



SECTION 4: PERFORMANCE

COMMUNITY SAFETY PREVENTION AND COMMUNITY PREPAREDNESS

PRIORITIES

Identifying and addressing the safety needs of at-risk community groups

Running effective community education events and campaigns

Conducting local station-based community prevention and engagement activities

Developing strategic partnerships to enhance community safety

Increasing community and business preparedness for and resilience in emergencies

Providing regulatory, advisory, inspection and investigation services

Researching, identifying and addressing major community risks



HIGHLIGHTS

- Visited the homes of 11 419 seniors to install smoke alarms or check batteries
- Enhanced child fire safety by delivering 2854 Fire Ed and Pre Ed presentations to primary schools and preschools
- Inspected 1077 commercial, industrial and residential buildings to help ensure a safer built environment
- Increased the number of Community Fire Units to 605 involving over 7000 volunteers, thus increasing community resilience and preparedness for bushfires
- Promoted community fire safety through major events such as Fire Prevention Week, Open Day, the Winter Fire Safety Campaign and other prevention programs in partnership with sponsoring partners
- Undertook research after the tragic Quakers Hill nursing home fire and provided information to assist the NSW Government with proposals for regulatory changes
- Improved business preparedness for emergencies by delivering 1024 workplace emergency management training courses to 7262 participants
- Conducted specialist investigations into 269 fires and explosions, and determined the cause in 66% of incidents
- Carried out community education to inform industry and the public that smoke alarms were now mandatory in caravans, campervans and moveable dwellings
- Worked with the Deaf Society of NSW to secure NSW Government funding to subsidise 3500 special smoke alarms for the hearing impaired

FUTURE DIRECTIONS

Use research and improved technology and information gathering to identify hazards and at risk groups, allowing better targeting of prevention programs

Develop further strategies with other NSW Government agencies such as Housing NSW, the Department of Education and Communities and the Department of Family and Community Services – Ageing, Disability and Home Care to improve fire safety for at-risk groups

Develop a policy on residential sprinkler systems in conjunction with other Australian fire services

Continue developing relationships with materials manufacturers to improve safety for the community and fire officers

Use behavioural surveys to track community awareness of fire safety messages and assess current FRNSW information campaigns, in order to improve effectiveness of future prevention activities

Develop a system to ensure compliance with and maintenance of annual fire safety statements in cooperation with other NSW Government agencies, local councils and industry associations

Limit bushfire severity by carrying out annual hazard reductions in line with State Plan targets

Develop the use of social media to disseminate safety messages and promote prevention programs



On FRNSW Open Day, a small visitor climbs aboard the fire engine

‘NO FIRE DEATHS’ GOAL

FRNSW has adopted the goal of zero deaths in NSW from preventable fires. This provides a core target for FRNSW to strive for in its prevention, preparedness, response and recovery activities. Achieving the goal is based on three main strategies:

- planned and coordinated responses
 - having the right resources in the right place at the right time
- effective community safety programs
 - general State-wide programs as well as programs targeted to specific local risks, and
- fire research and safer buildings – making the design and maintenance of fire safety measures in buildings more effective.

Since early 2011, FRNSW has run forums to help its fire crews identify the demographic profile and emergency management risks in their local areas, and develop strategies to target key at-risk community groups. By 30 June 2012, 153 different platoons at metropolitan stations had participated in these forums, which were also presented at Area Commands and Regional Zone conferences. The forums will continue rolling out to all fire stations across the State.



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IDENTIFYING AND ADDRESSING THE SAFETY NEEDS OF AT-RISK COMMUNITY GROUPS

FRNSW runs a wide range of general fire safety education programs, but it also delivers campaigns tailored to segments of the community at greater risk from fire and other emergencies than the general population.

CHILDREN AND YOUNG PEOPLE

Pre Ed and Fire Ed children's fire safety education

FRNSW's Pre Ed and Fire Ed programs teach young children fire safety practices and behaviours which could save their lives and those of their families. Easily understood safety messages such as 'Get Down Low and Go, Go, Go' are taught to children from preschool to Year 2 in primary schools. During 2011/12 FRNSW fire officers delivered 2854 Pre Ed and Fire Ed presentations.

Brigade Kids website

FRNSW has developed an interactive multimedia children's website, www.brigadekids.com. The site incorporates games, puzzles, screensavers, sing-alongs, quizzes, interviews, video segments and other safety education materials. It aims to engage and teach children about home fire safety. It also includes advice for parents and teachers on how to educate children about fire safety. The site has proved popular, with 32 047 visitors and 468 908 page views during 2011/12.

Triple Zero (000) online game

FRNSW continued to lead the national Triple Zero Awareness Working Group to promote Australia's Triple Zero (000) emergency phone number. The Working Group, comprising representatives of major emergency call-taking agencies, has developed an online safety game, the Triple Zero Kids' Challenge. The game, which is available in English and six other languages, uses puzzles and checklists to teach primary school-aged children how to correctly identify and react to emergencies by using Triple Zero (000).



RescuEd

FRNSW is the largest provider of road accident rescue services in the State. As part of its prevention strategy, FRNSW delivers RescuEd, a road safety education program which aims to reduce the number of young people killed or injured on NSW roads. RescuEd is targeted at Years 7–10 students and features a car extrication demonstration; a video about a real life youth accident victim; and discussion of the causes, consequences and prevention of road accidents. During 2011/12 fire officers from FRNSW primary and secondary rescue crews gave 148 RescuEd presentations to high school students.

Top: Demonstrating to children how to "Get Down Low and Go, Go, Go"

Bottom left: The Brigade Kids website teaches children about home fire safety

Bottom right: Promoting awareness of Australia's Triple Zero (000) emergency phone number



FRNSW's Pre Ed and Fire Ed programs teach young children fire safety practices and behaviours which could save their lives.

Youth road safety

FRNSW again participated in the annual Australian Youth and Road Trauma Forum, a whole-of-government approach to youth road safety. Rescue personnel from FRNSW and other emergency services staged a crash simulation and demonstrated extrication of road accident victims. The Forum aims to reduce road fatality and injury rates among young people, and to raise awareness of injury prevention and trauma care services and resources. The 2011 Forum was attended by more than 12 000 year 10–12 students. FRNSW also participated in a number of local road safety forums and high school driver education programs.

Juvenile fire-lighting

FRNSW's Intervention and Fire Awareness Program seeks to reduce the number and severity of fires started by children. It includes home fire safety education, brochures and fact sheets, a free and confidential 24-hour phone service, and tailored advice aimed at

creating safer homes. Trained fire officers also make home visits and carry out home fire safety assessments, with follow-up calls to check if fire-lighting activities have stopped. During 2011/12 FRNSW received and managed 32 referrals from concerned parents and carers, or from fire officers who had responded to incidents of juvenile fire-lighting.

Youth justice conferences

The *Young Offenders Act 1997* sets out procedures for using youth justice conferencing to deal with young people who commit certain offences. They allow cautions and warnings to be issued rather than formal charges being laid against a young person. During the year FRNSW participated in eight of these conferences related to fire offences under the terms of a Memorandum of Understanding (MOU) with Juvenile Justice, NSW Department of Attorney General and Justice. A revised MOU between the two agencies was signed in 2011.

Left: A fire officer answers questions from school children visiting the station

Right: Teaching children to dial 000 in an emergency can save lives



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SENIORS

Older people are a key at-risk community group with a disproportionately higher fire fatality risk than the rest of the population. In 2011, 80% of fire-related fatalities were aged 60 years and over.

During the year, fire officers delivered 643 fire safety presentations to seniors groups in partnership with local councils, service providers, and other community organisations such as Probus, Meals on Wheels and the War Widows Guild. Fire officers also conducted 1185 other community safety activities involving seniors. This included staffing fire safety displays and distributing safety information at the Premier's Gala Concerts held at the Sydney Entertainment Centre during Seniors Week and in the lead-up to Christmas. Around 30 000 seniors attended these concerts.

FRNSW continued developing resources to educate NSW seniors about home fire safety. Last year FRNSW and sponsor Brooks Australia developed a fire safety DVD for seniors, narrated by well-known actor Henri Szeps from the award-winning ABC TV series 'Mother and Son'. During 2011/12 fire officers used the DVD extensively in fire safety presentations to seniors groups across NSW.

Local promotions to seniors

To reduce the incidence of fire deaths involving seniors, in 2011/12 FRNSW conducted a number of local campaigns in geographical areas identified as higher risk. These involved a series of community collaborative workshops comprising fire crews, local councils, service clubs, social groups and service providers. Workshop members used local networks to promote fire safety messages to seniors and to encourage installation and maintenance of smoke alarms through the FRNSW's SABRE program.

Highlights included the following.

- During Seniors Week 2012, 800 Sutherland Shire seniors were presented by fire officers with smoke alarm batteries donated by Battery World.
- In February 2012, Blacktown fire officers in conjunction with SydWest Multicultural Services delivered 14 fire safety presentations aided by interpreters to elderly groups with culturally and linguistically diverse backgrounds.
- In March 2012, FRNSW developed a partnership with Wyanga Elder Aged Care in Redfern to increase the awareness and adoption of home fire safety practices by Aboriginal Elders through engagement with local fire officers.
- In the Hunter/Central Coast region, FRNSW worked jointly with the Red Cross and NSWRFs to promote the SABRE program and the 'Change Your Clock, Change Your Smoke Alarm' campaign to 870 elderly residents. The Red Cross Telecross and Teleconnect programs allowed FRNSW messages and programs to be distributed to seniors and housebound people via regular visits and phone calls.



Replacing a smoke alarm battery in the home of a senior citizen

SABRE program

Under FRNSW's Smoke Alarm and Battery Replacement for the Elderly (SABRE) program, fire officers worked with local councils and community care organisations in many areas to install and maintain battery-operated smoke alarms in the homes of seniors. During 2011/12 fire officers visited 11 419 homes throughout the State to install new smoke alarms or to check previously installed alarms.

PEOPLE WITH DISABILITIES

During the year FRNSW fire officers delivered 110 fire safety presentations across NSW to people with disabilities who are at increased risk from fire due to reduced mobility and other factors.

Wollongong, Bulli and Warrawong fire officers worked with Department of Education and Communities staff to provide a 10-week work experience program for 34 local high school students with special needs. Besides teaching acceptable workplace behaviour, safe work practices, punctuality and team work, the program also improved awareness of the role of emergency service workers in the community.



Left: Installing a smoke alarm for the hearing impaired Right: Launching the Aboriginal "Protect Your Mob" fire safety campaign

For the hearing impaired, specialised smoke alarms are available which have a flashing light and/or vibrating device to wake them in the event of a fire. Conventional smoke alarms cost as little as \$20 but alarms for the hearing impaired cost around \$450. In 2011 FRNSW worked with the Deaf Society of NSW to secure NSW Government funding to subsidise these alarms under the Smoke Alarm Subsidy Scheme (SASS). 3500 of these special alarms are planned to be installed. FRNSW's *Better Safe than Sorry* DVD featuring well-known 'Mother and Son' actor Henri Szeps was also translated into Auslan to educate SASS recipients about home fire safety.

Early in 2012, FRNSW joined the NSW Hoarding and Squalor Taskforce led by Catholic Community Services to develop a State-wide coordinated response to hoarding and squalor. Hoarding is a hazard for both occupants and responding fire officers. FRNSW is currently working with agencies such as the Public Guardian, Housing NSW, the RSPCA and NSW Health to research this issue and collect data.

ABORIGINAL COMMUNITIES

During 2011/12 FRNSW continued to develop its partnerships with Aboriginal communities across NSW. Activities included:

- working with local Aboriginal Land Councils and other Aboriginal organisations to identify opportunities to improve service delivery to Aboriginal communities
- setting up Community Fire Units in Aboriginal communities
- participating in a whole-of-government response to issues faced by local communities through Regional Coordination Management Groups.

FRNSW supported a number of events held by the Aboriginal community, including the launch of the 'Protect Your Mob' fire safety campaign during NAIDOC Week in July 2011. This campaign was developed in partnership with the Redfern Aboriginal community with assistance from Aboriginal organisations including the TAFE Eora Centre, the Metropolitan Local Aboriginal Land Council and the Redfern Aboriginal Housing Company. It featured Indigenous fire officers and Aboriginal first-grade National Rugby League players. In addition to the 'Protect Your Mob' campaign, fire crews also participated in a range of other NAIDOC Week events in communities across the State.

Recognising that it may be more effective if Indigenous communities tailor fire safety programs for their own particular needs, FRNSW piloted a program to assist Aboriginal communities in the Nambucca Valley develop fire safety and prevention programs. FRNSW is seeking grant funding to apply this program across the State.



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CULTURALLY AND LINGUISTICALLY DIVERSE COMMUNITIES

During 2011/12, FRNSW continued to develop and implement initiatives to promote fire safety awareness among culturally and linguistically diverse (CALD) communities across NSW, in line with its *Multicultural Policies and Services Program* (see Appendix 12). FRNSW also worked in partnership with local councils, CALD community groups, service providers and other community organisations providing key fire safety information at local events.

FRNSW CALD achievements during the year included the following:

- Supporting FRNSW Community Fire Safety Volunteers to better engage with their CALD community groups, raising the total number of volunteers to 21. These volunteers assist FRNSW in spreading fire safety messages to new migrants and community members with limited English language skills.
- Involving CALD service providers and key stakeholders in FRNSW's Fire Prevention Week and Open Day activities.
- Hosting the Harmony Day event at Albury TAFE in partnership with the Albury Wodonga Volunteer Research Bureau. Fire officers conducted kitchen fat fire simulator displays to highlight dangers when cooking, and distributed handout material to all 300 international students on campus.

- Conducting fire safety awareness exercises on Harmony Day for newly-arrived international students at Coffs Harbour Community College.
- Conducting a fire safety workshop incorporating fire blanket and extinguisher training and kitchen fat fire simulator displays for CALD community group members from the Baulkham Hills, Holroyd and Parramatta areas.
- Updating FRNSW's Fire Safety module in partnership with English Novatis, the Hills Holroyd Parramatta Migrant Resource Centre and the NSW Adult Migrant English Service, for inclusion in their curricula. This module covers home escape plans, smoke alarms, fire safety and the Triple Zero (000) emergency number.
- Working closely with the Federal Department of Immigration and Citizenship (DIAC), which funds service providers to CALD communities. DIAC helped include FRNSW's winter and summer fire safety campaigns in the educational curriculum delivered at Albury, Griffith, Goulburn, Wagga Wagga and Wodonga interagency forums.
- Continuing to work closely with newly arrived international students at universities and TAFE campuses across NSW to ensure that basic fire safety principles and legislation are understood and followed.

Left: A Community Fire Safety Volunteer attends a CALD community event

Right: Engaging with community members at a Harmony Day event

RUNNING EFFECTIVE COMMUNITY EDUCATION EVENTS AND CAMPAIGNS

ONLINE HOME FIRE SAFETY AUDIT

FRNSW, together with Principal Community Partner GIO, continued to encourage the public to undertake the online home fire safety audit launched in 2010. Householders did the audit by visiting the website and answering questions which assessed how safe their home is and identified the main fire risks. The audit was the main 'call to action' of the winter fire safety campaign. 4374 people completed the online audit in 2011/12.

In August and September 2011, FRNSW trialled an innovative promotion targeting 18–34 year olds through social media. People were encouraged to do the fire safety audit on Facebook; and as an incentive, could upload a photo of their face which would then appear on a 3-metre statue located at various places throughout the Sydney CBD.

SUMMER BUSHFIRE SAFETY CAMPAIGN

Over the summer of 2011/12, FRNSW supported the NSWRFs in running a public awareness media campaign to emphasise the importance of householders preparing their homes to reduce bushfire risk. The campaign theme was 'Prepare-Act-Survive' and featured actor Peter Phelps. The campaign promoted the new bushfire danger ratings and bushfire alert messages, and encouraged people in bushfire-prone areas to prepare a bushfire survival plan. FRNSW and the NSWRFs also developed a program focused on schools in bushfire-prone areas. The program aims to make those schools more resilient to the threat of bushfires by encouraging school principals to develop action plans to reduce fire risks during extreme weather conditions.

MARDI GRAS FESTIVAL

On 5 March FRNSW participated in the 32nd Sydney Gay and Lesbian Mardi Gras parade which was watched by around 400 000 spectators and a television audience of millions. The FRNSW contingent consisted of an off-line fire engine and a community education vehicle, accompanied by 100 fire officers, administrative staff and Community Fire Unit members. Pop star Paulini Curuenavuli, Ambassador for the 2012 World Firefighters Games, also joined the FRNSW contingent. FRNSW's participation in the parade underlined its commitment to equality and diversity in the workplace. It also enabled promotion of fire safety messages through banners and media interviews given on the night.

FIRE PREVENTION WEEK AND WINTER FIRE SAFETY CAMPAIGN

According to insurance industry research, almost one in every four NSW residents has experienced a fire in the home. FRNSW fire data shows that fire deaths and injuries peak between May and September each year. To address this, in 2012 FRNSW ran its annual Fire Prevention Week from 28 April to 5 May, encouraging householders to take steps to minimise the risk of a fire in their homes, especially during winter. The week was officially launched in Parramatta by Minister for Police and Emergency Services the Hon. Michael Gallacher,



Top: A householder doing the online home fire safety audit

Centre: Inspector Bernie Cinders poses with a friend in front of the statue in Sydney's CBD

Commissioner Greg Mullins and City of Parramatta Lord Mayor Lorraine Wearne. The week culminated in FRNSW's Open Day when fire stations across the State opened their doors to the public, distributing fire safety materials and providing advice on fire safety issues.

On 1 June FRNSW began its annual three-month-long winter fire safety campaign to encourage people to increase fire safety in their homes. The campaign particularly targeted families with children. A television advertisement produced jointly by FRNSW and GIO screened on the Seven Network throughout the campaign. The advertisement featured Linda Buchan, a burns survivor, urging householders to complete a home fire safety audit.



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Left: Burns survivor Linda Buchan tells her story in the winter fire safety TV spot Right: Many school groups visit the Museum of Fire to learn about fire safety

'CHANGE YOUR CLOCK, CHANGE YOUR BATTERY' CAMPAIGN

Preventable fire deaths and injuries may tragically result when domestic smoke alarms aren't working to warn of fire. Again this year FRNSW and the NSWRFs joined Duracell and interstate fire services in the 'Change Your Clock, Change Your Smoke Alarm Battery' campaign. Householders were asked to replace their smoke alarm batteries when they changed their clocks at the end of daylight saving time on Sunday 1 April. The campaign received widespread media coverage on TV, radio and press. Fire officers promoted the campaign to their communities and installed over 11 000 new batteries in smoke alarms for the elderly and disabled.

MUSEUM OF FIRE

FRNSW maintained its close partnership with the Museum of Fire at Penrith in western Sydney. The Museum delivered fire safety education to around 60 000 visitors in 2011/12. FRNSW continued using an area at the Museum to stage road crash rescue training and training for regional staff. The Museum also houses FRNSW's historic fleet, which is listed on the State's heritage register, and provides historical research services.

CONDUCTING LOCAL STATION-BASED COMMUNITY PREVENTION AND ENGAGEMENT ACTIVITIES

COMMUNITY EVENTS AND LOCAL MEDIA

More than 57 000 community safety, preparedness and engagement activities were carried out by fire crews during the year – see Appendix 9: Reported Responses by Region, Zone and Brigade 2011/12 for details. FRNSW fire officers participated in a wide range of community activities raising awareness of fire safety and prevention programs, supporting Community Fire Units and addressing local business groups, service clubs, schools and preschools, seniors groups and community organisations. They set up displays, distributed safety materials and spread fire safety messages at key community events including the Firefighter Championships, Clean Up Australia Day, Harmony Day, Reconciliation Week, emergency services expos, Australia Day celebrations and other festivals. They also worked closely with their local media to disseminate safety messages and publicise prevention activities.

OPEN DAY

FRNSW's annual Open Day gives the community the chance to see what goes on behind the scenes in Australia's busiest fire and rescue service. This year 81 189 people visited their local fire station on Open Day which was held on 5 May. Activities included rescue demonstrations, fire station tours and fire safety presentations. Safety messages delivered this year focused on smoke alarms, home escape plans and Triple Zero (000). More than 40 000 show bags containing fire safety fact sheets and brochures were distributed to visitors.

KITCHEN FAT FIRE DEMONSTRATIONS

According to FRNSW fire data, around half of all residential fires start in the kitchen. To highlight the dangers of kitchen fires and ways to prevent them occurring, FRNSW has 23 kitchen fat fire simulators that are used by fire officers to demonstrate the devastating consequences if people try to use water to extinguish a cooking oil fire. In 2011/12 fire officers gave 89 kitchen fat fire simulator demonstrations at a range of community events. Demonstrations were also staged on television shows such as Better Homes and Gardens, and on breakfast programs.



Left: ComSafe staff provide workplace emergency management training to businesses Right: Practising rope work used in rescues

DEVELOPING STRATEGIC PARTNERSHIPS TO ENHANCE COMMUNITY SAFETY

PARTNERSHIPS WITH THE BUSINESS SECTOR

In 2011/12 FRNSW partnered with the business sector to deliver major fire prevention programs aimed at increasing public awareness of risk and improving community safety. Partners chosen were those with similar corporate values and customer base to FRNSW, and who were also committed to community engagement and education.

Companies partnering with FRNSW on prevention programs

Partner	Sponsorship level
GIO	Principal Community Partner – three years
	Presenting Partner – Recovery kits
	Presenting Partner – Home fire safety audit
	Presenting Partner – Fire Prevention Week
Brooks Australia	Supporting Sponsor – three years
	Supporting Sponsor – Senior Ed program
Duracell	Presenting Partner – ‘Change Your Clock, Change Your Battery’ community education campaign
	Supporting Sponsor – Smoke alarm battery replacement program
Subaru Australia	Supporting Sponsor – Culturally and linguistically diverse program

FIRE SAFETY IN PUBLIC AND COMMUNITY HOUSING

Housing NSW is one of the world’s largest providers of public housing. It directly manages around 122 000 public housing homes, more than 19 000 through community housing providers and more than 4300 through the Aboriginal Housing Office. Throughout the year FRNSW and Housing NSW continued working together to maintain high levels of fire safety in public housing, including initiatives in the Hunter Valley, Newcastle and the Central Coast. This included developing a Memorandum of Understanding to enhance incident data collection and address information to improve recording and reporting of fires within Housing NSW properties.

FRNSW also continued working with the NSW Federation of Housing Associations, the peak body for the non-profit community housing sector. This partnership is aimed at reducing injuries and property losses caused by fires in many community housing projects, and improving recording and reporting incidents between all stakeholders.



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FRNSW burns a donated building at Parkes to conduct joint fire investigation training

FIRE SAFETY IN ACCOMMODATION FOR THE DISABLED

FRNSW continued working with the NSW Department of Human Services – Ageing, Disability and Home Care in a joint Fire Working Group to identify more than 400 residential and community homes accommodating people with disabilities. These homes are highlighted in the FRNSW computer-aided dispatch system, enabling fire officers to review and adjust their response procedures if they are called to emergencies in these premises.

FIRE SAFETY IN PUBLIC SCHOOLS

To reduce the incidence, severity and impact of fires in NSW public schools, FRNSW continued to work with the NSW Police Force and the NSW Department of Education and Communities through a joint School Fire Working Group. Group members developed uniform approaches to investigation, training and research; shared information about deliberately lit fires; and developed prevention programs. Schools with a high risk profile were also highlighted in FRNSW's computer-aided dispatch system. Actions taken by the Working Group have significantly reduced school fires in recent years.

FIRE SAFETY IN CULTURALLY AND LINGUISTICALLY DIVERSE COMMUNITIES

FRNSW participated with other Australian fire services in a national Culturally and Linguistically Diverse Working Group. This group is a consultative forum which identifies and addresses the fire risks to people from CALD backgrounds, shares initiatives and programs, and seeks to develop best practice models. FRNSW also represented Australian fire services on the Federal Attorney-General's national CALD Reference Group.

LOCAL GOVERNMENT SAFETY COMMITTEES

FRNSW continued its longstanding involvement with the safety committees of various local councils. This allowed recommendations to be made to councils about developing and implementing prevention and community safety education programs.

FIRE INVESTIGATION TRAINING

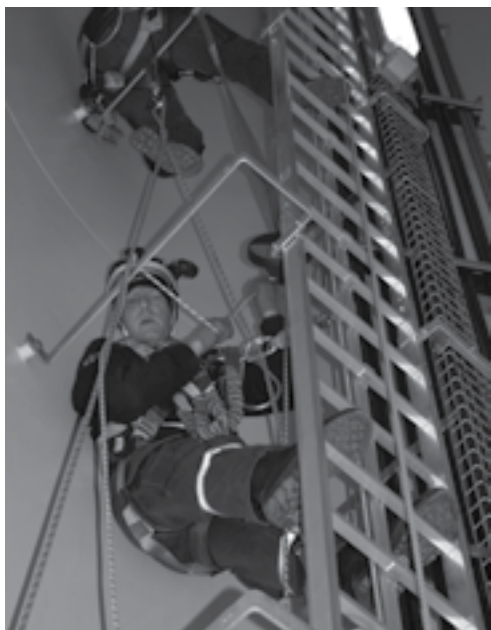
During the year FRNSW continued sharing its structure fire investigation expertise with other agencies. Training was given to the Australian Federal Police (AFP), ACT Fire & Rescue fire investigators and NSW Police Force arson detectives and forensic specialists. FRNSW took part in bushfire investigation training with the NSW Police Force and other fire agencies. FRNSW officers also attended courses on arson investigation, court procedures and bomb scene examination run by the AFP and the NSW Police Force.

In September 2011 FRNSW used a donated building at Parkes to conduct joint fire investigation training with NSW Police Force arson detectives and forensic specialists. The training focussed on testing new imaging and data gathering techniques for fire crime scenes. These techniques were used soon after when investigating the Quakers Hill Nursing Home fire in November 2011.

FRNSW worked with other fire services and the Canberra Institute of Technology (CIT) to implement an Advanced Diploma of Fire Investigation including an e-learning package for the Fire Investigation Module. This module was also used in a joint project between FRNSW, the Federal Department of Education, Employment and Workplace Relations and CIT to conduct remote training and skills acquisition at fire scenes using the National Broadband Network.

BUILDING CODE DEVELOPMENT AND BUILDING FIRE SAFETY

During the year FRNSW, in conjunction with the Australasian Fire and Emergency Service Authorities Council and the NSW Department of Planning & Infrastructure, continued to provide advice and expertise on building code development to the Australian Building Codes Board. It also worked with other government agencies to improve fire protection standards in buildings.



ComSafe training in Confined Spaces and Safe Working at Heights inside a wind turbine

FRNSW played a major role in rewriting Australian Standard AS2419.1 *Fire Hydrant Installations*, to ensure that hydrant systems provide the functionality and level of protection required by the *Building Code of Australia*.

ARSON REDUCTION AND PREVENTION

FRNSW, NSWRF and the NSW Police Force continued to meet in an inter-agency Arson Prevention Committee. Members shared information about deliberately lit fires; developed uniform approaches to investigation, training and research; and developed prevention programs to address and reduce the incidence of fires at local, regional and State levels. In October 2011 the committee updated the existing fire investigation protocol between the three agencies to improve procedures for major fire investigations. This proved timely when the tragic Quakers Hill Nursing Home fire in November 2011 led to one of the largest joint agency fire investigations in 30 years.

INCREASING COMMUNITY AND BUSINESS PREPAREDNESS FOR AND RESILIENCE IN EMERGENCIES

COMMERCIAL SAFETY TRAINING

FRNSW's commercial arm, ComSafe Training Services, a Registered Training Organisation, continued providing workplace emergency management training to business and industry. These programs ranged from basic fire, warden evacuation and first aid training, to hazardous material information and specialist training covering emergency fire teams, breathing apparatus, confined spaces, working at heights and rescue. ComSafe's focus continues to be workplace safety and how workers can most effectively interact with services personnel responding to an emergency.

During 2011/12 ComSafe delivered 1024 training programs to 7262 participants. This maintained its position as a leading provider in the field of emergency prevention and preparedness training, particularly in the healthcare industry. Revenue generated from these activities was used to develop and deliver fire and emergency education programs to the community.

Key ComSafe projects and achievements during the year included:

- facilitating an evacuation exercise of 4500 bank staff from a 32-level high-rise building, enabling the bank to safely respond to emergencies
- conducting confined space training for 90 trainees for one of Australia's largest wineries
- providing emergency response training to shift controllers at a large international company specialising in storage of dangerous chemicals
- revamping the Fire Safety Officer course which is in growing demand.

ComSafe services delivered in 2011/12

Course or service	Number delivered
Basic training courses (first attack and evacuation/ warden, public and private, firefighting for a day)	635
Healthcare courses	209
Specialist courses (confined space, height safety awareness, introduction to hazmat, motor vehicle response, first aid, self contained breathing apparatus, recertification: confined space and emergency response team, customised accredited and non-accredited courses)	168
Other services (including facilities rentals, consultations, evacuation drills and media events)	12
Total	1024



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Left: Community fire unit members extinguish a spot fire Right: CFU members work to reduce the fuel load

COMMUNITY BUSHFIRE PREPAREDNESS

Community Fire Units (CFUs) are an integrated approach to bushfire risk management used in areas where urban development meets bushland. They form a key component of FRNSW's bushfire information and education strategy. At 30 June 2012, FRNSW had 605 CFUs in metropolitan and regional NSW operated by more than 7000 volunteers. This was an increase of 28 CFUs during the year.

The CFU program assists residents in bushfire risk areas to prepare themselves, their families and their properties for the threat of bushfire. Each CFU is equipped with basic firefighting equipment which they are trained to use. Their training also helps members to make informed decisions about whether to leave early or stay to defend homes when bushfires threaten. FRNSW set up the CFU program following the devastating bushfires in Sydney in 1994. Since then, the effectiveness of CFUs has been repeatedly demonstrated, with members reducing bushfire risk through personal and property preparation, and defending their homes on many occasions during serious bushfires. This year CFU units were activated on a number of occasions when bushfires occurred in the Blue Mountains.

During the year, FRNSW trained new CFU members in bushfire behaviour, property preparation and protection, safe work practices and equipment use. Existing CFU members were given training to ensure that they were operating safely and their skills were kept up-to-date with current practices.

To comply with the *Work Health and Safety Act* introduced in January 2012, FRNSW developed new work practices and policies and reviewed its safety guidelines for CFU members.

Key improvements and developments during the year included:

- commissioning an independent strategic review of the CFU Program and incorporating recommendations into future development plans
- conducting a tender for servicing CFU equipment
- upgrading the CFU member database to enable its integration into a combined emergency volunteer management database with the NSWRFs and State Emergency Service

- developing the new CFU website which is now also accessible by the general public
- developing a social media strategy
- continuing to collaborate with the NSWRFs to use skills, knowledge and experience from subject matter experts and develop practices to further strengthen community resilience against bushfires
- engaging GEO Group (Parklea Correctional Facility) to mass produce trailers for both the FRNSW and NSWRFs CFU programs
- conducting local fire station engagement activities with CFUs to ensure they were well prepared for the bushfire season.

BUSHFIRE HAZARD REDUCTION

Hazard reduction burns decrease the potential fuel for bushfires between homes and surrounding bushland, reducing the effects of uncontrolled bushfires on life, property and the environment. They also give residents the opportunity to consult with fire crews on how to best prepare and protect their homes from bushfire.

During 2011/12 FRNSW fire officers carried out a range of hazard reductions on the urban/bushland interface. The La Niña weather pattern brought high rainfall and increased moisture levels which limited the periods when hazard reductions could be carried out. FRNSW hazard reductions were conducted in cooperation with the NSWRFs, National Parks and Wildlife Service, local councils, other public land managers and Landcare groups. Details of these burns are published in the NSWRFs Annual Report.

This year FRNSW streamlined its fire engineering process, improving the service provided to industry.



PROVIDING REGULATORY, ADVISORY, INSPECTION AND INVESTIGATION SERVICES

FIRE SAFETY ASSESSMENTS AND INSPECTIONS

In 2011/12 FRNSW fire safety officers and engineers continued to provide technical advice on fire prevention and life safety in buildings and sites owned or occupied by State Government agencies, local councils, industry and the public. Most of this work was in performance-based design, where alternative solutions to those prescribed by the *Building Code of Australia* were proposed. The most common issues were vehicular perimeter access, extended egress travel distances and rationalisation of fire resistance levels. Major shopping centres and high-rise buildings formed the bulk of the work, with the \$6 billion Barangaroo Development being one notable project assessed.

This year FRNSW assessed 174 developments, and reviewed 800 alternative solutions proposed on these developments. Advice was given to certifying authorities at 183 meetings about whether proposed building designs met required safety standards for the public and firefighting personnel. This work was usually done at the design stage of a development. Final inspections of performance-based buildings were carried out prior to occupancy at 175 developments. Fire safety officers also assessed and commented on 103 applications to be exempted from environmental planning and assessment regulations. FRNSW also streamlined its fire engineering process, improving the service provided to industry.

Left: Conducting a fire safety inspection in an office building

Right: Canine team checks for possible arson



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MAJOR INFRASTRUCTURE PROJECTS

FRNSW continued to assist other State and Federal Government agencies with major infrastructure projects. Its structural fire safety specialists assessed 162 submissions in relation to major projects, and dangerous and hazardous developments. Some of these included the North West Rail Link, the M2 motorway extension and expansion of the bulk liquids terminal at Port Botany.

MAJOR HAZARDS FACILITIES AND DANGEROUS GOODS SITES

Under the *Work Health and Safety Regulation 2011* and the *Explosives Regulation 2005*, hazardous sites across the State are required to create emergency plans. FRNSW assessed the fire safety aspects of emergency plans that were submitted during the year.

A FRNSW officer was seconded to the WorkCover Major Hazards team which inspected 23 major hazard facilities such as oil refineries and explosives and chemicals sites. These visits were carried out together with representatives from the Environment Protection Agency, Safe Work Australia and the NSW Police Force. Several dangerous goods sites were also inspected. FRNSW's role included giving advice on safe storage of hazardous materials and how to safeguard them from fires and other emergencies, with local fire crews creating pre-incident plans. FRNSW also reviewed emergency plans for these facilities and provided feedback to WorkCover.

OTHER BUILDING INSPECTIONS

FRNSW conducted more than 350 fire safety inspections during the year, prompted by complaints from local councils and members of the public and notifications from fire officers conducting pre-incident planning, and issued over 300 Fire Orders seeking rectification of those breaches. The most common problems were locked or blocked exits; improperly maintained fire alarm and/or suppression systems; and malfunctioning exit signs, emergency lighting and hydrant systems. Where necessary, remediation advice was given or rectification orders were served.

FRNSW assisted the NSW Police Force in conducting compliance inspections at entertainment venues. Fire officers inspected shared accommodation in areas attracting large numbers of short term visitors, such as Tamworth during the Country Music Festival. Fire officers also worked with Licensing Police and Council Officers to inspect more than 200 licensed premises to ensure that fire safety measures and occupancy numbers were compliant, and that occupants could readily escape in the event of a fire. In addition, FRNSW trained Police officers at the Goulburn Police Academy to identify fire safety concerns.

EXPANDED POLYSTYRENE SANDWICH PANELS

If fire occurs, the expanded polystyrene (EPS) sandwich panels often used for building insulation create major hazards for both building occupants and fire officers fighting fires. Burning EPS panels emit thick black toxic smoke which limits visibility and makes breathing difficult. The panels release a lot of heat and can delaminate, leading to building collapse. It can be hard to predict the location of a fire because the fire can travel between the panel skins.



Investigating a burnt-out building to determine cause of fire

Last year FRNSW worked with EPS panel manufacturers to develop a code of practice designed to enhance the safety of fire officers and the public. During 2011/12 FRNSW continued working with industry groups to expand this code of practice to address installation of other types of insulated sandwich panels that also pose fire hazards.

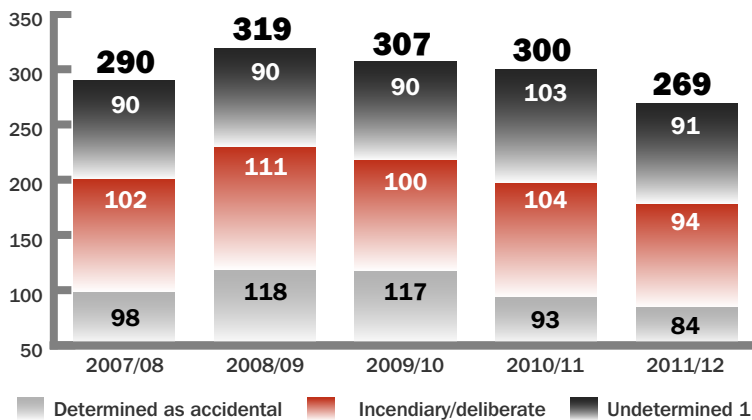
FIRE INVESTIGATIONS

In 2011/12 FRNSW specialists investigated 269 fires and explosions to try to determine the causes and origins of fires, identify unsafe practices and behaviours, and provide recommendations on rectification. The outcomes were made available as required to building owners, insurance companies, the NSW Police Force, local councils and the NSW Coroner. On many occasions, the information gained through these investigations was used to improve fire and life safety in the built environment; to assess the impact of new technology and new building designs, materials and construction methods; and to better understand human behaviour in fires. During the year FRNSW fire investigators verified and/or completed 264 Police court statements and made 32 court appearances.



Left: Fire investigators simulate a nursing home fire to test sprinkler effectiveness Right: Canine handler rewards accelerant detection dog following a demonstration of its skills

Outcome of Specialist Fire Investigations



Note: 1. A severe level of damage and destruction is the main reason why the cause of a fire can not be determined with certainty.

This year was marked by the tragic fire at the Quakers Hill Nursing Home on 18 November 2011. The fire resulted in the largest loss of life in a fire in more than thirty years with more than 20 fatalities arising from the fire. This matter is still before the courts. FRNSW fire investigators spent several days investigating the fire, working alongside NSW Police forensic officers, arson detectives and homicide detectives.

ACCELERANT DETECTION DOGS

FRNSW is the only Australian fire service that employs accelerant detection dogs to assist in determining the cause of fires. FRNSW's dogs Sheba and Winna, both Labradors, have a very high sensitivity to flammable liquids. Working with their handlers, they can quickly identify where accelerants have been used in fires. This helps detect and reduce arson, while their presence at fire scenes also acts as a visual deterrent to potential fire-setters.

During the year FRNSW canine teams assisted investigators from NSW Police, NSWRFSS and FRNSW at 100 incidents across NSW, resulting in 23 court appearances by the handlers to give evidence. The teams also gave 50 lectures and demonstrations to both internal and external stakeholders.

Highlights for the detection dog teams during the year included:

- appearing on television programs (such as Saturday Disney) and in magazines (That's Life), raising awareness of their roles
- participating in research with the Analytical Laboratories Division of NSW Health to test the effectiveness of materials used in the field for sampling ignitable liquids
- participating in research studies with the University of Technology Sydney and the Canberra Institute of Technology to assess effectiveness of the dogs, determine ways to improve their accuracy, and compare the training and work practices of agencies that use detection dogs
- assist in establishing, training and assessing volunteer SES urban search and rescue canine handlers.



SECTION 4: PERFORMANCE



Left: Training with aerial vehicles used when responding to highrise fires Right: Warning of the dangers of using unsafe consumer products

AUTOMATIC FIRE ALARMS

There were 12 915 automatic fire alarms (AFAs) connected in NSW in June 2012. AFAs provide vital early warning to occupants and automatic notification to FRNSW in higher risk premises such as multistorey buildings, hospitals, shopping centres, universities, backpacker accommodation, places of entertainment, and nursing homes as prescribed by the *Building Code of Australia*.

In 2011/12, 98% of AFA activations which FRNSW responded to proved to be false. Six premises generated more than 100 AFA activations during the year, and 315 premises (3.6% of all premises with AFAs) accounted for 24.8% of activations. Many false alarms are caused by poorly maintained or faulty fire protection systems. They cause unnecessary disruption to businesses and the community, and can divert valuable emergency service resources from responding to genuine emergencies.

Since 2003 the number of AFA connections has increased by 62%. During this time FRNSW succeeding in reducing unwanted false alarms by 19%. This was achieved by:

- providing advice and assistance to building owners/managers, including visiting premises with recurring false alarms to identify the causes and advise building owners/managers on how these could be rectified
- providing technical advice to local councils and other agencies
- advising industry groups and alarm monitoring companies on the main causes of false alarms and how these could be prevented
- comparing statistical data with other fire services to identify trends and improvements in false alarm prevention strategies
- using statistical information to identify problem systems.

RESEARCHING, IDENTIFYING AND ADDRESSING MAJOR COMMUNITY RISKS

UNSAFE CONSUMER PRODUCTS

When faulty consumer products, such as electrical appliances, were suspected of causing fires, responding fire crews advised FRNSW's specialist fire investigators and researchers who analysed fire reports and data. All products identified as being involved in a number of fires were referred to NSW Fair Trading, other relevant government agencies, and interstate fire investigation units for their action. Products FRNSW investigated as possible causes of fires included ethanol-fuelled fireplaces, compact fluorescent light globes, LPG-fuelled heaters, ceiling insulation and solar panels. Fact sheets and media alerts were issued where necessary.

LPG CABINET HEATERS

In partnership with NSW Fair Trading, FRNSW identified that while cabinet heaters were labelled as indoor heaters, they were not suitable for use indoors and had design safety issues. Also they did not meet either of the current Australian Standards for gas heating appliances (outdoor AS 4565 and indoor AS 4553). This led to an interim ban being imposed on the sale of cabinet heaters.



Assisting in investigation of a bus fire

REDUCED FIRE RISK CIGARETTES

FRNSW fire data indicate that cigarettes are a major source of ignition in fatal fires. A long campaign led by the NSW Government and FRNSW culminated when a national standard requiring cigarettes to self-extinguish came into effect under a Commonwealth Trade Practices regulation in 2010. In July 2011 FRNSW conducted joint research with the University of Technology Sydney into the effectiveness of the reduced fire risk cigarettes at preventing fires. While the research indicated that these cigarettes met the required standard and reduced the likelihood of causing fire, it also indicated that the standard could be further improved.

SMOKE ALARMS

Smoke alarms are lifesaving early-warning devices which detect smoke and alert occupants to the presence of fire. Installed in correct locations, they increase the time available for people to safely escape a burning building. In cooperation with other agencies, business and community groups, FRNSW continued media campaigns and community education activities promoting the effectiveness of working smoke alarms in protecting life and property. One focus of these campaigns is to highlight that photoelectric rather than ionisation smoke alarms are recommended, as they tend to be more effective.

Percentage of NSW adults living in homes with a smoke alarm

Year	2007	2008	2009	2010	2011
%	92.9	93.6	93.7	94.2	na ¹

Note: 1. Information on smoke alarm penetration was not collected during 2011.
Source: NSW Population Health Survey (HOIST), Centre for Epidemiology and Research, NSW Department of Health.

CARAVAN FIRES

Over the last decade, around 650 fires were reported in caravans, campervans and moveable dwellings in NSW, causing 14 deaths and numerous injuries. The actual number of fires is likely much higher, as many minor fires go unreported. Since May 2006 when legislation was introduced making smoke alarms mandatory in homes in NSW, FRNSW has worked to extend this legislation to include mobile properties. In 2011, the legislation was amended to require that smoke alarms be fitted in both new and existing caravans, campervans and moveable dwellings. During the year FRNSW continued awareness activities to ensure that industry and the public were aware of this new legislative requirement and were implementing it.

TRANSPORT SAFETY INVESTIGATION

In October 2011, FRNSW assisted the NSW Office of Transport Safety to investigate a bus fire involving compressed natural gas. This resulted in identification of the hazard that caused the fire and actions required to rectify it.

RESEARCH BURNS

In January FRNSW conducted four fire research burns at its testing facility at Londonderry. The burns aimed to duplicate as accurately as possible the fire that occurred at the Quakers Hill Nursing Home in November 2011.

The burns were attended by more than 60 people including representatives from various Government Departments, Blacktown Council, insurance companies, the fire industry and Police homicide, arson and forensic officers. The findings from these research burns and the data collected will provide valuable evidence for community safety policy improvements for many years. Following the Quakers Hill Nursing Home fire, FRNSW sought for sprinklers to be made mandatory in all aged care facilities. The NSW Government has since announced that it would legislate for this to occur.

The burn cells that FRNSW set up on its Londonderry training site also enabled joint research into fire behaviour with the NSW Police Force and several universities. Researchers used the burn cells to recreate fires to ensure that fire-cause determinations were accurate, and to test whether unsafe products or unsafe behaviours were involved. This included research with the University of NSW into fire dynamics in pre- and post-flashover fires; research with the University of Western Sydney into improved forensic photography of fire scenes; and research with the Canberra Institute of Technology on improving the abilities of accelerant detection dogs.



SECTION 4: PERFORMANCE

OPERATIONAL PREPAREDNESS CAPABILITY DEVELOPMENT

PRIORITIES

Recruiting and managing a diverse and effective workforce

Providing the highest quality education and training to continuously increase the capabilities of all staff

Increasing operational readiness through pre-incident and disaster planning, training exercises and learning from experience

Improving the health, wellbeing and fitness of staff to perform their jobs safely and efficiently

Maintaining reliable and effective fleet and equipment

Managing assets and finances to achieve the most efficient and effective use of resources





HIGHLIGHTS

- Improved recruitment processes and communications which are increasing awareness of firefighting as a career for women
- Held a summit to discuss challenges facing the retained firefighting system and ways to meet these challenges
- Held a major safety workshop and launched the 'Be Safe' approach to safety management
- Enhanced organisational e-learning capability and developed tools and resources
- Completed major renovations to Banora Point, Batemans Bay, Chester Hill, Delroy, Gloucester, Huntingwood and Unanderra fire stations
- Commenced distributing a new personal protective clothing ensemble to increase safety and protection for fire officers
- Developed an overarching policy defining how education and training will be designed, developed and delivered in FRNSW
- Revised full-time recruit training to align it to the training needs analysis

FUTURE DIRECTIONS

Implement the recommendations from the Retained Summit

Maintain the average age of the operational fleet at 10 years or less and further improve its environmental performance

Participate in further joint purchasing initiatives with other emergency services to increase efficiency and reduce costs

Deliver an integrated care and maintenance system for all personal protective clothing

Implement a blended learning strategy which combines traditional face-to-face classroom methods with other methods including live virtual classroom, self-paced online learning, collaborative learning, and video and web-based information

Implement new training programs to support firefighting staff in confined space awareness, entry and rescue and an ongoing development program for Station Officers.

Review regional rescue training and implement on-shift rescue training

Develop capability frameworks and flexible educational pathways for all staff



SECTION 4: PERFORMANCE

RECRUITING AND MANAGING A DIVERSE AND EFFECTIVE WORKFORCE

FRNSW's workforce strategy is based on the principles of encouraging and producing leaders at all levels; a commitment to ongoing staff development through education and training; equity and diversity in employment; ethical values-driven behaviours; and a strong focus on health and safety.

DIVERSITY AND EQUITY IN FRNSW

This year FRNSW conducted a number of information sessions as part of a campaign to recruit full-time fire officers. The employment of a diverse range of people was actively promoted under the theme of 'Everyone Being Welcome'. Video clips were created and posted online showcasing job opportunities in FRNSW to assist jobseekers looking for public sector careers.

In March 2012 FRNSW celebrated International Women's Day with a function at City of Sydney Fire Station. The event highlighted the important contribution of female staff to the work of FRNSW, with firefighting increasingly recognised in the community as a viable career choice for women. The strategies outlined in the Women's Employment and Development Action Plan are being implemented to recruit, develop and retain women in FRNSW's workforce.

FRNSW also continued implementing strategies to attract and retain Aboriginal staff. This included participating in Indigenous Careers Expos and developing promotional materials designed for Indigenous communities. In July 2011 many staff participated in NAIDOC week celebrations around the State. During this week FRNSW launched two plans – the Reconciliation Action Plan 2011/16 and the Aboriginal Employment and Development Action Plan 2011/13 – to enhance its support for Aboriginal staff and encourage closer relationships with Indigenous communities. FRNSW also employed a full-time Aboriginal Services Officer who provided support and guidance to FRNSW staff and liaised and worked with Indigenous communities.



RECRUITMENT OF FULL-TIME FIRE OFFICERS

FRNSW continued to attract many high calibre candidates, with four intakes of recruits from the highly competitive 2012 recruitment campaign. 96 recruits were selected from the 4000-plus applications received. Significantly, the recruitment campaign saw a large increase in suitable female applicants, with women making up 23% of all recruits. The first class of recruits from the 2012 campaign graduated in May and the second class will complete their training in September.

This year FRNSW moved to a new independent online testing provider. Candidates were assessed on their ability to demonstrate behaviours underpinning FRNSW values including honesty and integrity, respect, professionalism, and teamwork. They were also evaluated in areas such as cognitive ability, emotional intelligence, work safety, and work reliability. In addition, successful candidates also had to demonstrate high levels of physical aptitude across a range of simulated firefighting tasks, a passion for FRNSW as an organisation, and an ability to be a strong corporate ambassador.

A firefighter alumni program was set up to raise the recruitment profile of FRNSW and encourage greater diversity in its workforce. The program enabled prospective candidates to contact participating fire officers and discuss what the job entails, life at a fire station, emergency incidents and organisational culture.



Opposite: More women are becoming fire officers, increasing the diversity of FRNSW's workforce

Above left: Indigenous dancers perform at the NAIDOC launch of FRNSW's Aboriginal Plans

Right: Training retained fire officers in bushfire awareness as part of skills maintenance programs



RECRUITMENT OF RETAINED FIRE OFFICERS

Maintaining sufficient numbers of retained (or on-call) fire officers, mainly in rural areas of NSW, remains a pressing challenge for FRNSW. Population moves to larger centres, ageing demographics leading to less people volunteering, and changes in work patterns with more shift work are all making it harder to attract retained fire officers.

In November 2011 a Summit was held at Parliament House to discuss challenges facing the retained firefighting system. About 200 people attended, including permanent and retained fire officers, administration and trades staff, Fire Brigade Employees' Union officials, and employees from the State Emergency Service (SES), NSW Rural Fire Service (NSWRFS) and the Office of the Minister for Police and Emergency Services. The findings from the Summit, along with input from other consultation, are being used to develop a new retained firefighting model.

STAFF EXCHANGES AND SECONDMENTS

During the year FRNSW continued to provide staff development opportunities through a program of exchanges under its International and Interstate Firefighter Exchange Program:

- Qualified Firefighter Michael Goodwin exchanged places with Firefighter Peter Mickos from Södertörn Fire & Rescue Service, Stockholm, Sweden
- Qualified Firefighter Rohan Ashton exchanged places with Firefighter Bjorn Valfridsson from Gästrike Fire and Rescue Service, Gavle, Sweden.
- Inspector Adam Dewberry continued his secondment as advisor to the Solomon Islands Fire Service, working as part of the Regional Assistance Mission to the Solomon Islands
- Station Officer Stuart Harvey continued his two-year secondment to WorkCover's major hazards team.

INDUSTRIAL RELATIONS

In 2011/12 FRNSW consulted and communicated with staff and unions on a range of industrial and employee-related matters. This included participating in Joint Consultative Committee meetings with the Fire Brigade Employees' Union and the Public Service Association, working with the unions on a number of business unit restructures. FRNSW representatives appeared before the Industrial Relations Commission of NSW in relation to 52 disputes and used external legal services for five matters.



SECTION 4: PERFORMANCE

PROVIDING THE HIGHEST QUALITY EDUCATION AND TRAINING TO CONTINUOUSLY INCREASE THE CAPABILITIES OF ALL STAFF

TRAINING IN 2011/12

Numbers of FRNSW staff attending education and training programs¹

	2007/08	2008/09	2009/10	2010/11	2011/12
Full-time Firefighters Recruit Training	139	120	58	79	68
Appliance and Aerial Training	3743	3147	2152	1250 ⁶	820 ⁶
Breathing Apparatus Training (includes personnel from external agencies)	11 145	9805	9390	10 832	8135
Fire Training (includes personnel from external agencies)	1644	1300	1090	340 ⁸	1036
Senior Firefighters Promotion Program ⁵	100	229	130	106	130
Station Officers Promotion Program ⁵	61	62	58	32	16
Inspectors Promotion Program ⁵	0 ³	30	0 ³	16	13
Full-time Firefighters Skills Maintenance	1629	1941	790	na ⁴	na ⁴
Full-time Firefighters Level 1 to Qualified Firefighter Assessments	1433	1578	2565	na ⁴	na ⁴
Promotions to Qualified Firefighter	102	115	113	120	133
Retained Firefighters attendance at Senior Firefighters Program	na	na	na	na	5 ¹⁰
Retained Captains and Deputy Captains Development Program	126	108	100	92	96
Retained Firefighters Recruit Training	300	377	331	235	717 ⁷
Retained Firefighters Skills Maintenance	546	948	1534	810	579 ⁷
External Programs	8 ²	10 ²	423	72	57
Basic Life Support (new and refresher)	na	158	1645	2080	1785
Technical Rescue Training ⁹	–	–	–	–	1581
Incident Management Team Training ⁹	–	–	–	–	40

Notes:

1. This table does not include all training for re-accreditation purposes
2. FRNSW had previously run many Certificate IV courses in Workplace Training and Assessment. Delivery of these courses was put on hold while aspects of this course were reviewed
3. This program was not offered in the years indicated as numbers trained were sufficient to meet FRNSW's needs at that time
4. These data are no longer collected, as most training is now done at local station level
5. Training numbers determined by the number of officers needed at particular ranks
6. Decreased numbers due to rollout of new Scania 310 fire engines and drop in aerial training for the Station Officers Promotion Program
7. A large increase in Retained Firefighters Recruit Training was accommodated by allocating resources from the Retained Firefighters Skills Maintenance program, while still maintaining required levels of skills among retained fire officers
8. Reduced training was delivered due to a period of course development and role expansion into search and rescue, high rise firefighting and fire dynamics, in addition to Structural Fire Training programs
9. Training programs first offered in 2011/12



Left: Commissioner Mullins congratulates some of this year's graduating Inspectors

COMMAND, LEADERSHIP AND MANAGEMENT

Upon successful completion of the relevant promotion programs, 68 personnel graduated as Level 1 Firefighters from Initial Skills Training, 130 Qualified Firefighters were promoted to the rank of Senior Firefighter, 16 Leading Firefighters were promoted to the rank of Station Officer, 13 Station Officers graduated from the Inspectors Promotional Program and 133 fire officers completed the Qualified Firefighter program.

This year FRNSW staff also completed vocational qualifications, post-graduate degrees and external developmental programs as follows.

Provider	Program	Number of attendees
Charles Sturt University	Graduate Certificate in Management	13
Australian Institute of Police Management/ Charles Sturt University	Executive Leadership Program	2
	Executive Development Program	3
	Developing Future Leaders Program	4
	Volunteer Leaders Program	4
Australian Institute of Management	Diploma of Government Management	6
Emergency Management NSW	Emergency Management	19
Total		51

FRNSW sent five instructors to assist the New Zealand Fire Service in developing their own senior officer development programs. The FRNSW team provided strategic and tactical incident management training using theoretical exercises, real life case studies, Vector Command simulated training, Blue Card Incident Management System e-learning and face-to-face training using a built-for-purpose computerised simulation system.

The Retained Captains Development Program was improved to incorporate best practice in incident management, leadership, and station management and presentation skills. Senior and executive officers attended and facilitated programs to assist in preparing Captains

and aspiring Captains for their important roles as leaders and supervisors.

During the year, 68 full-time recruit fire officers graduated from FRNSW's State Training College with a Certificate II in Public Safety (Firefighting and Emergency Operations). Operational competency training was also delivered to 14 full-time fire officers returning to operational duties after absences of a year or more.

Basic life support training and assessment was delivered to comply with national competencies and FRNSW's obligations as a Registered Training Organisation. Basic life support refresher courses were given this year to 735 full-time fire officers and initial or recertification courses to 549 retained fire officers. New first aid qualifications were gained by 69 full-time fire officers, 425 retained fire officers and seven administrative and trades staff.

During the year FRNSW maintained training partnerships with other organisations, enabling it to draw on a broad range of expertise to strengthen the leadership and management skills of its staff. Partners include Charles Sturt University, the Open Training and Education Network, Australian Institute of Police Management, Australasian Fire and Emergency Service Authorities Council, Australian Emergency Management Institute, NSW Department of Premier and Cabinet, Queensland Combined Emergency Services Academy, Australian Institute of Management, Institute of Public Administration Australia, Australia New Zealand School of Government, Emergency Management Australia and Emergency Management NSW.



SECTION 4: PERFORMANCE



Above: Aerial appliance training at FRNSW's State Training College

STRUCTURAL FIRE TRAINING

Structural Firefighting Level 2 program continued rolling out, with fire officers across the State receiving theoretical and live fire training in fire behaviour, tactical ventilation, case study investigation and fireground strategies and tactics for structure fires. This training was also delivered to recruit fire officers and covered subjects such as fire dynamics, highrise operations, and search and rescue.

Two days of advanced training in structural firefighting strategies and tactics were given to 16 new Station Officers during the firefighting component of their promotional program. Fire behaviour training was also delivered to 20 Police officers as part of their Advanced Structural Fire Course in fire investigation and forensics.

During the year, new T-Cell live fire props were installed at Lismore, Kempsey and Albion Park to increase training opportunities in regional areas. T-Cells are formed by two shipping containers joined together in the shape of a T. The irregular shape increases the authenticity of fire attack and search and rescue training. Large props simulating

During the year appliance training was delivered to 820 fire officers.

tiled and tin roofs were also installed at Lismore and Kempsey to facilitate training for storm operations.

Construction also commenced on a large-volume prop that replicates commercial fires. It consists of six shipping containers joined on top of each other to simulate a large workshop with a mezzanine level. This is the first of its kind in Australia and will form the basis for advanced firefighting courses in the future.

APPLIANCE TRAINING

During the year appliance training was delivered to 820 fire officers. FRNSW continued to foster links with other agencies and to share training and information, with all its appliance instructors now having completed the Police Accident Investigation Course. Some training courses were updated and reviewed to ensure they aligned with Public Safety Training Packages. This year 190 licence upgrades were performed and 25 elevating work platform licences were awarded.

BREATHING APPARATUS AND HAZARDOUS MATERIALS TRAINING

FRNSW continued delivering initial training and skills maintenance to full-time and retained fire officers. Training included breathing apparatus, hazardous materials (hazmat) response, distress signalling units and intermediate hazmat training in regional areas. The Statewide training of fire officers in the use of gas detectors continued with a refresher program. Other training included installation and use of thermal imaging cameras, waterways training for intermediate hazmat stations and further training in extended-duration breathing apparatus. Continuing programs included operational and training support for decontamination trailers at special events, clandestine drug laboratory operations, enhanced self contained breathing apparatus and gas detection training, and an intermediate hazmat enhancement program.



External stakeholders also benefited from FRNSW's hazmat awareness and breathing apparatus training. Training was provided to personnel from the NSW Police Force, Ambulance Service of NSW, RailCorp, NSW Health, Department of Defence, Australian Federal Police, Australian Nuclear Science and Technology Organisation and the NSW Office of Environment and Heritage.

RESCUE TRAINING

This year 105 fire officers were trained and registered as primary rescue operators and 344 were recertified. Training continued in road crash rescue as enhanced Rapid Intervention Kits were installed on more fire engines. Safe Work at Heights training courses were likewise delivered as cordage kits were also installed on more fire engines.

A rescue training model is being developed that will enable much of the Primary Rescue Course to be delivered on-shift at stations, allowing fire officers to become Rescue Operators faster. USAR Category 1, rescue operations, road crash rescue, confined space rescue and safe working at heights were all nationally aligned or underwent continual improvement as part of a move to have all rescue training nationally recognised.

Rescue training was also delivered to a broad spectrum of external stakeholders, including the NSW Police Force, Department of Defence, NSW Health, Careflight, CHC, SES, NSWRFs and Taronga Zoo.

PROGRAM DESIGN AND DEVELOPMENT

During the year an overarching policy was developed, defining how education and training will be designed, developed and delivered in FRNSW in the future.

FRNSW further enhanced its e-learning capability. Tools and resources developed included procedures and templates for creating e-learning courses; an online facilitation course for FRNSW instructors; and a set of e-learning modules on fire dynamics.

FRNSW also worked to maintain its accreditation as a Registered Training Organisation, and to ensure all its training programs complied with national Vocational, Education and Training Quality Framework standards.

Above: Practising vertical rescue skills down the face of Warragamba Dam



SECTION 4: PERFORMANCE

28 fire crews competed in the Australasian Firefighter Championships.

INFORMATION TECHNOLOGY TRAINING

During the year more than 1600 staff were trained in effective use of new technology and applications. IT training included:

- on-site training courses for crews from 78 retained stations
- 55 Microsoft training courses in programs such as Word, Excel and PowerPoint
- more than 40 sessions in specialist applications such as GroupWise email, Adobe Acrobat, graphics software and the FRNSW Strategic Reporting System.

In addition, a number of training videos such as Driving with Trailers, Using Poles in Stations and Electrical Awareness were produced and distributed.

CORPORATE TRAINING

A range of new corporate programs were developed and delivered to staff. During the year, more than 100 staff attended bullying and harassment prevention training, 246 attended respectful workplace training, 105 attended fraud and corruption prevention training and 119 attended work health and safety awareness training. The induction program for new employees was delivered to 81 uniformed and non-uniformed staff. Coinciding with the new recruit intake, it promoted FRNSW values, professional competence, personal leadership, and the diverse nature of our workforce.

PROFESSIONAL LEARNING

During the year FRNSW made available a suite of professional learning programs, delivering more than 50 courses to staff in skills including leadership and management, technology, training delivery and corporate training. A total of 55 staff were awarded the Certificate IV in Training and Assessment. In addition, 29 staff were supported to enrol in the distance education Certificate IV Course in Frontline Management offered through OTEN.

LIBRARY AND INFORMATION SERVICES

The FRNSW Library continued providing access to information resources and research skills to support the work of the organisation. Resources in firefighting, fire prevention and community safety, fire safety engineering, fire service management, hazardous materials, emergency management and rescue were collected and catalogued. The Library catalogue comprises 44 422 resources including books, DVDs, research reports and journal articles, and is searchable via the FRNSW intranet.

Monthly updates and customised email alerts were distributed to inform staff about new resources. Staff undertaking both internal and external study and training courses were supported with study materials, a research service, access to specialist online information services and databases, and information skills training and advice. In 2011 the Library developed a short training course designed to improve the online search skills of staff. The course has so far been delivered five times, with plans to deliver this course on an ongoing basis, including by video conference to regional staff.

This year the Library loaned 1622 items from its collection, supplied more than 1300 journal articles, supplied 51 resources for interlibrary loan, and answered about 3100 reference queries. In addition, FRNSW staff conducted more than 6500 searches of the online Library catalogue.

INCREASING OPERATIONAL READINESS THROUGH PRE-INCIDENT AND DISASTER PLANNING, TRAINING EXERCISES AND LEARNING FROM EXPERIENCE

LESSONS LEARNED CENTRE

FRNSW's Lessons Learned Centre collects information on incidents, experiences and emerging issues; analyses this information; and then disseminates the lessons learned to ensure that policies, procedures and training are updated to reflect these lessons. In addition, the Centre responds to requests for incident information; undertakes various research and analysis projects; and processes and analyses operational debrief reports and fire officer observations.

This year the Centre produced three incident case studies, 12 issues of the monthly Heads Up, five Safety Bulletins and three Operations Bulletins. It also produced eight Standard Operational Guidelines and is currently reviewing around 30 others. In addition, Centre staff conducted 18 debriefs of major or significant incidents.

JOINT TRAINING EXERCISES WITH OTHER EMERGENCY SERVICES

This year FRNSW regularly participated in disaster planning and joint training exercises across the State with other emergency services and support agencies, transport operators, public utilities and industry. These crucial exercises enabled FRNSW to regularly rehearse and improve its capabilities, identify any aspects which need improvement,



increase cooperation and integration with other government agencies, and carry out pre-incident planning. They ensured that FRNSW is prepared to operate in a wide range of environments in compliance with multi-agency protocols.

Exercises that FRNSW participated in this year included:

- transport emergency exercises (such as simulated plane emergency landings, motor vehicle accidents and rail derailments)
- major infrastructure exercises carried out in conjunction with water and energy utilities and other government agencies
- exercises at high-rise residential blocks, shopping centres and large industrial sites
- national and international multi-agency counter-terrorism exercises
- hazardous materials exercises involving chemical, biological and radiological hazards
- rescue/urban search and rescue exercises, including exercises in preparation for being assessed for international certification later in 2012.

In July, FRNSW rescue officers competed and performed strongly against 23 other teams from around the world in the Australasian and World Road Rescue Challenge held in New Zealand.

Above: Conducting boat fire training at the Royal Motor Yacht Club

FIREFIGHTER CHAMPIONSHIPS

In October, the biennial Australasian Firefighter Championships were held in Port Macquarie, attracting thousands of fire officers from Australian and New Zealand fire services. 28 fire crews competed against each other in a range of events designed to hone their firefighting skills and strengthen team building. FRNSW teams from Kelso, Berry and Dorrigo filled the top three places, with all FRNSW teams placing in the top half of the field. The Championships showcased to the public the skills and expertise that modern fire officers use every day, whether they are fighting fires or responding to other major emergencies.



SECTION 4: PERFORMANCE

IMPROVING THE HEALTH, WELLBEING AND FITNESS OF STAFF TO PERFORM THEIR JOBS SAFELY AND EFFICIENTLY

SAFETY

In November FRNSW held a major Safety Workshop at ANZ Stadium, Homebush. Participants contributed ideas and information about FRNSW's current safety performance and proposed ways to enhance its culture of safety. At this event, FRNSW also launched 'Be Safe', the approach it will use for safety management. This reflects the priority FRNSW gives to health and safety, with continuous improvements sought through a systematic and formalised approach. 'Be Safe' is being progressively implemented in several phases.

FRNSW implemented requirements of the new *Work Health and Safety Act 2011* which took effect on 1 January 2012. This involved analysing current systems and processes to assess if they comply with the new Act, and identifying and implementing changes required.

FRNSW's system for reporting injuries, illnesses, exposures and near misses was further developed, improved and reviewed. The information provided by this system enabled frontline managers to improve workplace safety. A new hazard identification system was also developed that proactively identifies safety issues before they have an impact. This will assist in meeting the due diligence requirements of the new work health and safety legislation.

Throughout the year FRNSW promoted safety to its workforce through a comprehensive communication strategy built around a series of key monthly messages. Topics included workplace hazards, injuries and risks; common illnesses and how to prevent them; the Employees Assistance Program, safety reminders regarding breathing apparatus and personal protective clothing; healthy lifestyle choices and electrical safety.

The safety messages were reinforced through a range of internal communications including intranet articles, the Commissioner's fortnightly newsletter and posters distributed to all fire stations. Quarterly newsletters were also produced that focussed on health and safety issues relevant not only at work, but also to the home environment. These were mailed to all employees' homes. In addition, training was delivered at station visits, covering topics such as manual handling, health and fitness, and the new work health and safety legislation.

HEALTH AND FITNESS

This year FRNSW continued running programs such as 'Waste the Waist' to maintain and improve the health, fitness and wellbeing of its workforce. These programs aimed to develop and maintain optimal physical and psychological health so staff could safely and effectively meet the demands of their jobs. They are also sought to minimise the impact of hazards faced within the work environment.

Manual handling training continued rolling out across the State with a further 103 crews at regional stations trained during the year. Policies, guidelines and educational resources are being developed to reinforce the injury prevention information delivered during this training.

FRNSW engaged the University of Wollongong to review the Physical Aptitude Test used to assess the physical suitability of firefighter applicants. The review involved extensive consultation with fire officers across NSW. Critical firefighting tasks were identified through focus groups involving around 100 fire officers and a survey in which some 1000 fire officers participated. These tasks were then assessed through a series of simulations which monitored the physiology of 57 fire officers during a range of hazmat, rescue, bushfire and structural firefighting scenarios. Physiological data including heart rate, ventilation, oxygen consumption, core temperature and muscular loading were collected, enabling FRNSW to develop a more appropriate employment standard for screening firefighter applicants.

FRNSW created an incident ground meal guide with information on hydration and nutrition. This was implemented during the year to assist incident controllers in providing suitable meals and refreshments.

To safeguard the health of employees, health monitoring was provided to hazmat technicians, compartment fire behaviour training instructors and those potentially exposed to hazardous substances.

FRNSW again offered free flu vaccinations at the beginning of winter with 1255 employees getting vaccinated. Vaccinations were also given to urban search and rescue teams and new recruits.



Left: The FRNSW chaplain assists an employee. Right: Staying physically fit keeps fire officers in shape for the job

MENTAL HEALTH

To maintain optimal mental health among fire officers, FRNSW focuses on improving the work environment and increasing operational resilience, rather than solely treating psychological injuries and illness reactively. This year FRNSW developed a health, fitness and wellbeing policy to support its commitment to providing safe healthy workplaces for all its staff. FRNSW's Critical Incident Support Program offers help to employees affected by traumatic incidents. Peer team services include one-to-one assistance, on-scene support and follow-up and education and information sessions. The team encourages early intervention and referral to professional support services where appropriate. This year 13 more peers were recruited, primarily in regional areas, supplementing the existing team of 30 to 40 members. The scope of the peer role was also enlarged to provide support and guidance to employees on all mental health issues, not just those related to critical incidents.

The Employee Assistance Program (EAP) gives all employees and their immediate families access to confidential professional 24-hour counselling services for both work-related and personal issues. This year 238 employees and their family members used EAP services for face-to-face or phone counselling.

Wellness checks were organised in three business units via the EAP provider. The checks are a preventative monitoring strategy aimed at ensuring the health and wellbeing of employees. The business units chosen for these checks were those with greater potential risk of mental health issues. They included rescue personnel who attend motor vehicle accidents and fire investigators who attend scenes that may include the remains of deceased people.

CHAPLAINCY

As an emergency service, FRNSW responds to incidents which can often be traumatic for both victims and responders. During the year FRNSW's Salvation Army Chaplains, Majors Lyndsay Smith and Dawn Smith provided counselling and support to fire officers and their families. They also assisted members of the public involved in or affected by emergencies. The Chaplains provided their services on 3078 occasions during the year.

This year FRNSW developed a health, fitness and wellbeing policy to support its commitment to providing safe healthy workplaces.



SECTION 4: PERFORMANCE

MAINTAINING RELIABLE AND EFFECTIVE FLEET AND EQUIPMENT

FLEET STRATEGY AND PROFILE

FRNSW's fleet strategy maps future costs and replacement requirements over the lifecycle of its fleet (20 years for aerial and four wheel drive fire engines, and 15 years for most other fire engines). This ensures greater efficiencies in service delivery to metropolitan and regional communities by improved resourcing of fire stations.

The objectives of FRNSW's fleet strategy include:

- implementing an integrated approach to fleet management, including mid-life maintenance to ensure fire engines remain operational over their life at minimal cost
- improving safety and ergonomics by managing how equipment is stowed on vehicles
- reducing environmental impact by introducing Euro 5 emission standard compliant engines
- reducing the average age of the fire engine fleet as older vehicles are progressively replaced with modern new ones.

At 30 June 2012 the FRNSW fleet totalled 1531 vehicles. The fire engine fleet of 634 vehicles comprised 527 fire engines with pumps; an aerial fleet of 28 ladder platforms, ladders and aerial pumps; 79 rescue and hazardous materials (hazmat) vehicles; and the firefighting boat which is awaiting disposal. During the year FRNSW commissioned 13 new Class 1, 2 and 3 tankers and pumps including two aerial pumps. Ten CFA 4x4 tankers, eight Scania 92/93 series Class 3, 14 Firepac Class 3 fire engines and a 33-metre ladder platform were disposed of.

In addition to the fire engine fleet, FRNSW had 643 miscellaneous vehicles including boats, trailers, prime movers, logistics support vehicles and community fire unit trailers. There were also 253 passenger and light commercial vehicles to support operational requirements and general use.

For more detailed information on the FRNSW fleet, refer to Appendix 18: Fleet Profile.

PUMPERS (FIRE ENGINES)

Class 1 four wheel drive tankers: These multi-purpose tankers carry more water than pumps. Some have hazmat and primary rescue capability. They have Class A foam systems, and pump-and-roll firefighting capabilities allowing them to spray water while moving, which is effective for fighting bushfires and fast-moving grass fires. Newer models also incorporate cabin protection spray systems. Two new tankers were commissioned this year. The average age of the Class 1 fleet was 10.40 years at 30 June 2012, including service exchange vehicles (SEVs) that are used as temporary replacements for vehicles that are being serviced.

Class 2 pumps: These pumps have hazmat and primary rescue capability, and have proved very effective in regional areas. There are 249 Class 2 pumps now in service, including 217 for first call operations, with the remainder being used for training and as SEVs. Two new pumps were commissioned this year. The average age of the Class 2 fleet was 7.94 years at 30 June.

Class 3 pumps: These heavy urban fire engines may also be configured as primary rescue and hazmat vehicles. The latest Class 3 pumps have reversing cameras, 4000 litres/minute pumps, programmable warning signs at the rear and Euro 5 environmentally compliant engines. Six of these pumps were commissioned this year. The average age of the Class 3 fleet was 7.11 years at 30 June.

AERIAL VEHICLES

Two new 15-metre aerial pumps were commissioned this year. These vehicles replaced 2001 models which have become SEVs. The average age of the aerial fleet, including SEVs, was 9 years at 30 June.

SPECIALISED VEHICLES

These consist of rescue and hazmat vehicles. Two new heavy rescue vehicles were ordered this year and are planned to be commissioned in late 2012. The average age of specialised vehicles was 8.17 years at 30 June.

MAINTENANCE, INSPECTIONS AND REFURBISHMENTS

In 2011/12, FRNSW staff carried out 275 major services and 232 minor services in Sydney, and 461 services in regional areas. A further 143 services were conducted on minor fleet vehicles in the workshops. Mobile on-call vehicles also attended 2906 service calls.

This year FRNSW staff inspected 54 aerial vehicles and contractors inspected a further 56. RTA-certified inspectors carried out heavy vehicle pink slip inspections for the annual re-registration of the fire engine fleet.

Under FRNSW's fleet strategy, all fire engines receive major servicing and inspections at their projected midlife. Nine Class 3 mid-life refurbishments were completed during the year. The tanker mid-life



program also continued, with work completed on four heavy rescue units and three aerial pumpers in conjunction with the introduction of safety handrail systems.

EQUIPMENT MAINTENANCE AND MANAGEMENT

As part of its asset maintenance strategy, FRNSW continued to maintain rescue equipment on the fire engine fleet and replace it where necessary. This year 5400 pieces of equipment were serviced, 1600 new items were commissioned and 975 items were decommissioned. Equipment upgrades included height safety equipment,

power saws, chainsaws, portable fire pumps, hydraulic rescue cutters, and portable lights and generators.

FRNSW's hazmat technical services staff continued managing emergency supplies and refilling air cylinders. They also maintained, repaired, tested and distributed FRNSW equipment including breathing apparatus, protective clothing, air cylinders, chemical booms and bins, and chemical, biological and radiation detection equipment. In addition to servicing more than 50 000 pieces of equipment, more than 1000 new generation self-contained breathing apparatus sets have been bought and are being maintained.

Above: Workshop mechanics keep FRNSW's fleet in top working order



SECTION 4: PERFORMANCE

MANAGING ASSETS AND FINANCES TO ACHIEVE THE MOST EFFICIENT AND EFFECTIVE USE OF RESOURCES



Above: Fire officers try on the new firefighting garments

PROCUREMENT

During 2011/12 FRNSW continued its partnership with other Australian fire and emergency services in collaborative purchasing, coordinated through the Australasian Fire and Emergency Service Authorities Council. This procurement included both recurrent and capital contracts for plant and equipment, as well as firefighting and emergency vehicles. This joint purchasing is delivering economies of scale, reducing procurement overheads and providing opportunities for savings for all Australian fire services.

A contract was tendered and awarded for a new structural firefighting ensemble incorporating a complete care package. This package uses radio frequency identification tagging to track items through the cleaning process and provide lifecycle information on garment condition. Initial rollout of the new uniform is now underway. The new clothing incorporates improved design features and new materials to reduce weight, enhance comfort, and complies with the latest Australian Standard. An improved dutywear uniform is also being developed.

In line with the NSW Government's waste reduction and recycled purchasing policy, during the year FRNSW continued using green procurement practices in areas such as energy-efficient products, emission-efficient and emission-reducing vehicles, recyclable products and waste reduction.

PROPERTY MANAGEMENT

FRNSW's real estate portfolio includes 338 fire stations and more than 100 other properties including its training facilities,

communication centres, area and zone offices, staff accommodation and two logistics support facilities.

During 2011/12 FRNSW purchased land valued at \$330 000, while real estate which was no longer required was sold for \$1 825 000. The proceeds were used to offset other capital projects.

NEW FIRE STATIONS AND RENOVATIONS

FRNSW spent a record \$18.4 million on capital expenditure in 2011/12. Major work included commencing a new fire station building at Cabramatta and completing significant renovations at Banora Point, Batemans Bay, Chester Hill, Delroy, Gloucester, Huntingwood and Unanderra. Other major projects underway are the refurbished Triple Zero communications centre in Newcastle and training centre upgrades at Wellington, Lismore and Kempsey. The improved training sites will greatly assist in meeting training requirements in regional areas.

Major renovations began at Bankstown, Brewarrina, Hornsby, Parkes and Tea Gardens. Works in design or at tender stage include renovations to fire stations at Cardiff, Grenfell and Springwood.

FACILITIES MANAGEMENT

During the year FRNSW spent \$6.5 million on repairs relating to work health and safety, urgent minor and unscheduled works, cleaning, security, pest control and preventative maintenance of essential plant and equipment.

The Properties Helpdesk, which was established in 2011, provides a central point for reporting all maintenance requirements at FRNSW sites. 5352 calls for assistance were logged during the year, ranging from urgent help to routine break/fix tasks. The ability to track and share statistics across FRNSW has enabled more effective management of property assets.

Three major programs of capital work were carried out this year to improve conditions at fire stations across NSW. These comprised

103 air conditioning projects, 22 re-roofing and/or replacement roofs, and 85 roof compliance anchor systems.

BUSINESS RISK INSURANCE

FRNSW is a member of the NSW Treasury Managed Fund which provides the insurance requirements of the State's inner budget sector agencies. Total deposit premium (excluding GST) paid by FRNSW to the NSW Treasury Managed Fund in 2011/12 was \$23.3 million.

This year, FRNSW paid hindsight adjustment premiums of \$9.1 million (excluding GST) for workers compensation cover for 2005/06 and 2007/08. Improved workers compensation and return-to-work performance are key priorities of FRNSW to facilitate redirection of funds from premiums to frontline service delivery.

2011/12 FINANCIAL OUTCOMES

See the Financial Statements and Accompanying Notes for details of FRNSW's financial outcomes for 2011/12.

2012/13 BUDGET

For 2012/13, FRNSW's total expenses excluding losses are budgeted at \$647 million, an increase of 1.4% on the 2011/12 budget. This includes \$14.9 million for the 2011/12 unspent Personal Protective Clothing Replacement Program funding carried forward to 2012/13.

Total revenues for 2012/13 are budgeted at \$636.4 million. This includes \$504.8 million contributions from local councils and insurance companies, \$86 million from the State Government and \$45.5 million in operating revenue.

The 2012/13 capital expenditure budget is \$48.5 million. This includes \$18.4 million for new fire stations and upgrades to existing fire stations and training facilities; \$5.8 million for replacement of fire engines, specialist fire engines and rescue appliances; \$3.7 million for SAP Fleet ICT system; and \$3 million for the replacement of radios and portable receivers. These capital works are being funded by a Government allocation of \$6 million, a contributors' allocation of \$34.8 million and \$7.7 million from FRNSW capital reserves and asset sales.

FRNSW FUNDING

FRNSW's operations are currently funded by user charges and contributions from insurance companies, local councils and the State Government. Fire District Estimates are the means by which FRNSW recovers 85.4% of its net costs through statutory contributions from the insurance industry (73.7%) and local government (11.7%); see Appendices 1-3 for details. The Government contributes the remainder (14.6%) through NSW Treasury funding.

The NSW Government is reviewing the funding model for fire and emergency services, with the aim of spreading the costs beyond the traditional funding base of the insurance industry, local and state government. Public consultation was open until October 2012.

At 30 June 2012, there were 180 FRNSW Fire Districts. There were no variations (extensions and reductions) gazetted to Fire Districts during the year. With the exception of the Sydney, Lower Hunter and Newcastle Fire Districts, the local council in each Fire District contributed 11.7% of the estimated expenditure of FRNSW in that area. The level of contributions sought from councils increases from time to time, reflecting an overall increase in FRNSW's budget. In addition, the increases paid by individual councils can vary markedly from the average increase due to dissimilar incident and activity levels, staffing requirements, and specific building repairs and maintenance programs.

Contributions for the Sydney, Lower Hunter and Newcastle Fire Districts are apportioned between councils based on the aggregated five-year moving average of rateable land values provided by the NSW Valuer-General.

LABOUR EXPENSE CAP

The Labour Expense Cap was approved by Expenditure Review Committee of Cabinet and is a key additional budget control measure introduced in the 2012-13 Budget. Fire & Rescue NSW, like all areas of government, is committed to achieving a range of savings with the Labour Expense Cap being one of these key strategies. The cap limits employee related and contractor expenses across general government sector agencies as well as selected public trading enterprises.

The Government has decided not to mandate the specific method for achieving employee savings. This provides Directors-General and agency CEOs the flexibility to develop and implement workforce strategies appropriate for the services being delivered. Strategies to meet the Labour Expense Cap include:

- Improving efficiency of staffing arrangements to better manage overtime
- Reviewing current contracting levels, needs and arrangements
- Applying more rigorous job evaluation processes to ensure jobs are properly graded to curb 'grade creep'
- Improving workforce management by reducing staffing through natural attrition and retirements
- Improving the alignment of staff resourcing with work demands, which may include increasing temporary, part time and/or casual staff for peak workload periods.



SECTION 4: PERFORMANCE

EMERGENCY MANAGEMENT RESPONSE AND RECOVERY

PRIORITIES

Minimising the impact of emergency incidents through rapid effective response

Developing and maintaining strategic working partnerships with other emergency and support services

Assisting the community and business to recover from emergencies and disasters

Using information and communications technology to support response and recovery



HIGHLIGHTS

- Responded during 2011/12 to 130 744 emergency incidents, including 25 376 fires and explosions, 11 146 non-fire rescue and medical assistance calls, 15 503 hazardous materials incidents and other hazardous conditions, and 6990 calls relating to storm damage and floods
- Answered 96.66% of fire emergency calls within 10 seconds, well above the national benchmark of 90%
- Assisted with emergency planning and preparation for a range of major community, entertainment and sports events
- Assisted the State Emergency Service with recovery operations after storms, particularly during the heavy rain and resultant severe flooding experienced across NSW in February and March
- Responded FRNSW hazardous materials specialists to a major chemical fire in Canberra in September to assist ACT Fire & Rescue
- Developed a second cache of urban search and rescue equipment which can be deployed by air, allowing task forces to respond to simultaneous and/or consecutive incidents in NSW, interstate or overseas
- Implemented a new emergency services computer aided despatch (ESCAD) system, including telephony and voice recording systems, operator consoles and IT hardware upgrade, the Newcastle Communication Centre is also being upgraded and expanded

FUTURE DIRECTIONS

Maintain and build upon FRNSW's guaranteed, rapid and scalable capability to deal with a diverse range of emergency incidents

Continue to develop the structural collapse rescue capability of FRNSW and its partners

Gain International Search and Rescue Advisory Group External Classification for FRNSW's urban search and rescue capability in September 2012

In conjunction with other government agencies, increase capability to respond effectively to the consequences of terrorist attacks and major natural disasters in NSW, Australia and internationally

Develop a fully portable hazardous materials capability that can be deployed to remote areas and used to support urban search and rescue deployments to a disaster zone

Roll out a system for automatically tracking locations of all FRNSW's fleet of fire engines to further improve service delivery

Implement shared enterprise asset management across NSW emergency services



Top: Rescue vehicles are part of the FRNSW fire engine fleet

Centre: Hazard reduction at Mittagong to reduce fuel load

Bottom: Urban search and rescue team members discuss operations



SECTION 4: PERFORMANCE

MINIMISING THE IMPACT OF EMERGENCY INCIDENTS THROUGH RAPID EFFECTIVE RESPONSE

TOTAL INCIDENTS

During 2011/12, FRNSW crews responded to 130 744 emergency incidents, an average of around 360 incidents a day, or one incident every four minutes.

Number and type of incidents and emergencies attended¹

	2007/08 ²	2008/09	2009/10	2010/11	2011/12
Fires and explosions					
Structure fires	7723	7448	7495	7046	6652
Outside storage fires	323	289	303	259	255
Vehicle fires	4479	4384	4202	4000	3908
Bush and grass fires	9120	9915	9904	6968	6335
Rubbish fires	9551	9628	8918	7967	7873
Other fires	431	265	214	351	353
Total fires and explosions	31 627	31 929	31 036	26 591	25 376
Other emergencies and incidents					
Non-fire rescue calls:					
Motor vehicle accidents involving the extrication of victims	4683	4905	5104	4976	5041
Other non-fire rescues including industrial and home rescues	1821	2506	2623	2787	2944
Medical assistance	577	796	926	1032	1052
Animal rescues	1136	1411	2060	2056	2109
Total non-fire rescue calls	8217	9618	10 713	10 851	11 146
Hazardous material incidents and other hazardous conditions including powerlines down, electrical short circuits, gas leaks and fuel and chemical spills ³	16 259	16 474	15 224	15 557	15 503
Storm, floods and other natural disasters, and calls for assistance from other agencies	5537	5740	6088	6451	6990
Good intent calls	10 556	10 740	11 102	10 847	11 029
Malicious false calls	4092	3553	3060	2560	2139
System-initiated false alarms	54 206	53 803	52 646	52 501	52 197
Other	4383	5440	5405	5580	6364
Total other emergencies and incidents	103 250	105 368	104 238	104 347	105 368
Total fires, explosions and other emergencies	134 877	137 297	135 274	130 938	130 744

Notes:

1. Figures may vary slightly from earlier publications to reflect the submission of additional incident reports and changes to data from data quality improvement.

2. For February 2008, incident types reflect information provided on incident logs from FRNSW Communication Centres.



RESCUE

The provision of rescue services in NSW is coordinated by the State Rescue Board (SRB) under the *State Emergency and Rescue Management Act 1989*. FRNSW is the largest provider of rescue services, carrying out almost 70% of all rescues in NSW and operating primary and secondary specialist rescue units in 182 locations. Around 2700 fire officers are qualified and registered as rescue operators with the SRB. In addition to specialist rescue vehicles, every fire engine carries rescue equipment and every fire officer is trained in basic rescue.

During 2011/12 FRNSW responded to 11 146 non-fire rescue calls throughout the State (this total excludes those where medical assistance was provided), including rescuing people caught in transport, domestic and industrial incidents. Specially trained teams also carried out alpine, vertical and specialist rescues. In doing so, they worked closely with other agencies including the NSW Police Force, Ambulance Service of NSW, SES and NSW Volunteer Rescue Association.

This year FRNSW continued to share its rescue expertise by providing training to other emergency services. This included training in scene safety and road crash rescue awareness to doctors and crew members from helicopter rescue services.

URBAN SEARCH AND RESCUE

FRNSW's urban search and rescue (USAR) capability provides specialised response to deal with building collapses and other complex rescues. Throughout the year FRNSW continued to develop its USAR capability in preparation for the International Search and Rescue Advisory Group External Classification which will take place 10–14 September 2012. If successful, the NSW USAR Task Force will become only the 18th Heavy International Rescue Team so classified by the United Nations.

FRNSW's current USAR capabilities and equipment include:

- **USAR 1:** a Sydney-based, purpose-built 32-tonne semi-trailer designed to transport the largest store of USAR equipment in Australia
- **USAR 2 and 3:** purpose-built pantechinon trucks with USAR equipment caches based at Newcastle and Wollongong
- **USAR 4:** a specialist reconnaissance vehicle based in Sydney
- **USAR 5 and 6:** air-deployable USAR equipment caches (including tents, food and water) capable of sustaining 72-person rescue teams in the field for 10 days.

Above left: Extricating a trapped passenger following a serious road crash

Above right: Searching building ruins for survivors in the aftermath of Christchurch earthquake



SECTION 4: PERFORMANCE



Left: FRNSW hazardous materials (hazmat) officers at chemical spill at Port Botany Right: Retrieving a victim injured in a building collapse

When major emergencies occurred during the year, the initial USAR response was provided by on-duty rescue crews staffing heavy rescue units in Sydney, Newcastle, Gosford and Wollongong with additional specialist personnel deployed as required. USAR is also a key component of NSW's ability to deal with the consequences of a terrorist attack.

Many of FRNSW's fire officers are trained to USAR Category 1, which is the basic training for emergency service responders. Category 2 USAR crews are trained to carry out complex technical rescue operations. FRNSW currently has 257 Category 2 operators. Category 3 personnel are trained to lead a USAR Task Force. A Category 3 USAR course was conducted in late 2011 in conjunction with Queensland Fire and Rescue Service, and six senior FRNSW officers are now qualified to Category 3 level.

The Australian Government has identified FRNSW as a crucial partner in its National USAR capability development strategy. FRNSW's advanced USAR expertise enables it to play a central role in providing training to interstate and international emergency services that are increasing their own USAR capabilities. During the year FRNSW hosted a national USAR Instructors Workshop and trained personnel from other agencies in USAR Categories 1 and 2.

Following the Christchurch earthquake on 22 February 2011, two FRNSW-led USAR Task Forces were deployed as part of the Australian Government's response to rescue and recovery operations. The two teams, each comprising

more than 70 disaster assistance specialists, performed more than 400 assignments, including searches and rescues, during the deployments. In February 2012 on the first anniversary of this disaster, personnel from FRNSW and other NSW and Queensland emergency services travelled to New Zealand to commemorate the tragic event.

Following the Japanese earthquake and tsunami on 11 March 2011, FRNSW again led an Australian USAR Task Force deployed to the north east coast of Japan. FRNSW personnel returned a year later to join with Japanese authorities and local communities in commemorating the disaster and highlighting recovery efforts since.

HAZARDOUS MATERIALS INCIDENTS AND OTHER HAZARDOUS CONDITIONS

FRNSW is responsible for protecting the people, property and environment of NSW from chemical, biological and radiological (CBR) hazards under the *Fire Brigades Act 1989*. These may range from industrial accidents through to deliberate acts of terrorism. During 2011/12 FRNSW responded to 15 503 hazardous material (hazmat) incidents and other hazardous conditions. These included downed powerlines, electrical short circuits, gas leaks, and fuel and chemical spills.

FRNSW delivers hazmat expertise and equipment across NSW in a four-tiered approach.

Level 1 (standard): Comprises basic equipment and skills and is sufficient to deal with most hazmat incidents. All FRNSW fire officers have received hazmat/breathing apparatus training and all its fire engines are equipped with Level 1 hazmat capability, including chemical protective suits, self-contained breathing apparatus, gas detectors, absorbents and CBR kits.

Level 2 (intermediate): This level has additional equipment and skills. Level 2 fire stations are located in areas with increased hazmat risk, such as those with heavy transport and industry or environmentally sensitive areas. They provide specialised support to other stations within a 100 km radius. FRNSW has 21 Level 2 stations equipped with detection, decontamination and neutralising equipment. Thirteen of these have a waterways response capability.

During 2011/12, FRNSW responded to 1052 medical emergencies.



Left: Fire officers in protective suits being decontaminated after a hazmat incident Right: Fire officers practise administering first aid using a defibrillator

Level 3 (primary): As hazmat incidents can impact heavily on densely populated areas, FRNSW has six fire stations with advanced hazmat capabilities based in the major metropolitan areas of Sydney, the Central Coast, Newcastle and the Illawarra. These stations deploy comprehensive support, specialised equipment and advanced technical skills to large scale hazmat incidents.

Level 4 (specialist): Training and familiarity with the latest technologies allows hazmat specialists to provide specialised advice and assistance to incident management team at major or complex hazmat emergencies. They are also available to respond to incidents in remote and regional locations providing advanced hazmat skills and high end detection capability across the State.

The capability to monitor gas leaks and other airborne contaminants at major fires and hazmat incidents was enhanced by equipping Shellharbour, Newcastle and Berkeley Vale hazmat units with remotely operated atmospheric monitoring systems.

FRNSW's hazmat command/scientific team responded to a range of CBR and explosives incidents during the year, using a mobile laboratory to assess the nature and possible impacts of these incidents. Hazmat officers also supported NSW and Federal Police at more than 100 clandestine drug laboratory operations. FRNSW's role at these operations involves managing safety aspects such as exposure to chemicals and the risk of fire and explosions.

MEDICAL ASSISTANCE

Increasingly FRNSW is being called upon to assist the Ambulance Service of NSW at medical emergencies. During 2011/12, FRNSW responded to 1052 medical emergencies ranging from cardiac arrest, childbirth, snake bites and major trauma. All fire officers are trained in advanced first aid, oxygen resuscitation, use of automatic external defibrillators and basic patient assessment.

In addition, the Ambulance Service of NSW and FRNSW have joined forces to establish a Community First Responder program in six towns (Alstonville, Branxton, Bundanoon, Bundeena, Tocumwal and Uralla) where there is no ambulance station. In these towns, fire officers have received additional training so they can provide medical first response until Ambulance paramedics arrive, thus helping to save lives and minimise injuries.



SECTION 4: PERFORMANCE



Left: Using an aerial appliance to attack a building fire Right: Safety briefing to fire officers on Army Black Hawk helicopters

STRUCTURAL FIREFIGHTING

FRNSW manages fire emergencies in major cities, metropolitan areas and towns across regional and rural NSW, protecting 90% of the State's population. As one of the world's leading urban fire services, FRNSW uses state-of-the-art vehicles, equipment, communications and technology and best practice firefighting techniques to protect life and property from fire.

In 2011/12 FRNSW responded to 25 376 fires and explosions throughout the State. Incidents responded to included fires in buildings, structures, vehicles and rubbish through to bush and grass fires. Fire incidents that FRNSW responded to included 6652 building and structure fires ranging from residential premises such as houses and apartment blocks through to commercial premises such as factories and shopping centres, major institutions such as schools and hospitals, and other vital community infrastructure.

BUSHFIRE SUPPRESSION

During the year Australia experienced the continued La Niña climate event which increased rain and fuel loads across most of NSW. This brought the State out of drought; but while floods affected some areas, the NSWRFs and FRNSW were fighting bushfires in other areas. These included bushfires in the Blue Mountains in September and October 2011, followed in January by large grass fires in Ingleburn, Doyalson and Hexham, and in Western NSW including Tibooburra and Wanaaring, burning thousands of hectares.

In 2011/12 FRNSW responded to 6335 bush and grass fires, the lowest number for five years. However the high rainfall has again left a legacy of high fuel loads, thus increasing bushfire risks for following years. The NSWRFs and FRNSW anticipate that the threat of grass fires west of the Great Dividing Range will again be a major concern as summer approaches due to heavy grassland fuel loads.

TERRORISM CONSEQUENCE MANAGEMENT

During 2011/12 FRNSW maintained its operational preparedness to manage the consequences of terrorist acts as part of an integrated whole-of-government counter-terrorism strategy. This included hosting or participating in multi-agency counter-terrorism training events, and collaborating in developing operational policies and procedures.

From June to October 2011, FRNSW participated in Black Angus, a multi-agency counter-terrorism field exercise. From April to June 2012, FRNSW participated in Flare III, a multi-agency field exercise simulating a radiological incident. In June 2012, FRNSW participated in a multi-agency desktop training exercise in Orange aimed at improving management of terrorist incidents.

AVIATION OPERATIONS

FRNSW and the NSW Police Force continued to jointly fund and operate Fire Air 1, a helicopter based at Sydney's Bankstown Airport. The helicopter would play a primary role in any counter-terrorism response. During the year Fire Air 1 logged more than 100 flights. It was used for a range of tasks including bushfire reconnaissance, responses to structure fires, rescues, hazardous materials incidents, flood recovery operations and training exercises. More than 100 FRNSW and other agency personnel received helicopter awareness training including underwater escape, winch operations, emergency breathing systems and crew management.



Joint fire/police helicopter in action

SPECIAL EVENTS

FRNSW staff worked closely throughout the year with the NSW Government, NSW Police Force, event organisers and other State and Commonwealth Government agencies to assist with emergency management aspects of large public events. These included the Sydney Harbour Bridge temporary closure, Sydney Festival, Chinese New Year celebrations, Sea of Blue March, Mardi Gras, NSW Seniors Week, Australia Day, Sydney Resolution Concert, Soundwave, Australian Open Golf Championship and the Big Day Out Concert.

NOWRA AND BATHURST GO 24/7

In the 2011/12 budget the NSW Government allocated funds to enable the existing Nowra and Bathurst fire stations to move to 24/7 operation. The funding allowed more permanent fire officers to be employed at each station, offering additional protection to residents and businesses and improving response times to fires and other emergencies.

Bathurst station commenced operating around the clock in December 2011 followed by Nowra in June 2012. Both stations are located in areas of significant population growth, along with growth in commercial and industrial development. The Shoalhaven area also supports a large tourism industry and other major facilities including the HMAS Albatross Naval Air Station and defence-related industries.

The increased staffing has enabled FRNSW to meet the growing demand for emergency services in these areas. In 2011/12 Bathurst fire officers responded to 714 emergencies and conducted 448 community safety activities, while Nowra fire officers responded to 1408 emergencies and conducted 270 community safety activities. Bathurst fire station also received a new fire engine to complement the increased staffing.

DEVELOPING AND MAINTAINING STRATEGIC WORKING PARTNERSHIPS WITH OTHER EMERGENCY AND SUPPORT SERVICES

MEMORANDA OF UNDERSTANDING AND MUTUAL AID AGREEMENTS

FRNSW enters into Memoranda of Understanding (MoUs) and Mutual Aid Agreements (MAAs) with other government agencies and organisations to achieve agreed outcomes through effective partnerships. These agreements formalise collaborative activities such as cooperation, consultation, response, training and information exchange. They may also incorporate protocols for dealing with cross agency issues. Appendix 15 details current agreements between FRNSW and other organisations.

New or updated MoUs and MAAs that FRNSW finalised with other agencies during the year included the following:

- Updated MoU with the Environment Protection Authority on hazmat response procedures
- Updated MoU with RailCorp on FRNSW assistance in evacuating passengers in non-emergency situations
- Updated MoU with Sydney, Newcastle and Port Kembla Port Corporations and the Maritime Authority of NSW on hazmat support on State and inland waters
- An MoU with NSW WorkCover on notifications and information sharing
- Updated Mutual Aid Agreements (MAAs) with the NSWRFES. More than 100 MAAs are currently in place to ensure an agreed local response by the two agencies, and further enhance inter-agency communication and community safety
- An MoU with the Australian Nuclear Science and Technology Organisation on effective emergency planning and response through joint activities and shared resources
- An updated MoU with the Department of Defence on firefighting at Defence Establishment Orchard Hills
- An updated MoU with Sydney Water on use of recycled water for firefighting.



SECTION 4: PERFORMANCE



PARTNERSHIPS IN EMERGENCY MANAGEMENT COORDINATION

The State Emergency Management Committee (SEMC) is responsible for ensuring that NSW has a robust, effective and flexible system for dealing with emergencies. FRNSW's Commissioner is its Deputy Chair and senior FRNSW staff participate in various SEMC subcommittees and working groups.

Emergency Management Australia (EMA) supports the states and territories in coordinating emergency management capabilities. Senior FRNSW staff chair or participate in various EMA working groups.

PARTNERSHIPS BETWEEN FIRE SERVICES

The Australasian Fire and Emergency Service Authorities Council (AFAC) is a peak body established to improve collaboration and the sharing of expertise and strategic information between fire and emergency services across Australasia. FRNSW's Commissioner is Deputy President of AFAC while senior FRNSW staff serve on its steering committees and working groups.

FRNSW is a member of the Fire Services Joint Standing Committee which also has representatives from FRNSW, NSWRF, Rural Fire Service Association and Fire Brigade Employees' Union. The committee and its subcommittees provide forums for regular consultation and cooperation between the two fire services, including planning and coordination, to achieve complementary delivery of urban and rural fire services.

FRNSW's Commissioner is also the Australian Director of the International Association of Asian Fire Chiefs.

PARTNERSHIPS IN RESCUE

FRNSW's Commissioner is a member of the State Rescue Board which advises the Minister for Police and Emergency Services on the coordination and provision of rescue services in the State. FRNSW delivers rescue services in conjunction with other agencies including the NSW Police Force, Ambulance Service of NSW, SES and the NSW Volunteer Rescue Association.

FRNSW participates in a multi-agency Vertical Rescue Training Working Group that aims to achieve interoperability of equipment and rescue techniques between all stakeholders.

PARTNERSHIPS IN URBAN SEARCH AND RESCUE

FRNSW is the combat agency for building collapse rescue, and manages the State's multi-agency Urban Search and Rescue (USAR) capability. FRNSW chairs the AFAC USAR Working Group, and also chairs and represents all Australian fire services on the National USAR Working Group established by EMA.

FRNSW and the Queensland Fire and Rescue Service represent Australia at the International Search and Rescue Advisory Group and at the International USAR Team Leaders Meeting convened by the United Nations (UN). FRNSW is a member of the UN's Disaster Assessment and Coordination Team and also of the UN USAR Training Working Group.

PARTNERSHIPS IN MANAGING HAZARDOUS MATERIALS INCIDENTS

Staff from FRNSW and the Environment Protection Authority work closely together to manage and minimise the effects of hazardous materials incidents. FRNSW is a member of the National Chemical, Biological and Radiological (CBR) Steering Committee established by EMA. It also participates in the Australian delegation to the International CBR Consequence Management Group.



Far Left: Emergency services on scene of a road accident at Murrumbateman

Centre: Fire and ambulance officers work to free truck driver trapped by fallen tree on Mt Ousley Road, Wollongong

Right: Fire crews assist SES in flood recovery operations near Wagga

PARTNERSHIPS IN COUNTER TERRORISM

FRNSW works closely with the NSW Police Force, Ambulance Service of NSW, NSWRFSS, Australian Defence Force and other stakeholders on managing terrorism consequences. FRNSW's Commissioner is a member of the NSW Government Chief Executives Counter Terrorism Coordinating Group which provides advice to the Cabinet Standing Committee on Counter Terrorism. FRNSW counter-terrorism staff participate in the Coordinated Response Group based within the NSW Police Force Counter Terrorism and Special Tactics Command.

PARTNERSHIPS IN BUSHFIRE PREVENTION AND SUPPRESSION

FRNSW is a member of the NSW Bushfire Coordinating Committee, which provides a forum for consultation and cooperation between State firefighting agencies and environment and land management agencies. The Committee advises the NSWRFSS Commissioner and the Minister for Police and Emergency Services on bushfire prevention and suppression matters. FRNSW also coordinates a number of bushfire management committees in its Fire Districts. The committees bring together stakeholders, identify areas of potential risk on the bushland/urban interface in local areas, and develop operational and risk management plans.

In addition, FRNSW participates with other Australian and New Zealand fire and land management agencies and research partners in the Bushfire Cooperative Research Centre.

ASSISTING THE COMMUNITY AND BUSINESS TO RECOVER FROM EMERGENCIES AND DISASTERS

RECOVERY AFTER NATURAL DISASTERS

When natural disasters such as floods, hailstorms, strong winds or severe thunderstorms occur, the lead agency is the SES. In accordance with the NSW State Storm and Flood Plans and a Mutual Aid Agreement with the SES, FRNSW supports the SES and other organisations in responses during and after these types of incidents, making fire crews, vehicles and equipment available to assist community and business recovery. FRNSW responded to 6990 calls for assistance in 2011/12.

In early July 2011, strong damaging winds kept fire crews very busy throughout NSW, particularly in the Blue Mountains, Illawarra and Southern Highlands. Winds intensified to gale force, reaching up to 115 km/h in the Blue Mountains, knocking over trees, cutting power to more than 30 000 homes, closing the Great Western Highway and in one incident stranding rail commuters after a tree fell on two trains. All Blue Mountains fire crews as far west as Lithgow were deployed, and Strike Teams were also deployed from Sydney to assist. Fire crews responded to a range of incidents including trees and wires down, roofs blown off and gas leaks.

Earlier this year, more than 75% of the State was affected by flooding following extensive rain, with March 2012 the wettest on record since 1956. Nearly 7400 requests for assistance were received; 41 evacuation orders were issued; and 65 areas were declared natural disaster zones. As floodwaters rose, FRNSW and other emergency services played a vital role assisting SES. Fire officers responded to hundreds of calls, assisting residents, businesses and local communities by filling sandbags, carrying out salvage operations, helping with evacuations, and clearing debris and blocked drains. In February and March, SES, FRNSW and other emergency services spent an estimated 70 000 hours helping flood-affected communities in NSW.



SECTION 4: PERFORMANCE



In 2011/12 FRNSW presented \$70 000 to the Westmead Hospital Burns Unit.

Commissioner Greg Mullins presents donated toys to the Salvation Army for distribution to needy families

On 8 March 2012, severe storms hit Sydney and 250 fire officers from more than 50 stations responded to calls including 18 motor vehicle accidents, 17 downed powerlines and 54 flooding incidents. The heavy rain caused flooding of buildings, homes, shops and roadways right across the city, with FRNSW working closely with the SES to respond to the incidents.

RECOVERY AFTER FIRE

Fire officers provide recovery kits to people who have experienced a home fire. This kit gives affected householders easy-to-follow steps to help them start rebuilding their home and lives. It also offers tips to prevent fires from re-occurring in the home. During 2011/12 fire crews distributed 1050 'After the fire' brochures and 1780 'How to prevent fires' information sheets.

FUNDRAISING AND PRACTICAL SUPPORT

Emergency services workers are deeply aware of the human cost of incidents to which they respond. FRNSW and its staff help the community to recover after tragedies and disasters in various ways, including through financial support.

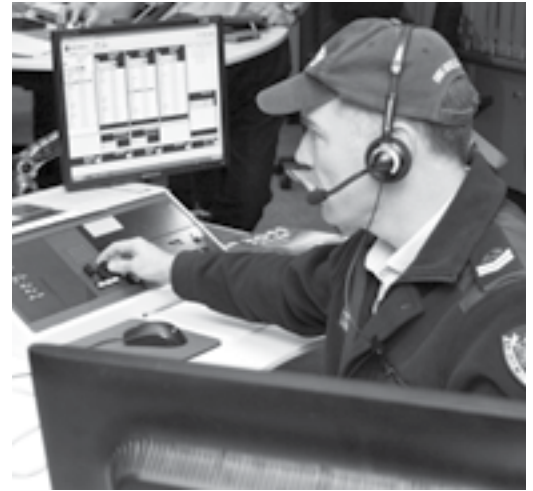
Many FRNSW employees donate regularly to charities and organisations such as the Burns Unit at The Children's Hospital, Westmead. In 2011/12 FRNSW presented \$70 000 to the Westmead Hospital Burns Unit which was generously donated by its staff via payroll deductions. Since 1996 FRNSW staff have donated more than \$1.83 million to the Burns Unit through funds raised by their own donations and community fundraising activities. These funds are used to buy vital equipment and

employ specialist staff to assist the children's rehabilitation. In addition to giving personally, FRNSW staff also encourage the public to join them in supporting these causes.

The Newcastle Firefighters Ball was held in August 2011 and raised \$20 500. This was combined with further \$10 000 in donations from FRNSW employees, enabling \$20 500 to be donated to the John Hunter Hospital Children's Burns Unit, \$5000 to KIDS Foundation – support group for burns survivors, and \$5000 to Kidsafe Hunter.

In March 2012, fire officers cycled from Sydney to Wagga Wagga, a distance of more than 400 kilometres, in only four days. This charity bike ride raised nearly \$39 000 for Westmead Children's Hospital Burns Unit, as well as providing opportunities to spread fire safety messages in schools and country towns along the way.

In September 2011, FRNSW staff competed against teams from the NSW Police Force, Corrective Services NSW, the Department of Defence and sponsor Steggles to pull a 40-tonne Hercules plane over 10 metres at Richmond RAAF base. The event raised \$15 000 for the Special Olympics.



Left: Recording key information about daily fire station activities in online eOccurrence Book Right: Alexandria Communications Centre operator taking Triple Zero calls

In November 2011, fire officers participated in McHappy Day events at McDonald's restaurants across the State, helping to raise funds for Ronald McDonald House Charities.

In December 2011, FRNSW staff again donated toys and non-perishables to the Salvation Army for distribution to families experiencing hardship, as they have for the past four years. Fire officers on the Central Coast also donated two video laryngoscopes at a cost of \$38 950 to Gosford and Wyong Hospitals. The new equipment will assist doctors and nurses from the emergency rooms of the two hospitals in treating victims as well as providing a valuable training tool.

USING INFORMATION AND COMMUNICATIONS TECHNOLOGY TO SUPPORT RESPONSE AND RECOVERY

A range of information and communication technology projects were implemented or progressed throughout the year. These projects improved FRNSW resource management and administration, reporting capabilities, and delivery of critical information to frontline staff responding to emergencies and natural disasters.

NEW DISPATCH SYSTEM

A major achievement during the year was delivery of the new Emergency Services Computer Aided Dispatch (ESCAD) system, which included telephony and voice recording systems, operator consoles and IT hardware upgrade. ESCAD went live in mid June 2012. The platform is also being made available to the NSWRFES and the SES. In addition to providing next generation capabilities to communication centre operations, the project significantly improved the ergonomic and occupational health and safety environment for operators. It also included implementation of a shared data centre facility with SES.

In spite of the major operational and IT challenges in delivering this new system, FRNSW's emergency call-taking, dispatch, coordination and communication centres continued their excellent call-taking performance. FRNSW operators answered 96.66% of fire emergency calls within 10 seconds, well above the national benchmark of 90%. Most calls originated from Triple Zero phone calls, automatic or other fire alarms, or directly from Police, Ambulance or other emergency services.



SECTION 4: PERFORMANCE



Left: Accessing information online for use in frontline operations Right: Radio equipment provides a vital communication link for responding crews

Technology played a critical role in dispatching the appropriate level of FRNSW vehicles, personnel and equipment to incidents as quickly as possible.

A Strategic Review of FRNSW's four communication centres was conducted in 2011. The Review identified that Katoomba and Wollongong communication centres each managed only 4% and 8% of FRNSW's emergency calls and recommended their closure to improve management of workload and resources. This occurred on 20 June 2012. The Newcastle communication centre is currently undergoing expansion and upgrading to support its enhanced role.

IT INFRASTRUCTURE

FRNSW maintains flexible and efficient IT infrastructure to successfully host and deliver operational systems. During the year FRNSW completed the installation of higher standard computers and ADSL2+ services to fire stations, with data transmission speeds up to 40 times faster. Data storage, servers and highly secure network communications continued to be enhanced to host internal cloud applications for FRNSW and its emergency service partners, the NSWRFs, SES and Ministry for Police and Emergency Services.

VIDEO CONFERENCING

FRNSW finalised major communications infrastructure which provided video conferencing facilities across the State. Despite being a geographically dispersed organisation, managers can connect face-to-face with each other and participate in meetings held in specially equipped meeting rooms. The technology is aimed at reducing the need for travel and saving staff time and travel costs, while also improving communication among staff. Video gateways provide the ability to extend this service to external partners and other participating agencies.

ELECTRONIC MESSAGING REVIEW

A review found that while FRNSW's current email software GroupWise was cost efficient, it was poorly supported and lacked integration with various applications. Extensive discussions and trials were conducted with leading email providers Microsoft, Google and VMWare. FRNSW investigated delivery of email services in an external cloud system which would still meet legislative requirements for storing data outside Australia. In 2012/13 FRNSW will call for tenders to replace the corporate email system.

SERVER AND STORAGE INFRASTRUCTURE

FRNSW finalised the move from a Novell NetWare dependency to a Linux environment. The higher reliability, exceptional performance and improved reliability of Linux systems coupled with continued improvements in the organisation's storage and virtualisation strategy has contributed strongly to the reliability of the IT network. FRNSW's IT network is available to its internal clients and shared service partners more than 99.5% of the time.



Triple Zero operator dispatches crews to respond following an emergency call

CONNECTION OF IT DEVICES

Significant changes to the network were implemented to cater for a “bring your own device” enterprise strategy. Staff will soon be able to securely use FRNSW network facilities to connect to the Intranet and Internet using their own devices. This strategy is being further developed, providing more options for staff to select and share the cost of their own smart devices.

RADIO COMMUNICATION

The migration of the Government Radio Network radio terminals to the open P25 digital standard was completed. As a digital network, the new standard provides clearer reception and more reliable communication, while allowing many more radio handsets to use the network. Unlike the previous network, the digital network can be enhanced with features such as text messages, encryption of voice communications, and global positioning to identify the location of a radio handset user.

In cooperation with other agencies, FRNSW completed and began upgrades to shared radio sites at Haystack Mountain, Jerilderie, Mt Perisher and Bombala with an additional radio site at Mallee Cliffs to increase radio coverage and introduce digital radio linking to the far south coast of NSW. Evaluation and selection of new portable transceiver radios began in 2012 with rollout to commence in 2012/13.

SHARED EMERGENCY SERVICES IT SYSTEMS

The goal of a common IT system across NSW emergency services agencies progressed further in 2011/12. The program commenced late 2010 with implementation of SAP-based human resources and payroll services for the NSWRFs, SES and the Ministry for Police and Emergency Services onto computer systems developed by FRNSW. This laid the foundation for implementing the larger volunteer and learning system which went live during 2011/12. More than 95 000 volunteer human resources records and well over two million associated qualifications for the FRNSW, NSWRFs and SES were loaded into one SAP system, making it one of the largest management systems for

human resources records in government in Australia today. The project was completed on time and on budget. Many other workflow improvements associated with travel, expenses and leave were also implemented via an Employee Self Service portal.

The next phase in the Emergency Services SAP program is enterprise asset management including fleet and equipment. This project will use the SAP enterprise asset management solution to drive best practice in the management of key life-saving critical infrastructure. The project is due to commence late 2012 with completion planned by the end of 2013.

MODERNISATION OF STATION RECORDS

In late 2011 FRNSW conducted a successful pilot of an electronic Occurrence Book application which replaces the current paper-based books. Occurrence Books have been used for more than a century to record all incidents at stations, including emergency calls, visitors, deliveries, and any injuries or other incidents. The eOccurrence Book will be available in late 2012, consolidating a range of manual records of station activities.

IMPROVED INTERNAL COMMUNICATIONS

The FRNSW intranet is the most widely used internal communication channels, receiving over one and half million visits annually. During the year work commenced on redeveloping the intranet with a modern design, new information architecture, upgraded content management system, collaborative work tools, and improved navigation and search capabilities. The redeveloped intranet will contribute to improved internal communication, and will improve access to information and make many online business processes more efficient.

ELECTRONIC DOCUMENT AND RECORDS MANAGEMENT

FRNSW continued rolling out the TRIM document management system with completion planned in early 2013. The system improves the management of correspondence and will assist FRNSW in meeting its legislative requirements under the *Government Information (Public Access) Act 2009*.



SECTION 4: PERFORMANCE



MOBILE APPLICATION DEVELOPMENT

FRNSW has adopted the Apple iPad as its standard-issue tablet computer. A pilot application, Commanders Toolkit, is being developed to provide support to incident controllers in the field with a 3G mobile network connection. The application is based around Google Maps which enables access to vital information such as fire hydrant location, known hazards in nearby locations, other operational information and guidelines to improve firefighter safety and to minimise the impact of incidents on the community.

CASE MANAGEMENT SYSTEM

The Workplace Standards team deals with a number of complex and confidential matters relating to staff. To support their operation FRNSW introduced a dedicated case management system, Resolve. This system enables recording of confidential details of employee concerns, provides detailed reports to management and assists in escalating cases via workflow.

AUTOMATIC VEHICLE LOCATION

Having the ability to know the location of its fleet of fire engines is of key importance to FRNSW for safety and service delivery. FRNSW undertook a trial of automatic vehicle location (AVL) in early 2011 to assess the suitability of this technology and finalised a contract to roll it out across all fire engines over 2012/13. AVL will enable operators in FRNSW's Communication Centres to dispatch the closest fire engine to an incident to ensure the fastest response time to emergencies.

INFORMATION SECURITY AND DISASTER RECOVERY

FRNSW had its certification for information security management, ISO/IEC 27001, audited and renewed during the year. The certification is awarded to organisations who can consistently show their internal processes and controls provide a secure environment for hosting IT data systems. FRNSW also successfully planned and executed its yearly IT disaster recovery program and promoted information security awareness across all NSW emergency service agencies.

Above: Automatic vehicle location will improve dispatch of fire crews to incidents