
New South Wales Auditor-General's Report

Performance Audit

Fitness of firefighters

Fire and Rescue NSW
NSW Rural Fire Service



The role of the Auditor-General

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the *Public Finance and Audit Act 1983*.

Our major responsibility is to conduct financial or 'attest' audits of State public sector agencies' financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies' accounts.

Financial audits are designed to add credibility to financial statements, enhancing their value to end-users. Also, the existence of such audits provides a constant stimulus to agencies to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to agencies and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on agency compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

We also conduct performance audits. These examine whether an agency is carrying out its activities effectively and doing so economically and efficiently and in compliance with relevant laws. Audits may cover all or parts of an agency's operations, or consider particular issues across a number of agencies.

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In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Fitness of firefighters: Fire and Rescue NSW and NSW Rural Fire Service**.

A handwritten signature in black ink, appearing to read 'G Hehir'.

Grant Hehir
Auditor-General
1 April 2014

Contents

Contents	1
Executive summary	2
Conclusion	3
Supporting findings	4
Recommendations	5
Response from Fire and Rescue NSW	6
Response from the NSW Rural Fire Service	8
Introduction	11
1.1 The firefighting occupation	11
1.2 Duty of care requirements and conditions of employment	11
Fire and Rescue NSW	16
2. Background	16
Key Findings	17
3. Is there a fitness standard for firefighters and are they regularly assessed against it?	17
3.1 Current fitness standard for permanent firefighters	17
3.2 Current fitness standard for retained firefighters	19
3.3 No ongoing fitness assessment	19
3.4 Current fitness initiatives and programs for firefighters	22
3.5 The importance of an ongoing fitness assessment	24
NSW Rural Fire Service	28
4. Background	28
Key findings	30
5. Is there a fitness standard for firefighters and are they regularly assessed against it?	30
5.1 Fitness is self-assessed by volunteer members	30
5.2 A risk-based approach to fitness	31
Appendices	35
Appendix 1: About the audit	35
Appendix 2: Interstate comparison – fire service agencies	37
Appendix 3: Interjurisdiction comparison – fire service agencies	39
Appendix 4: Fitness requirements for specialist roles in the NSW Rural Fire Service	40
Appendix 5: Interstate comparison – volunteer fire service agencies	42
Performance auditing	44
Performance audit reports	45

Executive summary

Firefighting is a demanding occupation both physically and psychologically. Firefighters generally work in a high temperature, risky environment and may carry up to 50 kilograms of weight including protective gear and firefighting equipment. Climbing stairs in high-rise buildings, fighting bush fires, working in confined spaces, and helping injured and distressed victims with this weight, puts considerable strain on a firefighter's body and mind.

Research shows that physical and psychological fitness is critical to the effective performance of firefighters. Research also shows that the strength and fitness of firefighters deteriorate with age.

In New South Wales, there are two primary firefighting agencies. Fire and Rescue NSW's purpose is to save life, property and the environment from fires, emergencies and disasters. The NSW Rural Fire Service combats bush fires and enables the community to be better prepared and protected from bush fires.

There are approximately 72,000 volunteer members in the NSW Rural Fire Service. In Fire and Rescue NSW there are over 6,800 paid firefighters and around 7,200 community fire unit volunteers.

Along with the requirement to achieve their firefighting and rescue objectives, both organisations have a duty of care to protect the health and safety of their employees, including their volunteer members. These obligations have been strengthened by the *Work Health and Safety Act 2011*.

This audit assessed whether Fire and Rescue NSW and the NSW Rural Fire Service know that their firefighters are fit for duty. We asked whether:

1. there is a fitness standard for firefighters
2. firefighters are assessed against the fitness standard

and therefore whether the current arrangements are effective in ensuring that firefighters are fit for duty.

For the purpose of this audit, 'fitness' means physical and psychological fitness. For Fire and Rescue NSW, the audit focused on permanent (full-time) and retained (part-time) firefighters. For the NSW Rural Fire Service, the focus was on volunteer members.

The scope of this audit has been limited to examining general fitness of firefighters and the mechanisms both agencies have in place to ensure that firefighters are fit for the job. It did not examine whether firefighters put their own safety or the safety of their colleagues at risk from fatigue and stress due to secondary employment, drug and alcohol abuse, psychological illnesses or other related factors. Fire and Rescue NSW have stated that they are the only fire service in Australia to have random drug and alcohol testing. They also stated that there are policies in place to deal with fatigue and secondary employment.

Management of Fire and Rescue NSW and the NSW Rural Fire Service should, where necessary, consider these wider health risks when addressing the specific recommendations in this report. We may undertake further audits of such risk factors in the emergency service sector generally.

Conclusion

Fire and Rescue NSW does not know with certainty whether its firefighters are currently fit to perform their full range of operational duties. The NSW Rural Fire Service does not know whether all its firefighters are currently fit to perform their full range of operational duties.

To be recruited by Fire and Rescue NSW, firefighters must pass fitness tests. However, once they are employed, there are no formal checks on firefighters' health and fitness during their career. There are measures in place which provide some degree of monitoring of health and fitness, for example, skills training which requires a certain level of fitness, reports on near miss injury incidents and data on workers compensation claims. Fire and Rescue NSW has an obligation to ensure firefighters can safely carry out their roles under the *Fire Brigades Act 1989* and also the Work Health and Safety legislation.

The Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 commits Fire and Rescue NSW and the Fire Brigade Employees' Union to agree to and implement a compulsory health and fitness program for all firefighters. This commitment has been in the Award since 2006. A health standard has been developed by Fire and Rescue NSW. Despite the issue of health and fitness being the subject of proceedings in the Industrial Relations Commission, at the time of this audit, a health and fitness program had not been agreed and implemented.

Limited information available from voluntary fitness assessments showed that over 40 per cent of firefighters assessed had one or more cardiovascular risk factors. There were also indications that a voluntary system of monitoring health and fitness has not been effective. We conclude that Fire and Rescue NSW needs to mandate periodic assessments to ensure those in the workforce have the required health and fitness to carry out their roles safely and effectively.

Fire and Rescue NSW has the authority to terminate employment of firefighters if they are unfit to carry out their roles. Health and fitness is a necessity for firefighters to carry out their roles and Fire and Rescue NSW should therefore, exercise this authority where firefighters persistently fail to meet fitness standards. Further, firefighters deemed unfit by an ongoing health and fitness assessment, should not be able to rely on the provisions under the Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 as a means to exit the organisation, unless they clearly meet the on and off duty injury criteria defined in the Award.

Volunteers with the NSW Rural Fire Service self-declare any health and fitness issues that may impact their ability to carry out their roles. There is no specific fitness standard and assessment to join as a volunteer. We think this approach is realistic in the circumstances of a volunteer organisation, although it poses an extra burden on brigade captains to assess the fitness and capabilities of each volunteer.

To support this general strategy, the NSW Rural Fire Service has a risk-based approach to testing and assigning tasks to volunteer members. Specific and regular fitness tests are required only for specialist roles, like remote area firefighters. However, volunteer members who fight bush fires are not currently tested.

Under the Work Health and Safety legislation, volunteers are now included as workers of an organisation. Therefore, the NSW Rural Fire Service has a duty of care to ensure the health and safety of its volunteer members. We consider that the NSW Rural Fire Service should undertake a risk analysis on the current approach to managing the health and fitness of volunteer members, particularly those who actively fight fires.

Supporting findings

Is there a fitness standard for firefighters?

Are firefighters regularly assessed against the fitness standard?

Fire and Rescue NSW

Fire and Rescue NSW has recently introduced a new fitness standard for permanent firefighters at recruitment. Retained firefighters represent 50 per cent of the total number of firefighters. Although they carry out similar but less frequent work as permanent firefighters, retained firefighters have a less rigorous fitness assessment process. Fire and Rescue NSW informed us that they are currently aligning the retained firefighter's physical aptitude test to that of permanent firefighters. Post-recruitment, there is no ongoing fitness assessment to ensure firefighters remain fit for duty.

Fire and Rescue NSW introduced a voluntary health and fitness program in 2004. The results from assessments through this program give cause for some fitness concerns. Since its inception, over 40 per cent of those assessed have presented with at least one cardiovascular risk factor. These results could not be considered as representative as the sample size is low. However, it supports the need for a better understanding on the health and fitness of firefighters.

Statistics on the number of injuries sustained by firefighters, the number of firefighters on light duties, the number of medical discharges and the death and disability claims support the need for a better process to ensure that firefighters remain fit for duty.

The NSW Rural Fire Service

The NSW Rural Fire Service requires that volunteer members should be capable of carrying out the physically and mentally demanding work of bush firefighting. There is no specific fitness standard for becoming a volunteer. Volunteer members self-declare any medical, physical and psychological issues that may impact on their ability to perform their duties.

There are also no ongoing requirements for volunteer members to maintain a specific level of fitness. Brigade captains informally monitor fitness and allocate tasks at an incident, based on the volunteer member's capability.

The NSW Rural Fire Service informed us that it adopts a risk-based approach in establishing fitness standards for its firefighters. This depends on the firefighting tasks and their risks to health and safety. Not all of the roles carried out by these volunteers are safety-critical roles.

There are fitness standards and ongoing assessments for specialist roles exposed to high risk environments and conditions, for example remote area firefighters. However, there is no specific fitness requirement for volunteer members who face similar consequences, for example, those fighting bush fires.

The NSW Rural Fire Service does not know how many volunteer members undertake active firefighting roles. However, they are currently in the process of classifying all volunteer members according to their roles.

Recommendations

Fire and Rescue NSW should, by December 2014:

1. introduce an ongoing health and fitness assessment for firefighters. This should:
 - be mandatory
 - define frequency of assessment (page 27)
2. implement measures that:
 - require firefighters, as part of their duties, to undertake activities to maintain their fitness
 - assist firefighters who fail their assessment to regain the required fitness standard
 - manage firefighters who continually fail assessments including terminating employment either through the Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award or the Fire Brigades Regulation 2008 (page 27).

The NSW Rural Fire Service should, by April 2015:

3. undertake a risk analysis on the current approach to managing the health and fitness of volunteer members, particularly those who actively fight fires (page 34)
4. introduce health and fitness initiatives to encourage volunteer firefighters to maintain their fitness (page 34)
5. establish a checklist to assist brigade captains in managing the health and fitness of their members (page 34)
6. consider a three-year renewal of self-assessment and declaration of medical conditions by volunteers (page 34).

Response from Fire and Rescue NSW



File Ref. No: FRN13/4775
TRIM Ref. No: D14/16635

24 March 2014

Mr Grant Hehir
Auditor General, Audit Office of NSW
GPO Box 12
Sydney NSW 2001

Dear Mr Hehir,

Fire & Rescue NSW (FRNSW) welcomes the Performance Audit Fitness of Firefighters and appreciates the work and effort undertaken by the Audit Office of NSW.

As acknowledged by the Audit Office, FRNSW currently has a comprehensive health and fitness program in place, and has done so for almost 10 years. While this program is continually evolving, it is a robust system that aims to support firefighters attain and maintain a high level of both physical and mental health, through a wide range of health promotion programs.

There is good evidence to suggest that these support programs provide FRNSW with a level of assurance that firefighters do possess the required level of health and fitness required to perform their tasks. This is further supported by the following observations:

- A good return on investment in regard to health promotion programs is noted widely throughout the literature suggesting a return of between \$4 and \$9 for every dollar spent (per employee).
- A significant decrease in illness and injury within FRNSW over the last 5 years, indicating a more fit and healthy workforce who are less susceptible to injury.
- An increase in medical discharge supports the fact that not only is FRNSW medically discharging those firefighters who can no longer undertake operational firefighting but also that firefighters are more aware of the expectations upon them, and actively seek medical discharge when appropriate.

It is noted that the Audit Office report there are no formal checks on firefighter health and fitness during their career, however there are a number of indicators which support evidence of firefighter fitness. For example, firefighter fitness is confirmed

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during routine operational training programs, and FRNSW Occupational Physicians assess fitness for duty, as outlined in sections 2.3 and 2.4 of the report.

The Audit Office acknowledges the development of the FRNSW health standard which provides the foundation for assessment of firefighter's fitness for duty. In anticipation of the release of the report, FRNSW will progress the health standard which will underpin the compulsory assessment program.

While FRNSW is confident that programs already in place support firefighter fitness, I support the recommendations outlined in the report. In particular, I believe the introduction of a compulsory health and fitness program would be beneficial and supplement the existing programs already in place. This will assist in developing a high level of confidence within FRNSW that all firefighters do meet health and fitness standards required to most effectively and efficiently serve the public of NSW, but just as importantly, to do so safely.

Yours sincerely

A handwritten signature in black ink, appearing to read 'G. Mullins', with a stylized flourish at the end.

Greg Mullins AFSM
Commissioner

Response from the NSW Rural Fire Service

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Your Ref: PA 6537

Our Ref: NUM/0387(HQ14/0277)

24 March 2014

Dear Mr Hehir 

PERFORMANCE AUDIT - FITNESS OF FIREFIGHTERS

I refer to the letter I received from Mr Rob Mathie, Assistant Auditor-General, dated 28 February 2014, providing me with a copy of the Audit Office's report ***Performance Audit – Fitness of Firefighters***.

Thank you for the opportunity to provide a response to the recommendations presented in the report, as they relate to the NSW Rural Fire Service.

Please find attached a copy of the NSW RFS's formal response to the report.

I would like to take this opportunity to thank all those involved in the audit for the collaborative way it was conducted.

Yours sincerely



Shane Fitzsimmons AFSM
Commissioner

◆ Rural Fire Service Advisory Council

◆ Bush Fire Co-ordinating Committee

NSW Rural Fire Service: Audit Fitness of Firefighters.

Recommendations Response

Recommendations:

NSW Rural Fire Service should by April 2015:

1. undertake a risk analysis on the current approach to managing the health and fitness of volunteer members, particularly those who actively fight fires
2. introduce health and fitness initiatives to encourage volunteer firefighters to maintain their fitness
3. establish a checklist to assist brigade captains in managing the health and fitness of their members
4. consider a three year renewal of self-assessment and declaration of medical condition by volunteers.

The NSW RFS supports the four recommendations put forward by the Audit Office of NSW resulting from the Fitness of Firefighter audit.

In relation to each recommendation:

1. undertake a risk analysis on the current approach to managing the health and fitness of volunteer members, particularly those who actively fight fires

This recommendation is **supported**.

The NSW RFS will undertake a risk analysis as recommended, building on the work undertaken as part of the audit.

The NSW RFS will seek to identify a desirable standard of general health and fitness as the basis of the risk analysis.

Opportunities for members to self-select into roles based on their capabilities will continue to be encouraged, that is, members undertake fit for purpose roles.

The analysis will be undertaken in line with the NSW RFS Organisational Risk Management policy and process.

The timeframe to undertake this analysis is seen as achievable.

Please note: The outcomes of the risk analysis may impact on the actions proposed related to the remaining recommendations.

2. introduce health and fitness initiatives to encourage volunteer firefighters to maintain their fitness

This recommendation is **supported**.

The NSW RFS will seek to introduce health and fitness initiatives. Initially they will be general wellbeing type initiatives that all members can relate to. It is envisaged that these broader strategies will then become more focused over time to specific work roles and functions.

The NSW RFS will also continue to monitor health and fitness related research in the development of these initiatives.

The timeframe to commence the introduction of the health and fitness initiatives is seen as achievable.

3. *establish a checklist to assist brigade captains in managing the health and fitness of their members*

This recommendation is **supported**.

The NSW RFS is well placed to develop the recommended checklists. The development of these checklists will build on the work the NSW RFS has undertaken in relation to functional work assessments. These work assessments relate to the key physical work performed by volunteer members.

The development of the checklists will be accompanied by a communications / awareness strategy targeting brigade captains and District staff.

The timeframe to establish the checklists is seen as achievable.

4. *consider a three year renewal of self-assessment and declaration of medical condition by volunteers.*

This recommendation is **supported 'in principle'** at this stage, subject to the outcomes of Recommendation One.

The reason for this 'in principle' support is that, while the Service has an initial self-assessment on joining, it would need to determine and quantify any benefit, such as reduction in injuries, for example, that potentially could be achieved through the introduction of a three year self-assessment regime against the cost of introduction and the ongoing maintenance of such a regime. This consideration would need to involve both the cost implications as well as member engagement factors.

Any process developed as a result of these considerations would still need to reinforce the arrangements that are currently in place, that is, members need to self report any time when they have a change in their health and fitness that may impact on their NSW RFS role.

The timeframe to consider the three year self assessment is seen as achievable, however, the timeframe for any implementation could only be established once this consideration has taken place.

The Membership and Strategic Service Directorate will oversee the implementation of these recommendations and report regularly through current reporting arrangements on the progress related to these recommendations. This will include reporting to the NSW RFS Audit and Risk Committee.

Introduction

1.1 The firefighting occupation

A firefighter is a person who works at a fire service agency, either as a volunteer or as an employee, and responds to incidents. These include bush fires, building fires, motor vehicle accidents and rescue and hazardous materials incidents. Firefighters may also respond to natural disasters (such as floods and storms) and possible terrorist activities.

Firefighters:

- work in environments where their physical safety is threatened
- attend traumatic incidents such as emergency medical responses or motor vehicle accidents
- provide 24 hour coverage
- have long periods of performing non-emergency duties followed by periods of emergency response.

In these conditions, the health and fitness of firefighters is critical to performance.

Research conducted in 2013 by the National Fire Protection Association in the United States of America, 'Standard on Comprehensive Occupational Medical Program for Fire Departments' showed that the key health attributes required of a firefighter include:

- senses – the ability to effectively respond to traffic and other road sounds when driving in an emergency situation and responding to incidents
- psychological – attributes include attentiveness and cognition as well as emotional stability
- general health – attribute refers to general stamina and the absence of conditions which may cause collapse. They include cardiovascular disorders such as heart attack, respiratory disease such as asthma and neurological disorders such as epilepsy and stroke.
- musculoskeletal – attributes refer to locomotive capabilities of the limbs and back, coordination of movement, stamina and agility.

1.2 Duty of care requirements and conditions of employment

The duty of care requirements are defined in the *Work Health and Safety Act 2011* and the preconditions of employment are in the Fire Brigades Regulation 2008, the Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 and the Service Standard for the NSW Rural Fire Service.

Section 19 of the *Work Health and Safety Act 2011* (the Act) outlines the primary duty of care for an employer including:

- (1) a person conducting a business or undertaking must ensure, so far as is reasonably practicable, the health and safety of:
 - (a) workers engaged, or caused to be engaged by the person, and
 - (b) workers whose activities in carrying out work are influenced or directed by the person,
- while the workers are at work in the business or undertaking.

Health and fitness of firefighters is critical to performance

(2) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

(3) Without limiting subsections (1) and (2), a person conducting a business or undertaking must ensure, so far as is reasonably practicable:

...

(f) the provision of any information, training, instruction or supervision that is necessary to protect all persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking, and

(g) that the health of workers and the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking.

The Act covers the health and safety of not only paid employees but volunteers as well.

Section 28 of the Act outlines the duty of care of workers:

While at work, a worker must:

- (a) take reasonable care for his or her own health and safety, and
- (b) take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons, and
- (c) comply, so far as the worker is reasonably able, with any reasonable instruction that is given by the person conducting the business or undertaking to allow the person to comply with this Act, and
- (d) co-operate with any reasonable policy or procedure of the person conducting the business or undertaking relating to health or safety at the workplace that has been notified to workers.

The Act replaces the *Occupational Health and Safety Act 2000* and increases the penalties for failure to meet duty of care responsibilities. Refer to Exhibit 1 which compares the old and new legislation in this respect.

The *Work Health and Safety Act 2011* cover the health and safety of not only paid employees but volunteers as well

Exhibit 1: Comparison of *Occupational Health and Safety Act 2000* and the *Work Health and Safety Act 2011*

	<i>Occupational Health and Safety Act 2000</i>	<i>Work Health and Safety Act 2011</i>
Primary duty of care	Primary duty of care is assigned to employers.	Primary duty of care is assigned to a person conducting a business or undertaking.
Definition of a worker	An employee is defined as an individual who works under a contract of employment or apprenticeship.	Extends the definition to include any person, who works, in any capacity, in or as part of the business or undertaking, including work as: an employee, a contractor or sub-contractor, an apprentice or trainee, or a volunteer.
Penalties – duty of care breaches	Monetary penalty of up to \$825,000 for an organisation and \$82,500 for an individual, including imprisonment for two years for an individual.	<p>Category 1 offence – if the person:</p> <ul style="list-style-type: none"> (a) has a health and safety duty, and (b) without reasonable excuse, engages in conduct that exposes an individual to whom that duty is owed to a risk of death or serious injury or illness, and (c) is reckless as to the risk to an individual of death or serious injury or illness. <p>The maximum penalty in the case of an offence committed by an individual is \$600,000 or five years imprisonment or both, or</p> <p>The maximum penalty in the case of an offence committed by a body corporate is \$3,000,000.</p> <p>Category 2 offence – if the person:</p> <ul style="list-style-type: none"> (a) has a health and safety duty, and (b) fails to comply with that duty, and (c) the failure exposes an individual to a risk of death or serious injury or illness. <p>The maximum penalty in the case of an offence committed by an individual is \$300,000 or in the case of an offence committed by a body corporate, \$1,500,000.</p> <p>Category 3 offence – if the person:</p> <ul style="list-style-type: none"> (a) the person has a health and safety duty, and (b) the person fails to comply with that duty. <p>The maximum penalty in the case of an offence committed by an individual is \$100,000, or in the case of an offence committed by a body corporate, \$500,000.</p>

Source: Audit Office research 2014.

Section 9 of the Fire Brigades Regulation 2008 outlines the conditions for appointment of a permanent firefighter with the Fire and Rescue NSW:

- (1) An application for appointment as a permanent firefighter must be in the approved form.
- (2) Before appointing an applicant as a permanent firefighter, the Commissioner must be satisfied that the applicant:
 - (a) is medically and psychologically fit to exercise the functions of a firefighter, and
 - (b) has passed examinations and assessments set or nominated by the Commissioner for appointment as a permanent firefighter.

Section 10 of the Fire Brigades Regulation 2008 outlines the conditions for appointment of a retained firefighter with the Fire and Rescue NSW:

- (1) An application for appointment as a retained firefighter must be in the approved form.
- (2) Before appointing an applicant as a retained firefighter, the Commissioner must be satisfied that the applicant:
 - (a) is medically and psychologically fit to exercise the functions of a firefighter, and
 - (b) has passed examinations and assessments set or nominated by the Commissioner for appointment as a retained firefighter.

Section 12 of the Fire Brigades Regulation 2008 states that:

- (1) The Commissioner may terminate a firefighter's appointment as a firefighter:
 - (a) if the firefighter is no longer medically or psychologically fit to exercise the functions of a firefighter, or
 - (b) if the firefighter is no longer a suitable person to exercise the functions of a firefighter.

The Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 commits Fire and Rescue NSW and the Fire Brigade Employees' Union to agree to and develop a compulsory health and fitness program, and for firefighters to be assessed against the agreed fitness standards. Clause 14 of the Award states that:

14.1 The parties agree and accept the need for a compulsory health and fitness programme that is underpinned by practical support, education and assistance programs provided by Fire and Rescue NSW.

14.2 The parties agree to develop and implement a health and fitness programme in circumstances in which a member of the Industrial Relations Commission will oversight their progress and set appropriate time frames, subject to the proviso that the parties specifically agree to the inclusion of a sub-clause in the following terms:

A firefighter who fails to meet the prescribed health and fitness standards will be given an appropriate period of time, as determined on medical advice, to achieve the level of health and fitness required. Subsequently, a firefighter who fails the medical reassessment or who is deemed on medical advice not capable of regaining or maintaining an acceptable level of fitness will be rehabilitated to another position in accordance with Fire and Rescue NSW policy.

14.3 Negotiations will also commence on a proposed return to work policy, which shall include agreed alternative duties provisions. The content of any Fire and Rescue NSW policy in this regard will form part of health and fitness negotiations.

14.4 Health and fitness standards will be subject to negotiation and agreement, but shall apply to all firefighters with no distinction based upon rank.

For the NSW Rural Fire Service, the Service Standard outlines requirements for joining the organisation as a volunteer member. Under Section 3.3 of the Standard, a volunteer is to (among other things):

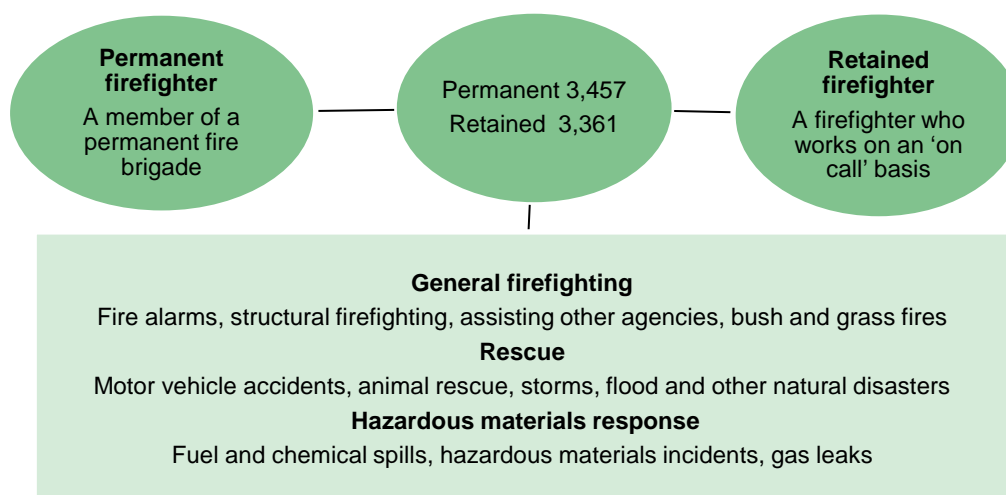
(e) be capable of and reasonably available, to perform the functions of the brigade they wish to join, or the role they wish to obtain, without endangering their own safety or the safety of others.

Fire and Rescue NSW

2. Background

Fire and Rescue NSW has 337 fire stations across New South Wales and more than 6,800 firefighters. Firefighters are made up of full-time (permanent) or part-time (retained) staff. Permanent firefighters work rostered shifts, generally two ten-hour day shifts, followed by two 14-hour night shifts and then four days off. Retained firefighters work on an on-call basis.

Exhibit 2: Types of firefighters and responsibilities



Source: Fire and Rescue NSW 2014.

Firefighters have long periods of performing non-emergency duties followed by periods of emergency response. Refer to Exhibit 3 for the types of incidents attended by firefighters over the last three years.

Exhibit 3: Incidents attended

Incident	2012–13	2011–12	2010–11
Structure fires	6,721	6,704	7,053
Outside storage fires	233	257	259
Vehicle fires	3,742	3,937	4,000
Bush and grass fires	10,107	6,381	6,970
Rubbish fires	7,551	7,918	7,972
Other fires	371	360	353
Non-fire rescue calls (medical assistance, animal rescue, motor vehicle accidents)	10,682	11,213	10,857
Hazardous material incidents	15,795	15,578	15,558
Storm, floods and other natural disasters	7,037	7,033	6,452
Good intent calls	11,958	11,115	10,849
False calls, false alarms	51,211	54,376	55,061
Other calls	8,203	5,871	5,556
Total	133,611	130,743	130,940

Source: Fire and Rescue NSW, Annual Report 2012–13.

Fire and Rescue NSW attended to over 133,000 incidents in 2012–13

Key Findings

3. Is there a fitness standard for firefighters and are they regularly assessed against it?

Finding: There is a fitness standard for permanent and retained firefighters. At recruitment, permanent and retained firefighters are assessed against a fitness standard to ensure they are physically fit for duty.

Post-recruitment there is no ongoing assessment to ensure firefighters remain fit for duty. There are measures in place which provide some degree of monitoring of health and fitness, for example, skills training which requires a certain level of fitness, reports on near miss injury incidents and data on workers compensation claims.

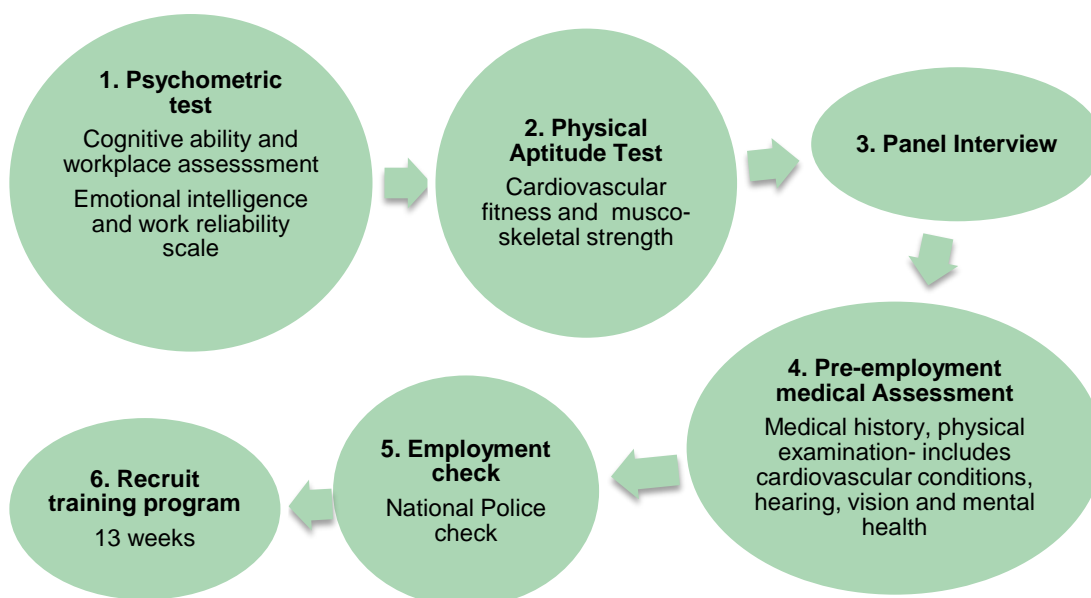
The Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 commits Fire and Rescue NSW and the Fire Brigade Employees' Union to agree to and implement a compulsory health and fitness program for all firefighters. This commitment has been in the Award since 2006. A health standard has been developed by Fire and Rescue NSW. Despite the issue of health and fitness being the subject of proceedings in the Industrial Relations Commission, at the time of this audit, a health and fitness program had not been agreed and implemented.

3.1 Current fitness standard for permanent firefighters

The Fire Brigades Regulation 2008 requires that, before appointing a candidate as a permanent firefighter, the Commissioner of Fire and Rescue NSW must be satisfied that he or she is medically and psychologically fit to exercise the functions of a firefighter.

If someone wants to become a permanent firefighter at Fire and Rescue NSW, he or she must, among other things, meet a fitness standard. Exhibit 4 outlines the recruitment process.

Exhibit 4: Permanent firefighter recruitment



Source: Fire and Rescue NSW 2014.

Fire and Rescue NSW introduced a new physical aptitude test in 2013 which seeks to ensure candidates have the level of strength and fitness to meet the demands of firefighting. Refer to Exhibit 5 for detail of the new physical aptitude test.

Exhibit 5: New physical aptitude test – permanent firefighters

Stage	Task	Test focus and description
1	Reduced visibility search	Claustrophobia – candidates are required to wear a frosted face mask and perform a crawling search in a dark and confined space.
	Ladder raise and lower simulation	Upper body strength and endurance – candidates are required to pick up a resistance reel with straight bar attached, with a combined vertical force of 29 kg, off the ground and bring it to navel-height, then squat under the bar and stand up, raising the bar above their head with their arms completely straight.
2	Single-sided jerry can carry	Upper body strength and endurance, grip strength, shoulder stability – candidates are required to adopt a unilateral grip on a 26 kg jerry can to lift it from the ground and move forward along a 30 metre corridor, completing a distance of 195 metres or 6.5 laps.
	Stair climb with single-sided jerry can carry	Upper body strength and endurance, lower body strength and power – candidates are required to adopt a unilateral grip on a 17.5 kg jerry can and step up and down a step 36 times. The task must be completed in the full 36 steps while carrying the jerry can in one hand.
	Rescue tools static holds	Upper body strength and endurance, shoulder stability – candidates are required to grip a simulated rescue tool, weighing 19 kg, with both hands, lift it from the ground and raise and hold it above their shoulder height for 40 seconds.
	Repeated hose drag	Cardiovascular fitness, upper and lower body muscular strength, power and endurance – candidates are required to grip a 2.8 metre length of 38 mm hose weighing 11 kg and move forward along a 30 metre corridor, completing a 150 metre distance in total.
3	Simulated fire attack	Functional strength and endurance – candidates are required to grip a 2.8 metre length of 38 mm hose weighted to 11 kg and adopt a crawling technique to remain below a 1.25 metre height indicator line and moving forward along a 30 metre corridor. The entire body must remain below the height level for the 30 metre distance.
	Firefighter rescue	Whole body functional strength, endurance and power, aerobic and anaerobic capacity – candidates are required to safely lift a 30 kg weighted firefighter breathing apparatus off the ground and lower themselves below a 1.55 metre height marker and walk backwards along a 10 metre corridor, without dropping or dragging the breathing apparatus off the ground.

Source: Fire and Rescue NSW 2014.

Fire and Rescue NSW informed us that the physical aptitude test was designed following rigorous research and testing. The test replicates scenarios that could impact on the candidate's capacity to effectively perform the firefighting role. It also identifies any health conditions that could be aggravated by undertaking duties essential to firefighting and that could result in serious injuries.

Firefighting agencies in other States rely on different testing arrangements. Appendix 2 provides a more detailed comparison of standards and testing in jurisdictions across Australia.

There are also psychometric tests focusing on emotional intelligence, cognitive ability, work safety knowledge and work reliability. Apart from this, there are medical examinations to gauge the general health of a candidate.

A candidate is recruited if he or she is successful in all of these assessments. Following this, permanent recruits undergo a 13 week training course to further build their fitness and skills for the role. This includes:

- preventing injury and working in a team
- operating communication systems, equipment and breathing apparatus
- providing emergency care and administering oxygen in an emergency situation
- participating in a rescue operation and responding to urban fire and wildfire
- checking and operating installed fire safety systems
- using personal protection at a hazmat (hazardous materials) incident, making the incident area safe and monitoring hazardous atmospheres
- operating the fire truck
- maintaining safety at an incident scene.

3.2 Current fitness standard for retained firefighters

As outlined earlier, the Fire Brigades Regulation 2008 requires that before appointing an applicant as a retained firefighter, the Commissioner must be satisfied that the applicant is medically and psychologically fit to exercise the functions of a firefighter.

Retained firefighters represent 50 per cent of the number of firefighters within Fire and Rescue NSW. They are part-time firefighters who live and work within close proximity of a fire station. They are required to be 'reasonably fit and healthy' to complete a pre-employment medical and functional (physical) assessment. Recruitment of retained firefighters also includes consideration of local risk factors such as dwelling types and the number of incidents in the area.

Although they carry out similar but less frequent work to permanent firefighters, retained firefighters have a less rigorous fitness assessment process. Fire and Rescue NSW informed us that they are currently aligning the retained firefighter's physical aptitude test to the permanent firefighter's physical aptitude test. Fire and Rescue NSW advised that in some small communities where it is difficult to attract sufficient numbers of candidates who can meet the physical requirements, a risk management approach will be adopted.

3.3 No ongoing fitness assessment

According to the Fire Brigades Regulation 2008, the Commissioner may terminate a firefighter's appointment if the firefighter is no longer medically or psychologically fit to exercise the functions of a firefighter.

As an employer, Fire and Rescue NSW has obligations under Work Health and Safety legislation to ensure the safety of its firefighters. This includes the provision of any information, training, instruction or supervision that is necessary to protect firefighters from risks to their physical and psychological health and safety.

As workers, firefighters have an obligation under Work Health and Safety legislation to maintain their own health and fitness in undertaking their role.

Fire and Rescue NSW has confirmed that firefighters are expected to maintain the same fitness standards they achieved to enter the service throughout their career. However, there are no explicit ongoing assessments of fitness to ensure that firefighters are maintaining their fitness for the job.

In the absence of any ongoing fitness assessment, there is a risk that:

- Fire and Rescue NSW is failing to meet its duty of care responsibilities
- firefighters currently in the workforce do not have the level of fitness to carry out their roles safely and effectively.

There are no ongoing fitness assessments

In addition, the Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012 (the Award) commits Fire and Rescue NSW to develop a compulsory health and fitness program and for firefighters to be assessed against fitness standards.

The commitment for a compulsory health and fitness program has been in the Award since 2006, however no agreement has been reached with the Fire Brigade Employees' Union.

Fire and Rescue NSW has made some progress towards developing a health standard for firefighters. This standard aims to:

- a) define the level of health and fitness required to perform the inherent requirements and demands of firefighting
- b) describe how the health and fitness of firefighters is assessed and reported in relation to these requirements.

The standard is proposed for both permanent and retained firefighters to identify significant chronic conditions likely to affect the fitness for duty. It includes an assessment of:

- cardiovascular conditions
- psychological conditions
- vision disorders
- hearing loss
- musculoskeletal disorders.

However, at the time of this audit, the proposed health standard had not been agreed and implemented.

Exhibit 6: Proposed health standard for firefighters

The proposed health standard supports consistent assessment of fitness for duty across the career of firefighters to ensure firefighters meet the required level of health and fitness for performing the firefighting tasks.

Health assessments may be conducted at various points during a firefighter's career. It includes a pre-employment assessment, a periodic health assessment program and a fitness for duty assessment.

Pre-employment health assessments

This is to determine the initial fitness to perform firefighting duties. The assessment aims to detect conditions, including cardiovascular, neurological conditions and psychiatric disorders. It comprises of a health questionnaire and clinical examination. Candidates also undergo a physical aptitude test to determine their ability to meet the high physical fitness demands of firefighting.

Periodic health assessment program

The periodic health assessment program supports firefighters in addressing chronic disease risk to support ongoing fitness for duty. It identifies physical and psychological health issues which are likely to affect ability to perform inherent firefighting tasks.

These are conducted according to defined frequencies:

- a) at time of commencement; then
- b) every five years to age 50; then
- c) every two years to age 60; then
- d) every year

Firefighters must have a health assessment conducted within two years after attaining age 50 and within one year after attaining age 60.

Fitness for duty assessments

In addition to routine periodic assessments, health assessments may be conducted in response to incidents or concerns regarding a firefighter's health.

These assessments are likely to address a particular health issue. They also include health assessments initiated as a result of concerns regarding prolonged or recurrent sick leave or related to a firefighter's return to work following illness or injury.

Source: Fire and Rescue NSW 2014.

Progress has been made to develop a health standard for firefighters

We found that no Australian Fire and Rescue agency has an ongoing fitness assessment for its firefighters. Refer to Appendix 2 for details. However, some firefighting organisations internationally have implemented ongoing assessments. For example, certain regions in Scotland require firefighters to undergo a mandatory fitness test every three years in addition to a health assessment. Refer to Appendix 3 for details.

Some organisations in New South Wales such as the NSW Office of Environment and Heritage, which have roles with risks similar to that of firefighters have ongoing fitness assessments. Refer to Exhibit 7 for examples.

Exhibit 7: Periodic health and fitness assessments in some organisations

National Standard for Health Assessment of Rail Safety Workers

Arising from the Waterfall rail accident in 2003, a national standard for health assessments of rail safety workers was developed. Effective as at 20 January 2013, it relates to assessments for the health and fitness of workers and their ability to perform rail safety duties. The fitness for duty is assessed through:

- periodic health assessments – conducted to identify health conditions that may affect safe performance of rail safety work. Examples are single-operator train drivers and rail signallers. Periodic health assessments are conducted at the time of commencement, then every five years to age 50, then every two years to age 60 and then every year.
- triggered health assessments – in response to incidents or concerns regarding the workers ability to safely perform their job. This is for non-safety critical workers. The assessments are conducted at the time of commencement, then at 40 years of age, then every five years.

The health assessments are an examination of medical conditions including blackouts, cardiovascular, neurological, psychological and musculoskeletal conditions.

Ambulance Service NSW – paramedics

The Health and Wellness Program aims to ensure that paramedics remain both physically and psychologically capable of delivering pre-hospital care to the community to the highest standard. It comprises of:

- a health assessment program designed to ensure paramedics are fit to meet the inherent physical and psychological job requirements
- a health support program that provides health related information, interactive tools, health events and support programs to promote a healthy lifestyle, as well as interventions to support paramedics with poor health assessment program outcomes.

NSW Office of Environment and Heritage – bush firefighters

Bush firefighters at the NSW Office of Environment and Heritage are required to pass an annual physical fitness assessment to carry out bush firefighting roles. The physical fitness assessment tests aerobic fitness, muscular strength and endurance, and flexibility needed to complete firefighting tasks over extended periods and work shifts.

- 1) light walk test – staff entering the fire ground unaccompanied are required to pass the light walk test. The test is a 1,610 metres walk in a time limit of 15 minutes.
- 2) moderate field test – the minimum fitness standard for general firefighting. Roles requiring this standard include aerial firefighting and general firefighting duties. The test requires carrying an 11.3 kg pack vest/weight and walking a distance of 3,220 metres in 30 minutes.
- 3) arduous pack test – the minimum fitness standard for employees wishing to participate in remote firefighting and interstate or international deployments. The test requires carrying a 20.4 kg pack vest/weight and walking a distance of 4830 metres in 45 minutes.

Source: National Standard for Health Assessment of Rail Safety Workers, Ambulance Service NSW and the NSW Office of Environment and Heritage 2014.

Firefighters
have an
obligation to
maintain their
fitness

3.4 Current fitness initiatives and programs for firefighters

Firefighters within Fire and Rescue NSW have an obligation to maintain their fitness. There are several opportunities and programs provided by Fire and Rescue NSW to firefighters.

Around 64 per cent of fire stations are equipped with fitness facilities. Where there are no such facilities, firefighters can be supported through partially subsidised gym membership fees.

Firefighters also undergo regular skills training which provides some degree of health and fitness monitoring. This includes:

- training in cutting up cars to assist in motor vehicle accident rescues
- re-certification of self-contained breathing apparatus qualifications annually
- re-certification of confined space training every two years
- re-certification of swift water rescue operator every two years.

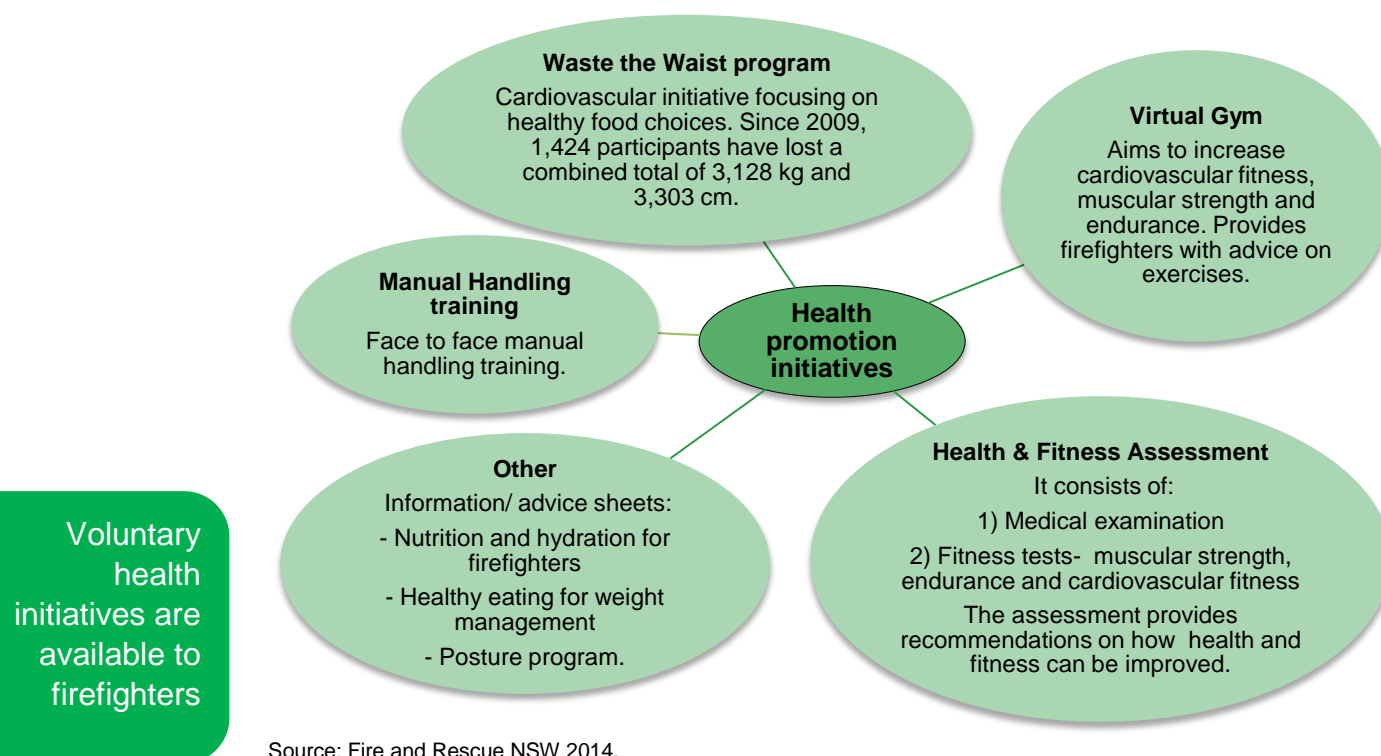
We found that pre-employment assessment for permanent and retained firefighters can identify medical conditions for which periodic monitoring is advised, for example, cardiovascular and type two diabetes risk factors. Such applicants can be recruited subject to review. Fire and Rescue NSW however, does not have reliable systems to follow up on the medical conditions of all personnel once they are employed.

Assessment of fitness for duty also occurs in response to monitoring of sick leave which includes diagnosis and duration of absence, response to specific performance or behavioural concerns and self-declaration of medical issues. Permanent and retained firefighters must also be examined by a Fire and Rescue NSW medical officer if they are absent on sick leave for a period of more than 28 days.

Fire and Rescue NSW informed us that near-miss injury incident reports and workers compensation claims also provide some degree of monitoring of the health and fitness of firefighters. Near miss injury incident reports have reduced from 210 in 2011–12 to 128 in 2013–14. In 2012–13, the total number of workers compensation claims for injuries sustained by firefighters was 585. This resulted in a cost of almost \$3 million, compared to 648 injury claims totalling \$5.4 million in 2011–12.

A policy on health, fitness and wellbeing developed by Fire and Rescue NSW outlines that all employees have responsibilities to engage in health promotion, prevention and support programs. Fire and Rescue NSW has several health promotion initiatives which firefighters can undertake. These are voluntary programs to assist firefighters in maintaining their fitness levels. Refer to Exhibit 8.

Exhibit 8: Health promotion initiatives



The station officer and crew members also assist each other through counselling, especially during a critical incident. There are also assistance programs in place to support firefighters following traumatic incidents.

Exhibit 9: Psychological support programs

Chaplaincy and family support	Supports, nurtures and expresses the spiritual and religious beliefs and values of firefighters and their families. The focus is on physical, cognitive and spiritual development.
Critical incident support program	Offers help to firefighters affected by individual traumatic incidents or a cumulative effect over their career. The aim is to lessen the impact of critical incidents on all personnel involved in the activities of Fire and Rescue NSW.
Employee assistance program	An external service providing professional and confidential counselling. Access is available to all firefighters and their families, 24 hours a day, seven days a week, providing three free visits per 12 months. In 2012–13, the program was used by 253 employees.
Peer support	One-to-one assistance, on-scene support and follow-up, and education and information sessions to firefighters. The scope includes providing support and guidance to employees on mental health issues, encouraging early intervention and referral to professional support services.

Source: Fire and Rescue NSW, 2014.

Some firefighters we met raised concerns on the effectiveness of these support programs, stating that:

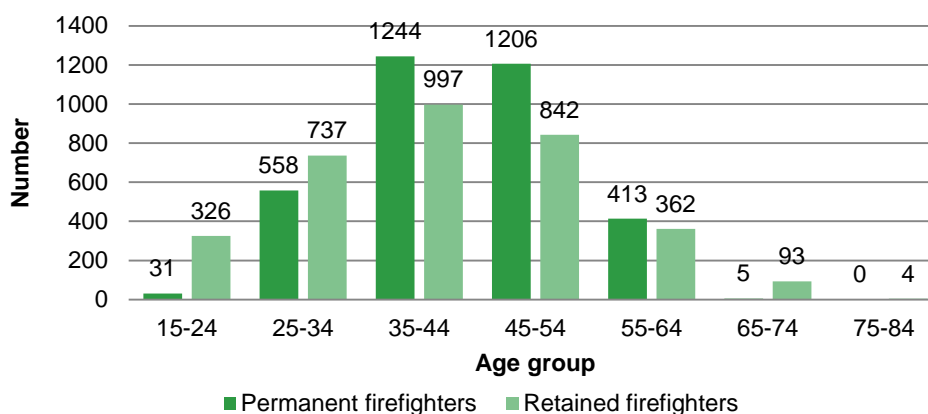
- some programs are not helpful in dealing with the psychological issues faced by firefighters
- some programs are not long enough to provide the support needed
- there is a lack of proactive measures to create mental health awareness.

Some station officers were also concerned with the lack of training to assist and manage mental health issues among firefighters. Fire and Rescue NSW accepts that better assistance needs to be provided to assist firefighters in dealing with psychological impacts of firefighting. Fire and Rescue NSW advises that it has introduced initiatives in partnership with organisations such as the Black Dog Institute.

3.5 The importance of an ongoing fitness assessment

Most firefighters with Fire and Rescue NSW stay with the organisation until they retire. Almost 43 per cent of permanent and retained firefighters are 45 years old and over.

Exhibit 10: Age profile of firefighters



Source: Fire and Rescue NSW 2014.

Some research confirms that the health and fitness of firefighters declines with age. Refer to Exhibit 11 for details.

Exhibit 11: Research showing fitness decline with age

A study in 2012 by the Hindawi Publishing Corporation in the United States of America on 'Age related decline in cardiorespiratory fitness among career firefighters' concluded that cardiorespiratory fitness of firefighters is significantly reduced with increasing age. However, this is also dependent on body mass index and physical exercise habits. It supports the importance of measuring cardiorespiratory fitness, physical activity, body composition and cardiovascular health at entry and at regular periods throughout a firefighter's career. This will assist in preventing the decline in cardiorespiratory fitness with increasing age.

A study in 2011 by the Institute of Occupational Medicine in the United Kingdom on the 'Review of aging and the demands of firefighting' states that some firefighters will be capable of continuing to meet the operational demands of being a firefighter beyond the current retirement age. However, age related deterioration in physical fitness; muscle strength and heat tolerance will mean that a high number of firefighters will find it difficult to meet the acute challenges of firefighting, resulting in reduced operational performance. For example, older firefighters may perform operational tasks more slowly.

Source: Hindawi Publishing Corporation, Institute of Occupational Medicine: Home Office Fire Research and Development Group, 2012 and the Institute of Occupational Medicine: Review of aging and the demands of firefighting, August 2011.

A recent study in the United States of America also found a consistent decline in fitness as firefighters aged. The 14-year study of more than 4,300 firefighters from California, found that more than 50 per cent of firefighters did not meet the ideal fitness levels to perform firefighting tasks efficiently. It recommended that mandatory fitness assessments be implemented to ensure firefighters maintain an appropriate level of fitness, especially as they advance in age.

Health and fitness of firefighters decline with age

In the absence of any mandatory health and fitness assessment in Fire and Rescue NSW, it is unclear whether current firefighters have the level of fitness to perform the full range of firefighting tasks.

Limited information available through a voluntary health and fitness program introduced by Fire and Rescue NSW in 2004–05, provides some indication that fitness is a concern within the agency. Assessment of firefighters under this program found that:

- 19 per cent of all participants were classified as obese according to body mass index
- 41 per cent of all participants had at least one cardiovascular risk factor
- 28 per cent of all participants had two or more cardiovascular risk factors.

These results cannot be considered as representative as the sample size is low. However, it supports the need for a better understanding on the health and fitness of firefighters.

In the eight years since the program's inception, 741 firefighters have participated. However, participation in this program has significantly declined with only five health and fitness assessments requested in 2013. This indicates that a voluntary system of monitoring health and fitness has not worked.

Statistics on the number of injuries sustained by firefighters, the number of firefighters on light duties, the number of medical discharges and the death and disability claims indicate that Fire and Rescue NSW needs a better process to ensure that its firefighters are fit for duty.

In 2012–13, firefighters reported a total of 584 injuries. Fitness related injuries such as body stressing and mental stress were amongst the top five injuries over the last three years.

Exhibit 12: Top five firefighter injuries

Types of injuries	2012–13	2011–12	2010–11
Body stressing	235	252	258
Falls, Trips And Slips Of A Person	140	150	129
Being Hit By Moving Objects	51	46	51
Hitting Objects With A Part Of The Body	54	40	54
Mental stress	29	38	61

Source: Fire and Rescue NSW, 2014.

Currently, almost ten per cent of permanent firefighters are on light duties. Light duties are roles apart from full operational duties as a firefighter. Fire and Rescue NSW has informed us that the main reasons for this are physical and psychological injuries.

Exhibit 13: Permanent firefighters on light duties

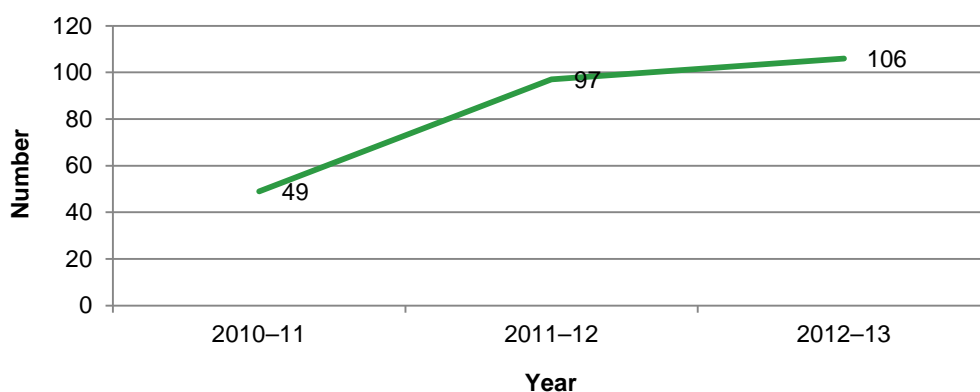
Year	2012–13	2011–12	2010–11
Permanent firefighters on light duties	329	297	362
Number of permanent firefighters	3,457	3,498	3,516
Per cent (%)	10	8	10

Source: Fire and Rescue NSW 2014.

The number of firefighters medically discharged from 2010–11 to 2012–13 has more than doubled. Fire and Rescue informed us that this is a result of a new medical assessment process to manage firefighters who are unfit. Firefighters are medically discharged when they are considered permanently unfit to carry out firefighting roles.

Fire and Rescue NSW needs a better process to ensure firefighters remain fit for duty

Exhibit 14: Firefighters medically discharged



Source: Fire and Rescue NSW 2014.

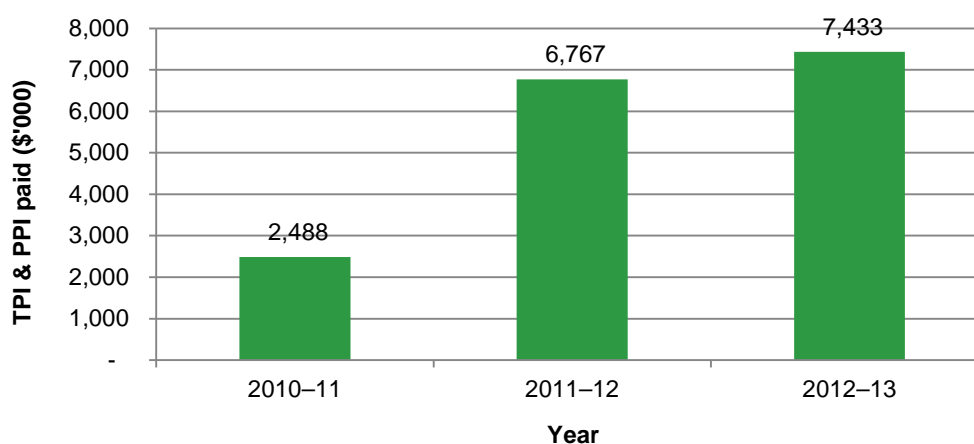
Firefighters have benefits under Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award 2012. Benefits are for injuries on or off duty that result in:

- total and permanent incapacity
- partial and permanent incapacity.

Total and permanent incapacity (TPI) is when a firefighter, by reason of ill-health (physical or mental) is unable to ever again engage in gainful employment for which the firefighter is reasonably qualified by education, training or experience. Partial and permanent incapacity (PPI) means that a firefighter is no longer fit to carry out the full range of his/her pre-injury duties with Fire and Rescue NSW.

Compensation under the scheme continues to rise with over \$7.4 million paid in 2012-13, for 44 claims.

Exhibit 15: Cost for claims under the firefighting staff death and disability award



Source: Fire and Rescue NSW 2014.

A mandatory ongoing fitness assessment and actions to ensure firefighters maintain or regain their fitness would:

- provide greater confidence on the effectiveness of firefighters to colleagues and the public at large
- reduce the risk to the health and safety of individual firefighters
- reduce the risk of liability to the organisation.

There would, however, be potential impacts of such a process. One such impact Fire and Rescue NSW could face is that initially a high number of firefighters could fail the ongoing assessment. As a result, there are several options.

Firstly, those firefighters who fail could engage in programs which help them regain their fitness.

According to the Award, if a firefighter is not capable of regaining or maintaining an acceptable level of fitness, he or she can be placed in another position within the organisation. However:

- that reduces the accountability placed on firefighters to be fit for the job
- Fire and Rescue NSW's capacity to absorb these firefighters is limited.

Secondly, Fire and Rescue NSW has the authority to terminate employment of firefighters if they are unfit to carry out their roles. Fire and Rescue NSW should exercise this authority where firefighters persistently fail to meet fitness standards.

In the event where a firefighter who persistently fails the ongoing health and fitness assessment and has proven injuries as defined under the Award, he or she may rely on the Award to exit the organisation. Depending on the number of firefighters who fail and the severity of the injury, this could become expensive for the NSW Government. In 2012–13, the average death and disability settlement was approximately \$170,000.

We would argue that firefighters deemed unfit by the ongoing fitness assessment alone should not be able to rely on the Award as a means to leave the organisation. In this circumstance, it will be important for Fire and Rescue NSW to rigorously assess firefighters to ensure the provisions of the Award only apply to those who clearly meet the on and off duty injury criteria.

Other potential impacts of such a process also need to be carefully managed. They include issues such as:

- negative effects on staff morale
- industrial consequences
- how those who fail the assessment will be assisted to improve their health and fitness
- attraction and retention of retained firefighters.

Recommendations

Fire and Rescue NSW should, by December 2014:

- introduce an ongoing health and fitness assessment for firefighters. This should:
 - be mandatory
 - define frequency of assessment.
- implement measures that:
 - require firefighters, as part of their duties, to undertake activities to maintain their fitness
 - assist firefighters who fail their assessment to regain the required fitness standard
 - manage firefighters who continually fail assessments including terminating employment either through the Crown Employees (Fire and Rescue NSW Firefighting Staff Death and Disability) Award or the Fire Brigades Regulation 2008.

NSW Rural Fire Service

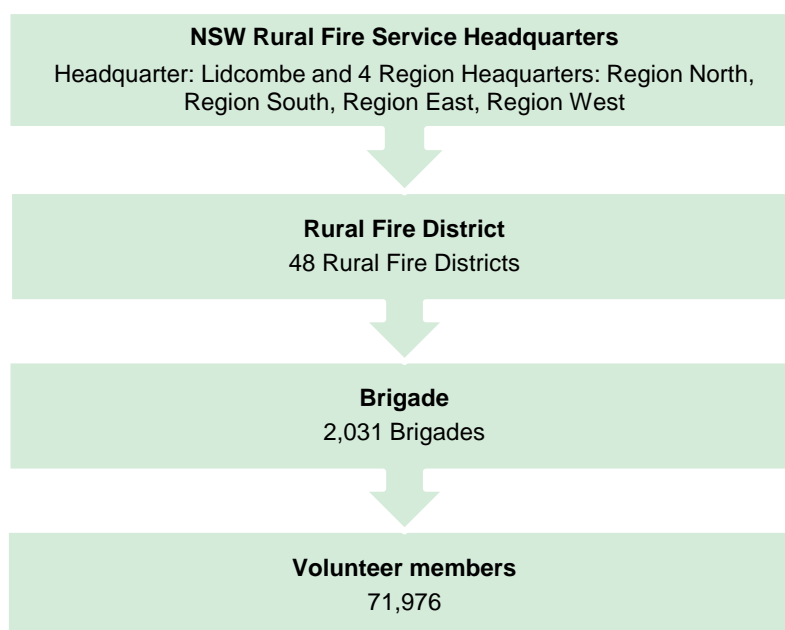
4. Background

The NSW Rural Fire Service is the lead combat agency for bush fires in New South Wales, working closely with other agencies to respond to a range of other emergencies including structure fires, motor vehicle accidents and storms that occur within rural fire districts.

The NSW Rural Fire Service is made up of approximately 72,000 volunteer members, operating in over 2,000 brigades and supported by around 900 paid staff.

All volunteers need to be a part of at least one brigade. A brigade ranges from ten to 80 volunteers and each brigade is led by a brigade captain.

Exhibit 16: Operational structure of the NSW Rural Fire Service



Source: NSW Rural Fire Service 2014.

Volunteer members with NSW Rural Fire Service can undertake various roles

As volunteers, members can undertake various roles. They include:

- bush firefighting – fighting wildfires (bush, grass and shrub)
- village firefighting – fighting structural and vehicle fires
- bush firefighting support – provide support in the vicinity of a bush fire
- catering support – assist with providing catering services
- communications support – operate fire communications unit.

In 2012–13, the NSW Rural Fire Service responded to 23,436 incidents, with grass fires the most common, followed by motor vehicle accidents.

Exhibit 17: Incidents attended

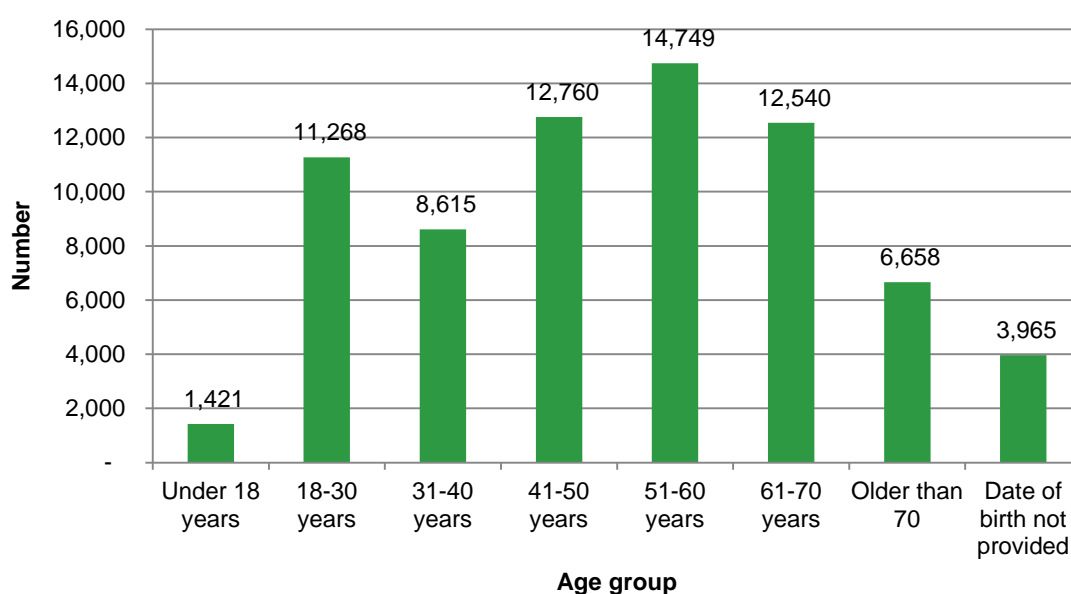
Incident type	2012–13	2011–12	2010–11
Motor vehicle accidents	3,881	4,211	4,016
False alarms	1,777	2,020	2,201
Grass fires	4,149	1,552	2,316
Bush fires	3,325	2,602	1,897
Vehicle fires	1,638	1,500	1,462
Controlled burns	1,088	964	1,095
Building fires	957	849	846
Smoke scare	1,109	685	864
Refuse fires	608	592	788
Oil spills	214	252	461
Assist other agencies	258	318	265
Flood	22	58	120
Other	4,410	3,310	2,499
Total	23,436	18,913	18,830

Source: NSW Rural Fire Service Annual Report 2012–13.

NSW Rural Fire Service attended to over 23,000 incidents in 2012–13

The age profile shows that 65 per cent of all volunteer members, whose date of birth is known, are over the age of 40 years old.

Exhibit 18: NSW Rural Fire Service age profile at 2012–13



Source: NSW Rural Fire Service 2014.

Key findings

5. Is there a fitness standard for firefighters and are they regularly assessed against it?

Finding: Those who intend to join NSW Rural Fire Service as a volunteer member must be capable of performing the functions of the brigade. However, there is no specific physical and psychological fitness standard like that of Fire and Rescue NSW.

Physical and psychological fitness is self-assessed by volunteers. This is supported by informal monitoring by brigade captains.

There is no ongoing requirement for volunteer members to maintain a level of fitness, except for those undertaking specialised roles such as remote area firefighters.

The NSW Rural Fire Service has adopted a 'self-management' approach to the health and fitness of its volunteer members. However, the NSW Rural Fire Service needs to ensure that those undertaking tasks such as bush firefighting, are fit to safely undertake their roles.

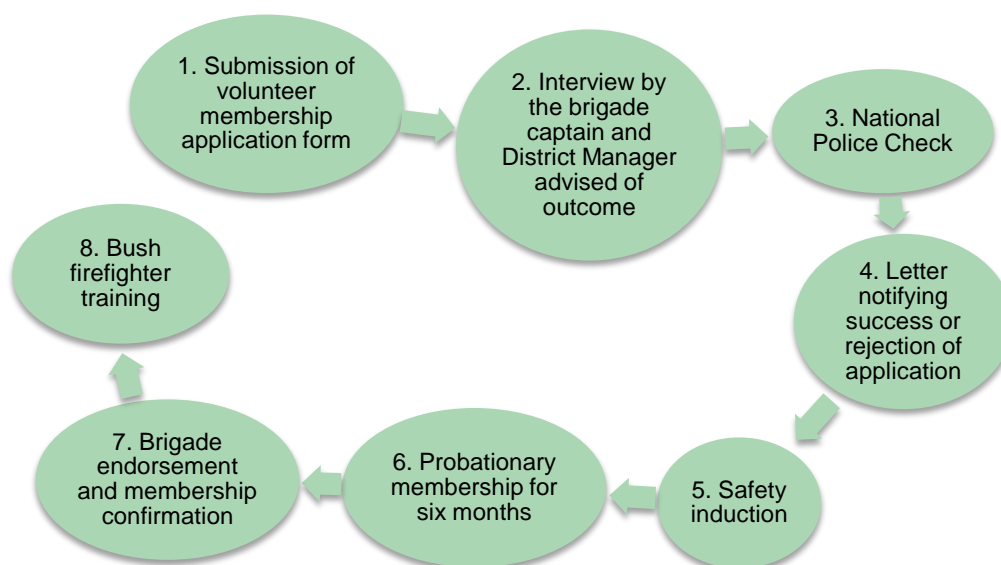
The Service Standard of the NSW Rural Fire Service states that those who intend to join as a volunteer member must be capable of performing the functions of the brigade. It recognises the work undertaken by the NSW Rural Fire Service is demanding, both physically and mentally. The standard also requires volunteer members to be capable of carrying out their duties without endangering their safety, the safety of other members and the public.

5.1 Fitness is self-assessed by volunteer members

When applying for membership, volunteer members must self-assess and declare any medical conditions that could adversely affect their own safety and the safety of others.

Information is also requested on any disabilities, including long-term medical conditions, psychiatric conditions, stroke, loss of sight or hearing, and restrictions to physical activities. Providing this information, however, is voluntary.

Exhibit 19: Recruitment process for volunteer firefighters



Source: NSW Rural Fire Service 2014.

Volunteer members must be capable of performing the functions of a brigade

There is no specific physical or psychological fitness standard or assessment to join the organisation such as the one adopted by Fire and Rescue NSW.

The current approach of self-assessment and declaration by volunteers has its risks and benefits. The benefits are that it:

- encourages members of the public to volunteer as there are no stringent requirements and costs
- does not exclude anyone who is willing to assist in emergencies
- promotes the availability of a large number of volunteers in emergencies.

The risks include:

- passionate volunteers deliberately not declaring physical and psychological conditions for the fear of being excluded
- unfit volunteers may be performing high risk tasks beyond their capability
- safety of unfit volunteers and their team members may be compromised.

Brigade captains and volunteers we met with raised similar concerns.

Exhibit 20: Comments by volunteers

- The issue of fitness has been looked at but not implemented in the fear that people will not join.
- Some districts wanted to undertake light voluntary fitness tests however this was not encouraged.
- There is no standard way of recruiting volunteers; there are no standard interview questions.
- There is no standard questionnaire to assess psychological background.
- There is a need for independent assessment whether a volunteer returning from injury is fit for active firefighting.
- If there is a fire during the day, mostly retired people between the ages of 50 and 70 would respond but there are no processes to determine their fitness and capacity to fight fires.
- There is no benchmarking on fitness initiatives which work well in the districts.
- There are no programs on lifestyle choices to encourage fitness.

Source: Audit Office research 2014.

5.2 A risk-based approach to fitness

After recruitment and initial training, there are many different roles for a volunteer in the NSW Rural Fire Service, from support roles, bush and village firefighters to specialist teams.

The NSW Rural Fire Service informed us that it adopts a risk-based approach in establishing fitness standards for its firefighters. This depends on the firefighting tasks and their risks to health and safety. Not all of the roles carried out by these volunteers are safety critical roles.

We conclude that the current service standard applied by the NSW Rural Fire Service and the subsequent continuous self-assessment are appropriate for non-specialist positions.

However, the current arrangements rely heavily on the integrity of volunteers in their self-assessment and on the ability of brigade commanders to identify volunteers at particular risk and allocate them tasks accordingly. Brigade captains we met mentioned that ensuring members' safety in relation to fitness is a continuous challenge. Having a practical tool to assist them with addressing priorities in relation to monitoring individual health and physical fitness would be helpful. The NSW Rural Fire Service needs to ensure that the risks in these areas are mitigated.

From the current information, we did not find that these risks currently translate into higher than expected levels of injury or safety compromise. Overall, worker's compensation claims by volunteer members have been low. Since 2005, there have been two volunteer member fatalities due to cardiac arrest. The first was an operational death in 2005, while driving a fire truck. The second was a non-operational death in 2011, while driving to a station to perform maintenance.

In 2012–13, there were 318 worker's compensation claims made, totaling \$893,000. The number of claims in 2012–13 has increased. However, the NSW Rural Fire Service informed us that this is due to a higher number of fires during the 2012–13 fire season.

Exhibit 21: Worker's compensation claims for volunteer firefighters

Nature of claim	2012–13		2011–12		2010–11	
	Number of claims	\$	Number of claims	\$	Number of claims	\$
Physical						
Trauma to muscles, tendons, joints and ligaments	53	169,659	23	240,718	60	296,379
Fractured skull and facial bones	7	42,063	4	109,710	10	159,126
Soft tissue injury due to trauma	56	133,232	29	70,352	-	-
Contusion, bruising, superficial crushing	16	11,653	6	45,171	3	1,034
Laceration or open wound	23	106,896	9	3,222	17	17,416
Hot burn	23	94,852	5	1,093	5	747,081
Others	137	274,999	53	101,189	33	515,029
Psychological						
Mental diseases	2	58,873	3	4,427	3	4,266
Post-traumatic stress disorder	1	616	-	-	-	-
Total	318	892,844	132	575,881	131	1,740,331

Source: WorkCover NSW 2014.

Specialised roles require specific qualifications and physical fitness. They include, for example, remote area firefighters. These firefighters are required to maintain a high level of fitness to stay employed in the role. There is also an ongoing fitness requirement against which these firefighters are periodically assessed.

Exhibit 22: Specialised role - Remote Area Firefighters

Remote Area Firefighters travel to and fight bush fires away (e.g. a few kilometres) from tanker support. Remote area firefighters hike into the bush a considerable distance with appropriate firefighting equipment as a self-sustaining or air supported team. As at September 2013, there were 169 qualified Remote Area Firefighters at the NSW Rural Fire Service.

NSW Rural Fire Service qualifications

Before undertaking any practical remote area firefighting activities, a member must have successfully passed the medical and fitness tests specified for remote area firefighting and have a willingness to fly in an aircraft.

Medical examination

A medical examination based on specialised assessment is completed by a physician. This certifies that the candidate is medically fit to train for and undertake the Arduous Pack test. The medical examination includes an assessment of several factors including:

- a) occupational history – for example, firefighting experience
- b) social history – for example, smoking, drinking alcohol and exercise routine
- c) medical history – for example, anxiety, psychiatric and mental health problems, heart attack and back problems.

Ongoing fitness test (Arduous Pack Test)

Remote Area Firefighters are required to pass an annual task based assessment to the arduous level. The Arduous Pack Test requires the candidate to walk a distance of 4.83 km over level ground wearing a 20.4 kg weight vest, or 15.4 kg weight vest if body weight is less than 68 kg. The walk must be completed in 45 minutes or less.

Candidates are required to successfully complete the annual task based assessment to remain deployed.

Source: NSW Rural Fire Service 2014.

Refer to Appendix 4 for details on the initial and ongoing fitness standards and assessment for other specialist roles within the NSW Rural Fire Service.

In the specialist teams, there are fitness standards and ongoing fitness testing, but there is no such requirement for volunteer members who fight bush fires. These include bush firefighters and village firefighters. This raises concerns that volunteer members, who are exposed to the same consequences as specialised firefighters, do not have the required fitness to safely and effectively undertake their tasks.

Volunteer fire service agencies in other jurisdictions also rely on self-declaration of medical and fitness conditions. Refer to Appendix 5 for details.

However, some have also developed ongoing fitness assessments based on the type of role and the level of risk involved. For example, the Australian Capital Territory (ACT) Rural Fire Service primarily assists with the suppression of bush and grass fires in rural and remote areas. A volunteer member self-declares their health and fitness to join the ACT Rural Fire Service. There is also a fitness test undertaken annually to ensure volunteer members possess the level of fitness required for the role.

Specialist roles have fitness standards and on-going fitness assessments

Exhibit 23: Fitness requirements for the ACT Rural Fire Service

A fitness test is dependent on the type of role undertaken, such as:

Light test: Incident Control Centre staff, aviation radio operator.

Moderate test: Firefighter, ranked officer, air observer, interstate deployments.

Arduous test: Remote area firefighter, rapid aerial response firefighter, international deployment.

These tests are done on an annual basis by brigades.

Fitness requirement	Test	Distance	Pack weight	Time
Light	Walk test	1.6 km	None	16 min
Moderate	Pack test	3.2 km	11 kg	30 min
Arduous	Pack test	4.8 km	20 kg	45 min

Source: Australian Capital Territory Rural Fire Service 2014.

NSW Rural Fire Service needs to ensure volunteers undertaking high risk roles are fit for duty

Currently, NSW Rural Fire Service does not know how many volunteer members actively fight bush fires or undertake other high risk roles, where a fitness assessment might be warranted. The NSW Rural Fire Service informed us that it is currently in the process of classifying all volunteer members according to their roles.

We consider that a rigorous fitness assessment is not appropriate for all the roles in a volunteer organisation like the NSW Rural Fire Service. However, we do consider that some measures should be taken to mitigate the risks posed to certain roles by the present arrangement.

The NSW Rural Fire Service needs to ensure that those undertaking tasks such as bush firefighting are fit to safely undertake their roles. This is also in light with its obligations under the current *Work Health and Safety Act 2011*, to volunteer workers.

Recommendations

The NSW Rural Fire Service should, by April 2015:

- undertake a risk analysis on the current approach to managing the health and fitness of volunteer members, particularly those who actively fight fires
- introduce health and fitness initiatives to encourage volunteer firefighters to maintain their fitness
- establish a checklist to assist brigade captains in managing the health and fitness of their members
- consider a three-year renewal of self- assessment and declaration of medical conditions by volunteers.

Appendices

Appendix 1: About the audit

Audit objective

The audit examined whether Fire and Rescue NSW and NSW Rural Fire Service know that firefighters are fit for duty.

Audit lines of inquiry

To assess the performance of the two agencies against this objective we addressed the following questions:

- Is there a fitness standard for firefighters?
- Are firefighters regularly assessed against the fitness standard?

Audit scope and criteria

The audit focused on relevant fitness strategies, policies and procedures and the implementation of these strategies in assessing and providing assurance on the fitness levels of firefighters.

We considered whether:

- there are fitness standards for the recruitment of firefighters and ongoing requirements to maintain fitness levels
- there are clear processes to ensure firefighters are fit for duty
- there are clear strategies to assess the fitness of firefighters on an ongoing basis.
- there is regular assessment and monitoring of the fitness of firefighters
- firefighters have access to facilities required to maintain their fitness levels
- there are mechanisms for Fire and Rescue NSW and the NSW Rural Fire Service to receive feedback on the fitness levels of its firefighters
- there are strategies for Fire and Rescue NSW and to deal with firefighters unfit for duty.

The audit did **not** focus on:

- other emergency services personnel
- the skill levels of firefighters within Fire and Rescue NSW and the NSW Rural Fire Service
- other staff members within Fire and Rescue NSW and the NSW Rural Fire Service who do not fight fires
- operational activities and incident management practices within Fire and Rescue NSW and the NSW Rural Fire Service
- Community Fire Unit volunteers.

Audit approach

The audit acquired subject matter expertise and evidence through:

- examining:
 - research reports on the fitness of firefighters
 - information on firefighting agencies in other jurisdictions
 - relevant policies, legislation, strategies, guidelines in relation to health and fitness
 - data from Fire and Rescue NSW, the NSW Rural Fire Service, NSW Public Service Commission and WorkCover NSW.
- interviewing permanent, retained and volunteer firefighters at Fire and Rescue NSW and the NSW Rural Fire Service
- discussions with key stakeholders.

Field work visits

We had discussions with relevant staff at the head office of the two agencies. We also interviewed staff from Fire and Rescue NSW and the NSW Rural Fire Service stations and offices in the following locations:

- Sydney Central Business District
- Parramatta
- Forestville
- Bankstown
- Busby
- Liverpool
- Campbelltown
- Camden
- Blacktown
- Mount Druitt
- Glendenning
- Nowra
- Shoalhaven
- Newcastle
- Charlestown
- Wagga Wagga
- Dubbo
- Coffs Harbour

Audit selection

We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standards ASAE 3500 on performance auditing, and to reflect current thinking on performance auditing practices. Our processes have also been designed to comply with the auditing requirements specified in the *Public Finance and Audit Act 1983*.

Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by Fire and Rescue NSW and the NSW Rural Fire Service. In particular we wish to thank our liaison officers and staff who participated in interviews and provided material relevant to the audit.

We were also assisted by staff from the NSW Public Service Commission, WorkCover NSW, Country Fire Authority Victoria, Fire Brigade Employees' Union, the Victorian Auditor-General's Office and the Australasian Fire and Emergency Service Authorities Council.

Audit team

The team leader for the performance audit was Angelina Pillay, assisted by Mai-Ann Nguyen. Sean Crumlin provided direction and quality assurance.

Audit cost

Including staff costs and overheads, the estimated cost of the audit is \$285,000.

Appendix 2: Interstate comparison – fire service agencies

Fire service agency	Physical and psychological fitness standard	Ongoing physical and psychological fitness standard
Fire and Rescue NSW	<p>Physical Physical Aptitude Test tasks:</p> <ul style="list-style-type: none"> reduced visibility search ladder raise and lower simulation single-sided jerry can carry stair climb with single-sided jerry can carry rescue tool static holds repeated hose drag simulated fire attack firefighter rescue. <p>Psychological</p> <ul style="list-style-type: none"> Pre-employment health assessment identifying mental health conditions. 	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>
Victoria Metropolitan Fire Brigade	<p>Physical</p> <ul style="list-style-type: none"> Physical fitness test: multi-stage shuttle run, required to achieve a level of 9.6 (Level 9, Shuttle 6 – which requires an oxygen uptake of 45 ml/kg/min) Physical aptitude tests: <ul style="list-style-type: none"> Part 1: Ladder climb Part 2: Firefighting task course. <p>Psychological</p> <ul style="list-style-type: none"> Psychological profile questionnaire – ensures applicants align with the psychological profile of a firefighter. Measures personality traits including problem solving ability, work related attitudes and values and working in a team environment Pre-employment medical by the Brigade's Medical Officer. Candidates are required to meet the medical fitness for firefighters and complete a drug screen, which may result in being deemed unfit for firefighting. 	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>
Victoria Country Fire Authority	<p>Physical</p> <ul style="list-style-type: none"> Physical assessment – beep test Physical challenge – confined space, hose haul, hose hold and drag, casualty rescue, balance beam, couplings/dexterity, ladder climb. <p>Psychological</p> <ul style="list-style-type: none"> Personality Profile: California Psychological Inventory – a psychological questionnaire testing interpersonal skills and attitudes and working in a team environment. 	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>
Queensland Fire and Rescue Service	<p>Physical</p> <ul style="list-style-type: none"> Fitness assessment: shuttle run to a level of 8.7 (Level 8, Shuttle 7 – requiring an oxygen uptake of approximately 42 ml/kg/min) Physical abilities assessment – stair climb, hose drag, equipment carry, forcible entry, search, rescue, ceiling breach and pull. <p>Psychological</p> <ul style="list-style-type: none"> Clinical psychological assessment – tests knowledge, skills, learning abilities and characteristics (firefighter profile). 	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>

Fire service agency	Physical and psychological fitness standard	Ongoing physical and psychological fitness standard
Western Australia Department of Fire and Emergency Services	<p>Physical</p> <ul style="list-style-type: none"> Physical fitness assessment – beep test, simulated heavy tool operation, simulated hose drag, height anxiety test, confined space anxiety tunnel crawl, simulated casualty rescue, equipment handling, hose coupling Functional movement assessment - simulates tasks performed by firefighters and candidates are required to perform the tasks multiple times. <p>Psychological</p> <ul style="list-style-type: none"> Medical assessment – conducted by a medical practitioner, consists of a medical history check for illnesses which may physically or medically prevent the candidate from carrying out firefighting roles. 	<p>Physical</p> <p>There is no ongoing physical fitness standard.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness standard.</p>
Tasmania Fire Service	<p>Physical</p> <ul style="list-style-type: none"> Physical fitness assessment – shuttle run test. Medical clearance by a medical practitioner is required to complete the fitness assessment Physical abilities assessments – tests relating to operational tasks performed by firefighters. The test measures five abilities: Balance and coordination, work in enclosed space, anaerobic capacity and agility, work at height and physical strength and endurance. <p>Psychological</p> <ul style="list-style-type: none"> Psychological assessment – a questionnaire to determine the applicant's psychological profile against the profile of the type of person who is most likely to be successful in the role of a firefighter. 	<p>Physical</p> <p>There is no ongoing physical fitness standard.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness standard.</p>
South Australia Metropolitan Fire Service	<p>Physical</p> <ul style="list-style-type: none"> Physical aptitude tests: <ol style="list-style-type: none"> Stage 1 – a 20 metre shuttle run test designed to measure aerobic fitness Stage 2 – hose hold, tunnel crawl, casualty rescue, ceiling breach and pull, ladder raise, extension and lower, tower climb and descent, container haul, forced entry, high pressure hose line drag, equipment carry and encapsulated suit test. <p>Psychological</p> <ul style="list-style-type: none"> Personality profiling – questions to identify candidates most suitable to the firefighting role Medical examination – factors include psychiatric: anxiety state, depressive disorder, confined space disorder. 	<p>Physical</p> <p>There is no ongoing physical fitness standard.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness standard.</p>
Northern Territory Fire and Rescue Service	<p>Physical</p> <ul style="list-style-type: none"> Physical fitness assessment – multi stage shuttle run, chain cutting, cutter carry, drum lift, dummy drag, branch control, hose drag and confined space anxiety test, height anxiety-haul aloft. <p>Psychological</p> <ul style="list-style-type: none"> Written assessment – includes psychometric testing, tests personality traits for a firefighter profile. 	<p>Physical</p> <p>There is no ongoing physical fitness standard.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness standard.</p>
Australian Capital Fire and Rescue	<p>Physical</p> <ul style="list-style-type: none"> Physical fitness assessment: beep test, obtain a level of 9.6 (Level 9, Shuttle 6 – which requires an oxygen uptake of 45 ml/kg/min). <p>Psychological</p> <ul style="list-style-type: none"> Psychological testing – tests psychological suitability for firefighting role. 	<p>Physical</p> <p>There is no ongoing physical fitness standard.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness standard.</p>

Source: Audit Office research 2014.

Appendix 3: Interjurisdiction comparison – fire service agencies

	Physical and psychological fitness standard	Ongoing physical and psychological fitness standard
Scotland – some regions	<p>Physical</p> <p>There is a physical fitness standard at entry. Candidates undergo six physical tests which include:</p> <ul style="list-style-type: none"> • Ladder Climb • Casualty Evacuation • Ladder lift/lower simulation • Enclosed spaces • Equipment Assembly • Equipment Carry. <p>Psychological</p> <p>There is a psychological fitness standard at entry and an assessment is conducted to test psychological fitness. The psychological test measures:</p> <ul style="list-style-type: none"> • working with numbers • understanding information and situational awareness • problem solving. 	<p>Physical</p> <p>Some regions in Scotland, including both Dumfries and Galloway require their firefighters to undertake a mandatory fitness test every three years using an exercise bike. In addition to an occupational health assessment measuring heart rate, blood pressure and body fat.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness assessment.</p>
France – Paris	<p>Physical.</p> <p>BSPP Central Fire Brigade firefighters are required to have a medical and physical fitness assessment at entry.</p> <p>Physical assessment – requirement to run between two studs spaced 20 metres apart at a pace dictated by a signal.</p> <p>Psychological</p> <p>There is a psychological fitness standard at entry. Candidates undergo a psychometric test which measure :</p> <ol style="list-style-type: none"> 1) cognitive function 2) personality, and 3) stress. 	<p>Physical</p> <p>Parisian firefighters are required to spend a minimum of three hours a day in the gymnasium focusing on strength and balance training.</p> <p>Psychological</p> <p>There is no ongoing psychological fitness assessment.</p>

Source: Audit Office research 2014.

Appendix 4: Fitness requirements for specialist roles in the NSW Rural Fire Service

Breathing Apparatus Operators (BAO)

The Breathing Apparatus Operators program is an internal program for members who undertake interior structural (or similar) firefighting using Compressed Air Breathing Apparatus (CABA). It is designed to take a member with existing Village Firefighting knowledge and skills and enable them to attack fires inside structures and carry out similar activities using breathing apparatus when safe. Breathing Apparatus Operators is a specialist role which requires a medical examination at entry. There are currently 706 BAO qualified volunteer firefighters at the NSW Rural Fire Service.

NSW Rural Fire Service qualifications

Before commencing training or assessment, a member must:

- be able to understand, speak, read and write the English language sufficiently well to communicate effectively with other firefighters in a team, and operate breathing apparatus and the associated breathing apparatus control system
- be certified as competent in Village Firefighting or its equivalent competency
- have successfully passed the medical examination specified for BAO
- must possess a current approved first aid certificate.

Medical examination

The medical examination form assesses:

- psychological disorders
- physicians questionnaire, including a recommendation for medical re-examination :
 - a) standard, that is, once initially, then every two years after 45 years of age
 - b) every two years, regardless of age
 - c) every year, regardless of age.

Shelf life and recent experience requirements

BAO certification has a shelf life of 12 months, with a recent experience requirement of three months. This means a person should not use CABA at an actual incident unless:

- in the past three months they have operated a CABA set for all or most of the operational duration of one cylinder at either an incident or exercise
- in the past 12 months they have been assessed as competent in an interior structural firefighting exercise or an actual operation
- they possess a current CABA medical certificate and a current first aid certificate.

Source: NSW Rural Fire Service 2014.

State mitigation support crew

State mitigation crew support volunteer brigades across the State through hazard reduction preparation and the Assist Infirm Disabled and Elderly Residents (AIDER) program. Crews also provide operational and logistical support at significant incidents, for example, fire suppression and setting up camps for volunteer firefighters.

State mitigation support crew members are temporary employees, with employment ranging from ten months to three years. These are salaried employees. Applicants need to pass the assessment process including an interview, a medical assessment, a physical fitness test and a functional test. There are currently 112 crew members.

The physical fitness test consists of an arduous pack test and a functional test.

Arduous pack test: a 4.83 km walk over level ground wearing a 20.4 kg weight vest, or a 15.4kg weight vest if body weight is less than 68 kg. The walk must be completed in 45 minutes or less.

Functional test: Consists of seven tasks measuring upper and lower body strength, manual dexterity and power and endurance. The assessment requires successful completion of the tasks including:

- vehicle load/vehicle unload
- hose reel drag and recover
- fuel drum roll and lifting
- timber drag simulation
- timber flip simulation
- wood chop simulation
- brush cutter simulation.

Source: NSW Rural Fire Service 2014.

Helicopter winch skills

Helicopter winch skills is an internal NSW Rural Fire Service specialist program for certified Remote Area Firefighters who are members of helicopter winch insertion capable RAF teams. It is designed to take a member with existing remote area firefighting knowledge and skills and enable them to be winched into remote locations from a helicopter.

There are currently 151 qualified volunteer firefighters with helicopter winch skills at the NSW Rural Fire Service.

NSW Rural Fire Service qualifications

Before commencing training or assessment a member must have:

- Remote Area Firefighting certification, or equivalent
- Aviation Basic Knowledge certification, or equivalent.

Source: NSW Rural Fire Service 2014.

Appendix 5: Interstate comparison – volunteer fire service agencies

Fire service agency	Physical and psychological fitness standard	Ongoing physical and psychological fitness standard
NSW Rural Fire Service	Volunteers are required to submit a medical self-declaration. All candidates are required to undergo a National Police Check and satisfy a six month probationary period. Physical There is no physical assessment at entry. Psychological There is no psychological assessment at entry.	Physical There is no ongoing physical fitness standard. Psychological There is no ongoing psychological fitness standard.
Country Fire Authority Victoria	Volunteers are required to submit a duty of disclosure form at entry. All candidates are required to undergo a National Police Check prior to being accepted as a volunteer. Physical There is no physical assessment at entry. Psychological There is no psychological assessment at entry.	Physical There is no ongoing physical fitness standard. Psychological There is no ongoing psychological fitness standard.
Western Australia Volunteer Fire and Rescue Service	All candidates are required to undergo National Police Check prior to being accepted as a volunteer. Physical There is no physical assessment at entry. Psychological There is no psychological assessment at entry.	Physical There is no ongoing physical fitness standard. Psychological There is no ongoing psychological fitness standard.
Northern Territory Fire and Rescue Service	At entry, candidates complete a registration form. All candidates are required to undergo a National Police Check prior to being accepted as a volunteer. Physical There is no physical assessment at entry. Psychological There is no psychological assessment at entry.	Physical There is no ongoing physical fitness standard. Psychological There is no ongoing psychological fitness standard.
Tasmania Fire Service	At entry, volunteers may also be asked to have a medical check carried out with a doctor if there is intention to be an active firefighter in a brigade that uses breathing apparatus. All candidates are required to undergo a National Police Check prior to being accepted as a volunteer and satisfy a three month probation period. Physical There is no physical assessment at entry. Psychological There is no psychological assessment at entry.	Physical There is no ongoing physical fitness standard. Psychological There is no ongoing psychological fitness standard.

Fire service agency	Physical and psychological fitness standard	Ongoing physical and psychological fitness standard
South Australian Country Fire Service	<p>All members are required to undergo a National Police Check and satisfy a probation period of six months once accepted into the local brigade.</p> <p>Physical There is no physical assessment at entry.</p> <p>Psychological There is no psychological assessment at entry.</p>	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>
Queensland Rural Fire Service	<p>All candidates are required to undergo a National Police Check prior to being accepted as a volunteer. Candidates are required to complete a medical self-assessment.</p> <p>Physical There is no physical assessment at entry.</p> <p>Psychological There is no psychological assessment at entry.</p>	<p>Physical There is no ongoing physical fitness standard.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>
Australian Capital Territory Rural Fire Service	<p>At entry, candidates complete an application form. There is a requirement to undergo a medical examination with a general practitioner. All members are required to undergo a National Police Check and satisfy a probation period of six months once accepted into the local brigade.</p> <p>Physical There is no physical assessment at entry.</p> <p>Psychological There is no psychological assessment at entry.</p>	<p>Physical There is an annual physical fitness assessment for volunteer members based on positions held and work categories. Front line fire fighters are required to successfully pass a pack walk test carrying a load of 11 kg, walking a distance of 3.2 km within 30 minutes.</p> <p>Psychological There is no ongoing psychological fitness standard.</p>

Source: Audit Office research 2014.

Performance auditing

What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of a government agency or consider particular issues which affect the whole public sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in the *Public Finance and Audit Act 1983*.

Why do we conduct performance audits?

Performance audits provide independent assurance to parliament and the public.

Through their recommendations, performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also focus on assisting accountability processes by holding managers to account for agency performance.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, the public, agencies and Audit Office research.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing. They can take up to nine months to complete, depending on the audit's scope.

During the planning phase the audit team develops an understanding of agency activities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the agency or program activities are assessed. Criteria may be based on best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork the audit team meets with agency management to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with agency management to check that facts presented in the draft report are accurate and that recommendations are practical and appropriate.

A final report is then provided to the CEO for comment. The relevant minister and the Treasurer are also provided with a copy of the final report. The report tabled in parliament includes a response from the CEO on the report's conclusion and recommendations. In multiple agency performance audits there may be responses from more than one agency or from a nominated coordinating agency.

Do we check to see if recommendations have been implemented?

Following the tabling of the report in parliament, agencies are requested to advise the Audit Office on action taken, or proposed, against each of the report's recommendations. It is usual for agency audit committees to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee (PAC) to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report is tabled. These reports are available on the parliamentary website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

Internal quality control review of each audit ensures compliance with Australian assurance standards. Periodic review by other Audit Offices tests our activities against best practice.

The PAC is also responsible for overseeing the performance of the Audit Office and conducts a review of our operations every four years. The review's report is tabled in parliament and available on its website.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100.

Performance audit reports

No	Agency or issues examined	Title of performance audit report or publication	Date tabled in parliament or published
239	Fire and Rescue NSW NSW Rural Fire Service	<i>Fitness of firefighters</i>	1 April 2014
238	Transport for NSW Department of Attorney General and Justice Department of Finance and Service Roads and Maritime Services NSW Police Force Department of Education and Communities	<i>Improving legal and safe driving among Aboriginal people</i>	19 December 2013
237	Department of Education and Communities	<i>Management of casual teachers</i>	3 October 2013
236	Department of Premier and Cabinet Ministry of Health – Cancer Institute NSW Transport for NSW – Rail Corporation NSW	<i>Government Advertising 2012–13</i>	23 September 2013
235	NSW Treasury NSW Police Force NSW Ministry of Health Department of Premier and Cabinet Department of Attorney General and Justice	<i>Cost of alcohol abuse to the NSW Government</i>	6 August 2013
234	Housing NSW NSW Land and Housing Corporation	<i>Making the best use of public housing</i>	30 July 2013
233	Ambulance Service of NSW NSW Ministry of Health	<i>Reducing ambulance turnaround time at hospitals</i>	24 July 2013
232	NSW Health	<i>Managing operating theatre efficiency for elective surgery</i>	17 July 2013
231	Ministry of Health NSW Treasury NSW Office of Environment and Heritage	<i>Building energy use in NSW public hospitals</i>	4 June 2013
230	Office of Environment and Heritage - National Parks and Wildlife Service	<i>Management of historic heritage in national parks and reserves</i>	29 May 2013
229	Department of Trade and Investment, Regional Infrastructure and Services – Office of Liquor, Gaming and Racing Independent Liquor and Gaming Authority	<i>Management of the ClubGRANTS scheme</i>	2 May 2013
228	Department of Planning and Infrastructure Environment Protection Authority Transport for NSW WorkCover Authority	<i>Managing gifts and benefits</i>	27 March 2013
227	NSW Police Force	<i>Managing drug exhibits and other high profile goods</i>	28 February 2013
226	Department of Education and Communities	<i>Impact of the raised school leaving age</i>	1 November 2012
225	Department of Premier and Cabinet Division of Local Government	<i>Monitoring Local Government</i>	26 September 2012
224	Department of Education and Communities	<i>Improving the literacy of Aboriginal students in NSW public schools</i>	8 August 2012
223	Rail Corporation NSW Roads and Maritime Services	<i>Managing overtime</i>	20 June 2012

No	Agency or issues examined	Title of performance audit report or publication	Date tabled in parliament or published
222	Department of Education and Communities	<i>Physical activity in government primary schools</i>	13 June 2012
221	Community Relations Commission For a multicultural NSW Department of Premier and Cabinet	<i>Settling humanitarian entrants in NSW: services to permanent residents who come to NSW through the humanitarian migration stream</i>	23 May 2012
220	Department of Finance and Services NSW Ministry of Health NSW Police Force	<i>Managing IT Services Contracts</i>	1 February 2012
219	NSW Health	<i>Visiting Medical Officers and Staff Specialists</i>	14 December 2011
218	Department of Family and Community Services Department of Attorney General and Justice Ministry of Health NSW Police Force	<i>Responding to Domestic and Family Violence</i>	8 November 2011
217	Roads and Traffic Authority	<i>Improving Road Safety: Young Drivers</i>	19 October 2011
216	Department of Premier and Cabinet Department of Finance and Services	<i>Prequalification Scheme: Performance and Management Services</i>	25 September 2011
215	Roads and Traffic Authority	<i>Improving Road Safety: Speed Cameras</i>	27 July 2011

Performance audits on our website

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website www.audit.nsw.gov.au.

Our vision

To make the people of New South Wales
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To perform high quality independent audits
of government in New South Wales.

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