

4

Section 4 – Performance

Community Safety

Prevention and Community Preparedness



Priorities

- › 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 and resilience in emergencies
- › Providing regulatory, advisory, inspection and investigation services
- › Researching, identifying and addressing major community risks



A. In 2010/11, fire officers delivered more than 3000 safety presentations to pre-schoolers and young children

B. McDonald's is the major community partner for FRNSW's Brigade Kids project, an interactive multimedia website for children

C. FRNSW worked with Aboriginal communities in 2010/11 to promote the 'Protect Your Mob' fire safety campaign

D. Minister for Police and Emergency Services Mike Gallacher officially opens FRNSW's Winter Fire Safety campaign

Highlights

- › Improved business preparedness for emergencies by delivering 1031 workplace emergency management training courses to nearly 17 000 participants
- › Conducted specialist investigations into 300 fires and explosions, and determined the cause in 66% of incidents
- › Visited the homes of 12 001 seniors to install smoke alarms or check batteries
- › Enhanced road safety awareness among young drivers by delivering 148 RescuEd presentations to high school students
- › Enhanced child fire safety by delivering 3031 Fire Ed and Pre Ed presentations to primary schools and preschools
- › Inspected 992 commercial, industrial and residential buildings to help ensure a safer built environment
- › Achieved smoke alarms being made mandatory in caravans and mobile homes, making these safer for users
- › Promoted community fire safety through major events such as Fire Prevention Week, Brigade Kids Day, Open Day, the Winter Fire Safety Campaign and other prevention programs in partnership with sponsoring partners



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 Training and the Department of 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 new State Plan targets
- › Develop use of social media to disseminate safety messages and promote prevention initiatives

'No Fire Deaths' goal

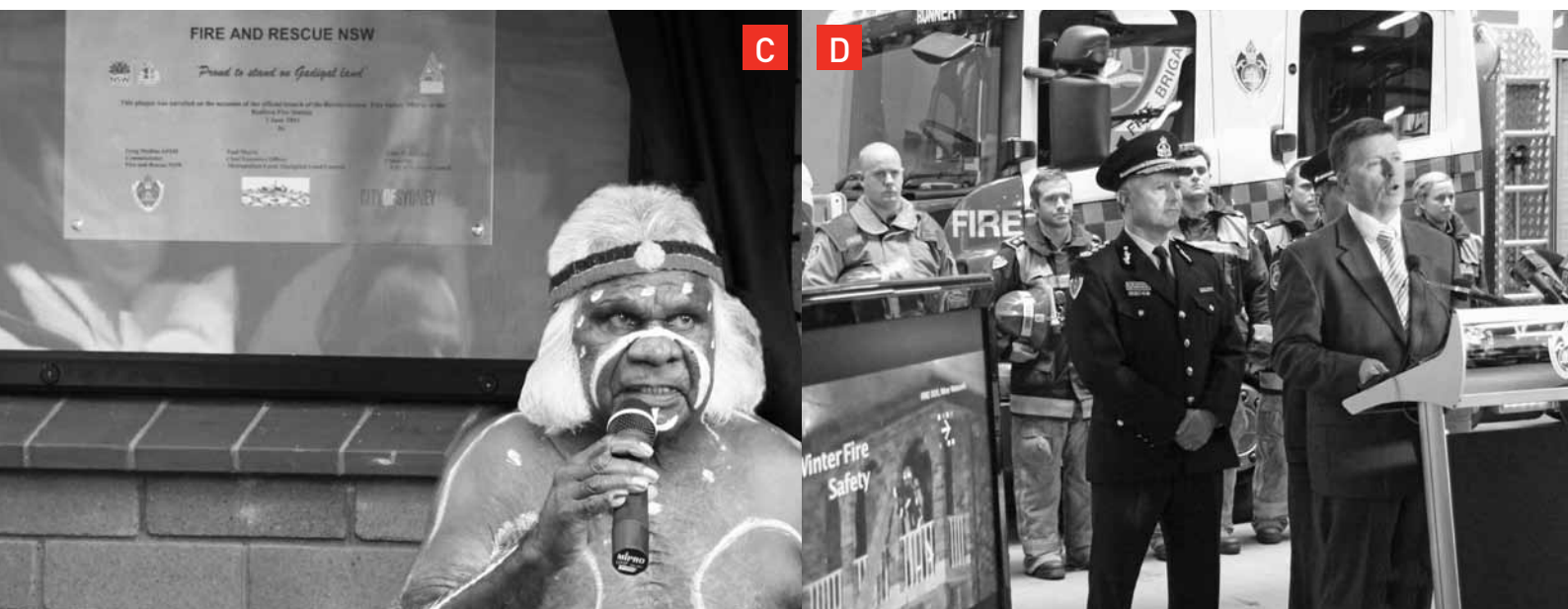
In January 2011 FRNSW set a goal of achieving no accidental fire deaths in NSW. This goal provides a core target for FRNSW brigades, zones, area commands and directorates across NSW to strive for in their prevention, preparedness, response and recovery activities.

A three-pronged strategy is being implemented to achieve this goal of zero preventable fire fatalities:

- › planned and coordinated responses – having the right resources in the right place
- › effective community safety programs – general Statewide 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.

As an initial step, FRNSW is running community safety forums. These are enabling brigades to profile their local communities, and tailor their emergency management and community engagement activities to address identified risks. They are also helping in developing strategies to target the most at-risk community groups.

A program of forums is being rolled out to metropolitan stations, and will be extended to regional stations during 2011/12.



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 2010/11 FRNSW fire officers delivered 3031 Pre Ed and Fire Ed presentations.

Brigade Kids website

FRNSW developed an interactive multimedia children's website, www.brigadekids.com. It incorporates games, puzzles, screensavers, sing-alongs, quizzes, interviews, video segments and other safety education materials. The website 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 latest version of the website was launched on Brigade Kids Day, 1 May 2011, at McDonald's restaurants across the State. The website proved popular, with 56 418 visitors (up 103% on last year). Page views totalled 587 867 and the average website viewing time was nearly 11 minutes.

Triple Zero (000) online game

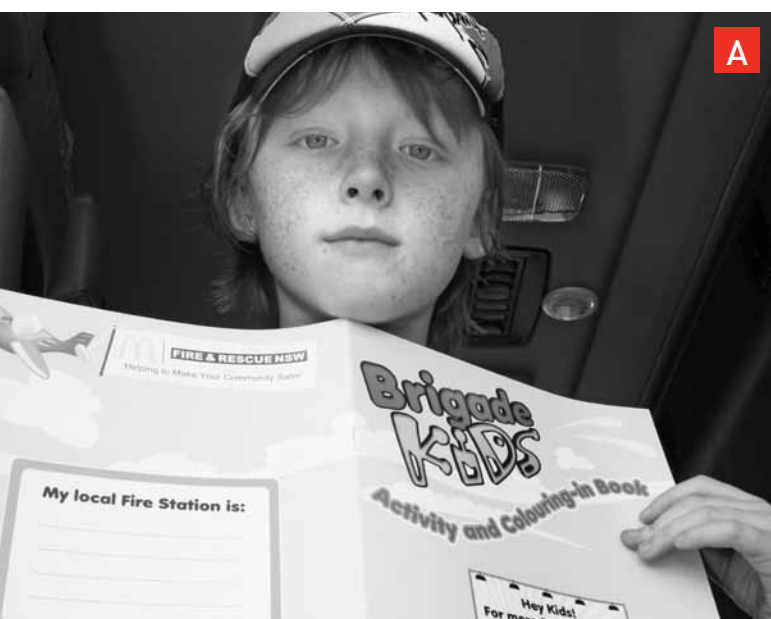
FRNSW continued to lead the national Triple Zero Awareness Working Group to promote Australia's Triple Zero emergency phone number. The Working Group, comprising representatives of major emergency call-taking agencies, produced and launched an online safety game, the Triple Zero Kids' Challenge. The game uses puzzles and checklists to teach primary school-aged children how to correctly identify and react to an emergency by using Triple Zero. During 2010/11, there were 112 684 unique visitors to the site. A total of 184 419 visitors, which includes repeat users, spent an average of 17 minutes on the site. The year's usage took the total number of Triple Zero scenarios used by 247 505 visitors to 558 041.

Adopt-a-School program

This program was developed to improve fire safety in schools and enhance school links with local fire stations. Participating fire brigades visited their local schools regularly to identify and reduce potential fire hazards, improve evacuation procedures, and deliver school fire safety education programs.



- A. The FRNSW Brigade Kids initiative aims to teach children about home fire safety
- B. During the RescuEd presentation, fire officers demonstrate a car extrication
- C. & D. FRNSW's Pre Ed and Fire Ed programs teach young children fire safety practices



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 2010/11 fire officers from FRNSW primary and secondary rescue crews made 148 RescuEd presentations to high school students, 16% more than last year.

Youth road safety

In June 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. This year's Forum was attended by 11 186 Years 10–12 students from 111 schools.

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 (IFAP) 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 2010/11 IFAP received and managed 28 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 13 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 May 2011.



Seniors

FRNSW fire data indicated that one in three fire-related fatalities in NSW in 2010 involved people 65 years and older. Seniors are a higher risk group because lesser mobility and health conditions that can reduce their ability to detect and escape a house fire. In 2010/11 FRNSW fire officers gave 441 fire safety presentations to seniors groups in partnership with local councils, service providers, and other community organisations such as Probus, Rotary, and the RSL.

During Seniors Week in March 2011, FRNSW and Supporting Sponsor Brooks Australia launched the DVD *Better Safe than Sorry* which outlines essential fire safety steps seniors should take around their homes. The DVD is narrated by actor Henri Szeps from the award-winning ABC-TV series *Mother and Son*. The DVD was distributed to University of the Third Age (U3A) branches, fire stations and public libraries across the State. The NSW Department of Family and Community Services – Ageing, Disability and Home Care also distributed copies to its Home Care clients. In addition, the DVD was posted on the FRNSW and U3A websites.

FRNSW staffed fire safety displays and distributed 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 the concerts.

Under FRNSW's Smoke Alarm and Battery Replacement (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 2010/11 fire officers visited 12 001 homes throughout the State to install new smoke alarms or to check previously installed alarms.

People with disabilities

During 2010/11 FRNSW fire officers delivered 106 fire safety presentations across NSW to people with disabilities who are at increased risk from fire due to reduced mobility and other factors.

Wollongong and Warrawong fire officers worked with Department of Education and Communities staff to provide a 10-week work experience program for 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.

For those deaf or hard of hearing, 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 deaf cost around \$450. FRNSW worked with the Deaf Society of NSW and Ageing, Disability and Home Care, NSW Department of Family and Community Services to secure NSW Government funding to subsidise these alarms. The first phase of the alarm rollout begins in December 2011 with around 3500 of these special alarms planned to be installed.



- A. Actor Henri Szeps is the narrator of the *Better Safe Than Sorry* DVD for senior citizens
- B. Special needs high school students participated in a 10-week work experience program with FRNSW
- C. FRNSW's Aboriginal Services Officer Steve Russell and South Sydney rugby league star Nathan Merritt promote the *Protect Your Mob* campaign
- D. FRNSW works closely with culturally and linguistically diverse communities



Aboriginal communities

During 2010/11 FRNSW continued to develop its partnerships with Aboriginal communities across NSW. Activities included:

- › working with local Aboriginal Land Councils to identify opportunities to improve service delivery to Indigenous communities
- › setting up a second Indigenous Community Fire Unit at Taree. It will join another at Maclean, while three more are being trained or trialled, and
- › participating in a whole-of-government response to issues faced by local communities through Regional Coordination Management Groups.

FRNSW employs a full-time Aboriginal Services Officer to liaise and work with Indigenous groups, and to support and guide FRNSW staff. During 2010/11 the officer assisted other FRNSW staff to strengthen relationships with Aboriginal communities.

Throughout the year FRNSW supported a number of major events held by the Aboriginal community. In July, fire crews participated in NAIDOC Week events throughout the State. Fire officers distributed brochures from the new 'Protect Your Mob' fire safety campaign. This campaign was developed 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.

FRNSW also attended the annual NSW Aboriginal rugby league knockout competition held at Woy Woy on the October long weekend. Indigenous fire officers joined the Aboriginal Services Officer in distributing fire safety information to spectators and participants.

The Indigenous portal on the FRNSW website was used to publicise a children's art competition which engaged the Indigenous and wider community in promoting fire safety messages. A new mural at Redfern fire station was the result of this competition. The four winning artworks were chosen from 160 State-wide entries.

Culturally and linguistically diverse communities

During 2010/11 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 Plan*. Fire officers worked in partnership with local councils, CALD community groups, service providers and other community organisations to give tailored fire safety presentations.

FRNSW CALD achievements during the year included:

- › Appointing and training additional FRNSW community fire safety volunteers, bringing the total number to 20. These volunteers spread fire safety messages to new migrants and community members with limited English language skills. The most recent appointment was from the Indian community in Woolgoolga.
- › Involving CALD service providers in FRNSW's Fire Prevention Week activities in May.



- › Hosting the 2011 National Harmony Day launch at the City of Sydney Fire Station. The Federal Minister for Immigration and Citizenship Mr Chris Bowen and Parliamentary Secretary for Immigration and Multicultural Affairs Senator Kate Lundy launched the event. Fire safety information was handed out to the 400 attendees. FRNSW also conducted and assisted with Harmony Day events in Wagga Wagga and Wollongong.
- › Translating FRNSW's safety fact sheets to increase awareness among CALD communities of fire risks and ensure that they will be well prepared should an incident occur. This information was translated into six languages (Arabic, Chinese, Vietnamese, Dinka, Thai and Hindi) and distributed at CALD events.
- › Updating FRNSW's Fire Safety module in the NSW Adult Migrant English Service curriculum. The module covers home escape plans, smoke alarms, fire safety and the Triple Zero emergency number. The information was posted on the FRNSW website and free copies were distributed to TAFE students.
- › Working closely with the Federal Department of Immigration and Citizenship (DIAC) which funds service providers to CALD communities. DIAC funded inclusion of FRNSW's winter and summer fire safety campaigns in the educational curriculum delivered at Albury, Griffith, Goulburn, Wagga Wagga and Wodonga.



- A. The winter fire safety campaign raised community awareness about how to prevent fires in the home
- B. Householders are encouraged to replace their smoke alarm batteries when they change their clocks for daylight saving
- C. Some of the vintage appliances on display at the Museum of Fire



Running effective community education events and campaigns

Online home fire safety audit

FRNSW, together with Major Community Partner GIO, developed an online home safety audit. The audit was launched in July 2010 with promotions at railway stations and at other key locations in the Sydney CBD. Householders do the audit by visiting FRNSW website and answering questions which assess how safe their home is and identifies the main fire risks. This year 7381 people completed the audit.

Summer bushfire safety campaign

Over the summer of 2010/11, FRNSW supported the NSW Rural Fire Service (RFS) in running a public awareness media campaign to emphasise the importance of householders in bushfire-prone areas preparing their homes to reduce bushfire risk. The campaign theme was 'Prepare-Act-Survive' and featured actor Peter Phelps. The campaign focused on announcing the new fire danger ratings and bushfire alert messages as well as encouraging people in bushfire-prone areas to prepare a bushfire survival plan. A new online tool was also launched to help residents assess their homes in terms of bushfire danger. With the support of the RFS, FRNSW engaged McDonald's to run a traymat promotion on Prepare-Act-Survive.

Mardi Gras Festival

On 5 March FRNSW participated in the 31st Sydney Gay and Lesbian Mardi Gras parade which was watched by an estimated 300 000 spectators and a television audience of millions. The FRNSW contingent consisted of an offline fire engine and a community education vehicle, accompanied by some 100 fire officers, administrative staff and Community Fire Unit members. FRNSW's participation 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 also show that fire deaths and injuries peak between May and August each year. In response, FRNSW in 2011 ran its annual Fire Prevention Week from 1–7 May, encouraging householders to take steps to minimise the risk of a fire in their homes, especially during winter.

Sponsors GIO and McDonald's supported FRNSW to promote community awareness of the dangers of house fire and simple actions to prevent them. GIO produced a community safety television advertisement with FRNSW which was shown on the Nine Network from 1 May until the end of September. It featured Linda Buchan, a burns survivor, urging members of the community to complete a home fire safety audit.

McDonald's produced a community safety announcement for television and radio advertisements promoting the Brigade Kids website. Brigade Kids Day was held on 1 May, with fire officers visiting selected McDonald's stores across the State to promote fire safety and Brigade Kids. McDonald's ran an in-store promotion selling children's red fire helmets for \$2 each which raised \$135 000 for the Burns Unit at The Children's Hospital, Westmead.

Fire Prevention Week culminated in the FRNSW Open Day, with fire stations across the State opening their doors to the public, distributing fire safety materials and providing advice on 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. The budget for the campaign, and the audience reach, were boosted when the Nine television network supported it by donating additional advertising airtime worth \$160 000.

'Change Your Clock, Change Your Battery' campaign

Fire deaths and injuries often occur when domestic smoke alarms do not work. Again this year FRNSW and the NSW Rural Fire Service joined Duracell and interstate fire services in the 'Change Your Clock, Change Your 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 3 April. The campaign received widespread media coverage on TV, radio and press. Fire officers promoted the campaign to their local communities, with some crews running smoke alarm information sessions at Bunnings stores.

Hunter and Central Coast pilot

In 2011, FRNSW joined the Australian Red Cross and the RFS in launching a pilot project designed to assist vulnerable members of the community in the Hunter and Central Coast. This project allows FRNSW messages and programs to be distributed by the Red Cross to seniors and housebound people via regular visits and phone calls.

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 almost 60 000 visitors in 2010/11. FRNSW continued using an area at the Museum to stage road crash rescue training. The Museum also houses FRNSW's historic fleet, which is listed on the State heritage register.





Conducting local station-based community prevention and engagement activities

Seasonal community safety campaigns

Local brigades used seasonal fire safety information to promote consistent safety messages across NSW. Highlighted risks specific to each season were:

- › Spring: electrical safety, household chemicals safety, removal of household clutter, preparing for the bushfire season, barbecue and backyard safety
- › Summer: festive season safety (particularly with lights and candles), caravan and camping safety, children and fire safety
- › Autumn: FRNSW Open Day, smoke alarm maintenance 'Change Your Clock, Change Your Battery' awareness, seniors fire safety, and
- › Winter: Fire Prevention Week, winter fire safety, kitchen fire safety.



Kitchen fat fire simulators

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 which are used by fire officers to demonstrate the devastating consequences if people try to use water to extinguish a cooking oil fire. In 2010/11 fire officers gave 167 kitchen fat fire simulator demonstrations at a range of community events such as the Tamworth Country Music Festival, Eastwood's Granny Smith Festival and the Kiama Emergency Services Expo. Demonstrations were also staged on television shows such as *Better Homes and Gardens*, and on cooking and morning programs.



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 an estimated 60 000 people visited their local fire stations on 7 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. More than 40 000 show bags with fire safety fact sheets and brochures were distributed to visitors.

Smoke alarm letters

Fire officers often attend fire calls to homes where there is no working smoke alarm or where installed smoke alarms have failed to operate. In these cases, FRNSW sends a letter advising the householder of the legal requirement to have working smoke alarms in their home. Each letter includes information on smoke alarms and where they should be placed for maximum effectiveness. This year, FRNSW sent 771 such letters.

% of NSW adults living in homes with a smoke alarm

Year	2006	2007	2008	2009	2010
%	86.9	92.9	93.6	93.7	94.2

Source: NSW Population Health Survey 2010, Centre for Epidemiology and Research, NSW Department of Health.

Smoke alarms in caravans

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 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 hard to extend this legislation to include mobile properties. On 25 February 2011, the legislation was amended to require that smoke alarms be fitted in both new and existing caravans, campervans and moveable dwellings. A six-month grace period was provided to allow time for compliance.

Community events and local media

More than 63 100 community safety, preparedness and engagement activities were carried out by fire crews during the year – see *Appendix 8: Reported Responses by Region, Zone and Brigade 2010/11* 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, 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.



- A. Legislation now requires installation of smoke alarms in both new and existing caravans
- B. Fire officers demonstrate that water and kitchen fat fires definitely do not mix
- C. Visitors to FRNSW stations enjoy a sausage sizzle on Open Day

Developing strategic partnerships to enhance community safety

Partnerships with the business sector

In 2010/11 FRNSW partnered with the business sector to deliver major fire prevention program messages 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 are also committed to community engagement and education.

Companies partnering with FRNSW on prevention programs

Partner	Sponsorship level
GIO	Major Community Partner – three years Presenting Partner – Recovery Kits Presenting Partner – Home Fire Safety Audit Supporting Sponsor – Fire Prevention Week
McDonald's	Major Community Partner – three years Presenting Partner – Brigade Kids
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 4 300 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 local 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 which will enable improved recording and reporting of fires within HNSW properties.

During the year FRNSW also worked 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. FRNSW helped to facilitate safety forums involving emergency services, community housing corporations and insurance brokers for public housing.

Fire safety in accommodation for the disabled

In 2010/11 FRNSW continued working with the NSW Department of Human Services – Ageing, Disability and Home Care through 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 over the last five years.

Fire safety in culturally and linguistically diverse communities

FRNSW combined with other Australian fire services to form 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, share 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 safety committees of various local councils. This allowed recommendations to be made to councils about developing and implementing prevention and community safety education initiatives.

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 Brigade 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 NSW Police Force.

FRNSW joined with the NSW Police Force to hold an advanced workshop on fire scene examination. Members of the AFP, RFS, ACT Fire Brigade and Australian Federal Police also attended. Key speaker was Dr John DeHaan, an international expert on fire scene examination. Practical components included demonstrations of electrical fault development, fire behaviour and improvised devices.

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, continued to provide 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. This included the licensing of technicians in particular fields of fire safety.

Arson reduction and prevention

FRNSW, RFS 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. FRNSW also participated in local arson prevention programs such as Project Lucifer, which was set up to combat a spate of deliberately lit fires in the lower Hunter Valley.

Increasing community and business preparedness 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, basic evacuation and first aid, 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 2010/11 ComSafe delivered 1031 training programs to nearly 17 000 participants. This maintained its position as a leading provider in the field of emergency prevention and preparedness training. Revenue generated from these activities was used to develop and deliver fire and emergency education programs to the community.

During the year ComSafe also comprehensively analysed its operations and implemented a restructure. This led to improved business processes and reduced operating costs while maintaining quality service delivery and financial viability. It also ensured ComSafe remained not only competitive, but a market leader.

Key ComSafe projects and achievements during the year included:

- › managing rehearsal of the evacuation of 4500 bank staff from a 32-level high-rise building, enabling the bank to safely respond to emergencies
- › providing emergency response training to shift controllers at a large international company specialising in storage of dangerous chemicals
- › continuing strong growth in providing services in the Hunter Valley and NSW far north coast, especially to energy generators and the health industry
- › expanding services to the wine industry, including confined spaces training and risk management, and
- › strengthening business relationships in the Riverina.



A. Homes of people with disabilities are recorded in the FRNSW computer-aided dispatch system

B. FRNSW shared its fire investigation expertise with other agencies

C. ComSafe trained nearly 17 000 participants in 2010/11



ComSafe training services*

	2009/10	2010/11
Basic training courses	541	365
Health care	547	522
Specialist courses	207	144
Other (such as facilities rentals, consultations, evacuation drills and media events)	83	43
Total	1378	1074

Note:

1. ComSafe programs and the areas in which they are delivered have changed, altering how annual performance is reported.



- A. ComSafe Training Services continue to focus on workplace safety
- B. CFU volunteers work to reduce the bushfire risk
- C. FRNSW fire officer conducts a hazard reduction
- D. FRNSW fire officers provide advice about fire safety standards in buildings

Community bushfire preparedness

FRNSW's Community Fire Unit (CFU) program is an integrated approach to bushfire risk management used in areas where urban development meets bushland. It forms a key component of FRNSW's bushfire information and education strategy. At 30 June 2011, FRNSW had 577 CFUs in metropolitan and regional NSW operated by more than 7140 volunteers. This is an increase of 1000 volunteers and 95 CFUs over the previous year.

The CFU program assists residents in bushfire risk areas to prepare themselves, their families and their properties for bushfire threat. Each CFU team is equipped with basic firefighting equipment which they are trained to use. Their training also helps CFU teams to make informed decisions about whether to leave early or stay to defend homes when bushfires threaten. In addition, CFU members may assist fire officers conducting local hazard reduction burns, giving the opportunity to practice mopping-up activities such as extinguishing spot fires caused by embers.

FRNSW set up the CFU program in response to 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 when bushfires have threatened.

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



A



B

Program improvements during the year included:

- › developing a strategy to increase community awareness of bushfire safety in line with local bushfire risk management plans
- › increasing Indigenous community involvement in CFUs
- › helping the RFS to develop and implement its own CFU program. This will act as the entry level for new RFS volunteers
- › conducting local fire station engagement activities with local CFUs to ensure that they were prepared for the upcoming bushfire season, and
- › extending eligibility requirements for CFU membership to allow CFU cadet members (16 and 17 years of age).

Bushfire hazard reduction

Hazard reduction burns decrease potential bushfire fuel 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 20010/11 FRNSW fire officers carried out numerous hazard reductions on the urban-bushland interface.

A La Nina weather pattern developed this year, bringing high rainfall and increased moisture levels which limited the times when hazard reductions could be carried out.

FRNSW hazard reductions were conducted in cooperation with the RFS, National Parks and Wildlife Service, local councils, other public lands managers, CFUs and Landcare groups. Details of these burns are published in the RFS Annual Report.

Providing regulatory, advisory, inspection and investigation services

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* are proposed. The most common issues were vehicular perimeter access, extended egress travel distances and rationalisation of fire resistance levels.

This year FRNSW assessed 306 alternative solution submissions. Advice was given to certifying authorities at 106 meetings about whether proposed building designs met the required standard for safety 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 153 developments. Fire safety officers also assessed and commented on 103 applications to be exempted from environmental planning and assessment regulations.



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.

Major hazards facilities and dangerous goods sites

Under the *Occupational Health and Safety Regulation 2001* 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.

FRNSW inspected 36 major hazards facilities such as oil refineries and explosives and chemicals sites. These visits were carried out together with representatives from the Office of Environment and Heritage, Safe Work Australia and the NSW Police Force. In addition, 30 dangerous goods sites were 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.

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. 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 also inspected shared accommodation in areas attracting large numbers of short term visitors, such as Tamworth during the Country Music Festival.

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 the fire. 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. Fire location can also be hard to predict because the fire can travel between the panel skins.

During the past year FRNSW worked closely with EPS panel manufacturers to develop a code of practice designed to enhance the safety of fire officers and the public. This code calls for more robust construction/assembly related to cold stores, food processing plants and other facilities requiring strict temperature control.

Fire investigations

In 2010/11 FRNSW specialists investigated 300 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 275 Police court statements and made 18 court appearances. Major fires investigated (that is, those involving losses over \$10 million) included Liverpool City Council Chambers, Visy Paper Products at Warwick Farm, Homemakers Super Centre at Kensington and NCS Resins chemical factory at Mt Druitt.

Fires investigated by FRNSW's specialist investigators

	2006/07	2007/08	2008/09	2009/10	2010/11
Outcome of investigation					
Determined as accidental	80	98	118	117	93
Incendiary/deliberate	111	102	111	100	104
Undetermined ¹	92	90	90	90	103
Total	283	290	319	307	300

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.

Accelerant detection dogs

FRNSW is the only Australian fire service using accelerant detection dogs. 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 at 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 the dog handlers with Sheba and Winna attended 121 incidents across NSW, resulting in 14 court appearances by the handlers to give evidence. The teams also gave 65 lectures and demonstrations to both internal and external stakeholders.



A. FRNSW inspected 36 major hazards facilities

B. In 2010/11 FRNSW specialists investigated 300 fires and explosions

Highlights for the detection dog teams during the year included:

- › making appearances on several television programs, raising awareness of their roles
- › participating in research with the NSW Health Division of Analytical Laboratories which tested and demonstrated the greater sensitivity of dogs compared to mechanical testing equipment, and
- › participating in a research study with the University of Technology Sydney to assess the dogs' effectiveness, determine ways to improve their accuracy, and compare the training and work practices of agencies using detector dogs.

Automatic fire alarms

There were 12 644 automatic fire alarms (AFAs) connected in NSW at 30 June 2011. AFAs provide vital early warning to occupants and automatic notification to FRNSW in higher risk premises such as multistorey buildings, hospitals, shopping centres, universities and nursing homes.

In 2010/11 FRNSW responded to 52 485 automatic fire alarm activations, 98% of which proved to be false. Many false alarms are caused by faulty fire protection systems. They cause unnecessary disruption to businesses and the community, and can divert valuable emergency services resources from responding to genuine emergencies.

FRNSW continued to address false alarms by:

- › visiting 269 premises with recurring false alarms to identify the causes and advise building owners on how these could be rectified
- › giving technical advice to local councils and other agencies
- › using statistical information to identify problem systems and incorrectly located smoke detectors
- › advising industry groups and alarm monitoring companies on the main causes of false alarms and how these could be prevented, and
- › comparing statistical data with other fire services to identify trends and improvements in false alarm prevention strategies.

From 1 August 2011 the false alarm fee is rising to \$750. This increase is necessary to encourage property owners and building managers to properly maintain and service AFA systems. The \$750 charge is still lower than most other states and is only the second increase in more than 16 years. False alarm charges do not apply to smoke alarms in private houses.

Researching, identifying and addressing major community risks

Unsafe consumer products

When faulty consumer products, such as electrical appliances, are suspected of causing fires, responding fire crews advise FRNSW's specialist fire investigators and researchers who analyse fire reports and data. All products identified as being involved in a number of fires are 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.

Reduced fire risk cigarettes

All cigarettes made and sold in Australia must now self-extinguish after being dropped. FRNSW fire data indicate that cigarettes are a major source of ignition in fatal fires.

On 23 September 2010, 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.

FRNSW sent several of the most popular Australian cigarette brands to the USA for testing at an independent



A. Research shows many householders are complacent about fire risks in the home

B. Fire officer sets up a burn cell to reconstruct a fire scenario

laboratory. The results showed that all exceeded the self-extinguishing requirements of the Australian Standard. FRNSW also began a joint research project with the University of Technology Sydney to analyse the effects of the introduction of reduced fire risk cigarettes to Australia. Results will be published in late 2011.

Burn cells to study fire behaviour

FRNSW set up two burn cells on a training site at Londonderry. This enabled joint research into fire behaviour by FRNSW, the NSW Police Force and institutions such as UTS and University of NSW. 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. Recent examples include reconstructing fires caused by heaters and cooking oil.

Benchmark behavioural survey

In 2010 FRNSW commissioned a large scale study to track community awareness of fire safety issues and to assess the effectiveness of its prevention programs and education campaigns. The study used both quantitative and qualitative research methods. The main findings were:

- ▶ many people were complacent about adopting safe fire practices in the home
- ▶ only a few considered themselves and their own household to be at high risk of fire, and
- ▶ many people were not motivated to take action because they felt their own risk was low, or because they did not believe that fire safety messages applied to them.

The research findings are being used to design and target future fire safety programs and campaigns more effectively.



4

Section 4 – Performance

Operational Preparedness

Capability Development



Priorities

- › Recruiting and managing a diverse effective workforce
- › Providing the highest quality education and training to continuously increase the capabilities of all staff
- › Improving the health, wellbeing and fitness of staff to perform their jobs safely and efficiently
- › Increasing operational readiness through pre-incident and disaster planning, training exercises and learning from experience
- › Maintaining reliable and effective fleet and equipment
- › Managing assets and finances to achieve the most efficient and effective use of resources

Highlights

- › Completed a training needs analysis for levels from recruit through to qualified fire officer rank
- › Developed and implemented an intensive 12-week Recruit Training Program, with 79 full-time fire officers graduating this year
- › Implemented the largest ever rollout of new fire engines and tankers
- › Opened new fire stations at Kincumber and Baulkham Hills, and renovated another 14 fire stations
- › Implemented a range of initiatives to raise awareness of firefighting as a career for women
- › Restructured FRNSW's Human Resources Directorate to improve support to frontline managers, workforce planning, and operational and managerial knowledge and performance
- › Established a Workplace Standards Branch and introduced programs to support a respectful workplace
- › Restructured FRNSW's Education and Training Directorate and overhauled training delivery
- › Negotiated and implemented new industrial awards for both full-time and retained fire officers in accordance with Government Wages Policy



A. FRNSW is committed to recruiting and managing a diverse effective workforce

B. Improving the health and fitness of staff helps them to perform their jobs safely and efficiently

C & D. FRNSW developed an intensive 12-week Recruit Training program and enhanced training delivery



Future directions

- › Develop an organisation-wide approach for the design, development and delivery of training in both face-to-face and blended environments
- › Use FRNSW's SAP Learning Management System to book, manage and record training
- › Develop and deliver e-learning modules across a range of topics to improve access to, and flexibility of, training across FRNSW
- › Develop capability frameworks, career pathways and a program of professional learning for all FRNSW staff
- › 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
- › Develop and introduce an integrated care and maintenance system for all personal protective clothing
- › Recruit and train more retained fire officers, especially in regional areas of NSW
- › Implement an integrated safety management system and an occupational health and safety risk management framework
- › Implement the *FRNSW Reconciliation Action Plan 2011-16* and the *FRNSW Aboriginal Employment and Development Action Plan 2011-2013*
- › Implement the *FRNSW Women's Employment and Development Action Plan* to recruit, develop and retain women in the FRNSW workforce



Recruiting and managing a diverse effective workforce

FRNSW's workforce strategy is based on 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

FRNSW delivered a number of the Equal Employment Opportunity initiatives identified in its EEO Management Plan 2010–2012.

This year FRNSW increased initiatives to raise awareness of firefighting as a career for women. In July, FRNSW and the Victorian Country Fire Authority co-hosted the 3rd Australasian Women in Firefighting Conference. FRNSW and the Fire Brigades Employees' Union jointly funded 20 delegates to attend the Conference, and FRNSW staff, including the Commissioner, presented at the Conference.

Also in July, FRNSW held a Women's Employment and Development Summit in which about 100 fire officers, administrative, trades and technical staff participated. The summit was instrumental in helping to develop the FRNSW's *Women's Employment and Development Action Plan*, which the Commissioner launched the following October. The Plan outlines strategies to recruit, develop and retain women in the FRNSW workforce.

An information session was held at the Wesley Conference Centre in October to raise awareness among women of careers in the fire and rescue service. It was attended by around 200 women.

The FRNSW completed its *Reconciliation Action Plan 2011–16*. This Plan affirms FRNSW's commitment to the national goal of reconciliation and describes how it will improve its capability to work with Aboriginal communities. An Aboriginal Affairs Advisory Committee, comprising both Indigenous and non-Indigenous members, was established.

The Aboriginal Resources Kit on the FRNSW Intranet continues to be a significant resource for raising staff awareness about Aboriginal culture and experience from both historical and contemporary perspectives. It helps staff to better understand issues facing Indigenous communities and to engage more effectively with them.

During National Aborigines and Islanders Day Observance Committee Week, FRNSW held and participated in a number of celebrations involving staff and local Indigenous communities.

Recruitment of full-time fire officers

FRNSW continued to attract many high calibre applicants, with three intakes of recruits during the year. Interviews and focus group discussions with key staff identified the need to improve workforce planning so that it attracts, recruits and develops a more diverse, skilled and adaptable workforce that better reflects the communities FRNSW serves. This research is being used to amend FRNSW's recruitment marketing to attract more women and people from Indigenous and culturally and linguistically diverse backgrounds. A KPMG review identified a lack of diversity in the workforce as a key factor that could lead to "mono-cultures" and a lack of tolerance and respect for alternate views and beliefs.



Recruitment of retained fire officers

Maintaining sufficient numbers of retained (or on-call) fire officers, mainly in rural areas of NSW, remains a 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. During the year 326 retained fire officers were recruited while 310 left the organisation by retirement, resignation or termination.

In 2010/11 FRNSW developed new strategies to improve recruitment, training and retention of retained fire officers, including:

- › streamlining retained recruitment processes
- › holding information sessions across NSW to raise awareness and quality of applicants
- › developing recruitment plans and fact sheets to help local brigades with recruitment
- › identifying suitable candidates from the 2010 Permanent Recruitment Campaign candidate pool as possible recruits for retained fire fighter positions in country areas, and
- › using FRNSW's e-recruitment system to build an online talent pool of suitably qualified candidates.



A. FRNSW's workforce strategy promotes equity and diversity in employment

B. FRNSW continued to attract many high calibre applicants

C. FRNSW developed new strategies to improve recruitment, training and retention of retained fire officers

D. Administrative staff undergo training

Industrial relations

During the year FRNSW continued to consult and communicate with staff and unions. It participated in Joint Consultative Committee meetings with the Fire Brigade Employees' Union and the Public Service Association. FRNSW also made representations to the Industrial Relations Commission of NSW when necessary. New awards for full-time and retained fire officers were negotiated, and these came into effect from 17 June 2011. Given the significant reforms, changes and associated restructures, unions expressed concerns about a number of issues and sometimes took industrial action.

Restructure of Human Resources

A review of corporate services led to FRNSW's Human Resources Directorate being restructured. This recognised the need for an increased focus on service in human resources in order to improve support to frontline managers, workforce planning, and operational and managerial knowledge and performance. A help desk was also established in May to give employees a single point of contact for all human resources and payroll enquiries.

Workplace Standards

FRNSW established a Workplace Standards Branch in July as part of its response to recommendations arising from the KPMG *Review of Workplace Conduct, Processes and Culture*. This has improved management of conduct and discipline across FRNSW and strengthened ethical behaviour. A total of 277 matters were dealt with during the year, consisting of 184 complaints and 93 conduct issues. For more information, see the Governance, Management and Workplace Reform chapter.



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

Education and Training restructure

During the year FRNSW's Education and Training Directorate was restructured and its training delivery overhauled. This was done to ensure that all staff receives the training and development needed to be part of a diverse, skilled and adaptable workforce. It will also make FRNSW a more effective organisation, better able to meet the many challenges and demands that face modern emergency services. Due to the reforms and review of training, delivery of some programs was affected.

Training in 2010/11

Numbers of FRNSW staff attending education and training programs ¹					
	2006/07	2007/08	2008/09	2009/10	2010/11
Full-time Firefighters Recruit Training	176	139	120	58	79
Appliance and Aerial Training	3385	3743	3147	2152	1250
Breathing Apparatus Training (includes personnel from external agencies)	17 010	11 145	9805	9390	10 832
Fire Suppression Training	480	1644	1300	1090	340
Senior Firefighters Promotion Program	59 ²	100	229	130	106
Station Officers Promotion Program	77	61	62	58	32
Inspectors Promotion Program	28	0 ⁴	30	0 ⁴	16 ⁴
Full-time Firefighters Skills Maintenance	na	1629 ⁵	1941	790	na ⁶
Full-time Firefighters Level 1 to Qualified Firefighter Assessments	na	1433 ⁵	1578	2565	na ⁶
Retained Captains and Deputy Captains Development Program ⁵	na	126 ⁵	108	100	92
Retained Firefighters Recruit Training	331	300	377	331	235
Retained Firefighters Skills Maintenance	na	546 ⁵	948	1534	810
External Programs	16 ³	8 ³	10 ³	423	72
Basic Life Support (new and refresher)	na	na	158	1645	2080

Notes:

1. This table does not include all training for re-accreditation purposes.
2. Reduced numbers in 2006/07 were due to changes in pre-course requirements and staff availability.
3. The NSWFB had previously run many Certificate 4 courses in Workplace Training and Assessment. Delivery of these courses was put on hold while aspects of this course were reviewed.
4. This program was not offered in the years indicated as numbers trained were sufficient to meet FRNSW's needs at that time.
5. This program was offered for the first time in 2007/08 as a formal training program.
6. These data are no longer collected, as most training is now done at local station level.

Initial skills training

To comply with changes to the industrial award for full-time firefighters, an intensive 12-week recruit training program was developed and implemented in September 2010.

During the year 79 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 delivered to 14 full-time fire officers who had returned to operational duties after absences of a year or more.

Skills acquisition and maintenance

This year FRNSW continued to deliver theoretical and practical skills acquisition and maintenance training to its full-time and retained fire officers.

Skills acquisition training was provided to 235 retained recruits. Skills maintenance programs were delivered to 810 retained fire officers at regional training facilities. Skills maintenance and acquisition training was also provided at station level in subjects including off-road driving, secondary rescue, road accident rescue, basic firefighting skills, chainsaw, power saw and pump operations.

Five Retained Captains and Deputy Captains Development Programs were conducted. These Programs focused on incident control systems, incident management, administration and fire station management. On completion, the Captains and Deputy Captains were qualified to deliver training at a station level.



A. Newly graduated fire officers demonstrate their skills

B. FRNSW continued to deliver theoretical and practical skills training to full-time and retained fire officers

Fire suppression training

During 2010/11 a Structural Firefighting Level 2 program was introduced. Under this program, fire officers across NSW receive theoretical and practical training in fire behaviour, tactical ventilation, case study investigation, fireground strategies and tactics for structure fires. Live fire training was delivered to 40 fulltime fire officers. This included subjects such as search and rescue, and high rise operations. 20 new Station Officers were given two days of advanced training in structural firefighting strategies and tactics as part of their development program.

Eight FRNSW personnel, 12 Aviation Rescue and Firefighting instructors and one instructor from Victoria's Country Fire Authority completed the Structural Firefighting Instructor's course. Fire behaviour training was also delivered to 20 NSW Police Force officers to develop their skills in fire investigation and forensics.

A new live fire prop was installed at the State Training College, Alexandria. The simulated service station building, bowsters and car enables search and rescue training under more realistic fire conditions. The new reverse hose lay technique was taught to recruits and included in fire operations training.

Basic life support

Training and assessment was realigned to comply with national competencies and FRNSW's responsibility as a Registered Training Organisation. Basic Life Support refresher courses were held this year for 628 full-time fire officers and either initial or recertification courses for 1452 retained fire officers. New first aid qualifications were gained by 79 full-time fire officers and two administrative and trades staff.





Vehicle training

During 2010/11 FRNSW delivered 47 training courses on specialised vehicles including pumpers, off-road tankers and aerial ladder platforms to its staff and personnel from other agencies. Around 1200 fire officers gained qualifications to drive specialised vehicles. Vehicle training instructors completed 189 Roads and Traffic Authority medium rigid licence upgrades and 42 heavy rigid licence upgrades. This was an increase of 72 licence upgrades over the previous year.

Breathing apparatus and hazardous materials

These capabilities continued to be delivered in initial and maintenance skills to full-time and retained fire officers. Training included breathing apparatus, hazardous materials (hazmat) response, and intermediate hazmat training in regional areas.

The State-wide training of fire officers in the use of gas detectors continued in conjunction with an annual refresher program. The rollout and training in the use of new breathing apparatus also continued in regional NSW, along with that for new distress signalling units in the greater Sydney area. Other training included installation and use of thermal imaging cameras for hazmat technicians, waterways training for intermediate hazmat stations and further training in extended air breathing apparatus. Continuing programs included operational and training support roles for specialised decontamination at special events, clandestine drug laboratories, enhanced self-contained breathing apparatus and gas detection, and an intermediate hazmat enhancement program.

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



A. FRNSW delivered 47 training courses on specialised vehicles including aerial ladder platforms

B. Breathing apparatus and hazardous materials training was delivered to full-time and retained fire officers

C & D. This year FRNSW developed a framework to ensure continuous improvements in learning and development

Command, leadership and management

This year upon successful completion of the relevant promotion programs, 106 Qualified Firefighters were promoted to the rank of Senior Firefighter, and 32 Leading Firefighters were promoted to the rank of Station Officer. FRNSW staff also completed the following post-graduate degrees and external developmental programs during 2010/11:

Program	Provider	Number
Graduate Certificate in Management	Charles Sturt University	13
Volunteer Leaders Program	Australian Institute of Police Management / Charles Sturt University	6

One Inspectors Promotion Program was held, with 16 FRNSW graduates and one New Zealand Fire Service graduate. FRNSW provided all incident management teams with a theoretical exercise and discussion session involving a fire scenario, using a computerised simulation system.

During the year FRNSW developed and 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, Institute of Public Administration Australia, Australia New Zealand School of Government, Emergency Management Australia and Emergency Management NSW.

Program design and development

During 2010/11 what is now FRNSW's Education and Training capability was restructured.

Despite the accompanying challenges, achievements included:

- › reorganising roles to better reflect training and compliance needs of the future
- › coordinating the collection of national quality indicators and reporting these to the Australian Skills Quality Authority
- › developing a framework to ensure continuous improvements in learning and development
- › managing and monitoring delivery of Certificate IV in Training and Assessment for FRNSW staff, and
- › ensuring compliance with national Vocational, Education and Training Quality Framework standards and assisting continuous improvement.



Staff exchanges and secondments

In 2010/11 FRNSW continued to provide staff development opportunities through a program of exchanges and secondments under its International and Interstate Firefighter Exchange Program:

- › Senior Firefighter Justin Allan exchanged places with Firefighter Ian Bolton of the North Vancouver Fire and Rescue Service, Canada
- › Senior Firefighter Nathan Begley exchanged places with Firefighter David Sallum from Gastrike Fire and Rescue Service, Gävle, Sweden
- › Inspector Adam Dewberry continued his two-year secondment as advisor to the Solomon Islands Fire Service, replacing Inspector Gary White, whose secondment concluded. Inspector Dewberry is working as part of the Regional Assistance Mission to the Solomon Islands, and
- › Station Officer Stuart Harvey began a two-year secondment to WorkCover's major hazards team.

Library and information services

FRNSW's library and information service provided access to information resources and research skills to support the work of the organisation. Resources in fire fighting, fire prevention and community safety, fire safety engineering, fire service management, hazardous materials, emergency management and rescue were collected and listed in the library catalogue. This now comprises more than 43 000 resources, all searchable through the FRNSW intranet.

Monthly updates and 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 2010/11 the FRNSW library loaned 1833 items from its collection to FRNSW staff, supplied more than 1500 journal articles and answered about 2800 reference queries.



A. FRNSW's library provided access to information resources and research skills

B & C. FRNSW continued working to maintain and improve the health, fitness and wellbeing of its workforce

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

Health and safety

In line with FRNSW's Safety Strategy 2009–2012, development of a Safety Management System is well underway. Consultation was carried out throughout FRNSW to ensure the new system meets the requirements of all areas.

FRNSW is preparing to implement the requirements of the new *Work Health and Safety Act 2011* which takes effect from 1 January 2012. This has involved analysing current systems and processes to assess if they comply with the new Act and to identify any changes required.

FRNSW also enhanced the online version of its notifications of injury, illness, exposure and near miss reporting system which was recently implemented. Reports were developed to track incidents and help identify risks and hazards. These reports have given management information and data to assist them in taking action to prevent similar incidents.

More than 100 new staff were given occupational health and safety induction training. Many current staff also received safety information and education through station forums, supervisor/management meetings, recruit training and promotion training programs.



Health and fitness programs

This year FRNSW continued running programs to maintain and improve the health, fitness and wellbeing of its workforce. Programs included:

- › analysis of injury data to identify areas for improvement in health and fitness programs
- › 40 voluntary health and fitness assessments
- › new exercise equipment in fire stations
- › review and updating of the virtual gym, an interactive website that outlines correct exercise technique and exercise programs
- › health promotion programs such as Quit Smoking, and
- › the peer fitness leader program.

Manual handling training for all metropolitan fire brigades was completed during the year, and will be extended to all regional brigades in 2011/12. Firefighter education sessions on issues such as hydration, nutrition, exercise programs, and the safe, effective use of exercise equipment were delivered across the State. A posture program was delivered to Sydney Communication Centre operators.

The “Waste the Waist” program, an interactive web-based competition targeting cardiovascular risk factors, including obesity, was held again in 2010/11. The second year of this program saw 250 employees take part – and lose – a total of 463 kg and 482 cm of waist girth.

FRNSW continued to develop rehabilitation pods which provide mobile rest and rehabilitation facilities for fire officers involved in long duration events or working in extreme conditions. The pods are designed to minimise firefighter injury and illness from stress, fatigue and dehydration by providing

relief from hot and cold environments, physical and mental rest, food and fluids, health monitoring, and treatment if required. The effectiveness of FRNSW’s incident ground rehabilitation was also assessed.

This year FRNSW began reviewing the physical aptitude test in conjunction with Wollongong University. This involves evaluating the physical demands of firefighting and determining a valid physical standard to be used for assessing potential firefighter candidates. This project is due to be completed in early 2012.

To safeguard the health of FRNSW employees, health monitoring was provided to hazmat technicians, compartment fire behaviour training instructors and those potentially exposed to hazardous substances. FRNSW vaccinated 1165 employees against flu. Vaccinations were also given to urban search and rescue teams and those deployed to remote areas. In addition, health promotions on specific health risks such as diabetes were carried out.

FRNSW continued to improve its injury management practices during 2010/11. All injured employees were placed on suitable duties within seven days of being certified as fit to do so, ensuring all injured workers returned to their pre-injury duties as quickly as possible. This year FRNSW again achieved reductions in deposit workers compensation premiums. Significant reductions in tail claim liabilities were also obtained over the year, which will reduce future hindsize premiums.

In line with the NSW Government’s mental health strategy, FRNSW has developed a mental health management policy framework. This framework aims to foster a collaborative approach to a healthy work environment by giving managers and staff the tools and skills to manage psychological health within FRNSW.



Employee Assistance Program

This year FRNSW continued to provide both internal and external employee assistance programs (EAP). These programs gave all staff and their immediate families access to confidential professional counselling services on a 24-hour basis for both work-related and personal issues. During the year, 178 staff and their family members used EAP services for 420 hours of face-to-face or phone counselling.

The external contracted EAP provider provided a program for members of the Fire Investigation and Research Unit, and also for members of Urban Search and Rescue teams returning from providing earthquake recovery assistance in New Zealand and Japan. Internal EAP staff supported employees with mental health issues. Beyond Blue workshops were delivered to Zone and Captains' conferences to provide information about common mental health issues in the workplace and how to deal with them.

Critical Incident Support Program

FRNSW uses a multi-faceted approach to deal with the effects of traumatic incidents on staff. Its Critical Incident Support Program (CISP) provides services that include one-to-one assistance, on-scene support and follow-up, education and information sessions. They encourage early intervention and referral to professional support services. The program relies heavily on the voluntary services of fire officers trained in peer support.

Contact between CISP members and fire officers continued to rise this year, with more than 400 initial contacts resulting in 157 interventions. CISP members continued visiting fire stations to increase awareness of the program and to give fire officers an initial point of contact to discuss workplace stress. The annual CISP conference was also held, with sessions on skills maintenance.

Chaplaincy

As an emergency service, FRNSW responds to all types of incidents which can sometimes be traumatic for both victims and responders. During the year FRNSW's Salvation Army Chaplains, Majors Lyndsay Smith and Dawn Smith, continued to provide counselling and support to fire officers and their families. They also assisted members of the public involved in or affected by emergencies. In addition to the care they offered to staff and their families during difficult times, they also assisted at major life events such as weddings, christenings and funerals.

The Chaplains provided their services on 3361 occasions during 2010/11. FRNSW greatly appreciates the commitment and service of its Chaplains.

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. This year the Centre:

- › replied to around 3000 requests for incident information
- › undertook various research and analysis projects, including dollar loss indicators and response times
- › processed and analysed 63 operational debrief reports and more than 150 firefighter observations
- › produced three incident case studies, 12 issues of Heads Up, 26 Commissioner's Orders, four Safety Bulletins, two Operations Bulletins and 17 Standard Operational Guidelines
- › developed a framework for planning and reporting key performance indicators, and
- › conducted 50 zone and station forums on case studies and issues.



Victorian bushfire enquiry

FRNSW participated in a NSW Government working group which reviewed the findings of the 2009 Victorian Bushfires Royal Commission and identified implications for NSW. Besides reviewing operational response, community protection was also boosted with the introduction of new fire danger ratings, neighbourhood safer places, emergency alerts, phone warning system and more online bushfire information.

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 and 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, and
- › general rescue/urban search and rescue exercises.

Firefighter Championships

The bi-annual FRNSW Firefighter Championships were held in October 2010 at Tweed Heads and attracted thousands of fire officers from Australian and New Zealand fire services. Fire crews competed against each other in a range of events designed to hone their firefighting skills and strengthen team building. 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. Kelso Fire Brigade, previous runners-up, came in first overall.



A. Increasing operational readiness through training exercises and learning from experience

B. Fire officers took part in hazardous materials exercises involving chemical, biological and radiological hazards

C. Fire officers showcase their skills at the Firefighting Championships



Maintaining reliable and effective fleet and equipment to ensure reliability and effectiveness

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 better resourcing NSW fire stations. The objectives of FRNSW's fleet strategy include:

- › an integrated approach to fleet management which includes mid-life maintenance, ensuring fire engines remain operational over their life at minimal cost
- › improved safety and ergonomics by managing how equipment is stowed on vehicles
- › reduced environmental impact with the introduction of Euro 5 emission standard compliant engines, and
- › reduced average age of the fleet as older fire engines are progressively replaced with modern firefighting vehicles.

At 30 June 2011 the FRNSW fleet totalled 1495 vehicles. The fire engine fleet of 663 vehicles was comprised of 551 fire engines with pumps; an aerial fleet of 26 ladder platforms, ladders and aerial pumps; 84 rescue and hazmat vehicles; and two vehicles awaiting disposal. This year FRNSW began disposing of older Firepac fire engines, and commissioned 63 new Class 1, 2 and 3 tankers and pumpers plus a 44-metre ladder platform.

In addition to the fire engine fleet, FRNSW has 579 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, some having hazmat and primary rescue capability, carry more water than pumpers, have Class A bushfire fighting foam systems, and pump and roll firefighting capabilities. Newer models also incorporate cabin protection spray systems. Twenty one tankers were commissioned this year. The average age of the Class 1 fleet, including service exchange vehicles (SEVs), was 10.5 years at 30 June 2011.

Class 2 pumpers: These pumpers also have hazmat and primary rescue capability, and have proved very effective in regional locations. There are 247 Class 2 pumpers now in service, including 215 for first call operations, with the remainder being used for training and as SEVs. A total of 10 new pumpers have been commissioned since 2009. The average age of the Class 2 fleet was 7 years at 30 June.

Class 3 pumpers: These heavy urban fire engines may also be configured as primary rescue and hazmat vehicles. The latest Class 3 pumpers have reversing cameras, 4000 litres/minute pumps, programmable warning signs at the rear and Euro 5 environmentally compliant engines. In the largest ever rollout program of these pumpers, 31 were commissioned in 2009/10, followed by a further



32 in 2010/11. The average age of the Class 3 fleet was 7.8 years at 30 June.

Aerial vehicles

A 44-metre ladder platform was commissioned in October 2010 at the City of Sydney Fire Station. Three new 15-metre aerial pumps are to be commissioned from August 2011, replacing 2001 models which will 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 are due to be ordered in 2011/12. The average age of specialised vehicles was 8.4 years at 30 June.

Maintenance, inspections and refurbishments

In 2010/11, FRNSW staff carried out 305 major services and 242 minor services in Sydney, and 444 services in regional areas. A further 148 services were conducted on minor fleet vehicles in the workshops. Mobile on-call vehicles also attended 3259 service calls.

During the year FRNSW staff inspected 62 aerial vehicles and contractors inspected a further 62. RTA-certified inspectors carried out heavy vehicle pink slip inspections for the annual re-registration of the fire engine fleet.

As part of FRNSW's fleet strategy, all fire engines receive major servicing and inspections at their projected mid-life. Ten Class 3 mid-life refurbishments were completed

during the year, with another 10 programmed for 2011/12. The tanker mid-life program also continued, with work completed on two heavy rescue units and two aerial pumps. In addition, rear air conditioning units were fitted to 31 fire engines.

Equipment maintenance and management

As part of its asset maintenance strategy, FRNSW continued to maintain rescue equipment on the fire engine fleet and replacing it where necessary. This year 5500 pieces of equipment were serviced, 2100 new items were commissioned and 590 items were decommissioned. Equipment upgrades included height safety equipment, power saws, chainsaws, portable fire pumps, hydraulic rescue cutters, mini cutters, road accident rescue equipment, 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 were bought and maintained.



A & B. At 30 June 2011 the FRNSW fleet totalled 1698 vehicles

C. The 44-metre ladder platform demonstrates its capabilities at Sydney Harbour Bridge

D. Hazmat technical services staff serviced more than 50 000 pieces of equipment



C



D



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

Procurement

During the year FRNSW continued its partnership with other Australian fire and emergency services in collaborative purchasing, coordinated through the Australasian Fire and Emergency Service Authorities Council (AFAC). This cost-saving procurement included both recurrent and capital contracts for plant and equipment, as well as firefighting and emergency vehicles.

In 2010/11 FRNSW led the national tender process for the supply of firefighting equipment. This collaborative purchasing will deliver economies of scale, reduce procurement overheads, and achieve savings for Australian fire services.

Major contracts were awarded for self-contained breathing apparatus and firefighting footwear. Tenders were also sought for a new firefighting uniform incorporating a complete care package. This package will use radio frequency identification tagging to track items through the cleaning process and provide lifecycle information on garment condition. Initial rollout of the new uniform and laundry system is due to commence early next year.

The new clothing will incorporate changed design features and new materials to reduce weight and improve comfort, and to comply with a new Australian Standard. The current style of protective clothing has been in service for more than a decade and will not meet the new 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. More than 650m² of commercial office space was leased in 2010/11 in Newcastle, Maitland and Batemans Bay, in addition to 2.31 hectares for a regional training centre.

During the year FRNSW bought land valued at \$215 000, while real estate which was no longer required was sold for \$682 000. The proceeds were used to offset other capital costs.



New fire stations and renovations

FRNSW spent a record \$13.2 million on capital expenditure on new fire stations and renovations during 2010/11. New fire stations were completed at Kincumber on the Central Coast and Baulkham Hills in northwest Sydney. Both include a range of environmental features. The Baulkham Hills Fire Station is a replacement. Castle Hill Fire Station was closed and the site is being sold.

Major renovations were completed at fire stations at Scarborough, Miranda, Lidcombe Goulburn and Coffs Harbour. Other projects were at Coffs Harbour Regional North Office, Batemans Bay Zone office, Greenacre Centre, Alexandria Training Centre and Head Office. Renovations to upgrade existing retained stations to provide suitable accommodation for permanent staff were completed at Nelsons Bay, Maitland, Cessnock and Lismore stations.

Major renovations were begun at Huntingwood, Gloucester and Yenda fire stations. Works in design or at tender stage included renovations to fire stations for Chester Hill, Bankstown, Hornsby, Tea Gardens, Grenfell, Cardiff, Unanderra, Fairfield, Banora Point, Batemans Bay, Parkes and Newcastle Communication Centre.

Other minor capital investments for energy efficiency or compliance purposes were made in water tank installations, hot water upgrades at 10 sites and fire protection improvements at 21 sites. A further \$1.85 million was spent on minor project works at 46 fire stations including heritage renovations at Leichhardt; upgrades at Corowa, Cobar and Griffith; structural integrity and safety works at Umina; and a facilities upgrade at Turvey Park.

Facilities management

During 2010/11 FRNSW spent \$5.2 million on repairs relating to occupational health and safety, urgent minor and unscheduled works, cleaning, security, pest control and preventative maintenance of essential plant and equipment.

A Properties Helpdesk was set up, providing a central point for reporting all maintenance requirements at FRNSW sites. This has significantly improved management of maintenance tasks and has also helped statistical information gathering, enabling better prioritisation of work.

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 the FRNSW to the NSW Treasury Managed Fund in 2010/11 was \$24.147 million.

This year, FRNSW paid hindsight adjustment premiums of \$7.3 million (excluding GST) for workers compensation cover for 2004/05 and 2006/07. Improved workers compensation and return-to-work performance is a key priority of FRNSW to facilitate redirection of funds from premiums to frontline service delivery.



- A. Fire officers model the new firefighting uniform
- B. The official opening of Kincumber Fire Station
- C. Miranda Station Officer Sean Straney holds the keys to the newly renovated station
- D. (L to R) Member for Baulkham Hills David Elliott, FRNSW Commissioner Greg Mullins and Minister for Police and Emergency Services Michael Gallacher unveil the plaque at Baulkham Hills Fire Station



2010/11 financial outcomes

See the Financial Statements and Accompanying Notes for details of FRNSW's financial outcomes for 2010/11.

2011/12 budget

For 2011/12, FRNSW's total expenses excluding losses are budgeted at \$638.0 million, an increase of 9.9 percent on the 2010/11 budget. This includes additional funding of \$3.9 million for full-time permanent firefighters at Bathurst and Nowra, \$4.4 million for additional Duty Commanders (Inspectors) and \$8 million, as part of the \$18 million Personal Protective Clothing Replacement Program.

Total revenues for 2011/12 are budgeted at \$636.8 million. This includes \$507.8 million as contributions from local councils and insurance companies, \$86 million from the State Government, and \$43 million in operating revenue.

The 2011/12 capital expenditure budget is \$53.8 million. This includes \$15.1 million for new fire stations and upgrades to existing fire stations and training facilities; \$13 million for the replacement of fire engines, specialist fire engines and rescue appliances; \$4.6 million for station communication equipment replacement; and \$4.5 million for SAP human resources systems for the emergency services sector. These capital works are being funded by a Government allocation of \$6.2 million, a contributors' allocation of \$36.1 million, and \$11.5 million from FRNSW capital reserves and asset sales.

FRNSW funding

FRNSW's operations are 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.

At 30 June 2011, 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 contributes 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.



A & B. In 2010/11 FRNSW will receive funding for personal protective clothing and fire engines



4

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 2010/11 to 130 979 emergency incidents, including 26 472 fires and explosions, 10 819 non-fire rescue and medical assistance calls, 15 483 hazardous materials incidents and other hazardous conditions, and 6420 calls relating to storm damage and floods
- › Answered 96.78% 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 flood and storm recovery
- › Deployed rescue and USAR personnel to south-east Queensland to support Queensland Fire and Rescue Service helping flood-affected communities to recover
- › Deployed USAR personnel to New Zealand and Japan to assist rescue and recovery efforts after the devastating effects of earthquakes and tsunami
- › Improved operational situational awareness at emergencies by implementing FireCam, which delivers real-time video streaming from emergencies
- › Entered into an agreement with the Roads and Traffic Authority and other emergency services to improve traffic management on the State's major roads following accidents



A & B. FRNSW minimises the impact of emergency incidents through rapid effective response

C. Rescue training with other emergency services

D. FRNSW continues to develop structural collapse rescue capability



Future directions

- › Implement the next generation computer-aided dispatch system in 2012
- › Gain International Search and Rescue Advisory Group External Classification for FRNSW's urban search and rescue capability in 2012
- › Extend the shared emergency services SAP solution to cover fleet and equipment
- › Maintain and build upon FRNSW's guaranteed, rapid and scalable capability to deal with a diverse range of emergency incidents
- › Work with other emergency services to further implement electronic transfer of emergency incident information between agencies
- › Continue to develop the structural collapse rescue capability of FRNSW and its partners
- › 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
- › Further implement a shared services strategy in IT infrastructure and systems
- › Identify and remove inefficient manual processes from frontline staff and provide technologies that will improve efficiency and safety



Minimising the impact of emergency incidents through rapid effective response

Total incidents

During 2010/11, FRNSW crews responded to 130 979 emergency incidents, a decrease of 3.2% on 2009/10, mainly due to a 30% decrease in bush and grass fires following a wet bushfire season. This was an average of around 360 incidents per day, or one incident every four minutes. Of these, 26 472 calls (20.2%) were fires and explosions, a decrease of 14.7% on 2009/10; 15 483 calls (11.8%) were

hazardous materials incidents and other hazardous conditions, an increase of 1.7% on 2009/10; and 10 819 calls (8.3%) were non-fire rescue calls including road accidents and medical assistance, an increase of 1.0% on 2009/10.

Automatic fire alarm systems generated many false alerts. However each is by necessity treated as a genuine emergency call until proven otherwise. These automatic fire alarm systems are generally installed in high-risk premises.

Number and type of incidents and emergencies attended¹

	2006/07	2007/08 ²	2008/09	2009/10	2010/11
Fires and explosions					
Structure fires	7718	7723	7447	7493	7009
Outside storage fires	359	323	289	303	257
Vehicle fires	4933	4479	4384	4202	3974
Bush and grass fires	10 911	9120	9915	9901	6933
Rubbish fires	8979	9551	9627	8917	7949
Other fires	241	431	264	214	350
Total fires and explosions	33 141	31 627	31 926	31 030	26 472
Other emergencies and incidents					
Non-fire rescue calls:					
Motor vehicle accidents involving the extrication of victims ³	4887	4683	4905	5104	4958
Other non-fire rescues including industrial and home rescues	1818	1821	2509	2623	2781
Medical assistance	504	577	796	925	1030
Animal rescues	947	1136	1411	2058	2050
Total non-fire rescue calls³	8156	8217	9621	10 710	10 819
Hazardous material incidents and other hazardous conditions including powerlines down, electrical short circuits, gas leaks and fuel and chemical spills ³	17 050	16 258	16 474	15 224	15 483
Storm, floods and other natural disasters, animal rescues and calls for assistance from other agencies	6064	5535	5738	6086	6420
Good intent calls	10 680	10 554	10 739	11 099	10 797
Malicious false calls	4802	4092	3553	3060	2553
System-initiated false alarms	53 454	54 206	53 805	52 645	52 485
Other	4659	4390	5443	5421	5950
Total other emergencies and incidents	104 865	103 252	105 373	104 245	104 507
Total fires, explosions and other emergencies	138 006	134 879	137 299	135 275	130 979

Notes:

- Figures may vary slightly from earlier publications to reflect the submission of additional incident reports and changes to data from data quality improvement.
- For February 2008, incident types reflect information provided on incident logs from FRNSW Communication Centres.
- Some road accident calls involving fuel spills were previously categorised as non-fire rescue calls, but are now classified as hazardous materials incidents.

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 operates primary and secondary specialist rescue units in 180 locations throughout NSW, and 2687 of its fire officers are qualified and registered as rescue operators with the SRB. This makes FRNSW the largest rescue provider in the State. In addition to specialist rescue vehicles, every fire engine carries rescue equipment and every fire officer is trained in basic rescue.

During 2010/11 FRNSW responded to 9789 non-fire rescue calls throughout the State (excluding those where medical assistance was provided), including rescuing people caught in transport, domestic and industrial incidents. Specially trained teams also carried out swift water, alpine and vertical rescues. In doing so, they worked closely with other agencies including the NSW Police Force, Ambulance Service of NSW, State Emergency Service (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.

Medical assistance

Increasingly FRNSW is being called upon to assist the Ambulance Service of NSW at medical emergencies. During 2010/11, FRNSW responded to 1030 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.

Throughout the world fire officers fulfill a medical first responder role to assist expert Ambulance paramedics by providing basic life support until their arrival. This area of work is expected to increase.



A. Fire officers rescue a trapped person from a motor vehicle

B. Fire officer takes part in an urban search and rescue exercise

Urban search and rescue

FRNSW's urban search and rescue (USAR) capability provides specialised backup response to local rescue units dealing with building collapses and other complex rescues. USAR is also a key component of the State's ability to deal with the consequences of a terrorist attack. FRNSW's current USAR capabilities and equipment include:

- › **USAR 1:** a Sydney-based, purpose-built 32-tonne semitrailer designed to transport the largest store of USAR equipment in Australia
- › **USAR 2 and 3:** purpose-built pantechon trucks with USAR equipment caches based at Newcastle and Wollongong
- › **USAR 4:** a specialist reconnaissance vehicle based at Ingleburn in Sydney's southwest, and
- › **USAR 5:** an air-deployable USAR equipment cache (including tents, food and water) capable of sustaining a 72-person rescue team in the field for 10 days.

When major emergencies occur, the initial USAR response is provided by on-duty rescue crews staffing heavy rescue units in Sydney, Newcastle, Gosford and Wollongong with additional specialist personnel deployed as required.

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 and operate remotely. FRNSW currently has 220 Category 2 operators, which includes the 48 fire officers trained to this level this year. Category 3 personnel are trained to lead USAR taskforces.

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 New Zealand emergency services that are increasing their own USAR capabilities. Throughout the year FRNSW worked with other Australian fire services to finalise a national USAR Category 3 Commanders' training program.

Other activities this year included working with the RSPCA and SES to establish a live casualty detection dog capability; training personnel from other agencies in USAR Category 1 competency; and constructing training props at Ingleburn and Milperra to provide USAR training and exercises for relevant government agencies.

FRNSW international and interstate deployments of USAR task forces

During the year FRNSW-led multi-agency urban search and rescue task forces were in the front line of national and international responses to several large scale natural disasters.

Extensive rainfall across Queensland in December and January caused widespread flooding across much of the State. Two 6-member FRNSW swift water rescue teams were deployed to Queensland to carry out rescues and body recovery. These were followed on 11 January by a FRNSW-led medium USAR Task Force of 38 personnel to conduct reconnaissances, rapid damage assessments, and swift water and structural collapse rescues.

A 6.3 magnitude earthquake struck Christchurch on 22 February, causing widespread damage and devastation. FRNSW led two Australian heavy USAR multi-agency Task Forces deployed to New Zealand for 10 days each. The first Task Force comprised NSW search and rescue, hazmat, engineering, advanced medical and logistics support capabilities, and was tasked with rescues and body recovery. The second Task Force comprised USAR and medical specialists from around Australia, led by NSW concentrated more on community support and carrying out damage and risk assessments.

A 9.0 magnitude earthquake, followed by a massive tsunami, struck the east coast of Japan on 10 March. Tens of thousands of people died; many more were missing, injured or homeless; and the property damage was enormous. A 76 person multi-agency Australian USAR Task Force led by FRNSW travelled to Minamisanriku in Japan and worked in conjunction with the Kyoto Fire Department.

A fuller summary of FRNSW's international and interstate USAR deployments can be found in the section, 'In times of trouble' in the front section of this report.

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 2010/11 FRNSW responded to 15 483 hazardous materials (hazmat) incidents and other hazardous conditions. These included downed powerlines, electrical short circuits, gas leaks, and fuel and chemical spills. FRNSW also completed restructuring its hazmat capability to align resources with needs, moving the primary hazmat station at Greenacre to Chester Hill.

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 fire officers have received hazmat/breathing apparatus training. All FRNSW fire trucks are equipped with Level 1 hazmat capability, including fully-encapsulated 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 about a 100km radius. FRNSW has 21 Level 2 stations equipped with detection, decontamination and neutralising equipment. Thirteen of these have a waterways response capability while those at Eden and Nelson Bay have additional waterways recovery equipment to deal with hazmat spillages.

Level 3 (primary): As hazmat incidents can impact heavily on densely populated areas of the State, FRNSW has based advanced hazmat capabilities in the major metropolitan areas of Sydney, the Central Coast, Newcastle and the Illawarra. These primary hazmat stations deploy comprehensive support, specialised equipment and advanced technical skills to large scale hazmat incidents. They also provide general backup for Level 1 and 2 stations. The six primary hazmat stations are located at Alexandria, Berkeley Vale, Chester Hill, Newcastle, Shellharbour and St Marys.

Level 4 (specialist): Comprises the provision of specialised advice and assistance to Incident Controllers at the most complex hazmat scientific events. Training and familiarity with the latest technologies allows hazmat specialists to add multi-agency knowledge to an incident management team.

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 stations 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 agencies at more than 100 clandestine drug laboratory operations, both within NSW and overseas. FRNSW's role at these operations involved managing safety aspects such as exposure to chemicals and the risk of fire and explosions.

Bushfire prevention and suppression

In the leadup to the 2010/11 bushfire season, FRNSW was involved in a series of exercises to test the emergency management skills of fire officers and the activation of NSW fire control centres. These exercises also strengthened inter-agency bushfire management.

During the year Australia experienced a new cycle of the La Nina 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 RFS and FRNSW were kept busy fighting bushfires in other areas. In 2010/11 FRNSW responded to 6933 bush and grass fires, the lowest number for five years. However the high rainfall left a legacy of high fuel loads, thus increasing bushfire risks for following years. The RFS and FRNSW anticipate that the heavy grassland fuel loads west of the Great Dividing Range will rapidly cure as summer approaches and fuel many large fires. Contingency plans are in place for such an eventuality.

Terrorism consequence management

During 2010/11 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.



A. Decontamination shower at a hazmat incident



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 plays a primary role in any counter-terrorism response. During the year Fire Air 1 flew 380 hours and 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.

Special events

FRNSW staff worked closely throughout the year with the 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 International Triathlon Union race in Sydney, the Australian Open Golf, the scuttling of HMAS Adelaide off Avoca Beach, the Fire Brigades Employees Union Centenary celebration, the Tamworth Country Music Festival, the Sydney Royal Easter Show and the visit by American TV personality Oprah Winfrey.



A. Fire Air 1 helicopter

B. FRNSW and Rural Fire Service fire officers launch the Winter Fire Safety campaign

C. FRNSW delivers rescue services in conjunction with other agencies



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.

- › A new MoU with the Bureau of Meteorology (BoM) on FRNSW access to the BoM's fire weather forecasting system and related data for use in firefighting.
- › An updated MoU with Juvenile Justice, NSW Department of Attorney General and Justice on FRNSW attendance at youth justice conferences for fire-related offences.
- › A new MoU with NSW Maritime and the Port Corporations of Sydney, Newcastle and Port Kembla, setting out the response arrangements and training responsibilities for hazardous materials incidents on NSW State and inland waters.
- › An updated MoU with the NSW Police Force on the shared use of a Kawasaki BK117 helicopter.
- › A new MoU between the Roads and Traffic Authority of NSW, Transport NSW, NSW Police Force, NSW emergency services including FRNSW, Ambulance Service of NSW and the Office of Environment and Heritage. This MoU is designed to enhance coordination and cooperation between agencies when managing traffic incidents.
- › An updated MoU with the RFS providing a framework for cooperation and joint operations involving urban and rural fire services in NSW.
- › Updated MAAs with the RFS. 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 interim agreement between FRNSW and the RFS on communication of bushfire alerts and emergency warning messages to the public during the 2010/11 bushfire season.
- › An updated MoU with the RFS and Sydney Water on the use of recycled water for firefighting.

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. 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, RFS, 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.

Partnerships in rescue

The FRNSW 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.



Partnerships in urban search and rescue

FRNSW is the combat agency for building collapse and 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 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 Training Working Group.

Partnerships in managing hazardous materials incidents

Staff from FRNSW and the NSW Office of Environment and Heritage work closely 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.



A. FRNSW fire officers don breathing apparatus and spillage suits during a hazmat incident

B. FRNSW conducts a hazard reduction

C & D. FRNSW assists other agencies and organisations by making fire crews, vehicles and equipment available when natural disasters occur

Partnerships in counter terrorism

FRNSW works closely with the NSW Police Force, Ambulance Service of NSW, RFS, Australian Defence Force and other stakeholders on managing terrorism consequences. The FRNSW 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 Bushfire Coordinating Committee, which provides a forum for consultation and cooperation between all State firefighting agencies and environment and land management agencies. The Committee advises the RFS 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 fire and land management agencies and research partners in Australia and New Zealand in the Bushfire Cooperative Research Centre.



Assisting the community and business to recover from emergencies and disasters

The Australian Incident Reporting System (AIRS) is a system used for collecting, recording and reporting information about responses to incidents and emergencies attended by Australian fire services. The information put into AIRS is used by many of FRNSW's stakeholders. During 2010/11 insurance companies, loss adjusters, lawyers and building owners and occupiers used AIRS information, together with post-incident analysis by FRNSW fire investigators to help finalise insurance claims so that those affected by emergency incidents could financially recover as quickly as possible. This information was also used by NSW Police Force and the State Coroner in their investigations.

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 supported the SES and other organisations in responses during and after such incidents, making fire crews, vehicles and equipment available to assist community and business recovery. FRNSW responded to 6420 calls for assistance in 2010/11.

On 2 August 2010 severe storms lashed Sydney. Fire crews responded during the night to 240 storm-related calls for assistance, removing fallen trees and debris and making dangerous scenes safe.

On 5 September the Illawarra, Wollongong, Shoalhaven and Riverina areas were hit by a severe storm were declared natural disaster zones. The SES received more than 2 300 requests for assistance. FRNSW deployed local fire crews as well as an extra six strike teams to Ulladulla and Kiama which were hit hard by the storms. Fire officers assisted SES volunteers removing trees, placing tarpaulins on damaged roofs and clearing debris.

On 15 October FRNSW crews across the State were kept busy when severe weather conditions including strong winds, torrential rain and snow hit many regions. Fire crews joined SES volunteers dealing with emergencies that included fallen trees and powerlines, rescues from floodwaters, medical assistance and evacuations.

In mid-June 2011 heavy rains brought major flooding to NSW's mid-North Coast. Local fire crews assisted SES with sandbagging operations and responding to numerous incidents that included flooding, leaking roofs, power lines and trees down. FRNSW also provided three swiftwater rescue teams who assisted with evacuations at Kempsey, Port Macquarie and Taree.

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 the year fire crews distributed 1092 *'After the fire'* brochures and 1802 *'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 2010/11 FRNSW presented \$86 515 to the Westmead Hospital Burns Unit which was generously donated by its staff via payroll deductions. Since 1996 FRNSW staff have donated more than \$1.76 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. As well as giving personally, FRNSW staff also encourage the public to join them in supporting these causes.

In July 2010, 150 golfers teed off for the annual Stephen Richardson Memorial Golf Day, raising a further \$10 000 for the Burns Unit.

In August the annual Newcastle Firefighters Ball raised \$25 250 to enable John Hunter Children's Hospital to buy equipment for treating burns patients. \$5000 was also donated to Hunter Kidsafe to educate children about accident prevention, and \$5000 to the KIDS Foundation to assist local families attending the annual Burns Survivors camp.

In November eight FRNSW fire trucks took part in the annual Camp Quality Convoy for Kids in the Illawarra which raised funds for children affected by cancer. Also in November 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, FRNSW staff donated toys and non-perishables to the Salvation Army for distribution to families experiencing hardship.

In March 2011 fire officers cycled from Sydney to Wagga Wagga, a distance of more than 400 kilometres, in only four days. This '400 in 4' charity bike ride raised a further \$41 321 for Westmead Children's Hospital Burns Unit, as well as providing opportunities to spread fire safety messages in country towns along the way.

On Brigade Kids Day in May, FRNSW supported an in-store promotion in McDonald's restaurants which raised \$135 000 for the Burns Unit at Westmead Children's Hospital Burns Unit.

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.

IT infrastructure

FRNSW maintains a flexible and efficient IT infrastructure to successfully host and deliver operational systems. During the year FRNSW increased the performance of technology and networks at its fire stations by introducing higher standard computers and upgrading data links to ADSL2+, which was 20 times faster than previous connection speeds. Data storage, servers and highly secure network communications were also developed as internal cloud hosting applications for FRNSW and its emergency service partners, the RFS and SES. These technology and communications upgrades should be completed by the end of 2011.

Video conferencing

FRNSW introduced video conferencing architecture which is improving internal and external collaboration, reducing travel and supporting eLearning technologies across NSW. It is also being used by RFS and SES employees.

Radio communication

Government Radio Network (GRN) operations were successfully migrated from the existing analog platform to the P25 digital standard. As an open standard, P25 facilitates competition between transceiver suppliers, and provides a foundation for future enhancements such as encrypted communications. In conjunction with the P25 migration, links between FRNSW Communication Centres and the GRN Network Operation and Control Centres were replaced with an Internet protocol based solution which improved operational flexibility and voice quality.

Video streaming from emergency incidents

FRNSW implemented FireCam which provides real-time video streaming from emergency incidents from many different sources, including the NSW Police and FRNSW aircraft, FRNSW Incident Command Vehicles, portable cameras and other video sources shared by Police. FireCam is available to authorised FRNSW staff across various networks and can also be accessed from handheld devices.



A & B. FRNSW staff donate regularly to charities and organisations such as the Salvation Army and The Burns Unit at the Children's Hospital, Westmead

C & D. Information and communications technology is used to deliver critical information to frontline staff responding to emergencies and natural disasters



Disseminating news to the media

FRNSW further developed its Chumby media dissemination system which instantly and simultaneously distributes incident information and details of FRNSW activities to major media outlets. The NSW Police Force, SES and RFS now also use this service to distribute their media information.

Shared emergency services IT systems

Throughout the year FRNSW developed and hosted shared IT systems with other NSW emergency services to further enhance the sector's capability to manage resources and respond to incidents. Since mid-2010, FRNSW, RFS, SES and the Ministry for Police and Emergency Services have collaborated in a SAP sector-wide human resources program to modernise systems and streamline processes. At its completion in July 2012, this program will support more than 95 000 volunteers and staff across nearly 3000 locations.

Operational Communications

During 2010/11 FRNSW maintained a highly developed and extremely reliable network of four emergency call-taking, dispatch, coordination and communication centres located in Sydney, Newcastle, Wollongong and Katoomba. The centres continued their excellent call-taking performance, answering 96.78% 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 by direct line from Police, Ambulance or other emergency services. Technology played a critical role in dispatching the appropriate level of FRNSW equipment, vehicles and personnel to incidents as quickly as possible. A next generation computer-aided dispatch system will go live early in 2012. The platform is being made available to the RFS and SES.

Network security

This year FRNSW installed an automated security control platform which delivered real-time visibility and control of all devices on its IT network. This enabled FRNSW to automatically identify who and what is connected to its network, control access, measure compliance with its security policies, block network threats, and remediate security violations when they occur.

Information security and disaster recovery

FRNSW implemented an information security management system and maintained International Organization for Standardization's ISO 27001 certification for its data centres. Disaster recovery plan and procedures were also further improved. These were successfully tested in May 2011, demonstrating that, in the event of problems at its primary site, FRNSW's IT systems could be recovered at its secondary data centre.

Enterprise content management

During the year FRNSW acquired an electronic enterprise content and records management system, TRIM, to replace the existing system. TRIM enables users to efficiently capture, secure, share and distribute digital and paper-based documents and reports, improving operational efficiencies by streamlining communications and automating routine tasks.



A. Chumby media dissemination system

B. Technology played a critical role in dispatching FRNSW equipment, vehicles and personnel to incidents

