safety incidents could be measured in part by the development of performance measures involving the management of occupational health and safety incidents recorded each year and subsequent injury management performance. This information should be disclosed in RAV’s annual report and record over periods of time the success or otherwise of strategies developed to reduce the level of incidents reported. Annual targets should also be set. Ideally, such targets should be benchmarked against best practice in similar organisations within Australia. Targets could include a commitment to reduce the incidence of the more common injuries by a specified percentage between years.

4.4.4 Multiple officer responses and overtime

When RAV was formed in March 1999, it was initially capable of providing a two officer crew emergency response to only 50 per cent of cases. With the progressive employment of more staff in response to an increasing workload, 85 per cent of emergency and acute cases received a two officer response in 2002-03, either through a two officer ambulance or through the dispatch of two separate emergency vehicles. The Committee understands that this ratio has since improved to 91.4 per cent of emergency cases. The conversion of single officer crewing to two officer crewing has been a key element of the Government’s commitment to boosting rural ambulance services, but has also led to increasing levels of overtime as illustrated in exhibit 4.2.

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42 Department of Human Services’ response, received 5 January 2004, to the Committee’s additional questions, p.3
Exhibit 4.2: Increasing Multiple Officer Responses and Overtime cost

Exhibit 4.2 illustrates that, since November 1999, the increasing frequency of multiple officer responses has a direct correlation with an increase in overtime costs. This correlation is brought about by the eight hour rule, whereby ambulance crews must have at least an eight hour break when responses overlap their normal shift, where they are recalled while off duty or when they have been rostered on-call and are required to respond to an emergency. Single officer responses in the past resulted in only one officer working overtime. Multiple officer responses invariably result in other officers working overtime while the response crew has their eight hour break. In other words, the employment of additional resources to enable two officer responses, along with the upgrading of some branches to 24 hour staffing arrangements has led directly to an increase in overtime costs.

4.4.5 Stand-by and rostered on-call provisions

In providing a 24 hour ambulance coverage, it is not cost efficient or productive to staff many small branches 24 hours per day. RAV provides coverage in these branches by rostering off-duty staff to be available to respond to calls during off-peak periods. Staff rostered as being on-call receive a loading of $3.25 per hour. If called out rostered staff are paid for the first two hours at time and a half and thereafter at double time. A minimum of four hours is paid, irrespective of the duration of the response. Given that staff responding to calls while rostered on must have an eight hour break before resuming duties, this invariably means that overtime is incurred up until the crews resume duty. The Committee was advised that, of the 119 ambulance locations in rural Victoria, around 54 of these locations utilise rostered on-call provisions.
The Committee accepts that the rostering of staff to be on-call is an acceptable industrial practice in providing ambulance services outside of normal hours of operation.

In contrast to the on-call rostering of staff, an increasing practice is the preference of operational staff to be available on stand-by for recall for up to eight hours to cover resource shortfalls. Officers receive their normal rate of pay while on stand-by. If recalled for duty during this period, they receive a minimum of four hours pay at double time. Any overlap of the eight hour period is paid at overtime rates, which also inevitably results in overtime paid to replacement staff, as a result of the eight hour rule. Apart from pay rates, in practical terms, there is no difference between being on stand-by or on-call, as in both instances an ambulance officer is off-duty on the understanding they could be recalled to duty.

There is a strong financial incentive for staff to be placed on stand-by which, on average, attracts payment of $27 per hour as compared to the rostered allowance of $3.25 per hour. Industrial provisions in New South Wales do not allow for a stand-by clause. Instead, if staff in that state are not rostered and are recalled, they are paid for the first two hours at time and a half and thereafter at double time.

The Committee also understands from the RAV that on a comparative basis to other states, the employment pay rates and conditions for ambulance officers in Victoria are currently (pending a new Enterprise Bargaining Agreement) equivalent to or better than in other states. This factor also influences the high cost of overtime and allowances in RAV.

The use of stand-by provisions is a growing factor in the high cost of overtime incurred by RAV. However, as these provisions are allowed for under the existing enterprise agreement, RAV must abide by the agreement.

### 4.4.6 Rostering

A key factor in controlling overtime is the ability to deploy staff within rostered hours of duty to match workload patterns of demand for ambulance services, thereby avoiding excessive overtime and call out costs where possible. It was not practical for the Committee to evaluate the various rosters being used and their success or otherwise in meeting fluctuating demands at a reasonable cost. Nevertheless, of critical importance when designing rosters is the ability of management to capture data detailing case loads, response times, resource levels, overtime and call-out costs, shift starting and finishing times and other relevant information.

RAV has limited access to this information but without computerised information gathering it has to collect this data manually, which is very time consuming. Further, whether the data can be relied upon as to its accuracy and completeness for ongoing

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43 Meeting with RAV, 30 January 2004
resource management analysis is doubtful. As referred to previously, RAV has determined the benefits of an automated rostering system, but technical issues have delayed the implementation of the system.

More effective rostering has strong potential to reduce overtime by better matching of resources to identified demands. The extent to which this can be achieved cannot be accurately determined until RAV is provided with information systems capable of producing comprehensive data in a timely and accurate manner, that can support critical decisions on the deployment of limited resources.

4.5 Industrial relations environment

The Committee was not in a position to determine whether the work practices referred to in the Auditor-General’s 1997 report have been addressed. However, it is obvious from the continuing escalation of overtime costs that work practices are continuing to play a part in the cost of overtime.

Until negotiations commenced on a new Enterprise Bargaining Agreement in mid 2004, RAV and the department considered that the industrial environment within RAV was very positive, as evidenced by the incidence of industrial disputes and work bans falling considerably in recent years.44 The access by operational staff to high levels of overtime and allowances to supplement base pay rates was also a factor in the environment. Since negotiations commenced on the new agreement there has been ongoing industrial action. In August 2004 the Australian Industrial Relations Commission terminated the bargaining period to enable resolution of the dispute.

RAV has established a Policy Consultative Committee which discusses industrial issues as part of its agenda. This Committee comprises representatives from RAV, Metropolitan Ambulance Service, Department of Human Services and involved unions. An employee relations manager has also been engaged by RAV to specifically handle industrial relations issues.

Industrial peace has also been achieved by RAV applying the standard application of award conditions across all its workforce, an area which was the subject of considerable disputation prior to the formation of RAV.

In 2000, RAV commenced developing an operational plan similar to a workforce plan which was to be delivered over a three year period. The plan was never finalised, although some aspects were implemented. One of the big challenges facing RAV is to project emerging demands for its services and to expand the workforce to meet those demands, subject to available funding from the department. In cases where regular

44 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.8
overtime could be avoided, the resultant reduction in overtime costs could also assist in funding additional staff.\textsuperscript{45}

RAV is currently undertaking a demographic analysis of demand growth, taking into account factors such as the ageing population, population changes, workloads on existing ambulance station locations and the availability of aerial ambulance services. Available data also suggests that where new ambulance stations are established demand actually increases, indicating that some patients prefer to arrive at hospital emergency departments in an ambulance due to a perception that they will receive priority treatment.

The Committee acknowledges that this study will have industrial implications in terms of recruitment levels, workloads, crewing configurations, replacement of retiring ambulance officers and skills development.

Negotiations are in progress on a new Enterprise Bargaining Agreement (EBA). This will provide RAV with an opportunity to address some of the factors contributing to high levels of overtime. A controversial issue will be the need to eliminate the existing practice of ambulance officers working up to 14 hours in a single shift. This practice is no longer acceptable for occupational health and safety reasons and new rosters would be required, along with additional staff.

Another factor that will need to be addressed if a CAD system is introduced, is whether call-taking and dispatch functions currently performed by RAV paramedics should be undertaken by civilian staff as occurs with the CAD system for the Metropolitan Ambulance Service.

The Department of Human Services has a vested interest in the EBA negotiations as the outcome will result in a need to substantially increase the department’s operating grants to RAV to meet employee costs and entitlements. The department advised the Committee that the responsibility for the negotiations rests with RAV as the employer. The department’s role was restricted to providing advice and to ensuring that the position taken by RAV as the employer was consistent with Government policy on employee benefits.\textsuperscript{46} Given this position, RAV needs to receive a commitment from the department about the extent to which outcomes from a new EBA will be funded.

4.6 Summary

The existing industrial environment within RAV up until negotiations commenced on a new Enterprise Bargaining Agreement had been largely stable, mainly due to the effective efforts of RAV in consulting with its workforce and unions on emerging issues. The stable environment was also due in part to the ability of a large proportion

\textsuperscript{45} Meeting with RAV, 10 October 2004

\textsuperscript{46} Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, pp.8–9
of operational staff to receive substantial overtime and allowances, bringing annual remuneration to levels considerably in excess of base remuneration rates.

The Committee accepts that certain levels of overtime will always be necessary, but is concerned that overtime costs incurred by RAV have increased sharply since the Auditor-General in 1997 advised that overtime costs were having an impact on the financial viability of rural ambulance services.

In the current industrial environment RAV is largely unable to control overtime costs, primarily as a result of industrial agreements, high levels of sick leave in some locations, increasing caseloads, increasing WorkCover claims and antiquated manual information gathering systems which prevent high level data analysis that would be possible with a computer assisted dispatch system. The Committee considers that there is a need to further address occupational health and safety issues, particularly those leading to sick leave, WorkCover claims and subsequent overtime.

RAV’s reaction to this situation has been to seek the Department of Human Service’s permission to engage full-time paramedics where it can be demonstrated that the cost of employing additional full-time operational staff would be less than paying overtime and call-out costs and allowances at certain branches. Apart from the funding implications of this policy, the ability to employ more paramedics is restricted by the limited number of paramedics graduating from universities, which is an Australia wide problem. RAV currently experiences a shortage of paramedics.

RAV faces considerable challenges in the future in maintaining a stable industrial environment, while at the same time accepting the need to restrain overtime costs and to address industrial practices resulting in overtime. Given that the department ultimately bears much of the costs associated with increases in employee benefits and the employment of additional resources by RAV to meet emerging demands, it needs to offer every assistance to RAV in forthcoming EBA negotiations. Of critical importance is that any wage increases granted under a new EBA will have a multiplier effect on overtime and stand by provisions. Given that overtime represented around 37.6 per cent of ordinary salaries in 2003-04, the cost of overtime to RAV will further rise substantially, leading to demands for higher recurrent grants from the Department of Human Services.

The Committee recommends that:

**Recommendation 4:** The Department of Human Services provide expert assistance to Rural Ambulance Victoria in negotiating a new enterprise agreement that addresses industrial practices that add substantially to overtime and allowance costs.
Recommendation 5: The Department of Human Services provide an undertaking to Rural Ambulance Victoria as to the extent to which any employee benefit increases negotiated in future enterprise bargaining agreements will be funded by the department, after taking into account Government policy.

Recommendation 6: The Department of Human Services give priority to the funding of computerised information systems, including a computer assisted dispatch system that will enable Rural Ambulance Victoria to more efficiently, effectively and economically manage its resources for the benefit of the rural Victorian community.

Recommendation 7: Rural Ambulance Victoria take action to ensure that its management of occupational health and safety, including injury management and return to work programs, reflects best practice.

Recommendation 8: Rural Ambulance Victoria include in its annual report performance data on its management of occupational health and safety, along with targets set at the beginning of each year.

Recommendation 9: Rural Ambulance Victoria, as a matter of priority, finalise a workforce plan.

Recommendation 10: Rural Ambulance Victoria investigate the incidence of sick leave, and subsequent overtime, at locations exhibiting levels of sick leave and overtime in excess of average levels taken elsewhere across Victorian ambulance locations.
CHAPTER 5: COMMUNICATIONS

5.1 The call-taking and dispatch process

Failure to have a continuous and reliable communications infrastructure has an impact on the efficiency of all ambulance operations, patient outcomes and staff safety.

Exhibit 5.1 details the call-taking and dispatch process used by RAV. Although the system is still largely a manual operation as compared with the computerised operations of other ambulance services in Australia, the processes used are similar to those utilised by other ambulance services.

Exhibit 5.1:
Rural Ambulance Victoria
Call-ta king and Dispatch Process

<table>
<thead>
<tr>
<th>Receive call Telstra 000</th>
<th>Take case details</th>
<th>Dispatch ambulance</th>
<th>Mobilise ambulance</th>
<th>Arrive at scene</th>
<th>Depart scene</th>
<th>Arrive at hospital</th>
<th>Clear case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation time</td>
<td>Turnout time</td>
<td>Travel time</td>
<td>Treatment time</td>
<td>Transport time</td>
<td>Hospital turn around time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


As shown in exhibit 5.1, once the call-taker receives the call a card is completed with basic details and handed to the dispatcher. During the dispatch process, a second card, known as a case card, is completed, recording patient medical details provided by the caller. This information is radioed to the ambulance crew. In two of the five operations centres in Victoria, RAV operates a screen based call-taking system known as CIS. Information is recorded on the screen by the call-taker as it is provided by the caller. The system records the details on a card which is then passed to the dispatcher. Although the system is marginally better than a fully manual system, it is obsolete and has limited functionality. The system was developed by the Metropolitan Ambulance Service around 1990 and is no longer supported by the manufacturer. It cannot produce management information in an electronic format, nor can it be regarded as totally accurate in terms of time recording.

All operations centres have call line and call address identification facilities. When a 000 call is received from Telstra, the system provides the call-taker with the telephone number and the caller’s address as registered with Telstra and other

47 SIPSaCS Bridging Strategy Business Case, August 2001, p.11
telecommunication companies such as Optus. When mobile phone calls are received, the system will indicate the locality of the call tower from which the call was transmitted, along with the registered address of the owner of the mobile phone.

The system is of some benefit, but suffers from the following disadvantages:

- the system provides only a telephone number associated with an exchange line and is of little value when calls originate from large premises with multiple telephone extensions; and
- apart from billing purposes for non-ambulance subscribers, the system is of value only when the emergency is located at the premises of the telephone subscriber.

The biggest disadvantage faced by RAV is that a call line identification system should be linked to a map base that forms part of a Computer Aided Dispatch (CAD) system, thereby allowing the location of calls originating from premises where the emergency occurs, to be instantly displayed on screen. This system subsequently enables the nearest ambulance to be immediately dispatched to the address.

5.2 Infrastructure supporting the call-taking and dispatch process

Exhibit 5.2 lists the critical infrastructure components supporting a modern call-taking and dispatch system as used by most ambulance services across Australia. The chart compares the existing status of these infrastructure components elsewhere in Australia with the current status of Rural Ambulance Victoria.

Exhibit 5.2: Ambulance Infrastructure Comparison

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>RAV</th>
<th>MAS</th>
<th>NSW</th>
<th>QLD</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Voice Communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Paging/Alerting System</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mobile Messaging</td>
<td>X</td>
<td>T</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>C</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Automatic Vehicle location</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>C</td>
<td>✓</td>
<td>✓</td>
<td>T</td>
<td>✓</td>
</tr>
<tr>
<td>Computer Aided Dispatch</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structured Call-taking</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Correspondence dated 28 November 2002 provided by RAV

<table>
<thead>
<tr>
<th>Key</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>=</td>
<td>existence of system</td>
</tr>
<tr>
<td>x</td>
<td>=</td>
<td>Not available</td>
</tr>
<tr>
<td>T</td>
<td>=</td>
<td>Tenders either called for or accepted</td>
</tr>
<tr>
<td>C</td>
<td>=</td>
<td>Commitment by Government to implementation</td>
</tr>
</tbody>
</table>
As shown in exhibit 5.2, RAV lags behind every state and territory in Australia in terms of critical infrastructure in a modern, efficient emergency ambulance service. The modern dispatch tools listed in the exhibit are accepted standard practice within emergency services across Australia, with most ambulance services having had CAD, mobile data and automatic vehicle location systems for many years. Many of these ambulance services are already planning for, or deploying the ‘second generation’ of these tools.48

In summary, RAV’s critical operating systems are past their design life, with the operations centres and radio network more than 12 years old and the mobile radio equipment more than 20 years old. This situation causes serious functional difficulties such as radio black spots and inadequate redundancy and back-up for existing systems. Ambulance officers have a limited ability to receive medical advice and to communicate with hospitals while ambulances are in transit. They are also unable to communicate with other emergency service organisations. Serious concerns exist as to the efficiency and accuracy of call-taking and dispatch functions that are performed manually. Without a computer assisted dispatch system and a mobile data network, the standard of management data, including operational and logistical data, is poor as a result of the time consuming processes involved in collecting manual data that may not even be accurate.49

RAV advised the Committee that:

There is no thought of anybody intentionally being misleading but there are obviously errors, there have to be, because (the system) is manual, and particularly if you have a high workload for a short period of time.

Further,

If you are using a clock in an operations centre, it could be different by one minute to a clock somewhere else.50

RAV has communicated these concerns to the Department of Human Services and the unions.
5.3 Actions taken by the Government to address communication deficiencies

The Auditor-General stated in 1997 there was a need to implement improvements to RAV communications systems involving call-taking and dispatching. Specifically, the Auditor-General perceived that the modernisation of communications systems would facilitate improvements in the timeliness of responses by rural ambulances and the accuracy and quality of management information arising from the communication process.51

The Committee understands that communications systems have remained largely as they were in 1996, although capital funding has recently been provided by the Department of Human Services to address some of the problems identified. The Auditor-General’s report noted that a report issued by the Victorian Ambulance Services Association in 1996 recommended rationalising the five operational centres to two centres, which was seen as being more conducive for large capital investment in communications infrastructure. No action was taken on the Association’s recommendation.

The Government’s primary response to RAV’s situation has been through its Statewide Integrated Public Safety Communication Strategy (SIPSaCS) within the Department of Justice. The strategy, which was developed by the Bureau of Emergency Services Telecommunications (BEST) located within the department, was announced in December 2001 by the Minister for Police and Emergency Services. The strategy is intended to upgrade emergency services, including emergency service telecommunications systems over a 10 year period. The SIPSaCS encompasses eight emergency services organisations including RAV and the Metropolitan Ambulance Service, Victoria Police and the Country Fire Authority.

The implementation of the strategy involves a series of technically complex and interrelated projects for the benefit of all emergency service organisations to be delivered at a cost of $1.1 billion over the 10 years commencing 2002-03. The Committee notes that a primary aim of the strategy is to improve response times of emergency service organisations by significantly upgrading existing communications technology.

The first three projects announced under the strategy were:52

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51 Victorian Auditor-General’s Office special report no. 51 - Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, pp.32–33
(a) **Mobile Data Network Project**

This project involves the fitting of mobile data terminals to all metropolitan police and metropolitan ambulance vehicles over a seven year period at an estimated cost of $100 million;

(b) **Metropolitan Mobile Radio Project**

This project involves the replacement of the existing aged analogue system used by Victoria Police, Metropolitan Ambulance Service and Metropolitan Fire and Emergency Services Board with a state of the art digital radio system costing $130 million over 10 years; and

(c) **Emergency Alerting System**

A messaging system will be used to alert emergency personnel from a number of agencies of emergencies requiring assistance. The $100 million project will equip approximately 29,000 volunteer and career emergency services personnel with personal messaging devices that will enhance their safety and improve response times. RAV personnel are to be included in this project.

Apart from the emergency alerting system, the needs of RAV are seen by the Government as a low priority and it will not receive funding under SIPSaCS until at least 2006-07. Current indications are that this date will be extended to 2011-12.

In view of the delayed benefits from SIPSaCS and, in an attempt to prevent further deterioration of its existing communications infrastructure, in late 2001 RAV undertook a study of the minimum works required to bridge the gap between the existing communications infrastructure and the more comprehensive projects envisaged under SIPSaCS from 2006-07. RAV considered that, unless the bridging strategy was implemented, RAV and the Government were placed at serious risk because any failure of the existing obsolete systems could result in RAV being unable to attend to incoming emergency calls, dispatch ambulances and address patient medical issues.

Exhibit 5.3 lists the components that the bridging strategy identified as being critical to RAV operations in the interim five year period pending the commencement of SIPSaCS projects that would benefit RAV.

53 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.6
54 ibid.
Exhibit 5.3: Projects Identified in 2001 Bridging Strategy

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost (2001) $ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Radio communication network</td>
<td></td>
</tr>
<tr>
<td>• mobile equipment replacement</td>
<td></td>
</tr>
<tr>
<td>• network refurbishment</td>
<td></td>
</tr>
<tr>
<td>• elimination of radio black spots</td>
<td></td>
</tr>
<tr>
<td>• medical consultation system</td>
<td></td>
</tr>
<tr>
<td>• handheld equipment replacement</td>
<td>4.93</td>
</tr>
<tr>
<td>• branch equipment replacement</td>
<td></td>
</tr>
<tr>
<td>2. Operations centres</td>
<td>1.20</td>
</tr>
<tr>
<td>• refurbishment of centres</td>
<td></td>
</tr>
<tr>
<td>• voice logging systems</td>
<td></td>
</tr>
<tr>
<td>• 000 call answering systems</td>
<td></td>
</tr>
<tr>
<td>• pager replacement</td>
<td></td>
</tr>
<tr>
<td>3. Computer Aided Dispatch</td>
<td>3.12 *</td>
</tr>
<tr>
<td>• core CAD system</td>
<td></td>
</tr>
<tr>
<td>• structured call-taking</td>
<td></td>
</tr>
<tr>
<td>4. Mobile messaging and status</td>
<td>2.57</td>
</tr>
<tr>
<td>• vehicle equipment</td>
<td></td>
</tr>
<tr>
<td>• automatic vehicle location</td>
<td></td>
</tr>
<tr>
<td>Total requirement over 3 years</td>
<td>11.82</td>
</tr>
</tbody>
</table>

Source: RAV documentation dated 28 November 2002
* This amount does not include recurrent funding of around $1 million per annum which would be needed to cover costs such as licensing fees and maintenance of a CAD system

To illustrate the urgency of implementing the bridging strategy, the following comments are provided on specific components of the strategy:55

(i) Mobile radio equipment

The existing mobile radio system is over 19 years old, no longer supported by the manufacturer and has performance and reliability problems that cannot be resolved. RAV perceived that some operational staff had lost confidence in the equipment and believed patient outcomes, health and safety were at risk.56

55 SIPSaCS Bridging Strategy, 23 August 2001
56 ibid., p.8
(ii) **Automatic vehicle location**

This system provides the location on screen of the nearest available ambulance to an emergency event. From observation, the existing dispatch system relies on the dispatcher being aware from a card system what emergency vehicles have been dispatched from the control centre. The memory of the dispatcher is relied on to identify which ambulances may be available on the road close to the scene or from ambulance stations. Radio contact is then necessary to determine the closest available response. This process can absorb critical time, affecting response times and patient outcomes.

(iii) **Radio communications network**

The existing radio communications network is more than 12 years old. Functional deficiencies include obsolete equipment no longer supported by the manufacturer and inadequate network redundancy. If a disaster occurred at one of the operations centres, 000 calls from Telstra could be directed to another operations centre. However, the other operations centres to which the emergency calls would be directed do not have radio links with the emergency vehicles located within the area served by the centre where the disaster occurred.

Another serious deficiency with the radio communications network is the incidence of black spots within Victoria where radio communications are not possible. These areas are concentrated around the alpine regions in north east Victoria, Wilsons Promontory, parts of north west Victoria in desert areas and areas extending from Anglesea to Wye River (including Lorne) on the southern coastline of Victoria. Many other areas, including the Grampians have marginal coverage. The lack of coverage arises from insufficient radio towers in these locations.57

(iv) **Computer Aided Dispatch**

Computer Aided Dispatch (CAD) is utilised by all other ambulance services in Australia and in most developed countries. The system highlights on a computer screen the location of an emergency on a CAD map, based on the most up to date street directory information available, as recorded on the State Digital Road Network (SDRN).

After following a rigid call-taking protocol, the call-taker transfers the information to the dispatcher who locates the nearest available ambulance within a 12 kilometre by 16 kilometre radius and dispatches the ambulance to the emergency. If an ambulance cannot be initially located, then the screen is expanded to locate available ambulances outside of the immediate locality. Every phase of the ambulance response is time

57 SIPSaCS Transition Program, December 2003, pp.13–17
stamped, thereby enabling critical information to be recorded for monitoring and response allocation purposes.

RAV does not have a firm commitment from the department to fund a CAD, despite an acknowledgement by the department that there has been a 25 per cent increase in demand for Rural Ambulance Victoria services since its formation. RAV informed the Committee that it needs a CAD system to control call-taking and dispatch, and accurate measurement of all phases of an ambulance response.

(v) **Structured call-taking**

A structured call-taking process involves the call-taker asking the caller a series of structured questions of a critical nature, such as the location of the emergency and the medical condition of the patient, in order to determine the urgency of the event for dispatching an emergency vehicle, if deemed necessary. RAV does not have a structured call-taking process beyond an internally developed model which has a number of limitations, including the quality of the response being unduly influenced by the experience and responsiveness of call-takers to a wide range of emergency situations.

In contrast, the Metropolitan Ambulance Service in 1996 introduced an internationally accepted system known as the Advanced Medical Priority Dispatch System (AMPDS). The system consists of 38 cards, each containing a small number of highly structured questions for call-takers. The questions are designed to assess a patient’s medical condition in specifically designed medical circumstances. The structured call-taking and dispatch protocols are intended to result in a better quality dispatch, in the shortest possible time, based upon greater recognition of the patient’s needs.

The Auditor–General in his follow-up review of the 1997 performance audit report, advised the Committee that:

> significant developments (since 1997) included consistent, medically approved, algorithmic call-taking and dispatch processes for utilisation in all RAV operations centres.

This has not occurred as funding was not provided to RAV to implement AMPDS.

In its bridging strategy, RAV unsuccessfully sought funding of $300,000 to implement AMPDS.

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58 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.7
59 ibid., p.6 and p.10
60 Letter, dated 24 June 2002, from the Auditor-General concerning the follow-up review of performance audit report no. 51, p.9
61 Rural Ambulance Victoria, SIPSaCS Transition Strategy, presentation to Department of Human Services, 22 May 2003
Subsequent to the introduction of AMPDS in 1996, the Metropolitan Ambulance Service introduced PROQA which is the computerised version of AMPDS and complements its CAD system. Structured call-taking combined with a CAD provides a consistent and evidence based methodology for call-taking and dispatch and mitigates the potential legal liability for an ambulance service due to a delayed or inappropriate emergency dispatch.

5.4 Government response to bridging strategy

The bridging strategy developed by RAV to meet immediate critical communication infrastructure needs prior to implementation of the SIPSaCS strategy was costed at $11.8 million in 2001.

In August 2003, the Minister for Health announced the Government would contribute $5 million to the bridging strategy to:

- replace mobile radio equipment in RAV’s 450 ambulances and support vehicles;
- refurbish RAV operations centres;
- replace pagers;
- install extra radio towers to eliminate black spots in the vicinity of Mallacoota, the Otways, Donald, Nhill and Mildura;
- upgrade 000 call answering system to enable greater management of calls between operations centres; and
- upgrade voice logging recorders at all operations centres to enable recorded emergency calls to be retrieved and verified.

Regarding the balance of the bridging strategy costing around $6.8 million, the department advised the Committee that $4.6 million would become available in the future as it was part of Labor’s Financial Statement issued in 2002. This amount would enable a CAD system to be implemented. The department further advised the Committee that it anticipated that the remaining $2.2 million required for the bridging strategy would be found in due course.

The Committee notes that Labor’s Financial Statement 2002 refers to the improvement of metropolitan and rural ambulance services with new and upgraded services across Victoria costing $30 million over four years. The statement does not

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62 Hon B Pike MP, Minister for Health, media release, $5m Project Takes Rural Ambulances to the Airwaves, 29 August 2003.
63 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.7
refer to the upgrade of RAV’s communications infrastructure. The 2003–04 asset investment initiatives for the Department of Human Services provided $400,000 towards the upgrade of ambulance services in Omeo and Mallacoota. The 2004-05 asset investment initiatives for the Department of Human Services included $5 million to expand ambulance services in five locations, of which three locations were in regional Victoria. A further $2.5 million was provided to RAV to replace ambulance vehicles. No further capital funds have been provided for RAV’s bridging strategy since 2002-03.\textsuperscript{65}

In addition to the advice from the department that a CAD system would be implemented, the Committee considers that RAV needs a firm funding commitment from the Government beyond what has been provided to date, in order to enable future planning of its communications infrastructure with an assured outcome. The Committee also observed that whereas the CAD system, in conjunction with structured call-taking and automatic vehicle location technology was costed at approximately $4.6 million, at 30 June 2003 the Department of Human Services had funds in the State Administration Unit totalling $72.3 million arising from a surplus on the provision of outputs.\textsuperscript{66} Surpluses from this source can be applied towards asset investment.

5.5 Summary

As shown in exhibit 5.2, RAV lags behind all other ambulance services in Australia, in terms of its communications infrastructure. The Committee noted that the Auditor-General’s 1997 report stated that it was a Government objective to have a single computer aided dispatch system apply to the operations of all the state’s emergency services, including rural based services such as RAV.\textsuperscript{67} This objective has not been achieved and there is no documented commitment to implement a rural CAD system in the immediate future. The Ambulance Service of New South Wales was the last ambulance service in Australia to install a statewide CAD system in 1999.

In the Committee’s view, this situation partly reflects the fact that whereas all other states and territories have a single ambulance service, Victoria provides ambulance services through two separate statutory authorities – RAV and the Metropolitan Ambulance Service – and a small, largely voluntary rural based service.

The Committee acknowledges that the department has commenced addressing the deficiencies in RAV’s communications infrastructure compared with other ambulance services, with the capital grant of $5 million in 2002-03.\textsuperscript{68} Nevertheless, critical

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\textsuperscript{66} Department of Human Services’ response, December 2003, to the Committee’s 2002-03 Budget Outcomes questionnaire, p.24

\textsuperscript{67} Victorian Auditor-General’s Office special report no. 51 Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, p.32

\textsuperscript{68} Rural Ambulance Victoria, Annual Report 2003, p.36
components of infrastructure identified in the bridging strategy – particularly the CAD system, automatic vehicle location facilities and structured call-taking systems, costing around $6.8 million, remain unfunded. Further, the Government has provided no firm, documented commitment as to future funding.

The Committee is puzzled that with all the proven efficiency, economic and safety benefits of a CAD system, RAV is yet to be provided with such a system.

Computer aided dispatch systems can save lives in emergency situations by improving response times and producing essential, accurate management information to enable better planning of resources to match demands.

The continuing lack of a CAD system for RAV poses serious risks for RAV and the Government. The following key risks were identified by RAV:69

- virtually all RAV call-taking and dispatch systems are manual functions involving manual recording of time critical phases of an ambulance response. Consequently, these processes are subject to human errors and omissions that may have serious impacts on resource utilisation, staff safety and/or patient outcomes;

- CAD systems produce automatic time and date stamping of all phases of an ambulance response. This information provides a complete and accurate audit trail that is available to the Coroner in the event of a coronial inquest involving an ambulance response. Without such information, RAV encounters a very difficult task in gathering information from other sources, especially given that even basic information such as the precise time when an emergency call was answered by a call-taker, cannot be relied on for accuracy. The above situation not only impacts on RAV’s reputation, but also exposes the Government and RAV to potential litigation; and

- following major events such as the Metropolitan Ambulance Royal Commission and the surge of terrorism around the world, there is a heightened awareness of the need to not only safeguard critical infrastructure, but to also provide backup in the event of a major disaster. As previously referred to, in the event of a RAV operations centre ceasing to function, RAV does not have the capacity to distribute 000 calls to other centres or to Emergency Communications Victoria and, at the same time, continue an uninterrupted dispatch of emergency vehicles. By comparison, the Metropolitan Ambulance Service has comprehensive off-site backup facilities for its CAD system.

Successive governments have sought to improve services in rural Victoria, particularly in terms of encouraging growth and employment opportunities in regional centres and rural towns, and supporting primary producers. Recent Government initiatives have included the regional fast rail project and the Regional Infrastructure

69 SIPaCS Bridging Strategy, Business Case, internal document, 23 August 2001 pp.16–21; RAV SIPSaCS Transition Program, Key messages, internal document
Development Fund. Health is a very important consideration for rural Victorians, including ready access to medical services, hospitals and a fast efficient ambulance service capable of serving less densely populated locations. As noted, RAV falls well below the benchmarks set by other states and territories, and the Metropolitan Ambulance Service, for a modern ambulance service using current communications technology and systems.

The Committee considers that a Government priority should be to provide an immediate investment of $6.8 million in improving public safety in rural Victoria by providing a CAD system and related communications infrastructure to RAV.

The installation of a CAD system backed up by a CAD map, automatic vehicle location facilities and modern radio communications, could service all of rural Victoria continuously, whereas RAV currently operates from five control centres that each employ around 16 personnel. Savings would arise from the rationalisation of operational staff at the control centres, who could then be redeployed to other emergency operations.

The Committee recommends that:

**Recommendation 11:** The Government, as a matter of urgent priority, provide funding for a CAD system for Rural Ambulance Victoria.

**Recommendation 12:** The Department of Justice undertake a feasibility study of the most beneficial means of installing a CAD system with regard to issues such as:

(a) whether such a system should be specific to Rural Ambulance Victoria or be jointly operated with other emergency service organisations;

(b) the ability of a CAD system to service remote areas; and

(c) the latest developments in CAD technology and the performance of existing suppliers of the technology.
6.1 Need for performance measurement

The Auditor-General’s 1997 report concluded that in the absence of suitable performance benchmarks at a high level, the community was not in a position to assess the standard of services it could expect from the ambulance services.\textsuperscript{70} The problem was attributed mainly to inconsistencies in the preparation of operational data and inadequate systems capable of collecting performance data.\textsuperscript{71}

In his follow-up review in June 2002, the Auditor-General advised that since RAV’s formation, it had progressively implemented uniform business rules and new computer systems that improved the level and quality of data capture, setting the foundation for benchmarking against other ambulance services in Australia. RAV was also participating in the development of new performance indicators in conjunction with the National Convention of Ambulance Authorities.\textsuperscript{72}

The Minister for Health advised the Committee in December 2002 that additional performance indicators had been developed for RAV, that were considered to provide a more meaningful insight into the financial, clinical and operational aspects of indicators already required nationally through the National Convention of Ambulance Authorities.\textsuperscript{73} The additional indicators were advised as:

- the number and percentage of patient care record clinical audits undertaken;
- the number of branches;
- air ambulance utilisation;
- staffing profiles and Effective Full Time staffing numbers; and
- the number and type of emergency vehicles in service.

The Minister further advised that RAV had established a centralised data analysis unit with the capacity to collate, analyse and report data on all key aspects of service delivery. Performance data was derived from patient care records and reports were able to be provided by area and branch on various aspects such as response time, caseload, ambulance utilisation, case duration, staffing/resources used, case destination, clinical condition and patient outcomes. In addition, the Minister advised that a statewide Victorian Ambulance Clinical Information System (VACIS) was

\textsuperscript{70} Victorian Auditor-General’s Office special report no. 51 \textit{Victorian Rural Ambulance Services: fulfilling a vital community need}, November 1997, p.29

\textsuperscript{71} ibid., pp.29–31


\textsuperscript{73} Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.6
being implemented in major rural branches.\textsuperscript{74} RAV subsequently advised that VACIS had not been installed in RAV branches pending trialling of the system within the Metropolitan Ambulance Service. This was currently taking place with RAV’s support.

The Minister also stated that RAV response times were published in RAV’s annual report and in the annual report of the Convention of Ambulance Authorities, which publishes data from all Australian ambulance services.\textsuperscript{75}

The most important performance measure for any ambulance service is how quickly the service responds to an emergency call and places the patient in the care of ambulance officers, usually paramedics. Responsiveness standards, widely referred to as the ORCON standards, were developed over 20 years ago and are used as the basis of performance targets for many ambulance services around the world. Basically the standards comprise two components: ‘activation time’ – which measures the timeframe from when an emergency call is answered to the point of dispatching an ambulance, and ‘response time’ – which measures the timeframe from when a call is received until the arrival of the ambulance at the scene of the event.\textsuperscript{76}

Reliable, continuous measurement of the ability of an ambulance service to respond to emergencies is critical to the community. With code 1 emergencies the ability of an ambulance service to respond to the most time critical emergency situations, such as heart attacks, within as short a timeframe as possible, can make a difference as to the life or serious impairment of a patient. It is generally accepted medically that persons having heart attacks should receive attention within five minutes, or eight minutes at a maximum. In recognition of this factor, in the United Kingdom ambulance authorities have set a benchmark for 75 per cent of all coronary heart disease calls to be responded to within eight minutes.

Apart from activation and response times, other components of an ambulance response also need to be monitored closely, such as reflex time (the time between the dispatch of an ambulance and arrival at scene), treatment time (the time between arrival and departure from scene) transport time (the time between the ambulance’s departure from the scene and arrival at a hospital) and turnover time (the time between the ambulance’s arrival at a hospital and clearance of case). Close monitoring of these components has an impact on the availability of ambulances to respond to further emergency calls, with ambulances needing to be available for further dispatch in as short a timeframe as is practical. RAV’s existing manual system relies entirely on paramedics contacting operations centres at each stage of the response process.

\textsuperscript{74} ibid., p.13
\textsuperscript{75} ibid., p.6
6.2 Availability of performance information

The advice from the Minister and the Auditor-General that additional performance indicators had been developed and were now included in the Report on Government Services – 2004 (produced by the Productivity Commission) RAV’s annual report and the Convention of Ambulance Authorities Report was examined in detail with the following results:

6.2.1 Report on Government Services

The Report on Government Services has been produced annually by the Commonwealth Productivity Commission since 1993 and seeks to develop and compare objective and consistent data on the performance of services that are central to the wellbeing of Australians, including emergency management. With respect to ambulance services, the report contains data on the level of ambulance response times for code 1 situations at the 50 per cent percentile and the 90 per cent quartile. The report stated that the 50th percentile response time – the time within which 50 per cent of first ambulance responses were made – in 2002-03 was highest in Tasmania (10.2 minutes) and lowest in the Australian Capital Territory (7.4 minutes). The 90th percentile response time was highest in Tasmania (20.9 minutes) and lowest in the Australian Capital Territory (12.0 minutes) in 2002-03.77

The ambulance response times for Victoria for 2002-03 were recorded as nine minutes at the 50th percentile and 17 minutes at the 90th percentile.78 The Committee noted that the data was based on aggregated information from both the Metropolitan Ambulance Service and RAV. The Metropolitan Ambulance Service’s 2002-03 annual report recorded response times of nine minutes and 14 minutes for the two percentiles respectively.79 The RAV’s annual report for 2002-03 recorded response times of nine minutes and 24 minutes respectively.80 On average, 14 per cent of RAV’s responses take longer than 20 minutes.81 As reported previously, all states and territories except Victoria have a single ambulance service. For comparative purposes the Productivity Commission chose to aggregate the response times of the distinctly separate ambulance services in Victoria. Nevertheless, the aggregation produces a skewed result, in that the response time at the 90th percentile for the Metropolitan Ambulance Service was 14 minutes, three minutes faster than the Productivity Commission’s reported figure. Similarly, the equivalent response time for RAV was 24 minutes, or seven minutes worse than the response time recorded in the Productivity Commission’s report.

78 ibid., p.8.43
79 The Metropolitan Ambulance Service, Metropolitan Ambulance Service Annual Report 2002/03, statistical summary, p.3
80 Rural Ambulance Victoria, Annual Report 2003, p.14
81 Rural Ambulance Victoria, Operational Services Dataset, internal document, October 2003

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A further concern to the Committee is that the ambulance services output of the Department of Human Services also used an aggregated approach, similar to that of the Productivity Commission, and recorded a similar distortion in Budget Paper No. 3 2003-2004 Budget Estimates, with a statewide projection of 15 minutes for 2003-04. An identical target has been set for 2004-05.

The Committee noted that the longest average response time at the 90th percentile in the Productivity Commission report was that of the Tasmanian Ambulance Service at 20.9 minutes. The equivalent response time for RAV was 24 minutes, or 3.1 minutes worse than that of Tasmania, a finding that can largely be attributed to the dispersion of the Victorian population in more remote locations.

In summary, the Report on Government Services 2004, did not provide information on the performance of RAV.

6.2.2 Rural Ambulance Victoria annual report

The 2002-03 annual report for RAV does include comprehensive information on a range of activities which are deemed to be performance indicators. However, what RAV and the Minister regarded as performance information is of a statistical nature from which the operational performance cannot be judged. Statistical information involved recording the volume of cases responded to, kilometres travelled, patients transported, attendances by category, billing categories, vehicle numbers by type and subscriber numbers by type.

The only information which could be regarded as of a performance nature is the inclusion in the annual report of response times for code 1 responses. These times were recorded as nine minutes at the 50th percentile and 24 minutes at the 90th percentile. Identical response times were recorded for 2001-02. The report did not record activation and response times which are regarded as world wide performance measures for any ambulance service. The report also did not record a target for response times which again is a recognised practice.

RAV confirmed that the response times recorded in its annual report are average times based on the manual compilation of statistics derived from patient care records. RAV is unable to set targets for response times because it does not have the capacity to compile accurate and complete information on response times against which performance against targets could be measured.

The Committee questioned the basis for recording the response times and was informed by the Department of Human Services that the information is derived and

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84 Rural Ambulance Victoria, Annual Report 2003, pp.12–14
85 ibid., p.14
verified through a manual comparison of patient care records prepared manually by RAV ambulance officers for all code 1 responses and case cards prepared by call-takers and dispatchers at each operations centre. This process is completed on a monthly basis for all code 1 cases, to which there were 53,794 responses in 2002-03. The department considered that given there were only minor deviations between months, the figures recorded in the RAV annual report reflected a stable performance.86

RAV advised the Committee that the accurate measurement of responses from case record sheets had always been difficult. Such measurement requires the synchronisation of timekeeping between call-takers, dispatchers and paramedics on the road. It relies on paramedics, often under pressure attending to patient needs, completing patient case records promptly, accurately and legibly. In reality, case records are often completed after the patient is delivered to the hospital and extensive reliance is placed on memory. Concerns about the accuracy of patient care records is reflected in statistical information prepared by RAV which demonstrated that approximately 16 per cent of patient care records, submitted in the twelve month period between September 2002 and September 2003, were either incomplete or useless.87 On a monthly basis, the rejection rate varied from a low of 12 per cent to a high of 19 per cent. Given such a high rejection rate, the overall accuracy of response times becomes questionable.

Another factor affecting average response time is the disparity of response times across ambulance districts. Media releases issued by the Minister for Health in October 2003 reported response times of 28 minutes at the 90th percentile for the Mildura and Ballarat areas.88 At the other end of the scale, response times of 20 minutes were recorded for the Geelong and Morwell areas89. Accordingly, the average response time across the state of 24 minutes was not necessarily reflective of all areas within the state. It further distorts the credibility of the statewide ambulance response time of 15 minutes at the 90th percentile recorded respectively in the Report on Government Services 2004 and Budget Paper No. 3, 2003-2004 Budget Estimates.

The installation of a CAD system, in conjunction with mobile data terminals, would result in data on ambulance responses becoming close to 100 per cent accurate.

86 Department of Human Services’ response, 5 January 2004, to the Committee’s additional questions, p.3
87 Rural Ambulance Victoria, Operational Services Dataset, internal document, October 2003
88 Hon B Pike, MP, Minister for Health, media release, Country Victorians Give Ambo Service the Thumbs Up, 14 October 2003
89 ibid.
6.2.3  The Convention of Ambulance Authorities Report 2002-03

This report contains data on ambulance code 1 response times across Australia, along with statistical data on ambulance responses, human resources, vehicle numbers and type, ambulance expenditure and user satisfaction surveys. However, given that this information is derived from the Report on Government Services 2004 prepared by the Productivity Commission and reflects aggregated data from the Metropolitan Ambulance Service and RAV, it is of little value for assessing the performance of RAV. The Minister and the Auditor-General’s advice that RAV response time performance is published in the annual report of the Convention of Ambulance Authorities was not factual.

Nevertheless, the Committee is encouraged by the actions of the Convention of Ambulance Authorities in establishing an advisory committee dedicated to developing benchmarking comparisons of ambulance jurisdictions across Australia, along with research into other factors such as service demand drivers, comparative labour costs and funding sources. The advisory committee intends to progressively develop and refine benchmarking methodologies depending on the availability of data. The previous chapter of this report comments on the restricted availability of data from the RAV and the advantages of a CAD system for producing accurate management information.

As part of its benchmarking activities, the Convention of Ambulance Authorities is considering the implementation of differing benchmarks for response times in recognition of the additional time taken to provide ambulance responses in remote locations compared with regional centres and the inner and outer metropolitan areas of Melbourne, which are in close proximity to ambulance stations. The Committee recognises the practicality of such an approach because as outlined above, there cannot be one single performance benchmark against which all RAV branches can be measured.

6.3  RAV data analysis

RAV has established a Data Analysis Unit within its head office which collects and collates data produced across its statewide operations. The unit analyses data, including prime documentation such as patient care records and produces statistical reports for management, operations centres, districts and branches. Reports include statistics on:

- RAV caseload by dispatch type (i.e. code 1, code 2 or code 3 responses);

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91  ibid., pp.26–34
• caseload by transport and attendance (categorising every response type, including backup to an initial response, air ambulance response, non-emergency transport and ambulance transport not required following arrival at scene);

• call caseload (volume of monthly calls and incidence of calls during morning, afternoon and at night);

• response times at the 50th and 90th percentiles;

• response times percentage in five minute intervals (reflecting percentage of responses under five minutes, between five and ten minutes, and progressing to the percentage of responses exceeding 20 minutes);

• average time in minutes taken for major segments of a response (referring to activation, reflex, time at scene and transport to hospital);

• sick leave and overtime hours per pay period for operational staff;

• responses by charge type (categorising responses by type of patient such as billable patients, subscribers, pensioners, patients that require no treatment and other non-billable patients); and

• caseload by dispatch hour and code (sorting code 1, 2, 3 and third party responses into the hour of day when they occur)

The Committee commends RAV for establishing the Data Analysis Unit, because much of the above information is extremely useful for monitoring and resource allocation purposes. However, due to the nature of the manual records involved, the unit’s work is time consuming and labour intensive to prepare. The Committee noted that the unit produces data on activation times, which are, as previously stated, used internationally as a key performance measure. Activation times up until September 2003 averaged 3.31 minutes, which is above the generally accepted target of three minutes. This performance can be attributed to the manual call-taking and dispatch processes on which RAV has to rely.

RAV chooses not to publish the above performance data because its accuracy cannot be relied on given the inherent problems involved in collecting the data, along with discrepancies in time recording in operations centres and in the field. Nevertheless, for internal purposes, the performance data is very useful, particularly as it provides trend information. The production of this information is also linked to the seven key result areas identified in RAV’s business and corporate plans.

The Department of Human Services acknowledged to the Committee that:

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92 Rural Ambulance Victoria, Operational Services Dataset, internal document, October 2003
...there has not been as comprehensive a series of data on performance for RAV as has been the case, for example, for the Metropolitan Ambulance Service.\(^{93}\)

The department also acknowledged the absence of response standards (targets) for rural ambulance services, due to the diversification of the population which extends from large, compact, regional cities to remote locations in sparsely settled areas of the state.\(^{94}\)

The RAV representative at the public hearing acknowledged that due to human error and high workloads for short periods, errors will occur in the recording of time critical information.\(^{95}\) The ‘real answer’ to this problem was seen as a CAD system, with inbuilt clocks and automated vehicle location facilities.\(^{96}\)

The existing limitations of data collection also impacts on the ability of RAV to collect further data on its operations, including risk assessment information that can be linked to the achievement of business plans, divisional plans and ultimately the corporate plan. Such information would not only be used for management purposes but could also be used to highlight any areas within RAV where performance was lacking.

With regard to the latter, the availability of additional performance data would also enable RAV to establish operational standards and to set targets within specified parameters as to its expectations of standards being met by each of its divisions and areas. Such a direction would need to be accompanied by training of its operational staff in interpreting data and analysing reasons for variations from performance standards.

### 6.4 Summary

The Auditor-General’s comments in 1997 that the absence of high level performance benchmarks meant the community could not assess the standard of services it can expect of its rural ambulance services, remains relevant today. Similar problems to those identified by the Auditor-General regarding the accuracy and timeliness of source data for performance evaluation still exist. The Auditor-General recommended that the development and implementation of high level performance benchmarks should be accorded a high priority, along with the public communication of such benchmarks to the community.\(^{97}\)

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\(^{93}\) Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.2  
\(^{94}\) ibid.  
\(^{95}\) ibid., p.10  
\(^{96}\) ibid.  
\(^{97}\) Victorian Auditor-General’s Office special report no. 51 *Victorian Rural Ambulance Services: fulfilling a vital community need*, November 1997, p.29
Assertions made to the Committee that additional performance indicators had been developed for RAV, subsequently turned out to be statistical information only, from which the quality of RAV’s performance cannot be judged. Similarly, assertions that RAV’s response times are included in important publications such as the Report on Government Services 2004, the Convention of Ambulance Authorities annual report and Budget Paper No.3, 2003-2004 Budget Estimates, is inaccurate, as the RAV information is aggregated with that of the Metropolitan Ambulance Service which deals with around five times more emergency cases than RAV. The decision to combine performance information from two distinctly separate statutory authorities with different operational needs does not appear logical and produces distorted information to the public.

The Committee emphasises that the lack of performance information is not a reflection of the performance of RAV. It is impressed with the efforts of RAV in establishing a dedicated Data Analysis Unit to capture and distribute critical management information. The inherent difficulties and limitations of manually collected information prevent RAV from publicly reporting key performance information. This is not the position in other states and territories which can use information generated from CAD systems.

The introduction of a CAD system would result not only in more timely and accurate management information, but may lead to savings in resources, even after allowing for recurrent expenditure involved in operating a CAD system, by eliminating much of the need to manually process information. It could also contribute to ambulances departing hospitals more quickly and becoming available sooner for dispatching because it would reduce the time needed by paramedics to complete patient care records.

The ability of RAV to develop meaningful and accurate performance indicators and targets is also a legislative requirement following amendments to the Ambulance Services Act 1986 as a result of the Metropolitan Ambulance Royal Commission in May 2001.

The Ambulance Services Act 1986, as amended, provides in part that the functions of the Secretary of the Department of Human Services include:

\[(g) \text{ in consultation with ambulance services, to develop criteria or measures that enable comparisons to be made between the performance of ambulance services.}^{98}\]

\[^{98}\text{Ambulance Services Act 1986, s.9(g)}\]
The Act also states that:

*An ambulance service’s statement of priorities under section 22F must:*

(b) specify in respect of the financial year to which it relates-

(iii) the performance indicators, targets or other measures against which the ambulance service’s performance is to be assessed and monitored.\(^99\)

Unless RAV is provided with communication systems capable of recording time critical management information, it will be difficult for RAV to comply with the amended legislation. As previously stated, the accuracy of manually prepared performance information is questionable.

The Committee recommends that:

**Recommendation 13:** The Department of Human Services accept that the production of timely, accurate and reliable performance information from a CAD system is a major factor in any decision making about funding for such a system.

**Recommendation 14:** The operational performance of Rural Ambulance Victoria be separately disclosed from that of the Metropolitan Ambulance Service in all future reports of the Government, the Convention of Ambulance Authorities and the Productivity Commission.

**Recommendation 15:** Rural Ambulance Victoria consider developing targets for activation and response times, taking into account geographical locations and population density in districts.

**Recommendation 16:** Rural Ambulance Victoria undertake research into additional performance measures that could be used throughout the organisation to monitor and improve overall performance, in the event that computerised data collection becomes available.

\(^99\) *Ambulance Services Act 1986, s.22H(b)(iii)*
CHAPTER 7: CLINICAL STANDARDS

7.1 Need for high level clinical standards

The Auditor-General’s 1997 report raised concerns about the maintenance and monitoring of clinical standards within rural ambulance services:100

- the development of clinical standards and staff training were restricted by a lack of resources in rural areas to devote to such activities;
- wide variations were occurring as to the quality of information recorded by ambulance officers on patient care records;
- inaccuracies in clinical data, particularly in the coding of information for input into computer databases and the recording of response times; and
- a lack of clinical performance targets and indicators to enable monitoring of the overall clinical performance of ambulance locations across the state, along with difficulties in maintaining ambulance officer skills in rural areas where there are low case loads.

The Auditor-General recommended that measures (such as clinical audits) be established to ensure the ongoing application of state-wide clinical standards, the joint development (with the Metropolitan Ambulance Service) of performance indicators and training plans and the introduction of computer facilities with the potential to improve the quality of clinical information derived from patient care records.101

The Auditor-General did not address this area in his follow-up review in June 2002.

In February 2000, the Director of Acute Health within the Department of Human Services delegated responsibility for the development and approval of Victorian Ambulance Clinical Practice Guidelines to the RAV Medical Standards Committee and the Metropolitan Ambulance Service Medical Standards Committee. The RAV Medical Standards Committee is responsible to the RAV Committee of Management for clinical governance and the provision of authoritative advice on the delivery of ambulance-based clinical service delivery to the communities of rural Victoria.102

The following sections detail actions taken by RAV to address the earlier concerns of the Auditor-General.

100 Victorian Auditor-General’s Office special report no. 51 Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, pp.37–38
101 ibid., p.38
102 Rural Ambulance Victoria Annual Report 2003, p.11
7.2 Development of clinical standards and staff training

The Minister for Health advised the Committee in December 2002 that RAV has developed a standardised tiered statewide clinical structure to ensure appropriate organisational resources are available for training and clinical audits. A centralised multidisciplinary Medical Standards Committee comprising four experienced medical advisors, the department’s Senior Medical Advisor, a medical representative from the Rural Doctors’ Association of Victoria, as well as operational and management representatives oversees the clinical practice guidelines. Formal processes have been established for the review, development and accreditation of clinical practice guidelines and clinical work instructions.

RAV has introduced eight area clinical teams, comprising an area clinical manager, a sessional area medical director, a dedicated mobile clinical educator, cluster based clinical specialists (responsible for clinical audit and skills reaccreditation) sessional clinical instructors and sessional instructors for volunteer staff. The dedicated mobile clinical educators are responsible for reviewing the clinical performance of remote area staff. The clinical competencies of all operational staff are reviewed at least annually.

The Minister further advised that RAV has introduced two dedicated training days per annum for every operational officer. These training days focus on clinical review and the introduction of new clinical competencies, such as the Advanced Life Support Program which has been introduced throughout rural Victoria.

RAV has also been actively involved in the development of clinical policies in conjunction with key stakeholders such as Palliative Care Victoria, the Victorian Institute of Forensic Medicine and the Office of the Public Advocate. RAV has also continued to work closely with Monash University in the delivery of undergraduate and post graduate programs for ambulance officers.

The Committee is satisfied that RAV has comprehensively addressed the Auditor-General’s previous concerns about staff training and the development of clinical standards.

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103 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.12
104 ibid., p.13
105 ibid.
106 ibid.
7.3 Quality of patient care records and the recording of clinical information

As noted in Chapter 6, the quality of patient care records remains of concern, given that these records are prepared manually and often some time after patients have been delivered to hospitals or other destinations. On average, around 16 per cent of patient care records are either incomplete or otherwise unsuitable for recording purposes.107

The establishment by RAV of a Data Analysis Unit was a very positive development, but relies on the accuracy and completeness of patient care records that are manually prepared. As previously noted, substantial improvement in the quality of patient care records is possible only through the installation of a CAD system and mobile data terminals.

The Minister advised the Committee that the Government is currently implementing across the state a Victorian Ambulance Clinical Information System that will provide for the collection and analysis of individual and organisation wide clinical and performance data. The data base will link patient outcomes to ambulance response times and clinical interventions. Information derived from the data base will also be utilised to identify training needs.108 The system is undergoing testing in 18 Metropolitan Ambulance Service Branches. At the date of this report, stage 1 of the system had been completed, with ministerial approval pending for stage 2.

The Committee recognises the efforts of RAV to improve the quality of patient care records and their use for management information purposes. The implementation of the Victorian Ambulance Clinical Information System is also a very positive development, but needs to be complemented by a CAD system to ensure accuracy of time segments in an emergency response.

7.4 Clinical performance measurement

The Auditor-General’s comments in 1997 on the lack of consolidated performance targets and indicators to enable external evaluation of overall clinical performance by RAV remain valid. This situation will continue until the Victorian Ambulance Clinical Information System is fully implemented and funding is directed towards systems that are capable of improving the quality of patient care records.

The Committee is aware that Budget Paper No. 3, 2004-05 Service Delivery included performance measures involving the percentage of audited cases that met clinical standards for both emergency and non-emergency ambulance cases. Targets were set for 92 per cent of emergency ambulance cases and 90 per cent for non-emergency cases to meet clinical practice standards. Actual achievement was 90 per cent for

107 Rural Ambulance Victoria, Operational Services Dataset, internal document, October 2003
108 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.7
non-emergency and 92 per cent for emergency cases in 2003-04. Although not specified in the Budget Paper, the achievement for 2003-04 related predominantly to the Metropolitan Ambulance Service as the audit of RAV patient care records did not commence until late 2003 and results were not reported to the Department of Human Services.

The 2004-05 Budget Paper stated that the data on audited cases included results for the whole of Victoria, indicating an aggregation of the audited cases for the Metropolitan Ambulance Service and RAV. The Committee was informed by the department that the 2004-05 Budget Papers included information on RAV clinical audits. Although Budget Paper No. 3, 2004-05 Service Delivery, included data on RAV’s clinical performance, the aggregation of this data with data from the Metropolitan Ambulance Service rendered this performance measure unsuitable for assessing the clinical performance of RAV.

Clinical indicators are being developed at a national level, including indicators such as survival rates after cardiac arrest. Due largely to the travel times involved, RAV cardiac survival rates are lower than the rates experienced by the Metropolitan Ambulance Service and an allowance for this factor would need to be taken into account in developing cardiac indicators. When agreed upon, clinical indicators will be tested internally by the respective ambulance authorities as to their appropriateness. If suitable, such indicators could be published for the benefit of the public.

The Committee is nevertheless impressed with the detailed attention given by RAV to maintaining high clinical standards. The Minister advised the Committee that all patient care records are reviewed by 25 clinical specialists throughout RAV against approved clinical practice guidelines. Minor variations in practice are dealt with at area level and recorded for training purposes. Major variations are reviewed by area clinical managers and medical officers and, where necessary, remedial programs are developed to address any learning or developmental needs of paramedics.

RAV is also contributing data to the Victorian Cardiac Arrest Registry and the Victorian State Trauma Registry, which will provide reporting to the Medical Standards Committee on agreed clinical indicators. RAV is also upgrading its patient care record computer system to assist with the collection of data for performance purposes.

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109 Budget Paper No. 3, 2004-05 Service Delivery, p.73
110 ibid., p.74
111 Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.3
112 ibid.
113 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.13
114 ibid.
115 ibid.
7.5 Summary

The Committee recognises that RAV has been making a concerted effort to develop, maintain and monitor a very high standard of clinical practice within its operations. Factors outside of the direct control of RAV, such as the full implementation of the Victorian Ambulance Clinical Information System and the acquisition of a CAD system along with mobile data terminals currently prevent RAV from developing accurate and meaningful performance indicators from which its clinical performance could be externally evaluated.

The Committee recommends that:

**Recommendation 17:** The Department of Human Services provide the necessary funding for the full implementation of the Victorian Ambulance Clinical Information System.

**Recommendation 18:** The Department of Human Services, in any deliberations on funding for a computer aided dispatch system, take into account the benefits to be gained from the accurate measurement of responses for clinical performance evaluation purposes.
8.1 Status of Rural Ambulance Victoria infrastructure

The 1997 Auditor-General’s report identified a range of problems associated with the ageing infrastructure of rural ambulance services, predominantly attributed to inadequate capital funding from the Department of Human Services over many years. Of particular concern was the inability to replace ambulance vehicles as they reached the end of their useful service life. The level of formal capital planning was seen as inadequate.

The Auditor-General’s follow-up review in June 2002 stated that while substantial progress had been made, further capital funding was still required to address the ageing infrastructure, including a need to upgrade communications, information technology and medical equipment. Reference was made to the Auditor-General’s 2001 financial audit report, whereby audit staff had observed that many of the buildings, plant and equipment items were not in good condition and significant moneys were required to enable facilities to reach an appropriate standard.

In the 2002-03 Budget $20 million in capital funding was provided by the Government over four years to respond to the growth in RAV caseloads across Victoria. This funding included the delivery of new and upgraded ambulance services in regional areas of Victoria.

Major RAV initiatives funded by the Government since October 1999, have included:

- delivery of 22 new ambulances in early 2002-03;
- establishment of 11 new ambulance stations;
- upgrade of 16 ambulance stations;
- provision of a new emergency helicopter for central Victoria based at Bendigo;
- establishment of Mobile Intensive Care Ambulance (MICA) units in Geelong, Bendigo and the Latrobe Valley;
- replacement of 45 ambulances with new GMC vehicles;
- refurbishment of the radio network ($3.5 million);
- upgrade of operations centres ($1.2 million); and

116 Letter, dated 24 June 2002, from the Auditor-General concerning the follow-up review of performance audit report no. 51, p.2
117 Victorian Auditor-General’s Office special report no. 51 Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, p.61
118 Letter, dated 24 June 2002, from the Auditor-General concerning the follow-up review of performance audit report no. 51, p.2
119 ibid.
120 Budget Paper No. 2, 2002-03 Budget Statement, p.176 and p.178
- provision of biomedical equipment, including 110 new defibrillators, for use by operational paramedics ($1.2 million).

The Minister advised the Committee in December 2002 that the urgent infrastructure issues identified by the Auditor-General had been addressed. A base had been established to enable the ongoing maintenance and upgrade of ambulance stations and vehicles, with moderate additional capital grants required in future years.\textsuperscript{121}

In 2001, a consultant reviewed the physical state of all RAV buildings and suggested that existing expenditure levels at the time were inadequate to maintain the value of these assets in the longer term.\textsuperscript{122} As a result of that review, a schedule of priority works was prepared to bring ambulance buildings up to an appropriate standard consistent with building regulations and occupational health and safety requirements. Capital funding totalling $3.6 million was provided to enable all urgent building works to be undertaken.\textsuperscript{123}

The issues identified by the Auditor-General concerning the replacement of ambulances and other emergency vehicles have been addressed. At the public hearing, the Department of Human Services advised the Committee that recurrent grants to RAV include a component of funding in the vicinity of $3.6 million per annum dedicated to the replacement of ambulances.\textsuperscript{124} The Committee noted that, at 30 June 2003, the financial report for RAV recorded $3.75 million as being held in a Motor Vehicle Replacement Reserve. RAV commenced implementation in October 2003 of a new fleet management system at a cost of $450,000, designed to manage vehicle replacement and maintenance across RAV’s fleet of vehicles which the Minister advised was valued at approximately $40 million.\textsuperscript{125}

8.2 Capital planning

Following the consultant’s review in 2001 in conjunction with actions taken to address urgent works, RAV has developed a five to ten year plan for future building upgrades and maintenance. Development of forward capital plans within a ten year outlook is in accordance with best practice in capital planning. Up until 30 June 2004, the projected adjusted budget for building upgrades and replacements was $2.9 million, of which $1.9 million was likely to be expended by 30 June 2004 with the balance to be carried forward into 2004-05. RAV informed the Committee that in relation to its ten year capital program, it had achieved around 80 per cent of what had been projected up until the end of 2003.

\textsuperscript{121} Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.5
\textsuperscript{122} ibid., p.11
\textsuperscript{123} ibid., p.12
\textsuperscript{124} Dr. C Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services, transcript of evidence, 10 November 2003, p.11
\textsuperscript{125} Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.12
\textsuperscript{127} Budget Paper No. 3, 2004-05 Service Delivery, p.279
8.3 Summary

Given the poor state of rural ambulance infrastructure identified by the Auditor-General in 1997 along with an ageing ambulance fleet, the Committee acknowledges the substantial efforts that have been made since October 1999 by the Government and RAV to upgrade infrastructure to a level required to operate a modern ambulance service providing high levels of service delivery.

The Committee was not in a position to evaluate the existing physical condition of RAV infrastructure. However, given the extent of forward planning undertaken in conjunction with capital works completed or in progress, significant advances have been made in meeting RAV’s infrastructure needs. The only exception to the above comment relates to the communications system which is reliant on capital funding to complete the bridging strategy discussed in Chapter 5.

Substantial capital funding has been provided to RAV since 2000 but the question remains as to whether capital grants will continue at the same levels in the future in order for RAV to fulfil its forward capital works program. The Committee notes that Budget Paper No. 3, 2004-05 Service Delivery, provided capital funding of $5 million over two years, ($4.5 million of which will be provided in 2004-05) to expand ambulance services in six locations, three of which are in rural and regional Victoria, namely Ballan, Kangaroo Flat and Geelong. A further $2.5 million was allocated for the replacement of rural ambulances. Given that the asset depreciation charge for 2003-04 was around $8 million, the capital grants to Rural Ambulance Victoria for 2004-05 will be below projected depreciation levels for 2004-05.

The Committee reiterates its previous recommendation that RAV should be funded for depreciation to enable RAV to have some certainty as to its ability to plan for the maintenance and replacement of assets as required.
9.1 Planning strategies

One of the most important tasks of any major organisation is the development of a corporate plan to determine the mission of the organisation, key objectives, specified action strategies, performance measures and targets. Corporate plans provide a longer term vision, and need to be supplemented by annual business plans, divisional plans and specific plans such as human resource plans and information technology strategic plans.

The 1997 audit report drew attention to the development of business plans by rural ambulance services. The plans were seen as lacking in detail on specific actions required to implement identified objectives, along with an absence of targets and financial resources required. At that time the department was developing an overall strategic plan for rural ambulance services, although the ambulance services involved made minimal contributions to the plan. 128

Following the formation of RAV in 1999, RAV immediately commenced work on the development of a corporate plan, supplemented by strategic plans and business plans. In 2001, the department and RAV jointly commissioned an independent review by a large accounting and consulting firm of RAV corporate operations with a view to more efficient and effective service delivery. This was to be achieved in part through the better synchronisation of business decisions with action plans. 129

The Minister for Health advised the Committee that, after the review, RAV initiated the following five projects in response to the recommendations; 130

- development of a recruitment strategy plan identifying both current and future staffing needs;
- appointment of support officers to each area team to enable a higher level of financial management and monitoring at area and branch level;
- development of monthly reporting mechanisms for each area team identifying cost drivers such as overtime levels, WorkCover claims, use of third party providers and expenditure levels;
- refinement of Board reports to enable greater monitoring of expenditure; and
- development of a Certified Agreement Implementation and Review Framework.

128 Victorian Auditor-General’s Office special report no. 51 Victorian Rural Ambulance Services: fulfilling a vital community need, November 1997, pp.73–74
129 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, pp.10–11
130 ibid., p.10
The Minister further advised that RAV’s 2002-03 Strategic Corporate Plan had been successfully implemented and a new corporate plan had been developed for 2002-05. The new plan identified seven specific Key Result Areas. Regular reporting against key performance measures was provided to the RAV Committee of Management.\(^{131}\)

### 9.2 Quality of strategic planning

The Committee considered that the RAV corporate plan for 2002-05 and supporting plans were of a high quality reflecting a strong commitment by RAV towards service excellence within the Victorian rural community. On 25 October 2002, RAV’s Operational Services Division was accredited under ISO 9001/2000 for three years, reflecting a commitment to effective, high quality operational management. The awarding of this accreditation included a commitment from RAV to the development of benchmarks that will demonstrate that RAV achieves and maintains its goal of best practice in ambulance services.\(^{132}\)

The Committee stresses that performance measures must be able to reflect to external parties the extent to which RAV’s corporate objectives and output targets are met in terms of quantity, quality, timeliness and cost. Measures that are task orientated, such as completion of tasks by a certain date, or of a quantitative nature, merely reflecting statistical information, cannot be regarded as key performance measures.

RAV needs to be able to develop measurable key performance indicators which can be linked back to the corporate plan divisional and area business plans. In turn, detailed accountability for performance should be included in the RAV annual report submitted to Parliament.

As previously stated, the development of suitable performance measures will not be possible until such time as appropriate mechanisms are in place to collect performance data, namely a CAD system and full implementation of the Victorian Ambulance Clinical Information System.

The Committee noted that planning documentation and accompanying monitoring documentation provided to the RAV Committee of Management is of a high quality. Delegations of authority are appropriate and adequate accountability is being achieved from subordinate staff for service delivery. RAV would benefit from the completion of a strategic workforce plan to provide for succession planning, as well as identifying future resource requirements and skills required based on case loads and corporate requirements.

\(^{131}\) ibid. p.11
\(^{132}\) Rural Ambulance Victoria, Annual Report 2003, p.4
The Committee acknowledges the substantial efforts that have been applied towards corporate planning and governance and looks forward to a time when RAV is in a position to develop meaningful, appropriate and quantifiable performance measures for external accountability purposes.
CHAPTER 10: SUBSCRIPTIONS

10.1 Subscription revenue

The 1997 audit report drew attention to declining subscriber numbers and a reduction in revenue from subscriptions despite subscription fees increasing by 45 per cent over the period 1990-91 to 1996-97.\textsuperscript{133} The decline was attributed to a range of factors including:\textsuperscript{134}

- an ageing population in rural areas resulting in more free ambulance transport for pensioners and health care card holders;
- private health funds offering ambulance services in their rates which were often set at levels below the subscription rates set by the Department of Human Services;
- a lack of incentive for rural ambulance services to maximise subscription revenue as under the funding model in existence at the time, any increases in subscription revenue equated to a subsequent reduction in funding from the department; and
- concerns arising from outsourcing of the administration of the subscriptions scheme.

The Auditor-General recommended that as part of the funding arrangements between the Department of Human Services and rural ambulance services, incentives be provided for rural ambulance services to achieve higher subscription levels.\textsuperscript{135}

The Minister for Health advised the Committee that since the Auditor-General’s report, under existing Health Service Agreements between the department and RAV, any revenue surplus after meeting service targets is retained by RAV for allocation to purposes consistent with its objectives. The Minister stated that the success in increasing subscription revenue enabled RAV to establish a special reserve of $2 million in 2001-02 which was used for IT purposes and the refurbishment of ambulance stations.\textsuperscript{136}

The outsourcing arrangements for subscriptions, which were criticised by the Auditor-General in 1997, are now seen by RAV as working satisfactorily following the appointment of a new contractor in 1999. The performance of the subscription scheme is monitored by a joint RAV/Metropolitan Ambulance Service Executive.

\textsuperscript{133} Victorian Auditor-General’s Office special report no. 51 \textit{Victorian Rural Ambulance Services: fulfilling a vital community need}, November 1997, p.52
\textsuperscript{134} ibid. pp.52–54
\textsuperscript{135} ibid. p.53
\textsuperscript{136} Minister for Health’s response, received 30 December 2002, to the Committee’s questions, pp.15–16
Management Team, which utilises a range of strategies to promote new membership and retain existing membership.137

10.2 Incentives to increase subscription revenue

The Committee examined the Health Service Agreement provision which was seen as an incentive to increase subscriptions. The provision is not necessarily specific to subscriptions as the clause permits RAV to ‘retain all unexpended funding’, meaning that RAV is allowed to retain any cash surpluses generated.138 Surpluses may occur as a result of increasing revenue from subscriptions, but can also result from increases from other sources such as transport fees, investment income, unexpended Government grants and other miscellaneous sources. Conversely, surpluses are also generated from reductions in expenditure as compared to budget.

The Committee noted that past increases in subscription revenue enabled RAV to establish a special reserve of $2 million in 2001-02. This special reserve was known as the property reserve. The Committee established that the property reserve was created primarily to receive funds from the sale of properties for subsequent use on appropriate capital projects. It was not possible to determine from the RAV financial report the extent to which revenue from subscription sources was also included in this reserve, but the Committee noted that transfers to the reserve in 2002-03 totalled only $412,000 and the balance held in the reserve at 30 June 2003 was $691,000.139

RAV advised that around $3 million had been applied towards information technology equipment and station refurbishment in recent years arising from cash surpluses exceeding initial budget projections.

The Committee also noted that where subscriber numbers exceeded initial budget projections, windfall revenue is earned, but is only available in the year in which it was received. This situation arises because the subscription revenue budget is increased in the following year based on the new subscriber numbers, thereby making it harder for RAV to boost its cash surplus from this source.

To illustrate this issue, in 2002-03 RAV subscriber numbers increased by 13,290 by comparison with 2001-02, representing a 4.8 per cent increase. Following the increase in subscriber numbers, subscription revenue increased by $1.56 million or 10.4 per cent compared to subscription revenue in 2001-02.140

As a result of the revenue earned in 2002-03, the Health Service Agreement budget for 2003-04 was based on a further increase in subscription revenue of 18.5 per cent, thereby anticipating subscription revenue on an accrual basis of $19.61 million as

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137 ibid. p.16
139 Rural Ambulance Victoria, Annual Report 2003, p.40
140 ibid. p.14
compared to actual revenue of $16.54 million in 2002-03.Subscriber numbers up until March 2004 were 300,473 as compared to 291,633 at June 2003, representing an increase of 8,840 subscribers or only 3 per cent. The balance of the projected revenue increase will need to be sourced from increased subscription costs and unless achieved, the projected cash surplus of $1.9 million will also be affected.

The Minister advised that over 70 per cent of rural Victorians, who are not entitled to free ambulance transport, are ambulance service subscribers. RAV is of the opinion that 70 per cent is around saturation level, and opportunities for further growth are becoming increasingly limited beyond demographic movements. Accordingly, opportunities to earn additional revenue from this source, which can be retained as part of operating surpluses, will become very restricted in the future.

By comparison with RAV, only around 40 per cent of persons eligible to become subscribers to the Metropolitan Ambulance Service have taken up membership, thereby creating a large potential for expansion in metropolitan areas of Melbourne.

The concerns of the Auditor-General in 1997 relating to the outsourcing arrangements for subscriptions have been comprehensively addressed. The arrangements are now seen as working satisfactorily, as evidenced by ongoing increases in subscriber numbers and the contractor meeting all key performance indicators specified in the contract.

It is unclear as to whether a real incentive exists for RAV to increase subscriber numbers. Provided all other factors remain equal there is a short term financial benefit available to RAV if subscriber revenue exceeds projections in any one year. However, any yearly increase is taken into account in the next year’s Health Service Agreement and the same opportunity may not arise.

Irrespective of any opportunities that may arise to retain additional revenue from subscriptions, RAV has a vested interest in encouraging subscribers, in that around 15 per cent of patients receiving ambulance transport will be billed, representing persons who are not subscribers and who do not qualify for free transport. Some of these bills will not be paid and will end up as bad debts. The Committee was advised by RAV that amounts become uncollectible due to reasons such as persons giving false addresses or failing to lodge claims with the Transport Accident Commission within the statutory period. The recovery of transport debts is a costly process for RAV and opportunities to minimise costs through encouraging more subscribers remain in the interests of RAV.

141 Rural Ambulance Victoria, Service Agreement, Ambulance Services, Agreement No. 15811, 2003-04, p.36
142 Minister for Health’s response, received 30 December 2002, to the Committee’s questions, p.16
143 ibid.
144 Rural Ambulance Victoria, Operational Services Dataset, internal document, October 2003
145 Mr D Kimberley, Chief Executive Officer, Rural Ambulance Victoria, transcript of evidence, 10 November 2003, p.5
10.3 Financial implications of the subscriber scheme

The Committee acknowledges the strong commitment of RAV, in conjunction with the Metropolitan Ambulance Service, to maximise subscriber levels. Based on the Statement of Financial Performance produced by RAV for the year ended 30 June 2003, subscriptions revenue of $16.54 million represented 14.3 per cent of total revenue from ordinary activities (14.2 per cent in 2001-02). Expenses attributed to the subscription scheme were recorded as $2.42 million in 2002-03, leaving a net benefit of $14.12 million.\(^{146}\) The Committee did not have information on the actual cost of providing free ambulance transport to subscribers, which involves on average around 1,625 responses per month.\(^{147}\)

The Committee observed that not all states have ambulance subscription schemes. For example, the New South Wales Ambulance Service relies largely upon patient transport fees and Government grants for its revenue. In Queensland, the Committee understands that the membership subscription scheme has recently been terminated and replaced with a levy on every household, via electricity accounts. Through this mechanism, the community as a whole pays for the ambulance service, instead of the existing insurance system in Victoria whereby subscribers effectively subsidise the cost of the service in return for free ambulance transport, if needed. In Tasmania, the ambulance service is free.\(^{148}\)

The Committee does not have a view as to how ambulance services should be paid for. However, it believes there could be merit in evaluating funding mechanisms applied in other states as to alternative methods that are fair and equitable, as well as guaranteeing a sound funding base. This aspect needs to be considered as the cost of providing an ambulance service will continue to increase, especially as salaries and wages continue to rise in line with inflation, enterprise bargaining agreements and other factors. Such cost increases inevitably place pressure on the cost of ambulance subscription, currently around $100 per family, per annum. The point is eventually reached whereby if ambulance subscriptions continue to rise, membership will fall, making the scheme uneconomic.

The Committee recommends that:

**Recommendation 19:** The Department of Human Services undertake a review of ambulance funding mechanisms elsewhere in Australia with a view to determining whether the existing subscription scheme remains appropriate for Victoria.


\(^{147}\) Rural Ambulance Victoria, *Operational Services Dataset*, internal document, October 2003
CHAPTER 11: AMALGAMATION OF AMBULANCE SERVICES

11.1 Amalgamation of Rural Ambulance Services

The Auditor-General’s 1997 report recommended the amalgamation of the five existing rural ambulance services into a single rural service. This was achieved on 1 March 1999 with the establishment of Rural Ambulance Victoria. The Alexandra and District Ambulance Service still remains as a separate service, largely of a voluntary nature with minimal Government funding.

The justification for the amalgamation at the time was seen by the Auditor-General as an opportunity to more effectively deliver ambulance services to rural communities and to enhance efficiency in ambulance operations. From observation, the decision to amalgamate the rural ambulance services has been very successful overall, although there still remains a need to further upgrade infrastructure and communications.

11.2 Potential for further rationalisation of ambulance services in Victoria

Although not referred to in the Auditor-General’s report, the possibility of an amalgamation between the Metropolitan Ambulance Service and Rural Ambulance Victoria may be considered as a possible extension of the amalgamation process which occurred in March 1999.

As previously stated, Victoria is the only state which does not have a single ambulance service. That is not to suggest that amalgamation should occur because of what happens in other states and territories, but only where clearly identifiable net benefits would occur from an amalgamation in the delivery of ambulance services.

The Committee acknowledges that the run-down state of affairs of rural ambulance services identified by the Auditor-General in 1997 has been substantially addressed through the amalgamation process and from increased capital and recurrent grants made by the Government since 2000. Nevertheless, the Metropolitan Ambulance Service remains substantially better resourced and has had a CAD system since 1997. While it could be argued that the population growth of Melbourne has justified the better resourcing of the Metropolitan Ambulance Service, the Committee considers this should not have been to the detriment of rural ambulance services. It is possible that had there been a single ambulance service in Victoria in the past, the problems faced by RAV would have been addressed at an earlier stage.

150 ibid.
The Committee is aware that there is already a large degree of co-operation between RAV and the Metropolitan Ambulance Service, particularly in areas such as clinical services, the Medical Standards Committee, the Statewide Integrated Public Safety and Communications Strategy and the subscriptions scheme. RAV also runs a first aid services business unit as a joint venture with the Metropolitan Ambulance Service. The respective operations of the two services are compatible in nature. Potential advantages from an amalgamation, apart from economies of scale, could include the extension of the Metropolitan Ambulance Services’ superior technology and communications systems, implementation of the CAD system statewide, consolidation of corporate services functions, joint training activities and a single fleet management system. Conversely, an amalgamation could initially lead to some industrial disputation although the Committee is aware that unions are supportive of an amalgamation. There may be concerns that an amalgamation could lead to a loss of rural focus which a feasibility study should address.

The Committee also observed that, whereas in Victoria and some other states, ambulance services are responsible to the Minister for Health, Queensland ambulance services, as an emergency service, report to the Minister for Emergency Services. The type of relationship could have some implications in terms of co-locating ambulance services with other emergency services such as Fire Services and/or State Emergency Services which are responsible to the Minister for Police and Emergency Services. The Committee also notes that the Bureau of Emergency Services Telecommunications, responsible to the Minister for Police and Emergency Services, currently provides computer aided dispatch services for the various emergency services, including the Metropolitan Ambulance Service. The Committee considers there could be some benefit in reviewing the ministerial reporting responsibilities of all emergency service organisations, including the potential consolidation of all reporting on emergency services, under one Minister.

The Committee strongly emphasises that an amalgamation should only proceed if it can be established that more efficient, effective and economical use of resources would result, particularly in relation to improving ambulance response times to regional and rural communities. RAV is already recognised amongst ambulance authorities within Australia as a leader in the provision of rural ambulance services. In these circumstances, a feasibility study would be required to clearly determine whether there could be net benefits to the community from an amalgamation.

The Committee recommends that:

**Recommendation 20:** The Government undertake a feasibility study into the benefits and disadvantages of an amalgamation between Rural Ambulance Victoria and the Metropolitan Ambulance Service.
Recommendation 21: The Government conduct a review to determine whether the existing organisational and reporting relationship between Ambulance Services and the Minister for Health remains appropriate, especially in terms of the possibility of consolidating reporting responsibilities under one Minister.

Report adopted by the Public Accounts and Estimates Committee at its meeting held on 25 October 2004 in the Legislative Council Committee Room at Parliament House, Melbourne.
APPENDIX 1: LIST OF PERSONS AND DEPARTMENTS PROVIDING EVIDENCE AND SUBMISSIONS

Evidence
Monday 10 November 2003 – Public Hearing

Dr C. Brook, Executive Director, Rural and Regional Health and Aged Care Services, Department of Human Services.

Mr D. Kimberley, Chief Executive Officer, Rural Ambulance Victoria.

Submissions
The Committee received submissions from the following:

Department of Human Services

Minister for Health
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