

Performance Audit Report

New South Wales Fire Brigades

Fire Prevention



THE AUDIT OFFICE
OF NEW SOUTH WALES

AUDITING WITH EXCELLENCE



BOX 12 GPO
SYDNEY NSW 2001

The Members of the Legislative Assembly
Parliament House
SYDNEY NSW 2000

In compliance with Section 38E of the *Public Finance and Audit Act 1983*, I present a report to the Legislative Assembly titled **New South Wales Fire Brigades: Fire Prevention.**

A handwritten signature in black ink, appearing to read 'A C Harris'.

A C HARRIS

Sydney
December 1996

Performance Audit Report

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Executive Summary

Executive Summary

The general public perception of Fire Services worldwide is formed by the way fires are *suppressed*. However, over the last 20 years there has been a shift in focus from *suppressing* fires and *minimising* the damage from spillages of hazardous materials to *preventing* them from occurring in the first place.

The NSW Fire Brigades is involved in a range of activities which aim to reduce incidences of fire and hazardous material spillage and, where they do occur, minimise their impact on the environment, property and most importantly human life. The majority of fires take place in residential properties.

These activities include community education campaigns and the inspection of new developments and existing premises to ensure that appropriate fire safety measures are in place. In the latter area the Brigades is only one of a number of agencies which have responsibilities.

Quite apart from loss of life and injury, fire and hazardous materials incidents can impose major financial strains on both the local economy and financially stretched public services. Recently the Brigades has launched a number of important campaigns. Most notable is the Smoke Alarms Awareness Campaign, sponsored by the NSW Health Department. This aims to accelerate the recent increase in the numbers of smoke alarm installations in residential homes, so that by 1997 the levels, which at the beginning of the decade were comparatively low, will approach best overseas performance. Other campaigns have succeeded in reducing the tendencies of youngsters to light fires and have given key lessons to young children in reacting to fire emergencies.

Much of the work behind these campaigns has depended on the enthusiasm and good will of fire prevention professionals and firefighters. In a number of instances individuals have been prepared to use their own leisure time to get messages across and counsel members of key target groups.

At a time when much of the Brigades' resources have to be spent in ensuring that, operationally, the demands of Sydney's continuing demographic shift to the West are met, expanding community awareness is not easy. In the 1990s, in comparison with other states and territories, funding per capita of urban and rural fire services in New South Wales has been below average. In addition around 80% of the total annual expenses of the Brigades is employee related, so shifting resources into prevention related areas is not straightforward.

However, there is scope for modifications. On the organisational front Regional Fire Prevention Officers have the potential to be key figures in community education. Already they are involved in some of the Brigades' most successful initiatives. However, the financial basis on which they operate needs to be changed, so that these individuals have an annual budget to carry out an agreed annual program.

Firefighters are already involved in a number of community education activities. The Brigades has ambitious plans to enhance the role of operational firefighters in community education initiatives and other prevention related aspects such as buildings inspections. There appears to be very considerable variation in activity between different fire stations and, within stations, between platoons, although it is not clear whether, in all cases, management information systems are providing an accurate picture of the scale of activity.

Firefighters cannot meet changing expectations and carry out new roles successfully without adequate support. In some instances it appears that whereas, at the corporate level, there is a clear vision of the future role of firefighters, some of the training and personnel related issues flowing from this vision need to be more clearly thought through. For example, the core training course for new recruits still focuses heavily on suppression and organisational issues rather than prevention. There is also a reluctance to extend training in presentational skills beyond fairly senior firefighters. In the longer term consideration may have to be given to recruitment processes, so that communication skills are given greater weight in initial selection.

Important decisions will also need to be taken about the future of the Public Education Section (PES). The Brigades envisages this section playing a greater role in community education, in which, despite its name it has had little involvement and in internal training for firefighters. If this eventuates either the section will have to expand or it will have to discontinue some of its present activities.

The strategic planning, targeting and monitoring of campaigns could be improved. There is a need to develop a more structured approach to some key target groups, which are disproportionately vulnerable to the perils of fire. These include the elderly a rapidly expanding demographic group - where there may be scope to utilise the reservoir of experience available in retired firefighters, and primary and secondary school pupils.

For school age children fire safety messages have to jostle for attention with other worthy candidates such as road safety and healthy living. The outcomes expected from school based campaigns must be clear and there should be stronger liaison with the Department of School Education and the Board of Studies.

There is a tendency for some of the Brigades' community education initiatives to develop in a piecemeal fashion. Activities may not always be carried out similarly across the state even where socio-economic circumstances suggest that they may have worthwhile results. As an example, a highly successful program targeted at child firefighters is largely restricted to two of the Brigades' geographical four regions. Whilst centralising community education activities will only stifle initiative and enthusiasm there needs to be a more formal process for the exchange of ideas and improved reporting and monitoring centrally of local activities. The financial basis on which Regional Fire Prevention Officers operate also needs to be changed, so that these individuals have an annual budget to carry out an agreed annual program.

Sponsorship funds are crucial to the Brigades' community education activities. A reliance on sponsorship carries the danger - one the Brigades is well aware of - that sponsors may be largely interested in campaigns with obvious commercial spin-offs. However, given prevailing fiscal realities a reliance on sponsorship monies is probably unavoidable in the medium term future.

Between January 1994 and the end of December 1995 the Brigades had a contractual arrangement with a local company which generated sponsorship funds and advertising revenue. It is important that, where external companies are involved in the generation of sponsorship and advertising on behalf of state agencies, the basis on which commission is charged is fully spelt out in the contract and financial disclosures are made in accordance with contractual requirements. This was not the case with the most recent arrangement and the lessons learnt from that will need to be fully borne in mind if a similar arrangement is envisaged in the future.

The Brigades has important responsibilities for ensuring that fire safety precautions are adequate in certain new developments in accordance with statute and the Building Code of Australia. Whilst other agencies, notably local government, have the primary enforcement role and the Brigades does not maintain

systematic data on the extent to which recommendations in plan reports and other submissions are accepted, the current approach appeared to be working satisfactorily. However, the effect on the nature and scale of workload of the imminent introduction of the performance based Building Code, which allows developers to adopt a less prescriptive “outcome” based approach to the installation of fire safety features and devices, will need to be carefully monitored over the next 18 months.

The main enforcement powers for ensuring that existing premises - where legal requirements apply - maintain adequate fire safety measures vest with local councils. The Brigades do have powers to issue enforcement notices to ensure that fire safety precautions are adequate, although such powers are limited to a relatively small number of “authorised” officers. There is scope for greater cooperation between the Brigades and local councils in planning and carrying out inspections of fire safety measures in existing premises.

Recommendations The Audit Office recommends that:

1. Fire Prevention Officers should operate on annual budgets notified before the start of the financial year to carry out a range of activities agreed with regional and zone commanders and the Director of Prevention and Operational Planning
2. The Brigade should ensure that Fire Prevention Officers are notified of community education activities carried out by fire stations
3. The development of presentation skills for firefighters should receive continuing priority, and be extended to more junior ranks in a cost effective manner
4. The Brigades should evaluate the adequacy of the coverage of prevention related aspects in core training programs
5. The Brigades should investigate the feasibility of basing recruitment decisions giving more weight to proficiency in communication skills
6. Following the completion of the current consultancy exercise on the Public Education Section key decisions should be made on the future of the Section
7. Regular meetings should be established between all the units/personnel with a major involvement in community education

8. The Brigades should ensure that any future arrangements with external companies for the generation of sponsorship funds or advertising revenue clearly specify the basis on which the company is to calculate and derive commission
9. Future arrangements for the generation of sponsorship funds should be closely monitored; in particular disclosures of financial details should be received in accordance with a clear timetable and should be closely scrutinised. Arrangements for audit either by the Brigades' internal audit or an independent auditor should be invoked if discrepancies appear serious
10. The Brigades should adopt a more strategic approach to community education campaigns with a medium term timetable for campaigns, targeting of particular demographic, ethnic and socio-economic groups and systematic monitoring of the effectiveness of campaigns
11. A decision should be finalised as to whether and when the Fire Ed program should be introduced on a phased statewide basis
12. The Brigades should adopt a more pro-active approach to cooperation with other agencies, especially the Department of School Education and the Board of Studies
13. Consideration should be given to the involvement of retired firefighters in community education programs targeted at the elderly, a key target group in the next century
14. The FSD should ensure that there is a plan to evaluate the effects of the introduction of the performance based Building Code of Australia on the division
15. Without altering the focus of responsibility (which rests with local councils) the Brigades should further explore with the Department of Local Government and local councils cooperative and consultative arrangements to maximise the effectiveness of monitoring and inspecting the adequacy of fire safety measures in existing buildings
16. There should be more robust monitoring procedures in place for the identification of potentially unlicensed sites storing hazardous materials.

Response to the Report

Commissioner, New South Wales Fire Brigades

I refer to your letter of 30 October 1996 and provide, attached, the Brigades' formal response to the report by your office on your performance audit of the Brigades' fire prevention functions.

I am pleased to formally acknowledge the excellent level of communication between your officers and Brigades officers in the course of the audit.

The Audit Office has provided a wide-ranging report following its comprehensive performance audit of the Brigades' fire prevention functions, the Brigades executives welcome the opportunity to now comment on some of the issues.

A recurrent finding of the audit relates to the ad hoc nature of some of the Brigades' prevention activities. This is an accurate description, as it reflects a more positive and pro-active response to opportunities, and not a lack of underlying strategic planning.

The challenge to the Brigades' fire prevention function is to effectively transfer the Brigades' knowledge into meaningful and timely information for the community.

It is difficult to maintain an ongoing focus of resources and funding to warn the community about threats that do not have a high public profile or community awareness. For example, in wet winters it is hard to maintain attention to the threat which vegetation growth will pose in a dry summer. This can be likened to the recent gun issue, when increased gun control became acceptable only after a disaster.

The Brigades therefore allocates its resources between suppression and prevention programs and within prevention programs, on the basis of overall strategic planning, with the emphasis always on preparedness for response, both to actual incidents and to the opportunities for public education in fire awareness when circumstances permit.

When public awareness of a particular situation has been heightened by a traumatic event, the Brigades will initiate or boost a responsive program, taking advantage of the opportunity presented by the event to deliver effective education or prevention messages.

The smoke alarm campaign to which the report refers was an outstanding example of capitalising on the community's concern following a series of tragic deaths from fires. The success achieved would not have occurred without the environment of public concern which existed at the time.

Similar campaigns were undertaken following fires in backpacker accommodation and sporting stadiums.

Legislation governing inspections does not generally allow pro-active inspections. Brigades inspections cannot normally be undertaken unless a complaint has been received, or a request has been received from Council, the owner, occupier or lessee. After the backpackers' fire, legislation was introduced to give the Brigades an expanded inspection role, but only in backpacker-type premises. This has since been changed to include all premises used for shared accommodation in the Local Government Act 1993.

Recently, the coroner inquiring into the Bowlers' Club fire recommended that the current inspectional role of the Brigades be extended by legislation to additional types of buildings.

While fire brigades officers are daily reminded of the consequences of the failure to manage risks and the importance of imparting these lessons to the community, the allocation of resources to preventive measures will always compete with other priorities for funds allocation.

The Brigades carries out prevention activities at an established level and has resources available to maintain the expertise to boost fire prevention activity in specific areas at times when the opportunity for effective delivery and reception is greatest. This approach is balanced by continuing education, through a variety of activities and delivery systems, throughout the year.

It should be noted that, since the audit was undertaken, focus has been given to addressing areas about which Brigades officers raised concerns with the Audit Office, and as a consequence a number of changes have been implemented. Major decisions about future directions will be taken in the early months of 1997, following the receipt and review of the report on the Public Education Section now being concluded by consultants.

RECOMMENDATIONS 1. ***Fire Prevention Officers should operate on annual budgets notified before the start of the financial year to carry out a range of activities agreed with regional and zone commanders and the Director of Prevention and Operational Planning.***

Agreed. The regional fire prevention officers' budgets will be factored into the 1997/98 Departmental budget. They will operate in accordance with the business plans which were recently implemented.

2. ***The Brigade should ensure that Fire Prevention Officers are notified of community education activities carried out by fire stations.***

Agreed. The communication mechanism to achieve this is in place.

The information is being provided by fire stations to the Fire Prevention Officers, who are recording the information.

3. The development of presentation skills for firefighters should receive continuing priority, and be extended to more junior ranks in a cost effective manner.

Agreed. The enhancement of firefighters' presentation skills is being programmed. At the level of the new employee, competency-based training will include these skills. The officer development program will deliver these skills to leading firefighters and officers.

4. The Brigades should evaluate the adequacy of the coverage of prevention related aspects in core training programs.

Agreed. Prevention-related modules are now included in the competency-based program for new employees, and will be included in all future programs for officer training.

5. The Brigades should investigate the feasibility of basing recruitment decisions giving more weight to proficiency in communication skills.

Agreed. A review of the recruitment criteria currently under way will address the weight to be given to communication skills.

6. Following the completion of the current consultancy exercise on the Public Education Section key decisions should be made on the future of the Section.

Agreed. The Brigades has commissioned a specific study into the commercial opportunities for public education.

7. Regular meetings should be established between all the units/personnel with a major involvement in community education.

Agreed.

8. The Brigades should ensure that any future arrangements with external companies for the generation of sponsorship funds or advertising revenue clearly specify the basis on which the company is to calculate and derive commission.

Agreed. These specifications will be included in the tender which NSW Supply Services will be asked to call in 1997.

9. Future arrangements for the generation of sponsorship funds should be closely monitored; in particular disclosures of financial details should be received in accordance with a clear timetable and should be closely scrutinised. Arrangements for audit either by the Brigades' internal audit or an independent auditor should be invoked if discrepancies appear serious.

Agreed. The Brigades will introduce improved financial monitoring procedures to ensure that the auditing process is carried out on a regular basis.

10. The Brigades should adopt a more strategic approach to community education campaigns with a medium term timetable for campaigns, targeting of particular demographic, ethnic and socio-economic groups and systematic monitoring of the effectiveness of campaigns.

Agreed. The recent development of business plans by the units with public education responsibilities has addressed the need for medium-term strategies. Particular focus is being given to delivering fire prevention services to disadvantaged groups. The monitoring of outcomes will form part of the planning process.

11. A decision should be finalised as to whether and when the Fire Ed program should be introduced on a phased statewide basis.

Agreed. The Brigades' Senior Operational Committee will address this proposal in the new year.

12. The Brigades should adopt a more pro-active approach to cooperation with other agencies, especially the Department of School Education and the Board of Studies.

Agreed. The Fire Ed program will be a major component of a co-operative approach with these agencies.

13. Consideration should be given to the involvement of retired firefighters in community education programs targeted at the elderly, a key target group in the next century.

Agreed. The Brigades will explore the availability of engaging suitable retired staff for this activity.

14. The FSD should ensure that there is a plan to evaluate the effects of the introduction of the performance based Building Code of Australia on the division.

The effects are being monitored on an ongoing basis and will form part of a quarterly report to the Brigades' Corporate Executive Group.

15. Without altering the focus of responsibility (which rests with local councils) the Brigades should further explore with the Department of Local Government and local councils cooperative and consultative arrangements to maximise the effectiveness of monitoring and inspecting the adequacy of fire safety measures in existing buildings.

Agreed. The Brigades' progressive devolution of authority to its field officers will strengthen cooperative arrangements with local councils in respect to monitoring fire safety in buildings.

16. *There should be more robust monitoring procedures in place for the identification of potentially unlicensed sites storing hazardous materials.*

Agreed. The devolution program is intensifying the role of local station crews in monitoring unlicensed hazardous sites.

Following trials currently being carried out, this process will be extended State-wide as training and funds become available.

The following (additional) comments are provided in relation to matters raised in the body of the report:

p.18 *Public Education Section*

The major focus for education of the public has been devolved from the Public Education Section to local fire stations (our frontline resource for public education) and to the regional fire prevention officers.

p.25 *2.3 Variations in level of activity*

The development of local variations to meet local needs is an effect of devolution. The focus for example in South West region is on juvenile fire setter programs, as this is a regional concern. A successful outcome of an individual regional program will flow on to all regions.

p.26 *Last paragraph*

By January 1997 all full-time staffed fire stations in the greater Sydney area will have personal computers and fax machines.

p.29 *2.5 Presentation Skills*

The enhancement of firefighters' presentation skills is being programmed. At the level of the new employee, the competency-based training program will include these skills. The officer development program will deliver these skills to leading firefighters and officers.

p.32 *2.6 Last paragraph*

An independent review of the Public Education Section's role is close to completion. It will incorporate costings and the establishment of fee levels, along with comment on commercial opportunities.

p.32 2.6 Trends in course numbers

The apparent decline in the number of courses conducted by PES reflects the decision to concentrate on health care training as a priority due to community demands.

p.32 The future of PES

The business plan of the PES has developed further since the draft made available to The Audit Office. A final decision on the future delivery of industrial training will be made in the new year.

p.33 2.7 Communication and Liaison

It is agreed that regular meetings will be established to improve communications.

p.34 2.8 Sponsorship

The new tender document to be issued in 1997 which has been formatted in accordance with Government guidelines will ensure that the difficulties raised with the previous sponsorship arrangements will not recur.

The Brigades is supportive of this section and with recommendations 8 and 9.

It is agreed that the existing sponsorship contract and tender specifications could, with hindsight, have been improved. The existing tender specifications and contract were drawn up by the Department of Supply with input from NSW Fire Brigades Public Relations section, and in future, we will seek guidance and support from the Department of Supply.

The Brigades intends to call for new tenders based on revised sponsorship specifications which will be based on one or a few major sponsors, rather than a number of minor sponsors. The Brigades will incorporate recommendations 8 and 9 of Part 2.8 of the Performance Audit Report.

p.40 3.3 Targeting, Planning, Monitoring and Funding

"However, the programming, targeting and monitoring of campaigns lacks a strategic focus."

A standing committee to monitor fire awareness issues and make recommendations on strategies to meet emerging issues has been established and meets regularly.

p.42 Planning campaigns

Planning is now being done to develop mechanisms to ensure the use by the public education areas of data collected by other arms of the service.

p.42 FireEd

The Brigades will finalise a decision on FireEd early in the new year.

p.43 Successes and Problems of Existing Approach to Community Education.

The Brigades is reviewing the implementation of the child intervention program. It is still in the trial and developmental stage and its success is linked with the skills and dedication of the officers involved.

p.45 Funding of campaigns

While the proportion of resources allocated to major programs remains fairly steady from year to year, priorities change to meet public expectations or particular requirements such as the recommendations of the coroner following fires. Ad hoc public education programs are developed when circumstances present an opportunity to effectively deliver messages that would normally be ignored if a crisis event had not occurred.

p.58 Paragraph one

The finding that the inspection system is ad hoc is addressed in the introductory comment.

p.61 2nd paragraph.

The requirements for a program of training officers for authorisation under the Local Government (Approvals) Act 1993 are being investigated by a working party.

p.62 First paragraph

The matter of "drive bys" has been addressed through strengthening the resolve at regional level to meet targets for the identification of unlicensed sites.

*(Signed)
I D Mac Dougall AC
Commissioner*

1 Introduction

Introduction

Audit Objectives and Scope

The Audit Office has carried out a performance audit of the arrangements made by the New South Wales Fire Brigades for minimising the frequency and impact of fire and hazardous material spillage. The audit did not review operational arrangements. The detailed audit objectives were to assess:

- whether current organisational arrangements are conducive to effective community education;
- whether current training and support arrangements are appropriate to enable operational staff to engage effectively in preventative roles, including increased involvement with public education, monitoring and inspection activities;
- whether the current approach to public education is delivering campaigns with a high impact targeted at particular socio-economic and ethnic groups and/or clearly established fire dangers; and
- whether the current arrangements for inspection, certification and enforcement are conducive to the minimisation of the risk of fire and hazardous material spillage.

Overview of the New South Wales Fire Brigades

The mission of the New South Wales Fire Brigades is to prevent and extinguish fires in and beyond the 186 fire districts throughout the state and to protect and save life by combating fire and hazardous materials incidents and by responding to non-fire rescue situations such as serious road traffic accidents.

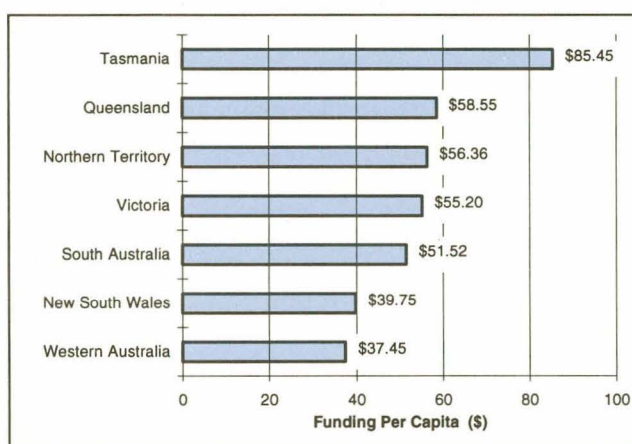
The Brigades has a long and proud history of protecting lives and property from fire and other dangers. Regular surveys have demonstrated the extremely high esteem in which the Brigades is held by the citizens of the State.

Structure and Funding

The NSW Fire Brigades is constituted as a Government Department under the control of a Commissioner, who reports directly to the Minister of Emergency Services. 1996-97 estimated net expenditure is \$244m. This expenditure is financed by a combination of contributions from insurance companies (about 73% of net expenditure) and local government (around 12% of net expenditure) with the residual being met by appropriation from the consolidated fund. Budget papers disclose that estimated net expenditure on the Investigations, Research and Advisory Services program, which does not include all prevention activities, is \$5.5m.

Employee related costs account for around 80% of the Brigades' total operating expenses. This means that scope for diverting funds to community education initiatives is highly limited, particularly at a time when resources are already stretched by the need to respond to Sydney's continuing demographic shift westwards. In comparative terms the per capita funding of urban and rural fire services in New South Wales has also been lower than in other States and Territories during the current decade. Both these factors mean that the Brigades' abilities to generate sponsorship is likely to be crucial to the funding of future community education initiatives.

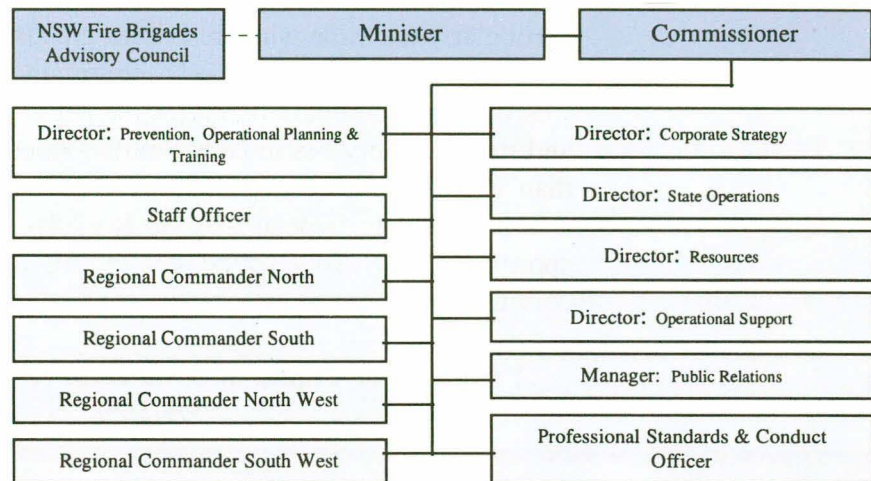
Funding Per Capita of Urban and Rural Fire Services 1995/1996



Source: The State of Australia, Evatt Foundation, 1996

The Fire Brigades is organised on both a functional and a regional basis as illustrated below. Operationally, the State is divided into four regions headed by Assistant Commissioners, complemented by four divisions providing support services and a planning and evaluation capability.

NSW Fire Brigades - Organisation Chart



There are a number of units/divisions of the NSW Fire Brigades involved in aspects of fire prevention. The Brigades' specialist Fire Prevention Unit, part of the Directorate of Prevention and Operational Planning, is located at Chullora in Sydney's Inner West. The Unit contains divisions dealing with education for industry groups, fire investigation and fire safety.

Fire Prevention Unit

Public Education Section: carries out lectures and training for health facilities, Government departments and commercial and industrial establishments. Much of its work is to enable organisations to meet the requirements of occupational health and safety legislation. The Section charges fees for its services and operates on a quasi-commercial basis. Currently it does little work with the general public (although the public can attend certain courses) and little training of firefighters. In the 1995/96 financial year the section had an operating budget of \$434,000. All fees earned by PES currently go into the Brigades' general revenue.

Fire Investigations Unit: has a key role in establishing the origin and cause of fires. The Unit is also involved in media liaison, attendance at Court and carries out formal and ad hoc training of operational officers. The Unit also monitors the safety of electrical equipment from a preventative perspective and produces a register of recalled products. Under the auspices of the Australian Fire Authorities' Council (AFAC) this has been provided to other fire authorities in Australia. It has a current operational budget of around \$650,000.

In 1994/95 the FIU attended 2.2% (662 fires) of the total number of fires in New South Wales, a decrease of 8.9% on the number in the previous year, determining the cause of 83.5% of these fires. The decline in numbers attended is partly attributed to a better understanding by firefighters of when attendance by FIU is necessary. Types of fires attended by the unit include major fires requiring the attendance of at least 3-4 Brigades, fires where fatalities and/or serious injuries occur, moderate to serious incidents in public government buildings such as schools and libraries, and various special interest fires.

Fire Safety Division: This division is primarily involved in a regulatory role, providing advice and comment on aspects of fire and structural risk management. The unit has an operational budget of around \$2.4m. The functions of the division are carried out under a number of statutory provisions, which are discussed in more detail in Chapter 4 and detailed in Appendix A.

The other functions of FSD include the training of operational personnel in new fire hydrant installation inspection techniques and representation on various committees responsible for altering/setting codes and standards for buildings and dangerous goods, including AFAC, Standards Australia, the Building Regulations Advisory Committee and the Australian Building Codes Board.

Public Relations Unit

The Public Relations Unit (PRU) is part of Human Resources and Administration Directorate, unlike the Fire Prevention Unit. In the 1995/96 financial year the unit operated on a budget of \$680,148.

The provision of public education is one of the 2 core activities of the PRU - the other being media relations. One role of the unit is the development, production and distribution of educative material such as videos, brochures and advertising campaigns (see Appendix B for a list of public education material produced by the unit). Other activities include the distribution of press releases, organisation of the Brigades' contribution to special events such as the Royal Easter Show and the "000" Spectacular, coordination of Fire Awareness Week and production of the monthly edition of Fire News, the Brigades' in-house journal. A number of these activities are dependent upon sponsorship funds and PRU, assisted by the NSW Supply Service, arranged the tendering process whereby an external company has generated funds on behalf of the Brigades and has subsequently managed that contract.

Regional Fire Prevention Officers In 1993 a position of Regional Fire Prevention Officer was provided to each of the four regions. Positions were deleted from other units to make this 'cost neutral'.

Hazard Reduction Unit of Bushfire Rescue Section The Hazard Reduction Unit of the Bushfire/Rescue Section based at Chullora runs a program of controlled burns in urban/bush interface areas in conjunction with other agencies, notably local councils. It also coordinates the Community Fire Unit Program, the main features of which are detailed in Chapter 3.

Acknowledgment The Audit Office acknowledges the valuable and generous assistance provided throughout the Audit by the staff of the NSW Fire Brigades to the Office and especially to Deborah Jackson and John Stanford who carried out the audit. This includes officers at Brigades' Headquarters in Elizabeth Street, at Chullora, where the Brigades' specialist Fire Prevention Unit is located, at the four Regional Headquarters and at eight fire stations in the Sydney Metropolitan area visited during the audit.

Constructive and willing assistance was also provided by the Department of Bush Fire Services, the New South Wales Supply Service, WorkCover, the Department for Local Government and three major Sydney councils.

Further comparative information was also obtained with the assistance of contacts in Audit Offices in Victoria, Queensland, Western Australia, New Zealand and the United Kingdom. Field visits were made to the Metropolitan Fire Brigade and Country Fire Authority in Victoria and the Australian Fire Authorities' Council (AFAC). The Audit Office extends its thanks to all these parties for their assistance.

Cost

The total cost of the audit can be dissected as follows:

Direct salaries costs	\$77,199
Overheads charged on staff time	23,159
Value of unpaid overtime (at standard time rates only)	6,209
Consultants	1,040
Travel and incidental costs	6,193
Printing	6,600
Total Costs	\$120,400

2 Organising for Effective Results from Community Education

Organising for Effective Results from Community Education

2.1 Audit Objective

Organisational arrangements should be conducive to the development and application of high quality community education campaigns. This chapter examines a number of aspects of current arrangements. It especially focuses on the role of Regional Fire Prevention Officers (RFPOs), the approach of the Public Education Section and communication and liaison within and between the Brigades' various sections. It also evaluates whether current training and support arrangements are appropriate to enable operational staff to engage effectively in a community education role.

2.2 The Role of Regional Fire Prevention Officers

The creation of Regional Fire Prevention Officers (RFPOs) in 1993 was part of the Brigades' drive to devolve responsibilities and make regions accountable for more aspects of suppression and prevention. The formal function of RFPOs encompasses both inspections and fire safety education. Currently all the RFPOs see their main responsibility as community education. They have very little or no involvement in site inspections. If this is intended, the Statement of Duties has not been amended to reflect this.

The responsibilities of the RFPO include lecturing to schools and community groups on request; attendance at NSW Fire Brigade functions, fetes and exhibitions; and development and implementation of appropriate fire safety education programs. RFPOs also have the additional role of supporting and monitoring educational activities undertaken at fire stations.

RFPOs operate on a core budget which consists of their salary. Funds can be made available for education programs developed by RFPOs, but The Audit Office noted that the procedure for accessing these funds is not clear. To some extent the impact of RFPOs has been dependent upon their ability to obtain funds. A clearer budgetary process in which RFPOs receive an annual budgetary allocation to carry out an agreed range of activities would thus lead to RFPOs becoming more effective.

2.3 The Role of Firefighters

Current Activities During field visits The Audit Office saw that firefighters showed considerable enthusiasm for community education. Activities in which firefighters have been involved include:

- ⇒ Fire Awareness Week
- ⇒ visits to pre-schools and child day care centres
- ⇒ visits to primary schools
- ⇒ “adoption” of primary/secondary schools
- ⇒ talks to Neighbourhood Watch groups
- ⇒ discussions with householders during routine hydrant inspections
- ⇒ visits to residential homes for the elderly
- ⇒ talks to Rotary groups
- ⇒ visits to/from guides and scouting groups
- ⇒ installing fire alarms for elderly citizens

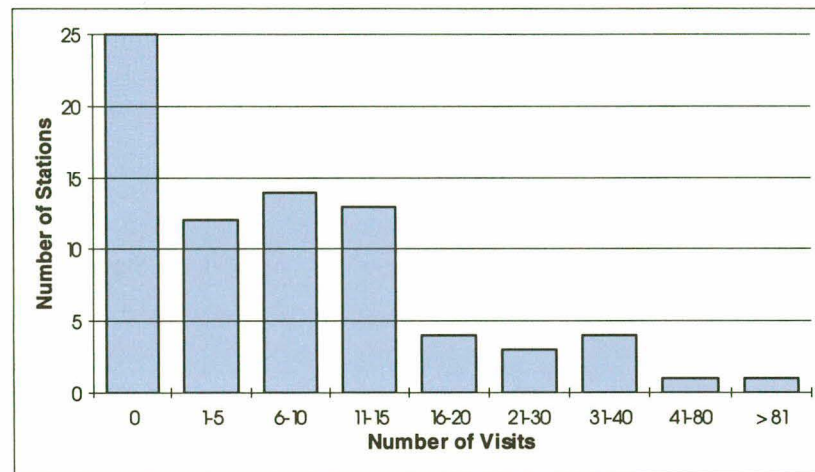
**Variations in
Level of Activity**

As graph 1 shows, there is significant variation in the level of this activity between stations and, within stations, between platoons. The nature and scale of involvement depends largely upon individual inclination.

There are systems in place to record and monitor the involvement of stations/platoons in community education activities in all four regions. But with the exception of the Fire Ed pilot scheme, described in detail in Case Study 3 in Chapter 3, activities by fire stations/platoons are rarely part of a broader strategy and evaluating their effectiveness is virtually impossible.

Analysis by the Audit Office of data on community education visits carried out by fire stations in the Southern Region in the period January 1995-December 1995 showed that, whereas one station (Wollongong) had reported 90 visits to a variety of organisations, over 20 stations had not reported any visits. An analysis by the Fire Prevention Officer of South Western Region of the 1995-96 financial year revealed *prima facie* a low overall level of activity and also showed considerable variation with visits by stations ranging from 0-20.

Graph 1: Community education visits by fire stations in the Southern Region, January 1995 - December 1995



Source: Region South Public Education/Community Involvement Database, January 1995 - December 1995

Data maintained by the Brigades shows considerable variation in the extent to which individual stations are involved in community education activities

The results in the graph cast doubt on whether all or even most platoons are completing and submitting the relevant documentation and therefore whether a full picture of activity is available to management. New guidelines should be compiled on the notification of activities to RFPOs.

Some firefighters have compiled their own education materials through library visits, general reading and contact with colleagues in other Fire Brigades elsewhere in Australia. Whilst an indication of initiative and enthusiasm, it does mean that there is a fragmented approach to this function. Some education activities may also go down ineffective or even inappropriate avenues.

The introduction of a computer network and fax machines at more stations may lead to the better reporting and coordination of such activities and more extensive sharing of initiatives and experiences. At the same time it is important that initiatives such as these are supported and encouraged by Management.

2.4 Core Training for Firefighters

Core Courses

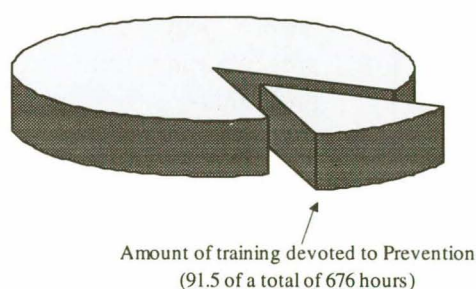
There are three major courses provided for firefighters at varying stages of their careers:

- **Recruit Firefighters:** a 16 week nationally accredited course for new recruits carried out at the Alexandria Fire Training College and Petersham TAFE
- **Station Management Program:** consisting of three streams of one week's duration. This program is targeted at Station Officers after promotion to that level and to qualified firefighters who have passed the Station Manager's examination
- **Inspectors Management Program:** consisting of two streams of one week duration each.

Profile of Prevention in Training

These core training programs contain components related to fire prevention activities. However, the course content devoted to what may broadly be considered prevention, as contrasted with suppression related activities, is small. Of around 680 hours on the Recruit Training course under 100 are dedicated to prevention and some of these modules are optional. The national competency based training package currently being developed by AFAC may lead to a change of approach.

Graph 2: Recruit Training



Source: Recruit Training Program, Fire Training College

Under 15% of the Recruit Training Program is spent on Prevention related activities

The small amount of coverage of prevention activities at the Recruit Training level highlights a broader issue; although the preventative aspects of the firefighter's role are becoming increasingly significant it is the suppression aspects which appear to drive recruitment decisions and initial training.

The New Zealand Fire Service has acknowledged a similar problem and has recently moved to establish Community Safety Teams. Whilst recruits to these teams are required to acquire full competence in fire suppression, the key accountabilities for recruits stress the importance of prevention and interaction with local communities and other agencies. The program is discussed in more detail in Case Study 1.

Case Study 1: Emphasising the Importance of Prevention in Selection Procedures and Recruit Training

Recognising the increasing importance of the prevention aspects of the Fire Service's role, the New Zealand Fire Service has created a number of community safety teams. Whilst members of these teams are fully conversant with and trained in suppression techniques their roles emphasise the importance of improving community knowledge of prevention and detection systems and, in a participative manner, preparing members of the community to minimise the impact of emergencies, including non-fire emergencies. Amongst the key accountabilities of team members are:

- identifying hazards threatening the community and developing techniques to eliminate those hazards or minimising their impact and assisting other agencies providing community safety programs
- regularly meeting with community groups to initiate hazard prevention and protection programs, making presentations and conducting training for such programs
- identifying high risk groups such as the elderly, people with physical and other disabilities and the young, and giving advice, assistance and training to minimise any hazards facing such groups
- property inspections for compliance with fire safety regulations
- investigation of the causes of fires
- transferring knowledge and skills to members of Volunteer Fire Brigades
- training to an elementary Ambulance Officer level.

2.5 Training for Firefighters in Presentational Skills

Training in presentational skills for firefighters is limited. The main course, "Train the Trainer", is typically offered as part of the Station Manager's course, and would not generally be open to staff with less than ten years experience, who are in sight of a promotion to the Station Officer grade.

Extending the scope of courses has resource implications - both in the direct costs of promoting the course and the loss of productive time of those attending. It is also naive to suggest that attending a course on presentational skills is likely to convert those who have little or no interest in the function.

However, there is currently a mismatch between the medium to long term aims of corporate management and the approach of the Fire Training College at Alexandria. Corporate management endorses wholeheartedly a greater role for firefighters in community education, but the Training College seems reluctant to extend presentational skills courses to less experienced firefighters, on the grounds that they will not benefit from such courses. There is a need to target less experienced firefighters for presentational skills training.

2.6 Training for Industry Groups

The NSW Fire Brigades provides fire safety training and conducts lectures for various industry groups and health care facilities on a fee for service basis. Training and lectures are the responsibility, and primary activity, of the Public Education Section (PES), a sub-section of the Fire Prevention Unit.

**Courses Offered
by PES**

Courses offered fall into two categories: “General” and “Health Care Facilities” and are listed in Table 1.

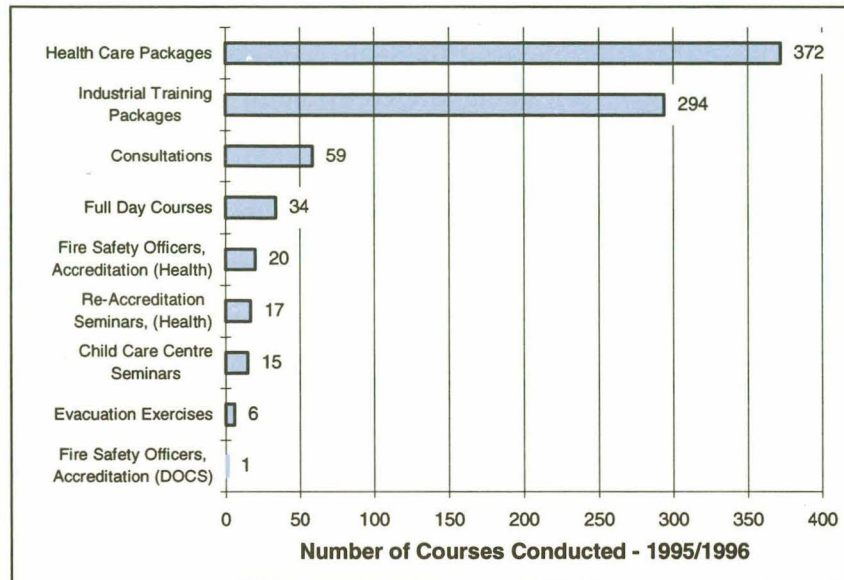
Table 1: Training Courses

General (Industrial/Commercial Groups)	Health Care Facilities
Basic Wardens Training Fire Awareness First Attack Firefighting Training Package I (combination of any two of above courses) Training Package II (combination of above courses) Advanced Wardens Course Basic Half Day Training Child Care Centre Seminars Consultations Evacuation Exercises Fire Safety Officers Full Day Courses Registered Clubs	Evacuation (Practical) Evacuation (Theory) Fire Awareness First Aid Fire Fighting Health Care Package (combination of above courses) Fire Safety Officer: Grade 1 Fire Safety Officer: Grade 2 Fire Safety Officer: Grade 3 Fire Safety Officer: Grade 4 Re-Accreditation

Some of these courses are provided in response to demand, while others are required by legislation. For example, under occupational health and safety legislation, fire safety officers in health care facilities are required to attend Fire Safety Officer Courses to gain initial accreditation, and Re-Accreditation courses every 3 years. Some of the above courses are available to the public, although none is specifically directed at the more general community.

General Training Packages I & II and the Health Care Packages account for the majority of external training offered by the Brigades. In 1995/1996 they amounted to 39.9% and 45.5% respectively of the total number of courses conducted - as demonstrated by the graph below.

Graph 3: Number of external courses conducted by the Public Education Section - 1995/1996



Source: Public Education Section, NSW Fire Brigades

At the moment the core business of the Public Education Section (PES) is in the Health sector. This may have to be reconsidered.

Financial Basis of Operation

The Public Education Section operates on a quasi-commercial basis, charging for services provided. Currently all fees earned go into the Brigades' general revenue. PES is funded by an annual budget allocation. The section expressed a desire to move to a self funded basis in the future; if properly managed this might create a small reservoir of funds earmarked for prevention related activities

PES is currently operating at a profit, and an Internal Audit Bureau review in 1995 concluded that the section is currently commercially viable.

There is no system in place for setting charges or annually revising charges for courses offered. The current schedule of fees has been unchanged for some time: fees for general courses were last revised in July 1993 and for health care facility courses as long ago as November 1991. Whilst there may not be a case for an automatic annual increase in fees, there should be an annual review conducted by PES and the Directorate of Finance.

Trends in Course Numbers	Demand for Fire Brigades courses appears to have declined - the number of courses conducted by PES in 1995/1996 is less than half the number conducted in 1991/1992, largely due to the decision taken by the Section to focus on providing training to the health sector. Therefore, the continued commercial viability of the PES in its current form, and consequently the external training offered by the Brigades, may be in doubt unless a regular review of operations is conducted.
The Future of PES	The draft <i>Community Fire Safety Strategic Plan</i> envisages a number of fundamental changes to the way the Brigades offers external training to industry and health care facilities. The draft plan, which is currently awaiting corporate endorsement, proposes a phasing out of the delivery of industrial training by PES, devolving the responsibility for this portion of fire safety training to firefighters at fire stations. PES is to maintain responsibility for the delivery of training to health care facilities. The draft plan also proposes that research be undertaken into the "viability/appropriateness of establishing a program of firefighters delivering fire safety training whilst off-duty".
Key Issues for the Future	<p>The approach envisaged in the <i>Community Fire Safety Strategic Plan</i> implies that important decisions will need to be made about the role of PES and the type of training it is going to provide to external groups in the future. If PES is to direct more of its resources to internal training and research there will be less capacity available for external courses, unless the section is expanded.</p> <p>A reduction in the external courses provided by PES may have an adverse effect on overall resources, because, as noted PES operates currently at a profit. The Department of Land and Water Conservation is carrying out a consultancy review of PES. Following this a number of important decisions will need to be made. These include:</p> <ul style="list-style-type: none">• the identification of courses provided by the private sector of a sufficient quality to ensure that the withdrawal of PES will not have an adverse effect on fire safety in particular industries• the feasibility of PES accrediting courses provided by the private sector• the financial contribution made by particular courses and future projections of their viability• the extent to which PES should concentrate its resources on targeted groups and the financial implications of such a shift.

2.7 Communication and Liaison

There is a tendency for the various sections of the Brigades involved in public education activities to do so as discrete units. Liaison and communication between groups tends to be informal, is instigated by individuals, and is largely dependent on personal relationships rather than being management driven.

Liaison Between Different Groups and Units

A number of structured meetings are held by groups but these tend to be focused on specific issues, and not on the general interchange of ideas and the progress of different education programs and activities. (For example, FSD holds regular division meetings. These meetings focus on issues relating to fire safety regulations. Community education issues tend to be relegated to the end of the agenda. As a result RFPOs, who used to attend regularly, now feel that there is little point.)

Communication between firefighters and RFPOs appears variable. This is largely due to the small number of RFPOs (only one in each region) relative to the large number of operational personnel. As a result the profile of RFPOs is also variable as is the ability of RFPOs to influence community education initiatives in the regions.

A similar situation is apparent in the relationship between PRU and firefighters. The major means of communication between these two groups is Fire News and the Newsreels produced by PRU. There is no schedule of meetings between firefighters and PRU personnel. There are no regular meetings between the four RFPOs, primarily due to a lack of time.

Some of the sections do cooperate on special projects. The PRU convene meetings to which the RFPOs and representatives from the Public Education Section are invited. These meetings are called irregularly to discuss specific events, such as Fire Awareness Week and the 000 Spectacular. RFPOs work together on special projects, such as the launch of the Kogarah Council Fire Prevention Education Program and some of the larger community functions.

Whilst there is no point in setting up highly bureaucratic processes, the creation of regular fora for the exchange of ideas and information between all those involved in community education could enhance the effectiveness of community education campaigns.

2.8 Sponsorship

Necessity of Sponsorship

Because of current fiscal realities, the demographic challenge of the expansion of the western part of Sydney and the lack of flexibility in budgets which are predominantly employee related, community education initiatives are heavily reliant upon sponsorship. For general sponsorship, funding agencies can either rely on in-house arrangements or on an external arrangement with an expert fund raising company. For understandable reasons, including a reluctance to divert Public Relations Unit (PRU) staff from core media related activities, and the specialist nature of this activity, the Brigades opted for the latter approach.

Agreement for Generation of Sponsorship Funds and Advertising Revenue

The Brigades had an agreement for the generation of sponsorship and advertising revenue with a local company for the period from 14 January 1994 until 31 December 1995. Prior to this there had been a non contractual arrangement for around two years. Following the expiry of the contract term the arrangement has continued although the Brigades has not exercised the formal option to extend the contract. The Brigades has informed the company that they intend to terminate their involvement with the company completely in November, 1996.

Purpose of Contractual Arrangement

Under the terms of the contract the company agreed to undertake "on a cost neutral basis" the generation of sponsorship and staging of activities and events on behalf of the NSW Fire Brigades. The principal events were the Royal Easter Show at the Royal Agricultural Showgrounds and Fire Awareness Week. The arrangement also involved the generation of advertising revenue to enable the Brigades' in-house journal, *Fire News Monthly*, to be published on a no cost basis.

To the extent that all these events/activities contained, to varying degrees, community education components, and because the majority of the community education campaigns run by the Brigades and material provided have been funded by sponsorship income, the arrangement has been integral to community education initiatives in recent years.

Whilst the contract itself does not contain easily measurable output or outcome indicators - such indicators would not be easy to identify and include in such a contract - the results appear to have been at least satisfactory. The Brigades' profile at both the Royal Easter Show and during Fire Awareness Week has been enhanced with no additional significant impact on operational budgets.

Reformulation of Approach to Sponsorship

The Brigades is currently rethinking the approach to sponsorship and are considering the possibility of negotiating a 'one sponsor' arrangement, provided this can be done within existing ICAC guidelines. There is also a danger that over reliance on sponsorship to fund campaigns may result in industry and commerce exerting too strong an influence on the direction of campaigns.

During the course of the audit a number of observations were made about aspects of the contract and management of the arrangement. These observations should inform any new contractual arrangement relating to sponsorship and the subsequent approach to monitoring.

Failure to Disclose Financial Information in Accordance with Contractual Terms

The terms of the contract relating to the provision of financial information were not adhered to in the following respects:

- ⇒ accounts have not been provided on a quarterly basis
- ⇒ accounts provided have not been audited
- ⇒ full details of sponsors have not been provided
- ⇒ whilst income related to Fire News is disclosed, no documentary evidence about income is available
- ⇒ as at September 1996 no financial statements relating to periods after 30/9/95 had been provided.

Charging of Commission

In the periods from 14 January 1994 to 31 December 1994 and 1 January 1995 to 30 September 1995, for which unaudited income and expenditure summaries have been provided, income of \$1.36m is disclosed. Over \$400,000 has been taken in commission by the company in addition to other expenses charged.

The basis on which commission has been calculated is unclear from the contract documentation. The contract does not specify a firm figure or percentage of revenue although cost projections for particular events attached to the contract show estimates of commission ranging from 10.9% to 22.9% of sponsorships. These percentages are well below those actually charged (28% for Fire News Monthly advertising revenue and 30% for other activities). Inquiries made by Audit suggest that at the time of contract finalisation the chief concern was whether sponsorship funds would be sufficient to cover costs related to the three main activities and that the level of sponsorship which eventuated was not envisaged.

Maintenance of Sponsorship Fund

Under the terms of the contract it was a requirement that a sponsorship fund subject to quarterly audit be maintained in a separate bank account. The account was to hold at least 2% of all sponsorship monies raised, plus all monies over and above budgeted costs including commissions. The basis on which this fund had been run and the uses to which it had been applied are unclear. As with other financial statements released by the company, the summary of income and expenditure for the Sponsorship Fund had not been audited.

Surpluses at End of Accounting Periods

Surpluses of over \$60,000 were shown at the end of each of the accounting periods for which financial statements were provided. As at September 1996 the whereabouts of these funds was unclear.

Future Monitoring of Contracts Relating to Generation of Sponsorship

It is likely that sponsorship will continue to be crucial in funding community education initiatives. For this reason, and in order to safeguard the Brigades' reputation, it is essential that sponsorship monies be properly accounted for and that monitoring by the Brigades is extremely robust. Arrangements for audit either by the Brigades' internal audit or an independent auditor should be invoked if discrepancies appear or unexplained transactions materialise.

2.9 Recommendations

1. Fire Prevention Officers should operate on annual budgets notified before the start of the financial year to carry out a range of activities agreed with regional and zone commanders and the Director of Prevention and Operational Planning.
2. The Brigade should ensure that Fire Prevention Officers are notified of community education activities carried out by fire stations.
3. The development of presentation skills for firefighters should receive continuing priority, and be extended to more junior ranks in a cost effective manner.
4. The Brigades should evaluate the adequacy of the coverage of prevention related aspects in core training programs.
5. The Brigades should investigate the feasibility of basing recruitment decisions giving more weight to proficiency in communication skills.

6. Following the completion of the current consultancy exercise on the Public Education Section key decisions should be made on the future of the Section.
7. Regular meetings should be established between all the units/personnel with a major involvement in community education.
8. The Brigades should ensure that any future arrangements with external companies for the generation of sponsorship funds or advertising revenue clearly specify the basis on which the company is to calculate and derive commission.
9. Future arrangements for the generation of sponsorship funds should be closely monitored; in particular disclosures of financial details should be received in accordance with a clear timetable and should be closely scrutinised. Arrangements for audit either by the Brigades' internal audit or an independent auditor should be invoked if discrepancies appear serious.

3 The Impact of Public Education Campaigns

The Impact of Public Education Campaigns

3.1 Audit Objective

Public education campaigns should focus on clearly established fire dangers, be targeted at key groups and achieve a high impact in a cost effective manner. This chapter reviews some of the high profile campaigns recently launched by the Brigades and evaluates the current approach to public education.

3.2 Major Campaigns

Major campaigns which have been carried out by the New South Wales Fire Brigades include:

- Smoke Alarms Awareness Campaign
- Fire Ed Program
- Child Intervention Program
- Early Childhood Safety Program
- Community Fire Unit Program

Some of the main features of these campaigns are discussed throughout this chapter. A longer list of campaigns and programs is in Appendix C.

3.3 Targeting, Planning, Monitoring and Funding

These campaigns have recorded noteworthy successes and have contributed to a greater awareness of the dangers of fire. They have also been carried out in a cost effective manner. However, the programming, targeting and monitoring of campaigns lacks a strategic focus.

Targeting Types of Fire Danger

The Brigades maintains an impressive array of data on fire causes, types of fire and their geographical location, much of which is produced by the Fire Brigades' Statistics Unit. This includes an Annual Statistical Report, which is widely distributed within the Brigades. Units such as the Bush Fire Hazard Reduction Unit use this data to focus their activities. However, in general such data are underutilised.

There are few procedures in place to identify potential fire risk areas in the community and target community education initiatives. The approach taken by the Brigades to public education tends to be reactive. Even the Brigades major campaign for 1996 - The Smoke Alarms Awareness Campaign - was launched following suggestions made at the Smoke Alarms

Summit held in December 1995 after a large number of civilian deaths and injuries in residential premises in the latter part of the year (including one week in November 1995 when there were eleven fire related deaths caused by domestic house fires), rather than as part of a medium-long term strategy prioritising types of fire hazard.

Case Study 2: Smoke Alarms Awareness Campaign

On 1 June 1996 the NSW Fire Brigades launched the Smoke Alarms Awareness Campaign.

The objectives of the campaign are:

- ⇒ To provide a vehicle for the NSW Fire Brigades and the Department of Health to promote and raise awareness of the need to use Smoke Alarms (and thereby)
- ⇒ To reduce death and injuries from fires
- ⇒ To work towards the goal of having a Smoke Alarm in every home in NSW
- ⇒ To create a program that is both self funding and self perpetuating.

Coordinated by the Brigades' Public Relations Unit, the campaign is a state-wide initiative with major sponsorship funds provided by the Department of Health. Sponsorship funds were also provided by the smoke alarms industry and one smoke alarms manufacturer agreed to provide smoke alarm products at a below retail price for sale through a telemarketing process.

The major thrust of the campaign is a 30 second advertisement on television supported by messages on radio and billboards, the distribution of a Smoke Alarms brochure and displays at promotional events such as the Royal Easter Show and during Fire Awareness Week.

State coverage has been divided into three phases: Phase I was run in June and targeted the greater Sydney area; Newcastle and Wollongong was covered in Phase II, which was launched on Fire Brigades Open Day on 20 July; while Phase III began in September targeting the rest of NSW and NSW residents of non-English speaking background.

The success of the campaign has been monitored through surveys of the public prior to the launch of the project and again in September.

Targeting Ethnic Groups

Adapting campaigns to the needs of NSW residents of non-English speaking background is a formidable challenge in a city as ethnically diverse as Sydney. The Brigades has recently launched a number of initiatives including printing of fire safety brochures in 4 languages and the production of radio broadcasts in 10 languages. As already highlighted, the Smoke Alarms Awareness Campaign has a section targeted at non-English speaking groups. In addition firefighters at two fire stations are learning Vietnamese in an effort to strengthen ties with the local community and facilitate communication at fires.

However, there is scope for more strategic targeting of particular groups, especially those from countries where firefighting is considered a military style exercise rather than a community based emergency service. In addition one RFPO, who has carried out a study into the subject, has pointed out that the messages and the manner in which they are conveyed may need to be modified to reflect the sensibilities of particular groups in order to achieve maximum impact. Indeed, unless this is done, it is argued, even the most well intentioned messages may offend the group being targeted and have an adverse effect. In addition, it should not be assumed that all members of an ethnic group are necessarily literate in their first language.

Planning Campaigns

As a result of the lack of strategic targeting, planning of public education campaigns tends to be ad hoc. With the exception of the Smoke Alarms Awareness Campaign, few campaigns are launched with specific objectives or benchmarks.

An example is the Fire Ed Program, highlighted in Campaign Case Study 3, which is currently being piloted by two stations in the South West Region. Planning for this program appears to have been limited to the initial launch of the pilot. The pilot commenced in October 1995 but no end date for the trial has been agreed and there are no procedures in place for the pilot's evaluation. In the event of the program being extended statewide, the training implications for its delivery do not appear to have been given adequate consideration.

Whilst it is accepted that a pilot phase is essential, even where, as in the case of Fire Ed, the same or similar programs have established successful track records in other states or overseas, the pilot needs to have clear aims and a firm timescale for full evaluation and a decision as to whether statewide implementation is warranted.

Case Study 3: Fire Ed Program

The proposed Fire Ed Program is based on a program developed by the Metropolitan Fire Brigades in Victoria, and has been adopted by the fire services in Queensland, Tasmania and the Northern Territory.

As is currently the case for school visits, the program will be presented by firefighters from local stations who “adopt” the school. However, with the Fire Ed Program a uniform approach will be implemented statewide through the use of structured lesson plans and education materials, targeting 5 year old children. The lessons, given over two visits of about 1 hour each, convey fire safety messages such as “Stop, Drop & Roll”, “Get Down Low and Go, Go, Go”, “000” and the difference between good fires and bad fires. The lessons also incorporate teacher delivered activities and homework to be completed by the children.

Fire Ed is currently being piloted by the NSW Fire Brigades in two stations in the South West Region - one a permanent station, the other a retained station.

Successes and Problems of Existing Approach to Community Education

The Child Intervention Program provides a microcosm of some of the successes and problems of the existing approach to community education. As highlighted in Case Study 4 the Program can be considered an outstanding success; recidivism rates - probably one of the most robust outcome measures of any campaign - are below 5%. The Program has been run with few resources and has relied upon the enthusiasm and public spirited approach of a very small number of firefighters, who carry out much of the work during their own time.

However, because only two RFPOs have the expertise to carry out the Program there is a likelihood that it is not reaching a number of geographical areas which might benefit. Moreover there appears to be no corporate vision of the Program’s future. Whilst there are plans in Northern region to train more firefighters in delivery of the program, elsewhere there is scepticism as to whether personnel have the capabilities to deliver the program successfully. The Audit Office also noted that there were differences in the way the program is targeted between the two regions which have adopted it; in one there is a reluctance to involve child firelighters with malicious behavioural tendencies, in another a number of such children are involved in the scheme.

Funding arrangements for the program vary between the two regions. One region receives an allocation from the regional budget, whilst the other receives no additional funding.

Case Study 4: Child Intervention Program

Research into “Why do children light fires?” by the Brigades’ former Child Safety Unit and a study of intervention programs successfully operating in the United States of America and the United Kingdom identified the need for a similar program targeted at children who light fires. As a result the Child Intervention Program (also known as the Child Intervention and Education Program) was developed and launched in 1991, based on materials prepared by the United States Fire Administration’s Federal Emergency Management Agency. The concept of the program is to offer “a procedure whereby families confronted with a child’s unsafe firelighting make personal contact, or are referred to a firefighter who has specific knowledge and training for the purpose of assisting the family to decide what actions and methods may possibly bring about the termination of the fire lighting problem” (source: Child Intervention Programme Information Brochure, Region North, NSW Fire Brigades).

The program objectives are:

- ⇒ To assist the child and family by education, and or, referral to an appropriate agency
- ⇒ To assist firefighters who encounter a child engaged in unsafe firelighting
- ⇒ To establish interagency cooperation in order to provide an effective service to the community
- ⇒ To reduce the trauma to families and the incident of fatalities, injury or property damage resulting from the lighting of fires by children.

An additional objective of the program in one region is:

- ⇒ To provide information and guidance to the community and firefighters in relation to the program.

Entrance to the program is dependent upon meeting a set eligibility criteria. Two RFPO’s run the program, covering the state, although budget, time and distance constraints result in the program being concentrated in a limited number of areas in two regions. The program is operated with the cooperation of a number of other groups, such as the Department of Health, health workers, teachers, community workers and psychologists.

To date the success of the Intervention program has been high, with approximately 95% of participants ceasing their firelighting activities. The continued success and expansion of the program is, however, dependent upon corporate adoption of the program and resource and budget allocation.

Monitoring Campaigns

Monitoring campaigns and evaluating their success has been limited. The reason suggested for lack of monitoring is the absence of a strategic approach and resource implications. However, the Smoke Alarms Awareness Campaign does have specific targets and a methodology for monitoring its impact on the public. This involves measuring the increase in smoke alarm installation in New South Wales (at only 21% according to an ABS survey in 1994 which is low compared with the USA and the UK) and comparing changes with a control group in another state. The methodology was developed with the NSW Health Department.

Case Study 5: Early Childhood Fire Safety

The Early Childhood Fire Safety Program, developed by one Regional Fire Prevention Officer (RFPO), targets pre-school aged children. The objective of the program is:

- ⇒ To provide basic low level fire safety education to children attending early childhood centres.

The program is performed by the RFPO or firefighters from a local fire station. Program materials have been developed by the RFPO based on a similar program running in the US, and include three lesson plans. The first two lessons incorporate specific fire safety messages - "Lighters And Matches Are Tools Not Toys" and "Escaping From a Fire" - the third lesson provides an introduction to Fire Brigades equipment. Funding for the program has been allocated from the budget of the region in which the program operates.

Funding of Campaigns

Funding is not provided on an annual basis for public education. This inhibits the development of a strategic approach. As discussed in Chapter 2 funding for campaigns coordinated by the Public Relations Unit is largely dependent upon sponsorship. The Smoke Alarms Awareness Campaign, for example, was funded via sponsorship from the Department of Health and one smoke alarms manufacturer. Funding for the other activities of the Public Relations Unit, for example the production and distribution of brochures and videos produced for the benefit of the public and appearances at special events, is also provided by sponsorship funds.

No additional funds are provided directly by the Brigades or through sponsorship for the development or operation of campaigns by the Regional Fire Prevention Officers, who operate on a budget consisting essentially of their salary, or by station officers or firefighters at fire stations. Campaigns are dependent upon individual initiative and, in some instances, on allocations from the regional budget.

For example, in one of the two regions that the Child Intervention Program operates an allocation from the regional budget is provided, while in the other region no funding is made available for the program. The Early Childhood Fire Safety Program, operating in one of the fire regions, also receives an allocation for the regional budget. However, many other public education activities do not receive any funding. (A school adoption program initiated by a station officer at a fire station in the Southern region, the materials for which are photocopied at the officer's own expense.)

Case Study 6: Community Fire Unit Program

The Community Fire Unit Program (CFU) was set up shortly after World War II and was expanded after the 1994 Bushfires. There are presently 68 CFU's located around NSW, over half established since the 1994 Bushfires. The aim of the program is:

- ⇒ To recruit community firefighting support to assist existing firefighting agencies to control and to extinguish bushfire.

The purpose of the CFU's is:

- ⇒ To maximise resource allocation of firefighting equipment into identified bushfire prone areas for the protection of life and property from bushfire threat.

The Community Fire Unit Program involves a mobile trailer or fixed cabinet containing firefighting equipment being placed in an identified fire risk area where urban development and bushland interface. Volunteers from the local community receive training from their local fire station on hazard reduction and in the use of the firefighting equipment. The community members are, therefore, equipped to handle fire incidents in the interim period between notification of the fire and the arrival of the Brigades. The approach is a highly defensive one and training has emphasised approaches which minimise the prospect of injury to members. CFU community members may also continue suppression activities if required, but always under the direction of the Brigades, and undertake mopping up and blackening out operations when the main fire front has passed.

**Coordination
with Other
Agencies**

There is also more scope for coordination with other agencies. This is crucial if certain target groups are to be reached. Particularly where primary and secondary schools are concerned, fire prevention is just one of a number of subjects which can contribute to a safer life for children and young adults. However, school curricula are crowded and fire prevention messages must compete with a number of other subjects. This means that approaches must be structured and have clearly envisaged outcomes. The system for public education targeted at children has been largely ad hoc and reactive, with visits to schools conducted on a request basis, although the proposed Fire Ed Program is intended to provide a more structured approach

The Audit Office noted that, whilst individuals in the Brigades have forged inter-agency links, at the corporate level such initiatives have been limited. With the exception of some exploratory talks, there has been a reluctance to approach the Department for School Education and the Board of Studies. The Department of Bush Fire Services is already discussing a curriculum led approach with the Board of Studies and there may be scope for the Brigades to link in with this initiative as a part of the more coordinated approach to community and public education which has already been launched by the two agencies

There is also scope for a more coordinated approach to the Museum of Fire at Penrith, which contains an expanding section on fire safety and may at present be an underused resource in enhancing the awareness of schoolchildren of the potentially devastating consequences of fire in the home.

**The Challenge of
Demographic
Change**

Demographic change in New South Wales means that the elderly will become an increasingly important target group. The *Department of Urban Affairs and Planning* has been reported as forecasting that by 2021 almost 20% of the Sydney metropolitan population will be over the age of 65 years.

The elderly provide a special set of challenges. The Metropolitan Fire Brigade in Melbourne has devised a program, utilising the skills and experience of retired firefighters, to reach this group. The features of this program are highlighted in Case Study 7. A key success factor is that, according to the Metropolitan Fire Brigade's own evaluation, the elderly are much more receptive to presentations from their peers than from younger firefighters.

Implementation of a similar program in New South Wales will not be straightforward - there is a tendency for firefighters to move away from Sydney on retirement and there may be labour relations and retraining issues. However, as one way of gaining access to a particularly important group such an approach is worthy of further consideration.

Case Study 7: Reaching the Elderly with Public Education Campaigns

Together with young people the research has regularly shown that the elderly are highly vulnerable to fire danger. The Metropolitan Fire Brigade realised that retired firefighters constituted a valuable and largely untapped reservoir of expertise. That Brigade had also targeted senior citizens as a high risk group. They also evaluated their approach to senior citizens and concluded that elderly citizens may be more receptive to fire safety messages from their peers than younger serving firefighters. A strategic program was developed, the lynch pin of which is the Retire Ed Program, launched in 1993.

Ten retired officers at various ranks and with diverse experience are now involved in this program delivering approximately 150 sessions per year to around 6,000 people throughout Melbourne and participating in other related "senior citizen" activities such as Senior Citizens Week.

The ownership which the retired officers have of the program and their promotion of it, including a regular stint by one officer on a community radio station targeted at the over 50s, have been key success factors. The program has also freed current firefighters to concentrate on other target groups such as children with whom they can interact more effectively. In 1994 the program won the 1994 International Association of Fire Chiefs Fire Service Award for Excellence.

Creating Partnerships With Other Bodies

The benefits of linking with other bodies can be seen in the Smoke Alarms Initiative launched by one local council in conjunction with the Brigade's Southern Region. The main features of this campaign, which has the aim of increasing smoke alarm installation in the homes of elderly ratepayers, is highlighted in Case Study 8. Whilst the financial constraints on most local councils mean that such a plan is not a viable option everywhere it demonstrates the sort of result which can be achieved by vision and cooperation between two levels of government.

Case Study 8: Creating a Partnership With Local Government

Background

In December 1995 a group of four councils established a **Fire Prevention Education Program**. Run through schools and community groups, and with the support of the NSW Fire Brigades, it aims to enhance awareness of fire safety and hazardous materials safety. Subsequently Kogarah Municipal Council decided to launch a Smoke Alarm Campaign with a budget of over \$600,000 aimed at increasing smoke alarm installation in residences of the elderly.



Main Features

- scheme targeted at pensioners eligible for rate rebates; around 4,100 initially identified
- budgeted for 2 hard wired smoke alarms per home, although number installed dependent on building type, preference and special needs of owner/occupier (e.g. strobe light attachment for hearing impaired, battery operated alarm where hard wired one inappropriate)
- at beginning of August 1996 over 2500 pensioners had responded to councils questionnaire; 84% said that they wanted alarms fitted whilst a further 10% indicated that they already had alarms installed
- tender selection procedure emphasised importance of dealing with elderly, with tenderers required to address this issue directly in tender submissions
- employees of successful contractor carry identity cards arranged and provided by Kogarah Council
- a leaflet on maintaining alarms following installation has been translated into 6 languages to address implications of census data on ethnic diversity of council area
- Phase 2 of program will aim to increase awareness and installation of fire alarms in wider community



Fire Brigades Involvement

- contributed technical details and assisted in design of joint smoke alarms brochure
- checked tender specification for alarm installation
- will maintain battery operated alarms



Key Success Factors

- ensure that there are no ambiguities in questionnaires and brochures announcing details of scheme
- determine target group and focus on it
- empathise with concerns of that group and be a good listener
- ensure that tender specification, criteria for award of contract and tender evaluation process reflect concerns of target group
- communicate closely with contractors and the target group
- evaluate performance of contractors

3.4 Recommendations

1. The Brigades should adopt a more strategic approach to community education campaigns with a medium term timetable for campaigns, targeting of particular demographic, ethnic and socio-economic groups and systematic monitoring of the effectiveness of campaigns.
2. A decision should be finalised as to whether and when the Fire Ed program should be introduced on a phased statewide basis.
3. The Brigades should adopt a more pro-active approach to cooperation with other agencies, especially the Department of School Education and the Board of Studies.
4. Consideration should be given to the involvement of retired firefighters in community education programs targeted at the elderly, a key target group in the next century.

4 Looking for Trouble: Prevention through Inspections

Inspections

4.1 Audit Objective

Introduction

Arrangements for inspection, certification and enforcement should be conducive to the minimisation of the risk of fire and hazardous material spillage. The NSW Fire Brigades involvement in ensuring that fire safety measures in planned developments and existing buildings are adequate is the second major strand of its fire prevention activities. The Brigades undertakes fire safety related inspections of both new and existing developments and inspections of sites containing hazardous materials. These inspections are conducted under a complex statutory framework which includes the *Fire Brigades Act 1989*, the *Local Government Act 1993*, the *Local Government (Approvals) Regulation 1993*, the *Building Code of Australia* and the *Environmental Planning and Assessment Regulation 1994*. [Appendix A provides a more detailed summary of the statutory framework.]

It is important to note that the Brigades does not have the main statutory enforcement powers. Such powers are vested in other agencies, such as local councils and the WorkCover Authority.

This chapter evaluates the Brigades' current approach to the inspection, certification and enforcement of fire safety regulations in new and existing development and in the identification of premises where hazardous materials are stored.

4.2 Current Statutory Framework and Arrangements (New Developments)

Fire Safety Division

The responsibility for discharging the Brigades fire safety related responsibilities rests with the Fire Safety Division, a sub-unit of the Fire Prevention Unit.

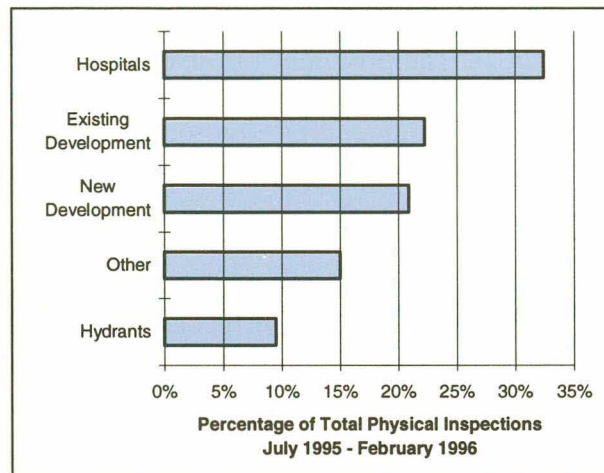
Facilities Inspected

Various types of facilities are inspected and/or reported on by the FSD, including:

- ♦ proposed developments and proposed upgrades of buildings
- ♦ existing buildings
- ♦ health care facilities
- ♦ hydrant systems.

The graph below shows the split between these facilities in terms of a percentage of total physical inspections undertaken by FSD during the eight month period July 1995 - February 1996.

Graph 4: Physical Inspections - July 1995 to February 1996



Source: Fire Safety Division Monthly Reports, July 1995 to February 1996

Inspections made under the Local Government (Approvals) Regulation 1993

Clause 21 inspections conducted under the *Local Government (Approvals) Regulation 1993* require the Brigades to review building applications for a development over 25m in height and provide advice to the referring council. A written report provides comment on provisions of the *Building Code of Australia* (BCA) related to fire safety.

Clause 49 inspections are made after completion of the building. Councils cannot issue a certificate of classification allowing occupation of a building until the Brigades has carried out such an inspection and made a report. Clause 49 requires the Brigades to inspect the building to ensure that all requirements specified in the building approval have been met.

Reports issued as a result of inspections made under clauses 21 and 49 contain recommendations from the Brigades on the fire safety aspects of the application. Whilst local councils must take these reports into consideration, they need not apply recommendations made by FSD. In the past this may have occurred, particularly if FSD recommendations went beyond the minimum fire safety requirements of the BCA.

The Brigades has no formal system of feedback from councils and does not maintain data on the extent to which recommendations have been accepted or rejected. However, The Audit Office, in visits to two local councils and in discussion with officers of the FSD, did not find evidence of disregard of Brigade recommendations.

Self-certification

The procedures in place to meet the legislative requirements of the *Local Government (Approvals) Regulation* 1993 and the *Building Code of Australia* with respect to fire safety related inspections are changing, with the introduction of builder/developer self-certification.

Inspections may take one of two forms: review of a building application and related plan(s) prior to construction or upgrade of the building; or the physical inspection of a site post construction. In the past the majority of inspections undertaken by the Fire Safety Division were of the first type. However, as can be seen in Table 2 below, in 1995/96 the number of site inspections carried out is more than double that of the 1994/95 year. This is largely due to the introduction of the self-certification process and the resulting change to the work activities of the FSD from inspection of plans prior to building construction, to physical site inspections and full smoke tests post installation.

Table 2: Type of inspections carried out by the Fire Safety Division, by year.

Inspection Type	1991/92	1992/93	1993/94	1994/95	1995/96
Plan	3,944	3,059	3,535	3,364	not available
Site	1,691	1,284	1,008	606	1,472 *
* The 1995/96 figure represents an extrapolation from the available data. In the 8 months from July 1995 to February 1996 site inspections equalled 981.					

Note: Table 2 includes inspections of new and existing developments.

Source: 1) 1994-95 New South Wales Fire Brigades Annual Report
2) Fire Safety Division Monthly Reports, July 1995 to February 1996

This change in focus for the FSD has been included as one of the four Key Directions contained in the Fire Safety Division Strategic Plan 1995-1997. The Plan prescribes a:

move toward builders and developers certifying that fire safety requirements of the various codes and standards have been complied with in relation to their submissions. FSD to focus on post installation site inspections to ensure compliance and functionality.

Source: Key Directions, Draft Fire Safety Division Strategic Plan 1995-1997

Builder/developer self-certification allows the builder or developer to certify that the building meets the minimum requirements of the BCA, including the fire safety requirements. This is similar to the Victorian system, already in operation, where accredited building surveyors certify that the requirements of the BCA have been met. The Victorian system is regulated by the Victorian Building Control Commission which licences surveyors, performs random audits of licence holders and undertakes disciplinary action where required.

In NSW the adoption of a self-certification system will see the FSD verifying the builders/developers certification and providing to council a short written letter stating whether or not they are in agreement with the builder/developer's certification, rather than a lengthy report containing an average of 80-90 recommendations, which was previous practice.

To ensure that all statutory requirements are met, FSD officers will be available at any time to inspect plans, sites or commission tests carried out by consultants. Under this system FSD will conduct fewer pre-construction plan inspections. There will be greater reliance on reaching agreement with council, designers and developers prior to construction (described as Pre-BA Meetings) and on clause 49 post-construction inspections. Therefore, open and frequent communication between the councils and the Brigades, particularly FSD, is essential to the success of this system. The process is currently being piloted in one Sydney council and appears to be working smoothly. It will soon be extended across the State.

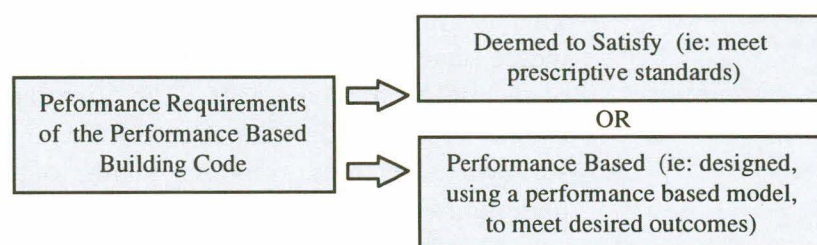
Building Code of Australia

This change in procedure is likely to receive added impetus with the introduction, in July 1997 of the performance based BCA. The BCA is currently an input based, prescriptive document detailing building regulations for all new buildings and prescribing minimum standards. Under the current BCA, exemptions from certain minimum requirements may be

obtained via section 82 of the *Local Government Act 1993* or clause 44(4) of the *Local Government (Approvals) Regulation 1993*. Over the past three years approximately 700 such exemptions have been granted by the Minister, with the concurrence on the Director-General of the Department of Local Government.

The new performance based BCA will be outcome focused. It will retain many of these minimum standards but will also allow building designers the option to design a building that will comply with the performance requirements of the code in terms of projected outcomes rather than inputs.

Exhibit 1: The Performance Based Building Code



Source: Fire Safety, Metropolitan Fire Brigade, Melbourne

The outcomes to be achieved by a performance designed building with respect to fire safety are:

- to show that the building can be evacuated before untenable conditions occur (ie: loss of life)
- to show that the fire will not spread to surrounding buildings.

Opinions on the effect the performance-based BCA vary. However, based on experience around the world, the impact is unlikely to be extensive, largely due to the cost implications. It is estimated that less than 5-10% of new developments will be designed using the performance-based option. The change to a performance-based BCA will also mean changes to the legislative framework governing the activities of the FSD, particularly the *Local Government Act 1993* and the *Local Government (Approvals) Regulations 1993*. Discussions are currently being held between the FSD and the Department of Local Government.

There will also be a direct impact on the Brigades in terms of training of FSD inspectors. With the introduction of a performance based code, inspectors will need the skills to recognise whether the required outcomes of the new code will be

realisable by assessing the adequacy and accuracy of the assumptions used in the design model. The FSD will assign one skilled officer to this area, and is discussing the possibility of developing a national diploma or graduate certificate covering the new BCA with the Australian Fire Authorities Council and other Brigades around Australia. It will be important to evaluate whether these arrangements are adequate in 1997.

Inspections made under the *Environmental Planning and Assessment Regulation 1994*

Inspections of new developments are also undertaken under the *Environmental Planning and Assessment Regulation 1994*. Under this regulation, if a building is classified as a Designated Development as per Schedule 3, which principally covers buildings used in heavy industry, FSD inspectors assess the Fire Safety Study received from the consultant to the applicant (usually this will be the building designer or builder) and make a report. A copy of this report is then forwarded to the applicant, the relevant council and the Department of Urban Affairs and Planning.

4.3 Current Statutory Framework and Arrangements (Existing Developments)

The power to conduct physical inspections of existing buildings is conferred on the Fire Brigades via the *Local Government Act 1993* and related legislation and the *Environmental Planning and Assessment Regulation 1994*. Again, these inspections are primarily carried out by the Fire Safety Division (activities separately undertaken by councils are described later).

The power of inspection only vests in officers authorised under the Act. There are less than 35 “authorised officers” in the Brigades, over half of whom are attached to the Fire Safety Division and located in the greater Sydney area. As a consequence, very few fire safety inspections of existing building are conducted by the Brigades outside this area.

Inspections made under the *Local Government Act 1993*

In addition, powers of inspection may only be activated in certain circumstances. Under section 202 of the *Local Government Act 1993* FSD officers will undertake fire safety inspections of existing buildings:

- when the premises are a place of shared accommodation (no request is necessary from any other party)
- on request from the local council
- on request from the owner, lessee or occupier
- when the Commissioner receives a written complaint.

The above inspections are physical inspections of existing premises, and may be undertaken as a joint exercise with an inspector from the relevant council. The system for undertaking inspections appears to be ad hoc and reactive, with little formal planning or targeting of high fire risk buildings. On completion of a Fire Safety Survey (an inspection undertaken as a result of a request from the owner, lessee or occupier) a report will be submitted to the party making the request. In addition, all inspection reports made under section 202 are submitted to the relevant local council for their information and for action if required.

Health Care Facilities

Inspections of health care facilities account for approximately one third of the physical inspections carried out by the Division, the largest single category of physical inspections carried out by FSD. These inspections are conducted on request from the facility as part of the Australian Council on Healthcare Standards (ACHS) Accreditation Program. One aspect of the Accreditation Program relates to compliance with applicable fire safety regulations. Therefore, FSD officers inspect health care facilities to review compliance with the requirements of the BCA.

Under the *Local Government Act 1993* private health care facilities are required to comply with all the requirements of the BCA, while public facilities, being crown premises, are compelled to comply with the technical provisions of the code. On completion of inspections, FSD submit a report to the owner/occupier of the facility for inclusion in their accreditation application. Inspections of health care facilities by FSD are carried out on a three yearly rotational basis.

Power to Issue Orders

Under section 150 of the *Local Government Act 1993* authorised officers of the NSW Fire Brigades has the power to issue orders under section 124 of the Act. First orders may be made to “ensure or promote adequate fire safety or fire safety awareness” [order 4] or to stop the conduct of any activity which may constitute a hazard to life or public safety [order 15]. If the owner/occupier does not comply with orders 4 or 15, FSD have the power to issue evacuation orders under orders 16 or 17 after consultation with the council and the owner/occupier. This power to issue orders is rarely used by the Fire Brigades. The Brigades prefers to take an advisory approach and allow the local council to assume the primary responsibility for enforcement.

**Council
Responsibilities
Independent of
the Brigades**

Councils also have a primary role to ensure that the fire safety requirements of the BCA are met, independent of the Fire Brigades.

For example, clauses 7 and 27 of the *Local Government (Approvals) Regulations 1993* relate to the provision of essential services, including sprinklers and hydrants. Under the legislation it is a condition of approval to erect a building, alter or add to an existing building or change the use of an existing building that is not consistent with the current classification of the building, that the owner certify, to the council, that the essential services requirements of the BCA are met. This certification must be renewed annually. There is no requirement that councils conduct physical inspections to verify the information provided in addition to relying on the certification provided by the owner.

The Audit Office did not review the way in which local councils exercise these responsibilities. A field visit was made to one council which has developed a central database which is available to other agencies, including the Fire Brigades. There are presently 700-800 buildings recorded on the database. However, as registration primarily relies on lodgement of a building application or application to change the classification of the building, completion of the database is a very long term aim. In the interim only new developments or extensive refurbishments will be identified. The system may not contain the details of all potentially vulnerable premises.

Councils also have maintenance inspection programs targeting certain classifications of high risk buildings. One council has targeted the following high risk structures for the purpose of conducting physical inspections:

- boarding houses
- nursing homes
- schools
- residential flats.

The Fire Brigades is not generally involved in these inspections and there do not appear to be any formal procedures in place for councils to advise the Brigades of scheduled inspections. Results of inspection are not communicated to FSD, or local fire stations who might derive operational benefits from the information.

Councils are not required by legislation to inform the Fire Brigades when approval is granted to change the use of the building or to alter or add to the building. As a result, firefighters may not be aware of changes that have been made to buildings in their area, a situation which may adversely affect their efficiency when responding to an incident.

**Scope for Greater
Inter-agency
Liaison**

Whilst there is considerable input by the Brigades in the evaluation and testing of fire safety technology in new buildings there appears to be little routine involvement once a development has been certified as ready for occupation. Although there is no statutory requirement for detailed liaison there appears to be scope for greater consultation between councils and the Brigades, and an increase in the joint work carried out by the two agencies with respect to the inspection of existing premises.

It must be stressed that there is no legal requirement for councils to consult with the Brigades in the areas just highlighted. However, the inspection of premises is a labour intensive and therefore resource intensive task and a greater emphasis on inter-agency cooperation may contribute to more effective fire safety measures in existing buildings.

4.4 The Future

**Current
Involvement of
Firefighters**

At present the approach of firefighters to inspection is reactive and from a suppression perspective. There is a monthly standard of 48 hydrant inspections and two "familiarisations" per month per platoon. The familiarisations are to enable firefighters to become accustomed to the lay out and hydrant location of potential fire risks in the vicinity of their stations. There is no central system for recording performance of these activities, although they are noted in the Station Register. Problems with hydrants are reported directly to the responsible water authority.

Where familiarisations detect problems with fire safety arrangements the normal procedure is to deal with the situation on an informal basis. Persistent failure to improve the position may lead to a notification to the Fire Safety Division, which, in turn, may notify the responsible local council.

**Future
Involvement**

The draft *Community Fire Safety Strategic Plan* envisages a far greater role for firefighters in the inspection process. The implications of such a change should not be downplayed. Currently the powers of firefighters who are not accredited as

“authorised officers” under the terms of the *Local Government Act 1993* are extremely limited. Only authorised officers, under certain conditions, can obtain the right of access to buildings/premises for inspection purposes. As already noted, the majority are in the Fire Safety Division.

**Training
Implications**

Clearly if firefighters are to move to the role envisaged in the *Community Fire Strategic Plan* there is a need to start a long term training program initially to provide the relevant skills and thereafter the provisions of refresher maintenance programs. The funding requirement for such a program must also be considered.

4.5 Hazardous Materials

Although the Brigades has a key operational role in reacting to and controlling incidents involving the spillage of hazardous materials, the licensing and enforcement powers to ensure that dangerous materials are stored and conveyed in a safe manner rests with the WorkCover Authority.

The SCID System

The Brigades has recently been heavily involved in the creation of the SCID (Stored Chemicals Information Database) system - a geographical information system which highlights the location of all licensed sites in the state and the nature of the hazardous material contained. The SCID system has already attracted international interest. In time it is likely to be of significant operational benefit to the Brigades by highlighting the location of hazardous materials when platoons are despatched to fires. More widespread operational benefits are likely to depend upon the introduction of more up to date information technology so that individual platoons can access SCID in real time.

**Licensing and
Enforcement
Arrangements By
WorkCover**

The Audit Office did not carry out a detailed review of the licensing and enforcement arrangements administered by WorkCover, although it noted that the integrity of the SCID system is highly dependent upon the holders of hazardous materials applying for a licence, or at least having applied at some time in the past. Some of the most destructive recent fires involving dangerous materials occurred at sites which turned out not to have been licensed.

WorkCover has assisted in the training of Brigades' platoons to carry out “drive-bys” in order to identify potential unlicensed sites, which can be identified to the Fire Safety Division and then to WorkCover, which maintains its own inspectorate.

The extent to which platoons have been involved in such monitoring is difficult to gauge because detailed summary records are not maintained by any of the divisions in the Fire Prevention Unit. During a field visit by The Audit Office in June 1996 to a fire station that had been identified as quite active in carrying out “drive-bys” it emerged that none had been carried out for several months.

It would seem that, whilst the Brigades does not have the key statutory focus in this area, there is scope for a more systematic approach to the identification of potentially unlicensed sites and to establishing a more thorough method of reporting the results of such an activity.

4.6 Recommendations

1. The FSD should ensure that there is a plan to evaluate the effects of the introduction of the performance based Building Code of Australia on the division.
2. Without altering the focus of responsibility (which rests with local councils) the Brigades should further explore with the Department of Local Government and local councils cooperative and consultative arrangements to maximise the effectiveness of monitoring and inspecting the adequacy of fire safety measures in existing buildings.
3. There should be more robust monitoring procedures in place for the identification of potentially unlicensed sites storing hazardous materials.

Appendices

Overview of the Statutory Framework

Appendix A

The functions of the Fire Safety Division are conducted under the following statutory authorisations.

Legislation	Clause/Section	Subject
<i>Fire Brigades Act 1989</i>	Part 2, Clause 6: Provision of fire brigades etc	General authority - “duty ... to take all practicable measures for preventing and extinguishing fires ...” [Clause 6(1)]
	Part 3, Division 4: Inspection etc	Awards powers of inspection to the Commissioner and his/her representative [as per Part 3, Division 4, Clause 23 and Part 7, Clause 83].
<i>Local Government (Approvals) Regulation 1993</i>	Clause 21: Referral of certain applications to the New South Wales Fire Brigades	Outlines responsibilities of council and the Commissioner. The council must forward to the Commissioner applications for approval to erect buildings over 25m. The Commissioner must supply a written report to council commenting on certain provisions of the <i>Building Code of Australia</i> (specifically, clauses E1.3, E1.5, E1.6, E1.8, E2.2, E3.4, E4.9, G3.8) as well as the accessibility to, and compatibility of, the couplings of the proposed fire hydrant system for use by the NSW Fire Brigades. [Related to clauses E1.3, E1.5, E1.6, E1.8, E2.2, E3.4, E4.9, G3.8 of the <i>Building Code of Australia</i> .]
	Clause 30: Consideration of reports from New South Wales Fire Brigades	Requires the Commissioner to supply council with a report, commenting on whether the system will comply with the <i>Building Code of Australia</i> and the accessibility to, and compatibility of, the couplings of the proposed fire hydrant system for use by the NSW Fire Brigades, prior to installation of the fire hydrant system in a building under 25m. [Related to clause E1.3 of the <i>Building Code of Australia</i> .]
	Clause 44: Council discretion in relation to certain provisions of the <i>Building Code of Australia</i>	Clause 44(4) allows council the discretion to exempt a building from the requirements of Part E1 of the <i>Building Code of Australia</i> on receipt of a report issued by the Commissioner recommending such exemptions.
	Clause 49: Reports of Director-General of New South Wales Fire Brigades	Requires the Commissioner to supply a written report to the council, after construction of a building, indicating whether the building complies with the council’s approval in respect of matters covered by the Commissioner’s report made under clause 21 of the <i>Local Government (Approvals) Regulation 1993</i> .
	Clause 151: Inspections by Director-General of New South Wales Fire Brigades	For the purposes of section 202(1)(b) of the <i>Local Government Act 1993</i> , links the <i>Local Government Act 1993</i> to the <i>Local Government (Approvals) Regulation 1993</i> , in relation to the provision, maintenance or certification of essential services. [Specifically related to sections 202, 655, 656 and 657 of the <i>Local Government Act 1993</i> .]

Legislation	Clause/Section	Subject
<i>Local Government Act 1993</i>	Section 82: Objections to application of regulations and local policies	Provides an avenue for an applicant lodging a building application to council to apply for dispensation from some or all requirements of the <i>Building Code of Australia</i> . This dispensation may be granted by the council with the concurrence of the Director-General of the Department of Local Government.
	Section 124: What orders may be given, in what circumstances and to whom?	Gives details of particular council orders. Order number 4 relates to orders ensuring or promoting adequate fire safety or fire safety awareness. [Related to sections 150 and 202 of the <i>Local Government Act 1993</i> .]
	Section 150: Powers of fire brigades	Allows authorised fire officers to issue orders as per section 124 of the Act. [Related to sections 124 and 202 of the <i>Local Government Act 1993</i> and clause 6 of the <i>Local Government (Orders) Regulation 1993</i> .]
	Section 151: Inspection reports by fire brigades	Details the obligations of the Commissioner and council with respect to section 202 inspections. The Commissioner must furnish an inspection report to the local council and provide recommendations, if necessary. Council must advise the Commissioner of any determination made. [Related to section 202 of the <i>Local Government Act 1993</i> .]
	Section 202: Special provisions with respect to Fire Brigades	Confers powers and responsibilities on authorised officers to undertake fire safety inspections of existing buildings in the following circumstances: <ul style="list-style-type: none"> ➤ when premises are a place of shared accommodation (no request is necessary from any other party); ➤ on request from the local council; ➤ on request from the owner, lessee or occupier; or ➤ when the Commissioner receives a written complaint. The NSW Fire Brigades are required to supply an inspection report to the relevant council. [Related to sections 150 and 151 of the <i>Local Government Act</i> , clause 151 of the <i>Local Government (Approvals) Regulation 1993</i> and clause 6 of the <i>Local Government (Orders) Regulation 1993</i> .]
	Section 203: Councils to carry out fire safety inspections on request of the Director-General of Fire Brigades	Requires councils to carry out building inspections at the written request of the Commissioner and providing an inspection report to the Commissioner at the completion of the inspection.
	Section 655: Fire exits	Offences related to fire exits. [Related to clause 151 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Section 656: Doors relating to fire exits	Offences related to doors relating to fire exits. [Related to clause 151 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Section 657: Paths of travel to fire exits	Offences related to paths of travel to fire exits. [Related to clause 151 of the <i>Local Government (Approvals) Regulation 1993</i> .]

Legislation	Clause/Section	Subject
<i>Local Government (Orders) Regulation 1993</i>	Clause 6	Prescribes certain matters for the purposes of section 202 of the <i>Local Government Act 1993</i> relating to inspections by the NSW Fire Brigades. [Related to sections 150 and 202 of the <i>Local Government Act 1993</i> .]
<i>Building Code of Australia</i>	Clause E1.3: Fire hydrants	Requirements with respect to fire hydrants. [Related to clauses 21, 30 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E1.5: Sprinklers	Requirements with respect to sprinklers. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E1.6: Portable fire extinguishers	Requirements with respect to portable fire extinguishers. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E1.8: Fire Control Centres	Requirements with respect to fire Control Centres. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E1.10: Provision for special hazards	Requirements with respect to special hazards (eg: hazardous materials) which the NSW Fire Brigades may report upon when requested to do so by councils.
	Clause E2.2: General requirements for smoke hazard management	Requirements with respect to general requirements for smoke hazard management. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause 3.1, 3.3(a) (iii), 3.4 & 3.7 of Specification G3.8: Smoke control systems	Requirements with respect to smoke control systems. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E3.4: Emergency lifts	Requirements with respect to emergency lifts. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
	Clause E4.9: Emergency warning and intercommunication systems	Requirements with respect to emergency warning and intercommunication systems. [Related to clauses 21 and 49 of the <i>Local Government (Approvals) Regulation 1993</i> .]
<i>Environmental Planning and Assessment Regulation 1994</i>	Schedule 3: Designated Development	List of buildings classified as Designated Developments which the NSW Fire Brigades are required to inspect and report on under the <i>Environmental Planning and Assessment Regulation 1994</i> .

Legend: “Commissioner” refers to Commissioner of the New South Wales Fire Brigades and Director-General of the New South Wales Fire Brigades

Promotional Material Produced by the Fire Brigades Appendix B

Brochures (all are produced in English - a number are produced in 4 other languages)	E.D.I.T.H - Evacuation Drills In The Home Fire Extinguishers Fire Extinguishers - Which One Will I Use? Fire Safety for the Traveller Fire Safety in Health Care Facilities How to Protect Your Home from Fire Learn Don't Burn NSW Fire Brigades - We take the heat off you Smoke Alarms: Your First Defence Smoke the Silent Killer The Outdoors Fire Safety Holiday Guide What to do After a Fire Your Bushfire Survival Guide
Videos	Investing in Community Protection Fire Extinguishers: Which One Will I Use?
Audio Tapes	For use by radio stations - convey 14 different safety messages (2 produced in a total of 8 languages)
Posters	Fire at Kurnell 1993 Plan To Get Out Alive (2 versions) "Robosaurus" at the 1994 Royal Easter Show
Other Material	Bookmarks Fire Safety Colouring-in and Activity Book Passport to Safety Stickers Swapcards Total Fire Ban Information Sheet Visitor's Certificate 000 Badges

Campaigns/Programs Mounted by the Fire Brigades

Appendix C

Lighters and Matches Are Tools Not Toys

Lighters and Matches Are Tools Not Toys targets pre-school aged children. The program was developed by the South West Region Fire Prevention Officer. The program involves the RFPO visiting a school on request. Lessons include a talk on the difference between toys for children and adult tools, with games and demonstrations used to reinforce the message.

School Adoption Program

One station in the Southern Region have developed a school education program, based on the National Fire Protection Association (US) Learn Not To Burn Program. The program involves the station “adopting” a local primary school and ensuring that every child receives one hour of fire safety education. Lessons comprise a lecture given by the Station Officer and age appropriate activities and homework, using puzzles which convey fire safety messages.

Regional Smoke Alarms Save Lives Campaign

A joint campaign between the NSW Fire Brigades and councils in the northern beaches/north shore area whereby residents can purchase battery operated smoke alarms from their local council at a reduced price. Fire Brigades officers agreed to install the alarms in homes of the elderly and disabled free of charge.

Evacuation Procedures in Schools

Visits have been conducted by firefighters from local fire stations to all schools in North 1 and North 2 zones for the purpose of discussing evacuation procedures. The aim of the scheme is to generate awareness among the school community of the need for rehearsed evacuation policies and procedures. At the same time the visits are used to introduce the firefighters to the school and establish liaison arrangements.

Language Courses

Firefighters in two stations in the South West Region are learning Vietnamese in an effort to strengthen ties with the local Vietnamese community and facilitate communication at fires.

Installation of Smoke Alarms

A number of stations have a program of installing battery operated smoke alarms into homes in their area, an initiative supported by the Brigades.

Fire Awareness Week

Fire Awareness Week is a national campaign coordinated by the Australian Fire Authorities Council. Activities during the week include Fire Station Open Day, barbeques, street parades and displays in shopping centres.

See Chapter 2 for details of the following programs/campaigns

- **Smoke Alarms Awareness Campaign**
- **Child Intervention Program**
- **Early Childhood Fire Safety Program**
- **Fire Ed Program**
- **Community Fire Unit Program**
- **Kogarah Council Fire Prevention Education Program**

List of Field Visits

Appendix D

- Commissioner
- Director, Corporate Strategy
- Director, Prevention and Operational Planning
- Manager, Fire Prevention Unit
- Officer In Charge, Fire Investigation Unit
- Investigator, Fire Investigation Unit
- Officer In Charge, Fire Safety Division
- Principal Instructor, Fire Safety Division Education and Training
- Officer In Charge, Public Education Section
- Officer In Charge and Officers, Rescue/Bushfire Section
- Acting Officer In Charge, Hazardous Materials Response Unit
- Regional Fire Prevention Officer, Region North
- Regional Fire Prevention Officer, Region North West
- Regional Fire Prevention Officer, Region South
- Regional Fire Prevention Officer, Region South West
- Public Relations and Marketing Manager, Public Relations Unit
- Manager, Statistics Unit
- Officer in Charge, Fire Training College
- Station Officer and Operational Personnel, Revesby Fire Station
- Station Officer, Marrickville Fire Station
- Station Officer, Blacktown Fire Station
- Station Officer, Mascot Fire Station
- Station Officer and Operational Personnel, Rydalmere Fire Station
- Captain, Wyoming Fire Station
- Station Officer and Operational Personnel, Crows Nest Fire Station
- Station Officer and Operational Personnel, Darlinghurst Fire Station
- President, Museum of Fire
- Commissioner, NSW Department of Bushfire Services
- Education Officer, NSW Department of Bushfire Services
- Manager, Scientific Services, WorkCover Authority
- Manager, Building Branch, Department of Local Government
- Chief Executive Officer and Fire Safety Coordinator, Australian Fire Authorities Council
- Acting Manager, Community Risk Management, Country Fire Authority
- Director Fire & Hazard Safety and Senior Officers, Metropolitan Fire Brigade
- Manager, Building Services and Manager, Building Surveying, Sydney City Council
- Assessments Officer, Planning & Environmental Services, North Sydney Council
- Smoke Alarm Officer, Kogarah Municipal Council
- Assistant Director-General, NSW Department of School Education
- Director, Curriculum Branch, NSW Board of Studies

Performance Audit Reports

Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
Department of Housing	<i>Public Housing Construction: Selected Management Matters</i>	5 December 1991
Police Service, Department of Corrective Services, Ambulance Service, Fire Brigades and Others	<i>Training and Development for the State's Disciplined Services: Stream 1 - Training Facilities</i>	24 September 1992
Public Servant Housing	<i>Rental and Management Aspects of Public Servant Housing</i>	28 September 1992
Police Service	<i>Air Travel Arrangements</i>	8 December 1992
Fraud Control	<i>Fraud Control Strategies</i>	15 June 1993
HomeFund Program	<i>The Special Audit of the HomeFund Program</i>	17 September 1993
State Rail Authority	<i>Countrylink: A Review of Costs, Fare Levels, Concession Fares and CSO Arrangements</i>	10 December 1993
Ambulance Service, Fire Brigades	<i>Training and Development for the State's Disciplined Services: Stream 2 - Skills Maintenance Training</i>	13 December 1993
Fraud Control	<i>Fraud Control: Developing an Effective Strategy (Better Practice Guide jointly published with the Office of Public Management, Premier's Department)</i>	30 March 1994
Aboriginal Land Council	<i>Statutory Investments and Business Enterprises</i>	31 August 1994
Aboriginal Land Claims	<i>Aboriginal Land Claims</i>	31 August 1994
Children's Services	<i>Preschool and Long Day Care</i>	10 October 1994
Roads and Traffic Authority	<i>Private Participation in the Provision of Public Infrastructure (Accounting Treatments; Sydney Harbour Tunnel; M4 Tollway; M5 Tollway)</i>	17 October 1994
Sydney Olympics 2000	<i>Review of Estimates</i>	18 November 1994
State Bank	<i>Special Audit Report: Proposed Sale of the State Bank of New South Wales</i>	13 January 1995
Roads and Traffic Authority	<i>The M2 Motorway</i>	31 January 1995

Department of Courts Administration	<i>Management of the Courts: A Preliminary Report</i>	5 April 1995
Joint Operations in the Education Sector	<i>A Review of Establishment, Management and Effectiveness Issues (including a Guide to Better Practice)</i>	13 September 1995
Department of School Education	<i>Effective Utilisation of School Facilities</i>	29 September 1995
Luna Park	<i>Luna Park</i>	12 October 1995
Government Advertising	<i>Government Advertising</i>	23 November 1995
Performance Auditing In NSW	<i>Implementation of Recommendations; and Improving Follow-Up Mechanisms</i>	6 December 1995
Ethnic Affairs Commission	<i>Administration of Grants (including a Guide To Better Practice)</i>	7 December 1995
Department of Health	<i>Same Day Admissions</i>	12 December 1995
Environment Protection Authority	<i>Management and Regulation of Contaminated Sites: A Preliminary Report</i>	18 December 1995
State Rail Authority of NSW	<i>Internal Control</i>	14 May 1996
Building Services Corporation	<i>Inquiry into Outstanding Grievances</i>	9 August 1996
Newcastle Port Corporation	<i>Protected Disclosure</i>	19 September 1996
Ambulance Service of New South Wales	<i>Charging and Revenue Collection (including a Guide to Better Practice in Debtors Administration)</i>	26 September 1996
Department of Public Works and Services	<i>Sale of the State Office Block</i>	17 October 1996
State Rail Authority	<i>Tangara Contract Finalisation</i>	19 November 1996
NSW Fire Brigades	<i>Fire Prevention</i>	December 1996



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