



**Bushfire CRC  
Enhancing Volunteer Recruitment and Retention Project  
(D3)**

**Occasional Report Number 2004:3**

**Recruiting New Rural Fire Service  
Volunteers: Direct Expenditure Estimates**

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## **Executive Summary**

- Bushfire CRC Volunteerism Project (D3) Report Number 3: 2004 *Profiles of Australia's Volunteer Firefighters* generated an estimate that approximately 17,500 of Australia's 221,000 rural fire service volunteers left their agency during the previous 12 months—suggesting an annual total volunteer turnover rate of approximately 8%.
- The direct, or immediate, cost to rural fire services of recruiting new volunteers to replace those who leave has not hitherto been estimated.
- An estimating exercise was carried out in which rural fire services (other than NT F & RS) were asked to provide estimates of their direct, or up front, tangible expenditures involved in recruiting a new volunteer, comprising costs associated with:  
(a) advertising and recruitment; (b) registration administration; (c) providing personal protective clothing; (d) providing other clothing; and, (e) providing initial training.
- There were great differences in agencies' abilities to provide an estimate for cost items. Three agencies (ACT ESA, SAFECOM--CFS, and TFS) were able to provide comprehensive estimates. It is probable that the overall expenditure figures presented here for the other four agencies are under-estimates.
- A major source of difference among agencies in average expenditure per new volunteer is in the cost of Personal Protective Clothing (PPC) provided by agencies to their volunteers, and particularly the cost of structural PPC.
- Based on information provided by agencies, it is estimated that the total annual direct expenditure by the seven participating agencies for recruiting new volunteers is of the order of \$12.5 million.

## **Recommendation**

Agencies may wish to review in more detail the level and nature of their direct, tangible expenditures on recruiting new volunteers in light of the information provided in this Report.

## **Rural Fire Services' Direct Expenditures on Recruiting New Volunteers**

### **Introduction**

The Bushfire CRC Volunteerism Project (D3) Report Number 3: 2004 *Profiles of Australia's Volunteer Firefighters* allowed estimates to be generated of the number of volunteers who ceased being volunteer members of rural fire services during a 12 month period. Following circulation of the Report, several inquirers raised questions about how much turnover of volunteers cost rural fire services annually.

In the absence of any previous work reported by agencies on this topic, a survey was conducted of the seven rural fire services participating in the Bushfire CRC Volunteerism Project (the NT Fire & Rescue Service is not a participant). Agencies were asked to provide an estimate of their direct expenditures on recruiting a new volunteer in terms of:

- Recruitment and advertising costs
- Apparel: Personal Protective Clothing—PPC (rural and structural), and non-PPC
- Registration administration costs
- Initial training costs

After all agencies had responded with their available information, a summary table was prepared. This was circulated to agencies for inspection and revision if desired. Several agencies revised their initial estimates. The cycle was repeated until all agencies indicated that no further revisions were required.

The final results of the estimating exercise are shown in Table 1. Explanations of aspects of the table have been provided in footnotes (<sup>1,2</sup> etc.) at the end of the Table. Following the Table there is a discussion of the various expenditure estimate figures shown.

**Table 1: Estimated Direct Expenditure on Recruiting a New Rural Fire Service Volunteer [for explanations, see Table footnotes on the following page, and the Discussion]**

<b>State or Territory</b>	<b>ACT</b>	<b>VIC</b>	<b>NSW</b>	<b>QLD</b>	<b>SA</b>	<b>TAS</b>	<b>WA</b>	<b>Weighted Mean</b>	<b>Total</b>
<b>Agency</b>	<b>ESA</b>	<b>CFA</b>	<b>RFS</b>	<b>F&amp;RS</b>	<b>CFS</b>	<b>TFS</b>	<b>FESA</b>		
<b>1. Total number of volunteers</b>	400	59,000	67,000	48,000	15,000	4,000	27,000		220,400
<b>2. Gross annual loss of volunteers</b>	100	3,700	5,800	3,800	1,500	500	2,100		17,500
Gross loss as a percentage of total volunteers	25%	6%	9%	8%	10%	13%	7%	8%	
<b>EXPENDITURE ITEM</b>									
<b>3. Recruitment Advertising</b>	NA	\$37	\$70	NA	\$120	\$15	NA		
<b>4. Apparel</b>									
<b>(i) Non-PPC</b>									
Cost per recruit	NA	NA	NA	NA	NA	\$219	NA		
% of recruits outfitted	NA	NA	NA	NA	NA	100%	NA		
<b>(ii) PPC</b>									
Rural (Cost per recruit)	\$700	\$500	\$668	\$300	\$669	\$645	\$466		
% of recruits outfitted	100%	66%	100%	100%	90%	86%	80%		
Urban (Cost per recruit)	NA	\$1,435	\$874	\$1,000	\$1,153	\$1,653	\$1,800		
% of recruits outfitted	0%	34%	2%	1%	10%	43%	0.02%		
<b>Weighted sub-total for Apparel</b>	\$700	\$818	\$686	\$310	\$745	\$1,485	\$377		
<b>5. Registration (administrative cost)</b>	\$10	NA	NA	NA	\$15	\$30	NA		
<b>6. Basic training (cost of training materials)</b>	\$50	NA	\$50	NA	\$65	\$90	\$100		
<b>7. Mean total expenditure per new volunteer</b>	\$760	\$855	\$806	\$310	\$945	\$1,620	\$477	<b>\$710</b>	
<b>8. Annual expenditure by agency</b>	\$76,000	\$3,163,500	\$4,674,800	\$1,178,000	\$1,417,500	\$919,500	\$1,001,700		<b>\$12,431,000</b>

**Table Notes:**

<sup>1</sup>. Weighted average taking into account the numbers of volunteers supplied with urban PPC in addition to rural PPC and non-PPC. Example: for TFS, 100% of volunteers receive non-PPC apparel, 86% of volunteers receive non-PPC apparel and rural PPC, 43% of volunteers receive non-PPC apparel, rural PPC, and urban PPC; the weighted average cost of clothing a TFS volunteer is thus \$1,485.

<sup>2</sup>. Average expenditure X annual number of replacements

NA = Not Applicable

? = unable to be estimated

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**Discussion of Table 1**

(Note that the numerals refer to line numbers in Table 1).

**1. Volunteer numbers:** These numbers have been rounded from the figures provided by fire services as at 30 June, 2004.

**2. Annual losses of volunteers:** Numbers were provided by ACT ESA; CFA; NSW RFS; SA CFS; & TFS. However, Q F & RS-Rural and WA FESA were both unable to provide volunteers loss figures. To estimate a number for each, the weighted average loss rate of 8% for the 12 months to 30 June 2004 for the other five agencies was applied. Values have been rounded.

**3. Recruitment advertising:** For ACT ESA, Q F & RS-Rural, and WA FESA, no funds were expended on recruitment advertising from central, or corporate, sources. Brigades could undertake their own recruiting activities but any such expenditures are (apparently) not identified easily as separate items in central accounting records. For NSW RFS, SA CFS, and TFS, the costs shown are in the nature of rough estimates. However, CFA reported that: (a) the total cost of materials supplied by CFA Headquarters to directly support brigades with recruitment campaigns during 2003/2004 was \$90,365; and (b) the number of new members who were registered during that period was 2,447. This corresponds to a direct recruiting cost per new CFA volunteer of \$37. It was not possible to factor-in recruiting effects of general media reporting of volunteer fire services activity. Presumably, this is likely to be very important for agencies depending on the events occurring during a given fire season.

**4.(i) Non-PPC expenditure:** TFS supplies non-PPC apparel to new volunteers: Woollen Pullover; Boots; Cotton Trousers; Poly-cotton Shirt; Broad Brimmed Hat; Epaulettes; Name Tag—total cost \$219 (Gerald Kutzner, personal communication, 15 September, 2004). Other agencies indicated that some brigades used their own funds to purchase non-PPC items for members.

**4.(ii) PPC expenditure:** The cost of structural PPC is greater than the cost of wildfire (or non-structural) PPC. Agencies were asked to provide estimates of the percentages of their volunteers who received wildfire PPC only, and structural as well as wildfire PPC. As can be seen from Table 1, there are great differences in the percentages across agencies, no doubt following their brigade risk profile pattern. Thus, 43% of TFS volunteers are provided with structural PPC, while for WA FESA, the figure is less than 1%. The weighted average apparel

expenditure estimate assumes that the turnover rates for those receiving rural PPC only and for those receiving both rural and structural PPC are the same. This assumption may be incorrect. Note that the percentages shown do not always total 100%--presumably because some non-operational staff do not receive PPC.

**5. Registration costs:** Three agencies were able to provide an estimate of the direct administrative cost of registering a new volunteer—ACT ESA, SA CFS, and TFS, ranging from \$10 to \$30.

**6. Initial training costs:** Five agencies were able to provide an estimate of costs of basic, or initial, training for new volunteers. Estimates ranged from \$50 - \$100. CFA and Q F & RS-Rural were unable to provide an estimate.

**7. Mean total expenditure per new recruit:** ACT ESA, SA CFS, and TFS were able to provide reasonably comprehensive estimates. For the others, no estimate could be provided for at least one of the four notional expenditure “items”. There appear to be considerable differences among the seven agencies in the amount expended in recruiting a new volunteer, ranging from \$310 (Q F & RS-Rural) to \$1,620 (TFS). The major determinant appears to be the net cost of providing structural PPC—made up of the cost per urban PPC unit, and the percentage of volunteers provided with urban PPC.

**9. Annual expenditure:** Obviously this figure will fluctuate markedly with the number of new volunteers recruited in a given year. To simplify the estimating process, it was assumed that the number of volunteers leaving in a year was equal to the number of new volunteers joining. To provide some perspective on the estimated raw costs, the estimated expenditure on recruiting new volunteers has been expressed as a percentage of the total expenditure 2002-3 for the three agencies whose Annual Reports provided a total expenditure figure for rural (as distinct from metropolitan and rural combined) community protection:

- CFA, annual expenditures: \$171.1 million, new volunteers expenditure = 1.8%
- NSW RFS, annual expenditures: \$241 million, new volunteers expenditure = 1.9%
- SA CFS annual expenditures: \$43.4 million, new volunteers expenditure = 3.2%

## **Concluding Discussion**

The estimates of average total expenditure per new volunteer and annual total new volunteer expenditure presented here do not take into account expenditures by brigades. Nor do they take into account staff salaries and other infrastructure costs involved in recruiting new volunteers.

No claim is made as to the absolute accuracy of the figures reported: they are estimates, based on the assumptions stated. To the extent that the assumptions are faulty, the estimates will be erroneous.

All agencies noted that there is some recycling of PPC when volunteers leave and other volunteers join as replacements. Obviously, the more PPC able to be recycled, the lower the expenditure. It was not possible to incorporate this into the estimation procedure.

As indicated earlier, the amounts expended by the various agencies per new volunteer recruit differ considerably. The differences presumably arise because of many factors, of which the most important is the percentage of volunteers who must be equipped with structural PPC.

The estimating procedure reported here should be seen as a preliminary exercise. Agencies might want to use it as a basis for more detailed, and more accurate, costings. Given that there is likely to be ongoing close scrutiny of how taxpayers' dollars are spent by government instrumentalities, it would seem prudent for fire agencies to be able to provide detailed figures on costs of volunteer recruitment if these should be requested.

Finally, it has been suggested by several contributors that a major cost of recruiting new volunteers is an **intangible**: the time spent by individual brigade members recruiting new volunteers and providing 'on the job' training and instruction to these new members.

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The author is solely responsible for any errors made in the assumptions, or in the calculations.

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