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# 9 Emergency management

## CONTENTS

<b>9.1 Profile of emergency management</b>	<b>9.2</b>
<b>9.2 Framework for measuring the performance of emergency management</b>	<b>9.10</b>
<b>9.3 Fire events</b>	<b>9.12</b>
<b>9.4 Road crash rescue events</b>	<b>9.38</b>
<b>9.5 Ambulance events</b>	<b>9.44</b>
<b>9.6 Future directions in performance reporting</b>	<b>9.72</b>
<b>9.7 Jurisdictions' comments</b>	<b>9.73</b>
<b>9.8 Definitions of key terms and indicators</b>	<b>9.82</b>
<b>9.9 Attachment tables</b>	<b>9.86</b>
<b>9.10 References</b>	<b>9.87</b>

### **Attachment tables**

Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 9A.3). A full list of attachment tables is provided at the end of this chapter, and the attachment tables themselves are available on the CD-ROM enclosed with the Report or from the Review website at [www.pc.gov.au/qsp](http://www.pc.gov.au/qsp).

Emergency management aims to reduce the level of risk to the community of emergencies occurring, reduce the adverse effects of emergency events, and improve the level and perception of safety in the community. This chapter reports on selected emergency events, including fire, ambulance (pre-hospital care, treatment and transport) and emergency road crash rescue events. While section 9.1 contains some information on the scope of emergency services organisation (ESO)

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activities, the chapter does not report on the total range of State, Territory and local government activities.

The road crash rescue events section of this chapter has been updated this year. Other improvements include revised 'fire deaths' data, including publication of a ten year time series in the attachment tables and expansion of time series data for 'ambulance staff attrition' and 'ambulance urban centre response times'.

## **9.1 Profile of emergency management**

Emergency management is defined as a range of measures to manage risks to communities and the environment (EMA 2004). The emergency management sector includes a range of agencies engaged in areas as diverse as risk assessment, legislation, community development, emergency response, urban development and land use management, and community recovery.

The range of events encompassed by emergency management includes fires, medical emergencies and transport, rescues, natural disasters (that is, bushfire, earthquake, flood, storm, cyclone, storm surge, landslide, tsunami, meteorite strike, and tornado<sup>1</sup>), consequences of acts of terrorism, technological and hazardous material incidents (such as chemical spills, harmful gas leaks, radiological contamination, explosions, and spills of petroleum and petroleum products), and the quarantine and control of diseases and biological contaminants. Emergency management aims to create and strengthen safe, sustainable and resilient communities that can avoid or minimise the effects of emergencies and, at the same time, have the ability to recover quickly and restore their socioeconomic vitality after an emergency event.

### **Roles and responsibilities**

The practice of emergency management requires cooperation among Australian, State, Territory and local governments, industry, community organisations and the community in general.

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<sup>1</sup> This list of natural disaster events is based on the Australian Government Natural Disaster Relief and Recovery Arrangement definition. Under this definition, natural disasters do not include drought, frost, heatwave, epidemic, or disaster events resulting from poor environmental planning, commercial development or personal intervention (other than arson) (EMA 2007).

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## *Government arrangements*

### *Australian Government*

The Australian Government administrative arrangements referred to in this section reflect the arrangements in place as at 9 November 2009. The primary role of the Australian Government is to support the development, by the states and territories, of a national emergency management capability.

When the total resources of an affected State or Territory cannot reasonably cope with the needs of a disaster, assistance from the Australian Government can be sought by that jurisdiction. Australian Government assistance may take the form of:

- providing material and technical assistance to states and territories in the event of large scale emergencies (coordinated through Emergency Management Australia (EMA), a division within the Australian Government Attorney-General's Department)
- providing financial assistance to states, territories and authorities for natural disaster prevention/mitigation and for helping to bear the costs of natural disasters (through the Natural Disaster Relief and Recovery Arrangements — administered by EMA)
- providing information, best practice materials and training programs (through the Australian Government Attorney-General's Department)
- providing funding for risk management programs and undertaking comprehensive risk assessment (through the Australian Government Attorney-General's Department)
- supporting community awareness activities (through the Australian Government Attorney-General's Department and the Bureau of Meteorology and Geoscience Australia).

Australian Government agencies also have specific emergency management responsibilities, including: the control of exotic animal and plant diseases; aviation and maritime search and rescue; the management of major marine pollution and meteorological and geological hazards; the provision of firefighting services at some airports and some defence installations; human quarantine; and research and development.

### *State and Territory governments*

State and Territory governments are responsible for regulatory arrangements for protecting life, property and the environment, and they have primary responsibility

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for delivering emergency services (including fire and ambulance services) directly to the community.

### *Local governments*

Local governments in some states and territories are involved to varying degrees in emergency management. Their roles and responsibilities may include:

- considering community safety in regional and urban planning by assessing risks, and developing mitigation measures and prevention plans to address emergencies such as bushfires and structure fires, floods, storms, landslides and hazardous materials incidents
- improving community preparedness through local emergency and disaster planning
- issuing hazard reduction notices to private land holders and clearing vegetation in high risk public areas
- collecting statutory levies to fund fire and other emergency services
- allocating resources for response and recovery activities
- providing financial and operational assistance to rural fire brigades and/or other voluntary emergency service units.

### *Emergency service organisations*

State, Territory and local governments provide emergency management services to the community through a range of ESOs. The governance and reporting lines of ESOs vary across jurisdictions. These organisations range from government departments to statutory authorities, and to smaller branches, agencies or services within larger departments or authorities. In some instances, non-government organisations also provide emergency management (and other ambulance event) services, such as St John Ambulance in WA and the NT.

In all jurisdictions, there is considerable cooperation and coordination among ESOs in response to emergency events. There can also be substantial cooperative efforts across governments, particularly in the recovery stages after a major incident. Events of considerable magnitude and duration, such as earthquakes, cyclones and bushfires, can involve international, interstate and other cooperation and support. Jurisdictions are increasingly interacting and contributing to programs and operational response to a number of significant emergency events around the Pacific and Indian Ocean rim.

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### *Fire service organisations*

State and Territory governments provide a range of emergency management activities through fire service organisations, including prevention/mitigation, preparedness, response and recovery (see framework section 9.2). The role of fire service organisations varies across jurisdictions and includes involvement in an expanding range of activities (table 9A.38) including:

- developing building fire safety codes and inspecting fire safety equipment and practices
- training and educating the community to achieve community awareness and behavioural change in relation to fire safety and road safety issues
- assisting individuals and communities to prepare for bushfires and other hazards
- responding to structure, bush, vehicle and other fires
- providing rural land management advice on the role and use of fire
- providing road crash rescue and other rescue services
- managing hazardous material incidents
- administering legislation relating to fire safety, hazardous materials facilities and hazard mitigation
- investigating fire cause and origin
- wide ranging industry research activities
- a number of specialist rescue capabilities, collectively known as Urban Search and Rescue.

Fire service organisations work closely with other government departments and agencies — including ESOs such as the State Emergency Service/Territory Emergency Service (S/TES), police and ambulance services, and community service organisations — to minimise the impact of fire and other emergencies on the community. Their governance arrangements differ across jurisdictions (table 9A.37).

Separate urban and rural fire service organisations deliver fire services in most jurisdictions. Land management agencies typically also provide fire services within designated areas. However, currently NSW, Victoria, WA and Tasmania only, are able to report fire activity for land management agencies, and financial information relating to these agencies is limited to Victoria. Jurisdictions with more than one fire authority can separate services in different ways — for example, NSW separates fire services based on service function and geographic area, whereas Victoria separates fire services by geographic area only.

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Some jurisdictions have particular arrangements for the provision of fire services in Indigenous communities. (For more information on fire services in Indigenous communities see SCRCSSP 2002, p. 572. and SCRGSP 2009, p. 11.35.)

### *State Emergency Services and Territory Emergency Services organisations*

State and Territory governments contribute to a range of emergency management activities through S/TES. The activities of S/TES (table 9A.39) include prevention/mitigation, preparedness, response and recovery (see framework section 9.2). The role of S/TES across jurisdictions encompasses a variety of activities. S/TES have a role in searches, urban search and rescue, rescues, floods, cyclones and other storms and a major role in attending road crash rescue incidents and performing extrications.

### *Ambulance service organisations*

State and Territory governments provide ambulance services in most jurisdictions. In WA and the NT, St John Ambulance is under contract to the respective governments as the primary provider of ambulance services (box 9.1). Across jurisdictions the role of ambulance service organisations as an integral part of the health system generally includes:

- providing emergency and non-emergency pre-hospital and out-of-hospital patient care and transport
- undertaking inter-hospital patient transport including the movement of critical patients
- conducting specialised rescue services
- preparing for and providing capacity for the ambulance component of multi-casualty events
- enhancing the community's capacity to respond to emergencies.

Funding responsibilities of State and Territory governments include ambulance services and, jointly with the Commonwealth, emergency responses, including responding to public emergencies and support for emergency air retrieval (COAG 2009).

There are fixed and rotary wing (helicopter) ambulance services in all jurisdictions. In most jurisdictions these services are provided by the ambulance service organisations through various contractual arrangements. In WA, SA, Queensland and the NT, all or most of the cost of air ambulance services falls outside of the

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ambulance service organisations (see also section 9.5 for a discussion of air ambulance services).

**Box 9.1 Relationships of primary ambulance response and management organisations to government**

<i>NSW</i>	<i>Ambulance Service of NSW</i> — a division of the Department of Health reporting to the Minister for Health
<i>Vic</i>	<i>Ambulance Victoria</i> — a separate statutory body reporting to the Minister for Health
<i>Qld</i>	<i>Queensland Ambulance Service</i> — a division of the Department of Community Safety, reporting to the Director-General, who reports to the Minister for Police, Corrective Services and Emergency Services
<i>WA</i>	<i>St John Ambulance</i> — an incorporated not-for-profit organisation under contract to the WA Government
<i>SA</i>	<i>SA Ambulance Service (SAAS)</i> — an incorporated unit under the SA Health Care Act (from 1 July 2008)
<i>Tas</i>	<i>Tasmanian Ambulance Service</i> — a statutory service of the Department of Health and Human Services
<i>ACT</i>	<i>ACT Ambulance Service</i> — one of four operational services that comprise the ACT Emergency Services Agency, Department of Justice and Community Safety (the other operational services are the ACT Fire Brigade, ACT Rural Fire Service and ACT State Emergency Service). The Department reports to the ACT Minister for Police and Emergency Services
<i>NT</i>	<i>St John Ambulance</i> — an incorporated not-for-profit organisation under contract to the NT Government

*Source:* State and Territory governments (unpublished).

*Other ESOs*

The ‘all-hazards all-agencies’ approach to emergency management means that there are many organisations involved in aspects of the prevention/mitigation, preparedness, response and recovery framework for emergency management. This Report focuses on selected event types in State and Territory jurisdictions, and in particular the roles of fire, S/TES and ambulance service organisations. This Report does not yet report directly on the performance of Australian Government or local government emergency management services or their agencies.

*Volunteers in emergency management*

In 2008-09, approximately 250 000 fire, ambulance and S/TES volunteers played a significant role in the provision of emergency services in Australia (table 9.1). The input by volunteers is particularly important in rural and remote service provision where caseload/incident levels are low but community safety needs are still a high priority.

Volunteers in many ESOs — including fire, ambulance, S/TES, marine rescue, and recovery and relief agencies — provide services relating to emergency situations and disasters resulting from natural hazards such as wildfires, floods, severe storms, earthquakes, cyclones, and human caused and technological events as well as medical emergencies.

**Table 9.1 Volunteers in emergency service organisations<sup>a, b</sup>**

	NSW <sup>c</sup>	Vic <sup>d</sup>	Qld <sup>e</sup>	WA <sup>f</sup>	SA	Tas	ACT	NT <sup>g</sup>	Aust
2006-07									
ASOs	121	897	416	2 839	1 619	507	–	10	6 409
FSOs	76 302	59 509	36 000	27 305	15 517	4 978	1 261	550	221 422
S/TES	10 331	4 411	7 000	1 854	1 821	525	191	347	26 480
<b>Total</b>	<b>86 754</b>	<b>64 817</b>	<b>43 416</b>	<b>31 998</b>	<b>18 957</b>	<b>6 010</b>	<b>1 452</b>	<b>907</b>	<b>254 311</b>
2007-08									
ASOs	163	437	225	2 960	1 534	507	–	10	5 836
FSOs	75 474	58 362	35 000	27 457	15 744	4 909	1 367	540	218 853
S/TES	10 114	4 833	6 430	1 827	1 828	560	205	293	26 090
<b>Total</b>	<b>85 751</b>	<b>63 632</b>	<b>41 655</b>	<b>32 244</b>	<b>19 106</b>	<b>5 976</b>	<b>1 572</b>	<b>843</b>	<b>250 779</b>
2008-09									
ASOs	205	494	188	2 566	1 502	574	–	13	5 542
FSOs	75 436	58 943	34 000	27 249	15 415	4 859	1 230	540	217 672
S/TES	10 954	5 500	6 300	1 454	1 613	584	247	299	26 951
<b>Total</b>	<b>86 595</b>	<b>64 937</b>	<b>40 488</b>	<b>31 269</b>	<b>18 530</b>	<b>6 017</b>	<b>1477</b>	<b>852</b>	<b>250 165</b>

ASO = ambulance service organisation. FSO = fire service organisation. S/TES = State and Territory emergency services. <sup>a</sup> Numbers for FSOs include volunteer support staff plus part paid volunteers for all jurisdictions except WA and the ACT. <sup>b</sup> Previous years ASOs data may not be comparable as volunteer data for 2007-08 and subsequent years are categorised into volunteers with transport capability and first responders with no transport capability. Data for 2007-08 and subsequent years exclude first responders. <sup>c</sup> NSW: Numbers for FSOs include retained firefighters and community fire unit members. <sup>d</sup> Vic: ASOs data include some volunteers who were remunerated for some time (usually response), but not for other time (usually on-call). <sup>e</sup> Qld: The decrease in numbers is the result of an audit of volunteer records that identified and removed records of volunteers who had left. In addition, for QAS, the decrease is attributed to the removal from this category of Community First Responders and university students undergoing paramedical studies enrolled as Honorary Officers. In 2008-09 only active SES volunteers are reported. <sup>f</sup> WA: 2008-09 SES data exclude 504 volunteer emergency service members who may also undertake an SES role. The removal of duplicate records is a contributing factor to the reduction in volunteer numbers in 2008-09. <sup>g</sup> NT: Transient people in the NT result in fluctuations in the numbers of volunteers. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); tables 9A.5, 9A.21 and 9A.24.

Information on the estimated value of volunteers to S/TES is outlined in box 9.2.

Although volunteers make a valuable contribution, they are not a free resource to governments. Governments incur costs in supporting volunteers to deliver emergency services in their communities, by providing funds and support through infrastructure, training, uniforms, personal protective equipment, operational equipment and support for other operating costs.



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### **Box 9.2 Value of volunteers to State/Territory Emergency Services**

State/Territory Emergency Services (S/TES) are dedicated to helping communities prepare and respond to unexpected events, and play a vital role in emergency management in all states and territories. The Australian Council of State Emergency Services (ACSES) funded a study to estimate the value of SES volunteer time based on data provided by the SES agencies in NSW, Victoria, SA and Tasmania.

Two approaches were used to estimate the economic value of SES volunteer time:

- the global substitution method, where an average wage rate is used to value all activities
- the task specific substitution method, where each task is valued at its market wage rate.

In both approaches operational tasks and time, including emergency response and community activities, were valued, as well as time spent on training, travel, administration and other tasks.

The value of volunteer time for community preparedness services, operational response, training and unit management (without stand-by time) from 1994-95 to 2004-05 averaged around \$52 million (NSW), \$19 million (Victoria) and \$12 million (SA) a year.

Stand-by time accounts for about 94 per cent of the total time in NSW and Victoria and about half the total value for NSW and 39 per cent for Victoria. The total time volunteers made available including stand-by time is worth more than \$86 million and \$41 million a year to NSW and Victoria respectively. For NSW the annual value of a volunteer's contribution was estimated as \$15 903. While the indirect or secondary benefits that may arise through volunteerism as explained through social capital theory were not valued, the study clearly shows the significant value volunteers provide to their communities.

*Source:* Ganewatta, G. and Handmer, J. (2007).

Volunteer activity has implications for the interpretation of financial and non-financial performance indicators in this chapter. Notional wages costs for volunteers are not reflected in monetary estimates of inputs or outputs, which means that data for some performance indicators may be misleading where the input of volunteers is not counted but affects outputs and outcomes. This issue may be explored in the future as the Steering Committee continues to examine data on rural and remote service provision in the emergency services sector.

## 9.2 Framework for measuring the performance of emergency management

The broad aim of emergency management is to reduce the level of risk to the community from emergencies. The framework of performance indicators in this chapter is based on objectives for emergency management that are common to all Australian ESOs (box 9.3).

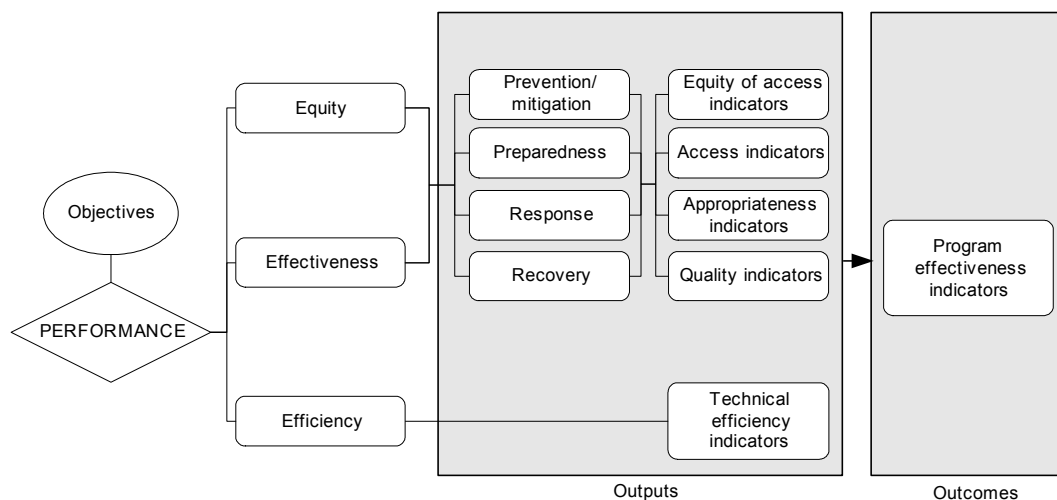
### Box 9.3 Objectives for emergency management

Emergency management services aim to provide highly effective, efficient and accessible services that:

- reduce the adverse effects of emergencies and disasters on the community (including people, property, infrastructure, economy and environment)
- contribute to the management of risks to the community
- enhance public safety.

Emergency service organisations aim to reduce the number of emergency events through prevention activities, and to reduce the impact of emergency events through community and operational preparedness. Fast, effective response and recovery services are critical to containing hazards and managing the consequences of emergency events. The prevention/mitigation, preparedness, response and recovery performance indicator framework (figure 9.1) used in this chapter for fire and road crash rescue events reflects these activities.

Figure 9.1 General performance indicator framework for emergency management



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The framework uses the widely accepted ‘comprehensive approach’ (prevention/mitigation, preparedness, response and recovery) to classify the key functions common to ESOs in managing emergency events. Outputs in the emergency event frameworks are grouped accordingly.

- *Prevention/mitigation* — the results of measures taken in advance of an emergency aimed at decreasing or eliminating its impact on the community and the environment. Activities that contribute to prevention and mitigation include: advice on land management practice and planning; the inspection of property and buildings for hazards, compliance with standards and building codes, and levels of safe practices; the preparation of risk assessment and emergency management plans; risk categorisation for public information campaigns; and public information campaigns and educational programs to promote safe practices in the community.
- *Preparedness* — the results of measures to ensure, if an emergency occurs, that communities, resources and services are capable of responding to, and coping with, the effects. Activities that contribute to preparedness include: public education and training; emergency detection and response planning (including the installation of smoke alarms and/or sprinklers); hazardous chemicals and material certification, and the inspection of storage and handling arrangements; the exercising, training and testing of emergency service personnel; and standby and resource deployment and maintenance. Preparedness also involves establishing equipment standards and monitoring adherence to those standards.
- *Response* — the results of strategies and services to control, limit or modify the emergency to reduce its consequences. Activities that contribute to response include: the implementation of emergency plans and procedures; the issuing of emergency warnings; the mobilisation of resources in response to emergency incidents; the suppression of hazards (for example, fire containment); the provision of immediate medical assistance and relief; and search and rescue.
- *Recovery (community)* — the results of strategies and services to support affected individuals and communities in their reconstruction of physical infrastructure and their restoration of emotional, social, economic and physical wellbeing. Activities that contribute to community recovery include: the restoration of essential services; counselling programs; temporary housing; long term medical care; and public health and safety information.
- *Recovery (ESOs)* — the results of strategies and services to return agencies to a state of preparedness after emergency situations. Activities that contribute to emergency services recovery include: critical incident stress debriefing; and the return of ESO resources to the state of readiness specified in response plans.

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Effective prevention activities reduce the requirement to respond to, and recover from, emergency events. Every jurisdiction is placing a greater emphasis on preventative activities. Efficient resource use reduces the cost of delivering a service of specified quality.

Outcome indicators in the performance framework indicate the contribution of ESOs to the community, economy and environment. Those currently reported are:

- for fire events: the ‘fire death rate’; ‘fire injury rate’; ‘median dollar losses from structure fire’; and ‘property losses from structure fire per person’
- for road crash rescue events: ‘road death’ rates; and a number of other outcome indicators reported in the Road Safety section of the police services chapter
- for ambulance events: ‘cardiac arrest survived event’; and ‘level of patient satisfaction’. ‘Cardiac arrest survival to hospital discharge’ and ‘pain management’ are identified as important outcome indicators in the ambulance events framework but data are not yet available for these indicators.

The general performance indicator framework presented in figure 9.1 has been applied to fire events (section 9.3) and road crash rescue events (section 9.4). Ambulance events are based on a different, health-related framework (section 9.5).

The Report’s statistical appendix contains data that may assist in interpreting the performance indicators presented in this chapter. These data cover a range of demographic and geographic characteristics, including age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (including Indigenous and ethnic status) (appendix A).

## 9.3 Fire events

This section contains information on the performance of ESOs in providing emergency management services for fire events. A fire event is an incident that is reported to a fire service organisation and requires a response. Fire events include (but are not limited to):

- structure fires (that is, fires inside a building or structure), regardless of whether there is damage to the structure
- landscape fires, including bushfires and grass fires, regardless of the size of the area burnt
- other fires, including vehicle and other mobile property fires, and outside rubbish fires.

## Emergency management services for fire events

Fire service organisations are the primary agencies involved in providing emergency management services for fire events. A range of other agencies may also be involved, including ambulance service organisations, S/TES, police and community services (table 9A.41).

Full reporting would ideally include information on the resources allocated by all ESOs to managing fire events. Although this information is currently unavailable, work is underway to improve data for future Reports. The descriptive information provided below on funding, incidents and human resources relate to fire service organisations only. (As discussed in section 9.1, fire service organisations are also involved in other activities not directly related to fire events.)

### Funding

Total funding of the fire service organisations covered in this Report was greater than \$3.0 billion in 2008-09. Over the period 2004-05 to 2008-09 funding increased (in real terms) for all jurisdictions except the ACT (table 9.2).

**Table 9.2 Real funding of fire service organisations (2008-09 dollars) (\$ million)<sup>a</sup>**

	<i>NSW</i> <sup>b</sup>	<i>Vic</i> <sup>c</sup>	<i>Qld</i>	<i>WA</i> <sup>d</sup>	<i>SA</i>	<i>Tas</i>	<i>ACT</i> <sup>e</sup>	<i>NT</i>	<i>Aust</i>
2004-05	747.6	567.2	356.1	138.6	159.7	59.5	52.2	22.7	2 103.6
2005-06	764.1	594.3	364.7	155.6	161.5	54.5	59.2	23.9	2 177.9
2006-07	849.3	975.7	377.1	249.8	160.7	58.6	57.5	24.2	2 752.9
2007-08	805.8	797.6	380.1	244.0	174.2	59.9	51.0	20.2	2 532.7
2008-09	891.1	1 203.0	400.7	231.7	174.4	60.3	50.6	24.0	3 035.8

<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). <sup>b</sup> NSW: Figures vary from year to year as a result of abnormal expenditure related to the response to specific major emergencies. <sup>c</sup> Vic: 2006-07 is the first year which includes revenue for the Department of Sustainability and Environment (DSE) and explains the marked increase for that year. Increase in 2008-09 is due to emergency funding arising from the Black Saturday Bushfires. <sup>d</sup> WA: FESA provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years are not segregated by service and include funding related to delivery of other emergency services including SES and volunteer marine rescue. Data for the Department of Environment and Conservation are not included. <sup>e</sup> ACT: The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. In 2006-07 funding is included for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

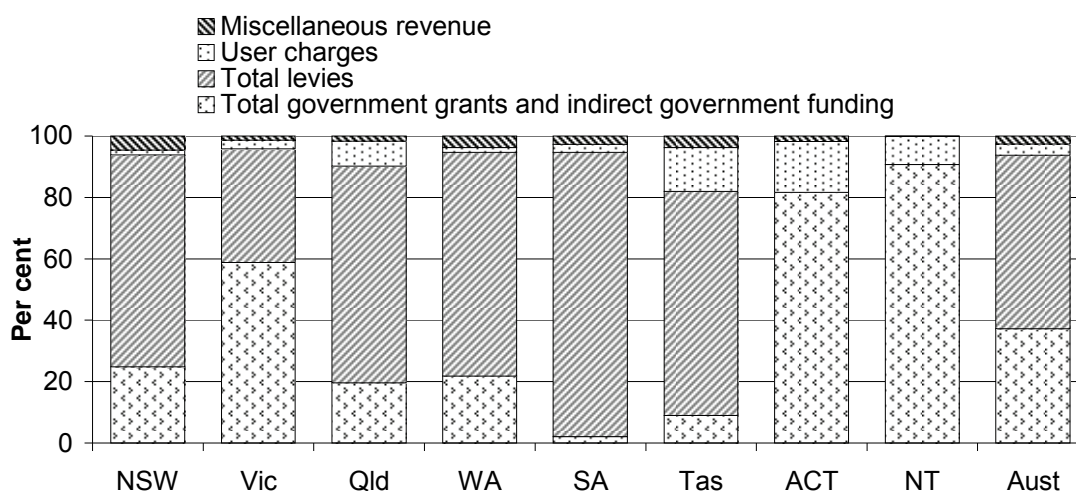
Source: State and Territory governments (unpublished); table 9A.1.

Fire levies were the primary source of funding in 2008-09 in all jurisdictions except the ACT and the NT, where Territory governments were the largest source of funds. Governments usually provide the legislative framework for the imposition of fire levies, rather than directly collecting the levies themselves. In 2008-09, fire levies

were raised from levies on property owners or, in some jurisdictions, from levies on both insurance companies and property owners (table 9A.1). In addition to relying on funded resources, all states and territories rely on volunteer firefighters, who make a significant contribution to community safety.

Nationally, 37.2 per cent of funding for fire service organisations was provided by government as government grants and indirect government revenue in 2008-09 (an increase from 26.9 per cent in 2007-08, with much of this due to government funding directed towards the 2009 Victorian fires). The proportions of funding sources varied across jurisdictions (figure 9.2).

**Figure 9.2 Major sources of fire service organisation revenue, 2008-09 (per cent)**



Source: State and Territory governments (unpublished); table 9A.1.

### Human resources

Human resources refers to any person delivering a firefighting or firefighting-related service, or managing the delivery of this service, including:

- firefighters (qualified paid and volunteer firefighters)
- support personnel (any paid person or volunteer directly supporting operational providers, including administrative, technical and communications personnel).

Nationally, 17 833 full time equivalent (FTE) paid personnel were employed by fire service organisations in 2008-09. Nationally, 13 752 FTE or 77.1 per cent of the 17 833 FTE were paid firefighters. A large number of volunteer firefighters (217 672 people) also participated in the delivery of fire services in 2008-09 (table 9A.5).

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### *Fires and other emergency incidents*

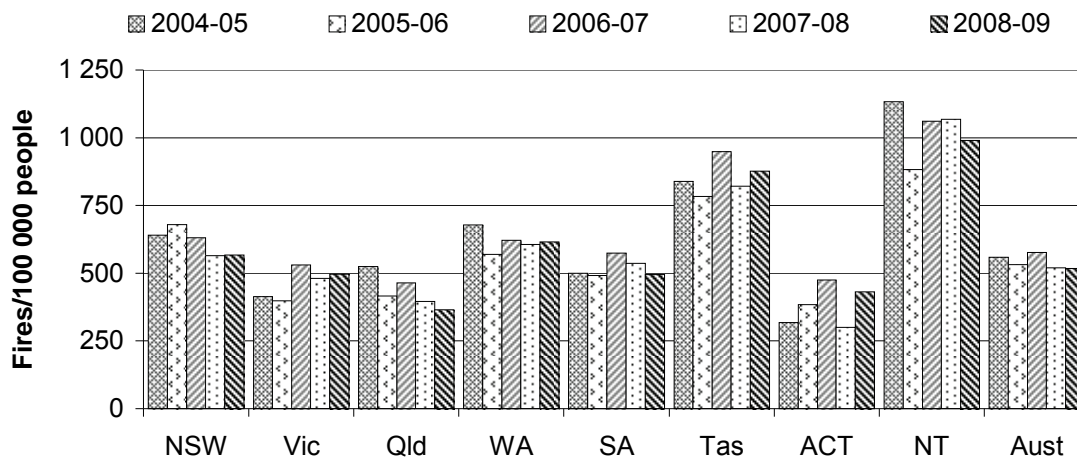
Various urban and rural fire service organisations operate within jurisdictions (table 9A.37). Complete data on reported fires and other incidents were not available in all jurisdictions.

Nationally, 29.0 per cent or 112 033 of the 386 312 reported incidents attended to by fire service organisations were fires, and 70.5 per cent were other emergencies and incidents in 2008-09 (0.5 per cent of incidents were 'not determined or not classified'), with these proportions varying across jurisdictions (table 9A.2). A significant proportion of calls for assistance across all jurisdictions are found, upon investigation, to be false alarms. However, fire service organisations are required by legislation to respond to all calls. An incident cannot be deemed to be a false report until the fire service organisation has responded and investigated the site.

### *Total fire incidents attended by fire service organisations per 100 000 people*

Nationally, 518 fire incidents per 100 000 people were attended in 2008-09, similar to the rate of 519 in 2007-08 (figure 9.3). Rates are more variable across jurisdictions and over time than the national averages.

**Figure 9.3 Fire incidents attended by fire service organisations per 100 000 people<sup>a, b, c, d, e, f, g, h</sup>**



<sup>a</sup> Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population. <sup>b</sup> WA: Data include reported turnouts by career and volunteer services to all areas of the State. <sup>c</sup> SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period so data are incomplete). <sup>d</sup> Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete for 2008-09. <sup>e</sup> ACT: Includes data for urban and rural fire service organisations. <sup>f</sup> NT: The high number of incidents per 100 000 people can be attributed to deliberately lit fires and the large number of grass fires in northern Australia that are caused by the annual growth of vegetation following the wet season. <sup>g</sup> Aust: The average for Australia excludes rural fire service data as per the jurisdictions' caveats. <sup>h</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); table 9A.10.

### *Ignition factor for structure fires*

Cause identification assists fire service organisations and other emergency management stakeholders to formulate fire prevention, community safety and public education programs. Cause identification also helps formulate legislation and standards, and is used to assist in recovery through the provision of information to facilitate insurance claims and settlements.

The most prevalent ignition factors causing structure fires varies between jurisdictions (table 9A.43). Nationally in 2008-09, the ignition factor for 20.1 per cent of structure fires was 'undetermined or not reported'. For structure fires where the cause of ignition could be determined, the most significant factors reported were:

- unattended heat sources (15.0 per cent)



- 
- short-circuit, ground fault and other electrical failure (10.5 per cent)
  - suspicious (9.1 per cent) (table 9A.43).

### *Total reported landscape fire incidents*

Landscape fire incidents include all vegetation fires, irrespective of the size of the area burnt and can vary substantially in their impact on fire resources, the community and longer term consequences. The number and severity of landscape fires is influenced by many factors, including environmental factors such as weather and climate, with the majority of landscape fires triggered by human activity (approximately 85 per cent) or lightning (approximately 15 per cent) (AIC 2008, Bryant 2008).

In early 2009, bushfire devastated Victoria, causing unprecedented loss of life and property (box 9.4).

#### **Box 9.4 Black Saturday (Victorian fires 2009)**

The Victorian Coroner's Office has confirmed the number of deaths as a result of the fires which directly affected many towns and communities; destroying homes, businesses, schools and kindergartens (Australian Government Disaster Assist 2009). Key statistics are:

- deaths: 173
- area burnt: 430 000 hectares (including 51 towns, 78 communities)
- total property dollar losses: \$1.35 billion
- homes lost: 2129, valued at \$713 million (includes contents and outbuildings).

Rebuilding homes and towns, supporting local economies, regenerating the natural environment and restoring community identity is an enormous task — for government, businesses and the communities. The Victorian and Australian governments have responded to this challenge by establishing the Bushfire Reconstruction and Recovery Authority to coordinate and oversee the rebuilding program.

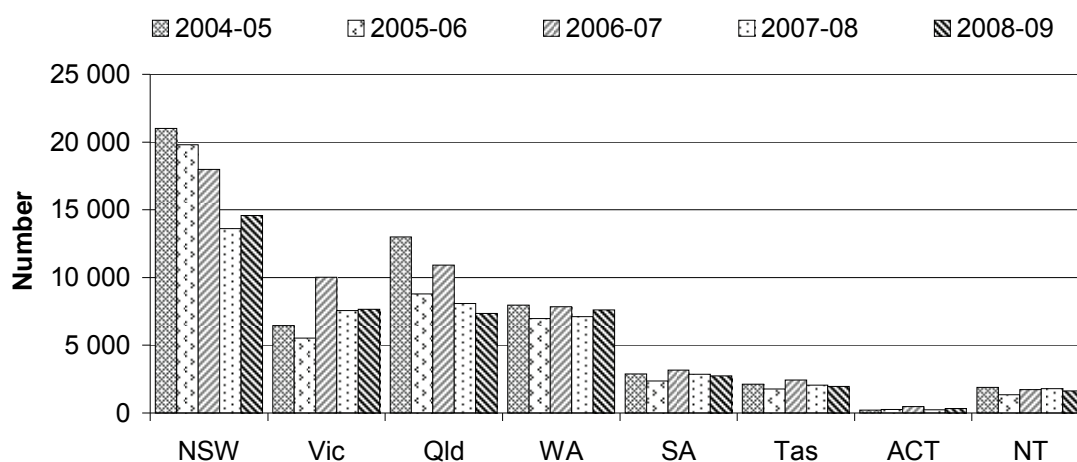
The response to these fires involved cooperation and resources from Australian, State and Territory governments. All of these governments are committed to improving policy and processes as a result of this event and are monitoring the findings and recommendations of the 2009 Victorian Bushfire Royal Commission's interim (August 2009), and final (due July 2010), reports.

Nationally, 43 901 landscape (bush and grass) fire incidents were reported by fire service organisations and land management agencies in 2008-09 (table 9A.3). The 2009 Black Saturday fires in Victoria are treated as a single landscape fire event. The consequences of the Black Saturday fire event are reflected in other data (as

noted in caveats) and indicators, including increased government funding and expenditure for Victoria in 2008-09. Where data relating to the fires are not yet available this is also noted in caveats. Some data relating to this fire event will not be recognised until future editions of the report due to the lag in reporting (for example fire deaths and fire injuries data).

The numbers of reported landscape fire incidents are in figure 9.4. Incidents reported to land management agencies are not included for some jurisdictions.

**Figure 9.4 Fire service organisations and land management agencies reported total landscape (bush and grass) fire incidents<sup>a, b, c, d, e, f, g, h, i</sup>**



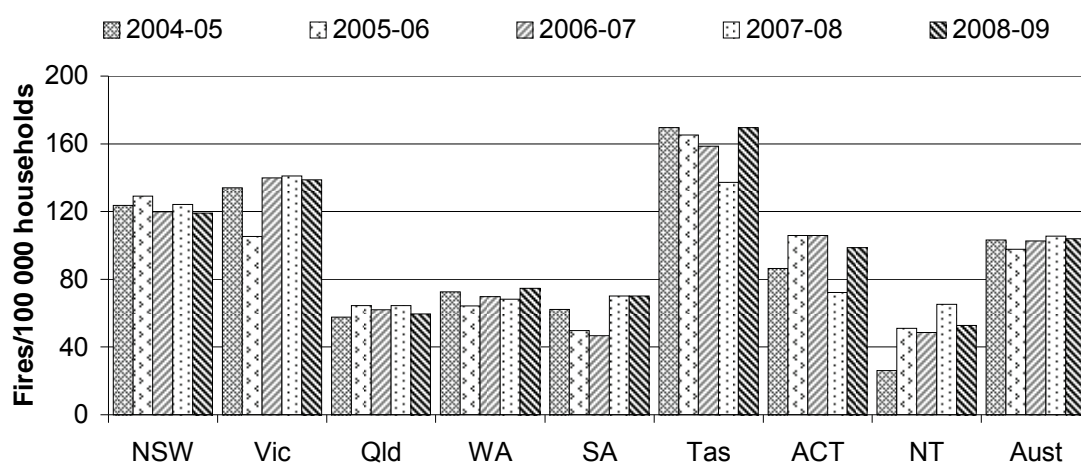
<sup>a</sup> These data may be different to those reported elsewhere because they reflect responses from fire service organisations and, where stated, land management agencies. <sup>b</sup> NSW: Includes data from the NSW Department of Environment and Climate Change, the NSW Rural Fire Service and the NSW Fire Brigades for all bush and grass fires regardless of size of area burnt. <sup>c</sup> Vic: Data include incidents from the Department of Sustainability and Environment. Due to data collection issues, data are incomplete for 2005-06. Black Saturday (Victorian fires 2009) is treated as a single landscape fire event in 2008-09. <sup>d</sup> Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. <sup>e</sup> WA: Data include landscape fires reported by the Department of Environment and Conservation as a lead agency, with 648 fires recorded for 2008-09. <sup>f</sup> SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period so data are incomplete). <sup>g</sup> Tas: Data include all vegetation fires, irrespective of size, from all fire brigades (full time and volunteer) and land management agencies. <sup>h</sup> ACT: A 51 per cent decrease in landscape fires from 2006-07 to 2007-08 corresponds to a milder fire season than the previous year. <sup>i</sup> NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades.

Source: State and Territory governments (unpublished); table 9A.3.

*Accidental residential structure fires reported to fire service organisations per 100 000 households*

The rate of accidental residential structure fires per 100 000 households is reported in figure 9.5. Rates may not be entirely comparable, as the number of accidental residential structure fires is affected by the number of fires where the cause has been determined and classified by fire service personnel. Although the national rate has been relatively constant, rates for jurisdictions show more variability over the five year period.

**Figure 9.5 Accidental residential structure fires reported to fire service organisations<sup>a, b, c, d, e, f, g</sup>**



<sup>a</sup> Rates may not be entirely comparable. The numerator (the number of accidental residential structure fires) is affected by the number of fires where the cause has been determined and classified by fire service personnel. Data for the denominator are from the ABS Australian Demographic Statistics Household projection series and are taken as the average of household data from the start and end of each financial year period to provide a financial year midpoint estimate. For example, household data for the 2008-09 financial year are the average of total households as at 30 June 2008 and as at 30 June 2009. <sup>b</sup> Vic: Due to data collection issues, data are incomplete for 2005-06. <sup>c</sup> Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population. <sup>d</sup> WA: Data include reported turnouts by career and volunteer services for all areas of the State. <sup>e</sup> SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period). SA may be under reported because MFS data entry was not completed by the submission deadline. <sup>f</sup> Tas: Data include *all* fire brigades, both full-time and volunteer. <sup>g</sup> NT: Data are for NT Fire and Rescue Service permanent fire stations only.

Source: ABS (2009) *Australian Demographic Statistics* Table 21 Projected number of households, states and territories—at 30 June, Cat. no. 3101.0; State and Territory governments (unpublished); table 9A.4.

*Hazardous materials incidents*

Hazardous materials include paints, adhesives, solvents, fuels, soap, detergents, cosmetics, pharmaceuticals, cleaners, household chemicals, acids, farm and garden

chemicals, explosives, industrial chemicals, plastics raw materials, gases and many others. All of these materials have hazardous properties that must be controlled or contained. The materials must be effectively managed and cleaned up in an emergency, when the primary controls have failed.

Australian governments aim to minimise the adverse effects of hazardous materials incidents on the community to enhance public safety. There is increasing community expectation that governments will prevent hazardous materials incidents that threaten community safety and the environment and that fire service organisations will respond to these incidents with the minimum possible further impact on the environment.

Fire service organisations provide ‘Hazmat’ (hazardous material) services that contribute to achieving enhanced community safety and quality of life, business confidence and protection of the environment by:

- influencing government policy and legislation to ensure integration of prevention and response activities
- effective planning, prevention, safe response and recovery from incidents.

The prevention/mitigation, preparedness, response and recovery services provided and delivered by fire service organisations for hazardous materials incidents have the potential to avoid the need for downstream services. The use of downstream services may be undesirable because it reflects negative outcomes and/or involves significant social costs.

Nationally, fire service organisations responded to 3132 hazardous materials incidents in 2008-09 (table 9.3).

**Table 9.3 Number of hazardous materials incidents attended to by fire service organisations<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>d</sup></i>	<i>WA</i>	<i>SA<sup>a</sup></i>	<i>Tas</i>	<i>ACT<sup>a</sup></i>	<i>NT</i>	<i>Aust</i>
2004-05	782	1 714	296	77	1 018	22	77	265	4 251
2005-06	848	1 245	288	84	1 116	30	62	238	3 911
2006-07	971	1 637	324	94	1 077	36	127	164	4 430
2007-08	777	1 448	415	87	180	26	179	90	3 202
2008-09	911	910	430	70	466	31	130	184	3 132

<sup>a</sup> Data may differ from those in table 9A.2 which include fires involving or releasing hazardous materials. Data also exclude minor fuel or other flammable liquid spills/leaks less than 200 litres except for SA for 2003-04 to 2006-07 and the ACT for all years. <sup>b</sup> Data represent incidents attended by FSOs. FSOs may not be notified of all hazardous materials incidents occurring in the community. <sup>c</sup> Coding of hazardous materials incidents is based on the judgment of the reporting fire officer shortly after the time of the incident. Some coding of incidents may be inaccurate due to the information available at the time of reporting. <sup>d</sup> Qld: Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures.

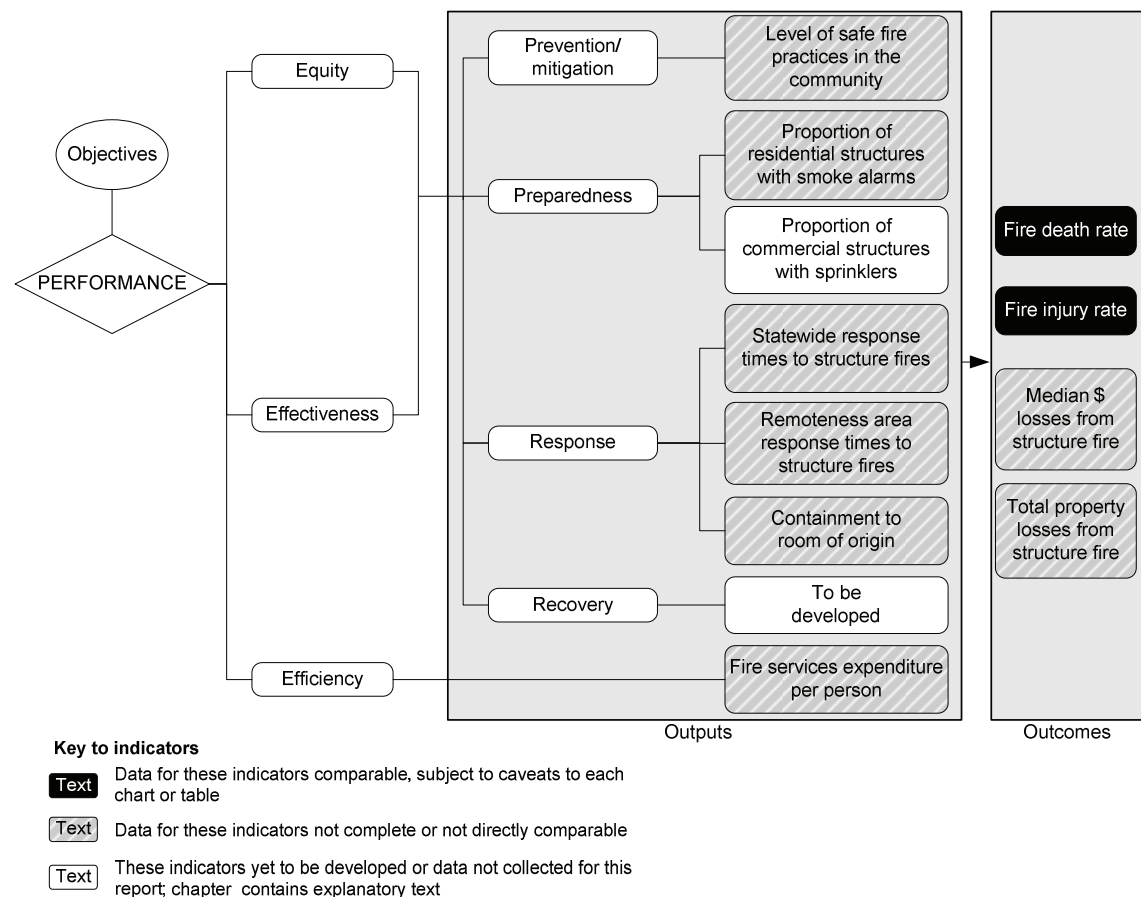
Source: State and Territory governments (unpublished).

In addition to fire service organisations, other agencies and organisations contribute to the emergency management and risk management of hazardous materials incidents. Different arrangements exist across jurisdictions (table 9A.42).

## Framework of performance indicators

Figure 9.6 presents the performance indicator framework for fire events, based on the general framework for all emergency events. Definitions of all indicators are provided in section 9.8.

Figure 9.6 Performance indicators for fire events



The performance indicator framework for fire events shows which data are comparable in the 2010 Report. For all data, supporting text and footnotes include caveats relevant to interpretation. Indicators that are considered comparable are only comparable subject to accompanying caveats. Chapter 1 discusses data comparability from a Report wide perspective (see section 1.6).

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Performance information is reported for a number of indicators. These results might have been influenced by factors such as differences in climatic and weather conditions, the socio-demographic and topographic composition of jurisdictions, property values and dwelling construction types. Importantly, jurisdictions also have diverse legislative fire protection requirements.

Results need to be interpreted with care because data might have been derived from small samples (for example, jurisdictions' fire safety measures surveys) or may be highly variable as a result of relatively small populations (as in Tasmania, the ACT and the NT).

The role of volunteers also needs to be considered when interpreting some indicators (such as fire service organisation expenditure per person). Volunteer personnel provide a substantial proportion of fire services (and emergency services more generally). While costs such as the training and equipment associated with volunteers are included in the cost of fire service provision, the labour costs of providing fire services would be much greater without volunteers (assuming these functions were still performed).

Information has not been reported for all fire events in each jurisdiction consistently over time. Reported results sometimes exclude rural fire events, so performance data are not always directly comparable across jurisdictions. Fire service organisations are cooperating to improve the standards for the collection of fire events data, which is evident by the inclusion of rural fire service organisations data by more jurisdictions in recent years. Differences in counting rules are expected to be minimised in future Reports.

## **Key performance indicator results**

### *Outputs*

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5). Outputs are measured by the 'level of safe fire practices in the community'; 'the proportion of residential structures with smoke alarms'; 'the proportion of commercial structures with sprinklers'; 'response times to structure fires'; 'containment to the room of origin'; and 'expenditure per person'.

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### *Equity and effectiveness — prevention/mitigation*

Equity and effectiveness indicators are linked for fire events. The equity dimension of prevention/mitigation indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services' activities. The effectiveness dimension of prevention/mitigation indicators relates to fire service organisations' ability to prevent fires and mitigate fire damage.

### *Level of safe fire practices in the community*

'Level of safe fire practices in the community' is an indicator of governments' objective to reduce the adverse effects of fires on the community and manage the risk of fires (box 9.5).

#### **Box 9.5 Level of safe fire practices in the community**

'Level of safe fire practices in the community' is defined as the number of households with household fire safety measures installed or prevention procedures followed, divided by the total number of households.

The higher the proportion of households with a fire safety measure installed or prevention measure followed, the less likely fires will occur or cause excessive damage. This indicator does not provide information on the degree to which practices under consideration contribute to fire prevention and mitigation.

Comparable data for this indicator were last reported by the ABS in 2001 (for the reference period February to November 2000). Since then data have been available inconsistently from various sources and are not directly comparable.

Selected fire risk management/mitigation strategies across jurisdictions are identified in table 9A.35. Nationally consistent data on household fire safety measures installed or prevention procedures followed have not been available since the ABS Population Survey Monitor (PSM) (ABS 2001) was discontinued (in November 2001). Since then, some jurisdictions have conducted their own surveys of household fire safety measures installed or prevention procedures followed. These surveys have focused on local priorities, for example, where there are already high levels of reported smoke alarms in homes, surveys may target other fire safety practices or measures. Different survey methodologies have also been used across jurisdictions. Such methodological differences between the surveys undertaken by the jurisdictions mean that nationally consistent data are not currently available.

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### *Equity and effectiveness — preparedness*

The equity dimension of preparedness indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services' activities. The effectiveness dimension of preparedness indicators relates to fire service organisations' ability to prepare, and assist the community to prepare, for fire events.

#### *Proportion of residential structures with smoke alarms*

The proportion of residential structures with smoke alarms is an indicator of governments' objective to reduce the adverse effects of fire on the community through preparedness measures (box 9.6).

#### **Box 9.6 Proportion of residential structures with smoke alarms**

'Proportion of residential structures with smoke alarms' is defined as the number of households with a smoke alarm installed, divided by the total number of households.

The higher the proportion of households with a smoke alarm installed, the greater is the likelihood that the adverse effects of fire will be avoided or reduced.

Data reported for this indicator are not complete and not directly comparable.

Current nationally comparable and complete time series data are not available on the proportion of residential structures with smoke alarms. Nationally consistent data for all jurisdictions were last available for the reference period February to November 2000, from the discontinued ABS PSM. Where available, subsequent data suggest increasing percentages of households have installed a smoke alarm/detector (table 9A.12). However, as these data are sourced from various jurisdictional collections they are not strictly comparable.

The most recent cross-sectional, nationally consistent data available relevant to the preparedness aspect of 'level of safe fire practices in the community' are for four jurisdictions on a variety of safety precautions (NSW, Victoria, Queensland and the ACT), for October 2007 (table 9A.11). Results indicated that across those four jurisdictions:

- 7.9 per cent of households had experienced a major emergency
- 46.5 per cent of households have an exit plan from dwelling
- 60.5 per cent of households have access to more than one mobile phone, and 89.3 per cent had a landline telephone connection (ABS 2008a).



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Related data for the same time period are available for WA (ABS 2008b).

*Proportion of commercial structures with sprinklers*

‘Proportion of commercial structures with sprinklers’ is an indicator of governments’ objective to prevent the adverse effects of fire on the community through preparedness measures (box 9.7).

**Box 9.7 Proportion of commercial structures with sprinklers**

‘Proportion of commercial structures with sprinklers’ is defined as the number of commercial structures with sprinklers installed, divided by the total number of commercial structures.

The higher the proportion of commercial structures with sprinklers installed, the greater is the likelihood that the adverse effects of fire are reduced. This indicator will not provide information on the operational status of sprinkler systems or their contribution to fire prevention.

Nationally comparable data are not available for this indicator.

*Equity and effectiveness — response*

The equity dimension of response indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services’ activities. The effectiveness dimension of response indicators relates to fire service organisations’ ability to respond to and suppress fires.

*Statewide, and remoteness area, response times to structure fires*

‘Statewide response times to structure fires’ and ‘remoteness area response times to structure fires’ are indicators of governments’ objective to reduce the adverse effects of fire on the community through timely response activities (box 9.8).

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**Box 9.8 Statewide and remoteness area response times to structure fires**

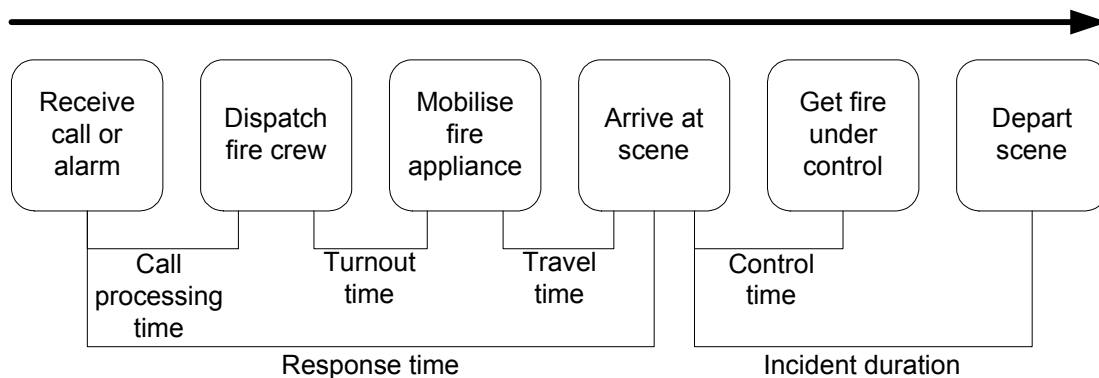
Statewide and remoteness area response times are defined as the times within which 50 per cent and 90 per cent of structure fires are responded to, measured by when the first fire appliance arrives at the scene.

Structure fires are those fires in housing and other buildings. The response time is defined as the interval between the receipt of the call at the communications centre and the arrival of the first appliance at the scene (that is, when the vehicle is stationary and the handbrake is applied). This and other intervals are illustrated in figure 9.7.

Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats).

Shorter response times suggest the adverse effects on the community of emergencies requiring fire services are reduced. Data reported for this indicator are not directly comparable.

**Figure 9.7 Response time points and indicators for fire events**



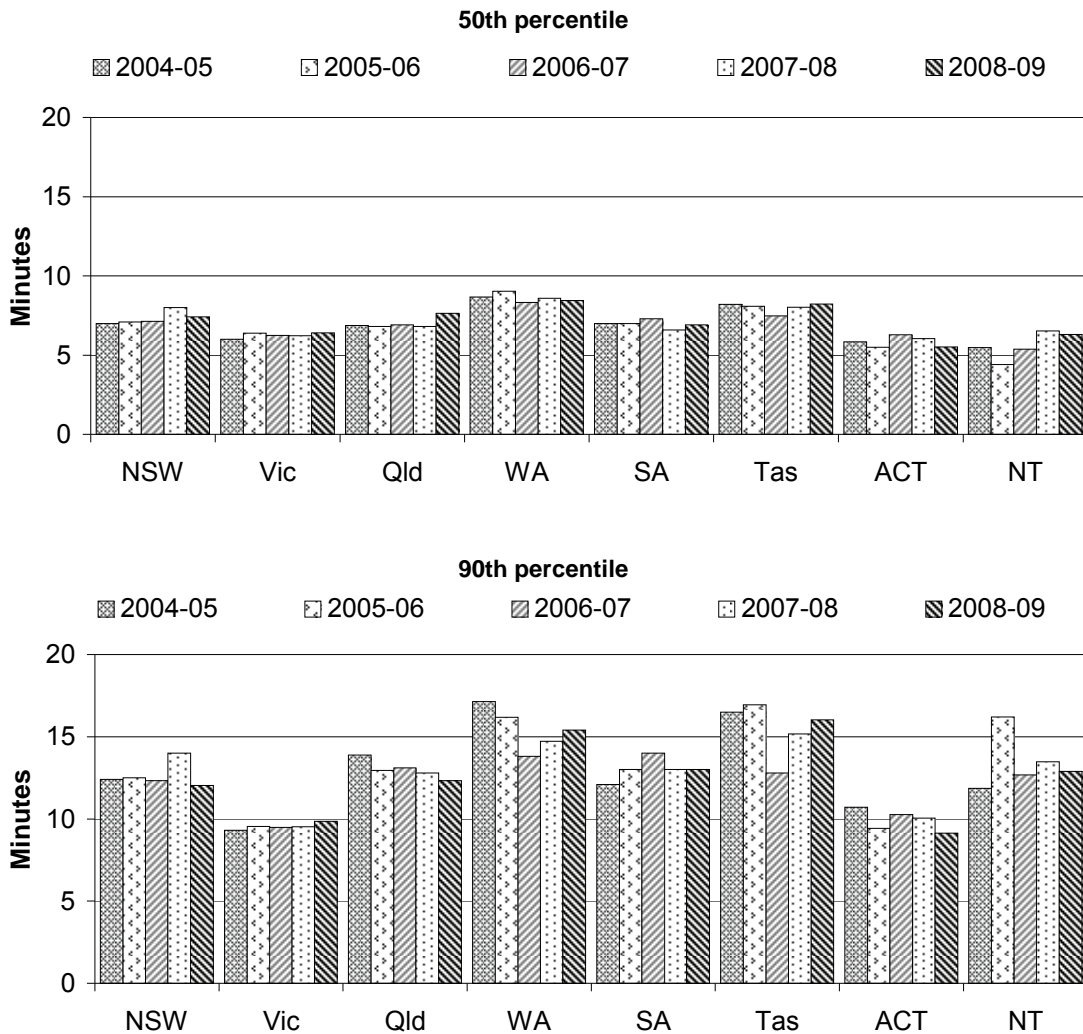
Response times need to be interpreted with caution because the data are not strictly comparable across jurisdictions. There are many factors that influence response times including:

- land area, and population size and density
- topography, road/transport infrastructure and traffic densities
- crewing configurations, response systems and processes, and travel distances.

In addition, reported response times can be affected by data collection systems. Jurisdictions use a combination of computer aided dispatch (CAD) and manual systems. The majority of data are retrieved from CAD systems, with manual systems providing approximately 10 per cent of data across all jurisdictions.

Response times vary between jurisdictions (figure 9.8).

Figure 9.8 Response times to structure fires, state-wide<sup>a, b, c</sup>

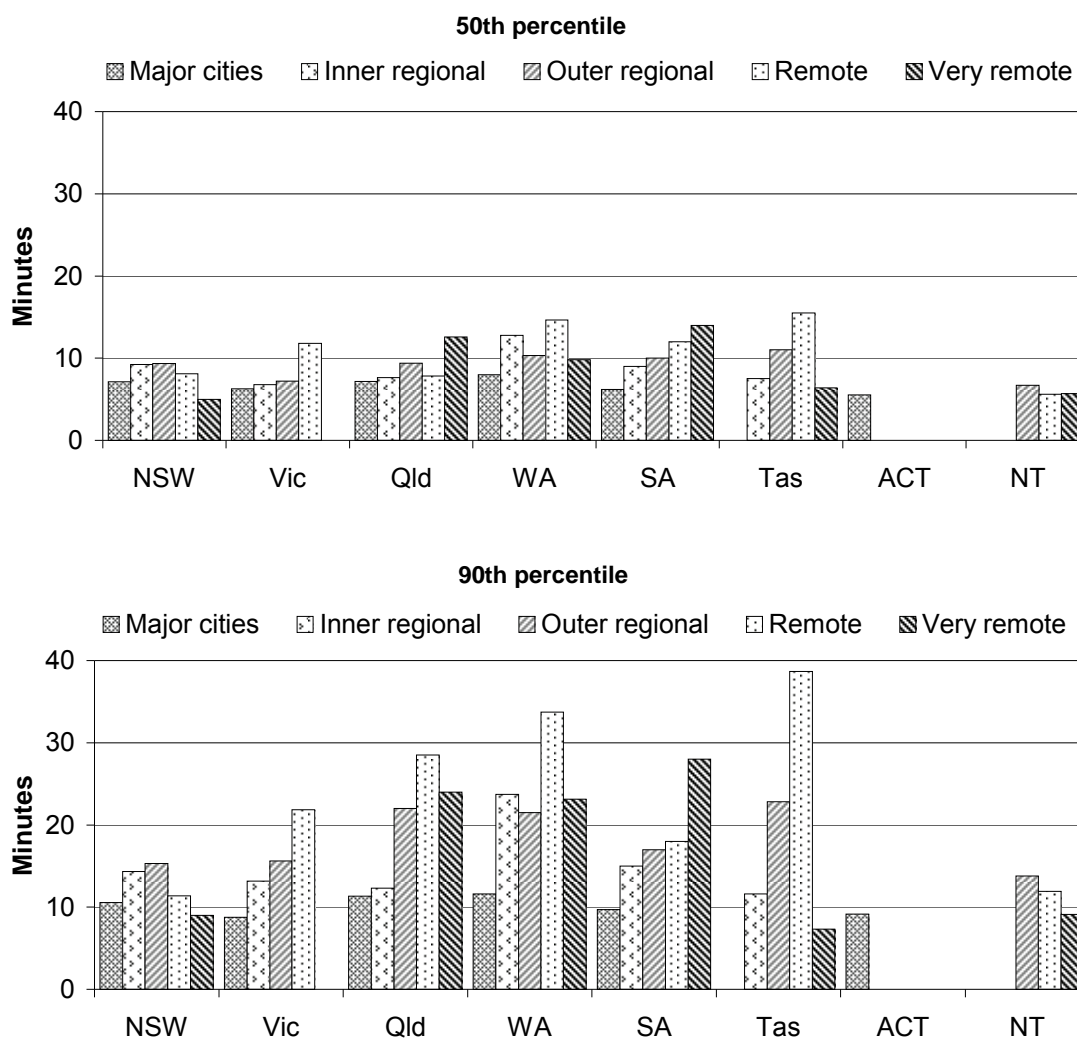


<sup>a</sup> Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Data with incomplete time details are excluded from percentile calculations. <sup>b</sup> Qld: In 2008-09 90 incidents were unable to be classified by remoteness and have been removed from calculations. Response times for QFRS Rural brigade crews are not included as response times are not accurately recorded. Only primary exposure incidents are included. <sup>c</sup> WA: Response times for major cities, regional and remote areas are affected by volunteer data that, particularly in remote areas of the State, are affected by significant travel time to incidents.

Source: State and Territory governments (unpublished); table 9A.13.

Response times can be segmented into remoteness areas based on the ABS Australian Standard Geographical Classification (figure 9.9).

Figure 9.9 **Response times to structure fires, by remoteness area, 2008-09**<sup>a, b, c, d, e, f, g, h</sup>



<sup>a</sup> Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Data with incomplete time details are excluded from percentile calculations. <sup>b</sup> Vic: There are no very remote areas in Victoria. <sup>c</sup> Qld: In 2008-09, 90 incidents were unable to be classified by remoteness and have been removed from calculations. Response times for QFRS Rural brigade crews are not included as response times are not accurately recorded. Only primary exposure incidents are included. <sup>d</sup> WA: Data include both career and volunteer responses. Response times for major cities, regional and remote areas are affected by volunteer data that, particularly in remote areas of the State, are affected by significant travel time to incidents. <sup>e</sup> SA: The Country Fire Service and the Metropolitan Fire Service do not have geocoded data. SA data include incident records with both alarm and arrival times. Excludes response times of 12 hours or more. The high 90<sup>th</sup> percentile result for the 'very remote' category is due to the small number of reported fires (11), with some fires having response time of 1 to 3 hours. <sup>g</sup> ACT: All responses were within the major city. <sup>h</sup> NT: NT Fire and Rescue Services respond to structure fires outside gazetted Emergency Response Areas in the NT when required impacting on some response times.

Source: State and Territory governments (unpublished); table 9A.14.

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## Containment to room of origin

'Containment to room of origin' is an indicator of governments' objective to reduce the adverse effects of fire emergency events on the community by response and mitigation strategies (box 9.9).

### Box 9.9 Containment to room of origin

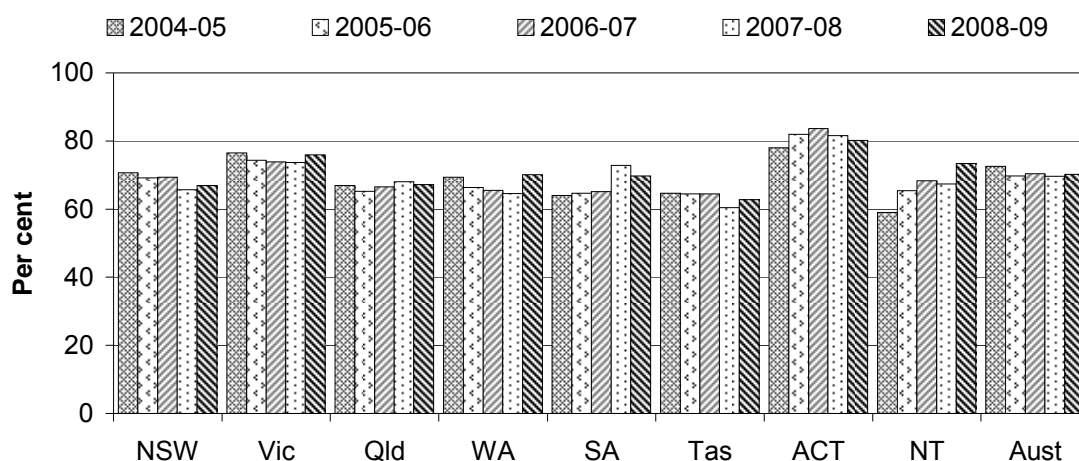
'Containment to room of origin' is defined as the number of structure fires contained to the object or room of origin divided by the total number of structure fires. Structure fires are those fires in housing and other buildings.

A higher proportion of structure fires contained to the object or room of origin is more desirable.

Data reported for this indicator are not directly comparable.

The proportion of fires, from all ignition types, contained to the object or room of origin varies between jurisdictions, and within jurisdictions over time (figure 9.10).

Figure 9.10 **Structure fires (all ignition types) contained to the object/room of origin**<sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> NSW: The decline in the percentage of structure fires confined to the object or room of origin between 2006-07 and 2007-08 is artificial. The data for 2007-08 for the first time conform to the nationally agreed definition for this measure by including data from both the NSW RFS and the NSWFB. <sup>b</sup> Vic: Data are incomplete for 2005-06. <sup>c</sup> Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure. <sup>d</sup> WA: Incidents where containment codes are not completed, and where the fire only affects the outside of a structure are excluded from containment calculations. <sup>e</sup> SA: Data exclude the Country Fire Service. <sup>f</sup> Tas: Data are for *all* fire brigades, both full-time and volunteer. <sup>g</sup> Aust: Average excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished); table 9A.15.

---

Nationally in 2008-09, the proportion of incendiary and suspicious structure fires contained to the object or room of origin was 56.9 per cent and for accidental structure fires 80.4 per cent. Nationally, rates have shown little movement over the 5 years to 2008-09. However, trends in individual jurisdictions' rates have varied (table 9A.15).

### *Equity and effectiveness — recovery*

The equity dimension of recovery indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from recovery strategies, services and activities. The effectiveness dimension of recovery indicators relates to community restoration, and to communities' and fire service organisations' ability to return to a state of preparedness (box 9.10).

#### **Box 9.10 Performance indicators — recovery**

There are two elements to recovery: supporting communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic, ecological and physical wellbeing following a fire event, and return of communities and fire service organisations to a state of preparedness after experiencing a fire event.

Recovery indicators are identified as a key development area for future Reports.

### *Efficiency*

#### *Fire service organisations' expenditure per person*

'Fire service organisations' expenditure per person' is a proxy indicator of the efficiency of governments in delivering emergency management services (box 9.11).

---

**Box 9.11 Fire service organisations' expenditure per person**

'Fire service organisations' expenditure per person' is defined as total fire service organisation expenditure per person in the population.

All else being equal, lower expenditure per person represents greater efficiency. However, efficiency data are difficult to interpret. While high or increasing expenditure per person may reflect deteriorating efficiency, it may also reflect changes in aspects of the service (such as improved response) or the characteristics of fire events (such as more challenging fires). Similarly, low or declining expenditure per person may reflect improving efficiency or lower quality (response times) or less challenging fires.

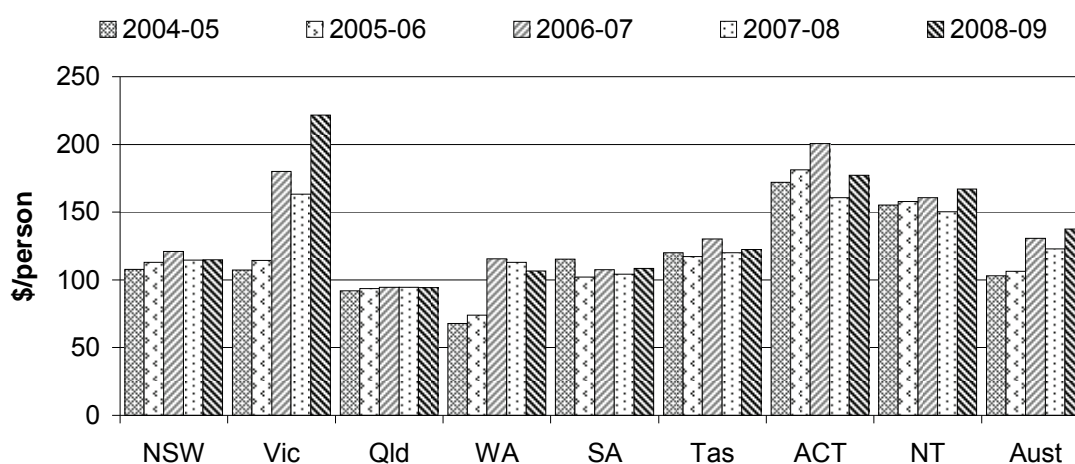
Expenditure per person is employed as a proxy for efficiency. Expenditure per fire is not used as a proxy for fire service organisation efficiency because an organisation that applies more resources to the prevention and preparedness components to reduce the number of fire incidents could erroneously appear to be less efficient.

Data reported for this indicator are not directly comparable.

Both total cost of fire service organisations and the cost to government of funding fire service organisations are reported. Both are reported, because revenue from other sources is significant for a number of jurisdictions.

Nationally, the total expenditure on fire service organisations per person in 2008-09 was approximately \$138 (figure 9.11).

**Figure 9.11 Fire service organisations expenditure per person (2008-09 dollars)<sup>a, b, c, d, e</sup>**



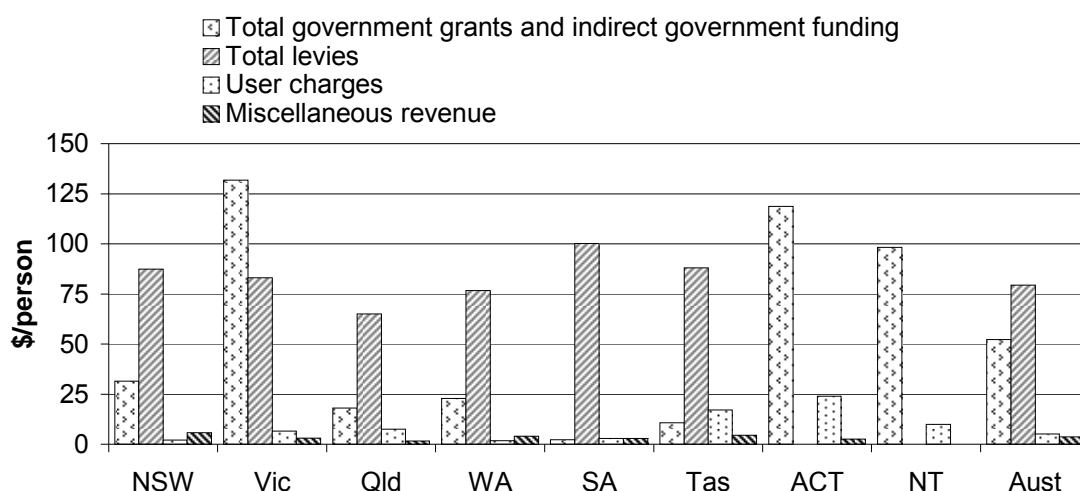
<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Total fire expenditure includes levies on insurance companies and property owners, user charges, fundraising and donations and indirect revenue. <sup>b</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). <sup>c</sup> Vic: 2006-07 is the first year in which the Victorian data includes expenditure for the Department of Sustainability and Environment (DSE) and explains the marked increase for that year. 2008-09 data include a significant increase in expenditure due to emergency funding arising from the Black Saturday Bushfires. <sup>d</sup> WA: FESA provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years cannot be segregated by service and include SES and volunteer marine services as well as fire. Data for the Department of Environment and Conservation are not included. <sup>e</sup> ACT: The increase in 2005-06 was due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. 2006-07 expenditure includes placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

Source: State and Territory governments (unpublished); table 9A.17.

Nationally, total government grants and indirect government funding of fire service organisations per person in 2008-09 was \$52.18. Levies per person in 2008-09 averaged \$79.36 nationally, with relatively minor contributions from user charges and miscellaneous revenue (table 9A.18). The major sources of funding varied considerably across jurisdictions (figure 9.12).



Figure 9.12 Fire service organisation funding per person, 2008-09<sup>a</sup>



Source: State and Territory governments (unpublished); table 9A.18.

### Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (chapter 1, section 1.5). These outcome indicators: ‘fire death rate’, ‘fire injury rate’, ‘median dollar losses from structure fire’ and ‘property losses from structure fire per person’, relate to the objective of ESOs to minimise the effect of fire on life, property and the environment. Caution should be exercised in interpreting data for some indicators, given the significant fluctuations from year to year, particularly for jurisdictions with relatively small populations.

### Fire death rate

‘Fire death rate’ is an indicator of governments’ objective to minimise the adverse effects of fire events on the community and enhance public safety (box 9.12).

#### Box 9.12 Fire death rate

‘Fire death rate’ is defined as the number of fire deaths per million people.

A low or decreasing fire death rate represents a better outcome.

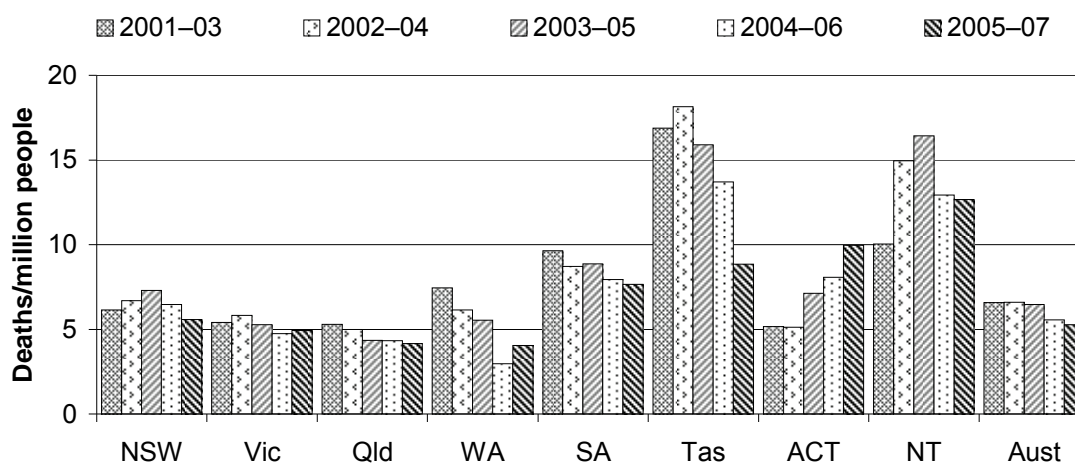
Fire deaths are identified from cause of death information supplied by the medical practitioner certifying the death or by a coroner. Fire deaths are reported by year of registration of death at State and Territory Registrars of Births, Deaths and Marriages.

Data reported for this indicator are comparable. Latest available data are for 2007.

Nationally, there were 98 fire deaths in 2007. Exposure to smoke, fire and flames accounted for 58 deaths, 15 fire deaths occurred from intentional self-harm by smoke, fire and flames and 3 deaths were due to assault. The remaining fire deaths were of undetermined intent (table 9A.6). The fire death rate was 4.7 deaths per million people in 2007.

Fire deaths data are volatile over time, because of the small number of fire deaths. To overcome data volatility, a three year weighted average fire death rate is reported (figure 9.13).

**Figure 9.13 Annual fire death rate, three year rolling average<sup>a, b, c, d, e</sup>**



<sup>a</sup> Fire deaths data may differ slightly from those published in earlier reports due to ABS revisions incorporated in the 2010 Report. Cells in table 9A.6 have been randomly adjusted to avoid the release of confidential data. Where necessary, totals have been adjusted separately to the component cells and totals are not necessarily the sum of the component cells. <sup>b</sup> Fire deaths are coded to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire death codes X00-X09 plus X76, X97 and Y26. Fire deaths data are reported by the State or Territory of the deceased's usual residence, and by the year the death was registered. <sup>c</sup> The small number of deaths means it is difficult to establish patterns and provide detailed analysis. <sup>d</sup> Australian totals include Other Territories. <sup>e</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Calendar year population estimates are the midpoint estimate of the relevant calendar year (that is, as at 30 June).

Source: ABS (various years) *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 9A.6.

Nationally, the three year weighted average fire death rate was 5.3 per million people for 2005–07.

### *Fire injury rate*

'Fire injury rate' is an indicator of governments' objective to minimise the adverse effects of fire events on the community and enhance public safety (box 9.13).

### Box 9.13 Fire injury rate

'Fire injury rate' is defined as the number of fire injuries per 100 000 people.

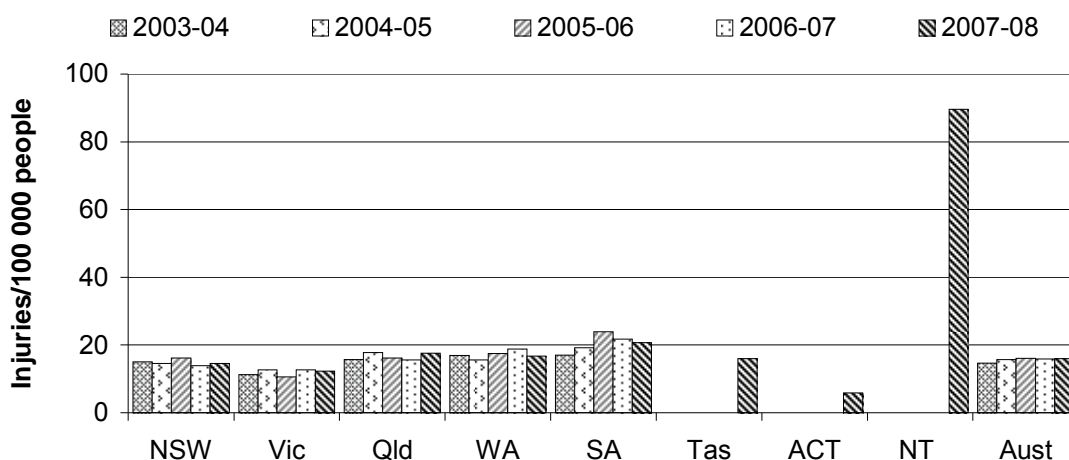
A lower fire injury rate represents a better outcome.

Fire injuries are represented by hospital admissions (excluding emergency department non-admitted casualties) and are reported by the State or Territory where the admission occurs. A person injured by fire may be treated more than once, and in more than one State or Territory. Deaths from fire injuries after hospitalisation have been removed from the fire injuries data for the time series because these are counted in the fire death rate.

Data reported for this indicator are comparable. Latest available data are for 2007-08.

Nationally in 2007-08, there were 3378 hospital admissions due to fire injury (table 9A.7) and the rate per 100 000 people was 15.9 (figure 9.14).

Figure 9.14 Annual fire injury rate<sup>a, b, c</sup>



<sup>a</sup> Fire injuries are coded to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire injury codes X00-X09 plus X76, X97 and Y26. Fire injuries are reported by the State or Territory where the injury is treated. Excludes secondary fires resulting from explosions, transport incidents, and emergency department non-admitted casualties. <sup>b</sup> Tas, ACT and NT: Data for 2003-04 to 2006-07 are not available. <sup>c</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: Australian Institute of Health and Welfare (AIHW), *National Hospital Morbidity Database* (unpublished); table 9A.7.

Fire injury rates are volatile over time, given the small number of fire injuries. To overcome data volatility, three year weighted average fire injury rates are reported

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in the data attachment table for periods and jurisdictions with published data (table 9A.7).

### *Losses from structure fire*

‘Median dollar losses from structure fire’ (box 9.14) and ‘property loss from structure fire per person’ (box 9.15) are indicators of the effect of fire on property.

#### **Box 9.14 Median dollar losses from structure fire**

‘Median dollar losses from structure fire’ is defined as the median dollar losses from structure fire (a fire in a house or other building), adjusted for inflation. The median is the middle number in a sequence and is regarded as a more appropriate measure of ‘typical’ losses than the average (or mean) loss.

Lower or decreasing median dollar losses represent a better outcome.

Data reported for this indicator are not directly comparable.

#### **Box 9.15 Property losses from structure fire per person**

‘Property losses from structure fire per person’ is defined as the property loss from structure fire (a fire in housing or other building) per person, adjusted for inflation.

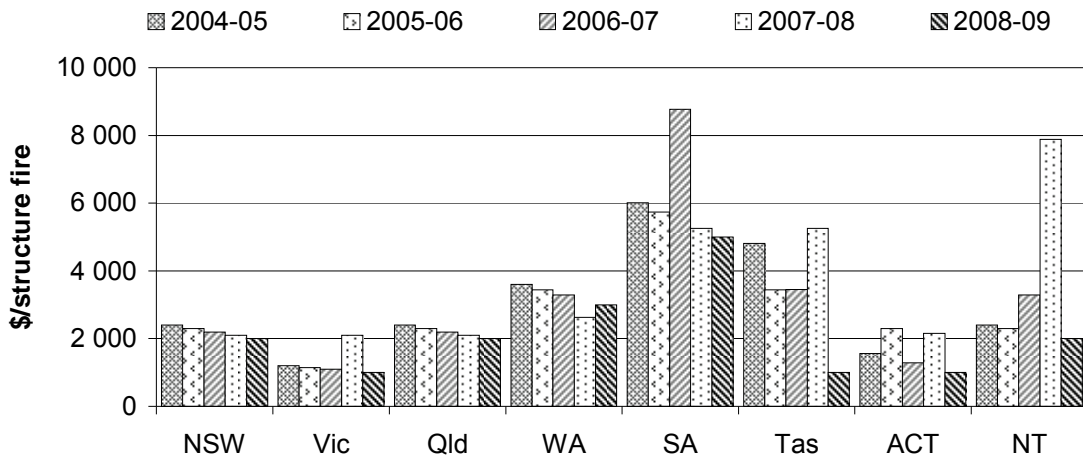
Lower or decreasing total property losses from structure fire per person represent better outcomes.

Data reported for this indicator are not directly comparable.

These data (expressed in real terms) have not been adjusted for jurisdictional differences in the costs and values of various types of building. Further, the method of valuing property loss from fire varies across jurisdictions.

The median dollar loss varies across jurisdictions and over time. No clear national trends are evident (figure 9.15).

Figure 9.15 **Median dollar loss per structure fire (2008-09 dollars)**<sup>a, b, c, d, e, f</sup>



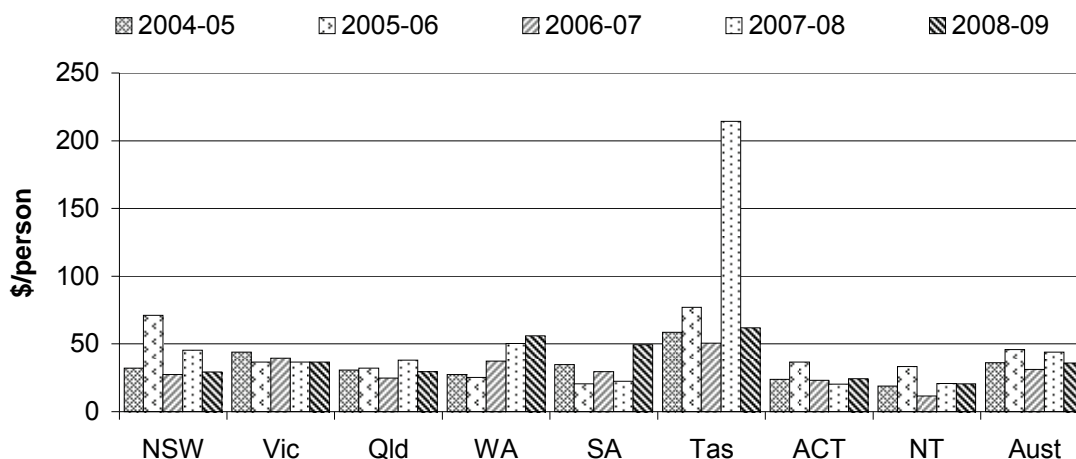
<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). Estimates have not been validated by the insurance industry, or adjusted for interstate valuation differences. <sup>b</sup> Vic: Due to data collection issues, data are incomplete for 2005-06. 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009. <sup>c</sup> Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. <sup>d</sup> SA: 2006-07 data may be under reported because MFS data entry was not completed by the submission deadline. <sup>e</sup> WA: Dollar losses are based on estimated values provided by firefighters. <sup>f</sup> Tas: data are for *all* fire brigades, both full time and volunteer. Property loss does not include losses as a result of vegetation fires.

Source: State and Territory governments (unpublished); table 9A.8.

The property loss per person (expressed in real terms) has fluctuated over time in all jurisdictions (figure 9.16).

Data for the three year average property loss per person are also available in the attachment tables (table 9A.9).

**Figure 9.16 Property loss from structure fire per person  
(2008-09 dollars)<sup>a, b, c, d, e, f, g, h, i, j</sup>**



<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). Estimates have not been validated by the insurance industry or adjusted for interstate valuation differences. <sup>b</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). <sup>c</sup> NSW: Some structure fires resulted in direct dollar loss in excess of \$1 million each. In 2004-05 there were 17 such structure fires; 2005-06, 32 with five of these at \$10+ million each and one at \$89 million; 2006-07, 15 at \$1+ million each; 2007-08, 19 at \$1+ million each with four at \$5+ million each and one of \$100 million. <sup>d</sup> Vic: Due to data collection issues, data are incomplete for 2005-06. 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009. <sup>e</sup> Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population. In 2007-08 one major incident accounted for \$41m of the total property loss value. <sup>f</sup> WA: Dollar losses are based on estimated values provided by firefighters. <sup>g</sup> SA: 2006-07 data include a \$15 million fire accounting for 35 per cent of the reported dollar loss that year. Data entry for 2006-07 reported property loss from structure fire was incomplete. <sup>h</sup> Tas: Data are for all fire brigades, both full time and volunteer. For 2007-08, data include two significant fires where the property loss was \$60 million and \$20 million respectively. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09. <sup>i</sup> Tas, ACT and NT: Due to small population sizes, rates in these jurisdictions may be affected significantly by single large-loss events. <sup>j</sup> Average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished); table 9A.9.

## 9.4 Road crash rescue events

A road crash rescue event is an incident involving a motor vehicle and the presumption that assistance is required from ESOs.

A primary aim of governments is to reduce death and injury and the personal suffering and economic costs of road crashes. Achieving this aim is challenging and complex. It requires a range of activities, including design and maintenance of vehicles and roads, driver training, road user education, enforcement of road rules,

emergency response and health care in the event of an incident. The agencies involved in this include emergency services organisations, police services, road and transport authorities, health and community services and others.

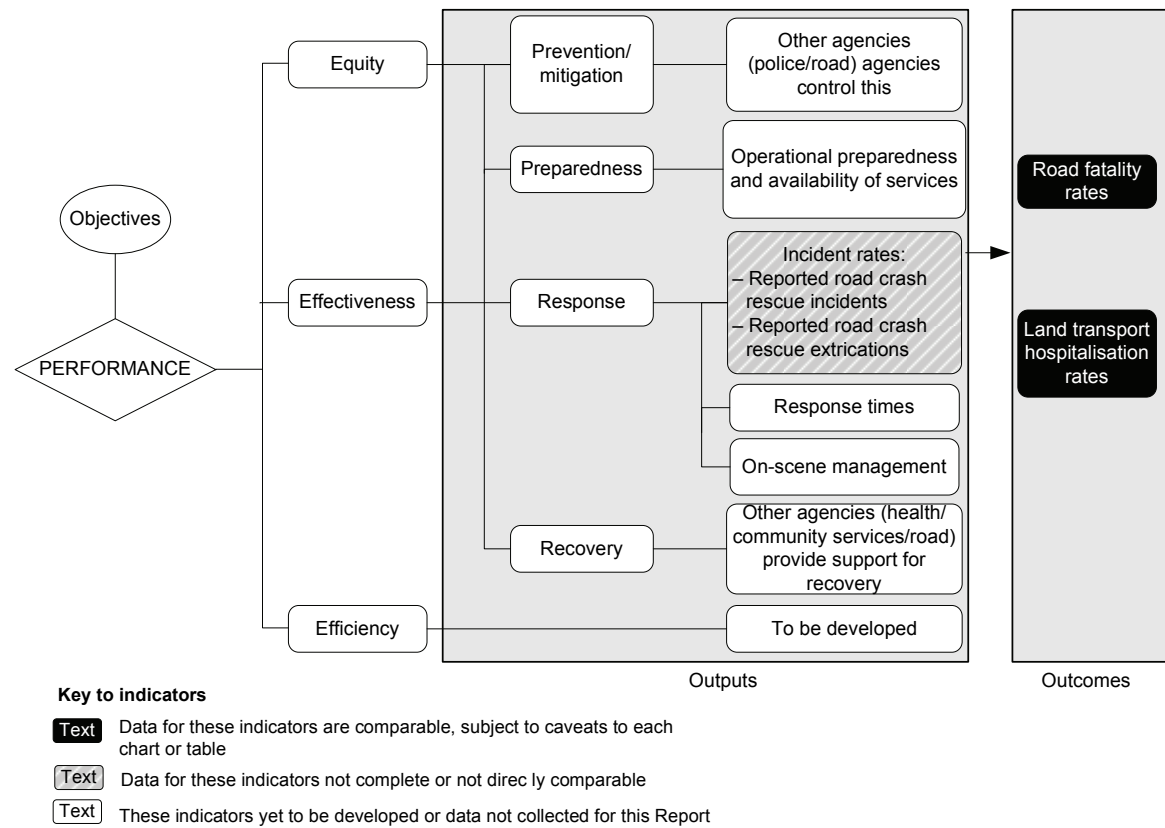
Emergency service organisations provide services that contribute to governments' aims through the provision of effective and efficient medical and rescue services. These rescue services are provided by a diverse range of ESOs; nationally, road crash rescue services are provided by over 20 organisations (table 9A.41).

Some aspects of police activities that are relevant to road crash rescue are addressed in chapter 6, section 6.6.

### Framework of performance indicators

An updated performance indicator framework is presented in this Report (figure 9.17).

Figure 9.17 Performance indicators for road crash rescue events



The framework represents the key elements of a road crash rescue reporting framework. A number of complex issues require further work to develop indicator

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definitions and identify key measures and data sources. This work will be undertaken progressively for future editions of the Report.

The focus of reporting in this section of the Report is on the preparedness, response and efficiency indicators for road crash rescue events. Related road safety reporting is included in the Police services chapter under road safety (chapter 6, section 6.6). Data relating to patient transportation are incorporated into ambulance events reporting later in this chapter (section 9.5).

#### *Equity and effectiveness — prevention/mitigation*

The prevention/mitigation and recovery elements of the performance framework for road crash rescue are largely controlled by agencies other than the ESOs covered by this chapter; for example, prevention of road crashes through community safety campaigns, regulation and law enforcement is predominately a police activity. Agencies involved in recovery range from traffic authorities reopening roadways, to the health and community sectors for rehabilitation of patients.

The National Road Safety Strategy (NRSS), and related Action Plan (ATC 2000 and 2009) provide the framework and priority areas for coordinating the road safety initiatives of Australian, State, Territory and local governments, as well as other major organisations with road safety responsibilities.

#### *Equity and effectiveness — preparedness*

‘Operational preparedness and availability of services’ indicators are linked to the NRSS and aim to improve trauma, medical and retrieval services. Indicators will focus on the number and availability of appropriately trained and authorised personnel (staff and volunteers), and location of facilities. Definitions and data are yet to be developed for reporting on a nationally comparable basis (box 9.16).

#### **Box 9.16 Operational preparedness and availability of services**

Specific measures of operational preparedness and availability of services are yet to be defined.

This indicator and associated measures are currently under development.



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### *Equity and Effectiveness — response*

The effectiveness dimension of response indicators relates to emergency service organisations' ability to respond to road crash rescue events.

#### *Reported road crash rescue incidents and extrications*

'Reported road crash rescue incidents and extrications' is an indicator of governments' objective to reduce the adverse effects of road incidents on the community through appropriate response activities (box 9.17).

#### **Box 9.17 Reported road crash rescue incidents and extrications**

'Reported road crash rescue incidents' is defined as the number of reported incidents involving a motor vehicle and the presumption that assistance is required from emergency services organisations. It is measured by the rate of reported road crash rescue incidents per 100 000 people.

'Reported road crash rescue extrications' is defined as an assisted release and removal of trapped people (usually casualties) from motor vehicles by specially equipped and trained emergency service crews, arising from incidents reported. It is measured by the rate of reported extrications per 100 000 people; per 100 000 registered vehicles; and per million vehicle kilometres travelled.

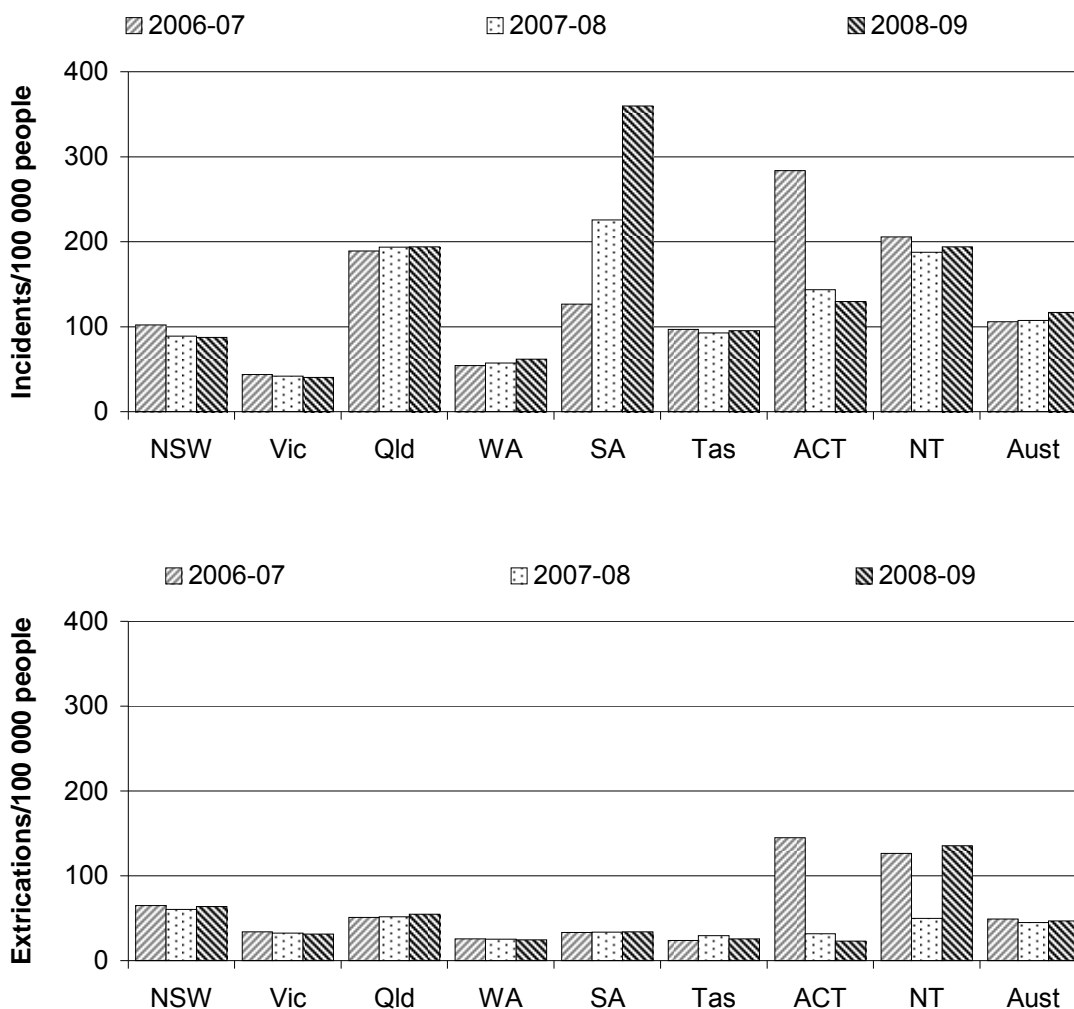
A lower or decreasing number of reported road crash rescue incidents and extrications, adjusted for population, indicates a better community outcome. Higher or increasing proportions of reported road crash rescue incidents and extrications indicate higher emergency response workloads.

Data for this indicator are not directly comparable.

Nationally, there were 25 281 road crash rescue incidents in 2008-09, or 116.8 incidents per 100 000 people (table 9A.19), and 10 134 (or 40.0 per cent) of reported incidents required an extrication response (table 9A.20).

Data for road crash rescue incidents and extrications per 100 000 people display some marked variations across jurisdictions — this may reflect different collection methods and the lack of comparability between jurisdictions. Collection methods are improving over time, making trend analysis difficult. Only the three most recent years are presented in figure 9.18.

Figure 9.18 Reported road crash rescue incidents and extrications<sup>a, b, c, d, e</sup>



<sup>a</sup> Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure. <sup>b</sup> WA: Data include road crash rescue incidents attended by fire services and SES; Extrications data include those performed by career and volunteer fire services and SES volunteers. <sup>c</sup> Tas: Data include responses by fire services, ambulance services and SES. <sup>d</sup> ACT: Data were refined in 2007-08 to provide a more accurate reflection of road crash rescue incidents and extrications. <sup>e</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased Estimated ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); tables 9A.19-20.

Data for earlier years are reported in the attachment tables. Reported road crash rescue incidents per 100 000 people are reported in attachment table 9A.19. Extrications per 100 000 people, per 100 000 registered vehicles and per million vehicle kilometres travelled are reported in attachment table 9A.20.

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### *Response times*

Response times are an important element of a comprehensive road crash rescue framework. Timely, reliable, effective and safe emergency response services reduce the negative impacts of road crash events. Definitions and data are yet to be developed for reporting on a nationally comparable basis (box 9.18).

#### **Box 9.18 Response times**

Specific response times indicators and associated measures for road crash rescue are currently under development.

### *On-scene management*

On-scene management (involving coordination of emergency response personnel, traffic control and securing the scene to prevent new crashes, clean up of hazardous materials, coordination of public cooperation, etc.) is an important factor in achieving the NRSS outcomes of improved trauma, medical and retrieval services (box 9.19).

#### **Box 9.19 On-scene management**

On-scene management indicators and associated measures are currently under development.

### *Equity and effectiveness — recovery*

The recovery element of the performance framework for road crash rescue is largely controlled by agencies other than the ESOs reporting in this chapter.

Complex interface and cross-cutting issues are associated with recovery indicators. For example the level of recovery from injury after major road emergency incidents may be influenced by a number of services including: ambulance, hospital, community and primary health care and disability services.

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## *Efficiency*

The Steering Committee has identified efficiency indicators as an important element of the performance indicator framework (chapter 1, section 1.5) (box 9.20).

### **Box 9.20 Efficiency**

Appropriate efficiency indicators, and associated data sources, for road crash rescue events are yet to be developed.

## **Outcomes**

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see chapter 1, section 1.5).

### *Road fatality rates and land transport hospitalisation rates*

Road fatality rates and land transport hospitalisation rates are indicators of governments' objective to reduce death and injury from road crash incidents. Many agencies and factors affect these outcomes. Relevant data for road deaths and land transport hospitalisations are reported in chapter 6 (section 6.6). Nationally in 2007-08, road transport incidents accounted for 1493 deaths and 36 815 hospitalisations (tables 6A.38-39). Nationally road fatalities increased to 1556 in 2008-09 (table 6A.38).

## **9.5 Ambulance events**

This section provides information on the performance of ESOs in providing services for ambulance events and in preparing the community to respond to emergencies. Ambulance events are incidents that result in demand for ambulance services to respond, including: emergency and non-emergency pre-hospital and out-of-hospital patient care; transport; inter-hospital patient transport; specialised rescue services; ambulance services to multi-casualty events; and capacity building for emergencies.

### **Emergency management services for ambulance events**

Ambulance service organisations are the primary agencies involved in providing services for ambulance events. In a limited number of cases, other organisations provide services such as medical transport for emergencies (table 9A.41). The

descriptive information provided below on funding, incidents and human resources are for ambulance service organisations only. Ambulance assets are reported in table 9A.26.

Ambulance data reported in this chapter cover the principal providers of State and Territory ambulance services; data do not include private providers and other outsourced arrangements.

### *Revenue*

Total revenue of ambulance service organisations covered in this Report was approximately \$1.98 billion in 2008-09. Nationally, revenue (expressed in real terms) increased each year from 2004-05 to 2008-09, with an average annual growth rate of 6.0 per cent (table 9.4).

**Table 9.4 Revenue of ambulance service organisations (2008-09 dollars) (\$ million)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust<sup>b</sup></i>
2004-05	453.6	449.7	359.1	111.5	128.0	28.5	19.3	18.1	1 567.9
2005-06	488.6	478.5	376.7	113.3	128.3	30.9	22.5	18.2	1 657.0
2006-07	510.9	468.8	405.1	117.6	131.3	33.1	20.7	19.4	1 707.0
2007-08	570.8	491.7	430.5	124.9	144.7	34.9	22.4	20.8	1 840.7
2008-09	616.7	511.1	460.7	120.8	178.2	42.4	23.1	22.0	1 975.8

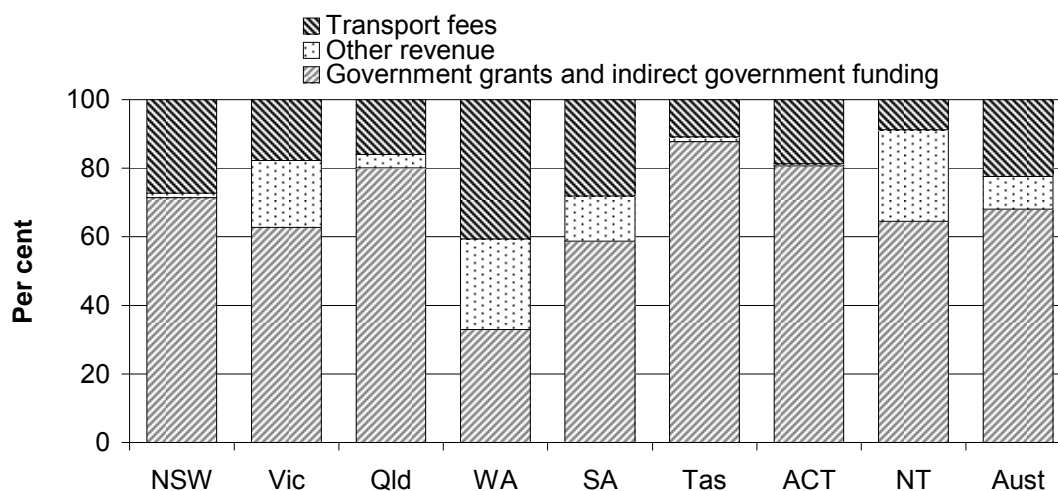
<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from data in agency annual reports and other sources. <sup>b</sup> Totals may not sum due to rounding.

Source: State and Territory governments (unpublished); table 9A.22.

Ambulance service organisations are funded by a variety of sources, with non-government sources making a significant contribution.

The primary sources of revenue across all jurisdictions in 2008-09 were grants from State and Territory governments, transport fees (from government hospitals, private citizens and insurance) and other revenue (subscriptions, donations and miscellaneous revenue) (figure 9.19).

**Figure 9.19 Major sources of ambulance service organisation revenue, 2008-09<sup>a</sup>**



<sup>a</sup> Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

Source: State and Territory governments (unpublished); table 9A.22.

Nationally, 68.1 per cent of funding for ambulance service organisations in 2008-09 was provided as direct government revenue and indirect government revenue, with the remainder sourced from transport fees and other revenue (table 9A.22).

### *Incidents*

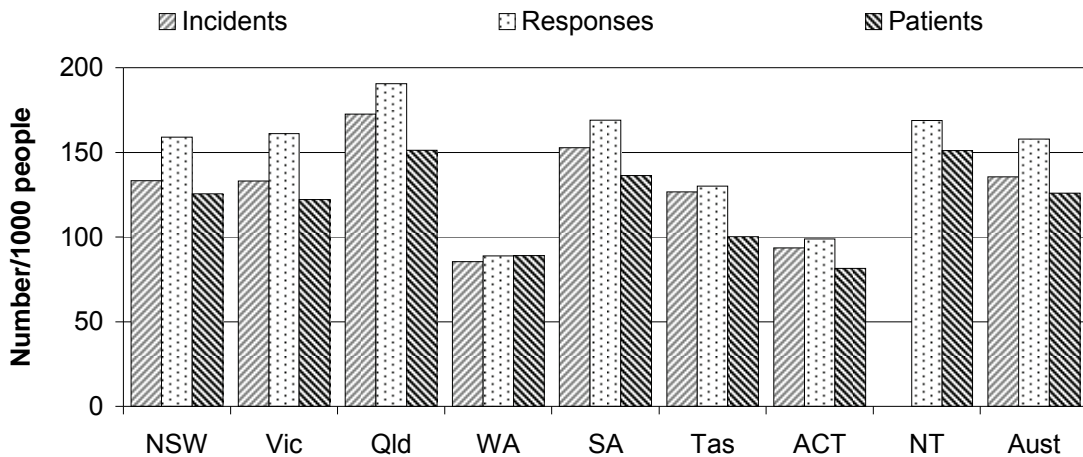
Ambulance service organisations attended 2.93 million incidents nationally in 2008-09 (excluding the NT) (table 9A.23). Most of these were emergency incidents (39.2 per cent), followed by non-emergency incidents (34.5 per cent) and urgent incidents (26.1 per cent).

### *Ambulance incidents, responses and patients per 1000 people*

The numbers of incidents, responses and patients are interrelated. Multiple responses/vehicles may be sent to a single incident, and there may be more than one patient per incident. There may also be responses to incidents that do not have people requiring treatment and/or transport.

Nationally, there were approximately 158 responses per 1000 people, and 126 patients per 1000 people, in 2008-09 (figure 9.20).

Figure 9.20 **Reported ambulance incidents, responses and patients, 2008-09**<sup>a, b, c, d, e</sup>



<sup>a</sup> An incident is an event that results in a demand for ambulance resources to respond. An ambulance response is a vehicle or vehicles sent to an incident. There may be multiple responses/vehicles sent to a single incident. A patient is someone assessed, treated or transported by the ambulance service. <sup>b</sup> Vic: Incidents and responses are for road ambulances only. <sup>c</sup> WA: Does not have a policy of automatically dispatching more than one unit to an incident unless advised of more than one patient. Separate statistics are not kept for incidents and responses. Numbers shown under incidents are cases. <sup>d</sup> NT: A response is counted as an incident. Data for incidents are not available and are not included in the rate for Australia. <sup>e</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); table 9A.23.

### *Triage category by ambulance transport rate*

Emergency department presentation rates and demand for ambulance services are closely linked. The majority of people who are acutely ill or injured and need to attend a hospital emergency department will call the ambulance service to provide immediate pre-hospital care and then take them to hospital.

The National Triage Scale category allocated to a patient on arrival at the emergency department is a nationally comparable measure of how acutely ill the patient is, ranging from triage category 1 (for a patient in immediate need of attention) to triage category 5 (for patients who have a presenting condition that indicates they can safely wait for 2 hours to see a doctor) (chapter 10, box 10.4).

Nationally, in 2007-08 (later data are not available), 84.0 per cent of emergency department patients in triage category 1 arrived by ambulance, air ambulance or helicopter rescue services, and 47.9 per cent of patients in triage category 2. For all triage categories, 23.2 per cent of patients arrived by ambulance, air ambulance or helicopter rescue services (table 9.5).

**Table 9.5 Emergency department patients who arrived by ambulance, air ambulance or helicopter rescue services, by triage category 2007-08 (per cent)<sup>a</sup>**

<i>Triage category</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1 — Resuscitation	81.9	83.3	88.5	83.7	85.2	88.8	81.1	75.6	84.0
2 — Emergency	47.8	46.9	54.8	40.3	49.3	53.8	38.1	38.6	47.9
3 — Urgent	33.8	34.0	39.0	25.1	35.8	35.3	27.7	23.6	33.9
4 — Semi-urgent	19.1	14.2	17.8	9.4	14.4	14.1	10.4	10.7	15.8
5 — Non-urgent	5.8	2.5	4.6	2.7	6.3	2.7	2.5	5.2	4.4
<b>Total</b>	24.1	21.1	28.3	17.0	26.0	23.6	17.4	15.8	23.2

<sup>a</sup> Data represent the 78 per cent of emergency department presentations for which patient-level data were available. Data include all presentations.

Source: AIHW (2009) *Australian Hospital Statistics*, National Non-admitted Patient Emergency Department Care Database.

### *Aero-medical arrangements in Australia*

Arrangements for air ambulance or aero-medical services vary throughout Australia. Some of these arrangements involve services provided entirely by State and Territory ambulance services or by sub-contractors to these services, while others are provided completely externally to the State ambulance services. Some arrangements involve a mix of the two, where external organisations provide aircraft and/or air crew while ambulance service organisations provide paramedics to staff the air ambulances. The result is that the revenue (funding) and expenditure for air ambulance services are included in ambulance reports from some jurisdictions while in other jurisdictions none of these costs are included.

The Australian Government also provides some capital and recurrent funding for aero-medical service provision through the Royal Flying Doctor Service, mainly for primary health services to rural and remote communities. In some jurisdictions, these same aircraft are used to transfer patients requiring higher level care.

It is not possible for ambulance service organisations to provide full activity and financial data for air ambulance services in Australia. The Council of Ambulance Authorities (CAA) has tried to identify, as comprehensively as possible, air ambulance services provided by ambulance service organisations directly, or by other service providers such as the Royal Flying Doctor Service. In doing so, the



CAA has counted the total number of aircraft available in each jurisdiction during 2008-09, and the component of expenditure that is funded through ambulance service expenditure (that is, the expenditure figures do not represent total expenditure, only that component funded through ambulance services) (table 9.6).

**Table 9.6 Aero medical resources and expenditure, 2008-09<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Operated by State Ambulance Service									
Fixed wing	4	4	–	–	–	1	–	–	9
Helicopter	5	4	–	–	–	–	–	–	9
Operated by other service providers									
Fixed wing	1	–	14	12	7	–	–	–	34
Helicopter	5	–	14	1	3	1	1	–	25
<b>Total aircraft</b>	15	8	28	13	10	2	1	–	77
<b>Expenditure (\$'000)</b>	73 614	34 503	na	1 194	na	3 560	581	–	113 452

<sup>a</sup> These figures do not represent the total air ambulance medical expenditure for jurisdictions, but only that funded through ambulance services and reported as part of the total ambulance service expenditure. <sup>b</sup> WA, SA and NT: Fixed wing services are provided by the Royal Flying Doctor Service (RFDS). In addition, AMS, a NT Government operated aero-medical service, operates in the 'top end' of the NT. <sup>c</sup> Tas: Aircraft and pilot are provided by the RFDS under contract, aero medical crew are provided by the State. – Nil or rounded to zero. na Not available.

Source: Council of Ambulance Authorities (CAA) (unpublished).

### *Human resources*

Data on human resources are reported by operational status on a full time equivalent (FTE) basis. Human resources include any person involved in delivering and/or managing the delivery of ambulance services, including:

- ambulance operatives (including patient transport officers, students and base level ambulance officers, qualified ambulance officers, other clinical personnel and communications operatives)
- operational and corporate support personnel (including management, operational planners and coordinators, education and training personnel, corporate support personnel, non-operative communications and technical personnel)
- remunerated and non-remunerated volunteers and ambulance community first responders. Ambulance community first responders are a type of volunteer that provide an emergency response (with no transport capacity) and first aid care before ambulance arrival.

Nationally, 13 283 FTE salaried personnel were involved in the delivery of ambulance services in 2008-09. The majority of salaried ambulance personnel in 2008-09 were ambulance operatives (82.1 per cent) (table 9A.24).

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Nationally, 5542 volunteer personnel (comprising 5051 operatives and 491 support personnel) participated in the delivery of ambulance services in 2008-09. The proportion of volunteer personnel and the nature of their role varied across jurisdictions. Given the decentralised structure of its ambulance service operations, WA has a relatively higher number of volunteer operational and corporate support personnel (table 9A.24).

Nationally there were 1345 ambulance community first responders in 2008-09 (table 9A.24). In some locations the first responder service is provided by another emergency service agency, for example, a fire service.

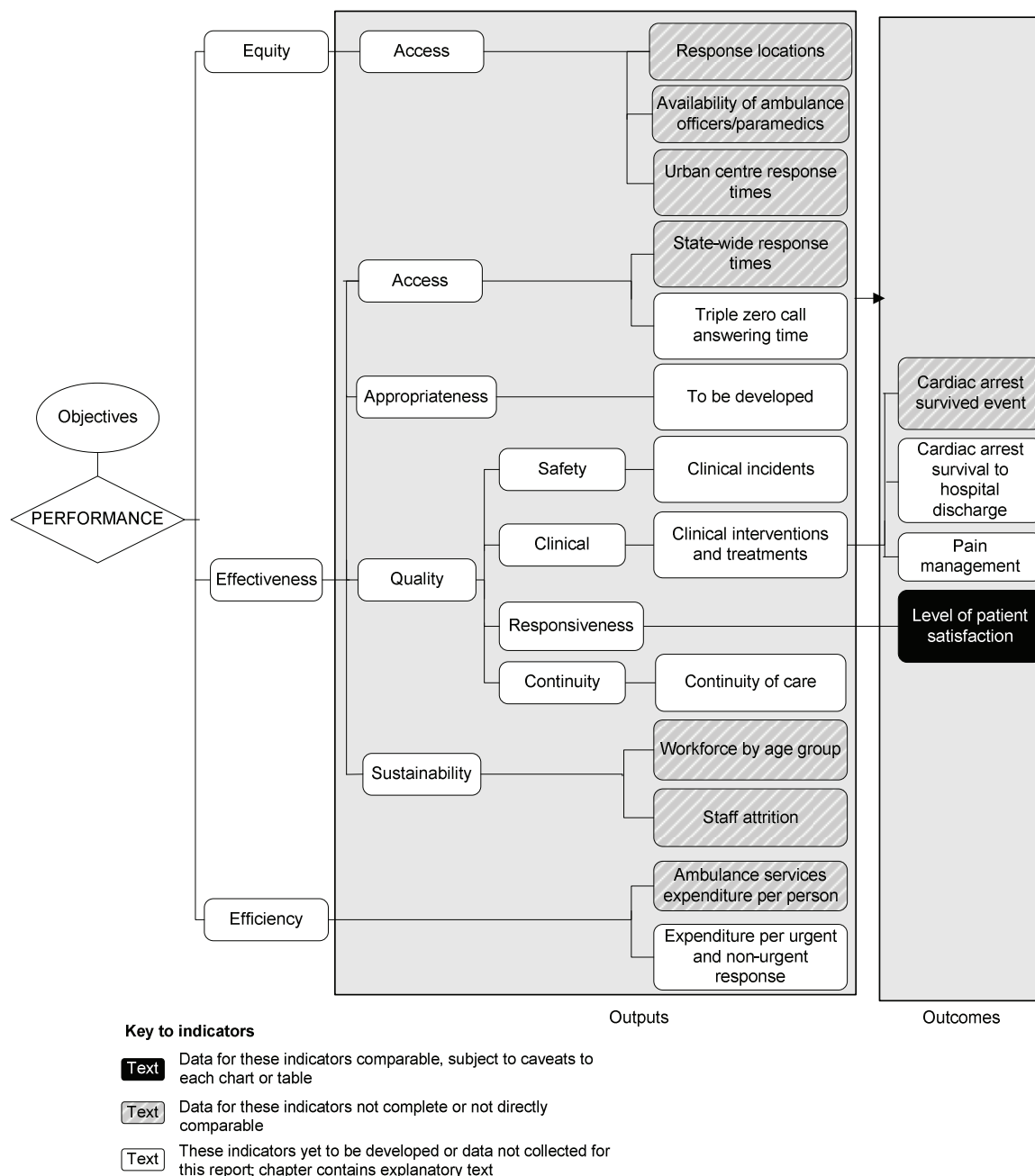
### **Framework of performance indicators**

Figure 9.21 presents the performance indicator framework for ambulance events. This framework is based on the general framework for the health section of the Report. It was introduced in the 2009 Report to replace the framework presented in previous reports — which was based on the general framework for all emergency events.

The performance indicator framework for ambulance events shows which data are comparable in the 2010 Report. For all data, supporting text and footnotes include caveats relevant to interpretation. Indicators that are considered comparable are only comparable subject to accompanying caveats. Chapter 1 discusses data comparability from a Report wide perspective (see section 1.6). Definitions of all indicators are provided in section 9.8.

Caution should be exercised in making comparisons between the ambulance service organisations because of differences in geography, population dispersal and service delivery models. The Report's statistical appendix contains general demographic and socioeconomic data that may assist in interpreting the performance indicators presented in this section (appendix A).

Figure 9.21 Performance indicators for ambulance events



## Key performance indicator results

### Outputs

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5). Output indicators for ambulance services are: ‘response locations’; ‘availability of

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ambulance officers/paramedics'; 'urban centre response times'; 'state-wide response times'; 'triple zero call answering time'; 'clinical incidents'; 'clinical interventions and treatments'; 'continuity of care'; 'workforce by age group'; 'staff attrition'; 'ambulance service organisations expenditure per person'; and 'expenditure per urgent and non-urgent response'.

### *Equity — access*

Equity of access indicators measure access to services by groups in the community who may have special needs.

### *Response locations*

'Response locations' is an indicator of governments' objective of providing accessible emergency ambulance services to communities (box 9.21).

#### **Box 9.21 Response locations**

'Response locations' is defined as the number of paid (or salaried), mixed and volunteer response locations per 100 000 people. Locations are primary ambulance response locations where paid, volunteer or a mix of paid and volunteer ambulance operatives are responding in an ambulance vehicle and providing pre-hospital care.

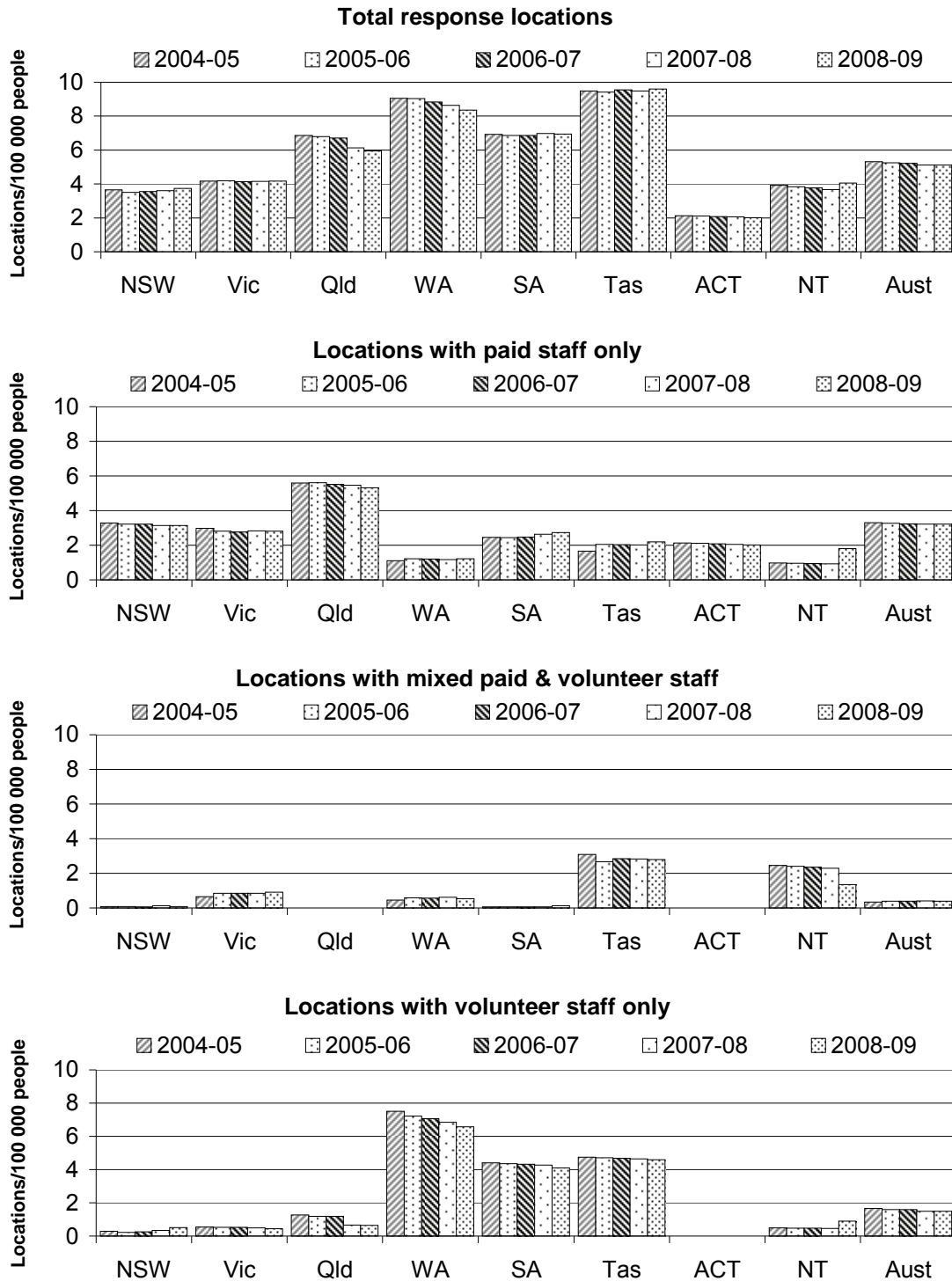
Higher or increasing numbers of paid, mixed and/or volunteer response locations, after adjusting for population, suggests better ambulance service response capacity.

This indicator complements the 'availability of paramedics' indicator, as some jurisdictions' ambulance workforce comprises a large proportion of volunteers, particularly in rural and remote locations. This indicator also helps explain variation in expenditure for ambulance services across jurisdictions. For example, in some jurisdictions, smaller rural areas are serviced by paid ambulance personnel whereas in others, there may be a mix of paid and volunteer personnel or wholly volunteer personnel. Service delivery strategies have a significant impact on cost and help explain differentials in expenditure per person between jurisdictions. For example figure 9.22 shows that WA and Tasmania have the highest numbers of response locations per person yet they both have lower than average expenditure per person (figure 9.29) which is in part explained by their relatively higher reliance on volunteers for rural service delivery.

Data for this indicator are not directly comparable.

Nationally, there were 5.1 paid, mixed and volunteer response locations per 100 000 people in 2008-09 (table 9A.27). The number of salaried, mixed and volunteer response locations per 100 000 people varied across jurisdictions (figure 9.22).

Figure 9.22 Number of paid, mixed and volunteer response locations<sup>a, b, c</sup>



<sup>a</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). <sup>b</sup> Response locations data for 2007-08 and subsequent years reflect changes in the new data definition, which does not include first responder locations. <sup>c</sup> ACT: There are no mixed or volunteer only response locations in the ACT.

Source: State and Territory governments (unpublished); table 9A.27

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### *Availability of ambulance officers/paramedics*

‘Availability of ambulance officers/paramedics’ is another indicator of governments’ objective of providing equitable and accessible ambulance services to communities (box 9.22).

#### **Box 9.22 Availability of ambulance officers/paramedics**

‘Availability of ambulance officers/paramedics’ is defined as the number of full time equivalent ambulance officers/paramedics per 100 000 people. Ambulance officers/paramedics includes student and base level ambulance officers and qualified ambulance officers but excludes patient transport officers.

Higher or increasing availability of ambulance officers/paramedics, after adjusting for population, suggests better ambulance service response capacity.

The role of paramedics is expanding to provide primary health care, improve emergency response capabilities and strengthen community healthcare collaborations in rural and remote communities (Stirling et al 2007). Many rural and remote communities do not have access to adequate health care due, in part, to the difficulty in recruiting and retaining health professionals to these areas. Paramedics provide some of these communities with extended access to health service delivery. Expanding roles are also developing in metropolitan areas as a response to overstretched emergency departments where paramedics often continue caring for the patient on arrival at hospital.

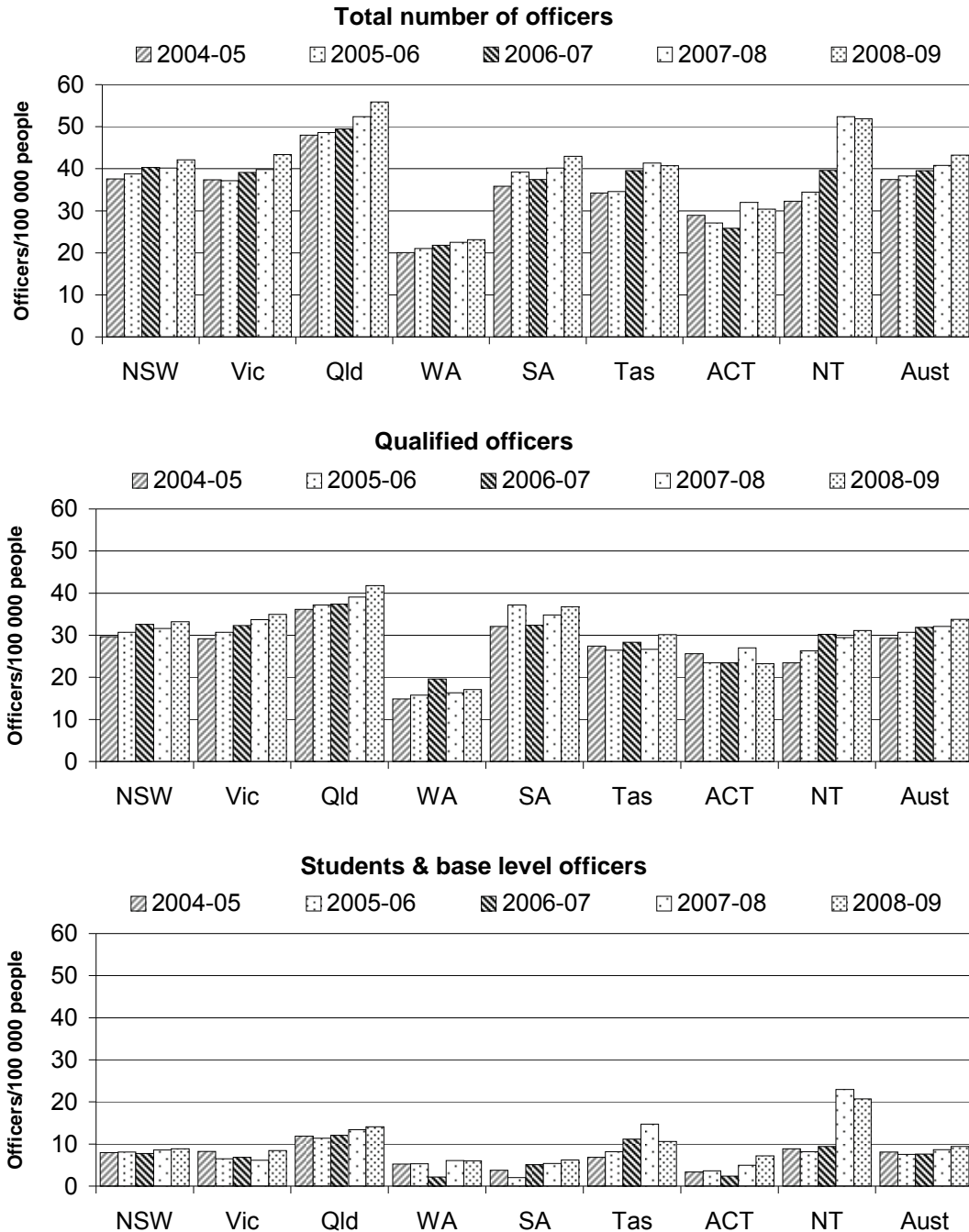
This indicator needs to be interpreted with care because ambulance responses in some jurisdictions, particularly in rural and remote locations, are predominantly provided by volunteers. Therefore the results reported may indicate a lower level of access for these jurisdictions. However, this indicator is complemented by the response locations indicator, which identifies jurisdictions that provide an ambulance response utilising volunteers. The higher the proportion of paramedics in a jurisdiction the higher the cost of service provision. In small rural areas which have low frequency of medical emergencies it is very costly to provide paramedic personnel and it also raises issues with skills maintenance for paramedics when the caseload they are exposed to is low.

Data for this indicator are not directly comparable.

Nationally, there were 43.2 FTE ambulance officers/paramedics per 100 000 people in 2008-09 (table 9A.24).

The number of FTE ambulance officers/paramedics per 100 000 people varied across jurisdictions (figure 9.23).

**Figure 9.23 Number of full time equivalent ambulance officers/paramedics<sup>a, b</sup>**



<sup>a</sup> Data relate to paid staff only. <sup>b</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); table 9A.24.

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## *Response times*

'Response times' are indicators of governments' objective of providing equitable, accessible and effective ambulance services to communities (box 9.23).

### **Box 9.23 Response times**

'Response times' is defined by two measures:

- the time within which 50 per cent of the first responding ambulance resources arrive at the scene of an emergency in code 1 situations
- the time within which 90 per cent of the first responding ambulance resources arrive at the scene of an emergency in code 1 situations.

The response time is defined as the time taken between the initial receipt of the call for an emergency ambulance and the ambulance's arrival at the scene of the emergency (figure 9.24). Emergency responses are categorised by an assessment of the severity of the medical problem:

- code 1 — responses to potentially life threatening situations using warning devices
- code 2 — responses to acutely ill patients (not in life threatening situations) where attendance is necessary but no warning devices are used.

Shorter response times suggest the adverse effects on the community of emergencies requiring ambulance services are reduced.

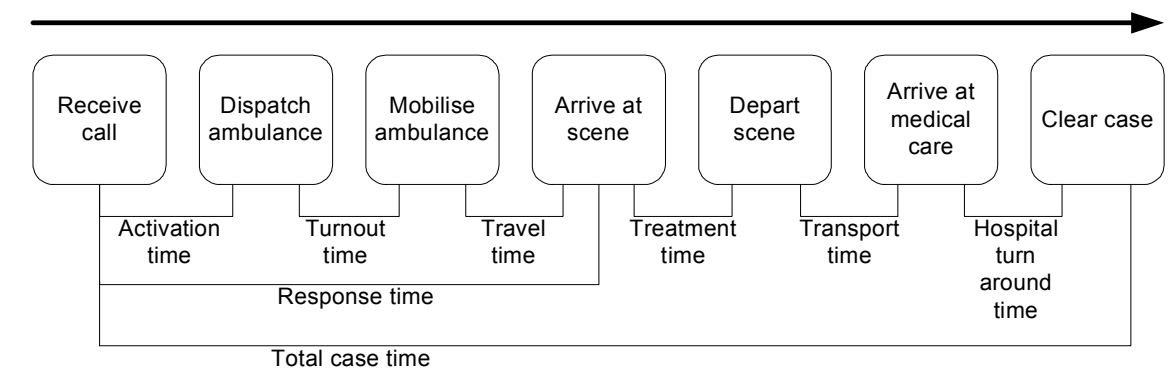
Response time data need to be interpreted with care, because performance is not strictly comparable across jurisdictions.

- Response time data for some jurisdictions (when calculated on a State-wide basis) represent responses to urban, rural and remote areas, while others include urban areas only.
- Response time data in some jurisdictions include responses from volunteer stations where turnout times are generally longer because volunteers are on call rather than on duty.
- Response times can be affected by the dispersion of the population (particularly rural/urban population proportions), topography, road/transport infrastructure and traffic densities.

Although definitions of response times are consistent, not all jurisdictions have systems in place to capture all components of response time for all cases, from the time of the call to arrival at the scene. Differences across jurisdictions in definitions of geography, personnel mix, and system type for capturing data, affect the comparability of response times data. The commencement of recording ambulance service response times varies as per the jurisdictions' caveats.



Figure 9.24 Response time points and indicators for ambulance events



### *Urban centre response times*

‘Urban centre response times’ is an indicator of governments’ objective of providing equitable and accessible ambulance services to communities (box 9.24).

#### **Box 9.24 Urban centre response times**

‘Urban centre response times’ is the response time, as defined in box 9.23, for urban centre responses.

Shorter, or reducing, response times suggest the adverse effects on the community of emergencies requiring ambulance services are reduced.

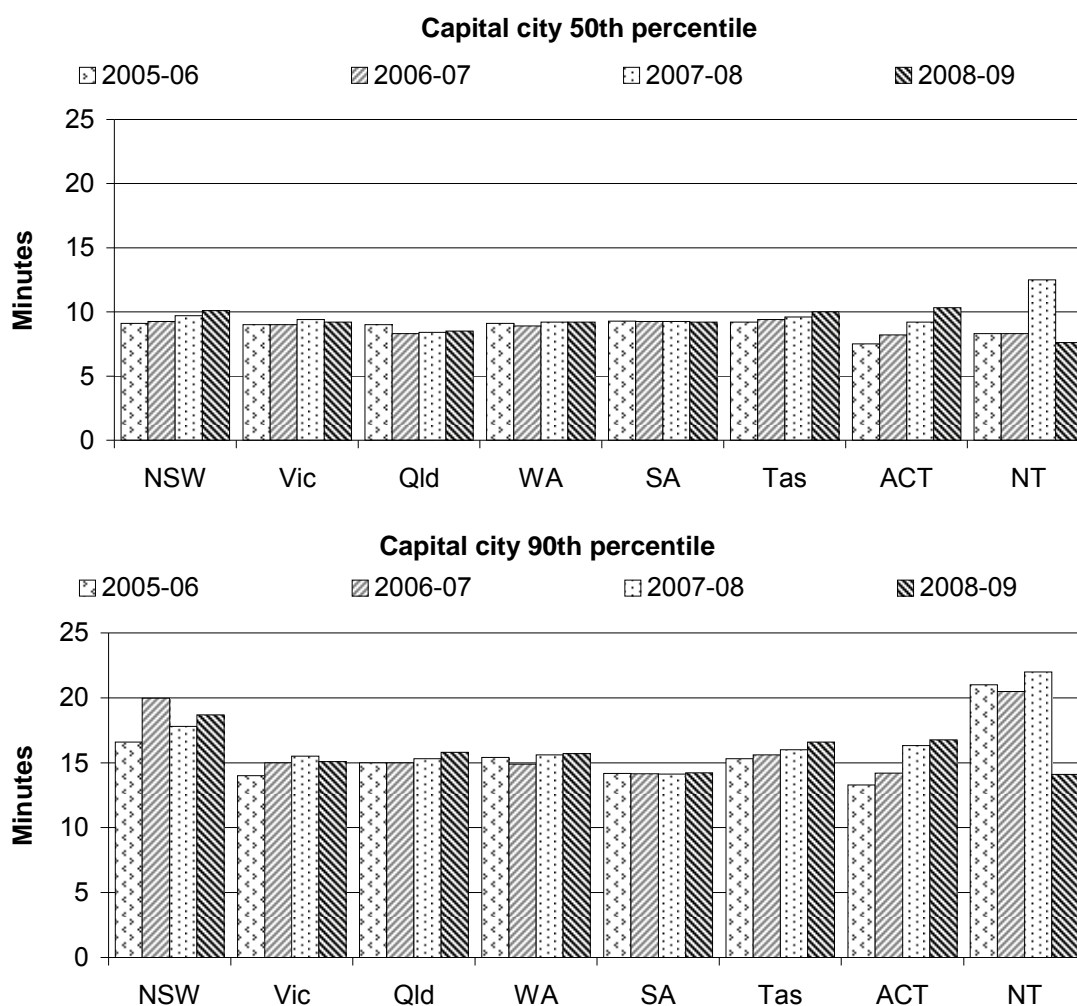
Population densities across Australian capital cities varies considerably and this can impact on response time performance. This indicator might be further developed to report data for urban centres with populations of 50 000 and above in future Reports.

Data for this indicator are not directly comparable.

Nationally in 2008-09, the time within which 50 per cent of the urban centre first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 7.6 to 10.3 minutes, and the time within which 90 per cent of the urban centre first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 14.1 to 18.7 minutes across jurisdictions (figure 9.25).

Urban centre response times within most jurisdictions remained steady between 2004-05 and 2008-09 (table 9A.29).

Figure 9.25 Ambulance response times (urban centre)<sup>a, b, c, d, e</sup>



<sup>a</sup> Response times commence from the following time points: Vic, SA and Tas first key stroke; NSW, Qld (QAS) and WA transfer to dispatch; and the NT crew dispatched. In 2007-08 the ACT response times commence from the first key stroke, whereas, in 2003-04 to 2006-07 response times commenced from incident creation. Therefore, ACT data across years are not directly comparable. Capital city response times are calculated using urban centre boundaries based on the ABS Urban Centres Localities structure. Response times for NSW and SA do not strictly adhere to the urban centre boundaries. <sup>b</sup> NSW: Did not triage emergency calls prior to 2005-06. Results for code 1 cases represent '000' and urgent medical incidents. <sup>c</sup> Vic: Prior to 2007-08, data sourced from Patient Care Records completed by paramedics; from 2007-08 metropolitan data sourced from CAD system and not directly comparable with previous years. <sup>d</sup> Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response times are reported from the CAD data. <sup>e</sup> SA: Prior to 2006-07 code 1 response times were calculated on all responses to category 1 and 2 cases and based on patient case cards. Code 1 response times for 2006-07 are now calculated from SA Ambulance CAD data and are more aligned to the definitions provided by the CAA. Code 1 response times for 2006-07 exclude second and subsequent vehicles arriving at an incident and exclude incidents where the category of dispatch was upgraded. As a result, the data are not directly comparable with prior years.

Source: ABS (2008 and unpublished) *Statistical Geography: Volume 3 — Australian Standard Geographical Classification (ASGC) Urban Centres Localities, 2006*, Cat. no. 2909.0, Canberra; State and Territory governments (unpublished); table 9A.29.

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### *Effectiveness — access*

Effectiveness of access indicators measure how well the outputs of a service achieves the stated objective(s) of that service in a timely and affordable manner to the community.

#### *State-wide response times*

‘State-wide response times’ is an indicator of governments’ objective of providing accessible and effective ambulance services to communities (box 9.25).

#### **Box 9.25 State-wide response times**

‘State-wide response times’ is the response time, as defined in box 9.23, for state-wide responses.

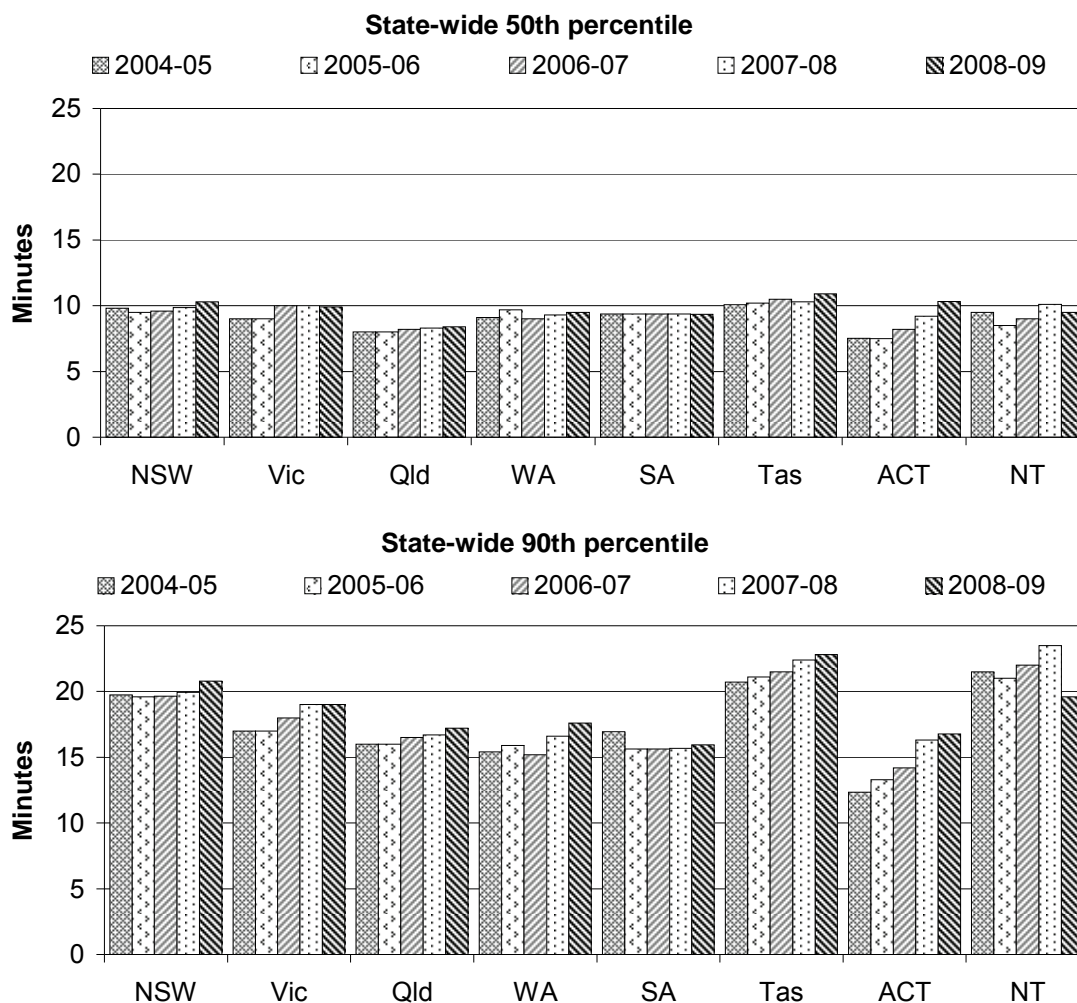
Shorter, or reducing, response times suggest the adverse effects on the community of emergencies requiring ambulance services are reduced.

Data for this indicator are not directly comparable.

Nationally, the time within which 50 per cent of the state-wide first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 8.4 to 10.9 minutes across jurisdictions. The time within which 90 per cent of the state-wide first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 16.0 to 22.8 minutes across jurisdictions (figure 9.26).

State-wide response times within most jurisdictions remained relatively steady between 2004-05 and 2008-09. Some jurisdictions’ data indicate increases in response times over this 5 year period (table 9A.29).

Figure 9.26 Ambulance response times, state-wide<sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> Response times commence from the following time points: Vic (AV rural) receipt of call; Vic (AV metro), SA and Tas first key stroke; NSW, Qld (QAS) and WA transfer to dispatch; and the NT crew dispatched. In 2007-08 the ACT response times commence from the first key stroke, whereas, in 2003-04 to 2006-07 response times commenced from incident creation. Therefore, ACT data across years are not directly comparable. <sup>b</sup> NSW: Did not triage emergency calls prior to 2005-06. Results for code 1 cases represent '000' and urgent medical incidents. A volunteer ambulance service audit was undertaken in 2008-09 which led to improved reporting. <sup>c</sup> Vic: Data are incomplete for 2004-05 due to industrial action in the month of July 2004. The basis of response time reporting changed in 2007-08 and results are not directly comparable with previous years. <sup>d</sup> Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response times are reported from the CAD data. <sup>e</sup> WA: Ambulance first responder locations data are not available for 2007-08. <sup>f</sup> SA: Prior to 2006-07 code 1 response times were calculated on all responses to category 1 and 2 cases and based on patient case cards. Code 1 response times for 2006-07 are now calculated from SA Ambulance CAD data and are more aligned to the definitions provided by the CAA. Code 1 response times for 2006-07 exclude second and subsequent vehicles arriving at an incident and exclude incidents where the category of dispatch was upgraded. As a result, the data are not directly comparable with prior years. <sup>g</sup> Tas: a high proportion of population is in small rural areas, relative to other jurisdictions, which may affect average response times.

Source: State and Territory governments (unpublished); table 9A.29.

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### *Triple zero call answering time*

‘Triple zero call answering time’ has been identified for development as an indicator of governments’ objective of providing accessible and effective ambulance services to the community (box 9.26). Data for this indicator were not available for the 2010 Report.

#### **Box 9.26 Triple zero call answering time**

‘Triple zero call answering time’ is yet to be defined.

Data collection for the triple zero call answering time indicator is under development through the CAA.

### *Effectiveness — appropriateness*

Appropriateness indicators measure governments’ objective to deliver ambulance services that meet clients’ needs (box 9.27).

#### **Box 9.27 Performance indicator — appropriateness**

‘Appropriateness’ indicators measure how well services meet clients’ needs.

Appropriateness has been identified as a key area for development in future Reports.

### *Effectiveness — quality — safety*

Quality indicators reflect the extent to which a service is suited to its purpose and conforms to specifications where specific aspects of quality can be reported against.

Safety is the avoidance, or reduction to acceptable levels, of actual or potential harm from ambulance services. Safety has been identified as a key area for development in future Reports.

### *Clinical incidents*

‘Clinical incidents’ has been identified as an overarching indicator of governments’ objective to deliver safe ambulance services to the community (box 9.28).

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**Box 9.28 Clinical incidents**

‘Clinical incidents’ are broadly defined as adverse events that occur because of ambulance service deficiencies and which result in death or serious harm to a patient.

Clinical incidents will incorporate a wider range of categories than sentinel events. (A sentinel event is an adverse event that occurs because of health system and process deficiencies and which results in the death of, or serious harm to, a patient.)

A clinical incidents indicator is to be developed in accordance with national health-wide reporting standards.

*Effectiveness — quality — clinical*

‘Clinical’ indicators measure the effectiveness and quality of clinical interventions and treatments. Clinical indicators have been identified as a key area for development in future reports.

*Clinical interventions and treatments*

‘Clinical interventions and treatments’ has been identified as an overarching indicator of governments’ objective to meet clients’ needs through delivery of quality ambulance services (box 9.29).

**Box 9.29 Clinical interventions and treatments**

‘Clinical interventions and treatments’ is yet to be defined.

In the short to medium term, the clinical dimension is likely to provide indicators of service outputs and outcomes. These indicators are currently under development through the CAA. In the longer term additional clinical measures might include indicators of the effectiveness of ambulance services interventions and treatments.

Current development work is focused on an indicator of ‘cardiac arrest survival to hospital discharge’ in the short term and, in the medium term, an indicator of ‘pain management’ (in the ambulance events outcomes section).

The indicator ‘cardiac arrest survived event rate’ reported in the outcomes section of this chapter has strong links to clinical interventions and treatments.

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### *Effectiveness — quality — responsiveness*

Responsiveness is the provision of services that are client orientated and respectful of clients' dignity, autonomy, confidentiality, amenity, choices, and social and cultural needs.

The indicator 'patient satisfaction' reported in the outcomes section of this chapter has strong links to responsiveness.

### *Effectiveness — quality — continuity*

Continuity is the provision of uninterrupted, timely, coordinated healthcare, interventions and actions across programs, practitioners and organisations. The Steering Committee has identified continuity as a key area for development in future Reports.

#### *Continuity of care*

'Continuity of care' is an indicator of governments' objective to meet clients' needs through delivery of coordinated health care, including ambulance services (box 9.30). No data were available for the 2010 Report.

#### **Box 9.30 Continuity of care**

'Continuity of care' has been broadly defined as transporting the right patient to the right hospital. Some ambulance services are using secondary triage strategies where patients with particular conditions (for example, cardiac and stroke) are transported directly to the hospital or specialised centre where the best treatment for their needs can be provided, rather than transported to the closest hospital where those services may not be available.

This indicator is under development through the CAA.

### *Effectiveness — sustainability*

Sustainability is the capacity to provide infrastructure (that is, workforce, facilities, and equipment) into the future, be innovative and respond to emerging needs of the community.

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### Workforce by age group

‘Workforce by age group’ is an indicator of governments’ objective to deliver sustainable ambulance services (box 9.31).

#### Box 9.31 Workforce by age group

‘Workforce by age group’ is defined as the age profile of the workforce, measured by the proportion of the operational workforce in 10 year age brackets (under 30, 30–39, 40–49, 50–59 and 60 and over). The data are reported as percentages, by jurisdiction.

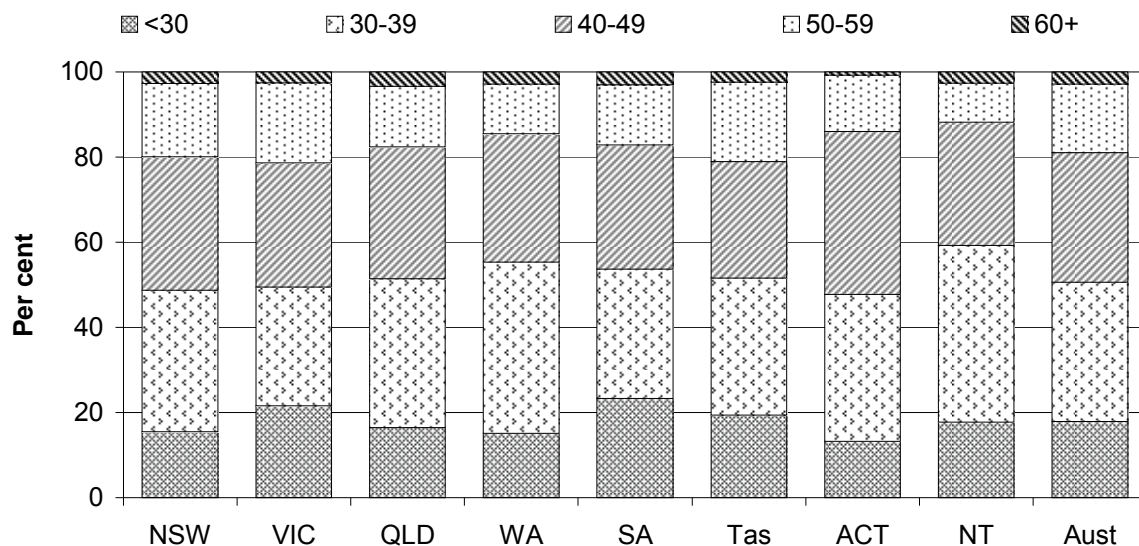
The smaller the proportion of the workforce who are in the younger age groups and/or the larger the proportion who are closer to retirement, the more likely sustainability problems are to arise in the coming decade as the older age group starts to retire.

A three year time series will be available for the attachment tables of the 2011 Report.

Data for this indicator are not strictly comparable.

The age profile of the ambulance workforce for each jurisdiction is shown in figure 9.27. Nationally in 2008-09, around 81 per cent of the ambulance workforce were aged under 50.

Figure 9.27 Ambulance workforce, by age group, 2008-09



Source: State and Territory governments (unpublished), table 9A.25.



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### Staff attrition

'Staff attrition' is an indicator of governments' objective to deliver sustainable ambulance services (box 9.32).

#### Box 9.32 Staff attrition

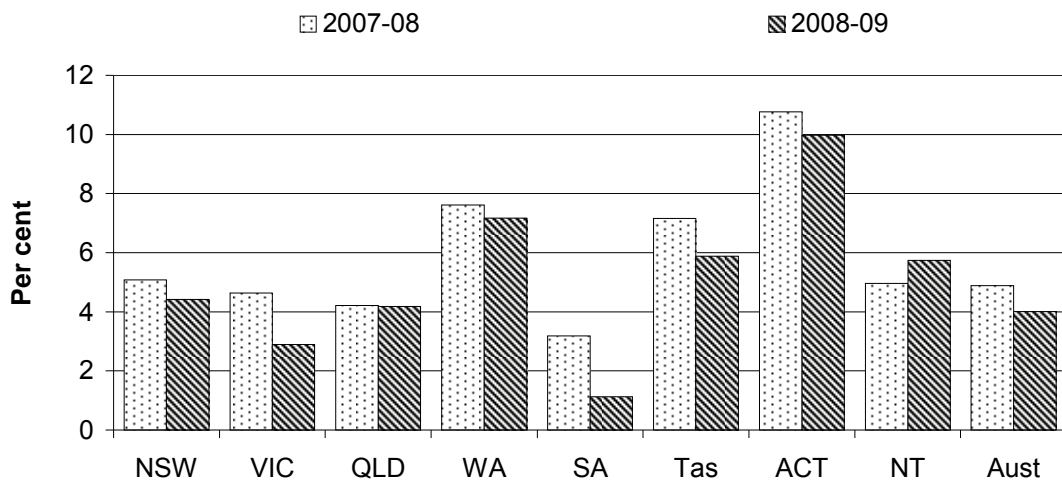
'Staff attrition' is defined as level of attrition in the operational workforce. It is calculated as the number of FTE employees who exit the organisation as a proportion of the number of FTE employees. It is based on staff FTE defined as 'operational positions where paramedic qualifications are either essential or desirable to the role'.

Low or decreasing levels of staff attrition are desirable.

Data for this indicator are not strictly comparable.

The proportion of attrition in the ambulance workforce for each jurisdiction is shown in figure 9.28. Nationally, staff attrition fell from 4.9 per cent in 2007-08 to 4.0 per cent in 2008-09.

Figure 9.28 Ambulance staff attrition, 2008-09



Source: State and Territory governments (unpublished), table 9A.25.

### Efficiency

Care needs to be taken when comparing efficiency data across jurisdictions because there are differences in the reporting of a range of cost items and funding arrangements (funding policies and taxing regimes). Some jurisdictions, for example, have a greater proportion of government funding relative to levies

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compared with other jurisdictions. Also, differences in geographic size, terrain, climate, and population dispersal may affect costs of infrastructure and numbers of service delivery locations per person.

### *Ambulance service organisations' expenditure per person*

'Ambulance service organisations' expenditure per person' is an indicator of governments' objective to deliver efficient ambulance services (box 9.33).

#### **Box 9.33 Ambulance service organisations' expenditure per person**

'Ambulance service organisations expenditure per person' is defined as ambulance service organisations expenditure divided by the population. Expenditure, and funding, per person are employed as proxies for efficiency. Two measures are reported:

- total expenditure (from all government and non-government sources) on ambulance service organisations per person — this measure indicates efficiency of use of resources from all sources
- total government grants and indirect government funding of ambulance service organisations per person — this measure indicates efficiency of use of resources from government sources.

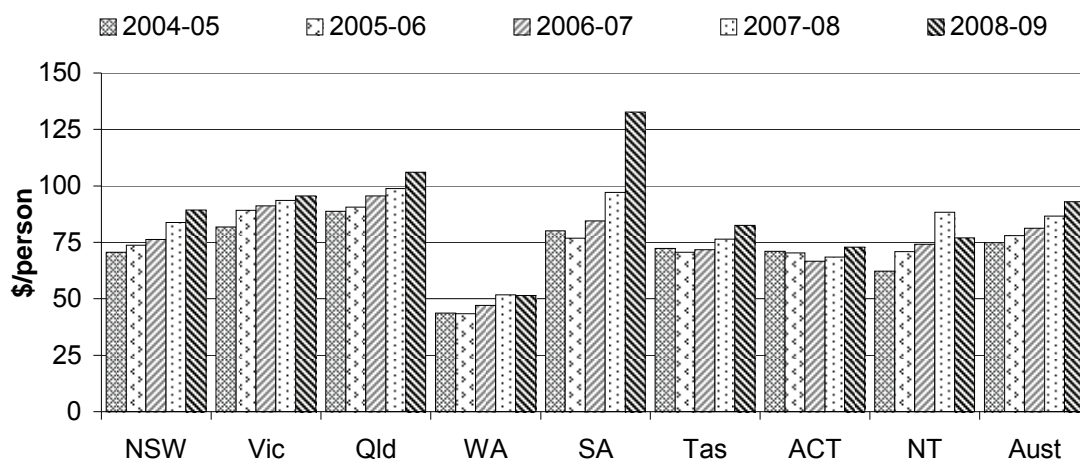
Holding other factors constant, a decrease in expenditure per person represents an improvement in efficiency. However, efficiency data are difficult to interpret. Although high or increasing expenditure per person may reflect deteriorating efficiency, it may also reflect changes in aspects of the service (such as improved response) or changes in the characteristics of emergencies requiring ambulance services (such as more serious para-medical challenges). Similarly, low or declining expenditure per person may reflect improving efficiency or lower quality (slower response times) or less severe cases.

Data for this indicator are not directly comparable.

Nationally, total expenditure on ambulance service organisations per person was \$93.01 in 2008-09 (figure 9.29).

Nationally, total government grants and indirect government funding of ambulance service organisations per person was \$62.16 in 2008-09 (figure 9.30).

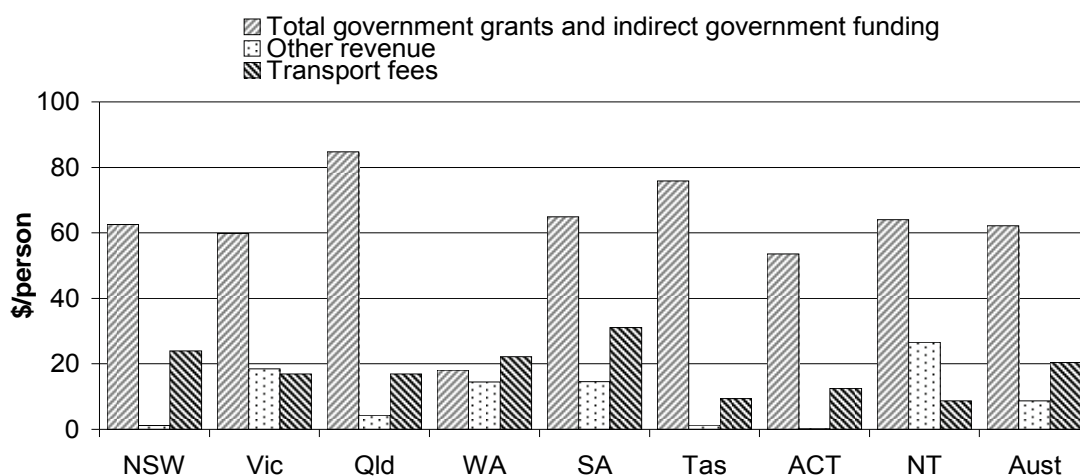
**Figure 9.29 Ambulance service organisations expenditure per person (2008-09 dollars)<sup>a, b, c, d, e</sup>**



<sup>a</sup> Data are adjusted to 2008-09 dollars using the GDP price deflator (2008-09 = 100) (table AA.26). <sup>b</sup> Historical rates in this figure may differ from those in previous Reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). <sup>c</sup> WA and NT: use a contracted service model for ambulance services. <sup>d</sup> SA: 2008-09 data reflect three significant events that year: (1) increase in wages (2) subsequent back pay paid to frontline paramedics as a result of the 'work value' case (from the 2007 enterprise bargaining agreement) reaching finalisation and (3) an increase in the number of frontline paramedics recruited. <sup>e</sup> ACT: For 2005-06 and later years, ACT Ambulance Service data are collated using the new Emergency Services Agency Capability Model, which utilises a different cost attribution model for shared costs across the Emergency Services Agency. Therefore, the financial figures for 2005-06 and later years cannot be directly compared with those of previous years.

Source: State and Territory governments (unpublished); table 9A.32.

**Figure 9.30 Sources of ambulance service organisations revenue per person, 2008-09<sup>a</sup>**



<sup>a</sup> Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

Source: State and Territory governments (unpublished); table 9A.33.

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### *Expenditure per urgent and non-urgent response*

'Expenditure per urgent and non-urgent response' has been identified for development as an indicator of governments' objective to deliver efficient ambulance services (box 9.34).

#### **Box 9.34 Expenditure per urgent and non-urgent response**

'Expenditure per urgent and non-urgent response' is yet to be defined. This indicator is under development through the CAA. Data for this indicator were not available for the 2010 Report.

### *Outcomes*

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see chapter 1, section 1.5).

### *Cardiac arrest survived event rate*

'Cardiac arrest survived event rate' is an indicator of governments' objective to deliver effective ambulance services (box 9.35).

#### **Box 9.35 Cardiac arrest survived event rate**

'Cardiac arrest survived event rate' is defined as the percentage of patients aged 16 years and over who:

- were in out-of-hospital cardiac arrest (excluding paramedic witnessed)
- where any chest compressions and/or defibrillation was undertaken by ambulance/Emergency Medical Services (EMS) personnel, and
- who have a return to spontaneous circulation (ROSC) on arrival at hospital.

For the out-of-hospital setting, a survived event means a sustained ROSC with spontaneous circulation (that is, the patient having a pulse) until administration and transfer of care to the medical staff at the receiving hospital (Jacobs, et al. 2004).

A further disaggregation of this indicator is defined as the percentage of patients aged 16 years and over who:

- were in out-of-hospital cardiac arrest (excluding paramedic witnessed)
- where the arrest rhythm on the first ECG assessment was either Ventricular Fibrillation or Ventricular Tachycardia (VF/VT), and
- who have a return of spontaneous circulation (ROSC) on arrival at hospital.

(Continued next page)

**Box 9.35** (continued)

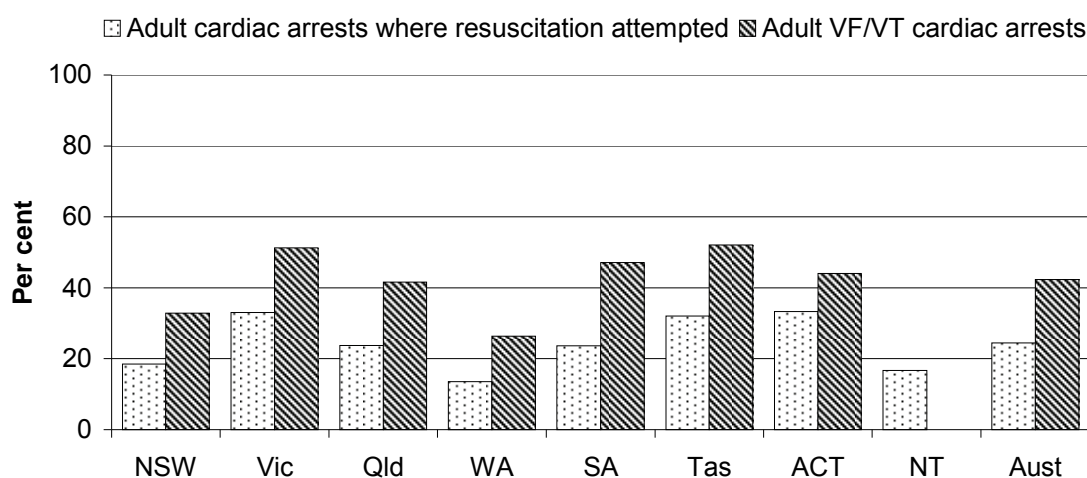
Patients in Ventricular Fibrillation (VF) or Ventricular Tachycardia (VT) are more likely to have better outcomes compared with other causes of cardiac arrest as these conditions are primarily correctable through defibrillation.

Paramedic witnessed cardiac arrests are excluded in the measures reported as these cardiac arrests are treated immediately by the paramedic and as such have a better likelihood of survival due to this immediate and rapid intervention. This is substantially different to cardiac arrests occurring prior to the ambulance arriving where such increasing periods of treatment delay are known to negatively influence outcome.

A higher or increasing rate for each measure is desirable. Data and associated measures for this indicator are not directly comparable.

The survival rate from out-of-hospital witnessed cardiac arrests varied across jurisdictions in 2008-09 (figure 9.31).

**Figure 9.31 Cardiac arrest survived event rate, 2008-09<sup>a, b, c, d, e, f, g</sup>**



<sup>a</sup> A 'survived event' is defined as the patient having return of spontaneous circulation (ROSC) on arrival to hospital (that is, the patient having a pulse). This is not the same as the patient surviving the cardiac arrest as having ROSC is only one factor that contributes to the overall likelihood of survival. <sup>b</sup> The measure 'adult cardiac arrests where resuscitation attempted' provides an overall indicator of outcome without specific consideration to other factors known to influence survival. <sup>c</sup> NSW: Data collected for the Ambulance Service of NSW are based on recorded protocols as instigated by in-field paramedics. <sup>d</sup> Vic: Excludes patients with unknown rhythm on arrival at hospital. <sup>e</sup> WA: Data are provided for the capital city only. <sup>f</sup> Tas: For 2007-08 VF/VT arrests is for two out of three regions only as no rhythm was recorded in the remaining region. <sup>g</sup> NT: For 2008-09 VF/VT arrests data are not available.

Source: State and Territory governments (unpublished); table 9A.28.

Cardiac arrest data reported in figure 9.31 are not comparable across jurisdictions and the CAA is undertaking a review to improve data comparability for this indicator.

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Available data on the further breakdown of this indicator are reported in attachment table 9A.28. Time series data, where available, are also provided in attachment table 9A.28.

### *Cardiac arrest survival to hospital discharge*

‘Cardiac arrest survival to hospital discharge’ has been identified for development as an indicator of governments’ objective to deliver effective ambulance services (box 9.36).

#### **Box 9.36 Cardiac arrest survival to hospital discharge**

‘Cardiac arrest survival to hospital discharge’ is yet to be defined.

A higher or increasing rate is a desirable outcome.

This indicator is under development through the CAA. Data for this indicator were not available for the 2010 Report.

### *Pain management*

‘Pain management’ has been identified for development as an indicator of governments’ objective to deliver effective ambulance services (box 9.37).

#### **Box 9.37 Pain management**

‘Pain management’ is yet to be defined.

This indicator is under development through the CAA. Data for this indicator were not available for the 2010 Report.

### *Level of patient satisfaction*

‘Level of patient satisfaction’ is an indicator of governments’ objective to deliver responsive ambulance services (box 9.38). The performance of ambulance service organisations can be measured in terms of the satisfaction of those people who directly used the service.

### Box 9.38 Level of patient satisfaction

'Level of patient satisfaction' is defined as the total number of patients who were either 'satisfied' or 'very satisfied' with ambulance services they had received in the previous 12 months, divided by the total number of patients that responded to the *National Patient Satisfaction Survey* (CAA 2009).

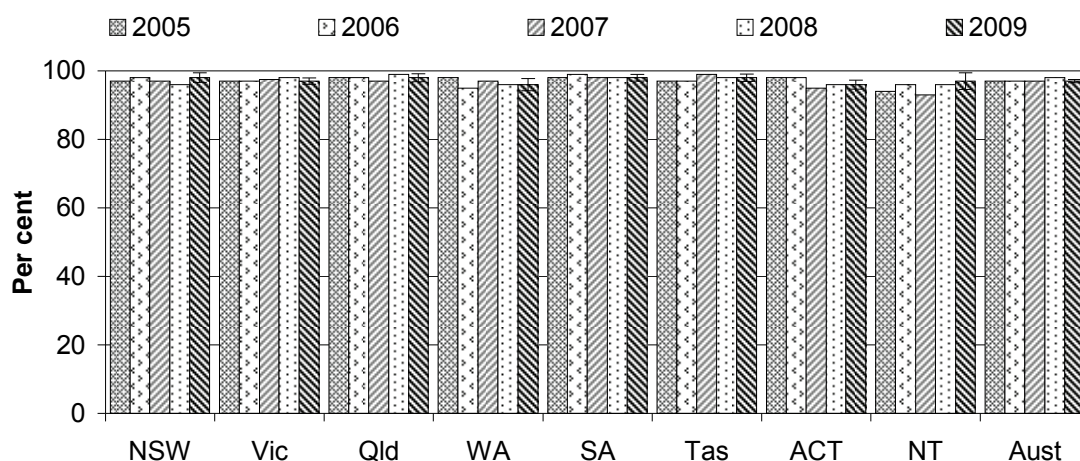
A higher level or increase in the proportion of patients who were either 'satisfied' or 'very satisfied' suggests greater success in meeting patient needs.

This indicator does not provide information on why some patients were not satisfied. It also does not provide information on the level of patient expectations.

Data for this indicator are comparable.

Data for 2005 to 2009 were collected by jurisdictions and collated by the CAA. The CAA survey obtained 4851 usable responses nationally from patients who used an ambulance service in 2009 (table 9A.30). The estimated satisfaction levels for ambulance patients were similar across all jurisdictions and all years. Standard errors for the 95 per cent confidence interval, available with latest year patient satisfaction data, indicate that there are no statistically significant differences between jurisdictions (figure 9.32).

Figure 9.32 Proportion of ambulance users who were satisfied or very satisfied with the ambulance service<sup>a</sup>



<sup>a</sup> Based on a survey of people who used an ambulance service in the previous 12 months. Jurisdictions conducted the surveys at various times during each year. Standard errors for the 95% confidence interval are included for 2009.

Source: CAA 2005–09 *National Patient Mailout Satisfaction Research*; table 9A.30.

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## 9.6 Future directions in performance reporting

A number of developments are underway to improve the comparability and accuracy of data, and to expand the scope of reporting on emergency services. Specifically, performance indicators for fire, road crash rescue and ambulance services are being improved with the assistance of the Australasian Fire and Emergency Service Authorities Council (AFAC), the ACSES and the CAA.

### Fire events

Performance measures are currently being developed for the reporting of fires in the landscape. The long-term aim is to report annually on the measures for each relevant jurisdiction across Australia. The key landscape fire performance measures that have been agreed to in concept, subject to the availability of data, for inclusion in future editions of the Report are:

- landscape fire deaths per 100 000 people
- landscape fire injuries per 100 000 people

and, subject to identification of appropriate denominators to facilitate comparative reporting:

- number of primary dwellings affected by wildfire
- total number of hours by volunteers on wildfire suppression.

The focus of current work is on developing agreed data definitions and identifying appropriate data sources.

### Road crash rescue events

An updated performance indicator framework has been included in this Report, along with text to provide a more comprehensive picture of the strategies and programs delivered by governments to reduce the impact of road trauma.

The section continues to provide road crash rescue information on the number of road crash rescue incidents and the number of events in which extrications occurred, and to reference other sections of the Report where data relevant to the performance indicator framework for road crash rescue events are published. Nevertheless the challenge remains to demonstrate the cost, benefits and value of the full range of emergency risk management services related to road trauma.

The focus of development work in the immediate future will be to derive indicator definitions, identify appropriate measures and develop data for reporting against the



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preparedness and response elements of the emergency management performance indicator framework.

### **Ambulance events**

Ambulance event reporting continues to focus upon further developing the indicators introduced to the 2009 Report. This will entail continuing development and implementation of data collections for some indicators, and refining those indicators that already have data reported, with ongoing work to increase data completeness and comparability.

### **Other event types**

Other event type services for which performance reporting has yet to be developed include: rescues (other than road crash rescues); natural emergency events (other than landscape fires); emergency relief and recovery; and quarantine and disease control.

## **9.7 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in this chapter.

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## **New South Wales Government comments**

“ The NSW Government continues its commitment to reducing death and injury, and the social, economic and environmental impacts caused by emergencies. In 2008-09 NSW began work on 75 new mitigation projects worth more than \$17.5 million, jointly funded by the Federal, NSW and local governments. Over the last six years a total of 368 mitigation projects have been undertaken in NSW worth more than \$70 million.

During 2008-09 the Ambulance Service of NSW provided over 1.1 million emergency and other responses, an average of 3068 per day. The Service implemented pilot programs to expand the scope of paramedic practice and decision making to allow direct referral to general practitioners, community services and other non-emergency care alternatives for low risk, low acuity patients. The Sydney-based Emergency Medical Services helicopters at Bankstown Airport were consolidated and the Wollongong EMS Helicopter extended to 24 hour operation.

During 2008-09 the NSW Rural Fire Service (NSW RFS) enhanced its operational capabilities through implementing radio upgrades and new aerial firefighting technology. The NSW Fire Brigades (NSWFB) took on the primary rescue response role in eight additional areas, bringing the total number of NSWFB rescue units to 176. Preventative measures to prepare land and properties bushfires continue to be a top priority for the fire services. This year the NSW RFS employed nine seasonal mitigation crews to assist in the preparation of hazard reduction burns and fuel management programs and delivered 53 000 hours of community awareness and engagement activities. In addition, 7399 development applications for construction and renovations in bushfire prone areas were assessed.

The NSWFB's Community Fire Units rose to 418, involving over 5800 volunteers to support community preparedness for bushfires. NSWFB firefighters visited 2900 schools and preschools, installed batteries and checked smoke alarms at 9400 seniors' homes and delivered emergency management training courses to more than 21 000 participants.

In 2008-09 the NSW State Emergency Service (SES) committed 387 520 hours to operational response, including responding to 305 flood rescues. Flood Rescue arrangements were strengthened significantly and new swiftwater techniques were accredited. The SES developed a warning system to alert key agencies and personnel of any impending tsunami and increased road crash capability to a total of 84 Road Crash Rescue Units and 10 Community First Responder Units.

NSW also provided considerable support interstate, with some 3668 RFS, NSWFB and SES staff deployed to assist with the Victorian bushfires, and 335 SES members assisting with the Brisbane storms.

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## Victorian Government comments

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South-east Australia remained in severe and protracted drought throughout 2008-09. During January 2009, many parts of Victoria recorded near record low rainfall with much of the State recording no rain. Towards the end of the month, record heatwave conditions prevailed resulting in a significant increase in demand for health and emergency services. Ambulance services experienced an increase in demand of approximately 50 per cent during this period as the incidence of heat related illness and death rapidly escalated. The State's public transport and energy infrastructure was impacted with over 200 train services cancelled on Friday 30 January at the peak of the heatwave.

In early February 2009, particularly 7 February, bushfires swept across Victoria, devastating 78 communities and 430 000 hectares of land. One hundred and seventy three people lost their lives. Destroyed along with hundreds of businesses were 2129 homes, 5 schools and kindergartens, 3 sporting clubs and numerous other buildings at an estimated dollar loss of 1.35 billion. Fire services were ably supported throughout this event by the Victoria State Emergency Service, Victoria Police, Ambulance Victoria and a broad range of Australian Government, local government and non-government organisations. Significant interstate and international mutual aid also arrived to support the State's substantial response, recovery and disaster victim identification effort.

The Victorian Government responded to this unprecedented natural disaster by establishing the 2009 Victorian Bushfires Royal Commission to investigate the causes and responses to the bushfires which swept through parts of Victoria in late January and February 2009. The Commission delivered its Interim Report on 17 August 2009 which detailed 51 recommendations. The Victorian Government supports each of these recommendations and is fully committed to their implementation. The Royal Commission's Final Report is due 31 July 2010.

The Victorian Government, in partnership with the Australian Government, also established the Victorian Bushfire Reconstruction and Recovery Authority to oversee and coordinate the largest recovery and rebuilding program Victoria has ever undertaken. The Authority is working with communities, businesses, charities, local councils and other government departments to help rebuild and re-establish communities affected by the bushfires.

Ambulance Victoria was created on 1 July 2008 following integration of the three former ambulance services. In its first year of operation, services have been significantly boosted by over 300 new paramedics based in towns and suburbs across Victoria. These additional paramedics have addressed an increasing demand for emergency ambulance services and contributed to improved response time performance.

The Government's commitment to providing high quality air ambulance services has been enhanced through the addition of two new air ambulance helicopters; one at Warrnambool to deliver emergency coverage to the south west of Victoria and the other a 24/7 retrieval service, based at Essendon, established to transport critically ill patients.

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## Queensland Government comments

“ Implementation of recommendations from the Queensland Ambulance Service (QAS) Audit 2007 and Queensland Fire and Rescue Service (QFRS) Efficiency Review 2008 continued this year with substantial progress achieved in the delivery of key initiatives to enhance service delivery whilst challenged by an increased demand for services.

Demand growth for QAS urgent incidents has been less than projected in 2008-09 reflecting the success of demand management strategies implemented since the QAS Audit in late 2007. These strategies included the implementation of a Triple Zero community education campaign, aimed at promoting appropriate use of emergency ambulances, and the continuation of the Clinical Deployment Supervisor role in Brisbane and south-eastern regions.

To ensure as many resources as possible were deployed to frontline service delivery, QAS recruited an additional 253 full-time equivalents and commissioned an additional 145 ambulance vehicles in 2008-09, ensuring that the ambulance service continues to provide the highest possible level of service.

The roll-out of a new single state-wide Computer Aided Dispatch system across all ambulance and fire communication centres was completed in 2008-09, further enhancing operational service delivery.

The QFRS invested considerable time and resources across the ‘all hazards’ spectrum of services during 2008-09. This involved responding to and providing Incident Management Teams in support of operations across a broad range of incidents including cyclones, floods and oil spills. The QFRS continues to develop and deploy Technical Rescue capabilities (for example, swift water rescue) including obtaining international accreditation in Urban Search and Rescue during the Multi-Jurisdictional National Counter-Terrorism Exercise ‘Mercury 08’.

Queensland also continued to monitor the findings and recommendations of the 2009 Victorian Bushfires Royal Commission to ensure outcomes are incorporated into policy and practice where appropriate.

A number of significant events impacted Queensland during the year resulting in the activation of the Natural Disaster Relief and Recovery Arrangements on five occasions, and the State Disaster Relief Arrangements on one occasion. During the year, approximately 6300 SES volunteers committed over 109 000 hours to protect and assist their local communities. Queensland is increasing its focus on building community resilience to minimise vulnerability to disasters with the delivery of storm and cyclone season awareness campaigns and by working closely with local government to ensure contemporary Disaster Management Plans are in place.

In order to support and develop its volunteer network of approximately 41 700, Queensland significantly progressed a Volunteer Management Strategy which is a key commitment towards achieving the Queensland Government’s objective under *Toward Q2: Tomorrow’s Queensland* to increase the proportion of Queenslanders involved in their communities as volunteers.

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## Western Australian Government comments

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The Fire and Emergency Services Authority of WA (FESA) delivers emergency services throughout the State via a network of regionally-based FESA resources and with the support of local volunteers.

Western Australia's unique characteristics continue to influence the provision of emergency services. Our expansive land area, topography and widely dispersed population significantly affect infrastructure costs and response times. Growth in population and changing demographic patterns are increasing demand for services and adversely affecting volunteer numbers in some areas.

During 2008-09 FESA gained approval to draft critical amendments to the *Bush Fires Act 1954* and a comprehensive emergency services Act. These legislative amendments are intended to improve coordination and control of major bushfires and ultimately reduce the impact of emergencies on the community.

Building the capacity of staff and volunteers, as well as community stakeholders is a key strategic objective. Processes for the allocation of capital and human resourcing across the State to support effective response have been improved. FESA also continues to work closely with local governments and other partners to implement prevention and mitigation initiatives and improve community resilience to deal with emergencies.

Operational capability was enhanced with the implementation of a new service delivery model for the metropolitan region, and the expansion of our Community Fire Manager and Community Emergency Management Officer programs to support local emergency planning and emergency management.

A commitment to fire investigation and arson reduction, and raising awareness of emergency hazards for at-risk community groups is continuing.

Improved emergency management through technology has also been a major focus with the development of our StateAlert emergency warning system and continued use of spatial technology to improve planning and incident management.

Road ambulance services are delivered by non-government providers for most of the State with St John Ambulance the principal provider.

Eighty per cent of ambulance services are provided within the Perth metropolitan area. The remaining 20 per cent of the workload is delivered through a mix of career paramedics and volunteer from a large number of country response locations. In 91 per cent of all cases a career paramedic was in attendance with 9 per cent of cases performed by volunteer only crews. This model of maximising response locations for the sparsely populated and disparate communities in WA is supported by over 2500 qualified volunteer ambulance operatives.

The combination of an 8.1 per cent increase in incidents, hospital blockage and significant ramping of ambulance vehicles contributed to a reduced response capacity during the year and a deterioration of response times in comparison to the previous year. This is the subject of review in the next reporting period.

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## South Australian Government comments

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### *Fire and Emergency Services*

To improve public safety the SA Government published a *Strategic Direction 2008–2014 Statement* for fire and emergency services that commits the sector to Community Engagement, Seamless Integration, Improved Communication, Building Partnerships, Improving Community Resilience and Being Accountable.

Several key projects and initiatives were undertaken during 2008-09 including:

- amending the *Fire and Emergency Services Act 2005* to further refine governance and legislative arrangements and support the recommendations for operational improvements identified in the Bushfire Management Review and the Wangary Bushfire Coronial Inquest
- implementing initiatives and recommendations of SA's Bushfire Task Force established to examine the issues arising from the Royal Commission into the Victorian bushfires of 7 February 2009.

### *SA Ambulance Service*

Highlights for 2008-09 included:

- successfully piloting the extended care paramedic model which involved treating patients in their home and residential care facilities, contributing to a reduction in emergency department presentations and hospital admissions
- winning six of the 15 awards presented at the Council of Ambulance Authorities' national ambulance awards ceremony
- implementing an internationally-recognised call triaging system
- launching volunteer supported crewing initiatives to support volunteers in remote areas
- achieving satisfied or very satisfied service level ratings by 98 per cent of patients surveyed
- achieving emergency response time targets.

### *Fire, emergency and ambulance services*

Initiatives for 2009-10 include:

- implementing a new telephone and text messaging warning system
- implementing a new national framework for fire warnings
- participating in the SA Computer Aided Dispatch project to provide new computer aided dispatch systems
- promoting long-term retention and recruitment of volunteers
- working closely with the Council of Ambulance Authorities and the Australasian Fire and Emergency Service Authorities Council's initiatives for service excellence.

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### **Tasmanian Government comments**

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Tasmania has a number of unique characteristics that influence the provision of emergency services throughout the State and affect response/turnout times and infrastructure costs. These characteristics include a small and dispersed population, diseconomies of scale, reliance on a network of dedicated volunteers in rural and remote areas and the State's rugged topography. Tasmania's two major urban centres have low population density compared to the large urban centres in other states.

Tasmania's data includes both urban and rural fire and ambulance service performance and counts all 'call taking' time in response measurements. As Tasmania has the highest percentage of all jurisdictions of its population in rural areas and the lowest proportion (34.9 per cent, compared to a national average of 68 per cent) in highly accessible areas, reliable comparisons of response performance to other jurisdictions are difficult.

The Tasmania Fire Service (TFS) comprises four career brigades and 229 volunteer brigades that respond to fires in all metropolitan and rural areas. Tasmania reports all incidents attended by these brigades, and the TFS bears the full cost of funding both the operating and capital costs of its brigades.

The TFS continues to deliver a broad range of educational and promotional programs to assist at-risk sectors of the community to prevent fires and minimise the impact of fires that occur. Figures indicate that fire-prevention programs targeting at-risk households are particularly effective, with significant decreases in house fire rates over the last 10 years.

The TFS took over the responsibility for road crash rescue in metropolitan areas in 2006-07. The number of patient extrications undertaken by TFS for 2008-09 has increased compared to the previous period. State Emergency Services (SES) continue to provide road crash rescue services for rural areas.

The Tasmanian Ambulance Service (TAS) provides emergency ambulance care, transport services and a non-emergency patient transport service. In addition, TAS provides fixed-wing and helicopter aero-medical services.

Tasmania is currently the only State that provides a free-of-charge ambulance service to the public and consequently there is a far greater reliance on government funding for ambulance services than in all other jurisdictions. The State Government has increased funding to improve services in both urban and rural areas.

Tasmania recorded one of the highest levels of ambulance patient satisfaction of all the states. This factor reflects positively on its ambulance personnel.

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## Australian Capital Territory Government comments

“ The ACT Emergency Services Agency (ESA), which is part of the Department of Justice and Community Safety, comprises the ACT Ambulance Service, the ACT Fire Brigade, the ACT Rural Fire Service and the ACT State Emergency Service along with emergency management and support areas. It also incorporates the affiliated Snowy Hydro Southcare aeromedical services.

The ACT ESA provides services across a broad geographic base to encompass the Bush Capital Planning Model. This geographic spread provides challenges to meet benchmark response standards and community expectations.

Over the past twelve months the ESA has continued to foster the ‘all hazards all agencies’ approach to delivering emergency services and emergency management for the ACT and surrounding region. This was again demonstrated when supporting Victoria during the bushfires. Six taskforces were deployed from the ACT incorporating all agencies to assist with firefighting, incident management teams, liaison, communications, logistics and medical support.

The operational capability of the ESA was further improved or enhanced through the continued work of the following key projects:

- restructure of the ESA and its agencies
- continuing commitment to the operation of Snowy Hydro Southcare aeromedical services with NSW
- significant training initiatives to further staff and volunteer capabilities
- undertaking a strategic station relocation feasibility study
- commencement of a purpose built emergency services headquarters building incorporating all the operational services and support functions
- commencement in the construction of a multi agency training facility.

The Media and Community Information unit provided the ACT community with emergency information and education on preparing for emergency situations. This was achieved by engaging with the media, Canberra Connect and community groups providing regular information updates on websites, and attending community events. A significant project that the ESA undertook this year involved working with the culturally and linguistically diverse community in the development of information packages about how to prepare for storms and floods, fire safety in the home, and how to be bushfire aware and farm fire wise. This was additional to all the other community education campaigns still being undertaken from previous years.

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## Northern Territory Government comments

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The Northern Territory made significant steps forward with its emergency management and response capability during 2008-09. Government announced construction of a new fire station in the Darwin area for completion in 2011-12 including an additional 22 firefighters. This includes a further nine additional firefighter positions in Alice Springs and 11 firefighter and two training positions in the Darwin area over the next two years.

New first response vehicles were brought on-line at volunteer fire stations in Pine Creek and Batchelor to provide improved response capacity for the regions in terms of road crash rescue and firefighting ability. Additional grassfire units were purchased as a Territory-wide resource for hazard abatement and for use on high fire danger days when additional fire crews are placed on operational duties.

The Northern Territory Fire Alarm System Transmission (NTFAST) system was subject to a major upgrade maintaining best practice in fire alarm monitoring across the NT. The Chemical, Biological, Radiological, and Nuclear (CBRN) budget increased ensuring maintenance of equipment. This equipment will now be utilised with Hazmat and other fire service responses. The Urban Search and Rescue (USAR) procurement program, financed through the Australian Government, and managed by Emergency Management Australia was finalised.

Bushfires Northern Territory expanded its fleet and replaced aging earthmoving equipment. Funding was also provided to place the aerial fire suppression arrangements on a stable footing. Operational improvements included the creation of new positions in training and volunteer support. Bushfires Northern Territory has restructured from 10 regions into six to better enable coordinated planning and to provide a consistency of service across the NT.

Bushfires Northern Territory has advanced research into fire related carbon fluxes from its savannah burning program, with a view to enabling accredited burning projects to be included in the Carbon Pollution Reduction Scheme. Two further fire management greenhouse emissions abatement projects will occur in the NT by 2013.

The Northern Territory Emergency Service (NTES) experienced a reasonable level of emergency response activity in the reporting period. Major activities included responding to severe storms in the Alice Springs Region and MacDonnell Shire, power failure issues in Darwin and flooding events in the Barkley Region. NTES continued to develop its capability to assist the community to respond to emergencies.

Internal restructuring was completed with the implementation of an area manager system. Improved capacity to deliver remote training from Darwin continues through a volunteer portal on the Northern Territory Police, Fire and Emergency Services College e-learning website and the completion of the USAR training facility at Alice Springs.

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## 9.8 Definitions of key terms and indicators

<b>Alarm notification not involving fire</b>	Fire alarm notification due to the accidental operation of an alarm, the failure to notify fire services of an incorrect test by service personnel or a storm induced voltage surge.
<b>All agencies</b>	<p>All agencies should be involved to some extent in emergency management. The context of emergency management for specific agencies varies and may include:</p> <ul style="list-style-type: none"><li>• ensuring the continuity of their business or service</li><li>• protecting their own interests and personnel</li><li>• protecting the community and environment from risks arising from the activities of the organisation</li><li>• protecting the community and environment from credible risks.</li></ul> <p>Emergency management measures may be referred to in a number of organisational and community contexts, including risk management, environmental management, occupational health and safety, quality management, and asset management.</p>
<b>All hazards</b>	<p>The all hazards approach concerns arrangements for managing the large range of possible effects of risks and emergencies. This concept is useful to the extent that a large range of risks can cause similar problems and such measures as warning, evacuation, medical services and community recovery will be required during and following emergencies. Many risks will, however, require specific response and recovery measures and will almost certainly require specific prevention and mitigation measures.</p>
<b>Ambulance community first responders</b>	<p>A type of volunteer that provide an emergency response (with no transport capacity) and first aid care before the ambulance arrival.</p>
<b>Ambulance service response times</b>	<p>The response time is defined as the time taken between the initial receipt of the call for an emergency ambulance and the ambulance's arrival at the scene of the emergency. Emergency responses are categorised by an assessment of the severity of the medical problem:</p> <ul style="list-style-type: none"><li>• code 1 — responses to potentially life threatening situations using warning devices</li><li>• code 2 — responses to acutely ill patients (not in life threatening situations) where attendance is necessary but no warning devices are used.</li></ul> <p>Response times are reported as percentiles in this report.</p>
<b>Ambulance expenditure</b>	<p>Includes salaries and payments in the nature of salaries to ambulance personnel, capital expenditure (such as depreciation and the user cost of capital) and other operating expenditure (such as running expenditure, contract expenditure, provision for losses and other recurrent expenditure). Excludes interest on borrowings.</p>
<b>Ambulance incident</b>	<p>An event that results in one or more responses by an ambulance service.</p>
<b>Ambulance non-government revenue</b>	<p>Includes revenue from subscription fees, transport fees, donations and other non-government revenue. Excludes funding revenue from Australian, State and local governments.</p>
<b>Ambulance patient</b>	<p>A person assessed, treated or transported by the ambulance service.</p>

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<b>Ambulance personnel</b>	Any person employed by the ambulance service provider who delivers an ambulance service, manages the delivery of this service or provides support for the delivery of this service. Includes salaried ambulance personnel, remunerated volunteer and nonremunerated volunteer ambulance personnel.
<b>Ambulance response</b>	A vehicle or vehicles sent to an incident. There may be multiple responses/vehicles sent to a single incident.
<b>Ambulance services</b>	Provide emergency and non-emergency pre-hospital and out-of-hospital patient care and transport, inter-hospital patient transport, specialised rescue services, ambulance services to multi-casualty events, and community capacity building to respond to emergencies.
<b>Availability of ambulance officers/paramedics</b>	The number of full time equivalent ambulance officers/paramedics per 100 000 people. Ambulance officers/paramedics includes student and base level ambulance officers and qualified ambulance officers but excludes patient transport officers.
<b>Cardiac arrest survived event rate</b>	For the out-of-hospital setting, survived event rate means sustained return of spontaneous circulation (ROSC) with spontaneous circulation until administration and transfer of care to the medical staff at the receiving hospital (Jacobs, et al. 2004).
<b>Community first responder</b>	See 'Ambulance community first responders'.
<b>Emergency ambulance response</b>	An emergency ambulance response (code 1) to a pre-hospital medical incident or accident (an incident that is potentially life threatening) that necessitates the use of ambulance warning (lights and sirens) devices.
<b>Events in which extrication(s) occurred</b>	An event in which the assisted removal of a casualty occurs. An incident with multiple people extricated is counted the same as an incident with one person extricated.
<b>Extrication</b>	Assisted removal of a casualty.
<b>False report</b>	An incident in which the fire service responds to and investigates a site, and may restore a detection system.
<b>Fire death</b>	A fatality where fire is determined to be the underlying cause of death. This information is verified by coronial information.
<b>Fire death rate</b>	The number of fire deaths per 100 000 people in the total population.
<b>Fire expenditure</b>	Includes salaries and payments in the nature of salaries to fire personnel, capital expenditure (such as depreciation and the user cost of capital) and other operating expenditure (such as running expenditure, training expenditure, maintenance expenditure, communications expenditure, provision for losses and other recurrent expenditure). Excludes interest on borrowings.
<b>Fire incident</b>	A fire reported to a fire service that requires a response.
<b>Fire injury</b>	An injury resulting from or relating to a fire or flames, requiring admission to a public or private hospital. Excludes emergency department outpatients and injuries resulting in a fire death.
<b>Fire injury rate</b>	The number of fire injuries per 100 000 people in the total population.
<b>Fire personnel</b>	Any person employed by the fire service provider who delivers a firefighting or firefighting-related service, or manages the delivery of this service. Includes paid and volunteer firefighters and support personnel.

<b>Fire safety measure</b>	<ul style="list-style-type: none"> <li>• Operational smoke alarm or detector</li> <li>• Fire sprinkler system</li> <li>• Safety switch or circuit breaker</li> <li>• Fire extinguisher</li> <li>• Fire blanket</li> </ul>	<ul style="list-style-type: none"> <li>• Fire evacuation plan</li> <li>• External water supply</li> <li>• The removal of an external fuel source</li> <li>• External sprinkler</li> <li>• Other fire safety measure.</li> </ul>
<b>Indirect revenue</b>	All revenue or funding received indirectly by the agency (for example, directly to Treasury or other such entity) that arises from the agency's actions.	
<b>Landscape fires</b>	Vegetation fires (for example, bush, grass, forest, orchard and harvest fires), regardless of the size of the area burnt.	
<b>Median dollar loss per structure fire</b>	The median (middle number in a given sequence) value of the structure loss (in \$'000) per structure fire incident.	
<b>Non-urgent ambulance response</b>	A non-urgent response (code 3 and code 4) by required ambulance or patient transport services that does not necessitate the use of ambulance warning devices (lights and sirens).	
<b>Non-structure fire</b>	A fire outside a building or structure, including fires involving mobile properties (such as vehicles), a rubbish fire, a bushfire, grass fire or explosion.	
<b>Other incident</b>	<p>An incident (other than fire) reported to a fire service that requires a response. This may include:</p> <ul style="list-style-type: none"> <li>• overpressure ruptures (for example, steam or gas), explosions or excess heat (no combustion)</li> <li>• rescues (for example, industrial accidents or vehicle accidents)</li> <li>• hazardous conditions (for example, the escape of hazardous materials)</li> <li>• salvages</li> <li>• storms or extreme weather.</li> </ul>	
<b>Percentiles</b>		
<b>50<sup>th</sup> / 90<sup>th</sup> percentile ambulance service response times</b>	The time within which 50 per cent / 90 per cent of emergency (code 1) incidents are responded to by an ambulance.	
<b>50<sup>th</sup> / 90<sup>th</sup> percentile fire service response times</b>	The time within which 50 per cent / 90 per cent of first fire resources respond.	
<b>Response locations (ambulance)</b>	The number of paid, mixed and volunteer response locations per 100 000 people. Locations are primary ambulance response locations where salaried, volunteer or mixed ambulance operatives are responding in an ambulance vehicle and providing pre-hospital care.	
<b>Response time (fire services)</b>	The interval between the receipt of the call at the dispatch centre and the arrival of the vehicle at the scene (that is, when the vehicle is stationary and the handbrake is applied).	
<b>Road crash rescue</b>	An incident involving a motor vehicle and the presumption that assistance is required from emergency services organisations.	

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<b>Staff attrition (ambulance)</b>	The level of attrition in the operational workforce. It is calculated as the number of FTE employees who exit the organisation as a proportion of the number of FTE employees. It is based on staff FTE defined as 'operational positions where paramedic qualifications are either essential or desirable to the role'.
<b>Structure fire</b>	A fire inside a building or structure, whether or not there is damage to the structure.
<b>Structure fire contained to object or room of origin</b>	A fire where direct fire/flame is contained to the room of origin (that is, excludes wildfires and vehicle fire in unconfined spaces). A room is an enclosed space, regardless of its dimensions or configuration. This category includes fires in residential and non-residential structures.
<b>Urgent ambulance response</b>	An urgent (code 2) undelayed response required (arrival desirable within 30 minutes) that does not necessitate the use of ambulance warning devices (lights and sirens).
<b>User cost of capital</b>	The opportunity cost of funds tied up in the capital used to deliver services. Calculated as 8 per cent of the current value of non current physical assets (including land, plant and equipment).
<b>Volunteer (ambulance)</b>	<p><i>Remunerated volunteer ambulance operatives:</i> all personnel who volunteer their availability, however are remunerated in part for provision of an ambulance response (with transport capability).</p> <p><i>Non-remunerated volunteer ambulance operatives:</i> all personnel engaged on an unpaid casual basis who provide services generally on an on-call basis and are principally involved in the delivery of ambulance services. These staff may include categories on the same basis as permanent ambulance operatives (with transport capability).</p> <p><i>Non remunerated volunteer operational and corporate support staff:</i> all personnel engaged on an unpaid casual basis who provide services generally on an on-call basis and are principally involved in the provision of support services. These staff may include categories on the same basis as permanent ambulance operatives.</p>
<b>Volunteer (fire)</b>	<p><i>Volunteer firefighters:</i> staff of the fire service organisation, who deliver or manage a firefighting service directly to the community and who are formally trained and qualified to undertake firefighting duties but do not receive remuneration other than reimbursement of 'out of pocket expenses'.</p> <p><i>Volunteer support staff:</i> all staff that are not remunerated of the fire service organisation, staff shared with other services, and umbrella department's staff. For fire service organisations, any staff that are not remunerated whose immediate client is the firefighter. These can be people in operational support roles provided they do not receive payment for their services other than reimbursement of 'out of pocket expenses'.</p>
<b>Volunteer (S/TES)</b>	Staff of S/TES organisations that do not receive payment for their services other than reimbursement of 'out of pocket expenses'.
<b>Workforce by age group</b>	The age profile of the workforce, measured by the proportion of the operational workforce in 10 year age brackets (under 30, 30–39, 40–49, 50–59 and 60 and over).

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## 9.9 Attachment tables

Attachment tables are identified in references throughout this chapter by an '9A' suffix (for example, table 9A.3 is table 3). Attachment tables are provided on the CD-ROM enclosed with the Report and on the Review website ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users without access to the CD-ROM or the website can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

### Fire events

- Table 9A.1** Major sources of fire service organisations' revenue (2008-09 dollars)
- Table 9A.2** Reported fires and other primary incidents attended to by fire service organisations (no.)
- Table 9A.3** Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents
- Table 9A.4** Accidental residential structure fires reported to fire service organisations per 100 000 households
- Table 9A.5** Fire service organisations' human resources
- Table 9A.6** Fire deaths
- Table 9A.7** Fire injuries
- Table 9A.8** Median dollar loss per structure fire (2008-09 dollars)
- Table 9A.9** Property loss from structure fire (2008-09 dollars per person)
- Table 9A.10** Fire incidents attended by fire service organisations per 100 000 people
- Table 9A.11** Household preparedness for emergencies, October 2007
- Table 9A.12** Households with a smoke alarm or smoke detector installed
- Table 9A.13** Response times to structure fires, state-wide (minutes)
- Table 9A.14** Structure fires and response times to structure fires, by geographic areas
- Table 9A.15** Structure fires contained to the object or room of origin (per cent)
- Table 9A.16** Fire service organisations' costs (\$'000) (2008-09 dollars)
- Table 9A.17** Fire service organisations' expenditure per person (2008-09 dollars)
- Table 9A.18** Fire service organisations' funding per person (2008-09 dollars)

### Road crash rescue events

- Table 9A.19** Reported road crash rescue incidents (number)
- Table 9A.20** Reported road crash rescue extrications (number)

### SES/TES services

- Table 9A.21** S/TES volunteer human resources (number)

### Ambulance events

- Table 9A.22** Major sources of ambulance service organisations revenue (2008-09 dollars)
- Table 9A.23** Reported ambulance incidents, responses, patients and transport
- Table 9A.24** Ambulance service organisations' human resources
- Table 9A.25** Ambulance service organisations' human resources, operational workforce, by age group and attrition

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<b>Table 9A.26</b>	Ambulance assets (number)
<b>Table 9A.27</b>	Ambulance stations and locations, by staff type
<b>Table 9A.28</b>	Cardiac Arrest Survived Event Rate
<b>Table 9A.29</b>	Ambulance code 1 response times (minutes)
<b>Table 9A.30</b>	Satisfaction with ambulance service organisations
<b>Table 9A.31</b>	Ambulance service costs (\$'000) (2008-09 dollars)
<b>Table 9A.32</b>	Ambulance service organisations' expenditure per person (2008-09 dollars)
<b>Table 9A.33</b>	Ambulance service organisations' revenue per person (2008-09 dollars)
<b>Contextual and other information</b>	
<b>Table 9A.34</b>	Communications and dispatching systems
<b>Table 9A.35</b>	Selected fire risk management/mitigation strategies
<b>Table 9A.36</b>	Prevention activities of fire service organisations
<b>Table 9A.37</b>	Delivery and scope of activity of primary fire service organisations
<b>Table 9A.38</b>	All activities of fire service organisations
<b>Table 9A.39</b>	All activities of State Emergency Services and Territory Emergency Services
<b>Table 9A.40</b>	Treatment of assets by emergency management agencies
<b>Table 9A.41</b>	Summary of emergency management organisations by event type
<b>Table 9A.42</b>	Reported fires and other primary incidents, urban and rural inclusions and exclusions
<b>Table 9A.43</b>	Top three known ignition factors for structure fires

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## 9A Emergency management — attachment

Definitions for the indicators and descriptors in this attachment are in section 9.8 of the chapter. Data in this Report are examined by the Emergency Management Working Group, but have not been formally audited by the Secretariat. A peer review process is also undertaken by the Emergency Management Working Group in the development of data definitions. Unsourced information was obtained from the Australian, State and Territory governments, with the assistance of the Australasian Fire and Emergency Service Authorities Council and the Council of Ambulance Authorities. Data for past years have been revised for some jurisdictions, where this has occurred, totals and any derived data have been recalculated. For this reason data for past years presented in this Report may vary from figures published in earlier editions of this Report.

This file is available in Adobe PDF format on the Review web page ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users without Internet access can contact the Secretariat to obtain these tables (see details on the inside front cover of the Report).

## Attachment contents

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### Fire events

<b>Table 9A.1</b>	Major sources of fire service organisations' revenue (2008-09 dollars)
<b>Table 9A.2</b>	Reported fires and other primary incidents attended to by fire service organisations (no.)
<b>Table 9A.3</b>	Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents (no.)
<b>Table 9A.4</b>	Accidental residential structure fires reported to fire service organisations per 100 000 households
<b>Table 9A.5</b>	Fire service organisations' human resources
<b>Table 9A.6</b>	Fire deaths
<b>Table 9A.7</b>	Fire injuries
<b>Table 9A.8</b>	Median dollar loss per structure fire (2008-09 dollars)
<b>Table 9A.9</b>	Property loss from structure fire (2008-09 dollars per person)
<b>Table 9A.10</b>	Fire incidents attended by fire service organisations (number per 100 000 people)
<b>Table 9A.11</b>	Household preparedness for emergencies, October 2007
<b>Table 9A.12</b>	Households with a smoke alarm or smoke detector installed
<b>Table 9A.13</b>	Response times to structure fires, state-wide (minutes)
<b>Table 9A.14</b>	Structure fires and response times to structure fires, by geographic areas
<b>Table 9A.15</b>	Structure fires contained to the object or room of origin (per cent)
<b>Table 9A.16</b>	Fire service organisations' costs (\$'000) (2008-09 dollars)
<b>Table 9A.17</b>	Fire service organisations' expenditure per person (2008-09 dollars)
<b>Table 9A.18</b>	Fire service organisations' funding per person (2008-09 dollars)

### Road crash rescue events

<b>Table 9A.19</b>	Reported road crash rescue incidents (number)
<b>Table 9A.20</b>	Reported road crash rescue extrications (number)

### SES-TES services

<b>Table 9A.21</b>	S/TES volunteer human resources (number)
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### Ambulance events

<b>Table 9A.22</b>	Major sources of ambulance service organisations revenue (2008-09 dollars)
<b>Table 9A.23</b>	Reported ambulance incidents, responses, patients and transport
<b>Table 9A.24</b>	Ambulance service organisations' human resources
<b>Table 9A.25</b>	Ambulance service organisations' human resources, operational workforce, by age group and attrition
<b>Table 9A.26</b>	Ambulance assets (number)
<b>Table 9A.27</b>	Ambulance stations and locations, by staff type
<b>Table 9A.28</b>	Cardiac Arrest Survived Event Rate
<b>Table 9A.29</b>	Ambulance code 1 response times (minutes)
<b>Table 9A.30</b>	Satisfaction with ambulance service organisations
<b>Table 9A.31</b>	Ambulance service costs (\$'000) (2008-09 dollars)

## Attachment contents

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<b>Table 9A.32</b>	Ambulance service organisations' expenditure per person (2008-09 dollars)
<b>Table 9A.33</b>	Ambulance service organisations' revenue per person (2008-09 dollars)
<b>Context and other information</b>	
<b>Table 9A.34</b>	Communications and dispatching systems
<b>Table 9A.35</b>	Selected fire risk management/mitigation strategies
<b>Table 9A.36</b>	Prevention activities of fire service organisations
<b>Table 9A.37</b>	Delivery and scope of activity of primary fire service organisations
<b>Table 9A.38</b>	All activities of fire service organisations
<b>Table 9A.39</b>	All activities of State Emergency Services and Territory Emergency Services
<b>Table 9A.40</b>	Treatment of assets by emergency management agencies
<b>Table 9A.41</b>	Summary of emergency management organisations by event type
<b>Table 9A.42</b>	Reported fires and other primary incidents, urban and rural inclusions and exclusions
<b>Table 9A.43</b>	Top three known ignition factors for structure fires

# All jurisdictions — fire events

Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2004-05										
Government grants										
Australian	%	0.1	1.8	1.2	0.9	0.1	0.7	—	2.7	0.8
State/Territory	%	15.7	14.6	15.7	12.4	—	11.0	78.7	86.9	16.2
Local	%	8.5	5.7	—	—	—	—	—	—	4.6
Levies										
On insurance companies	%	66.9	67.8	—	—	—	29.3	—	—	42.9
On property owners	%	2.9	1.9	75.9	83.3	95.6	42.3	—	—	28.3
User charges	%	3.2	3.2	5.2	1.8	2.1	13.0	15.6	8.5	4.0
Miscellaneous revenue	%	2.8	5.0	2.0	1.6	2.2	3.7	0.4	1.9	3.1
Indirect government funding	%	—	—	—	—	—	—	5.3	—	0.1
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	%	24.3	22.1	16.8	13.3	0.1	11.7	78.7	89.7	21.6
Total levies	%	69.7	69.7	75.9	83.3	95.6	71.6	—	—	71.2
User charges	%	3.2	3.2	5.2	1.8	2.1	13.0	15.6	8.5	4.0
Miscellaneous revenue	%	2.8	5.0	2.0	1.6	2.2	3.7	0.4	1.9	3.1
Indirect government funding	%	—	—	—	—	—	—	5.3	—	0.1
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	\$m	181.4	125.3	60.0	18.4	0.1	6.9	41.1	20.3	453.6
Total levies	\$m	521.4	395.6	270.3	115.4	152.6	42.6	—	—	1 497.8
User charges	\$m	23.9	17.9	18.6	2.5	3.4	7.7	8.2	1.9	84.1
Miscellaneous revenue	\$m	20.9	28.4	7.3	2.3	3.6	2.2	0.2	0.4	65.3
Indirect government funding	\$m	—	—	—	—	—	—	2.8	—	2.8
<b>Total</b>	<b>\$m</b>	<b>747.6</b>	<b>567.2</b>	<b>356.1</b>	<b>138.6</b>	<b>159.7</b>	<b>59.5</b>	<b>52.2</b>	<b>22.7</b>	<b>2 103.6</b>

Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

2005-06	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
	Government grants									
	Australian	—	1.3	1.3	1.0	1.0	0.7	—	2.6	0.8
	State/Territory	14.3	14.9	15.9	18.3	—	7.5	79.6	84.5	16.3
	Local	8.6	5.7	—	—	—	—	—	—	4.6
	Levies									
	On insurance companies	68.2	66.4	—	—	—	30.5	—	—	42.8
	On property owners	2.8	1.7	75.1	77.5	94.6	46.1	—	—	27.8
	User charges	1.9	3.6	5.7	1.7	1.5	12.9	16.1	9.1	3.7
	Miscellaneous revenue	4.1	6.4	1.9	1.5	2.8	2.3	0.1	3.8	3.9
	Indirect government funding	—	—	—	—	—	—	4.2	—	0.1
	<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	Total government grants	22.9	21.9	17.2	19.3	1.0	8.2	79.6	87.1	21.7
	Total levies	71.0	68.1	75.1	77.5	94.6	76.6	—	—	70.6
	User charges	1.9	3.6	5.7	1.7	1.5	12.9	16.1	9.1	3.7
	Miscellaneous revenue	4.1	6.4	1.9	1.5	2.8	2.3	0.1	3.8	3.9
	Indirect government funding	—	—	—	—	—	—	4.2	—	0.1
	<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	Total government grants	175.3	130.2	62.9	30.0	1.7	4.4	47.2	20.8	472.5
	Total levies	542.9	404.8	274.1	120.5	152.9	41.8	—	—	1 536.9
	User charges	14.3	21.1	20.7	2.6	2.5	7.0	9.5	2.2	80.0
	Miscellaneous revenue	31.6	38.2	7.0	2.4	4.5	1.3	0.1	0.9	86.0
	Indirect government funding	—	—	—	—	—	—	2.5	—	2.5
	<b>Total</b>	<b>764.1</b>	<b>594.3</b>	<b>364.7</b>	<b>155.6</b>	<b>161.5</b>	<b>54.5</b>	<b>59.2</b>	<b>23.9</b>	<b>2 177.9</b>

Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2006-07										
Government grants										
Australian	%	—	0.8	1.4	2.0	0.4	0.9	—	1.4	0.7
State/Territory	%	21.9	43.3	16.8	26.0	0.2	13.0	70.8	86.0	29.2
Local	%	7.7	3.5	—	0.7	—	—	—	—	3.7
Levies										
On insurance companies	%	61.8	41.4	—	—	—	24.2	—	—	34.3
On property owners	%	2.9	1.0	73.3	64.1	94.9	46.1	—	—	23.6
User charges	%	1.7	2.4	6.9	1.7	2.3	12.4	17.1	9.0	3.3
Miscellaneous revenue	%	4.1	7.7	1.7	5.4	2.2	3.4	11.7	3.6	5.2
Indirect government funding	%	—	—	—	—	—	—	0.4	—	—
<b>Total</b>	%	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	%	29.6	47.5	18.2	28.8	0.6	13.9	70.8	87.3	33.6
Total levies	%	64.7	42.4	73.3	64.1	94.9	70.3	—	—	57.9
User charges	%	1.7	2.4	6.9	1.7	2.3	12.4	17.1	9.0	3.3
Miscellaneous revenue	%	4.1	7.7	1.7	5.4	2.2	3.4	11.7	3.6	5.2
Indirect government funding	%	—	—	—	—	—	—	0.4	—	—
<b>Total</b>	%	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	\$m	251.0	463.5	68.5	71.9	1.0	8.1	39.2	21.1	924.3
Total levies	\$m	549.4	413.7	276.2	160.2	152.5	41.2	—	—	1 593.1
User charges	\$m	14.1	23.8	26.0	4.3	3.7	7.3	9.5	2.2	90.8
Miscellaneous revenue	\$m	34.8	74.8	6.3	13.5	3.5	2.0	6.5	0.9	142.3
Indirect government funding	\$m	—	—	—	—	—	—	2.4	—	2.4
<b>Total</b>	\$m	<b>849.3</b>	<b>975.7</b>	<b>377.1</b>	<b>249.8</b>	<b>160.7</b>	<b>58.6</b>	<b>57.5</b>	<b>24.2</b>	<b>2 752.9</b>

Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2007-08										
Government grants										
Australian	%	—	0.4	1.4	2.6	3.0	2.2	—	7.8	0.9
State/Territory	%	13.3	33.3	17.9	20.8	—	9.8	80.3	80.3	21.9
Local	%	8.4	4.2	—	1.6	—	—	—	—	4.1
Levies										
On insurance companies	%	67.9	52.9	—	—	—	26.0	—	—	38.9
On property owners	%	3.4	1.3	72.2	69.3	91.8	47.5	—	—	26.4
User charges	%	1.7	4.1	7.3	1.9	3.1	11.9	17.4	10.3	4.0
Miscellaneous revenue	%	5.3	3.8	1.2	4.0	2.1	2.6	2.4	1.7	3.7
Indirect government funding	%	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants										
Total government grants	%	21.7	38.0	19.3	24.9	3.0	12.0	80.3	88.0	26.9
Total levies										
Total levies	%	71.3	54.1	72.2	69.3	91.8	73.5	—	—	65.3
User charges										
User charges	%	1.7	4.1	7.3	1.9	3.1	11.9	17.4	10.3	4.0
Miscellaneous revenue										
Miscellaneous revenue	%	5.3	3.8	1.2	4.0	2.1	2.6	2.4	1.7	3.7
Indirect government funding										
Indirect government funding	%	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants										
Total government grants	\$m	174.5	302.7	73.4	60.7	5.2	7.2	40.9	17.8	682.3
Total levies										
Total levies	\$m	574.7	431.9	274.5	169.1	159.9	44.0	—	—	1 654.0
User charges										
User charges	\$m	13.8	32.9	27.8	4.5	5.5	7.1	8.8	2.1	102.6
Miscellaneous revenue										
Miscellaneous revenue	\$m	42.8	30.1	4.4	9.7	3.6	1.6	1.2	0.3	93.8
Indirect government funding										
Indirect government funding	\$m	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>\$m</b>	<b>805.8</b>	<b>797.6</b>	<b>380.1</b>	<b>244.0</b>	<b>174.2</b>	<b>59.9</b>	<b>51.0</b>	<b>20.2</b>	<b>2 532.7</b>



Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

2008-09	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
Government grants										
Australian	%	—	0.3	1.1	2.2	2.1	1.0	1.5	1.2	0.6
State/Territory	%	18.1	54.8	18.5	19.2	—	8.0	78.3	89.5	33.1
Local	%	6.7	2.7	—	0.3	—	—	—	—	3.1
Levies										
On insurance companies	%	59.1	36.3	—	—	—	25.8	—	—	32.3
On property owners	%	9.9	0.7	70.6	72.9	92.5	47.2	—	—	24.3
User charges	%	1.6	2.9	8.1	1.6	2.7	14.3	16.5	9.2	3.6
Miscellaneous revenue	%	4.5	1.3	1.7	3.7	2.7	3.8	1.8	0.1	2.6
Indirect government funding	%	—	0.9	—	—	—	—	1.9	—	0.4
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	%	24.8	57.8	19.6	21.8	2.1	9.0	79.8	90.8	36.8
Total levies	%	69.0	37.0	70.6	72.9	92.5	73.0	—	—	56.6
User charges	%	1.6	2.9	8.1	1.6	2.7	14.3	16.5	9.2	3.6
Miscellaneous revenue	%	4.5	1.3	1.7	3.7	2.7	3.8	1.8	0.1	2.6
Indirect government funding	%	—	0.9	—	—	—	—	1.9	—	0.4
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total government grants	\$m	221.2	695.9	78.7	50.5	3.7	5.4	40.4	21.8	1 117.6
Total levies	\$m	615.2	445.3	282.8	168.9	161.4	44.0	—	—	1 717.6
User charges	\$m	14.2	34.7	32.5	3.7	4.6	8.6	8.4	2.2	109.0
Miscellaneous revenue	\$m	40.5	16.0	6.6	8.6	4.7	2.3	0.9	—	79.6
Indirect government funding	\$m	—	11.1	—	—	—	—	0.9	—	12.0
<b>Total</b>	<b>\$m</b>	<b>891.1</b>	<b>1 203.0</b>	<b>400.7</b>	<b>231.7</b>	<b>174.4</b>	<b>60.3</b>	<b>50.6</b>	<b>24.0</b>	<b>3 035.8</b>

(a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding.

Table 9A.1

Table 9A.1 Major sources of fire service organisations' revenue (2008-09 dollars) (a)

Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
(b) NSW:	Figures vary from year to year as a result of abnormal expenditure related to the response to specific major emergencies.								
(c) Vic:	The 2006-07 year is the first which includes revenue for the Department of Sustainability and Environment (DSE) and explains the marked increase for that year. The proportions of principal funding contributions from State Governments, local governments and insurance companies are established in legislation. The actual proportions received may vary as a result of the level of income from user charges and other income sources. For 2008-09 there is significant increase in government grants due to emergency funding arising from the Black Saturday Bushfires.								
(d) WA:	FESA provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years are not segregated by service and include funding related to delivery of other emergency services including SES and volunteer marine rescue. Data for the Department of Environment and Conservation are not included.								
(e) ACT:	The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. In 2006-07 funding is included under 'miscellaneous revenue' for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.								
	– Nil or rounded to zero.								
Source:	State and Territory Governments (unpublished); ABS (2009) <i>Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009</i> , Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).								

Table 9A.2

## Table 9A.2 Reported fires and other primary incidents attended to by fire service organisations (no.) (a)

	NSW	Vic (b)	Qld (c)	WA (d)	SA (e)	Tas (f)	ACT (g)	NT (h)	Aust
2004-05									
<b>Fires</b>									
Fires in a structure, involving a structure	6 917	5 804	2 424	1 437	1 433	741	279	140	19 175
Landscape fires, bush and grass	17 157	5 823	12 989	7 598	2 877	2 133	217	1 882	50 676
Other fires	18 978	9 110	5 284	4 525	3 405	1 193	546	286	43 327
<b>Total fires</b>	<b>43 052</b>	<b>20 737</b>	<b>20 697</b>	<b>13 560</b>	<b>7 715</b>	<b>4 067</b>	<b>1 042</b>	<b>2 308</b>	<b>113 178</b>
<b>Other emergencies and incidents</b>									
Nonfire rescue calls incl. road crash rescue	11 846	7 303	11 769	959	3 324	549	1 285	597	37 632
Hazardous conditions	12 532	6 931	3 046	980	1 557	235	224	152	25 657
Calls to floods, storm and tempest and other natural disasters	6 638	3 155	2 204	734	1 903	319	698	174	15 825
Good intent calls	11 166	9 745	4 260	1 464	1 538	964	436	180	29 753
Malicious false calls	5 338	2 596	1 553	326	588	169	145	114	10 829
System initiated false alarms	47 990	10 357	18 163	7 406	3 870	3 491	4 586	1 740	97 603
Other	9 947	3 822	2 513	284	4 288	290	1 067	455	22 666
<b>Total other emergencies and incidents</b>	<b>105 457</b>	<b>43 909</b>	<b>43 508</b>	<b>12 153</b>	<b>17 068</b>	<b>6 017</b>	<b>8 441</b>	<b>3 412</b>	<b>239 965</b>
Incident type not determined or not classified	na	na	na	na	na	na	na	na	na
<b>Total fires, other emergencies and incidents</b>	<b>148 509</b>	<b>64 646</b>	<b>64 205</b>	<b>25 713</b>	<b>24 783</b>	<b>10 084</b>	<b>9 483</b>	<b>5 720</b>	<b>353 143</b>
2005-06									
<b>Fires</b>									
Fires in a structure, involving a structure	7 342	5 574	2 720	1 348	1 455	696	331	144	19 610
Landscape fires, bush and grass	19 604	5 534	8 780	6 567	2 371	1 775	263	1 338	46 232
Other fires	19 118	9 124	5 305	3 675	3 840	1 358	681	357	43 458
<b>Total fires</b>	<b>46 064</b>	<b>20 232</b>	<b>16 805</b>	<b>11 590</b>	<b>7 666</b>	<b>3 829</b>	<b>1 275</b>	<b>1 839</b>	<b>109 300</b>
<b>Other emergencies and incidents</b>									
Nonfire rescue calls incl. road crash rescue	12 929	6 127	13 722	876	4 158	527	1 246	653	40 238

Table 9A.2

Table 9A.2 Reported fires and other primary incidents attended to by fire service organisations (no.) (a)

	NSW	Vic (b)	Qld (c)	WA (d)	SA (e)	Tas (f)	ACT (g)	NT (h)	Aust
Hazardous conditions	12 481	6 097	3 202	928	1 830	234	191	211	25 174
Calls to floods, storm and tempest and other natural disasters	6 607	4 459	2 352	814	2 259	392	1 095	184	18 162
Good intent calls	12 922	7 821	4 212	1 290	1 617	1 047	592	246	29 747
Malicious false calls	5 061	2 005	1 584	264	629	141	161	95	9 940
System initiated false alarms	49 270	9 224	20 699	7 540	5 016	3 784	5 313	2 307	103 153
Other	9 495	11 387	2 044	759	4 580	49	450	454	29 218
<b>Total other emergencies and incidents</b>	<b>108 765</b>	<b>47 120</b>	<b>47 815</b>	<b>12 471</b>	<b>20 089</b>	<b>6 174</b>	<b>9 048</b>	<b>4 150</b>	<b>255 632</b>
Incident type not determined or not classified	—	38	8	—	45	228	—	—	319
<b>Total fires, other emergencies and incidents</b>	<b>154 829</b>	<b>67 390</b>	<b>64 628</b>	<b>24 061</b>	<b>27 800</b>	<b>10 231</b>	<b>10 323</b>	<b>5 989</b>	<b>365 251</b>
2006-07									
<b>Fires</b>									
Fires in a structure, involving a structure	6 971	6 233	2 747	1 452	1 534	708	278	146	20 069
Landscape fires, bush and grass	17 684	10 008	10 912	7 343	3 170	2 441	481	1 714	53 753
Other fires	18 597	11 143	5 526	4 128	4 352	1 517	838	394	46 495
<b>Total fires</b>	<b>43 252</b>	<b>27 384</b>	<b>19 185</b>	<b>12 923</b>	<b>9 056</b>	<b>4 666</b>	<b>1 597</b>	<b>2 254</b>	<b>120 317</b>
<b>Other emergencies and incidents</b>									
Nonfire rescue calls incl. road crash rescue	14 970	8 591	16 109	1 590	4 535	990	1 278	624	48 687
Hazardous conditions	13 523	6 959	3 304	917	1 939	249	239	181	27 311
Calls to floods, storm and tempest and other natural disasters	7 864	4 034	2 686	857	2 000	409	941	181	18 972
Good intent calls	13 628	10 865	4 717	1 456	1 978	1 206	636	345	34 831
Malicious false calls	5 093	2 547	1 752	321	591	169	181	111	10 765
System initiated false alarms	49 724	13 026	19 130	7 688	4 799	3 771	5 361	2 359	105 858
Other	9 757	1 928	1 778	831	4 796	69	444	408	20 011
<b>Total other emergencies and incidents</b>	<b>114 559</b>	<b>47 950</b>	<b>49 476</b>	<b>13 660</b>	<b>20 638</b>	<b>6 863</b>	<b>9 080</b>	<b>4 209</b>	<b>266 435</b>

Table 9A.2

## Table 9A.2 Reported fires and other primary incidents attended to by fire service organisations (no.) (a)

	NSW	Vic (b)	Qld (c)	WA (d)	SA (e)	Tas (f)	ACT (g)	NT (h)	Aust
Incident type not determined or not classified	423	1	–	–	50	291	–	–	765
<b>Total fires, other emergencies and incidents</b>	<b>158 234</b>	<b>75 335</b>	<b>68 661</b>	<b>26 583</b>	<b>29 744</b>	<b>11 820</b>	<b>10 677</b>	<b>6 463</b>	<b>387 517</b>
2007-08									
<b>Fires</b>									
Fires in a structure, involving a structure	7 179	6 391	2 893	1 538	1 544	639	246	173	20 603
Landscape fires, bush and grass	13 517	7 553	8 093	7 114	2 862	2 048	237	1 789	43 213
Other fires	18 461	11 297	5 774	4 251	4 137	1 381	541	361	46 203
<b>Total fires</b>	<b>39 157</b>	<b>25 241</b>	<b>16 760</b>	<b>12 903</b>	<b>8 543</b>	<b>4 068</b>	<b>1 024</b>	<b>2 323</b>	<b>110 019</b>
<b>Other emergencies and incidents</b>									
Nonfire rescue calls incl. road crash rescue	15 465	8 954	17 261	1 686	5 240	1 153	1 315	638	51 712
Hazardous conditions	12 508	6 365	3 468	1 109	1 599	212	431	200	25 892
Calls to floods, storm and tempest and other natural disasters	7 508	3 005	2 859	842	2 043	388	809	234	17 688
Good intent calls	12 976	10 821	5 241	1 285	2 053	1 126	603	309	34 414
Malicious false calls	4 321	2 521	1 598	395	410	152	164	123	9 684
System initiated false alarms	51 193	12 807	20 916	8 682	8 423	3 290	5 768	2 319	113 398
Other	8 716	1 584	2 042	906	763	69	298	428	14 806
<b>Total other emergencies and incidents</b>	<b>112 687</b>	<b>46 057</b>	<b>53 385</b>	<b>14 905</b>	<b>20 531</b>	<b>6 390</b>	<b>9 388</b>	<b>4 251</b>	<b>267 594</b>
Incident type not determined or not classified	528	1	–	–	22	1 605	–	–	2 156
<b>Total fires, other emergencies and incidents</b>	<b>152 372</b>	<b>71 299</b>	<b>70 145</b>	<b>27 808</b>	<b>29 096</b>	<b>12 063</b>	<b>10 412</b>	<b>6 574</b>	<b>379 769</b>
2008-09									
<b>Fires</b>									
Fires in a structure, involving a structure	6 917	6 459	2 960	1 543	1 469	805	263	172	20 588
Landscape fires, bush and grass	14 531	7 661	7 358	7 607	2 749	1 966	337	1 640	43 849
Other fires	18 452	12 507	5 565	4 419	3 754	1 617	899	383	47 596
<b>Total fires</b>	<b>39 900</b>	<b>26 627</b>	<b>15 883</b>	<b>13 569</b>	<b>7 972</b>	<b>4 388</b>	<b>1 499</b>	<b>2 195</b>	<b>112 033</b>
REPORT ON									
GOVERNMENT									
SERVICES 2010									
									EMERGENCY MANAGEMENT

Table 9A.2

Table 9A.2 Reported fires and other primary incidents attended to by fire service organisations (no.) (a)

	NSW	Vic (b)	Qld (c)	WA (d)	SA (e)	Tas (f)	ACT (g)	NT (h)	Aust
<b>Other emergencies and incidents</b>									
Nonfire rescue calls incl. road crash rescue	16 548	9 606	17 831	1 869	5 717	1 422	1 274	714	54 981
Hazardous conditions	12 570	6 181	3 529	922	1 522	222	440	147	25 533
Calls to floods, storm and tempest and other natural disasters	8 197	2 839	2 784	955	2 131	398	888	248	18 440
Good intent calls	13 561	11 421	5 100	1 571	2 332	1 121	597	342	36 045
Malicious false calls	3 747	2 229	1 441	380	372	124	110	139	8 542
System initiated false alarms	54 706	12 590	21 264	8 657	7 364	3 742	5 622	2 676	116 621
Other	5 652	1 839	2 198	931	745	53	354	334	12 106
<b>Total other emergencies and incidents</b>	<b>114 981</b>	<b>46 705</b>	<b>54 147</b>	<b>15 285</b>	<b>20 183</b>	<b>7 082</b>	<b>9 285</b>	<b>4 600</b>	<b>272 268</b>
Incident type not determined or not classified	1 682	4	–	–	–	301	24	–	2 011
<b>Total fires, other emergencies and incidents</b>	<b>156 563</b>	<b>73 336</b>	<b>70 030</b>	<b>28 854</b>	<b>28 155</b>	<b>11 771</b>	<b>10 808</b>	<b>6 795</b>	<b>386 312</b>

(a) Data in this table may be different to other tables in the chapter as these data only reflect responses from fire service organisations, and, where stated, land management agencies. These data report the type of incident that reflects the most serious situation as determined by operational personnel after arriving at the scene and not the incident type relayed by the communication centre.

(b) Vic: Landscape fires data include incidents from the Department of Sustainability and Environment from 2004-05 onwards. Due to data collection issues, data are incomplete for 2005-06. Some degree of duplicate counting may be present across Country Fire Authority and Department of Sustainability and Environment figures.

(c) Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures.

(d) WA: Data include reported turnouts by career and volunteer services for all areas of the state.

(e) SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period).

(f) Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

(g) ACT: A 51 per cent decrease in the number of landscape fires from 2006-07 to 2007-08 corresponds to a milder fire season than the previous year. Better reporting and analysis of incidents has redistributed some incident types from other categories into hazardous conditions.

(h) NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades.

na Not available. – Nil or rounded to zero.

Table 9A.2

**Table 9A.2 Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	Vic (b)	Qld (c)	WA (d)	SA (e)	Tas (f)	ACT (g)	NT (h)	Aust
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Source: State and Territory governments (unpublished).

Table 9A.3

**Table 9A.3 Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents (no.) (a)**

		<i>NSW</i> (b)	<i>Vic</i> (c)	<i>Qld</i> (d)	<i>WA</i> (e)	<i>SA</i> (f)	<i>Tas</i> (g)	<i>ACT</i> (h)	<i>NT</i> (i)	<i>Aust</i>
2004-05	no.	21 014	6 462	12 989	7 962	2 877	2 133	217	1 882	55 536
2005-06	no.	19 806	5 534	8 780	6 981	2 371	1 775	263	1 338	46 848
2006-07	no.	17 993	10 008	10 912	7 836	3 170	2 441	481	1 714	54 555
2007-08	no.	13 605	7 553	8 093	7 114	2 862	2 048	237	1 789	43 301
2008-09	no.	14 583	7 661	7 358	7 607	2 749	1 966	337	1 640	43 901

- (a) These data may be different to those reported elsewhere because they reflect responses from fire service organisations and, where stated, land management agencies.
- (b) NSW: Data include fires from the NSW Department of Environment and Climate Change, the NSW Rural Fire Service and the NSW Fire Brigades for all bush and grass fires regardless of size of area burnt.
- (c) Vic: Data include incidents from the Department of Sustainability and Environment from 2004-05 onwards. Due to data collection issues, data are incomplete for 2005-06.
- (d) Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures.
- (e) WA: Data include landscape fires reported by the Department of Environment and Conservation as a lead agency, with 648 fires recorded for 2008-09.
- (f) SA: MFS industrial action 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports in this period).
- (g) Tas: Data include *all* vegetation fires, regardless of size, from all fire brigades (full time and volunteer) and land management agencies. Due to industrial action 90 incident reports are incomplete in 2008-09.
- (h) ACT: A 51 per cent decrease in landscape fires during 2007-08 corresponds with a milder fire season than the previous year. This number is in line with prior years.
- (i) NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades.

*Source:* State and Territory governments (unpublished).



Table 9A.4

Table 9A.4 **Accidental residential structure fires reported to fire service organisations per 100 000 households (a)**

	<i>NSW</i>	<i>Vic (b)</i>	<i>Qld (c)</i>	<i>WA (d)</i>	<i>SA (e)</i>	<i>Tas (f)</i>	<i>ACT</i>	<i>NT (g)</i>	<i>Aust</i>
2004-05	123.6	134.1	57.7	72.6	62.2	169.5	86.4	26.0	103.2
2005-06	129.2	105.3	64.5	64.3	49.7	165.1	105.9	51.0	97.6
2006-07	119.9	139.8	61.9	69.7	46.6	158.6	105.9	48.7	102.6
2007-08	124.3	141.1	64.5	68.3	70.1	137.3	72.1	65.2	105.5
2008-09	119.1	138.7	59.6	74.7	70.1	169.5	98.6	52.7	103.9

- (a) Rates may not be entirely comparable. The numerator (the number of accidental residential structure fires) is affected by the number of fires where the cause has been determined and classified by fire service personnel. Data for the denominator are derived from ABS Australian Demographic Statistics Household projection series by averaging household data from the start and end of a financial year to derive the financial year midpoint estimate. For example, household data for the 2008-09 financial year are the average of total households as at 30 June 2008 and as at 30 June 2009.
- (b) Vic: Due to data collection issues, data are incomplete for 2005-06.
- (c) Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population.
- (d) WA: Data include incidents attended to by career and volunteer services.
- (e) SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period). 2006-07 data may be under reported because MFS data entry was not completed by the submission deadline.
- (f) Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.
- (g) NT: Data are for NT Fire and Rescue Service permanent fire stations only.

*Source:* State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0, Table 21, Projected number of households, states and territories—at 30 June.

Table 9A.5

Table 9A.5 Fire service organisations' human resources

	Unit (a)	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust
2004-05										
Firefighting personnel	%	79.2	71.7	77.9	74.6	96.8	63.7	75.5	85.3	78.1
Firefighting personnel	FTE	3 717	2 172	2 189	892	848	279	270	174	10 541
Permanent firefighters	FTE	3 232	2 172	2 026	864	752	279	270	168	9 763
Part time & other firefighters	FTE	485	—	163	28	96	—	—	6	778
Support personnel	FTE	977	859	620	304	28	159	88	30	3 065
<b>Total</b>	<b>FTE</b>	<b>4 694</b>	<b>3 031</b>	<b>2 809</b>	<b>1 196</b>	<b>876</b>	<b>438</b>	<b>358</b>	<b>204</b>	<b>13 606</b>
Volunteer firefighters (h)	no.	75 443	58 662	44 648	28 319	15 569	4 668	1 062	551	228 922
2005-06										
Firefighting personnel	%	76.6	65.4	76.3	74.6	96.0	62.8	75.7	83.1	76.3
Firefighting personnel	FTE	3 791	3 923	2 221	906	866	280	289	182	12 458
Permanent firefighters	FTE	3 312	3 307	2 056	870	773	280	289	176	11 063
Part time & other firefighters	FTE	479	616	165	36	93	—	—	6	1 395
Support personnel	FTE	1 156	2 077	689	308	36	166	93	37	4 562
<b>Total</b>	<b>FTE</b>	<b>4 947</b>	<b>6 000</b>	<b>2 910</b>	<b>1 214</b>	<b>902</b>	<b>446</b>	<b>382</b>	<b>219</b>	<b>17 020</b>
Volunteer firefighters (h)	no.	76 195	58 849	41 324	26 890	15 120	4 765	1 018	539	224 700
2006-07										
Firefighting personnel	%	79.6	67.2	75.4	77.0	95.8	62.8	78.2	81.6	77.2
Firefighting personnel	FTE	3 887	4 119	2 239	932	905	287	291	182	12 842
Permanent firefighters	FTE	3 406	3 274	2 076	896	779	287	291	176	11 185
Part time & other firefighters	FTE	481	845	163	36	126	—	—	6	1 657
Support personnel	FTE	996	2 008	732	278	40	170	81	41	4 346
<b>Total</b>	<b>FTE</b>	<b>4 883</b>	<b>6 127</b>	<b>2 971</b>	<b>1 210</b>	<b>945</b>	<b>457</b>	<b>372</b>	<b>223</b>	<b>17 188</b>
Volunteer firefighters (h)	no.	76 302	59 509	36 000	27 305	15 517	4 978	1 261	550	221 422

Table 9A.5

Table 9A.5 Fire service organisations' human resources

	Unit (a)	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust
2007-08										
Firefighting personnel	%	73.6	67.2	78.0	77.8	95.3	62.2	90.1	81.2	73.7
Firefighting personnel	FTE	3 926	4 185	2 358	973	938	296	329	186	13 191
Permanent firefighters	FTE	3 443	3 340	2 193	919	813	296	276	176	11 456
Part time & other firefighters	FTE	483	845	165	54	125	–	53	10	1 735
Support personnel	FTE	1 406	2 047	665	277	46	180	36	43	4 700
<b>Total</b>	<b>FTE</b>	<b>5 332</b>	<b>6 232</b>	<b>3 023</b>	<b>1 250</b>	<b>984</b>	<b>476</b>	<b>365</b>	<b>229</b>	<b>17 891</b>
Volunteer firefighters (h)	no.	75 474	58 362	35 000	27 457	15 744	4 909	1 367	540	218 853
2008-09										
Firefighting personnel	%	78.5	74.6	76.4	76.4	95.4	58.0	77.9	81.9	77.1
Firefighting personnel	FTE	3 982	4 687	2 353	996	976	267	296	194	13 752
Permanent firefighters	FTE	3 485	3 580	2 195	970	852	267	296	184	11 829
Part time & other firefighters	FTE	497	1 107	158	26	124	–	–	10	1 923
Support personnel	FTE	1 088	1 593	726	308	47	193	84	43	4 082
<b>Total</b>	<b>FTE</b>	<b>5 070</b>	<b>6 280</b>	<b>3 079</b>	<b>1 304</b>	<b>1 023</b>	<b>460</b>	<b>380</b>	<b>237</b>	<b>17 833</b>
Volunteer firefighters (h)	no.	75 436	58 943	34 000	27 249	15 415	4 859	1 230	540	217 672

(a) FTE = full time equivalent.

(b) NSW: Numbers for fire service organisations' human resources include retained firefighters and community fire unit members.

(c) Vic: Victoria's land management agency, the Department of Sustainability and Environment (DSE) is included from 2005-06. Due to data issues with the DSE 2007-08 component, DSE figures for 2007-08 have been derived from 2006-07 DSE figures.

(d) Qld: Firefighting personnel include senior fire officers, Assistant Commissioners, the Deputy Commissioner and the Commissioner. Volunteer firefighter data for Queensland includes volunteer rural firefighters and volunteer rural operations support personnel.

(e) WA: Support staff data for 2006-07 and subsequent years include all non-fire specific staff including those that support SES and volunteer marine rescue. Volunteer firefighter data include volunteers from local government bush fire brigades, volunteer fire and rescue brigades, volunteer fire services and multi-skilled volunteer emergency services. Data for the Department of Environment and Conservation are not included.

Table 9A.5

Table 9A.5 **Fire service organisations' human resources**

	<i>Unit (a)</i>	<i>NSW (b)</i>	<i>Vic (c)</i>	<i>Qld (d)</i>	<i>WA (e)</i>	<i>SA (f)</i>	<i>Tas</i>	<i>ACT</i>	<i>NT (g)</i>	<i>Aust</i>
(f)	SA: The SA Fire and Emergency Services Commission employs most support personnel. Fire agency support staff include Metropolitan Fire Service training, building inspection and fire cause investigatory staff.									
(g)	NT: Numbers reflect NT Fire and Rescue Service and Bushfires NT uniformed, non-uniformed and volunteers.									
(h)	Numbers for Volunteer fire fighters include volunteer fire support staff. – Nil or rounded to zero.									

Source: State and Territory governments (unpublished).

Table 9A.6

Table 9A.6 **Fire deaths (a), (b), (c)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (d)</i>
Fire deaths, exposure to smoke, fire and flames (ICD code X00-X09)										
1998	no.	47	25	15	11	9	10	–	1	121
1999	no.	28	20	23	4	11	2	–	2	92
2000	no.	35	24	17	5	1	3	3	2	95
2001	no.	16	10	6	10	13	6	4	2	66
2002	no.	32	25	17	9	10	7	–	1	103
2003	no.	33	16	13	17	9	4	3	4	98
2004	no.	33	14	12	6	8	10	1	3	86
2005	no.	48	21	12	6	12	2	2	1	109
2006	no.	23	17	16	3	9	np	np	–	71
2007	no.	15	15	4	11	9	4	4	4	58
Fire deaths, intentional self-harm by smoke, fire and flames (ICD code X76)										
1998	no.	8	5	8	1	4	4	–	–	25
1999	no.	8	1	6	3	5	–	–	–	24
2000	no.	17	4	4	–	2	–	–	1	28
2001	no.	11	2	7	4	3	4	1	–	31
2002	no.	13	6	6	4	3	2	1	–	29
2003	no.	10	9	4	2	6	1	–	1	36
2004	no.	3	9	3	–	3	1	1	–	21
2005	no.	13	2	5	1	4	–	–	–	23
2006	no.	4	5	np	np	–	–	–	–	12
2007	no.	5	3	3	3	3	3	3	–	15
Fire deaths, assault by smoke, fire and flames (ICD code X97)										
1998	no.	1	3	3	–	–	2	–	–	6
1999	no.	2	4	3	4	–	–	–	–	6
2000	no.	3	2	12	2	–	–	–	–	18
2001	no.	–	4	4	–	–	–	–	–	5
2002	no.	4	3	3	–	4	–	–	–	7
2003	no.	1	2	2	–	3	–	–	–	9
2004	no.	4	–	–	–	–	–	–	–	np
2005	no.	–	3	–	–	–	2	–	–	np
2006	no.	np	–	–	–	np	–	–	–	4
2007	no.	–	–	3	–	–	–	–	–	3
Fire deaths, exposure to smoke, fire and flames, undetermined intent (ICD code Y26) (e)										
1998	no.	–	–	4	–	1	–	–	–	3
1999	no.	–	–	1	–	–	–	1	–	3
2000	no.	1	1	2	–	3	–	–	–	5
2001	no.	–	1	–	–	–	–	–	–	np
2002	no.	4	2	–	–	–	–	–	–	np
2003	no.	–	–	–	–	–	–	–	–	–
2004	no.	1	–	3	–	–	–	–	–	np

Table 9A.6

Table 9A.6 **Fire deaths (a), (b), (c)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (d)</i>
2005	no.	4	1	2	–	–	–	–	–	4
2006	no.	np	–	np	np	np	–	–	–	5
2007	no.	3	9	11	–	–	–	–	–	22
Total fire deaths (ICD codes X00-X09, X76, X97, Y26) (f)										
1998	no.	56	31	28	13	11	12	–	3	155
1999	no.	37	26	33	5	16	1	2	1	125
2000	no.	55	30	34	7	9	3	3	2	146
2001	no.	27	16	17	13	16	9	1	1	104
2002	no.	49	34	24	10	12	8	1	3	141
2003	no.	46	29	18	20	16	7	3	2	143
2004	no.	39	23	15	6	12	11	1	4	110
2005	no.	62	27	18	7	13	5	3	4	138
2006	no.	30	22	19	5	12	4	4	–	92
2007	no.	22	27	14	13	11	4	3	4	98
Annual fire death rate										
1998	per million people	8.8	6.7	8.1	7.1	7.4	25.4	–	15.8	8.3
1999	per million people	5.8	5.5	9.4	2.7	10.7	2.1	6.4	5.2	6.6
2000	per million people	8.5	6.3	9.5	3.7	6.0	6.4	9.5	10.2	7.6
2001	per million people	4.1	3.3	4.7	6.8	10.6	19.1	3.1	5.1	5.4
2002	per million people	7.4	7.0	6.5	5.2	7.9	16.9	3.1	15.0	7.2
2003	per million people	6.9	5.9	4.7	10.2	10.4	14.7	9.2	10.0	7.2
2004	per million people	5.8	4.6	3.8	3.0	7.8	22.8	3.1	19.8	5.5
2005	per million people	9.2	5.3	4.5	3.5	8.4	10.3	9.1	19.4	6.8
2006	per million people	4.4	4.3	4.6	2.4	7.7	8.2	12.0	–	4.4
2007	per million people	3.2	5.2	3.3	6.2	6.9	8.1	8.8	18.6	4.7

Table 9A.6

Table 9A.6 **Fire deaths (a), (b), (c)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (d)</i>
Three year weighted average fire death rate										
1998 to 2000	per million people	7.7	6.2	9.0	4.5	8.0	11.3	5.3	10.4	7.5
1999 to 2001	per million people	6.1	5.1	7.9	4.4	9.1	9.2	6.3	6.8	6.5
2000 to 2002	per million people	6.7	5.6	6.9	5.3	8.2	14.1	5.2	10.1	6.7
2001 to 2003	per million people	6.1	5.4	5.3	7.4	9.6	16.9	5.2	10.0	6.6
2002 to 2004	per million people	6.7	5.8	5.0	6.1	8.7	18.1	5.1	15.0	6.6
2003 to 2005	per million people	7.3	5.3	4.4	5.5	8.9	15.9	7.1	16.4	6.5
2004 to 2006	per million people	6.5	4.8	4.3	3.0	7.9	13.7	8.1	12.9	5.6
2005 to 2007	per million people	5.6	4.9	4.2	4.0	7.7	8.8	10.0	12.7	5.3
Population (g)										
Jun 1998	m	6.3	4.6	3.4	1.8	1.5	0.5	0.3	0.2	18.7
Jun 1999	m	6.4	4.7	3.5	1.8	1.5	0.5	0.3	0.2	18.9
Jun 2000	m	6.5	4.7	3.6	1.9	1.5	0.5	0.3	0.2	19.2
Jun 2001	m	6.6	4.8	3.6	1.9	1.5	0.5	0.3	0.2	19.4
Jun 2002	m	6.6	4.9	3.7	1.9	1.5	0.5	0.3	0.2	19.7
Jun 2003	m	6.7	4.9	3.8	2.0	1.5	0.5	0.3	0.2	19.9
Jun 2004	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.1
Jun 2005	m	6.8	5.0	4.0	2.0	1.6	0.5	0.3	0.2	20.4
Jun 2006	m	6.8	5.1	4.1	2.1	1.6	0.5	0.3	0.2	20.7
Jun 2007	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.0

- (a) Fire deaths data may differ slightly from those published in earlier reports due to ABS revisions incorporated in the 2010 Report. Cells in this table have been randomly adjusted to avoid the release of confidential data. Where necessary, totals have been adjusted separately to the component cells and totals are not necessarily the sum of the component cells.
- (b) Fire deaths are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire death codes X00-X09 plus X76, X97 and Y26. Fire deaths data are reported by the State or Territory of the deceased's usual residence, and by the year the death was registered.
- (c) The small number of deaths means it is difficult to establish patterns and provide detailed analysis.
- (d) Includes Other Territories.

Table 9A.6 **Fire deaths (a), (b), (c)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT Aust (d)</i>
(e)	Significant increases in the number of deaths of 'undetermined intent' in 2007 relate to a change in ABS coding practice. ABS advise that the number of deaths attributed to 'undetermined intent' codes for the 2007 reference year is expected to decrease as data are revised.								
(f)	Total fire deaths are unpublished data from the ABS. Totals have been adjusted separately to the component cells and revised totals are not necessarily the sum of the component cells.								
(g)	Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Calendar year population estimates are the midpoint estimate of the relevant calendar year (i.e. as at 30 June).								
	– Nil or rounded to zero. <b>np</b> Not published.								

Source: ABS (2009) *Causes of Death, Australia*, Cat. no. 3303.0 (published - *ICD code details*, and unpublished - *Total fire deaths*); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2).



Table 9A.7

Table 9A.7 **Fire injuries (a)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas(b)</i>	<i>ACT(b)</i>	<i>NT(b)</i>	<i>Aust</i>
Total hospital admissions due to fire injury										
1998-99	no.	971	409	637	290	303	56	42	5	2 713
1999-2000	no.	861	445	652	357	247	62	23	117	2 764
2000-01	no.	928	439	617	374	256	35	13	102	2 764
2001-02	no.	1 005	551	758	386	262	na	na	na	3 170
2002-03	no.	901	567	601	341	289	na	na	na	2 699
2003-04	no.	1 004	559	604	333	262	na	na	na	2 923
2004-05	no.	979	633	702	312	296	na	na	na	3 170
2005-06	no.	1 100	537	653	357	373	na	na	na	3 305
2006-07	no.	951	656	644	391	343	na	na	na	3 305
2007-08	no.	1 008	644	745	357	330	79	20	195	3 378
Annual rate of hospital admissions due to fire injury										
1998-99	per 100 000 people	15.2	8.8	18.3	15.8	20.3	11.9	13.5	2.6	14.4
1999-2000	per 100 000 people	13.4	9.4	18.5	19.2	16.4	13.1	7.3	60.2	14.5
2000-01	per 100 000 people	14.2	9.2	17.2	19.8	17.0	7.4	4.1	52.0	14.3
2001-02	per 100 000 people	15.2	11.4	20.6	20.2	17.3	na	na	na	16.2
2002-03	per 100 000 people	13.5	11.6	16.0	17.6	18.9	na	na	na	13.7
2003-04	per 100 000 people	15.0	11.3	15.7	16.9	17.1	na	na	na	14.6
2004-05	per 100 000 people	14.5	12.6	17.8	15.6	19.2	na	na	na	15.7
2005-06	per 100 000 people	16.2	10.6	16.1	17.5	23.9	na	na	na	16.1
2006-07	per 100 000 people	13.9	12.7	15.6	18.8	21.8	na	na	na	15.8
2007-08	per 100 000 people	14.6	12.3	17.6	16.8	20.7	15.9	5.9	89.6	15.9
Three year weighted average rate of hospital admissions due to fire injury										
1998-99 to 2000-01	per 100 000 people	14.3	9.1	18.0	18.3	17.9	10.8	8.3	38.5	14.4

Table 9A.7

Table 9A.7 Fire injuries (a)		<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas(b)</i>	<i>ACT(b)</i>	<i>NT(b)</i>	<i>Aust</i>
1999-2000 to 2001-02	per 100 000 people	14.3	10.0	18.8	19.7	16.9	na	na	na	15.0	
2000-01 to 2002-03	per 100 000 people	14.3	10.7	17.9	19.2	17.7	na	na	na	14.7	
2001-02 to 2003-04	per 100 000 people	14.6	11.4	17.4	18.2	17.8	na	na	na	14.8	
2002-03 to 2004-05	per 100 000 people	14.4	11.8	16.5	16.7	18.4	na	na	na	14.6	
2003-04 to 2005-06	per 100 000 people	15.3	11.5	16.5	16.7	20.1	na	na	na	15.5	
2004-05 to 2006-07	per 100 000 people	14.9	12.0	16.5	17.3	21.6	na	na	na	15.9	
2005-06 to 2007-08	per 100 000 people	14.9	11.9	16.5	17.7	22.1	na	na	na	16.0	
Population (c)											
Dec 1998	m	6.4	4.7	3.5	1.8	1.5	0.5	0.3	0.2	18.8	
Dec 1999	m	6.4	4.7	3.5	1.9	1.5	0.5	0.3	0.2	19.0	
Dec 2000	m	6.5	4.8	3.6	1.9	1.5	0.5	0.3	0.2	19.3	
Dec 2001	m	6.6	4.8	3.7	1.9	1.5	0.5	0.3	0.2	19.5	
Dec 2002	m	6.6	4.9	3.8	1.9	1.5	0.5	0.3	0.2	19.8	
Dec 2003	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.0	
Dec 2004	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3	
Dec 2005	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5	
Dec 2006	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9	
Dec 2007	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2	

(a) Fire injuries are represented by hospital admissions. Fire injuries data in the 2008 and subsequent Reports differ from those in earlier Reports because counting rules for fire injury data were aligned with those for fire deaths in 2008. Fire injuries are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire injury codes X00-X09 plus X76, X97 and Y26. Fire injuries are reported by the State or Territory where the injury is treated. Excludes secondary fires resulting from explosions, transport accidents, and emergency department non-admitted casualties.

(b) Tas, ACT and NT: Data for reference years 2001-02 to 2006-07 are not available.

(c) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

na Not available.

Table 9A.7 **Fire injuries (a)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas(b)</i>	<i>ACT(b)</i>	<i>NT(b)</i>	<i>Aust</i>
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*Source:* Australian Institute of Health and Welfare (AIHW), *Australian Hospital Statistics*, (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2).

Table 9A.8

	<i>NSW</i>	<i>Vic (b)</i>	<i>Qld (c)</i>	<i>WA (d)</i>	<i>SA (e)</i>	<i>Tas (f)</i>	<i>ACT</i>	<i>NT</i>
2004-05	2 404	1 202	2 404	3 606	6 010	4 808	1 563	2 404
2005-06	2 296	1 148	2 296	3 444	5 741	3 444	2 296	2 296
2006-07	2 193	1 096	2 193	3 289	8 772	3 454	1 288	3 289
2007-08	2 101	2 101	2 101	2 626	5 252	5 252	2 153	7 878
2008-09	2 000	1 000	2 000	3 000	5 000	1 000	1 000	2 000

- (a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences.
- (b) Vic: Due to data collection issues, data are incomplete for 2005-06. 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009.
- (c) Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures.
- (d) WA: Dollar losses are based on estimated values provided by firefighters.
- (e) SA: 2006-07 data may be under reported because MFS data entry was not completed by the submission deadline.
- (f) Tas: Data are for *all* fire brigades, both full-time and volunteer. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09.

*Source:* State and Territory Governments (unpublished); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

Table 9A.9

Table 9A.9 **Property loss from structure fire (2008-09 dollars per person) (a), (b)**

	NSW (c)	Vic (d)	Qld (e)	WA (f)	SA (g)	Tas (h)(i)	ACT (h)	NT (h)	Aust (j)
Property loss from structure fire									
2004-05	32	44	31	27	35	59	24	19	36
2005-06	71	37	32	25	21	77	37	33	46
2006-07	27	40	25	37	29	51	23	12	31
2007-08	45	37	38	50	22	214	20	21	44
2008-09	29	37	30	56	49	62	24	21	36
Three year averages									
2004-05 to 2006-07	44	40	29	30	28	62	28	21	38
2005-06 to 2007-08	48	38	32	38	24	114	27	22	40
2006-07 to 2008-09	34	38	31	48	34	109	23	18	37

- (a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences.
- (b) Historical rates in this table may differ from those in previous Reports, as historical population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).
- (c) NSW: Some structure fires resulted in direct dollar loss in excess of \$1 million each. In 2004-05 there were 17 such structure fires; 2005-06, 32 with five of these at \$10+ million each and one at \$89 million; 2006-07, 15 at \$1+ million each; 2007-08, 19 at \$1+ million each with four at \$5+ million each and one of \$100 million.
- (d) Vic: Due to data collection issues, data are incomplete for 2005-06. 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009.
- (e) Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population. In 2007-08 one major incident accounted for \$41 million of the total property loss value.
- (f) WA: Dollar losses are based on estimated values provided by firefighters.
- (g) SA: In 2006-07 there was a \$15 million fire that accounted for 35 per cent of the reported dollar loss. Data entry for 2006-07 reported property loss from structure fire was incomplete.
- (h) Tas, ACT and NT: Due to small population sizes, rates in these jurisdictions may be impacted significantly by single large-loss events.
- (i) Tas: Data are for all fire brigades, both full time and volunteer. For 2007-08, data include two significant fires where the property loss was \$60 million and \$20 million respectively. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09.
- (j) Average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

Table 9A.10

**Table 9A.10 Fire incidents attended by fire service organisations (number per 100 000 people)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld (a)</i>	<i>WA (b)</i>	<i>SA (c)</i>	<i>Tas (d)</i>	<i>ACT (e)</i>	<i>NT (f)</i>	<i>Aust (g)</i>
Incidents per 100 000 people (h)									
2004-05	640	414	525	678	499	839	318	1 133	559
2005-06	679	398	416	569	492	784	384	882	532
2006-07	631	530	464	621	575	949	475	1 060	577
2007-08	565	481	396	606	537	821	300	1 068	519
2008-09	567	496	365	616	495	877	431	990	518
Population (million) (h)									
2004-05	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
2005-06	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
2006-07	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
2007-08	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
2008-09	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6

(a) Qld: Accurate identification of incidents attended by both QFRS Urban and Rural crews is not possible at this stage. Reporting of incident attendance by QFRS Rural Crews is incomplete due to voluntary reporting procedures. QFRS Urban stations (Agency 1) are estimated to serve 87.6 per cent of Queensland's population.

(b) WA: Data include reported turnouts by career and volunteer services for all areas of the State.

(c) SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period).

(d) Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

(e) ACT: Includes data for urban and rural fire service organisations.

(f) NT: The high number of incidents per 100 000 people can be attributed to deliberately lit fires and the large number of grass fires in northern Australia that are caused by the annual growth of vegetation following the wet season.

(g) The average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

(h) Historical rates and population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

Source: State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2).

Table 9A.11

Table 9A.11 Household preparedness for emergencies, October 2007 (a)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Presence of selected safety precautions									
Smoke alarms/detectors (b)	%	94.1	97.2	93.8	na	na	na	89.7	na
Tested smoke alarms/detectors (c)	%	75.7	82.2	78.8	na	na	na	69.6	na
Fire blankets	%	18.4	21.8	18.5	na	na	na	19.4	na
Fire extinguishers	%	27.4	30.5	32.3	na	na	na	30.3	na
Electrical safety switches or circuit breakers	%	75.9	75.0	89.5	na	na	na	78.5	na
Written or rehearsed emergency plan (d)	%	13.3	15.1	19.7	na	na	na	14.7	na
Portable first aid kit	%	57.1	55.8	62.8	na	na	na	59.0	na
First aid qualification (e)	%	30.7	29.4	35.0	na	na	na	31.0	na
Households with emergency phone numbers located for ease of use (f)	%	63.6	70.3	61.3	na	na	na	62.1	na
Most recent emergency in the last two years									
House fire	%	1.9	2.0	2.2	na	na	na	2.9	na
Bushfire	%	0.8	1.1	*0.7	na	na	na	np	na
Storm, wind or hail (g)	%	7.2	3.4	5.8	na	na	na	11.9	na
Flood	%	1.3	0.7	0.7	na	na	na	*1.8	na
Other emergency (h)	%	0.4	*0.3	0.2	na	na	na	np	na
Most recent emergency by type of emergency services contacted									
Fire service	%	11.7	17.5	8.0	na	na	na	9.1	na
State Emergency Service	%	11.2	6.8	6.6	na	na	na	*7.9	na
Ambulance	%	*0.7	**0.7	*2.5	na	na	na	np	na
Police	%	*3.3	*1.9	**1.2	na	na	na	**1.5	na
No emergency services contacted	%	78.8	76.3	84.7	na	na	na	83.0	na
Most recent emergency by whether changes were made as a result (i)									
House fire	%	49.9	55.7	56.1	na	na	na	44.5	na
Bushfire	%	55.9	50.6	50.7	na	na	na	np	na
Storm, wind or hail (g)	%	40.8	36.6	49.0	na	na	na	32.8	na
Flood	%	56.9	62.8	67.3	na	na	na	*43.7	na
Other emergency (h)	%	57.2	*42.5	63.7	na	na	na	np	na

(a) Household data are based on area of usual residence. No ABS survey data are available for SA, Tasmania and the NT. Related survey data for WA are available in ABS 2008, *Community preparedness for emergencies*, Cat. no. 4818.5.

(b) The difference in the percentage of households with a smoke alarm between tables 9A.11 and 9A.12 for NSW and Queensland is because of the different sources of data used to collate the figures. Data for table 9A.11 is sourced from the ABS and data for table 9A.12 is sourced from the jurisdictions.

(c) Manually tested within the last 12 months.

(d) Rehearsed within the last 12 months. Emergency plan is for non-medical emergencies only.

(e) First aid qualification either obtained or renewed by a household member during the last 3 years. Also included if a household member is a doctor or nurse.

Table 9A.11 **Household preparedness for emergencies, October 2007 (a)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
(f)	Includes only emergency phone numbers that are displayed/stored separately and are easily accessible in an emergency. This excludes looking up phone numbers in the White or Yellow pages phone books.								
(g)	Includes cyclones.								
(h)	Includes landslide, earthquake, explosion, bomb threat and gas or chemical leak.								
(i)	Changes made refers to additional or improved safety measures and includes, for example, installed smoke alarms, installed gutter guards and upgraded electrical switchboards.								
	* Estimate has a relative standard error of 25–50 per cent and should be used with caution.								
	** Estimate has a relative standard error greater than 50 per cent and is considered too unreliable for general use.								
	<b>na</b> Not available. <b>np</b> Not published.								

Source: ABS (2008) *Household preparedness for emergencies*, Cat. no. 4818.0.55.001, Canberra.



Table 9A.12

**Table 9A.12 Households with a smoke alarm or smoke detector installed**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
February 2000 to November 2000 (a)										
Estimated no. of households with a smoke alarm/detector	'000	1 431	1 665	813	378	557	153	83	20	5 100
	%	60.8	95.1	60.8	54.0	95.0	82.1	73.5	40.0	72.0
Standard error	±	2.3	1.4	2.5	3.4	1.6	2.4	2.3	4.0	0.7
Total households	'000	2 355	1 751	1 337	700	586	187	113	50	7 080
Estimated percentage of households with a smoke alarm/detector (b, c, d, e, f, g, h)										
2004-05	%	71.5	95.5	72.6	70.0	na	na	na	63.0	na
2005-06	%	76.9	95.5	76.4	86.0	na	na	na	73.0	na
2006-07	%	86.9	95.5	79.0	86.0	na	na	na	na	na
2007-08	%	92.9	97.2	87.6	86.0	na	na	89.7	na	na
2008-09	%	93.6	97.2	90.1	86.0	na	na	na	na	na

- (a) The February 2000 to November 2000 data are from the Population Survey Monitor (PSM) and represent the last occasion on which smoke alarm data were collected for all jurisdictions. The PSM was subsequently discontinued and, from 2002-03 onwards, the data were sourced from jurisdictional collections that were not strictly comparable with the PSM because of methodological differences.
- (b) The difference in the percentage of households with a smoke alarm between tables 9A.11 and 9A.12 for NSW and Queensland is because of the different sources of data used to collate the figures. Data for table 9A.11 are sourced from the ABS and data for table 9A.12 are sourced from the jurisdictions.
- (c) NSW: Data are sourced from the NSW Population Health Survey 2008 (HOIST), Centre for Epidemiology and Research, NSW Department of Health. Estimates are based on the following numbers of respondents for NSW: 2004 (8,892), 2005 (10,687), 2006 (7,795), 2007 (7,301), 2008 (8,417) that answered 'yes' to the question: 'Do you have smoke alarms installed in your home?'. The 95 per cent confidence interval for 2008 is (92.8 – 94.47). Because the data are based on a sample of the population, the 95 per cent confidence interval provides a range of values that should contain the actual value for the population 95% of the time. In general, a wider confidence interval reflects less certainty in the indicator estimate.
- (d) Vic: 2007-08 data are sourced from ABS Household Preparedness for Emergencies Survey. Prior data sourced from a random telephone survey of 2304 respondents residing within the 23 local government areas significant to the metropolitan fire district which was conducted in April 2004.
- (e) Qld: Data are collected by the Office of Economic and Statistical Research as part of the annual Queensland Household Survey conducted in November each year since 2004. Data are estimates for the whole population of Queensland.
- (f) WA: 2007-08 and 2008-09 data are based on a random telephone survey of 300 Perth residents and 100 country residents conducted by a market research organisation in April 2008.
- (g) ACT: Data for 2007-08 supplied by ABS Household Preparedness for Emergencies survey.
- (h) No data are available for SA and Tasmania. No survey has been carried out in the NT after 2005-06, in the ACT the only survey was undertaken in 2007-08.

*Source:* ABS (2001) *Population Survey Monitor*, Cat. no. 4103.0, Canberra; ABS (2008) *Household preparedness for emergencies*, Cat. no. 4818.0.55.001, Canberra; State and Territory governments (unpublished).

Table 9A.13

**Table 9A.13 Response times to structure fires, state-wide (minutes) (a)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i> (b)	<i>WA</i> (c)	<i>SA</i>	<i>Tas</i> (d)	<i>ACT</i>	<i>NT</i>
50th percentile								
2004-05	7.0	6.0	6.9	8.7	7.0	8.2	5.8	5.5
2005-06	7.1	6.4	6.8	9.0	7.0	8.1	5.5	4.4
2006-07	7.1	6.3	6.9	8.3	7.3	7.5	6.3	5.4
2007-08	8.0	6.2	6.8	8.6	6.6	8.0	6.0	6.5
2008-09	7.4	6.4	7.6	8.4	6.9	8.2	5.5	6.3
90th percentile								
2004-05	12.4	9.3	13.9	17.1	12.1	16.5	10.7	11.9
2005-06	12.5	9.6	13.0	16.2	13.0	16.9	9.4	16.2
2006-07	12.3	9.5	13.1	13.8	14.0	12.8	10.3	12.7
2007-08	14.0	9.5	12.8	14.7	13.0	15.2	10.1	13.5
2008-09	12.0	9.9	12.3	15.4	13.0	16.0	9.1	12.9

(a) Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats). Different methods of calculating percentiles may affect results. Data in this table are not directly comparable.

(b) Qld: Code 30 (respond to incident with no lights or sirens) incidents have been excluded from all response time calculations. In 2008-09 90 incidents were unable to be classified by remoteness and have been removed from calculation. Response times for QFRS Rural brigade crews are not included as response times are not accurately recorded. Only primary exposure incidents are included.

(c) WA: Data include both career and volunteer responses where the response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response times for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the state are affected by significant travel time to incidents.

(d) Tas: Due to industrial action 90 incident reports are incomplete in 2008-09.

Source: State and Territory governments (unpublished).

Table 9A.14

Table 9A.14 **Structure fires and response times to structure fires, by geographic areas (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic(c)</i>	<i>Qld(d)</i>	<i>WA(e)</i>	<i>SA(f)</i>	<i>Tas(g)</i>	<i>ACT(h)</i>	<i>NT(i)</i>
2004-05									
Structure fires									
Major cities	no.	4 203	4 199	1 100	937	932	..	279	..
Inner regional	no.	1 314	1 023	634	139	174	487	..	..
Outer regional	no.	892	258	382	98	206	230	..	78
Remote	no.	166	7	73	40	45	18	..	50
Very remote	no.	45	..	25	na	11	2	..	12
<b>All areas</b>	<b>no.</b>	<b>6 620</b>	<b>5 487</b>	<b>2 214</b>	<b>1 214</b>	<b>1 368</b>	<b>737</b>	<b>279</b>	<b>140</b>
50th percentile									
Major cities	minutes	6.0	5.9	6.3	8.0	7.0	..	5.8	..
Inner regional	minutes	8.6	7.0	7.2	13.0	9.0	7.5	..	..
Outer regional	minutes	9.0	7.0	8.1	10.0	9.0	10.6	..	5.0
Remote	minutes	7.8	na	9.6	12.0	8.0	15.8	..	5.0
Very remote	minutes	7.1	..	7.6	na	12.0	25.5	..	6.4
<b>All areas</b>	<b>minutes</b>	<b>7.0</b>	<b>6.0</b>	<b>6.9</b>	<b>8.7</b>	<b>7.0</b>	<b>8.2</b>	<b>5.8</b>	<b>5.5</b>
90th percentile									
Major cities	minutes	9.7	8.4	10.4	13.0	10.0	..	10.7	..
Inner regional	minutes	15.4	13.1	17.0	29.0	17.5	12.3	..	..
Outer regional	minutes	20.5	15.2	21.7	35.0	16.0	22.4	..	11.3
Remote	minutes	19.0	na	50.3	29.0	18.4	22.3	..	7.2
Very remote	minutes	10.8	..	30.2	na	37.0	28.0	..	17.1
<b>All areas</b>	<b>minutes</b>	<b>12.4</b>	<b>9.3</b>	<b>13.9</b>	<b>17.1</b>	<b>12.1</b>	<b>16.5</b>	<b>10.7</b>	<b>11.9</b>
2005-06									
Structure fires									
Major cities	no.	4 449	4 135	962	801	967	..	331	..
Inner regional	no.	1 472	901	482	128	185	434	..	..
Outer regional	no.	895	252	346	93	190	239	..	91
Remote	no.	182	4	62	27	28	20	..	39
Very remote	no.	54	..	19	21	12	1	..	14
<b>All areas</b>	<b>no.</b>	<b>7 052</b>	<b>5 292</b>	<b>1 871</b>	<b>1 070</b>	<b>1 382</b>	<b>694</b>	<b>331</b>	<b>144</b>
50th percentile									
Major cities	minutes	6.6	6.2	6.4	8.0	7.0	..	5.5	..
Inner regional	minutes	9.0	7.5	7.4	14.0	10.0	7.2	..	..
Outer regional	minutes	9.0	8.0	7.8	10.0	11.0	11.3	..	4.1
Remote	minutes	8.1	5.8	6.1	11.0	9.0	14.1	..	4.2
Very remote	minutes	9.0	..	6.4	11.0	9.5	35.4	..	7.0
<b>All areas</b>	<b>minutes</b>	<b>7.1</b>	<b>6.4</b>	<b>6.8</b>	<b>9.0</b>	<b>7.0</b>	<b>8.1</b>	<b>5.5</b>	<b>4.4</b>
90th percentile									
Major cities	minutes	10.4	8.6	9.9	12.0	10.0	..	9.4	..
Inner regional	minutes	15.5	14.0	16.5	28.0	17.0	11.2	..	..

Table 9A.14

Table 9A.14 **Structure fires and response times to structure fires, by geographic areas (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic(c)</i>	<i>Qld(d)</i>	<i>WA(e)</i>	<i>SA(f)</i>	<i>Tas(g)</i>	<i>ACT(h)</i>	<i>NT(i)</i>
Outer regional	minutes	0.0	15.0	20.8	27.0	18.0	22.7	..	13.4
Remote	minutes	15.5	19.3	33.4	22.0	20.0	37.5	..	10.5
Very remote	minutes	20.1	..	21.5	48.0	73.8	35.4	..	49.7
<b>All areas</b>	<b>minutes</b>	<b>12.5</b>	<b>9.6</b>	<b>13.0</b>	<b>16.2</b>	<b>13.0</b>	<b>16.9</b>	<b>9.4</b>	<b>16.2</b>
2006-07									
Structure fires									
Major cities	no.	4 294	4 491	1 209	1 007	905	..	278	..
Inner regional	no.	1 321	1 213	591	136	194	470	..	..
Outer regional	no.	849	329	415	95	201	218	..	96
Remote	no.	173	6	129	32	37	17	..	37
Very remote	no.	46	..	71	18	12	3	..	13
<b>All areas</b>	<b>no.</b>	<b>6 683</b>	<b>6 039</b>	<b>2 415</b>	<b>1 288</b>	<b>1 349</b>	<b>708</b>	<b>278</b>	<b>146</b>
50th percentile									
Major cities	minutes	6.6	6.1	6.4	8.0	7.0	..	6.3	..
Inner regional	minutes	9.0	7.0	7.6	11.2	10.0	7.5	..	..
Outer regional	minutes	9.0	7.0	7.5	10.5	10.0	10.9	..	5.6
Remote	minutes	8.0	19.8	8.8	11.9	12.0	10.4	..	5.4
Very remote	minutes	8.2	..	7.8	10.9	9.0	21.7	..	4.0
<b>All areas</b>	<b>minutes</b>	<b>7.1</b>	<b>6.3</b>	<b>6.9</b>	<b>8.3</b>	<b>7.3</b>	<b>7.5</b>	<b>6.3</b>	<b>5.4</b>
90th percentile									
Major cities	minutes	10.3	8.6	9.7	12.1	10.4	..	10.3	..
Inner regional	minutes	15.4	13.0	15.3	25.1	17.0	12.8	..	..
Outer regional	minutes	20.3	14.7	16.4	22.0	17.0	22.6	..	11.8
Remote	minutes	19.3	34.1	19.1	24.4	21.6	26.8	..	12.3
Very remote	minutes	13.1	..	16.0	32.9	150.1	33.9	..	20.2
<b>All areas</b>	<b>minutes</b>	<b>12.3</b>	<b>9.5</b>	<b>13.1</b>	<b>13.8</b>	<b>14.0</b>	<b>12.8</b>	<b>10.3</b>	<b>12.7</b>
2007-08									
Structure fires									
Major cities	no.	4 724	4 549	1 318	1 064	939	..	246	..
Inner regional	no.	1 510	1 172	732	157	169	408	..	..
Outer regional	no.	545	330	416	99	198	215	..	90
Remote	no.	78	np	85	42	37	16	..	55
Very remote	no.	5	..	22	18	10	-	..	25
<b>All areas</b>	<b>no.</b>	<b>6 862</b>	<b>6 051</b>	<b>2 573</b>	<b>1 380</b>	<b>1 353</b>	<b>639</b>	<b>246</b>	<b>170</b>
50th percentile									
Major cities	minutes	7.0	6.1	6.3	8.3	6.0	..	6.0	..
Inner regional	minutes	10.0	6.9	7.1	11.6	9.0	7.3	..	..
Outer regional	minutes	10.0	7.3	8.1	9.9	10.0	11.1	..	6.8
Remote	minutes	9.0	np	7.1	14.9	12.0	9.7	..	6.7
Very remote	minutes	7.0	..	8.1	13.6	21.0	na	..	5.0

Table 9A.14

Table 9A.14 **Structure fires and response times to structure fires, by geographic areas (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic(c)</i>	<i>Qld(d)</i>	<i>WA(e)</i>	<i>SA(f)</i>	<i>Tas(g)</i>	<i>ACT(h)</i>	<i>NT(i)</i>
<b>All areas</b>	<b>minutes</b>	<b>8.0</b>	<b>6.2</b>	<b>6.8</b>	<b>8.6</b>	<b>6.6</b>	<b>8.0</b>	<b>6.0</b>	<b>6.5</b>
90th percentile									
Major cities	minutes	11.0	8.6	10.4	11.8	9.0	..	10.1	..
Inner regional	minutes	20.0	12.6	14.7	23.1	15.0	11.1	..	..
Outer regional	minutes	27.0	15.9	19.0	22.7	17.0	21.2	..	13.7
Remote	minutes	16.5	np	17.2	28.2	23.4	21.6	..	14.3
Very remote	minutes	15.0	..	17.9	22.5	57.6	na	..	11.1
<b>All areas</b>	<b>minutes</b>	<b>14.0</b>	<b>9.5</b>	<b>12.8</b>	<b>14.7</b>	<b>13.0</b>	<b>15.2</b>	<b>10.1</b>	<b>13.5</b>
2008-09									
Structure fires									
Major cities	no.	4 637	3 927	1 263	1 061	965	..	263	..
Inner regional	no.	1 373	1 266	695	160	212	515	..	..
Outer regional	no.	500	325	430	113	161	269	..	107
Remote	no.	76	7	72	47	45	19	..	52
Very remote	no.	3	..	21	29	11	3	..	13
<b>All areas</b>	<b>no.</b>	<b>6 589</b>	<b>5 525</b>	<b>2 481</b>	<b>1 410</b>	<b>1 394</b>	<b>806</b>	<b>263</b>	<b>172</b>
50th percentile									
Major cities	minutes	7.1	6.3	7.2	8.0	6.2	..	5.5	..
Inner regional	minutes	9.3	6.8	7.6	12.8	9.0	7.5	..	..
Outer regional	minutes	9.4	7.2	9.4	10.3	10.0	11.0	..	6.7
Remote	minutes	8.1	11.8	7.8	14.7	12.0	15.5	..	5.6
Very remote	minutes	5.0	..	12.6	9.8	14.0	6.4	..	5.7
<b>All areas</b>	<b>minutes</b>	<b>7.4</b>	<b>6.4</b>	<b>7.6</b>	<b>8.4</b>	<b>6.9</b>	<b>8.2</b>	<b>5.5</b>	<b>6.3</b>
90th percentile									
Major cities	minutes	10.6	8.8	11.3	11.6	9.7	..	9.1	..
Inner regional	minutes	14.4	13.2	12.3	23.7	15.0	11.6	..	..
Outer regional	minutes	15.3	15.6	22.0	21.5	17.0	22.8	..	13.8
Remote	minutes	11.4	21.9	28.5	33.7	18.0	38.7	..	11.9
Very remote	minutes	9.0	..	24.0	23.2	28.0	7.3	..	9.1
<b>All areas</b>	<b>minutes</b>	<b>12.0</b>	<b>9.9</b>	<b>12.3</b>	<b>15.4</b>	<b>13.0</b>	<b>16.0</b>	<b>9.1</b>	<b>12.9</b>

(a) Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats). Different methods of calculating percentiles may affect results. Data in this table are not directly comparable.

(b) Data may differ from those in table 9A.2 because data with incomplete time details are excluded from percentile calculations.

(c) Vic: There are no very remote areas in Victoria. For 2007-08 remote structure fires are rolled into the outer regional classification due to the low numbers of events. For 2004-05 percentile data are not available for remote areas.

**Table 9A.14 Structure fires and response times to structure fires, by geographic areas (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic(c)</i>	<i>Qld(d)</i>	<i>WA(e)</i>	<i>SA(f)</i>	<i>Tas(g)</i>	<i>ACT(h)</i>	<i>NT(i)</i>
(d)	Qld: Code 30 (respond to incident with no lights or sirens) incidents have been excluded from all response time calculations. In 2008-09 90 incidents were unable to be classified by remoteness and have been removed from calculation. Response times for QFRS Rural brigade crews are not included as response times are not accurately recorded. Only primary exposure incidents are included.								
(e)	WA: Data include both career and volunteer responses where the response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response times for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the state are affected by significant travel time to incidents.								
(f)	SA: The Country Fire Service and the Metropolitan Fire Service do not have geocoded data. SA data include incident records with both alarm and arrival times. Excludes response times of 12 hours or more. The high 90th percentile results for the 'very remote' category are due to the small number of reported fires, with some fires having response time of 1 to 3 hours.								
(g)	Tas: Due to industrial action 90 incident reports are incomplete in 2008-09.								
(h)	ACT: All responses were within the major city.								
(i)	NT: NT Fire and Rescue Services respond to structure fires outside gazetted Emergency Response Areas in the NT when required impacting on some response times.								
	<b>na</b> Not available. <b>np</b> Not published. <b>..</b> Not applicable.								

*Source:* State and Territory governments (unpublished).

Table 9A.15

**Table 9A.15 Structure fires contained to the object or room of origin (per cent)**

	NSW(a)	Vic(b)	Qld(c)	WA(d)	SA(e)	Tas(f)	ACT	NT	Aust(g)
All ignition types									
2004-05	70.7	76.5	66.9	69.3	64.0	64.7	78.0	59.0	72.6
2005-06	69.2	74.3	65.2	66.4	64.7	64.5	82.0	65.4	69.7
2006-07	69.4	73.9	66.6	65.5	65.1	64.5	83.6	68.3	70.4
2007-08	65.7	73.7	68.1	64.6	72.8	60.4	81.6	67.4	69.6
2008-09	66.9	75.9	67.2	70.1	69.7	62.8	80.2	73.4	70.2
Incendiary and suspicious structure fires									
2004-05	56.8	55.8	61.4	55.2	70.4	58.3	54.5	27.3	56.6
2005-06	57.5	59.7	54.4	55.2	71.4	53.1	60.0	100.0	57.4
2006-07	55.7	60.9	61.5	51.6	64.4	52.1	71.7	60.0	58.2
2007-08	65.4	57.8	60.4	53.9	59.4	50.0	70.0	55.6	57.5
2008-09	50.8	62.2	60.4	56.4	65.2	47.2	74.5	61.5	56.9
Accidental structure fires									
2004-05	82.8	84.4	80.0	79.1	64.0	73.4	77.2	86.7	82.1
2005-06	80.9	82.8	80.1	77.4	64.3	74.6	84.5	56.3	80.8
2006-07	80.7	82.1	80.6	72.7	79.0	74.7	91.5	70.4	80.7
2007-08	77.5	81.7	80.4	73.0	83.7	70.5	89.7	79.5	79.6
2008-09	78.9	83.6	77.8	79.4	79.9	73.8	86.2	74.2	80.4

(a) NSW: The decline in the percentage of structure fires confined to the object or room of origin between 2006-07 and 2007-08 is artificial. The data for 2007-08 for the first time conform to the nationally agreed definition for this measure by including data from both the NSW Rural Fire Service and the NSW Fire Brigade.

(b) Vic: Data are incomplete for 2005-06.

(c) Qld: QFRS Rural Incidents Database does not currently record the necessary information to calculate this measure.

(d) WA: Incidents where containment codes are not completed, and where the fire only affects the outside of a structure are excluded from containment calculations.

(e) SA: Data exclude the Country Fire Service.

(f) Tas: Data are for *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

(g) Average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished).

Table 9A.16

## Table 9A.16 Fire service organisations' costs (\$'000) (2008-09 dollars) (a)

	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2004-05									
Labour costs									
Salaries and payments in the nature of salaries	464 407	292 220	214 851	77 522	85 281	32 542	37 004	20 742	1 224 569
Payroll tax	23 532	15 056	9 703	na	4 119	1 750	na	1 150	55 311
Capital costs (f)									
Depreciation	37 703	44 319	27 846	7 065	21 166	4 776	1 974	1 760	146 608
User cost of capital									
Land	11 307	14 197	6 670	2 645	2 433	641	794	437	39 124
Other assets	29 894	55 791	25 962	7 018	21 231	6 175	3 745	1 690	151 506
Other costs (g)	192 782	145 657	93 938	44 112	50 410	14 630	13 710	7 441	562 680
Interest on borrowings	547	–	911	3 035	–	349	–	–	4 841
<b>Total costs (h)</b>	<b>724 787</b>	<b>537 986</b>	<b>362 597</b>	<b>135 716</b>	<b>178 088</b>	<b>58 124</b>	<b>56 432</b>	<b>31 633</b>	<b>2 085 363</b>
2005-06									
Labour costs									
Salaries and payments in the nature of salaries	486 767	312 676	217 495	82 990	77 371	32 599	34 853	21 557	1 266 308
Payroll tax	24 884	16 021	9 646	na	4 214	1 947	na	1 187	57 899
Capital costs (f)									
Depreciation	36 746	42 881	26 793	8 433	19 705	5 022	1 363	1 851	142 793
User cost of capital									
Land	10 517	15 195	6 864	2 504	3 510	735	750	351	40 425
Other assets	29 492	59 635	28 175	11 261	21 675	6 131	3 463	1 660	161 493
Other costs (g)	213 356	166 124	105 552	48 169	40 412	13 509	20 522	7 834	615 478
Interest on borrowings	767	–	1 009	2 790	–	381	–	–	4 947
<b>Total costs (h)</b>	<b>766 361</b>	<b>581 316</b>	<b>378 015</b>	<b>150 853</b>	<b>159 163</b>	<b>57 261</b>	<b>60 201</b>	<b>32 902</b>	<b>2 186 071</b>

REPORT ON  
GOVERNMENT  
SERVICES 2010

EMERGENCY  
MANAGEMENT



Table 9A.16

## Table 9A.16 Fire service organisations' costs (\$'000) (2008-09 dollars) (a)

	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2006-07									
Labour costs									
Salaries and payments in the nature of salaries	481 036	398 022	222 974	113 876	83 600	34 648	36 323	22 682	1 393 161
Payroll tax	25 287	20 188	9 781	na	4 379	1 882	na	1 241	62 758
Capital costs (f)									
Depreciation	36 261	43 411	30 046	9 626	17 649	5 079	1 102	1 661	144 836
User cost of capital									
Land	10 039	17 119	10 166	3 949	2 444	720	716	374	45 527
Other assets	29 285	64 539	28 464	12 271	22 958	5 990	3 076	1 533	168 116
Other costs (g)	282 388	423 817	108 678	104 714	45 114	18 255	26 998	8 271	1 018 235
Interest on borrowings	286	–	982	4 634	–	434	–	–	6 337
<b>Total costs (h)</b>	<b>828 971</b>	<b>929 789</b>	<b>390 161</b>	<b>240 487</b>	<b>169 321</b>	<b>63 973</b>	<b>67 499</b>	<b>34 147</b>	<b>2 724 347</b>
2007-08									
Labour costs									
Salaries and payments in the nature of salaries	496 497	288 759	228 678	112 036	84 767	33 943	34 471	19 395	1 298 545
Payroll tax	25 864	12 123	10 180	na	4 162	2 048	na	–	54 377
Capital costs (f)									
Depreciation	34 521	46 807	28 528	10 008	15 476	5 045	1 412	1 747	143 544
User cost of capital									
Land	9 580	19 471	5 647	5 647	2 371	985	1 019	358	39 431
Other assets	28 318	66 501	29 662	13 623	22 394	5 844	2 363	1 928	170 633
Other costs (g)	235 231	455 097	112 347	104 965	43 425	14 712	16 499	9 609	991 886
Interest on borrowings	251	–	285	2 376	–	416	–	–	3 328
<b>Total costs (h)</b>	<b>794 567</b>	<b>857 163</b>	<b>399 214</b>	<b>240 632</b>	<b>166 062</b>	<b>59 545</b>	<b>54 744</b>	<b>32 680</b>	<b>2 604 607</b>

REPORT ON  
GOVERNMENT  
SERVICES 2010

EMERGENCY  
MANAGEMENT

Table 9A.16

Table 9A.16 Fire service organisations' costs (\$'000) (2008-09 dollars) (a)

	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
2008-09									
Labour costs									
Salaries and payments in the nature of salaries	500 596	409 599	245 570	119 710	89 324	34 516	41 325	23 532	1 464 172
Payroll tax	25 327	18 878	11 064	na	4 195	2 068	na	1 228	62 760
Capital costs (f)									
Depreciation	34 285	53 272	31 415	8 823	17 085	4 591	4 259	1 699	155 429
User cost of capital									
Land	10 634	18 574	11 935	5 602	2 257	1 068	1 010	341	51 419
Other assets	30 328	116 901	28 598	13 537	24 990	5 806	2 131	1 954	224 245
Other costs (g)	243 854	609 400	104 974	92 892	43 270	16 266	13 961	9 836	1 134 453
Interest on borrowings	252	43	256	2 980	—	337	—	—	3 868
<b>Total costs (h)</b>	<b>809 063</b>	<b>1 189 172</b>	<b>410 556</b>	<b>234 962</b>	<b>174 669</b>	<b>61 179</b>	<b>61 676</b>	<b>37 021</b>	<b>2 978 298</b>

(a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding.

(b) NSW: Figures vary from year to year as a result of abnormal expenditure related to response to specific major emergencies.

(c) Vic: 2004-05 user cost of capital included June 2005 revaluations of \$34 million. Training costs for CFA do not represent the total training costs. Personnel and other costs associated with this item are included under other costs headings. 2006-07 is the first year in which the Victorian data includes costs for the Department of Sustainability and Environment (DSE), explaining the increase in the 'other costs' for that year. In 2008-09 capital cost increase largely due to DSE reclassification of fire tracks. 2008-09 data include a significant increase in costs due to emergency funding arising from the Black Saturday Bushfires.

(d) WA: FESA provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years cannot be segregated by service and include costs related to delivery of other emergency services including SES and volunteer marine rescue. Data for the Department of Environment and Conservation are not included.

(e) ACT: The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. In 2006-07 funding is included under 'miscellaneous revenue' for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

Table 9A.16

## Table 9A.16 Fire service organisations' costs (\$'000) (2008-09 dollars) (a)

	NSW (b)	Vic (c)	Qld	WA (d)	SA	Tas	ACT (e)	NT	Total
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(f) The user cost of capital is partly dependent on depreciation and asset revaluation methods employed. Details of the treatment of assets by emergency management agencies across jurisdictions are outlined in table 9A.37.

(g) Includes the running, training, maintenance, communications, provisions for losses and other recurrent costs.

(h) Total costs excludes payroll tax, the user cost of capital associated with land, and interest on borrowings.

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished). ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID: A2304682C) (table AA.26).

Table 9A.17

**Table 9A.17 Fire service organisations' expenditure per person (2008-09 dollars)  
(a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic (c)</i>	<i>Qld</i>	<i>WA (d)</i>	<i>SA</i>	<i>Tas</i>	<i>ACT (e)</i>	<i>NT</i>	<i>Aust</i>
2004-05										
Total	\$m	724.8	538.0	362.6	135.7	178.1	58.1	56.4	31.6	2 085.4
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	107.71	107.30	91.89	67.90	115.23	119.93	171.97	155.23	102.97
2005-06										
Total	\$m	766.4	581.3	378.0	150.9	159.2	57.3	60.2	32.9	2 186.1
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	112.93	114.31	93.48	74.05	102.07	117.22	181.12	157.87	106.41
2006-07										
Total	\$m	829.0	929.8	390.2	240.5	169.3	64.0	67.5	34.1	2 724.3
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	120.93	180.00	94.42	115.57	107.46	130.11	200.62	160.65	130.65
2007-08										
Total	\$m	794.6	857.2	399.2	240.6	166.1	59.5	54.7	32.7	2 604.6
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	114.71	163.39	94.42	112.93	104.32	120.11	160.63	150.21	122.97
2008-09										
Total	\$m	809.1	1 189.2	410.6	235.0	174.7	61.2	61.7	37.0	2 978.3
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	114.90	221.66	94.39	106.61	108.36	122.29	177.31	167.00	137.60

- (a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding. Data exclude the user cost of capital associated with land, interest on borrowings and payroll tax. Total fire expenditure includes levies on insurance companies and property owners, user charges, fundraising and donations and indirect revenue.
- (b) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).
- (c) Vic: 2006-07 was the first year in which Victorian data included expenditure for the Department of Sustainability and Environment (DSE) and explains the marked increase for that year. 2008-09 data include a significant increase in expenditure due to emergency funding arising from the Black Saturday Bushfires.
- (d) WA: FESA provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years cannot be segregated by service and include SES and volunteer marine services as well as fire. Data for the Department of Environment and Conservation are not included.
- (e) ACT: The increase in 2005-06 was due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. In 2006-07 expenditure included the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

**Table 9A.17 Fire service organisations' expenditure per person (2008-09 dollars)  
(a), (b)**

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*Source:* State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

Table 9A.18

Table 9A.18 **Fire service organisations' funding per person (2008-09 dollars) (a), (b)**

		<i>Unit</i>	<i>NSW (c)</i>	<i>Vic (d)</i>	<i>Qld</i>	<i>WA (e)</i>	<i>SA</i>	<i>Tas</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
<b>Total government grants</b>											
2004-05											
Total	\$m		181.4	125.3	60.0	18.4	0.1	6.9	41.1	20.3	453.6
Population	m		6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$		26.96	24.99	15.19	9.21	0.09	14.32	125.27	99.83	22.40
2005-06											
Total	\$m		175.3	130.2	62.9	30.0	1.7	4.4	47.2	20.8	472.5
Population	m		6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$		25.83	25.60	15.55	14.72	1.07	9.11	141.86	99.97	23.00
2006-07											
Total	\$m		251.0	463.5	68.5	71.9	1.0	8.1	39.2	21.1	924.3
Population	m		6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$		36.61	89.73	16.57	34.55	0.64	16.57	116.41	99.33	44.32
2007-08											
Total	\$m		174.5	302.7	73.4	60.7	5.2	7.2	40.9	17.8	682.3
Population	m		6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$		25.20	57.70	17.35	28.48	3.25	14.53	120.02	81.60	32.22
2008-09											
Total	\$m		221.2	695.9	78.7	50.5	3.7	5.4	40.4	21.8	1 117.6
Population	m		7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$		31.42	129.72	18.10	22.91	2.31	10.78	116.01	98.22	51.63
<b>Total levies</b>											
2004-05											
Total	\$m		521.4	395.6	270.3	115.4	152.6	42.6	–	–	1 497.8
Population	m		6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$		77.49	78.89	68.50	57.73	98.74	87.89	–	–	73.96
2005-06											
Total	\$m		542.9	404.8	274.1	120.5	152.9	41.8	–	–	1 536.9
Population	m		6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$		79.99	79.61	67.77	59.17	98.03	85.48	–	–	74.81
2006-07											
Total	\$m		549.4	413.7	276.2	160.2	152.5	41.2	–	–	1 593.1
Population	m		6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$		80.15	80.08	66.85	76.98	96.77	83.76	–	–	76.40
2007-08											
Total	\$m		574.7	431.9	274.5	169.1	159.9	44.0	–	–	1 654.0
Population	m		6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$		82.96	82.32	64.91	79.34	100.45	88.72	–	–	78.09

Table 9A.18

Table 9A.18 **Fire service organisations' funding per person (2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW (c)</i>	<i>Vic (d)</i>	<i>Qld</i>	<i>WA (e)</i>	<i>SA</i>	<i>Tas</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
<b>2008-09</b>										
Total	\$m	615.2	445.3	282.8	168.9	161.4	44.0	–	–	1 717.6
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	87.37	83.01	65.02	76.62	100.14	87.97	–	–	79.36
<b>User charges</b>										
<b>2004-05</b>										
Total	\$m	23.9	17.9	18.6	2.5	3.4	7.7	8.2	1.9	84.1
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	3.56	3.57	4.71	1.25	2.19	15.94	24.85	9.44	4.15
<b>2005-06</b>										
Total	\$m	14.3	21.1	20.7	2.6	2.5	7.0	9.5	2.2	80.0
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	2.11	4.15	5.13	1.30	1.58	14.37	28.66	10.44	3.89
<b>2006-07</b>										
Total	\$m	14.1	23.8	26.0	4.3	3.7	7.3	9.5	2.2	90.8
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	2.06	4.60	6.30	2.06	2.37	14.77	28.11	10.26	4.36
<b>2007-08</b>										
Total	\$m	13.8	32.9	27.8	4.5	5.5	7.1	8.8	2.1	102.6
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	1.99	6.27	6.58	2.13	3.43	14.34	25.96	9.52	4.84
<b>2008-09</b>										
Total	\$m	14.2	34.7	32.5	3.7	4.6	8.6	8.4	2.2	109.0
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	2.02	6.47	7.48	1.70	2.88	17.17	24.03	9.94	5.04
<b>Miscellaneous revenue</b>										
<b>2004-05</b>										
Total	\$m	20.9	28.4	7.3	2.3	3.6	2.2	0.2	0.4	65.3
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	3.10	5.67	1.84	1.14	2.31	4.60	0.67	2.07	3.22
<b>2005-06</b>										
Total	\$m	31.6	38.2	7.0	2.4	4.5	1.3	0.1	0.9	86.0
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	4.66	7.50	1.74	1.16	2.91	2.58	0.17	4.34	4.19
<b>2006-07</b>										
Total	\$m	34.8	74.8	6.3	13.5	3.5	2.0	6.5	0.9	142.3
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	5.08	14.49	1.53	6.46	2.23	4.01	19.19	4.13	6.82

Table 9A.18

Table 9A.18 **Fire service organisations' funding per person (2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW (c)</i>	<i>Vic (d)</i>	<i>Qld</i>	<i>WA (e)</i>	<i>SA</i>	<i>Tas</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
<b>2007-08</b>										
Total	\$m	42.8	30.1	4.4	9.7	3.6	1.6	1.2	0.3	93.8
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	6.19	5.74	1.04	4.56	2.27	3.14	3.57	1.56	4.43
<b>2008-09</b>										
Total	\$m	40.5	16.0	6.6	8.6	4.7	2.3	0.9	0.0	79.6
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	5.75	2.98	1.52	3.92	2.89	4.55	2.59	0.07	3.68
<b>Indirect government funding</b>										
<b>2004-05</b>										
Total	\$m	–	–	–	–	–	–	2.8	–	2.8
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	–	–	–	–	–	–	8.41	–	0.14
<b>2005-06</b>										
Total	\$m	–	–	–	–	–	–	2.5	–	2.5
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	–	–	–	–	–	–	7.50	–	0.12
<b>2006-07</b>										
Total	\$m	–	–	–	–	–	–	2.4	–	2.4
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	–	–	–	–	–	–	7.07	–	0.11
<b>2007-08</b>										
Total	\$m	–	–	–	–	–	–	–	–	–
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	–	–	–	–	–	–	–	–	–
<b>2008-09</b>										
Total	\$m	–	11.1	–	–	–	–	0.9	–	12.0
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	–	2.06	–	–	–	–	2.72	–	0.55

(a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding.

(b) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(c) NSW: Figures vary from year to year as a result of abnormal grants for specific major emergencies.

(d) Vic: 2006-07 was the first year in which the Victorian data included revenue for the Department of Sustainability and Environment (DSE) and explains the marked increase for that year. 2008-09 data include a significant increase in government grants due to emergency funding arising from the Black Saturday Bushfires.



**Table 9A.18 Fire service organisations' funding per person (2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW (c)</i>	<i>Vic (d)</i>	<i>Qld</i>	<i>WA (e)</i>	<i>SA</i>	<i>Tas</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
(e)	WA: FESA provides a wide range of emergency services under an integrated management structure. A property-based Emergency Services Levy (ESL) was introduced in WA on 1 July 2003; insurance levies ended on 31 December 2003. The first full year of ESL funding was 2004-05. The ESL provides for delivery of all emergency services except for volunteer marine rescue. Data for 2006-07 and subsequent years cannot be segregated by service and includes SES and volunteer marine services as well as fire.									
(f)	ACT: The increase in 2005-06 was due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs. In 2006-07 funding was included under 'miscellaneous revenue' for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.									
	– Nil or rounded to zero.									
<i>Source:</i>	State and Territory governments (unpublished); ABS (2009) <i>Australian Demographic Statistics</i> , Cat. no. 3101.0 (table AA.2); ABS (2009) <i>Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009</i> , Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).									

# All jurisdictions — road crash rescue events

Table 9A.19

**Table 9A.19 Reported road crash rescue incidents (number)**

	<i>NSW</i>	<i>Vic (a)</i>	<i>Qld (b)</i>	<i>WA (c)</i>	<i>SA (d)</i>	<i>Tas (e)</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
Total incidents									
2004-05	6 512	2 317	5 360	863	2 619	545	597	73	18 886
2005-06	6 358	2 151	6 814	500	2 379	520	903	446	20 071
2006-07	7 002	2 258	7 809	1 129	1 997	475	954	437	22 061
2007-08	6 166	2 200	8 192	1 218	3 592	460	489	408	22 725
2008-09	6 163	2 166	8 436	1 360	5 799	476	451	430	25 281
Incidents per 100 000 people (g)									
2004-05	96.8	46.2	135.8	43.2	169.5	112.5	181.9	35.8	93.3
2005-06	93.7	42.3	168.5	24.5	152.6	106.4	271.7	214.0	97.7
2006-07	102.1	43.7	189.0	54.3	126.7	96.6	283.6	205.6	105.8
2007-08	89.0	41.9	193.7	57.2	225.6	92.8	143.5	187.5	107.3
2008-09	87.5	40.4	194.0	61.7	359.7	95.1	129.7	194.0	116.8

(a) Vic: Due to data collection issues, data are incomplete for 2005-06.

(b) Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure.

(c) WA: Data includes responses by career and volunteer fire services and SES volunteers.

(d) SA: SASES reported taskings until 2005-06, not being able to distinguish incidents.

(e) Tas: Data include responses by fire services, ambulance services and SES.

(f) ACT: Data analysis has been refined in 2007-08 to better reflect road crash rescue incidents.

(g) Historical rates in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

Source: State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (Table AA.2).

Table 9A.20

**Table 9A.20 Reported road crash rescue extrications (number)**

	<i>NSW</i>	<i>Vic (a)</i>	<i>Qld (b)</i>	<i>WA (c)</i>	<i>SA (d)</i>	<i>Tas (e)</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
Total extrications									
2004-05	4 657	1 002	717	802	na	117	104	68	7 467
2005-06	4 073	1 831	1 829	347	666	389	485	294	9 914
2006-07	4 453	1 751	2 104	531	524	117	487	269	10 236
2007-08	4 180	1 704	2 183	536	533	146	108	108	9 498
2008-09	4 481	1 672	2 382	541	549	129	80	300	10 134
Extrications per 100 000 people (g)									
2004-05	69.2	20.0	18.2	40.1	na	24.1	31.7	33.4	36.9
2005-06	60.0	36.0	45.2	17.0	42.7	79.6	145.9	141.1	48.3
2006-07	65.0	33.9	50.9	25.5	33.3	23.8	144.7	126.6	49.1
2007-08	60.3	32.5	51.6	25.2	33.5	29.4	31.7	49.6	44.8
2008-09	63.6	31.2	54.8	24.5	34.1	25.8	23.0	135.3	46.8
Extrications per 100 000 registered vehicles (h)									
2004-05	114.7	28.3	26.9	54.5	na	33.3	48.2	63.8	55.3
2005-06	95.4	48.9	63.1	21.7	58.5	103.8	216.4	257.9	69.0
2006-07	102.1	45.9	69.4	31.7	45.3	31.2	207.6	227.0	69.3
2007-08	92.5	44.6	68.8	30.7	45.2	37.3	44.7	87.8	62.1
2008-09	98.1	41.7	72.6	29.6	45.4	32.2	32.4	233.0	64.7
Extrications per million vehicle kilometres travelled (i)									
2004-05	79.1	19.1	17.2	37.6	na	25.7	32.2	42.7	37.5
2005-06	63.9	35.2	41.1	16.0	45.8	73.4	156.3	183.4	48.0
2006-07	72.5	32.0	46.3	23.5	33.7	23.1	161.6	163.3	48.9
2007-08	66.6	29.4	47.4	22.1	37.5	29.2	34.2	60.5	44.1
2008-09	68.1	29.4	49.5	21.2	33.9	24.1	24.4	160.3	45.5

(a) Vic: Due to data collection issues, data are incomplete for 2005-06.

(b) Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure.

(c) WA: Data includes extrications performed by career and volunteer fire services and State Emergency Services volunteers.

(d) SA: SASSES extrications are not available for 2004-05.

(e) Tas: Data include responses by fire services, ambulance services and SES.

(f) ACT: Data analysis has been refined to better reflect road crash rescue extrications.

(g) Historical rates in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(h) Registered vehicle numbers: for 2004-05 are from the ABS *Survey of Motor Vehicle Use* (ABS 2008); for all other years data are from the ABS *Motor Vehicle Census* (ABS 2009 and various years). ABS revisions to census and survey data means that the rates shown here may differ from those in previous reports.

(i) Kilometers travelled: for 2008-09 are from ABS *Experimental estimates of motor vehicle use* (ABS 2009); For prior years, data are from the ABS *Survey of Motor Vehicle Use* (ABS 2007). ABS revisions to survey data means that the rates shown here may differ from those in previous reports.

Table 9A.20 **Reported road crash rescue extractions (number)**

	<i>NSW</i>	<i>Vic (a)</i>	<i>Qld (b)</i>	<i>WA (c)</i>	<i>SA (d)</i>	<i>Tas (e)</i>	<i>ACT (f)</i>	<i>NT</i>	<i>Aust</i>
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na Not available.

Source: ABS (2009 and various years) *Motor Vehicle Census*, Cat. No. 9309.0, Canberra; ABS (2008) *Survey of Motor Vehicle Use*, Cat. No. 9208.0, Canberra; ABS (2009) *Experimental estimates of motor vehicle use*, Cat. No. 9222.0, Canberra; ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); State and Territory governments (unpublished).

# All jurisdictions — State Emergency Services/Territory Emergency Services

Table 9A.21

Table 9A.21 **S/TES volunteer human resources (number)**

	NSW (a)	Vic	Qld (b)	WA (c)	SA (d)	Tas	ACT	NT (e)	Aust
2004-05									
Operational	na	na	na	2 015	1 998	575	194	495	na
Non-operational	na	na	na	na	na	na	50	na	na
<b>Total</b>	<b>9 835</b>	<b>4 350</b>	<b>12 456</b>	<b>2 015</b>	<b>1 998</b>	<b>575</b>	<b>244</b>	<b>495</b>	<b>31 968</b>
2005-06									
Operational	10 302	na	9 394	1 863	1 896	577	168	392	na
Non-operational	na	na	na	na	na	na	na	na	na
<b>Total</b>	<b>10 302</b>	<b>4 437</b>	<b>9 394</b>	<b>1 863</b>	<b>1 896</b>	<b>577</b>	<b>168</b>	<b>392</b>	<b>29 029</b>
2006-07									
Operational	10 331	3 101	7 000	1 854	1 821	525	191	347	25 170
Non-operational	na	1 310	na	na	na	na	na	na	na
<b>Total</b>	<b>10 331</b>	<b>4 411</b>	<b>7 000</b>	<b>1 854</b>	<b>1 821</b>	<b>525</b>	<b>191</b>	<b>347</b>	<b>26 480</b>
2007-08									
Operational	10 114	3 691	6 430	1 827	1 828	530	205	293	24 918
Non-operational	na	1 142	na	na	na	30	na	na	na
<b>Total</b>	<b>10 114</b>	<b>4 833</b>	<b>6 430</b>	<b>1 827</b>	<b>1 828</b>	<b>560</b>	<b>205</b>	<b>293</b>	<b>26 090</b>
2008-09									
Operational	10 954	3 691	6 300	1 442	1 613	552	247	299	25 098
Non-operational	na	1 809	na	12	na	32	na	na	na
<b>Total</b>	<b>10 954</b>	<b>5 500</b>	<b>6 300</b>	<b>1 454</b>	<b>1 613</b>	<b>584</b>	<b>247</b>	<b>299</b>	<b>26 951</b>

(a) NSW: in 2008-09 there are 10 954 operational volunteers comprised of 9850 active members and 1104 reserve members.

(b) Qld: The decrease in numbers is the result of an audit of volunteer records that identified and removed records of volunteers who have left, and in 2008-09 Queensland reported active volunteers only.

(c) WA: 2008-09 data exclude 504 volunteer emergency service members who may also undertake an SES role. The removal of duplicate records is a contributing factor to the reduction in volunteer numbers in 2008-09.

(d) SA: Data refer to active, operational members.

(e) NT: Transient people in the NT result in fluctuations in the numbers of volunteers.

na Not available.

Source: State and Territory governments (unpublished).

# All jurisdictions — ambulance events



Table 9A.22

Table 9A.22 Major sources of ambulance service organisations revenue (2008-09 dollars) (a)

		<i>Unit</i>	<i>NSW(b)</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA(c)</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
2004-05											
Government grants											
Australian	%	–	1.8	–	–	0.3	–	–	–	–	0.5
State/Territory	%	77.8	57.9	78.5	20.8	46.6	83.9	90.3	61.1	65.7	
Local	%	–	–	–	–	–	–	–	–	–	–
Subscription fees	%	–	17.3	–	2.2	14.6	–	–	2.4	6.3	
Transport fees											
Interhospital	%	11.7	3.9	7.2	4.0	8.7	–	7.7	–	7.2	
Uninsured citizens	%	3.6	7.7	1.8	45.2	16.2	1.5	–	7.4	8.3	
Workers' compensation	%	na	1.2	0.7	–	0.3	1.0	–	0.3	0.5	
Motor accident insurance	%	3.5	4.5	2.7	3.4	5.8	7.3	–	2.5	3.8	
Veterans' Affairs	%	0.5	–	4.4	3.5	2.8	4.8	0.7	0.5	1.7	
Other	%	–	0.6	0.5	–	–	0.6	0.7	0.6	0.3	
Donations	%	–	0.2	0.1	0.8	0.2	–	–	0.2	0.2	
Miscellaneous	%	2.8	3.5	4.0	20.2	4.6	0.9	0.6	25.0	4.8	
Indirect govt revenue		–	1.5	–	–	–	–	–	–	–	0.4
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	%	77.8	59.6	78.6	20.8	46.8	83.9	90.3	61.1	66.3	
Indirect govt revenue	%	–	1.5	–	–	–	–	–	–	–	0.4
Other revenue (d)	%	2.9	20.9	4.1	23.2	19.3	0.9	0.6	27.6	11.3	
Transport fees	%	19.3	17.9	17.3	56.0	33.9	15.2	9.1	11.3	22.0	
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	\$m	353.0	268.2	282.1	23.2	59.9	23.9	17.4	11.0	1 038.9	
Indirect govt revenue	\$m	–	6.9	–	–	–	–	–	–	6.9	
Other revenue (d)	\$m	13.0	94.2	14.8	25.8	24.8	0.2	0.1	5.0	177.9	
Transport fees	\$m	87.6	80.4	62.3	62.4	43.4	4.3	1.8	2.0	344.1	
<b>Total</b>	<b>\$m</b>	<b>453.6</b>	<b>449.7</b>	<b>359.1</b>	<b>111.5</b>	<b>128.0</b>	<b>28.5</b>	<b>19.3</b>	<b>18.1</b>	<b>1 567.9</b>	
2005-06											
Government grants											
Australian	%	–	1.6	–	–	0.2	0.2	–	–	–	0.5
State/Territory	%	75.1	58.0	78.0	34.4	46.1	87.5	94.3	63.5	66.2	
Local	%	–	–	–	–	–	–	–	–	–	–
Subscription fees	%	–	17.5	–	1.9	14.4	–	–	2.4	6.3	
Transport fees											
Interhospital	%	12.0	4.2	7.8	4.2	8.4	–	1.8	–	7.4	
Uninsured citizens	%	5.3	8.3	1.9	29.3	18.9	1.3	–	6.7	8.0	
Workers' compensation	%	na	1.1	0.8	–	0.3	0.9	–	0.3	0.5	
Motor accident insurance	%	3.6	4.3	2.6	3.4	4.7	4.8	–	2.2	3.6	

Table 9A.22

Table 9A.22 Major sources of ambulance service organisations revenue (2008-09 dollars) (a)

	<i>Unit</i>	<i>NSW(b)</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA(c)</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Veterans' Affairs	%	0.5	–	4.1	3.8	2.7	3.0	0.6	0.5	1.6
Other	%	–	0.6	0.5	–	–	0.6	2.8	0.6	0.3
Donations	%	0.2	0.2	–	0.8	0.1	–	–	–	0.2
Miscellaneous	%	3.4	3.0	4.2	22.2	4.0	1.7	0.5	23.8	5.0
Indirect govt revenue	%	–	1.2	–	–	–	–	–	–	0.3
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	%	75.1	59.6	78.0	34.4	46.3	87.7	94.3	63.5	66.7
Indirect govt revenue	%	–	1.2	–	–	–	–	–	–	0.3
Other revenue (d)	%	3.6	20.7	4.3	25.0	18.6	1.7	0.6	26.3	11.5
Transport fees	%	21.3	18.5	17.7	40.7	35.1	10.6	5.1	10.2	21.5
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	\$m	367.0	285.3	293.9	38.9	59.4	27.1	21.2	11.6	1 104.5
Indirect govt revenue	\$m	–	5.8	–	–	–	–	–	–	5.8
Other revenue (d)	\$m	17.5	98.8	16.2	28.3	23.9	0.5	0.1	4.8	190.1
Transport fees	\$m	104.0	88.6	66.6	46.1	45.0	3.3	1.2	1.9	356.6
<b>Total</b>	<b>\$m</b>	<b>488.6</b>	<b>478.5</b>	<b>376.7</b>	<b>113.3</b>	<b>128.3</b>	<b>30.9</b>	<b>22.5</b>	<b>18.2</b>	<b>1 657.0</b>
2006-07										
Government grants										
Australian	%	–	1.5	–	–	0.2	0.9	–	–	0.5
State/Territory	%	72.5	55.8	78.5	32.4	45.4	87.2	78.2	65.5	64.7
Local	%	–	–	–	–	–	na	–	–	–
Subscription fees	%	–	18.8	–	1.7	14.1	–	–	2.1	6.4
Transport fees										
Interhospital	%	12.5	4.3	7.9	4.1	9.0	–	–	–	7.8
Uninsured citizens	%	6.7	9.1	1.4	31.5	19.5	1.0	–	6.0	8.6
Workers' compensation	%	na	1.1	0.7	–	0.4	0.5	–	0.3	0.5
Motor accident insurance	%	3.3	4.1	2.5	3.5	4.4	5.1	–	2.2	3.4
Veterans' Affairs	%	2.8	–	3.9	3.9	2.9	3.7	0.6	0.5	2.3
Other	%	–	0.8	0.5	–	0.1	0.6	20.2	0.6	0.6
Donations	%	–	0.2	0.3	0.8	0.1	–	–	1.1	0.2
Miscellaneous	%	2.2	3.6	4.3	22.1	3.9	1.0	1.0	21.8	4.8
Indirect govt revenue	%	–	0.5	–	–	–	–	–	–	0.1
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	%	72.5	57.3	78.5	32.4	45.7	88.1	78.2	65.5	65.2
Indirect govt revenue	%	–	0.5	–	–	–	–	–	–	0.1
Other revenue (d)	%	2.3	22.6	4.5	24.5	18.1	1.0	1.0	25.0	11.4
Transport fees	%	25.3	19.6	17.0	43.1	36.2	10.9	20.8	9.5	23.3
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	\$m	370.2	268.8	317.9	38.1	60.0	29.2	16.2	12.7	1 112.9

Table 9A.22

Table 9A.22 **Major sources of ambulance service organisations revenue (2008-09 dollars) (a)**

	<i>Unit</i>	<i>NSW(b)</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA(c)</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Indirect govt revenue	\$m	–	2.4	–	–	–	–	–	–	2.4
Other revenue (d)	\$m	11.6	105.9	18.4	28.9	23.8	0.3	0.2	4.8	193.9
Transport fees	\$m	129.1	91.8	68.8	50.7	47.6	3.6	4.3	1.8	397.7
<b>Total</b>	<b>\$m</b>	<b>510.9</b>	<b>468.8</b>	<b>405.1</b>	<b>117.6</b>	<b>131.3</b>	<b>33.1</b>	<b>20.7</b>	<b>19.4</b>	<b>1 707.0</b>
2007-08										
Government grants										
Australian	%	–	1.4	–	–	0.2	0.9	–	–	0.4
State/Territory	%	70.7	56.5	78.7	30.2	47.9	83.9	79.0	64.1	64.5
Local	%	–	–	–	–	–	na	–	–	–
Subscription fees	%	–	18.1	–	1.5	12.9	–	–	1.9	6.0
Transport fees										
Interhospital	%	13.6	4.5	8.2	3.8	8.7	–	–	–	8.3
Uninsured citizens	%	6.9	9.0	1.5	33.0	19.8	1.0	–	5.5	8.8
Workers' compensation	%	na	1.1	0.7	–	na	0.5	–	0.2	0.5
Motor accident insurance	%	3.6	4.0	2.7	2.9	3.8	4.9	–	1.7	3.4
Veterans' Affairs	%	2.9	–	3.5	3.8	2.8	6.4	4.5	0.5	2.4
Other	%	0.5	0.5	0.4	–	0.2	0.5	15.9	1.4	0.6
Donations	%	–	0.1	–	0.2	0.1	–	–	0.5	–
Miscellaneous	%	1.8	3.6	4.1	24.7	3.5	2.0	0.6	24.3	4.8
Indirect govt revenue	%	–	1.0	–	–	–	–	–	–	0.3
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	%	70.7	57.9	78.7	30.2	48.1	84.8	79.0	64.1	64.9
Indirect govt revenue	%	–	1.0	–	–	–	–	–	–	0.3
Other revenue (d)	%	1.8	21.9	4.2	26.3	16.5	2.0	0.6	26.7	10.8
Transport fees	%	27.5	19.2	17.1	43.5	35.3	13.3	20.3	9.2	24.0
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	\$m	403.3	284.5	338.9	37.7	69.7	29.6	17.7	13.3	1 194.7
Indirect govt revenue	\$m	–	5.1	–	–	–	–	–	–	5.1
Other revenue (d)	\$m	10.3	107.7	17.9	32.9	23.9	0.7	0.1	5.6	199.1
Transport fees	\$m	157.2	94.3	73.7	54.3	51.1	4.6	4.6	1.9	441.7
<b>Total</b>	<b>\$m</b>	<b>570.8</b>	<b>491.7</b>	<b>430.5</b>	<b>124.9</b>	<b>144.7</b>	<b>34.9</b>	<b>22.4</b>	<b>20.8</b>	<b>1 840.7</b>
2008-09										
Government grants										
Australian	%	–	–	–	–	–	1.3	–	–	–
State/Territory	%	71.4	61.8	80.1	32.9	58.7	86.4	80.7	64.5	67.8
Local	%	–	–	–	–	–	na	–	–	–
Subscription fees	%	–	16.7	–	1.7	10.6	–	–	2.0	5.4
Transport fees										
Interhospital	%	14.1	4.6	7.6	2.8	7.4	–	–	–	8.2

Table 9A.22

Table 9A.22 **Major sources of ambulance service organisations revenue (2008-09 dollars) (a)**

	<i>Unit</i>	<i>NSW(b)</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA(c)</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Uninsured citizens	%	6.7	7.6	1.3	31.4	15.1	0.8	–	5.1	7.7
Workers' compensation	%	na	1.0	0.8	–	na	0.4	–	0.2	0.5
Motor accident insurance	%	3.0	4.0	2.5	3.0	3.0	4.1	–	1.7	3.1
Veterans' Affairs	%	3.0	–	3.3	3.5	2.4	5.0	3.1	0.4	2.3
Other	%	0.5	0.5	0.5	–	0.2	0.5	15.6	1.5	0.6
Donations	%	–	0.1	–	2.8	–	–	–	0.4	0.2
Miscellaneous	%	1.3	2.6	3.9	22.0	2.5	1.4	0.6	24.4	3.9
Indirect govt revenue	%	–	0.9	–	–	–	–	–	–	0.2
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	%	71.4	61.8	80.1	32.9	58.7	87.7	80.7	64.5	67.9
Indirect govt revenue	%	–	0.9	–	–	–	–	–	–	0.2
Other revenue (d)	%	1.3	19.5	4.0	26.5	13.2	1.4	0.6	26.8	9.5
Transport fees	%	27.3	17.7	15.9	40.6	28.1	10.9	18.7	8.8	22.4
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Government grants	\$m	440.4	316.1	368.9	39.8	104.6	38.0	18.7	14.2	1 340.7
Indirect govt revenue	\$m	–	4.7	–	–	–	–	–	–	4.7
Other revenue (d)	\$m	8.0	99.6	18.3	32.0	23.4	0.6	0.1	5.9	188.0
Transport fees	\$m	168.2	90.7	73.5	49.0	50.1	4.7	4.3	1.9	442.5
<b>Total</b>	<b>\$m</b>	<b>616.7</b>	<b>511.1</b>	<b>460.7</b>	<b>120.8</b>	<b>178.2</b>	<b>43.3</b>	<b>23.1</b>	<b>22.0</b>	<b>1 975.8</b>

(a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26). Due to differences in definitions and counting rules, data reported may differ from data in agency annual reports and other sources. Totals may not add due to rounding.

(b) NSW has a subscription scheme but funds are deposited to the consolidated revenue of the NSW Treasury.

(c) SA: 2007-08 other fees from citizens includes workers compensation fees.

(d) Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

Table 9A.23

Table 9A.23 Reported ambulance incidents, responses, patients and transport (a)

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
2004-05										
Incidents										
Emergency incidents	'000	528	205	151	41	76	25	9	na	1 034
Urgent incidents	'000	..	130	240	41	63	15	9	na	499
Non-emergency incidents	'000	267	243	195	67	50	9	5	na	835
Casualty room attendances	'000	-	-	7	-	-	-	-	-	7
Total incidents	'000	794	578	593	150	189	49	23	na	2 375
Population (h)	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Incidents per 1 000 people	no.	118	115	150	75	122	101	71	na	117
Responses										
Emergency responses	'000	657	295	211	42	83	29	12	8	1 337
Urgent responses	'000	..	147	268	42	68	17	11	13	566
Non-emergency responses	'000	290	253	198	68	50	10	4	9	883
Total responses	'000	947	694	677	153	201	56	27	31	2 785
Population (h)	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Responses per 1 000 people	no.	141	139	172	76	130	116	81	150	138
Patients										
Transported	'000	622	486	516	141	153	35	18	24	1 994
Treated not transported	'000	141	48	32	13	28	6	5	2	276
Total patients	'000	763	534	548	154	181	41	23	26	2 271
Patients per 1 000 people	no.	113	107	139	77	117	84	69	130	112
Transport										
Total fleet road	m km	na	16.6	20.4	5.1	2.1	2.1	0.6	0.7	47.6
Flying hours fixed wing	'000 hrs	7	5	-	-	-	1	-	-	13
Flying hours rotary wing	'000 hrs	4	2	-	-	-	-	-	-	7

Table 9A.23

Table 9A.23 Reported ambulance incidents, responses, patients and transport (a)

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
2005-06										
Incidents										
Emergency incidents	'000	414	219	165	43	87	29	11	na	968
Urgent incidents	'000	176	139	256	41	67	18	11	na	709
Non-emergency incidents	'000	245	273	207	71	51	12	5	na	865
Casualty room attendances	'000	-	-	8	-	-	-	-	-	8
Total incidents	'000	834	631	636	156	206	59	27	na	2 549
Population (h)	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Incidents per 1 000 people	no.	123	124	157	76	132	121	81	na	124
Responses										
Emergency responses	'000	528	315	236	44	94	31	12	8	1 269
Urgent responses	'000	205	156	289	42	70	19	12	14	808
Non-emergency responses	'000	266	281	207	73	51	11	6	9	903
Total responses	'000	999	752	732	159	215	62	30	31	2 980
Population (h)	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Responses per 1 000 people	no.	147	148	181	78	138	126	90	151	145
Patients										
Transported	'000	655	534	556	147	161	37	19	25	2 133
Treated not transported	'000	146	50	45	14	27	10	6	2	300
Total patients	'000	801	584	601	161	188	46	25	27	2 433
Patients per 1 000 people	no.	118	115	149	79	121	94	75	130	118
Transport										
Total fleet road	m km	na	21.2	21.8	5.3	8.9	2.2	0.8	0.7	60.9
Flying hours fixed wing	'000 hrs	8	5	-	-	-	1	-	-	14
Flying hours rotary wing	'000 hrs	6	2	-	-	-	-	1	-	9

Table 9A.23

Table 9A.23 Reported ambulance incidents, responses, patients and transport (a)

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
2006-07										
Incidents										
Emergency incidents	'000	453	232	190	45	97	29	11	na	1 057
Urgent incidents	'000	181	156	270	41	64	20	12	na	744
Non-emergency incidents	'000	246	286	213	80	59	11	7	na	902
Casualty room attendances	'000	-	-	10	-	-	-	-	-	10
Total incidents	'000	880	674	682	166	220	61	29	na	2 713
Population (h)	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.8
Incidents per 1 000 people	no.	128	131	165	80	140	124	86	na	130
Responses										
Emergency responses	'000	572	333	274	46	106	31	12	8	1 384
Urgent responses	'000	213	177	311	42	68	22	13	16	861
Non-emergency responses	'000	268	295	212	83	59	10	7	10	944
Total responses	'000	1 053	805	797	171	232	63	32	34	3 188
Population (h)	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.8
Responses per 1 000 people	no.	154	156	193	82	148	128	96	160	153
Patients										
Transported	'000	709	565	569	155	174	37	19	27	2 256
Treated not transported	'000	180	58	52	18	27	12	8	2	359
Total patients	'000	889	623	621	174	202	49	27	29	2 614
Patients per 1 000 people	no.	130	121	150	83	128	101	80	137	125
Transport										
Total fleet road	m km	na	23.6	25.4	5.8	9.4	2.3	0.8	0.7	68.1
Flying hours fixed wing	'000 hrs	8	5	-	-	-	1	-	-	14
Flying hours rotary wing	'000 hrs	6	2	-	-	-	-	1	-	9

Table 9A.23

Table 9A.23 Reported ambulance incidents, responses, patients and transport (a)

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
2007-08										
Incidents										
Emergency incidents	'000	480	228	220	48	108	29	12	na	1 125
Urgent incidents	'000	196	162	284	41	59	22	13	na	776
Non-emergency incidents	'000	256	313	220	85	69	10	8	na	961
Casualty room attendances	'000	-	-	9	-	-	-	-	-	9
Total incidents	'000	932	702	733	174	236	61	32	na	2 870
Population (h)	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Incidents per 1 000 people	no.	135	134	173	82	148	123	95	na	136
Responses										
Emergency responses	'000	605	330	311	51	120	32	13	8	1 469
Urgent responses	'000	233	176	329	41	63	23	13	18	896
Non-emergency responses	'000	280	325	218	88	69	9	8	9	1 006
Total responses	'000	1 119	831	858	180	252	63	34	35	3 371
Population (h)	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Responses per 1 000 people	no.	161	158	203	85	158	127	100	161	159
Patients										
Transported	'000	755	587	604	163	183	37	20	28	2 377
Treated not transported	'000	106	61	47	19	33	13	7	2	287
Total patients	'000	860	648	651	182	216	50	27	30	2 663
Patients per 1 000 people	no.	124	123	154	85	135	100	80	138	126
Transport										
Total fleet road	m km	30.1	25.6	28.0	5.9	10.5	2.3	0.8	0.8	104.1
Flying hours fixed wing	'000 hrs	8	5	-	-	-	1	-	-	14
Flying hours rotary wing	'000 hrs	7	2	-	1	-	-	1	-	11



Table 9A.23

Table 9A.23 Reported ambulance incidents, responses, patients and transport (a)

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
2008-09										
Incidents										
Emergency incidents	'000	491	240	217	51	108	30	12	na	1 150
Urgent incidents	'000	181	153	285	47	62	23	14	na	765
Non-emergency incidents	'000	266	322	242	90	76	10	7	na	1 013
Casualty room attendances	'000	-	-	7	-	-	-	-	-	7
Total incidents	'000	939	714	751	188	246	63	33	na	2 934
Population (h)	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Incidents per 1 000 people	no.	133	133	173	85	153	127	94	na	136
Responses										
Emergency responses	'000	611	331	285	54	128	33	13	10	1 465
Urgent responses	'000	215	178	309	48	68	24	14	18	873
Non-emergency responses	'000	295	356	235	94	76	9	7	10	1 080
Total responses	'000	1 120	864	829	196	272	65	34	37	3 418
Population (h)	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Responses per 1 000 people	no.	159	161	190	89	169	130	99	169	158
Patients										
Transported	'000	764	593	607	177	184	38	22	30	2 416
Treated not transported	'000	119	62	51	19	35	12	7	3	309
Total patients	'000	884	656	658	196	220	50	28	33	2 725
Patients per 1 000 people	no.	126	122	151	89	136	100	82	151	126
Transport										
Total fleet road	m km	30.4	30.8	29.6	6.1	10.4	2.4	0.9	0.8	111.5
Flying hours fixed wing	'000 hrs	8	5	-	-	-	1	-	-	14
Flying hours rotary wing	'000 hrs	7	2	-	1	-	1	1	-	11

Table 9A.23 **Reported ambulance incidents, responses, patients and transport (a)**

	Unit	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas	ACT	NT (g)	Aust (g)
(a)	An incident is an event that results in a demand for ambulance resources to respond. An ambulance response is a vehicle or vehicles sent to an incident. There may be multiple responses/vehicles sent to a single incident. A patient is someone assessed, treated or transported by the ambulance service.									
(b)	NSW: Prior to 2005-06, did not triage emergency calls. Urgent incident and response caseload are included in emergency caseload figures. In 2005-06, the introduction of medical prioritisation has allowed for the separation of emergency and urgent activity. Comparisons of NSW cases types in 2008/09 with previous years is affected by changes in the Medical Priority Dispatch System classification which were implemented in 2008/09.									
(c)	Vic: Victorian incidents and responses are for road ambulances only (excludes air ambulance).									
(d)	Qld: Patients transported data are extrapolated to the end of each financial year utilising the end of March data. Incident and response data has been adjusted to better align with the Report on Government Services definition of 'Ambulance Events' and excludes standby incidents for the purpose of coverage.									
(e)	WA: Does not have a policy of automatically dispatching more than one unit to an incident unless advised of more than one patient. Separate statistics are not kept for incidents and responses. Numbers shown under incidents are cases.									
(f)	SA: Prior to 2006-07 incidents, response and patient data were based on patient case cards. Incidents, response and patient data for 2006-07 are extracted from SA Ambulance Computer Aided Dispatch data and are more aligned to the definitions provided by the CAA. As a result in some areas the data are not directly comparable with prior years. For 2007-08 RFDS cases were reclassified from urgent to non-emergency. In the 2010 report figures were revised retrospectively to more directly align with definitions except for in 2004-05.									
(g)	NT: Incident data are unavailable as data are not recorded on the JESC system and all cases are considered an incident. A response is counted as an incident, therefore, data for incidents are not included in the rates for Australia.									
(h)	Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2007 is used as the denominator for 2007-08.									
	na Not available .. Not applicable. – Nil or rounded to zero.									
	Source: State and Territory governments (unpublished); ABS (2009) <i>Australian Demographic Statistics</i> , Cat no. 3101.0 (table AA.2).									

Table 9A.24

Table 9A.24 Ambulance service organisations' human resources (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
<b>Salaried personnel</b>										
Ambulance operatives	%	86.2	83.7	79.2	73.6	77.9	83.2	75.5	72.2	82.0
Ambulance operatives	FTE	2 926	2 016	2 289	475	667	185	110	78	8 747
Patient transport officers	FTE	134	41	138	38	69	2	5	1	429
Students and base level ambulance officers	FTE	534	411	468	104	58	33	11	18	1 637
Qualified ambulance officers	FTE	1 994	1 463	1 426	297	496	133	84	48	5 941
Clinical other	FTE	18	—	2	—	—	—	—	—	20
Communications operatives	FTE	247	101	255	35	44	17	10	11	721
Operational support personnel	FTE	246	144	212	64	57	24	14	13	774
Corporate support personnel	FTE	222	248	390	106	133	14	22	17	1 152
<b>Total salaried personnel</b>	<b>FTE</b>	<b>3 394</b>	<b>2 409</b>	<b>2 891</b>	<b>645</b>	<b>857</b>	<b>223</b>	<b>146</b>	<b>108</b>	<b>10 672</b>
Population (h)	million	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
<b>Per 100 000 people</b>										
Students and base level ambulance officers	FTE	7.9	8.2	11.9	5.2	3.8	6.8	3.4	8.8	8.1
Qualified ambulance officers	FTE	29.6	29.2	36.1	14.9	32.1	27.4	25.6	23.5	29.3
<b>Total</b>	<b>FTE</b>	<b>37.6</b>	<b>37.4</b>	<b>48.0</b>	<b>20.1</b>	<b>35.8</b>	<b>34.3</b>	<b>28.9</b>	<b>32.3</b>	<b>37.4</b>
<b>Volunteers (a)</b>										
Ambulance operatives	no.	118	819	575	1 767	1 295	448	—	16	5 038
Operational and corporate support	no.	—	—	—	857	235	—	—	1	1 093
<b>Total volunteers</b>	<b>no.</b>	<b>118</b>	<b>819</b>	<b>575</b>	<b>2 624</b>	<b>1 530</b>	<b>448</b>	<b>—</b>	<b>17</b>	<b>6 131</b>
Community first responders	no.	na	na	na	na	na	na	na	na	na

Table 9A.24

Table 9A.24 Ambulance service organisations' human resources (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
2005-06										
<b>Salaried personnel</b>										
Ambulance operatives	%	86.6	83.1	79.2	72.5	76.9	81.1	75.0	72.9	81.7
Ambulance operatives	FTE	3 066	2 040	2 402	504	725	188	107	84	9 116
Patient transport officers	FTE	140	44	153	39	40	2	5	1	425
Students and base level ambulance officers	FTE	547	329	461	108	31	40	12	17	1 545
Qualified ambulance officers	FTE	2 083	1 562	1 505	321	580	129	78	55	6 313
Clinical other	FTE	23	—	1	—	—	—	—	—	24
Communications operatives	FTE	273	106	282	35	74	17	12	12	810
Operational support personnel	FTE	257	152	178	72	81	28	14	15	797
Corporate support personnel	FTE	218	263	453	118	136	16	22	16	1 243
<b>Total salaried personnel</b>	<b>FTE</b>	<b>3 541</b>	<b>2 455</b>	<b>3 033</b>	<b>695</b>	<b>942</b>	<b>232</b>	<b>143</b>	<b>116</b>	<b>11 157</b>
Population (h)	million	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
<b>Per 100 000 people</b>										
Students and base level ambulance officers	FTE	8.1	6.5	11.4	5.3	2.0	8.2	3.6	8.2	7.5
Qualified ambulance officers	FTE	30.7	30.7	37.2	15.8	37.2	26.4	23.5	26.3	30.7
<b>Total</b>	<b>FTE</b>	<b>38.8</b>	<b>37.2</b>	<b>48.6</b>	<b>21.1</b>	<b>39.2</b>	<b>34.6</b>	<b>27.1</b>	<b>34.5</b>	<b>38.2</b>
<b>Volunteers (a)</b>										
Ambulance operatives	no.	84	915	427	1 951	1 221	503	—	13	5 114
Operational and corporate support	no.	—	—	—	900	258	—	—	1	1 159
<b>Total volunteers</b>	<b>no.</b>	<b>84</b>	<b>915</b>	<b>427</b>	<b>2 851</b>	<b>1 479</b>	<b>503</b>	<b>—</b>	<b>14</b>	<b>6 273</b>
Community first responders	no.	na	na	na	na	na	na	na	na	na

Table 9A.24

Table 9A.24 Ambulance service organisations' human resources (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
2006-07										
<b>Salaried personnel</b>										
Ambulance operatives	%	86.3	83.0	77.6	71.1	73.8	81.7	79.1	74.9	80.9
Ambulance operatives	FTE	3 194	2 147	2 481	524	725	215	105	100	9 491
Patient transport officers	FTE	148	53	163	43	87	2	10	1	506
Students and base level ambulance officers	FTE	530	354	500	45	80	55	8	20	1 592
Qualified ambulance officers	FTE	2 212	1 641	1 511	400	504	139	78	63	6 548
Clinical other	FTE	33	—	1	—	—	—	—	—	34
Communications operatives	FTE	271	100	306	36	54	19	9	16	811
Operational support personnel	FTE	278	169	227	72	82	32	10	16	887
Corporate support personnel	FTE	229	272	489	141	176	16	18	18	1 358
<b>Total salaried personnel</b>	<b>FTE</b>	<b>3 701</b>	<b>2 589</b>	<b>3 197</b>	<b>737</b>	<b>983</b>	<b>263</b>	<b>133</b>	<b>134</b>	<b>11 736</b>
Population (h)	million	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
<b>Per 100 000 people</b>										
Students and base level ambulance officers	FTE	7.7	6.9	12.1	2.2	5.1	11.2	2.4	9.4	7.6
Qualified ambulance officers	FTE	32.6	32.3	37.4	19.6	32.3	28.4	23.5	30.2	31.9
<b>Total</b>	<b>FTE</b>	<b>40.4</b>	<b>39.2</b>	<b>49.7</b>	<b>21.8</b>	<b>37.5</b>	<b>39.6</b>	<b>25.9</b>	<b>39.8</b>	<b>39.6</b>
<b>Volunteers (a)</b>										
Ambulance operatives	no.	121	897	416	1 938	1 377	507	—	9	5 265
Operational and corporate support	no.	—	—	—	901	242	—	—	1	1 144
<b>Total volunteers</b>	<b>no.</b>	<b>121</b>	<b>897</b>	<b>416</b>	<b>2 839</b>	<b>1 619</b>	<b>507</b>	<b>—</b>	<b>10</b>	<b>6 409</b>
Community first responders	no.	na	na	na	na	na	na	na	na	na

Table 9A.24

Table 9A.24 Ambulance service organisations' human resources (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
2007-08										
<b>Salaried personnel</b>										
Ambulance operatives	%	86.3	82.5	81.0	71.9	75.0	81.9	83.5	81.5	81.9
Ambulance operatives	FTE	3 262	2 264	2 738	561	799	226	129	132	10 110
Patient transport officers	FTE	142	55	186	43	81	2	13	1	525
Students and base level ambulance officers	FTE	595	321	565	130	86	73	17	50	1 837
Qualified ambulance officers	FTE	2 189	1 769	1 651	349	554	132	92	64	6 799
Clinical other	FTE	47	5	1	–	9	–	–	–	62
Communications operatives	FTE	289	113	336	39	69	19	7	17	888
Operational support personnel	FTE	284	164	332	116	92	32	16	11	1 047
Corporate support personnel	FTE	232	317	312	103	175	18	9	19	1 186
<b>Total salaried personnel</b>	<b>FTE</b>	<b>3 778</b>	<b>2 745</b>	<b>3 382</b>	<b>780</b>	<b>1 065</b>	<b>276</b>	<b>154</b>	<b>162</b>	<b>12 344</b>
Population (h)	million	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
<b>Per 100 000 people</b>										
Students and base level ambulance officers	FTE	8.6	6.1	13.4	6.1	5.4	14.7	5.0	23.0	8.7
Qualified ambulance officers	FTE	31.6	33.7	39.0	16.4	34.8	26.6	27.0	29.4	32.1
<b>Total</b>	<b>FTE</b>	<b>40.2</b>	<b>39.8</b>	<b>52.4</b>	<b>22.5</b>	<b>40.2</b>	<b>41.3</b>	<b>32.0</b>	<b>52.4</b>	<b>40.8</b>
<b>Volunteers (a)</b>										
Ambulance operatives	no.	163	437	225	1 889	1 285	507	–	9	4 515
Operational and corporate support	no.	–	–	–	1 071	249	–	–	1	1 321
<b>Total volunteers</b>	<b>no.</b>	<b>163</b>	<b>437</b>	<b>225</b>	<b>2 960</b>	<b>1 534</b>	<b>507</b>	<b>–</b>	<b>10</b>	<b>5 836</b>
Community first responders	no.	39	516	188	–	2	34	–	–	779

Table 9A.24

Table 9A.24 Ambulance service organisations' human resources (a)

	Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
2008-09										
<b>Salaried personnel</b>										
Ambulance operatives	%	86.3	82.0	82.8	69.7	76.3	82.4	81.1	73.8	82.1
Ambulance operatives	FTE	3 464	2 506	2 988	590	869	229	128	135	10 909
Patient transport officers	FTE	160	64	175	40	89	6	9	2	545
Students and base level ambulance officers	FTE	625	452	613	132	100	53	25	46	2 045
Qualified ambulance officers	FTE	2 340	1 877	1 819	378	592	151	81	69	7 306
Clinical other	FTE	48	10	1	4	11	–	–	–	74
Communications operatives	FTE	291	104	380	37	76	19	14	18	939
Operational support personnel (i)	FTE	295	199	304	110	104	30	18	30	1 091
Corporate support personnel (i)	FTE	254	352	317	147	166	19	12	18	1 283
<b>Total salaried personnel</b>	<b>FTE</b>	<b>4 013</b>	<b>3 057</b>	<b>3 608</b>	<b>848</b>	<b>1 138</b>	<b>278</b>	<b>158</b>	<b>183</b>	<b>13 283</b>
Population (h)	million	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
<b>Per 100 000 people</b>										
Students and base level ambulance officers	FTE	8.9	8.4	14.1	6.0	6.2	10.6	7.2	20.8	9.4
Qualified ambulance officers	FTE	33.2	35.0	41.8	17.1	36.7	30.1	23.2	31.1	33.8
<b>Total</b>	<b>FTE</b>	<b>42.1</b>	<b>43.4</b>	<b>55.9</b>	<b>23.1</b>	<b>42.9</b>	<b>40.7</b>	<b>30.4</b>	<b>51.9</b>	<b>43.2</b>
<b>Volunteers (a)</b>										
Ambulance operatives	no.	205	494	188	2 310	1 268	574	–	12	5 051
Operational and corporate support	no.	–	–	–	256	234	–	–	1	491
<b>Total volunteers</b>	<b>no.</b>	<b>205</b>	<b>494</b>	<b>188</b>	<b>2 566</b>	<b>1 502</b>	<b>574</b>	<b>–</b>	<b>13</b>	<b>5 542</b>
Community first responders	no.	85	490	231	471	34	34	–	–	1 345

Table 9A.24

Table 9A.24 **Ambulance service organisations' human resources (a)**

Unit	NSW (b)	Vic (c)	Qld	WA (d)	SA (e)	Tas (f)	ACT (g)	NT	Aust
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(a) Previous years data may not be comparable. Prior to 2007-08 volunteer data were categorised into volunteers with transport capability and first responders with no transport capability. Community first responders are reported separately from 2007-08.

(b) NSW: A volunteer ambulance service audit was undertaken in 2008-09 which lead to improved reporting of community first responder numbers.

(c) Vic: Data on volunteers includes some remunerated volunteers. These volunteers were remunerated for some time (usually response), but not for other time (usually on-call time). Data on community first responders includes 50 CERT and 30 Hatzolah responders.

(d) WA: Operational and corporate support volunteers are the total of volunteers who perform a support role and do not undertake ambulance rosters. The reduction in this number in 2008-09 compared with earlier years has resulted from an improvement in the volunteer records system. Prior to 2008-09, the comparatively high number of volunteers in the operational and corporate support category arises from including staff involved in the provision of the public First Aid services division which accounts for 45.7 FTE of corporate personnel.

(e) SA: volunteers data are approximated.

(f) Tas: The number of non remunerated volunteer ambulance operatives was 448 in 2004-05, down from 567 in the preceding year due to (a) the exclusion of district health hospital staff trained to volunteer level, and (b) inactive volunteers. In Tasmania, clinical other relates to part time doctors.

(g) ACT: Includes attribution of Emergency Service Agency Staff; on 1 July 2006 the ESA was re-absorbed into the Department of Justice & Community Safety and the ACT Government centralised Finance and HR staff in a Shared Service Centre. In 2007-08 ACT operational support staff are calculated by partial attribution using total ESA FTE as a driver and does not include FTE's from Shared Services.

(h) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2008 is used as the denominator for 2008-09.

(i) From 2007-08 operational support staff include community service operatives previously reported under corporate support staff.

FTE = full time equivalent. – Nil or rounded to zero.

Source: ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); State and Territory governments (unpublished).



Table 9A.25

**Table 9A.25 Ambulance service organisations' human resources, operational workforce, by age group and attrition**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
2007-08										
Operational workforce, by age group										
Under 30 years of age	no.	528	421	411	87	192	50	12	44	1 745
30–39 years of age	no.	1 197	716	1 001	255	271	82	52	52	3 626
40–49 years of age	no.	1 075	748	839	194	262	71	55	46	3 290
50–59 years of age	no.	605	474	407	81	98	51	13	16	1 745
60 or over years of age	no.	87	59	84	18	21	10	2	4	285
Total operational workforce	no.	3 492	2 418	2 742	635	844	264	134	162	10 691
Total operational workforce	FTE	3 409	2 314	2 549	604	786	237	130	121	10 149
Operational workforce, attrition	FTE	173	107	107	46	25	17	14	6	496
Operational workforce, attrition	%	5.1	4.6	4.2	7.6	3.2	7.2	10.8	5.0	4.9
2008-09										
Operational workforce, by age group										
Under 30 years of age	no.	549	585	489	100	218	49	18	27	2 035
30–39 years of age	no.	1 178	755	1 040	266	284	81	47	63	3 714
40–49 years of age	no.	1 110	786	918	199	272	69	52	44	3 450
50–59 years of age	no.	609	510	421	77	132	47	18	14	1 828
60 or over years of age	no.	96	69	101	19	28	6	1	4	324
Total operational workforce	no.	3 542	2 705	2 969	661	934	252	136	152	11 351
Total operational workforce	FTE	3 460	2 561	2 729	614	857	238	130	122	10 711
Operational workforce, attrition	FTE	153	74	114	44	10	14	13	7	429
Operational workforce, attrition	%	4.4	2.9	4.2	7.2	1.1	5.9	10.0	5.7	4.0

Source: State and Territory governments (unpublished).

Table 9A.26

Table 9A.26 **Ambulance assets (number) (a)**

	NSW (b)	Vic (c)	Qld	WA	SA	Tas	ACT (d)	NT	Total
2004-05									
<b>Ambulance stations and locations</b>									
Response locations	246	209	271	181	107	46	7	8	1 075
Communication centres	4	6	8	2	4	1	1	1	27
Other locations	44	54	29	113	17	2	3	–	262
<b>Total</b>	<b>294</b>	<b>269</b>	<b>308</b>	<b>296</b>	<b>128</b>	<b>49</b>	<b>11</b>	<b>9</b>	<b>1 364</b>
<b>Ambulances and other vehicles</b>									
Ambulance general purpose	851	448	658	394	195	94	15	29	2 684
Patient transport vehicles	84	38	115	14	19	2	9	2	283
Operational support vehicles	272	203	128	14	58	26	4	10	715
Special operations vehicles	–	7	–	–	–	–	1	–	8
Administrative vehicles	55	112	85	39	33	2	–	5	331
Other vehicles	56	25	47	19	8	5	1	4	165
<b>Total</b>	<b>1 318</b>	<b>833</b>	<b>1 033</b>	<b>480</b>	<b>313</b>	<b>129</b>	<b>30</b>	<b>50</b>	<b>4 186</b>
2005-06									
<b>Ambulance stations and locations</b>									
Response locations	238	213	275	184	107	46	7	8	1 074
Communication centres	4	5	7	2	1	1	1	1	22
Other locations	44	51	36	113	17	2	2	–	265
<b>Total</b>	<b>286</b>	<b>269</b>	<b>318</b>	<b>299</b>	<b>125</b>	<b>49</b>	<b>10</b>	<b>9</b>	<b>1 361</b>
<b>Ambulances and other vehicles</b>									
Ambulance general purpose	869	488	691	405	199	94	16	30	2 792
Patient transport vehicles	84	41	104	16	19	2	2	2	270
Operational support vehicles	297	208	154	11	66	22	11	10	779
Special operations vehicles	19	18	–	–	–	6	1	–	44
Administrative vehicles	46	114	65	44	35	2	–	5	311
Other vehicles	58	27	46	18	8	5	1	4	167
<b>Total</b>	<b>1 373</b>	<b>896</b>	<b>1 060</b>	<b>494</b>	<b>327</b>	<b>131</b>	<b>31</b>	<b>51</b>	<b>4 363</b>
2006-07									
<b>Ambulance stations and locations</b>									
Response locations	244	214	277	184	108	47	7	8	1 089
Communication centres	4	6	7	2	1	1	1	1	23
Other locations	43	52	34	113	17	2	3	–	264
<b>Total</b>	<b>291</b>	<b>272</b>	<b>318</b>	<b>299</b>	<b>126</b>	<b>50</b>	<b>11</b>	<b>9</b>	<b>1 376</b>
<b>Ambulances and other vehicles</b>									
Ambulance general purpose	876	497	729	410	201	98	16	31	2 858
Patient transport vehicles	94	40	112	16	19	2	2	2	287
Operational support vehicles	300	226	169	8	69	22	11	10	815
Special operations vehicles	22	17	–	–	4	2	1	–	46
Administrative vehicles	51	127	46	44	37	2	–	5	312
Other vehicles	67	28	47	20	9	5	2	4	182

Table 9A.26

Table 9A.26 **Ambulance assets (number) (a)**

	NSW (b)	Vic (c)	Qld	WA	SA	Tas	ACT (d)	NT	Total
<b>Total</b>	<b>1 410</b>	<b>935</b>	<b>1 103</b>	<b>498</b>	<b>339</b>	<b>131</b>	<b>32</b>	<b>52</b>	<b>4 500</b>
2007-08									
<b>Ambulance stations and locations</b>									
Response locations	250	218	259	184	111	47	7	8	1 084
Communication centres	4	6	7	2	1	1	1	1	23
Other locations	52	32	25	113	16	2	3	–	243
<b>Total (e)</b>	<b>306</b>	<b>256</b>	<b>291</b>	<b>299</b>	<b>128</b>	<b>50</b>	<b>11</b>	<b>9</b>	<b>1 350</b>
Ambulance 1st responder locations (e)	5	29	28	na	5	3	–	–	70
Third party 1st responder locations	–	68	–	–	6	–	–	–	74
<b>Ambulances and other vehicles</b>									
Ambulance general purpose	895	513	730	415	202	98	16	28	2 897
Patient transport vehicles	95	46	112	16	19	2	2	2	294
Operational support vehicles	340	237	200	10	78	22	9	9	905
Special operations vehicles	21	11	1	–	4	2	1	–	40
Administrative vehicles	48	142	46	43	35	2	2	8	326
Other vehicles	72	31	50	21	9	5	2	4	194
<b>Total</b>	<b>1 471</b>	<b>980</b>	<b>1 139</b>	<b>505</b>	<b>347</b>	<b>131</b>	<b>32</b>	<b>51</b>	<b>4 656</b>
2008-09									
<b>Ambulance stations and locations</b>									
Response locations	263	224	259	184	112	48	7	9	1 106
Communication centres	4	6	7	1	1	1	1	1	22
Other locations	46	31	25	113	16	2	3	1	237
<b>Total (e)</b>	<b>313</b>	<b>261</b>	<b>291</b>	<b>298</b>	<b>129</b>	<b>51</b>	<b>11</b>	<b>11</b>	<b>1 365</b>
Ambulance 1st responder locations (e)	8	28	28	88	5	4	–	–	161
Third party 1st responder locations	13	68	–	–	6	3	–	–	90
<b>Ambulances and other vehicles</b>									
Ambulance general purpose	888	519	770	441	207	99	21	31	2 976
Patient transport vehicles	93	47	114	16	19	3	3	2	297
Operational support vehicles	357	260	204	13	91	22	9	9	965
Special operations vehicles	20	19	1	8	11	2	1	–	62
Administrative vehicles	46	140	46	45	36	2	2	9	326
Other vehicles	72	28	53	19	10	5	4	5	196
<b>Total</b>	<b>1 476</b>	<b>1 013</b>	<b>1 188</b>	<b>542</b>	<b>374</b>	<b>133</b>	<b>40</b>	<b>56</b>	<b>4 822</b>

(a) Differences in geography, topography and operational structures require different resourcing models across jurisdictions.

(b) NSW: A volunteer ambulance service audit was undertaken in 2008-09 which has led to improved reporting of data for ambulance stations and locations.

(c) Vic: General purpose ambulances exclude contractors' nonemergency vehicles and special operations vehicles include four fixed wing and three rotary wing aircraft under contract. In 2006-07 for the then Victorian Metropolitan Ambulance Service (MAS), two ambulances were excluded as they were loaned for student training purposes only and not used for responding.

Table 9A.26 **Ambulance assets (number) (a)**

	<i>NSW</i> (b)	<i>Vic</i> (c)	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i> (d)	<i>NT</i>	<i>Total</i>
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(d) ACT: For 2006-07 the ESA provided shared HQ/Comcen, Fleet Workshop and Store/Logistics Centre to all four operational agencies (ambulance, urban fire, rural fire, and SES).

(e) Response locations data for 2007-08 and subsequent years reflect changes in the new data definition, which do not include first responder locations, now reported separately.

– Nil or rounded to zero.

*Source:* State and Territory governments (unpublished).

Table 9A.27

Table 9A.27 **Ambulance stations and locations, by staff type**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i>
2004-05										
<b>Ambulance stations and locations</b>										
With paid staff only	no.	221	149	221	22	38	8	7	2	668
With mixed paid and volunteer staff	no.	6	33	–	9	1	15	–	5	69
With volunteer staff only	no.	19	27	50	150	68	23	–	1	338
<b>Total</b>	<b>no.</b>	<b>246</b>	<b>209</b>	<b>271</b>	<b>181</b>	<b>107</b>	<b>46</b>	<b>7</b>	<b>8</b>	<b>1 075</b>
Population (a)	million	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
<b>Per 100 000 people</b>										
With paid staff only	no.	3.3	3.0	5.6	1.1	2.5	1.7	2.1	1.0	3.3
With mixed paid and volunteer staff	no.	0.1	0.7	–	0.5	–	3.1	–	2.5	0.3
With volunteer staff only	no.	0.3	0.5	1.3	7.5	4.4	4.7	–	0.5	1.7
<b>Total</b>	<b>no.</b>	<b>3.7</b>	<b>4.2</b>	<b>6.9</b>	<b>9.1</b>	<b>6.9</b>	<b>9.5</b>	<b>2.1</b>	<b>3.9</b>	<b>5.3</b>
2005-06										
<b>Ambulance stations and locations</b>										
With paid staff only	no.	218	143	227	25	38	10	7	2	670
With mixed paid and volunteer staff	no.	5	43	–	12	1	13	–	5	79
With volunteer staff only	no.	15	27	48	147	68	23	–	1	329
<b>Total</b>	<b>no.</b>	<b>238</b>	<b>213</b>	<b>275</b>	<b>184</b>	<b>107</b>	<b>46</b>	<b>7</b>	<b>8</b>	<b>1 078</b>
Population (a)	million	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
<b>Per 100 000 people</b>										
With paid staff only	no.	3.2	2.8	5.6	1.2	2.4	2.0	2.1	1.0	3.3
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.6	0.1	2.7	–	2.4	0.4
With volunteer staff only	no.	0.2	0.5	1.2	7.2	4.4	4.7	–	0.5	1.6
<b>Total</b>	<b>no.</b>	<b>3.5</b>	<b>4.2</b>	<b>6.8</b>	<b>9.0</b>	<b>6.9</b>	<b>9.4</b>	<b>2.1</b>	<b>3.8</b>	<b>5.2</b>
2006-07										
<b>Ambulance stations and locations</b>										
With paid staff only	no.	221	143	228	25	39	10	7	2	675
With mixed paid and volunteer staff	no.	5	44	0	12	1	14	–	5	81
With volunteer staff only	no.	18	27	49	147	68	23	–	1	333
<b>Total</b>	<b>no.</b>	<b>244</b>	<b>214</b>	<b>277</b>	<b>184</b>	<b>108</b>	<b>47</b>	<b>7</b>	<b>8</b>	<b>1 089</b>
Population (a)	million	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
<b>Per 100 000 people</b>										
With paid staff only	no.	3.2	2.8	5.5	1.2	2.5	2.0	2.1	0.9	3.2
With mixed paid and volunteer staff	no.	0.1	0.9	0.0	0.6	0.1	2.8	–	2.4	0.4
With volunteer staff only	no.	0.3	0.5	1.2	7.1	4.3	4.7	–	0.5	1.6
<b>Total</b>	<b>no.</b>	<b>3.6</b>	<b>4.1</b>	<b>6.7</b>	<b>8.8</b>	<b>6.9</b>	<b>9.6</b>	<b>2.1</b>	<b>3.8</b>	<b>5.2</b>

Table 9A.27

Table 9A.27 **Ambulance stations and locations, by staff type**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i>
2007-08										
<b>Ambulance stations and locations (b)</b>										
With paid staff only	no.	217	148	231	25	42	10	7	2	682
With mixed paid and volunteer staff	no.	9	44	–	13	1	14	–	5	86
With volunteer staff only	no.	24	26	28	146	68	23	–	1	317
<b>Total</b>	<b>no.</b>	<b>250</b>	<b>218</b>	<b>259</b>	<b>184</b>	<b>111</b>	<b>47</b>	<b>7</b>	<b>8</b>	<b>1 085</b>
Population (a)	million	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
<b>Per 100 000 people</b>										
With paid staff only	no.	3.1	2.8	5.5	1.2	2.6	2.0	2.1	0.9	3.2
With mixed paid and volunteer staff	no.	0.1	0.8	0.0	0.6	0.1	2.8	–	2.3	0.4
With volunteer staff only	no.	0.3	0.5	0.7	6.9	4.3	4.6	–	0.5	1.5
<b>Total</b>	<b>no.</b>	<b>3.6</b>	<b>4.2</b>	<b>6.1</b>	<b>8.6</b>	<b>7.0</b>	<b>9.5</b>	<b>2.1</b>	<b>3.7</b>	<b>5.1</b>
2008-09										
<b>Ambulance stations and locations</b>										
With paid staff only	no.	221	151	231	27	44	11	7	4	696
With mixed paid and volunteer staff	no.	6	49	–	12	2	14	–	3	86
With volunteer staff only	no.	36	24	28	145	66	23	–	2	324
<b>Total</b>	<b>no.</b>	<b>263</b>	<b>224</b>	<b>259</b>	<b>184</b>	<b>112</b>	<b>48</b>	<b>7</b>	<b>9</b>	<b>1 106</b>
Population (a)	million	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
<b>Per 100 000 people</b>										
With paid staff only	no.	3.1	2.8	5.3	1.2	2.7	2.2	2.0	1.8	3.2
With mixed paid and volunteer staff	no.	0.1	0.9	–	0.5	0.1	2.8	–	1.4	0.4
With volunteer staff only	no.	0.5	0.4	0.6	6.6	4.1	4.6	–	0.9	1.5
<b>Total</b>	<b>no.</b>	<b>3.7</b>	<b>4.2</b>	<b>6.0</b>	<b>8.3</b>	<b>6.9</b>	<b>9.6</b>	<b>2.0</b>	<b>4.1</b>	<b>5.1</b>

(a) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2008 is used as the denominator for 2008-09.

(b) Response locations data for 2007-08 reflect changes in the new data definition, which do not include first responder locations.

Source: ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); State and Territory governments (unpublished).

Table 9A.28

Table 9A.28 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g)**

	<i>Unit</i>	<i>NSW (h)</i>	<i>Vic (i)</i>	<i>Qld</i>	<i>WA (j)</i>	<i>SA</i>	<i>Tas (k)</i>	<i>ACT</i>	<i>NT (l)</i>	<i>Aust</i>
<b>Adult cardiac arrests where resuscitation attempted (excluding paramedic witnessed)</b>										
2004-05	no.	na	na	na	na	na	na	na	na	na
2005-06	no.	na	1 592	1 369	364	na	na	67	na	na
2006-07	no.	1 875	1 655	1 505	380	633	na	59	53	na
2007-08	no.	2 438	1 702	1 577	389	620	83	64	111	6 984
2008-09	no.	1 821	1 772	1 533	355	631	131	69	72	6 384
Survival incidents										
2004-05	no.	na	na	na	na	na	na	na	na	na
2005-06	no.	na	426	248	31	na	na	23	na	na
2006-07	no.	387	463	242	45	151	na	14	7	na
2007-08	no.	476	473	293	35	157	29	17	24	1 504
2008-09	no.	337	586	364	48	149	42	23	12	1 561
Survival rate										
2004-05	%	na	na	na	na	na	na	na	na	na
2005-06	%	na	26.8	18.1	8.5	na	na	34.3	na	na
2006-07	%	20.6	28.0	16.1	11.8	23.9	na	23.7	13.2	na
2007-08	%	19.5	27.8	18.6	9.0	25.3	34.9	26.6	21.6	21.5
2008-09	%	18.5	33.1	23.7	13.5	23.6	32.1	33.3	16.7	24.5
<b>Adult VF/VT cardiac arrests (excluding paramedic witnessed)</b>										
2004-05	no.	na	na	na	na	na	na	na	na	na
2005-06	no.	na	577	470	118	na	na	23	na	na
2006-07	no.	403	510	458	121	194	na	19	10	na
2007-08	no.	487	508	436	133	161	29	26	31	1 811
2008-09	no.	453	566	430	114	172	48	25	na	1 808
Survival incidents										
2004-05	no.	na	na	na	na	na	na	na	na	na
2005-06	no.	na	228	143	20	na	na	8	na	na
2006-07	no.	164	214	138	33	90	na	7	1	na
2007-08	no.	183	232	144	22	69	11	10	10	681
2008-09	no.	149	290	179	30	81	25	11	na	765
Survival rate										
2004-05	%	na	na	na	na	na	na	na	na	na
2005-06	%	na	39.5	30.4	16.9	na	na	34.8	na	na
2006-07	%	40.7	42.0	30.1	27.3	46.4	na	36.8	10.0	na
2007-08	%	37.6	45.7	33.0	16.5	42.9	37.9	38.5	32.3	37.6
2008-09	%	32.9	51.2	41.6	26.3	47.1	52.1	44.0	na	42.3

Table 9A.28 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g)**

	<i>Unit NSW (h)</i>	<i>Vic (i)</i>	<i>Qld</i>	<i>WA (j)</i>	<i>SA</i>	<i>Tas (k)</i>	<i>ACT</i>	<i>NT (l)</i>	<i>Aust</i>
(a)	Rates are the percentage of patients aged 16 years or over who were in out-of-hospital cardiac arrest (excluding paramedic witnessed) for: (1) all adult cardiac arrests where any chest compressions and/or defibrillation was undertaken by ambulance/EMS personnel, where the patient has a return of spontaneous circulation (ROSC) on arrival at hospital; and (2) adult VF/VT cardiac arrests (a further breakdown of cardiac arrest data) the arrest rhythm on the first ECG assessment was either Ventricular Fibrillation or Ventricular Tachycardia, where the patient has a ROSC on arrival at hospital. For the out of hospital setting survived event means sustained ROSC with spontaneous circulation until administration and transfer of care to the medical staff at the receiving hospital (Jacobs, et al. 2004). Note that this does not reflect the proportion of patients who will survive to be discharged from hospital alive.								
(b)	For each of the indicators used a higher or increasing rate is a desirable outcome.								
(c)	Successful outcome is defined as the patient having return of spontaneous circulation (ROSC) on arrival to hospital (i.e. the patient having a pulse). This is not the same as the patient surviving the cardiac arrest as having ROSC is only one factor that contributes to the overall likelihood of survival.								
(d)	The indicators used to measure outcomes for cardiac arrests are not directly comparable as each are subject to variations based on differing factors used to define the indicator which are known to influence outcome. A recent review of the data across jurisdictions has highlighted a level of uncertainty that all jurisdictions are utilising a consistent definition in the denominator presented within the Cardiac Arrest data. These discrepancies are currently the subject of further review by the Council of Ambulance Authorities.								
(e)	The indicator 'Adult cardiac arrests where resuscitation attempted' provides an overall indicator of outcome without specific consideration to other factors known to influence survival.								
(f)	Patients in Ventricular Fibrillation (VF) or Ventricular Tachycardia (VT) are more likely to have better outcomes compared with other causes of cardiac arrest as these conditions are primarily correctable through defibrillation.								
(g)	Paramedic witnessed cardiac arrests are excluded in the indicators reported as these cardiac arrests are treated immediately by the paramedic and as such have a better likelihood of survival due to this immediate and rapid intervention. This is vastly different to cardiac arrests occurring prior to the ambulance arriving where such increasing periods of treatment delay are known to negatively influence outcome.								
(h)	NSW: Data collected for Ambulance Service NSW are based on recorded protocols as instigated by in-field paramedics.								
(i)	Vic: Excludes patients with unknown rhythm on arrival at hospital.								
(j)	WA: Data are provided for the capital city only.								
(k)	Tas: For 2007-08 VF/VT arrests is for two out of three regions only as no rhythm was recorded in the remaining region.								
(l)	NT: For 2008-09 VF/VT arrests are not available due to a change in systems.								
	<b>na</b> Not available.								

Source: State and Territory governments (unpublished).



Table 9A.29

**Table 9A.29 Ambulance code 1 response times (minutes) (a)**

	<i>NSW (b)</i>	<i>Vic (c)</i>	<i>Qld (d)</i>	<i>WA (e)</i>	<i>SA (f)</i>	<i>Tas (g)</i>	<i>ACT</i>	<i>NT</i>
Statewide 50th percentile								
2004-05	9.8	9.0	8.0	9.1	9.4	10.1	7.5	9.5
2005-06	9.5	9.0	8.0	9.7	9.4	10.2	7.5	8.5
2006-07	9.6	10.0	8.2	9.0	9.4	10.5	8.2	9.0
2007-08	9.9	10.0	8.3	9.3	9.4	10.3	9.2	10.1
2008-09	10.3	9.9	8.4	9.5	9.4	10.9	10.3	9.5
Statewide 90th percentile								
2004-05	19.7	17.0	16.0	15.4	17.0	20.7	12.3	21.5
2005-06	19.6	17.0	16.0	15.9	15.6	21.1	13.3	21.0
2006-07	19.7	18.0	16.5	15.2	15.6	21.5	14.2	22.0
2007-08	19.9	19.0	16.7	16.6	15.7	22.4	16.3	23.5
2008-09	20.8	19.0	17.2	17.6	16.0	22.8	16.8	19.6
Capital city 50th percentile								
2004-05	np	np	np	np	np	np	np	np
2005-06	9.1	9.0	9.0	9.1	9.3	9.2	7.5	8.3
2006-07	9.3	9.0	8.3	8.9	9.3	9.4	8.2	8.3
2007-08	9.7	9.4	8.4	9.2	9.3	9.6	9.2	12.5
2008-09	10.1	9.2	8.5	9.2	9.2	10.0	10.3	7.6
Capital city 90th percentile								
2004-05	np	np	np	np	np	np	np	np
2005-06	16.6	14.0	15.0	15.4	14.2	15.3	13.3	21.0
2006-07	20.0	15.0	15.0	14.9	14.2	15.6	14.2	20.5
2007-08	17.8	15.5	15.3	15.6	14.1	16.0	16.3	22.0
2008-09	18.7	15.1	15.8	15.7	14.2	16.6	16.8	14.1
Urban centre (a)								
Population ('000)	3 641.4	3 371.9	1 676.4	1 256.0	1 040.7	128.6	322.0	66.3
Area (sq km)	1 788.1	2 152.8	1 825.9	1 035.2	754.5	125.1	297.7	78.5
Population per sq km	2 036.4	1 566.3	918.1	1 213.3	1 379.3	1 028.0	1 081.7	844.6

(a) Response times commence from the following time points: Vic (AV rural) receipt of call; Vic (AV metro), SA and Tas first key stroke; NSW, Qld (QAS) and WA transfer to dispatch; and the NT crew dispatched. In 2007-08 the ACT response times commence from the first key stroke. Previous years' ACT response times commenced from incident creation, so ACT data across years are not directly comparable. Capital city response times are calculated using urban centre boundaries based on the ABS Urban Centres Localities structure. Urban centres are: Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Canberra-Queanbeyan (Canberra part) and Darwin. Response times for NSW and SA do not strictly adhere to the urban centre boundaries.

(b) NSW: Did not triage emergency calls prior to 2005-06. Results for code 1 cases represent '000' and urgent medical incidents. In 2005-06 the introduction of medical prioritisation has allowed for separation of emergency and urgent activity. A volunteer ambulance service audit was undertaken in 2008-09 which led to improved reporting.

Table 9A.29 **Ambulance code 1 response times (minutes) (a)**

	NSW (b)	Vic (c)	Qld (d)	WA (e)	SA (f)	Tas (g)	ACT	NT
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(c) Vic: Data are incomplete for 2004-05 due to industrial action in the month July 2004. The basis of response time reporting changed in 2007-08 and results are not directly comparable with previous years. Metropolitan response and case times data are sourced from Computer Aided Dispatch system, prior to 2008-09 these data were sourced from patient care records completed by paramedics. Rural response times are sourced from Patient Care Records completed by paramedics.

(d) Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response times are reported from the computer aided dispatch (CAD) data.

(e) WA: Ambulance first responder locations data are not available for 2007-08.

(f) SA: for the 2010 Report figures have been revised retrospectively to more directly align with definitions, except for in 2004/05. Code 1 response times are now calculated from SA Ambulance CAD data and are more aligned to the definitions provided by the CAA. Previously prior to 2006-07 code 1 response times were calculated on all responses to category 1 and 2 cases and based on patient case cards. Code 1 response times from 2006-07 have excluded second and subsequent vehicles arriving at an incident and exclude incidents where the category of dispatch was upgraded.

(g) Tas: The highest proportion of population is in small rural areas, relative to other jurisdictions, which increases average response times.

**np** Not published.

Source: ABS (2008 and unpublished) *Statistical Geography: Volume 3 — Australian Standard Geographical Classification (ASGC) Urban Centres Localities, 2006*, Cat. no. 2909.0, Canberra; State and Territory governments (unpublished).

Table 9A.30

Table 9A.30 Satisfaction with ambulance service organisations (a)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Patients surveyed in 2005	no.	1 300	2 600	1 300	1 300	1 300	1 300	1 300	1 300	11 700
Usable responses	no.	421	1 227	589	488	569	548	587	279	4 708
Very satisfied or satisfied	%	97.0	97.0	98.0	98.0	98.0	97.0	98.0	94.0	97.0
Neither satisfied nor dissatisfied	%	1.0	1.5	1.0	1.0	1.0	1.0	2.0	3.0	2.0
Dissatisfied or very dissatisfied	%	2.0	1.5	1.0	1.0	1.0	2.0	1.0	3.0	1.0
Total patients (est.) (b)	'000	763	534	548	154	181	41	23	26	2 271
Patients not surveyed (est.) (c)	'000	762	532	547	153	179	40	21	25	2 259
Patients surveyed in 2006	no.	1 300	2 600	1 300	1 300	1 300	1 300	1 300	1 300	11 700
Usable responses	no.	395	1 028	568	329	597	678	471	260	4 326
Very satisfied or satisfied	%	98.0	97.0	98.0	95.0	99.0	97.0	98.0	96.0	97.0
Neither satisfied nor dissatisfied	%	1.0	2.0	1.0	3.0	-	2.0	1.0	1.0	1.0
Dissatisfied or very dissatisfied	%	1.0	1.0	1.0	2.0	1.0	1.0	1.0	3.0	2.0
Total patients (est.) (b)	'000	801	584	601	161	188	46	25	27	2 433
Patients not surveyed (c)	'000	800	582	599	160	187	45	24	26	2 422
Patients surveyed in 2007	no.	1 300	2 600	1 300	1 300	1 300	1 570	1 300	1 300	11 970
Usable responses	no.	464	1 227	507	305	641	679	479	241	4 543
Very satisfied or satisfied	%	97.0	97.5	97.0	97.0	98.0	99.0	95.0	93.0	97.0
Neither satisfied nor dissatisfied	%	1.0	2.0	1.0	1.0	1.0	1.0	3.0	4.0	2.0
Dissatisfied or very dissatisfied	%	2.0	0.5	2.0	2.0	1.0	-	2.0	3.0	1.0
Total patients (est.) (b)	'000	889	623	621	174	202	49	27	29	2 614
Patients not surveyed (c)	'000	888	621	620	172	200	48	26	28	2 602
Patients surveyed in 2008	no.	1 300	2 600	1 300	1 300	1 300	1 560	1 300	1 300	11 960
Usable responses	no.	350	1 136	479	389	590	701	458	236	4 339
Very satisfied or satisfied	%	96.0	98.0	99.0	96.0	98.0	98.0	96.0	96.0	98.0
Neither satisfied nor dissatisfied	%	2.0	1.0	-	2.0	1.0	-	1.0	2.0	1.0
Dissatisfied or very dissatisfied	%	2.0	1.0	1.0	2.0	1.0	2.0	3.0	2.0	1.0

Table 9A.30

Table 9A.30 Satisfaction with ambulance service organisations (a)

Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Total patients (est.) (b)	860	648	651	182	216	50	27	30	2 663
Patients not surveyed (c)	859	645	650	181	214	48	26	29	2 652
Patients surveyed in 2009	1 300	2 600	1 300	1 300	1 300	1 590	2 081	1 300	12 771
Usable responses	467	1 121	571	444	613	689	744	202	4 851
Very satisfied or satisfied	98.0	97.0	98.0	96.0	98.0	98.0	96.0	97.0	97.0
95% confidence interval (d)	± 1.4	± 0.9	± 1.2	± 1.8	± 1.0	± 1.1	± 1.3	± 2.4	± 0.5
Neither satisfied nor dissatisfied	1.0	2.0	1.0	2.0	1.0	1.0	1.0	3.0	2.0
Dissatisfied or very dissatisfied	1.0	1.0	1.0	2.0	1.0	1.0	3.0	–	1.0
Total patients (est.) (b)	'000	656	658	196	220	50	28	33	2 725
Patients not surveyed (c)	'000	653	657	195	218	49	26	32	2 712

(a) These results are from a survey distributed to code 1 and code 2 patients (Emergency and Urgent), per jurisdiction, per year.

(b) Total patients is equal to the sum of the number of patients transported plus the number treated and not transported, reported in table 9A.23.

(c) Number of patients not surveyed is equal to the total number of patients (those transported plus those not transported) minus the patients who were surveyed.

(d) 2009 rates include standard errors for the 95 per cent confidence interval (for example, X per cent ± X per cent), confidence intervals for prior years are not available.

– Nil or rounded to zero.

Source: Council of Ambulance Authorities 2005–2009 National Patient Mailout Satisfaction Research, Adelaide.

Table 9A.31

## Table 9A.31 Ambulance service costs (\$'000) (2008-09 dollars) (a)

	NSW	Vic (b)	Qld	WA (c)	SA (d)	Tas (e)	ACT (f)	NT (g)	Total
2004-05									
Labour costs (h)									
Salaries and payments in the nature of salaries	326 452	249 857	232 212	39 632	81 444	20 501	15 737	8 328	974 162
Payroll tax	–	10 337	11 066	–	–	1 161	–	–	22 564
Capital costs									
Depreciation	17 251	19 173	23 775	5 184	8 484	2 438	553	683	77 541
User cost of capital (i)									
Land	4 934	2 721	4 328	2 627	550	215	294	25	15 696
Other assets	10 740	13 511	19 204	3 344	3 184	1 249	1 029	642	52 903
Other costs	120 601	127 746	74 749	39 024	30 633	10 880	5 975	3 037	412 645
Interest on borrowings	220	–	274	–	–	–	–	18	512
<b>Total costs (j)</b>	<b>475 044</b>	<b>410 287</b>	<b>349 940</b>	<b>87 184</b>	<b>123 745</b>	<b>35 067</b>	<b>23 293</b>	<b>12 690</b>	<b>1 517 251</b>
2005-06									
Labour costs (h)									
Salaries and payments in the nature of salaries	339 536	282 596	241 082	43 596	77 927	21 158	14 251	10 006	1 030 152
Payroll tax	–	12 557	11 201	–	–	1 212	–	–	24 970
Capital costs									
Depreciation	16 481	20 310	24 047	6 080	8 675	2 227	383	642	78 846
User cost of capital (i)									
Land	5 518	3 916	4 607	2 510	607	206	239	24	17 627
Other assets	13 800	14 820	21 393	4 246	3 688	883	1 328	760	60 917
Other costs	130 980	135 649	80 080	34 580	29 535	10 247	7 408	3 355	431 834
Interest on borrowings	123	–	379	–	–	–	–	20	521
<b>Total costs (j)</b>	<b>500 798</b>	<b>453 374</b>	<b>366 602</b>	<b>88 502</b>	<b>119 824</b>	<b>34 515</b>	<b>23 371</b>	<b>14 762</b>	<b>1 601 749</b>

Table 9A.31

## Table 9A.31 Ambulance service costs (\$'000) (2008-09 dollars) (a)

	NSW	Vic (b)	Qld	WA (c)	SA (d)	Tas (e)	ACT (f)	NT (g)	Total
2006-07									
Labour costs (h)									
Salaries and payments in the nature of salaries	341 927	287 919	251 771	45 057	87 804	22 090	12 646	10 768	1 059 980
Payroll tax	-	-	10 041	-	-	1 351	-	-	11 391
Capital costs									
Depreciation	16 711	20 935	27 958	8 215	8 468	1 249	584	604	84 725
User cost of capital (i)									
Land	5 275	3 958	6 821	3 907	808	190	308	23	21 291
Other assets	13 030	16 811	22 912	1 882	3 850	904	713	864	60 965
Other costs	150 922	144 987	92 211	42 807	33 102	11 050	8 476	3 514	487 069
Interest on borrowings	2	-	230	-	-	-	-	-	232
<b>Total costs (j)</b>	<b>522 589</b>	<b>470 652</b>	<b>394 852</b>	<b>97 961</b>	<b>133 224</b>	<b>35 293</b>	<b>22 419</b>	<b>15 750</b>	<b>1 692 739</b>
2007-08									
Labour costs (h)									
Salaries and payments in the nature of salaries	374 589	305 349	272 883	53 651	100 931	24 256	13 542	13 330	1 158 532
Payroll tax	-	-	11 472	-	-	1 527	-	-	12 999
Capital costs									
Depreciation	23 238	20 320	28 257	9 370	8 997	1 860	495	785	93 322
User cost of capital (i)									
Land	4 908	4 155	6 526	774	1 039	174	349	22	17 947
Other assets	12 105	15 638	23 809	5 100	3 807	1 075	709	884	63 126
Other costs	170 332	149 835	93 071	42 030	40 798	10 711	8 605	4 204	519 587
Interest on borrowings	-	-	139	-	-	-	-	-	139
<b>Total costs (j)</b>	<b>580 265</b>	<b>491 142</b>	<b>418 021</b>	<b>110 151</b>	<b>154 533</b>	<b>37 903</b>	<b>23 351</b>	<b>19 203</b>	<b>1 834 567</b>

Table 9A.31

## Table 9A.31 Ambulance service costs (\$'000) (2008-09 dollars) (a)

	NSW	Vic (b)	Qld	WA (c)	SA (d)	Tas (e)	ACT (f)	NT (g)	Total
2008-09									
Labour costs (h)									
Salaries and payments in the nature of salaries	4 13 424	3 07 293	2 89 572	5 8 343	1 59 666	2 6 440	1 4 885	1 1 718	1 2 81 341
Payroll tax	-	-	1 1 905	-	-	1 528	-	-	1 3 433
Capital costs									
Depreciation	1 9 852	2 1 206	3 4 002	1 0 235	9 975	1 789	792	871	9 8 722
User cost of capital (i)									
Land	4 755	4 081	8 878	737	1 048	567	412	21	2 0 499
Other assets	1 1 875	1 7 383	2 6 165	5 002	3 450	1 486	671	248	6 6 280
Other costs	1 83 384	1 66 491	1 11 579	3 9 825	4 0 779	1 1 557	9 015	4 227	5 6 6 857
Interest on borrowings	-	-	48	-	-	-	-	-	48
<b>Total costs (j)</b>	<b>6 28 535</b>	<b>5 12 373</b>	<b>4 61 318</b>	<b>1 13 405</b>	<b>2 13 870</b>	<b>4 1 272</b>	<b>2 5 363</b>	<b>1 7 064</b>	<b>2 0 13 200</b>

(a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26).

(b) Vic: From 1 July 2006 the then Victorian Metropolitan Ambulance Service (MAS), now Ambulance Victoria (AV), was exempt from payroll tax.

(c) WA: use a contracted service model for ambulance services.

(d) SA: The increase in salaries and payments in the nature of salaries from 2007-08 to 2008-09 reflect three significant events that in 2008-09: 1) increase in wages 2) subsequent back pay paid to frontline paramedics as a result of the "work value" case (from the 2007 enterprise bargaining agreement) reaching finalisation and 3) an increase in the number of frontline paramedics recruited.

(e) Tas: The service is part of the Department of Health and Human Services and sources corporate support services from the Department. The value of other assets reported in 2004-05 was overstated. It included the value of land that was already reported separately.

(f) ACT: For 2005-06, the Ambulance Service data has been collated using the new Emergency Services Agency Capability Model, which utilises a different cost attribution model for shared costs across the Emergency Services Agency. Therefore, the financial figures for 2005-06 cannot be directly compared with those of previous years.

(g) NT: use a contracted service model for ambulance services. All property holding assets are held under a separate entity to St John Ambulance NT.

(h) Payroll tax is excluded from labour costs.

(i) The user cost of capital is partly dependent on depreciation and asset revaluation methods employed. Details of the treatment of assets by emergency management agencies across jurisdictions are outlined in table 9A.40.

Table 9A.31 **Ambulance service costs (\$'000) (2008-09 dollars) (a)**

	NSW	Vic (b)	Qld	WA (c)	SA (d)	Tas (e)	ACT (f)	NT (g)	Total
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(j) Total costs excludes the user cost of capital for land, and interest on borrowings.

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).



Table 9A.32

Table 9A.32 **Ambulance service organisations' expenditure per person (2008-09 dollars) (a), (b)**

	Unit	NSW	Vic	Qld	WA (c)	SA (d)	Tas	ACT (e)	NT (c)	Aust
2004-05										
Total	\$m	475.0	410.3	349.9	87.2	123.7	35.1	23.3	12.7	1 517.3
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	70.60	81.83	88.68	43.62	80.07	72.36	70.98	62.27	74.92
2005-06										
Total	\$m	500.8	453.4	366.6	88.5	119.8	34.5	23.4	14.8	1 601.7
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	73.79	89.15	90.66	43.44	76.84	70.66	70.31	70.83	77.97
2006-07										
Total	\$m	522.6	470.7	394.9	98.0	133.2	35.3	22.4	15.8	1 692.7
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	76.24	91.12	95.56	47.07	84.55	71.78	66.63	74.10	81.18
2007-08										
Total	\$m	580.3	491.1	418.0	110.2	154.5	37.9	23.4	19.2	1 834.6
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	83.77	93.62	98.86	51.69	97.07	76.45	68.51	88.26	86.62
2008-09										
Total	\$m	628.5	512.4	461.3	113.4	213.9	41.3	25.4	17.1	2 013.2
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	89.26	95.51	106.06	51.45	132.67	82.50	72.92	76.98	93.01

(a) Non-government revenue is now termed other revenue because some items in this category (for example, Veterans' Affairs) are not strictly non-government. Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26).

(b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2008 is used as the denominator for 2008-09.

(c) WA and NT: use a contracted service model for ambulance services.

(d) SA: The increase in expenditure per person from 2007-08 to 2008-09 reflect three significant events in 2008-09: (1) increase in wages (2) subsequent back pay paid to frontline paramedics as a result of the "work value" case (from the 2007 enterprise bargaining agreement) reaching finalisation and (3) an increase in the number of frontline paramedics recruited.

(e) ACT: Ambulance Service data for 2005-06 and later years have been collated using the new Emergency Services Agency Capability Model, which utilises a different cost attribution model for shared costs across the Emergency Services Agency. Therefore, the financial figures for 2005-06 and later years cannot be directly compared with those of previous years.

Source: State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

Table 9A.33

**Table 9A.33 Ambulance service organisations' revenue per person  
(2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (c)</i>
<b>Total government grants</b>										
2004-05										
Total	\$m	353.0	268.2	282.1	23.2	59.9	23.9	17.4	11.0	1 038.9
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	52.47	53.49	71.49	11.61	38.78	49.41	53.13	54.19	51.30
2005-06										
Total	\$m	367.0	285.3	293.9	38.9	59.4	27.1	21.2	11.6	1 104.5
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	54.08	56.11	72.69	19.10	38.11	55.39	63.78	55.62	53.76
2006-07										
Total	\$m	370.2	268.8	317.9	38.1	60.0	29.2	16.2	12.7	1 112.9
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	54.01	52.04	76.94	18.29	38.05	59.30	48.05	59.61	53.37
2007-08										
Total	\$m	403.3	284.5	338.9	37.7	69.7	29.6	17.7	13.3	1 194.7
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	58.22	54.24	80.15	17.70	43.76	59.67	51.97	61.23	56.41
2008-09										
Total	\$m	440.4	316.1	368.9	39.8	104.6	38.0	18.7	14.2	1 340.7
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	62.55	58.92	84.82	18.04	64.92	75.92	53.62	64.07	61.94
<b>Indirect government revenue</b>										
2004-05										
Total	\$m	–	6.9	–	–	–	–	–	–	6.9
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	–	1.38	–	–	–	–	–	–	0.34
2005-06										
Total	\$m	–	5.8	–	–	–	–	–	–	5.8
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	–	1.14	–	–	–	–	–	–	0.28
2006-07										
Total	\$m	–	2.4	–	–	–	–	–	–	2.4
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	–	0.46	–	–	–	–	–	–	0.11
2007-08										
Total	\$m	–	5.1	–	–	–	–	–	–	5.1
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	–	0.98	–	–	–	–	–	–	0.24

Table 9A.33

**Table 9A.33 Ambulance service organisations' revenue per person  
(2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (c)</i>
<b>2008-09</b>										
Total	\$m	–	4.7	–	–	–	–	–	–	4.7
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	–	0.87	–	–	–	–	–	–	0.22
<b>Other revenue (d)</b>										
<b>2004-05</b>										
Total	\$m	13.0	94.2	14.8	25.8	24.8	0.2	0.1	5.0	177.9
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	1.93	18.78	3.74	12.93	16.02	0.51	0.38	24.44	8.78
<b>2005-06</b>										
Total	\$m	17.5	98.8	16.2	28.3	23.9	0.5	0.1	4.8	190.1
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	2.58	19.43	4.00	13.87	15.30	1.10	0.40	23.04	9.25
<b>2006-07</b>										
Total	\$m	11.6	105.9	18.4	28.9	23.8	0.3	0.2	4.8	193.9
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	1.70	20.49	4.46	13.87	15.09	0.65	0.62	22.79	9.30
<b>2007-08</b>										
Total	\$m	10.3	107.7	17.9	32.9	23.9	0.7	0.1	5.6	199.1
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	1.49	20.53	4.23	15.44	15.03	1.39	0.42	25.53	9.40
<b>2008-09</b>										
Total	\$m	8.0	99.6	18.3	32.0	23.4	0.6	0.1	5.9	188.0
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	1.13	18.57	4.22	14.50	14.54	1.22	0.41	26.59	8.69
<b>Total transport fees</b>										
<b>2004-05</b>										
Total	\$m	87.6	80.4	62.3	62.4	43.4	4.3	1.8	2.0	344.1
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	\$	13.02	16.03	15.78	31.22	28.05	8.96	5.36	9.99	16.99
<b>2005-06</b>										
Total	\$m	104.0	88.6	66.6	46.1	45.0	3.3	1.2	1.9	356.6
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	\$	15.33	17.42	16.47	22.62	28.87	6.71	3.47	8.90	17.36
<b>2006-07</b>										
Total	\$m	129.1	91.8	68.8	50.7	47.6	3.6	4.3	1.8	397.7
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	\$	18.83	17.77	16.65	24.36	30.21	7.33	12.77	8.68	19.07

**Table 9A.33 Ambulance service organisations' revenue per person  
(2008-09 dollars) (a), (b)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust (c)</i>
2007-08										
Total	\$m	157.2	94.3	73.7	54.3	51.1	4.6	4.6	1.9	441.7
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	\$	22.69	17.98	17.44	25.47	32.11	9.34	13.38	8.77	20.85
2008-09										
Total	\$m	168.2	90.7	73.5	49.0	50.1	4.7	4.3	1.9	442.5
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	\$	23.89	16.91	16.89	22.24	31.06	9.39	12.43	8.71	20.44

- (a) Data are adjusted to 2008-09 dollars using the gross domestic product (GDP) price deflator (2008-09 = 100) (table AA.26).
- (b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2008 is used as the denominator for 2008-09.
- (c) Totals may not add as a result of rounding.
- (d) Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

*Source:* State and Territory governments (unpublished); ABS (2009) *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2); ABS (2009) *Australian National Accounts: National Income, Expenditure and Product, June Quarter 2009*, Cat. no. 5206.0, Table 32, Expenditure on Gross Domestic Product (GDP), Chain volume measures and Current prices, Annual (Series ID. A2304682C) (table AA.26).

# All jurisdictions — contextual and other information

Table 9A.34

Table 9A.34 **Communications and dispatching systems**

Development stage	NSW(a)	Vic(b)	Qld(c)	WA	SA	Tas(d)	ACT(e)	NT(f)
Agency involvement	Operating Fire Brigades	Operating Metropolitan Fire and Emergency Services Board	Operating Fire and Rescue Service	Current CAD operating (new CAD in test) Fire and Emergency Services Authority	Investigating Metropolitan Fire Service	Operating Tasmania Fire Service (all brigades)	Operating Fire Brigade	Operating Fire and Rescue
Future agency involvement	Rural Fire Service NSW Ambulance Service	Country Fire Authority Ambulance Victoria (metro)	Ambulance Service Complete Victoria (rural)	Fire and Rescue Service Local Government Bush Fire Brigades SES	Country Fire Service Ambulance Service SES Police	Ambulance Service Complete	Ambulance Rural Fire Service Complete SES	St John Ambulance TES Police Complete
Coverage	Statewide	Melbourne Metropolitan Inner Country CFA Statewide SES Statewide	Statewide	Statewide	Statewide	Statewide for each service	Territorywide	Darwin emergency response area

(a) NSW: A computer aided dispatch (CAD) system is being implemented for ambulance services in NSW. The NSW Fire Brigades operate a communications and dispatch system for both the Fire Brigades and the Rural Fire Service.

(b) Vic: Further development includes technological enhancement of mobile data terminals for all services and an automatic vehicle location system for police, the SES and fire services.

(c) Qld: The roll out of a new single state-wide CAD system across all ambulance and fire communication centres was completed in 2008-09.

Table 9A.34

**Table 9A.34 Communications and dispatching systems**

	NSW(a)	Vic(b)	Qld(c)	WA	SA	Tas(d)	ACT(e)	NT(f)
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(d) Tas: The CAD system is routinely upgraded to enhance service delivery by taking advantage of a range of technological innovations.

(e) ACT: Common CAD system.

(f) NT: Communications and "000" dispatch are provided by PFES Joint Emergency Services Communications Centre.

Source: State and Territory governments (unpublished).





Table 9A.35

**Table 9A.35 Selected fire risk management/mitigation strategies (a)**

	NSW (b)	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov
Bushfire risk management strategies (continued)	Static Water Supply Program  Standards of Fire Cover Program for vehicle resource allocation  Service Delivery Model to guide District activities and ongoing community education strategies		Community Fire Units	FESA provides a fire risk management service to the Department of Environment and Conservation for unallocated Crown land and unmanaged reserves	Statewide consultation with government land management agencies and utilities on bushfire prevention planning processes	Establishment of self sustaining neighbourhood groups to develop local bushfire survival strategies			Requirement under Building Code of Australia that residential type buildings in bushfire prone areas be constructed to provide protection against embers, radiation and direct flame contact to reduce danger to life and minimise the risk of the loss of the building
	Development of a brigade classification system based on risk analysis		Rural brigade classification and resource allocation system based on risk analysis		Mandatory consultation by State and local planning authorities with CFS for new residential and tourist developments in bushfire-prone areas	Permit system to control the number, type and location of prescribed fires burning during the bushfire season.			

Table 9A.35

**Table 9A.35 Selected fire risk management/mitigation strategies (a)**

	NSW (b)	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov
Community awareness and fire education programs	School fire education programs; Preschool fire education; Aboriginal Fire Stories; Juvenile Intervention and Fire Awareness Program; Partnerships with agencies with similar objectives; Development and distribution of education teaching resources, community safety videotapes, fact sheets available	Community Fire Awareness Programs including Brigades in Schools, Early FireSafe, Isolated Elderly, FireReady, Fired up English, Community Fireguard, Summer Street Meetings.	Community fire safety and awareness programs: Senior's Fire Ed, Operation Safehome, Fight Fire Fascination	Community fire education programs	Community fire safe programs; community fireguard fire safety education for junior and primary schools	Specific fire safety programs for at-risk sectors of domestic and business community	Fire Ed (primary school fire safety education)  Road Awareness and Accident Prevention program (RAAP) - targets yr 11 students and aims to reduce road fatality rate in 17-24 yr olds  Community Liaison and Safety Program (CLASP) - assists older people to reduce safety and security risks in the home  Juvenile Firelighting Awareness Intervention Program (JFAIP) - fire prevention program to children 3-16 yrs presenting with dangerous firelighting behaviours  Bush FireWise program - provide information and increase resilience of community living in rural interface  Revised Yellow Pages incorporating the 'Handy Map'  Extensive consultation in lead up to SBMP  Televised community service announcements  Attendance at The Canberra Show Publication of several	Community fire awareness programs	Development and distribution of school education teaching resources, television programs, videotapes, maps and bushfire action guides by EMA

Table 9A.35

**Table 9A.35 Selected fire risk management/mitigation strategies (a)**

	NSW (b)	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov
Community awareness and fire education programs (continued)			School education programs	School education programs		Partnerships with agencies with similar objectives		School education programs	Enhancement of Disaster Education in Schools in EMA website
Smoke alarm legislation	Mandatory legislation for new homes or homes undergoing major renovations. Legislation making smoke alarms mandatory in all homes was introduced on May 1 2006.	Mandatory for all homes supported by public awareness campaigns	Mandatory legislation for hard wired smoke alarm installation in all new households and homes undergoing major renovations	Mandatory legislation for hard wired smoke alarm installation in all new households and homes undergoing major renovations	Legislation mandates hard wired smoke alarms in all new homes and in all households and homes before sale	Legislation mandating hard wired smoke alarms in all new homes and those undergoing major renovations	Mandatory legislation for new homes or homes undergoing major renovations	Hazard abatement programs  Mandatory legislation for hard wired smoke detector installation in all new households and homes undergoing major renovations	Requirement under Building Code of Australia (developed and managed by the Australian Building Codes Board) that smoke alarms be installed in all new homes

(a) This table does not provide an exhaustive list of fire risk management/mitigation strategies across jurisdictions. Some jurisdictions also operate ambulance risk management/mitigation strategies.

(b) NSW: The Building Legislation Amendment (Smoke Alarms) Act 2005 and the Environmental Planning and assessment Amendment (Smoke Alarms) regulation 2006 commenced on 1 May 2006 and requires: the installation of one or more smoke alarms in buildings in which persons sleep; smoke alarms in such buildings must be operational; and persons do not remove or interfere with the operation of smoke alarms installed in such buildings.

Source: State and Territory emergency management agencies (unpublished).

Table 9A.36

Table 9A.36 **Prevention activities of fire service organisations**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Promotion of:								
Smoke alarms	✓	✓	✓	✓	✓	✓	✓	✓
Maintenance of smoke alarms	✓	✓	✓	✓	✓	✓	✓	✓
Safety switches	✓	✓	✓	✓	✓	✓	✓	✓
Fire extinguishers	✓	✓	✓	✓	✓	✓	✓	✓
Fire blankets	✓	✓	✓	✓	✓	✓	✓	✓
General prevention and awareness for:								
Residential	✓	✓	✓	✓	✓	✓	✓	✓
Business and government	✓	✓	✓	✓	✓	✓	✓	✓
Industry	✓	✓	✓	✓	✓	✓	✓	✓
Rural/farming	✓	✓	✓	✓	✓	✓	✓	✓
Targeted programs for:								
Cultural and language diversity groups	✓	✓	✓	✓	✓	X	✓	X
Aboriginal and Torres Strait Islander communities	✓	✓	✓	✓	✓	X	X	X
Other risk groups	✓	✓	✓	✓	✓	✓	✓	X
Conduct of community engagement and awareness programs in bush fire prone areas	✓	✓	✓	✓	✓	✓	✓	✓

Source: State and Territory governments (unpublished).

Table 9A.37 Delivery and scope of activity of primary fire service organisations (a)

	NSW	Vic (b)	Qld	WA (c)	SA	Tas	ACT	NT (d)
Urban (a)	NSW Fire Brigades: government department reports to the Minister for Emergency Services directly.	Metropolitan Fire and Emergency Services Board: statutory authority reports to the Minister for Police and Emergency Services.	See Urban and rural.	See Urban and rural.	See Urban and rural.	See Urban and rural.	See Urban and rural.	NT Fire and Rescue Service: branch of the Department of Police, Fire and Emergency Services. The Director of Fire and Rescue Services and Emergency Services reports to the Chief Executive Officer for Police, Fire and Emergency Services, who reports to the Minister for Police, Fire and Emergency Services.
Rural (a)	NSW Rural Fire Service: government department reports to the Minister for Emergency Services directly.	Department of Sustainability and Environment: government department responsible for public lands.	See Urban and rural.	See Urban and rural.	See Urban and rural.	See Urban and rural.	See Urban and rural.	Bushfires NT — this is a division of the Department of Natural Resources Environment and the Arts (NEAT). The Chief Fire Control Officer reports to the CEO of NEAT who reports directly to the Minister.

Table 9A.37 Delivery and scope of activity of primary fire service organisations (a)

NSW	Vic (b)	Qld	WA (c)	SA	Tas	ACT	NT (d)
Urban and rural (a)	Country Fire Authority: statutory authority reports to the Minister for Police and Emergency Services.	Queensland Fire and Rescue Service — this service, incorporating the Rural Fire Service, is a division of the Department of Community Safety, reporting to the Director-General, who reports to the Minister for Police, Corrective Services and Emergency Services.	Fire and Emergency Services Authority of WA (FESA): umbrella statutory authority reports to the Minister for Police and Emergency Services directly.	South Australian Metropolitan Fire Service: body corporate reports to the SA Fire and Emergency Services Commission.	Tasmania Fire Service: operational arm of the State Fire Commission, reports to the Minister for Police and Emergency Management.	ACT Fire Brigade and ACT Rural Fire Service: services of the ACT Emergency Services Agency within the Department of Justice and Community Safety, together report to the ACT Minister for Police and Emergency Services.	

(a) Excludes brigades employed by large scale public and private land managers; port, mining and other infrastructure brigades; and land management departments and brigades operating under Australian jurisdiction (for example, airport and defence installations). Urban FSOs: attend residential and commercial structure fires; incidents involving hazardous materials; and road crash incidents within major urban centres. Rural FSOs: attend local structure fires and other events outside major urban centres; rural non-structure fires (including crop, bushland and grassland fires on private property); and fires in national parks and State forests.

(b) Vic: The Metropolitan Fire and Emergency Services Board provides urban fire services coverage from the Melbourne Central Business District through to the middle and outer suburbs. The Country Fire Authority provides urban and rural fire services coverage for all parts of Victoria other than the Melbourne Metropolitan Fire District and public lands. This includes outer metropolitan Melbourne and regional centres.

(c) WA: As the primary fire and emergency service in WA, FESA includes the Fire and Rescue Career and Volunteer Service, Volunteer Bush Fire Service, Volunteer Emergency service Units and the Volunteer Marine Rescue Services in its Operational Division. Bush Fire Brigades are administered by local governments with fires in national parks and reserves the responsibility of the Department of Environment and Conservation.

(d) NT: Bushfires NT is primarily a land management organisation and responds only to grass fires and bushfires on land outside the Fire and Rescue Service response areas. The NT statistics in this chapter do not apply to Bushfires NT unless stated.

Source: State and Territory governments (unpublished).

Table 9A.38

Table 9A.38 All activities of fire service organisations

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Fire prevention								
Advice on rural land management	✓	✓	✓	✓	✓	✓	✓	✓
Preparation of risk assessment and emergency plans	✓	✓	✓	✓	✓	✓	✓	✓
Inspection of property and building for fire hazards and fire standards compliance	✓	✓	✓	✓	✓	✓	✓	✓
Inspection of storage and handling	✓	✓	✓	✓	✓	✓	X	✓
Other	✓	✓	✓	✓	✓	✓	✓	✓
Fire preparedness								
Preparation of response plans	✓	✓	✓	✓	✓	✓	✓	✓
Public training and intervention	✓	✓	✓	✓	✓	✓	✓	✓
Promotion of fire alerting systems	✓	✓	✓	✓	✓	✓	✓	✓
Training of fire personnel	✓	✓	✓	✓	✓	✓	✓	✓
Sale and maintenance of fire protection equipment	✓	✓	✓	X	X	✓	X	X
Hazardous chemicals and material certification	✓	✓	✓	✓	✓	X	X	X
Other	✓	✓	✓	✓	✓	✓	✓	✓
Nonfire preparedness								
Counter-terrorism	✓	✓	✓	✓	✓	✓	✓	✓
Critical infrastructure protection	✓	✓	✓	✓	✓	✓	✓	✓
National security support	✓	✓	✓	✓	✓	✓	✓	✓
Fire response								
Structural fire suppression	✓	✓	✓	✓	✓	✓	✓	✓
Wild fire suppression	✓	✓	✓	✓	✓	✓	✓	✓
Response to incident involving hazardous substances	✓	✓	✓	✓	✓	✓	✓	✓
Interagency response/incident management arrangements	✓	✓	✓	✓	✓	✓	✓	✓
Other	✓	✓	✓	✓	✓	✓	✓	✓
Nonfire response								
Hazardous materials incidents	✓	✓	✓	✓	✓	✓	✓	✓
Chemical biological and radiological incidents	✓	✓	✓	✓	✓	✓	✓	✓
Aircraft/airport incident response	✓	✓	✓	✓	✓	✓	✓	✓
Medical emergencies	✓	✓	✓	X	X	✓	✓	✓
Road crash rescue	✓	✓	✓	✓	✓	✓	✓	✓
Industrial rescue	✓	✓	✓	✓	✓	✓	✓	✓
Rescue	✓	✓	✓	✓	✓	✓	✓	✓
Storm damage	✓	✓	✓	✓	✓	X	✓	✓
Natural events	✓	✓	✓	✓	✓	✓	✓	✓
Marine response	✓	✓	X	✓	✓	X	✓	✓

Table 9A.38

Table 9A.38 **All activities of fire service organisations**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Technological and hazardous material incidents	✓	✓	✓	✓	✓	✓	✓	✓
Emergency relief and recovery	✓	✓	✓	✓	✓	✓	X	X
Vertical rescue	✓	✓	✓	✓	✓	✓	✓	✓
Urban search and rescue	✓	✓	✓	✓	✓	✓	✓	✓
Fire recovery								
Critical incident stress debriefing	✓	✓	✓	✓	✓	✓	✓	✓
Salvage and restoration of the emergency event to a safe state	✓	✓	✓	✓	✓	✓	✓	✓
Support for the community	✓	✓	✓	✓	✓	X	✓	X
Post incident analysis of events	✓	✓	✓	✓	✓	✓	✓	✓

Source: State and Territory governments (unpublished).



Table 9A.39

Table 9A.39 **All activities of State Emergency Services and Territory Emergency Services**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Storm damage	✓	✓	✓	✓	✓	✓	✓	✓
Flood response	✓	✓	✓	✓	✓	✓	✓	✓
Road crash rescue	✓	✓	✓	✓	✓	✓	X	✓
Earthquakes	✓(a)	✓	✓	✓	✓	✓	✓(a)	✓
Civil defence	✓	✓	✓	✓	✓	✓	✓	✓
National security support	✓(a)	✓	✓(a)	✓	✓	✓(a)	✓	✓(a)
Land search and rescue	✓(a)	✓(a)	✓(a)	✓(a)	✓	✓(a)	✓(a)	✓
Urban search and rescue	✓(a)	✓	✓(a)	✓	✓	✓(a)	✓	✓(a)
Inland marine search and rescue	✓(a)	✓(a)	✓(a)	✓(a)	✓	✓(a)	X	✓
Offshore marine search and rescue	X	✓(a)	X	✓(b)	✓	X	✓(b)	✓
Support to non-government emergency service organisations	✓	✓	✓	✓	✓	✓	✓	✓
Assistance for municipal planning	✓	✓	✓	✓	✓	✓	X	✓
Conduct of emergency management courses	X	✓	✓	✓	✓	✓	X	✓
Air observer (b)	✓(a)	✓	✓(a)	✓(a)	✓	✓(a)	✓	✓
Vertical rescue	✓	✓	✓	✓	✓	✓(a)	X	✓
Public safety awareness and education	✓	✓	✓	✓	✓	✓	✓	✓
Tropical cyclone response	X	X	✓	✓	X	X	X	✓
Tsunami response	✓	✓	✓	✓	X	✓(a)	X	✓

(a) This role is to provide support to another agency in this activity.

(b) WASES and ACTES undertake air observer duties only, offshore. They do not participate in sea rescue.

Source: State and Territory governments (unpublished).

Table 9A.40

Table 9A.40 Treatment of assets by emergency management agencies (a), (b), (c)

Depreciation method	Depreciable assets	NSW			Vic			Qld (d)			WA			SA			Tas			ACT (e), (f)			NT
		Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		
Revaluation method	Land	Fair or market value	Deprival or market value	Fair or market value	Fair or market value	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	na	
	Buildings	Fair or market value	Deprival or market value	Fair or market value	Fair or market value	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	Deprival value	Fair value or historical cost	Market value	na	
	Other assets	Fair or market value	Deprival or market value	Fair or market value	Fair or market value	..	Deprival value	na	na	Deprival value	na	na	Deprival value	na	na	Deprival value	na	na	Deprival value	na	na	na	
Frequency of revaluations	Land, buildings	5 years	1–5 years	1–5 years	1–5 years	3 years	3 years	5 years	5 years	1–5 years	3 years	3 years	3 years	5 years	5 years	3 years	5 years	5 years	3 years	5 years	5 years	na	
	Other assets	5 years	1–5 years	1–5 years	Annually	3 years	3 years	5 years	5 years	Annually	3 years	3 years	3 years	5 years	5 years	3 years	5 years	5 years	3 years	5 years	5 years	na	
Useful asset lives	Buildings	40 years	12–66 years	15–80 years	15–80 years	40 years	20–30 years	33–100 years	30–40 years	40 years	20–30 years	33–100 years	30–40 years	40 years	20–30 years	33–100 years	30–40 years	40 years	20–30 years	33–100 years	30–40 years	40 years	
	Specialist equipment	15 years	2–50 years	3–20 years	3–20 years	10–15 years	1–20 years	5–25 years	10 years	3–20 years	1–20 years	5–25 years	10 years	5–10 years	5–10 years	1–20 years	5–25 years	10 years	3–20 years	1–20 years	5–10 years	5–10 years	
	IT equipment	3 years	3–5 years	3–5 years	3–5 years	3 years	9–20 years	5–10 years	4 years	3 years	9–20 years	5–10 years	4 years	3 years	9–20 years	5–10 years	4 years	3 years	9–20 years	5–10 years	4 years	na	
	Other vehicles	5–15 years	2–20 years	2–10 years	2–10 years	5–20 years	6–20 years	5–10 years	7–15 years	5–15 years	6–20 years	5–10 years	7–15 years	5–15 years	6–20 years	5–10 years	7–15 years	5–15 years	6–20 years	5–10 years	7–15 years	5–15 years	
Threshold capitalisation levels (\$)	Office equipment (g)	5–20 years	2–20 years	3–10 years	3–10 years	10–15 years	10 years	3–10 years	7 years	3–10 years	3–10 years	7 years	3–10 years	3–10 years	7 years	3–10 years	3–10 years	7 years	3–10 years	3–10 years	7 years	na	
	Other equipment (h)	5–20 years	3–20 years	3–10 years	3–10 years	5–15 years	5 years	3–10 years	10 years	3–10 years	3–10 years	10 years	5 years	3–10 years	10 years	3–10 years	3–10 years	10 years	3–10 years	3–10 years	10 years	na	
Threshold capitalisation levels (\$)	Buildings	5000	All	5000	5000	1000	10 000	1000	2000	5000	1000	1000	10 000	1000	2000	10 000	1000	2000	10 000	1000	2000	na	
	IT equipment	5000	1000	5000	5000	1000	10 000	1000	na	5000	1000	1000	10 000	1000	na	10 000	1000	na	10 000	1000	na	na	
	Other assets	5000	1000	5000	5000	1000	10 000	1000	2000	5000	1000	1000	10 000	1000	2000	10 000	1000	2000	10 000	1000	2000	na	

(a) Market value is the current (net) value market selling price or exchange value; deprival value may be either the depreciated replacement cost of an asset of a similar service potential or the stream of its future economic benefits.

(b) The assets used by the NSW Rural Fire Service are largely vested in Local Government. Accordingly, although issues such as asset depreciation and useful lives may be guided by Service policies, Local Government policies will prevail in other areas.

(c) Estimated as 1/depreciation rate.

(d) Asset lives for some assets have been grouped with other classifications.

Table 9A.40

**Table 9A.40 Treatment of assets by emergency management agencies (a), (b), (c)**

	NSW	Vic	Qld (d)	WA	SA	Tas	ACT (e), (f)	NT
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(e) The recognition threshold for the revaluation of assets is \$500 000.

(f) Treatment includes all four response agencies: the ACT Fire Brigade, the ACT Rural Fire Service, the ACT State Emergency Service and the ACT Ambulance Service. Assets have been manually apportioned. Apportionment process varies from previous years.

(g) For some jurisdictions, office equipment includes furniture and fittings.

(h) For some jurisdictions, other equipment includes information technology.

**na** Not available. .. Not applicable.

**Source:** State and Territory governments.

Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

	NSW	Vic	Qld	SA	Tas	ACT	NT	Aus Gov (c), (d)
Fires	NSW Fire Brigades	Melbourne Fire and Emergency Services Board	Qld Fire and Rescue Service	Country Fire Service	Tasmania Fire Service	ACT Emergency Services Agency	NT Fire and Rescue Service	Airservices Australia (Rescue and Fire Fighting Service)
	NSW Rural Fire Service	Country Fire Authority	Qld Police Service	Metropolitan Fire Service	Forestry Tasmania	ACT Fire Brigade	Bushfires NT	Defence
	NSW Police Force	Department of Sustainability and Environment	Department of Environment and Resource Management	Local governments	Parks and Wildlife	ACT Rural Fire Service	Aviation Rescue and Fire Fighting Authority	Emergency Management Australia
	Ambulance Service of NSW	Parks Victoria	Qld Parks and Wildlife Service	Forest Products Commission	Department of Urban Services	Canberra Urban Parks and Places	Parks and Wildlife Bureau of Meteorology	Bureau of Meteorology
	Department of Environment and Climate Change NSW	Airport Rescue and Firefighting Service	Local government	FESA Operations Division (support)	FESA Operations Division	Australian Building Codes Board	Australian Building Codes Board	Australian Building Codes Board
		Gas distribution companies	Qld Ambulance Service	WA Police Service	WA Police Service	Department of Transport and Regional Services	Department of Transport and Regional Services	Department of Transport and Regional Services
		Emergency Management Qld Helicopter Rescue	Emergency Management Qld Helicopter Rescue	Department for Community Development	Department for Community Development			
Medical transport and emergencies	Ambulance Service of NSW	Ambulance Victoria	Qld Ambulance Service	St John Ambulance	Tasmania Ambulance Service	ACT Emergency Services Agency	St John Ambulance	
	NSW Health	Melbourne Fire and Emergency Services Board	Emergency Management Qld Helicopter Rescue	FESA operations Division	FESA operations Division	ACT Ambulance Service	Royal Flying Doctor Service	Royal Flying Doctor Service
	Helicopter Rescue Services (under ambulance control)		Qld Health	Royal Flying Doctor Service	Royal Flying Doctor Service		Territory Health Service	Territory Health Service
			Royal Flying Doctor Service Community Helicopters					
Road crash rescues	NSW Fire Brigades	Melbourne Fire and Emergency Services Board	Qld Fire and Rescue Service	FESA Operations Division	Tasmania Police		NT Fire and Rescue Service	
			Qld Fire and Rescue Service	State Emergency Service	State Emergency Service			

Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov (c), (d)
Road crash rescues (continued)	NSW Police Force	Country Fire Authority	Qld SES		Metropolitan Fire Service	State Emergency Service	ACT Fire Brigade	NT Emergency Services	
	Ambulance Service of NSW	Victoria SES	Qld Ambulance Service		Country Fire Service				
	NSW SES		Qld Police Service						
	Volunteer Rescue Association								
Rescues (other)	NSW Fire Brigades	Meibourne Fire and Emergency Services Board	Qld Fire and Rescue Service	WA Police Service	State Emergency Service	Tasmania Police	ACT Emergency Services Agency	NT Fire and Rescue Service	Australian Maritime Safety Authority
	NSW Police Force	Country Fire Authority Qld SES		FESA Operations Division	Metropolitan Fire Service	State Emergency Service	ACT Fire Brigade	NT Emergency Services	Defence
	Ambulance Service of NSW	Victoria SES	Qld Ambulance Service	FESA Operations Division (support)	Country Fire Service	Tasmania Fire Service	Australian Federal Police	NT Police	Australian Customs Service
	NSW SES	Victoria Police	Qld Police Service	FESA Volunteer Marine Rescue Services	SA Police	Tasmania Ambulance Service	ACT State Emergency Service		
	Volunteer Rescue Association	Ambulance Victoria	Emergency Management Qld Helicopter Rescue	St John Ambulance	SA Ambulance Service				
	Mines Rescue Service	Volunteer Groups	Volunteer Marine Rescue Association Qld		State Rescue Helicopter Service				
	Royal Volunteer Coastal Patrol	Municipal councils	Australian Volunteer Coast Guard Association		Surf Life Saving Association of SA				
	Australian Volunteer Coast Guard Association	Building Control Commissioner	Surf Life Saving Qld						

Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

Natural events	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov (c), (d)
	State Emergency Service	Victoria State Emergency Service	Local government	FESA Operations Division	SDP Functional Services	State Emergency Service	ACT Emergency Services Agency	NT Emergency Service	Emergency Management Australia
	NSW Police Force	Victoria Police	Qld SES	FESA Operations Division (support)		Department of Police and Public Safety	Australian Federal Police Fire Brigade	NT Police	Department of Transport and Regional Services
	NSW Fire Brigades	Melbourne Fire and Emergency Services Board	Qld Fire and Rescue Service	WA Police Service		Tasmania Fire Service	ACT Emergency Service	NT Fire and Rescue Service	Geoscience Australia
	Ambulance Service of NSW	Country Fire Authority	Qld Police Service	Department for Community Development		Tasmanian Ambulance Service	Department of Urban Service	Parks and Wildlife	Bureau of Meteorology
	Volunteer Rescue Association	Municipal councils	Qld Ambulance Service	Department of Mineral and Petroleum Resources		Local government authorities	ACT Ambulance Service	Local Councils	Defence
	Department of Commerce	Volunteer groups	Department of the Environment and Resource Management	Department of Agriculture		Department of Health and Human Services	ACT Rural Fire Service		Australian Building Codes Board
	Department of Primary Industry		Department of Communities	Department of Health		Department of Primary Industries, Water and Environment			
	Department of Environment and Climate Change NSW		Water Corporation						
	Ministry of Transport			Department for Planning and Infrastructure					
	Department of Premier and Cabinet								
	NSW Treasury								
	Department of Community Services								

Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov (c), (d)
Natural events (continued)	Mines Rescue Service								
	NSW Health								
	Red Cross								
	St. Vincent De Paul								
	Seventh Day Adventist								
	Salvation Army								
	Local government authorities								
	NSW Rural Fire Service								
Technological and hazardous material incidents	NSW Fire Brigades	Melbourne Fire and Emergency Services Board	Qld Fire and Rescue Service	FESA Operations Division	SDP Functional Services	DPIWE (Environmental and Pollution Control)	ACT Fire Brigade	NT Fire and Rescue Service	Australian Maritime Safety Authority
	NSW Rural Fire Service	Country Fire Authority	Hazardous Industries and Chemicals Branch	WA Police Service	SA Ambulance Service		Australian Federal Police	NT Police	Department of Transport and Regional Services
	Department of Environment and Climate Change NSW	Victoria Police	Department of Transport and Main Roads	Industry Emergency Response Groups		SES	Environment Protection Authority	Territory Health Service	Emergency Management Australia
	NSW Police Force	Ambulance Victoria	Qld Health	Department of Industry and Resources		Local government	ACT Health and Community Care	St John Ambulance	Airservices Australia
	Ambulance Service of NSW	Department of Human Services	Qld Ambulance Service	St John Ambulance		Department of Police and Public Safety		MBT	Civil Aviation Safety Authority
	NSW Health	Vic Workcover Authority	Qld Police Service	Department of Environment and Conservation		Tasmania Fire Service		NT TES	Australian Transport Safety Bureau
	National Oil Spill Committee	Environmental Protection Authority	Department of Health	Department of Health		Tasmania SES		Work Health Authority	Defence

Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

	NSW	Vic	Qld	WA	SA	ACT	NT	Aus Gov (c), (d)
Technological and hazardous material incidents (continued)	Port Corporations	Marine Board		Water Corporation				
	Oil Companies	(Vic Channels, Local Ports Operators)		Alinta Gas				
	Department of Environment and Climate Change NSW	Department of Sustainability and Environment		Port Authorities				
		Parks Victoria		Department of Environment and Conservation				
			Department of Planning and Infrastructure					
				Local government authorities				
Quarantine and disease control	NSW Health	Department of Sustainability and Environment	Qld Primary Industries and Fisheries	Department of Health	SDP Functional Services	ACT Health and Community Care	NT Emergency Service	Department of Health and Aging
	Department of Primary Industry	(Water Agencies and Agriculture)	Department of Environment and Resource Management	Department of Agriculture		Environment ACT	Territory Health Service	Australian Quarantine and Inspection Service
	Water Authorities	Municipal councils	Qld Health	Water Corporation		ACT Electricity and Water	NT Police	Australian Customs Service
	NSW Police Force	Department of Human Services (Public Health)	Department of Community Safety				Transport and Works Department	Emergency Management Australia
	Department of Environment and Climate Change NSW		Department of Transport and Main Roads	FESA Operations Division			Department Primary Industry and Fisheries	Agriculture, Fisheries and Forestry Australia
	NSW Fire Brigades		Local government					



Table 9A.41

Table 9A.41 Summary of emergency management organisations by event type (a), (b)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov (c), (d)
Emergency relief and recovery	State Emergency Management Committee	Municipal councils	Department of Community Safety	Department of Community Development	SDP Functional Services	Department of Health and Human Services (Community and Rural Health)	ACT Emergency Services Agency	NT TES	Department Family and Community Services
	NSW Police Force	Department of Human Services (Public Health)	Department of Communities	Utility agencies		Salvation Army	Department Community Services	Territory Health Services	Centrelink
	Department of Commerce	Church/charitable organisations	Local government	Department of Health		Department of Infrastructure Energy and Resources	Department Urban Services	Government departments	Department Transport and Regional Services
	Department of Community Services	Victoria SES	Qld SES	Department of Premier and Cabinet		Local government	ACT State Emergency Service	Charity organisations	Emergency Management Australia
	Department of Premier and Cabinet	Victoria Police	Qld Health	Local governments		Tasmania SES		Red Cross	
	NSW Treasury			Insurance Council of Australia					
	NSW Health	Department of Sustainability and Environment (Agriculture)		FESA Operations Division (support)					
	Department of Primary Industry			Department of Treasury and Finance					
	Red Cross								
	St. Vincent De Paul								
	Department of Transport	Vic Roads		Department Agriculture					
	Department of Education	Utility companies		Department of Environment and Conservation, Catchment and Water Protection					

Table 9A.41

**Table 9A.41 Summary of emergency management organisations by event type (a), (b)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus Gov (c), (d)
Emergency relief and recovery (continued)	Community Relations Commission Salvation Army  Seventh Day Adventist  Local government authorities			Department Mineral and Petroleum Resources  Department Planning and Infrastructure					

(a) Information on emergency management activities was initially collected from the Survey of Emergency Management Activities conducted in 2000. This information was updated by jurisdictions for the 2002-2004 Reports without the survey being re-conducted.

(b) Organisations are ordered by level of involvement in each event type, except for the column under the heading of Australian Government. That is, the first mentioned organisation for each jurisdiction under each event type is the most involved combating organisation, the second mentioned is the second main combating organisation, through to the last mentioned, which is the most minor combating organisation listed (and there may be other organisations with a role, more minor again which are not listed).

(c) Emergency Management Australia is the central coordinating Australian Government agency for any hazard, at the request of the jurisdictions.

(d) The Australian Government administrative arrangements referred to in this table reflect the arrangements in place as at November 2009.

Source: Australian, State and Territory governments (unpublished).

Table 9A.42

**Table 9A.42 Reported fires and other primary incidents, urban and rural inclusions and exclusions**

<b>Table no.</b>	<b>Table title</b>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
9A.2	Reported fires & other primary incidents attended to by fire service organisations	✓	✓	X	✓	✓	✓	X	X
9A.3	Fire service organisations and land management agencies reported total landscape fire incidents	✓	✓	X	✓	✓	✓	X	X
9A.4	Accidental residential structure fires reported to fire service organisations per 100 000 households	✓	✓	X	✓	✓	✓	✓	X
9A.8	Median dollar loss per structure fire	X	✓	X	✓	✓	✓	✓	X
9A.9	Total property loss from structure fire - dollars per person	X	✓	X	✓	✓	✓	✓	X
9A.10	Total fire incidents attended by fire service organisations per 100 000 persons	✓	✓	X	✓	✓	✓	X	X
9A.13	Response times to structure fires	✓	✓	X	✓	✓	✓	✓	X
9A.14	Structure fires and response times to structure fires across geographic areas	✓	✓	X	✓	✓	✓	✓	X
9A.15	Structure fires confined to the room of origin (per cent)	X	✓	X	✓	X	✓	✓	X
9A.40	Top three known ignition factors	✓	✓	X	✓	✓	✓	✓	X
9.3	Hazardous materials incidents attended by fire service organisations	✓	✓	X	✓	✓	✓	✓	X

Source: State and Territory Governments (unpublished).

Table 9A.43

Table 9A.43 Top three known ignition factors for structure fires

	NSW	Vic	Qld (a)	WA	SA	Tas	ACT	NT	Aust
<b>2007-08</b>									
Structure fires (no.)	7 179	6 391	2 795	1 538	1 544	639	246	170	20 502
Top ignition factor	Unattended heat sources (19.0%)	Unattended heat sources (17.8%)	Unattended heat sources (11.9%)	Suspicious (11.7%)	Suspicious (12.0%)	Unattended heat sources (19.1%)	Suspicious (26.4%)	Short-circuit, ground fault and other electrical failure (10.0%)	Unattended heat sources (15.3%)
Second top ignition factor	Short-circuit, ground fault and other electrical failure (8.6%)	Short-circuit, ground fault and other electrical failure (12.9%)	Short-circuit, ground fault and other electrical failure (8.3%)	Short-circuit, ground fault and other electrical failure (9.6%)	Short-circuit, ground fault and other electrical failure (8.9%)	Incendiary (15.0%)	Unattended heat sources (11.4%)	Suspicious (7.1%)	Short-circuit, ground fault and other electrical failure (10.0%)
Third top ignition factor	Suspicious (7.4%)	Suspicious (10.7%)	Incendiary (5.0%)	Unattended heat sources (8.9%)	Abandoned, discarded material including discarded cigarettes (3.3%)	Failure to clean (8.3%)	Abandoned, discarded material including discarded cigarettes (10.2%)	Abandoned, discarded material including discarded cigarettes (4.7%)	Suspicious (8.7%)
Ignition factor undetermined / not reported	22.1%	12.4%	31.4%	21.6%	43.2%	14.1%	4.1%	40.6%	21.6%
Other factors	42.9%	46.2%	43.4%	48.2%	32.6%	43.5%	47.9%	37.6%	44.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9A.43

Table 9A.43 Top three known ignition factors for structure fires

	NSW	Vic	Qld (a)	WA	SA	Tas	ACT	NT	Aust
<b>2008-09</b>									
Structure fires (no.)	6 917	6 459	2 836	1 543	1 469	805	263	172	20 464
Top ignition factor	Unattended heat sources (17.6%)	Unattended heat sources (19.1%)	Unattended heat sources (10.8%)	Suspicious (13.6%)	Suspicious (13.1%)	Unattended heat sources (18.4%)	Suspicious (19.0%)	Unattended heat sources (4.7%)	Unattended heat sources (15.0%)
Second top ignition factor	Short-circuit, ground fault and other electrical failure (10.0%)	Short-circuit, ground fault and other electrical failure (13.0%)	Short-circuit, ground fault and other electrical failure (7.5%)	Short-circuit, ground fault and other electrical failure (12.2%)	Short-circuit, ground fault and other electrical failure (9.3%)	Incendary (17.6%)	Unattended heat sources (13.3%)	Short-circuit, ground fault and other electrical failure (4.7%)	Short-circuit, ground fault and other electrical failure (10.5%)
Third top ignition factor	Suspicious (7.9%)	Suspicious (10.6%)	Suspicious (5.8%)	Unattended heat sources (7.9%)	Abandoned, discarded material including discarded cigarettes (3.6%)	Failure to clean - included is a fouled flue (10.2%)	Abandoned, discarded material including discarded cigarettes (9.1%)	Suspicious (4.7%)	Suspicious (9.1%)
Ignition factor undetermined / not reported	17.9%	12.4%	33.9%	23.1%	38.5%	11.1%	4.6%	50.0%	20.1%
Other factors	46.6%	44.9%	42.0%	43.2%	35.5%	42.7%	54.0%	35.9%	45.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(a) Qld: QFRS Rural Incident Database does not currently record the necessary information to calculate this measure.

Source: State and Territory Governments (unpublished).