

# Household Expenditure on Sports and Physical Recreation, Australia, 2003–04

## Introduction

This report presents results from the Household Expenditure Survey conducted by the Australian Bureau of Statistics (ABS) during 2003–04. The survey collected detailed information about the expenditure and income of households resident in private dwellings throughout Australia. The report provides details of the expenditure on sports and physical recreation products during 2003–04. It also provides a comparison at constant prices of 2003–04 data with the corresponding figures for expenditure on sports and physical recreation from the 1998–99 Household Expenditure Survey.

The Household Expenditure Survey collects information about expenditure by households rather than expenditure by individuals because some purchases (e.g. furniture, white goods and home entertainment equipment) are for the benefit of everyone in a household and so cannot be attributed in any meaningful way to any particular member of that household.

The results of the survey do not show the total demand for sports and physical recreation products in Australia, because its scope is limited to expenditure by households for private purposes. Sports and physical recreation products are also purchased by businesses, governments and international tourists.

The expenditure data collected in the 2003–04 survey were categorised using the Household Expenditure Classification. The Product Classification of the *Australian Culture and Leisure Classifications* (ABS cat. no. 4902.0) (ACLC) was used as a guide to determine which of the Household Expenditure Classification categories were predominantly related to sports and physical recreation. Because there is not an exact correspondence between the categories of the two classifications, there are minor instances of in-scope products being excluded from the data presented in this report and vice versa. See paragraphs 4 and 5 of the Explanatory notes for further detail.

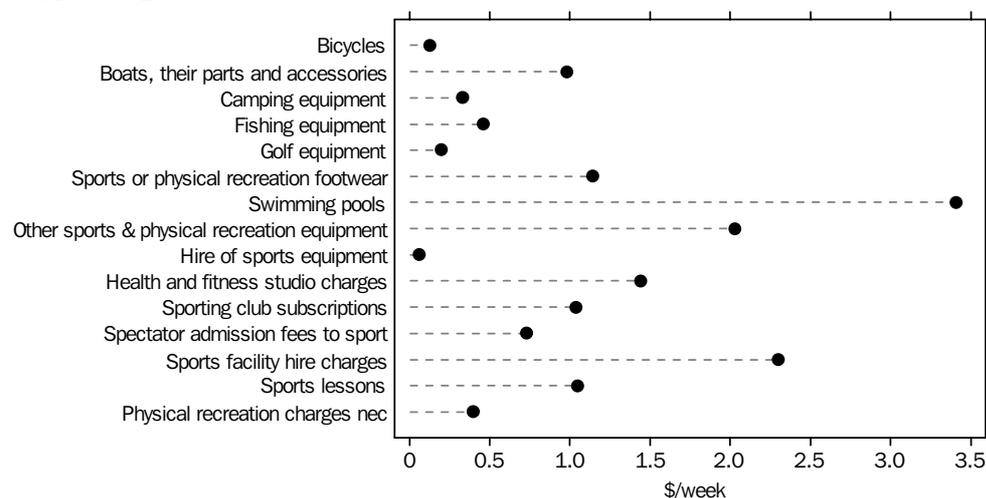
## 1 Sports and Physical Recreation Expenditure

During 2003–04, the average expenditure by Australian households on all goods and services (including in-ground swimming pools) was \$886.63 per week. Of this amount, \$15.70 (1.8%) was spent on the sports and physical recreation products detailed in table 1. The term 'products' is used by the ABS to encompass both the tangible (otherwise known as goods) and the intangible (otherwise known as services).

Nearly half (48.2%) of the expenditure on sports and physical recreation products went on Sports, physical recreation and camping equipment (\$7.57 per week). A further 44.7% was spent on Sports and physical recreation services (\$7.02 per week), while Sports and recreation vehicles accounted for the remaining 7.1% (\$1.11 per week).

The product categories for which the highest expenditures were recorded were Swimming pools (\$3.41 per week), Sports facility hire charges (\$2.30 per week) and Other sports and physical recreation equipment (\$2.03 per week).

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS—2003–04



The 2003–04 Household Expenditure Survey also captured data regarding the numbers of households reporting expenditure on each product category. The category on which the largest number had expenditure was Sports facility hire charges which was reported by 15.8% of households. Physical recreation charges nec and Other sport and physical recreation equipment were the categories reported by the next highest percentages of households. These were little different at 5.8% and 5.7% respectively.

The product categories on which the lowest percentages of households had expenditure were Hire of sports equipment (0.4%); Boats, their parts and accessories (0.7%) and Bicycles (0.8%).

In total, \$6,332.5m was spent on the sports and physical recreation products detailed in table 1 during 2003–04. The expenditure on Sports, physical recreation and camping equipment was \$3,053.3m, while \$2,831.5m was spent on Sports and physical recreation services and \$447.7m on Sports and recreation vehicles.

**Table 1** EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS BY AUSTRALIAN HOUSEHOLDS – 2003–04

	<i>Average household expenditure</i>	<i>Total household expenditure</i>	<i>Number of households reporting expenditure(a)</i>
	\$/week	\$m/year	'000
<b>Sports and recreation vehicles</b>			
Bicycles	*0.13	*52.4	(b)61.1
Boats, their parts and accessories	0.98	395.3	(c)51.8
<i>Total</i>	<i>1.11</i>	<i>447.7</i>	<i>112.9</i>
<b>Sports, physical recreation and camping equipment</b>			
Camping equipment	0.33	133.1	72.6
Fishing equipment	0.46	185.5	178.3
Golf equipment	0.20	80.7	82.2
Sports or physical recreation footwear	1.14	459.8	228.0
Swimming pools	3.41	1,375.4	(b)86.7
Other sports and physical recreation equipment	2.03	818.8	441.1
<i>Total</i>	<i>7.57</i>	<i>3,053.3</i>	<i>978.4</i>
<b>Sports and physical recreation services</b>			
Hire of sports equipment	*0.06	*24.2	33.8
Health and fitness studio charges	1.44	580.8	332.2
Sporting club subscriptions	1.04	419.5	236.1
Spectator admission fees to sport	0.73	294.4	278.6
Sports facility hire charges	2.30	927.7	1,225.1
Sports lessons	1.05	423.5	294.3
Physical recreation charges nec(d)	0.40	161.3	444.9
<i>Total</i>	<i>7.02</i>	<i>2,831.5</i>	<i>2,169.2</i>
<b>Total expenditure on selected sports and physical recreation products</b>	<b>15.70</b>	<b>6,332.5</b>	<b>2,717.7</b>
Total expenditure on all products	886.63	357,617.4	7,735.8
* estimate has a relative standard error of between 25% and 50% and should be used with caution			
(a) Households reporting expenditure in the two week enumeration period unless otherwise noted.			
(b) Households reporting expenditure in the twelve months prior to interview.			
(c) Households reporting expenditure in the twelve months or two weeks prior to interview for different commodities within this category.			
(d) This is a new expenditure category for 2003–04 and includes charges for horse riding, ice-skating, snooker and related games, swimming pool admission, parasailing and skydiving. For 1998–99 these were all included in an expenditure category which was predominantly out of scope of sports and physical recreation.			

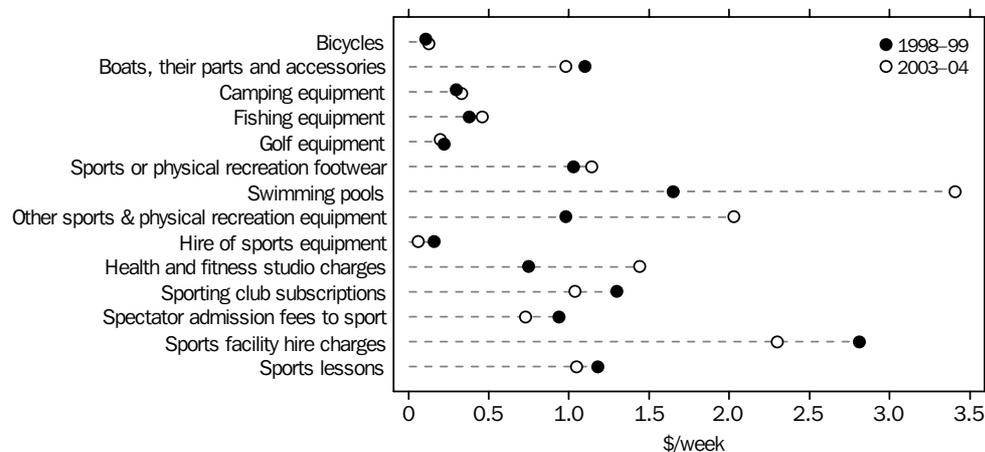
## 2 Comparison of Sports and Physical Recreation Expenditure Over Time

Changes in expenditure over time are a result of changes in prices (both in the general level of prices and the relative prices of different products) and changes in quantities of products purchased. People may pay more (or less) for items or collectively buy more (or less) of them for a variety of reasons, such as

- changes in the quality of a product
- the introduction of new products
- changes in people's preferences
- changes in the composition of the population (e.g. age, ethnicity, family size, etc.)
- increases in the number of people and the number of households.

It is possible to adjust Household Expenditure Survey data for different years to eliminate the effect of price changes. This enables a better understanding of the change in demand over time for sports and physical recreation products. The effect of price changes can be removed by adjusting the expenditure on each product category by the index number for the relevant sub-group of the Consumer Price Index (CPI). The time period comparisons presented in the graph below and in table 2 are in constant price terms – that is, for both 1998–99 and 2003–04, the expenditure on sports and physical recreation products is presented in 2003–04 prices. However, these data should be treated with caution as the sub-groups of the CPI do not correspond exactly to the product categories used by the Household Expenditure Survey. In addition, the CPI is only applicable to capital cities, whereas the Household Expenditure Survey covers households throughout Australia. Also, there are two product categories which have a slightly different content for 2003–04 than they did for 1998–99. These differences – which will have only a slight effect on comparability – are detailed in the footnotes to table 2.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE(a) ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS—1998–99 and 2003–04



(a) At 2003–04 prices.

Overall, the average weekly expenditure on sports and physical recreation products increased by 18.8%, from \$12.88 in 1998–99 to \$15.30 in 2003–04, despite a slight fall in the percentage of households reporting this expenditure.

This rise was largely the result of substantial increases in expenditure on Swimming pools, Other sports and physical recreation equipment, and Health and fitness studio charges counteracting falls in expenditure on several other product categories. The average expenditure on Swimming pools rose by 106.7% from \$1.65 per week to \$3.41 per week, while the increase for Other sports and physical recreation equipment was similar at 107.1% from \$0.98 to \$2.03. For Health and fitness studio charges, average weekly expenditure rose by 92.0% from \$0.75 to \$1.44.

The rise in expenditure on Health and fitness studio charges was accompanied by an increase from 2.8% to 4.3% in the percentage of households reporting this expenditure. Over the same period, average weekly expenditure on Sports facility hire charges fell from \$2.81 to \$2.30 while the percentage of households reporting this expenditure decreased from 19.3% to 15.8%. This suggests that health and fitness studios may have gained business at the expense of sports facilities.

The total annual expenditure on sport and physical recreation products by all Australian households rose by 29.0% from \$4,784.9m in 1998–99 to \$6,171.2m in 2003–04. This was brought about by the increase in average weekly household expenditure (18.8%) in combination with an 8.6% increase in the total number of Australian households from 7.1m to 7.7m over the same period. The increase in total annual expenditure on all products over this period was 16.7% from \$306,329.4m to \$357,617.4m.

**Table 2** HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS AT CONSTANT PRICES(a)  
– 1998–99 and 2003–04

	AVERAGE HOUSEHOLD EXPENDITURE		TOTAL HOUSEHOLD EXPENDITURE		PERCENTAGE OF HOUSEHOLDS REPORTING EXPENDITURE	
	1998–99	2003–04	1998–99	2003–04	1998–99	2003–04
	\$/week	\$/week	\$/year	\$/year	%	%
<b>Sports and recreation vehicles</b>						
Bicycles	0.11	*0.13	40.4	*52.4	1.6	0.8
Boats, their parts and accessories	*1.10	0.98	*406.9	395.3	1.4	0.7
<i>Total</i>	<i>*1.20</i>	<i>1.11</i>	<i>*447.3</i>	<i>447.7</i>	<i>2.8</i>	<i>1.5</i>
<b>Sports, physical recreation and camping equipment</b>						
Camping equipment	*0.30	0.33	*111.0	133.1	0.8	0.9
Fishing equipment	0.38	0.46	141.2	185.5	3.5	2.3
Golf equipment	0.22	0.20	80.7	80.7	1.4	1.1
Sports or physical recreation footwear	1.03	1.14	380.7	459.8	3.5	2.9
Swimming pools	1.65	3.41	611.5	1,375.4	0.7	1.1
Other sports and physical recreation equipment(b)	0.98	2.03	363.1	818.8	5.1	5.7
<i>Total</i>	<i>4.55</i>	<i>7.57</i>	<i>1,688.3</i>	<i>3,053.3</i>	<i>13.3</i>	<i>12.6</i>
<b>Sports and physical recreation services</b>						
Hire of sports equipment	*0.16	*0.06	*60.4	*24.2	0.9	0.4
Health and fitness studio charges	0.75	1.44	276.9	580.8	2.8	4.3
Sporting club subscriptions	1.30	1.04	483.1	419.5	2.6	3.1
Spectator admission fees to sport	0.94	0.73	349.3	294.4	5.1	3.6
Sports facility hire charges(c)	2.81	2.30	1,041.8	927.7	19.3	15.8
Sports lessons	1.18	1.05	437.8	423.5	3.8	3.8
<i>Total(d)</i>	<i>7.13</i>	<i>6.62</i>	<i>2,649.3</i>	<i>2,670.1</i>	<i>27.1</i>	<i>24.8</i>
<b>Total expenditure on selected sports and physical recreation products (d)</b>	<b>12.88</b>	<b>15.30</b>	<b>4,784.9</b>	<b>6,171.2</b>	<b>35.9</b>	<b>32.6</b>
Total expenditure on all products	824.83	886.63	306,329.4	357,617.4	100.0	100.0

\* estimate has a relative standard error of between 25% and 50% and should be used with caution

(a) At 2003–04 prices.

(b) In addition to the products included for 1998–99, for 2003–04 this expenditure category includes skipping ropes, roller blades, roller skates, skateboards and toboggans. For 1998–99 these were all included in an expenditure category which was predominantly out of scope of sports and physical recreation.

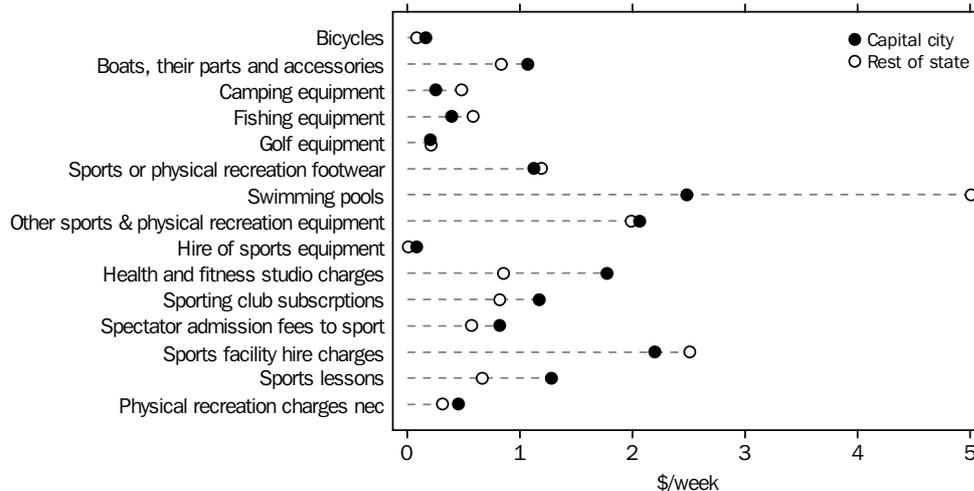
(c) In addition to the products included for 1998–99, for 2003–04 this expenditure category includes tenpin bowling parties. For 1998–99 these were included in an expenditure category which was predominantly out of scope of sports and physical recreation.

(d) Excludes Physical recreation charges nec because this expenditure category did not exist at the time of the 1998–99 Household Expenditure Survey. For the 1998–99 survey, the component products of Physical recreation charges nec were included in an expenditure category predominantly out of scope of sports and physical recreation.

### 3 Sports and Physical Recreation Expenditure by Major Region

Table 3 shows that the average weekly household expenditure on Sports and physical recreation services during 2003–04 for people living in capital cities was 35.6% higher than for people living elsewhere – \$7.77 compared with \$5.73. On the other hand, the average weekly household expenditure on Sports, physical recreation and camping equipment was 31.3% lower in the capital cities than elsewhere – \$6.50 compared with \$9.46. This was largely due to the estimate of expenditure on swimming pools being considerably higher for areas outside the capital cities. The overall estimates of household expenditure on sports and physical recreation products were \$15.50 for capital cities and \$16.10 for other areas. However, the difference in these estimates was not statistically significant.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS, By major region—2003–04



The lack of significant difference between capital-city and rest-of-state spending on sports and physical recreation contrasts with the situations existing for spending on all products, and for average household income. The average weekly household expenditure in capital cities on all products was 18.4% higher than in other areas – \$940.12 compared with \$793.82. Similarly, the capital-city average weekly household income of \$1,210 was 22.7% higher than the corresponding rest-of-state figure of \$986. Hence, despite their average income being lower, the spending by regional households on sports and physical recreation products in 2003-04 was similar to that of their capital-city counterparts. In percentage terms, regional households spent 1.6% of their weekly income on sports and physical recreation, compared with 1.3% for capital-city households.

The lack of significant regional difference in sports and physical recreation spending in 2003–04 also contrasts with the corresponding data from the previous Household Expenditure Survey. For 1998–99, sports and physical recreation spending in capital cities was 18.2% higher than in other areas – \$11.68 per week compared with \$9.88 (1998–99 prices).

**Table 3** HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS, By major region – 2003–04

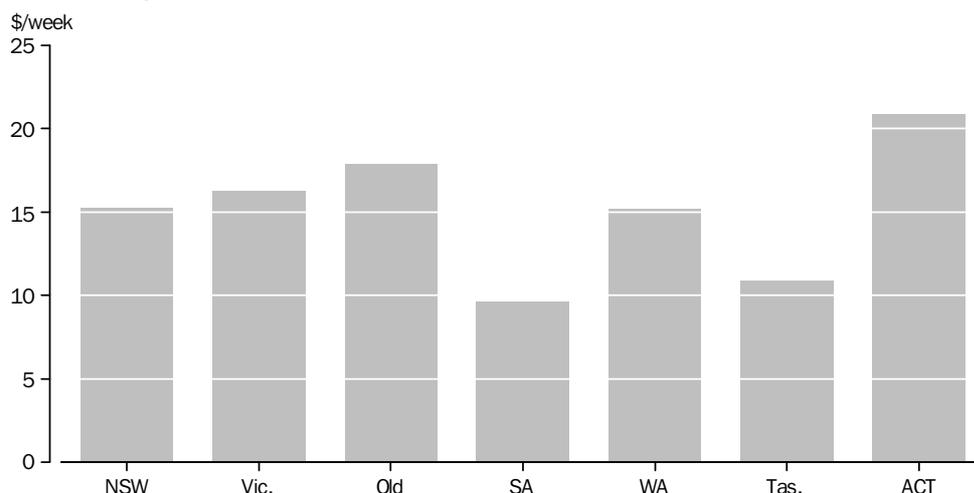
	<i>Capital city</i>	<i>Rest of state</i>	<i>Australia</i>
AVERAGE WEEKLY HOUSEHOLD EXPENDITURE (\$)			
Sports and recreation vehicles			
Bicycles	*0.16	*0.08	*0.13
Boats, their parts and accessories	*1.07	*0.83	0.98
<i>Total</i>	*1.23	*0.91	1.11
Sports, physical recreation and camping equipment			
Camping equipment	0.25	*0.48	0.33
Fishing equipment	*0.39	*0.58	0.46
Golf equipment	*0.20	*0.21	0.20
Sports or physical recreation footwear	1.12	1.19	1.14
Swimming pools	2.48	*5.01	3.41
Other sports and physical recreation equipment	2.06	*1.99	2.03
<i>Total</i>	6.50	9.46	7.57
Sports and physical recreation services			
Hire of sports equipment	*0.08	**0.01	*0.06
Health and fitness studio charges	1.77	*0.85	1.44
Sporting club subscriptions	1.17	0.82	1.04
Spectator admission fees to sport	0.82	*0.57	0.73
Sports facility hire charges	2.20	2.51	2.30
Sports lessons	1.28	*0.66	1.05
Physical recreation charges nec	0.45	*0.31	0.40
<i>Total</i>	7.77	5.73	7.02
<b>Total expenditure on selected sports and physical recreation products</b>	<b>15.50</b>	<b>16.10</b>	<b>15.70</b>
Total expenditure on all products	940.12	793.82	886.63
Average weekly household income (\$)	1,210	986	1,128
Number of households ('000)	4,907.5	2,828.2	7,735.8
Number of persons ('000)	12,567.8	7,038.9	19,606.6
* estimate has a relative standard error of between 25% and 50% and should be used with caution			
** estimate has a relative standard error greater than 50% but less than or equal to 75% and is considered too unreliable for general use			

## 4 Sports and Physical Recreation Expenditure by States and Territories

For 2003–04, the state or territory with the highest estimate of average weekly household expenditure on sports and physical recreation products was the Northern Territory with \$42.17. This was more than double the next highest figure of \$20.83 recorded for the Australian Capital Territory. However, the Northern Territory estimate has a very high relative standard error (57.2%) and hence is considered too unreliable for general use. As a result, it has been omitted from the graph below.

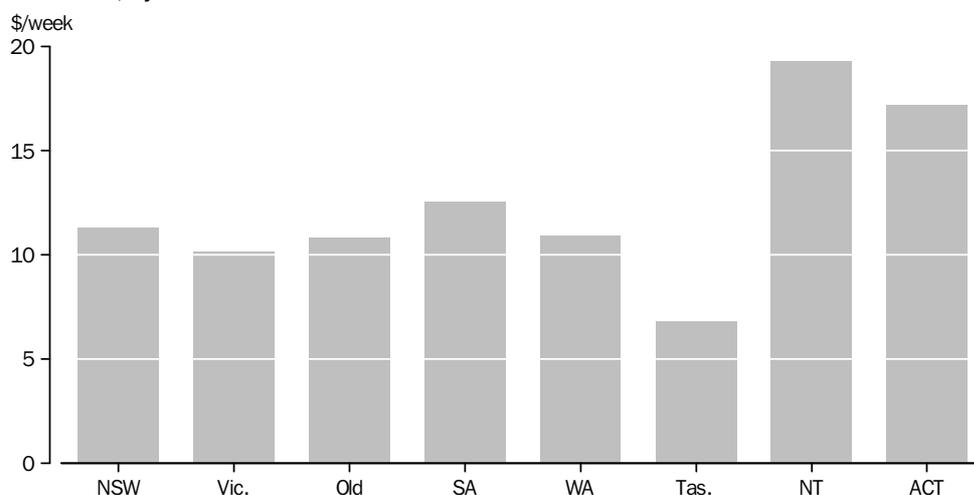
Across the states, sports and physical recreation expenditure ranged from \$9.63 per week in South Australia to \$17.84 per week in Queensland.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS, By states and territories—2003–04



The South Australian expenditure of \$9.63 per week was significantly lower than the expenditure levels of all the states and the territory appearing in the graph above with the exception of Tasmania. This contrasts with the results of the 1998–99 Household Expenditure Survey in which the estimate for South Australia was exceeded only by those for the two territories.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS, By states and territories—1998–99



The fall, relative to the other states and territories, in South Australian household expenditure on sports and physical recreation also contrasts with the results of the Household Expenditure Survey with respect to cultural expenditure. The level of South Australian cultural expenditure relative to the overall level of the other states and territories was similar for both the 1998-99 and 2003-04 surveys and, relative to a couple of states, was actually higher in 2003-04.

In 2003-04, the Northern Territory and the Australian Capital Territory had the highest levels of both average weekly household income (\$1,401 and \$1,399 respectively) and average weekly household expenditure on all products (\$1,040.72 and \$1,054.66 respectively). For both data items, the state with the lowest estimate was Tasmania.

The percentage of total expenditure devoted to sports and physical recreation ranged from 1.2% in South Australia up to 2.2% in Queensland, compared with 1.8% for Australia as a whole. For household income, the percentage devoted to sports and physical recreation expenditure was 1.4% for Australia, but ranged from 0.9% in South Australia to 1.7% in Queensland.

**Table 4** HOUSEHOLD EXPENDITURE ON SELECTED SPORTS AND PHYSICAL RECREATION PRODUCTS, By states and territories  
– 2003–04

	NSW	Vic.	Q/d	SA	WA	Tas.	NT(a)	ACT	Aust.
AVERAGE WEEKLY HOUSEHOLD EXPENDITURE (\$)									
Sports and recreation vehicles									
Bicycles	**0.26	*0.05	**0.03	*0.16	*0.10	np	**0.03	**0.45	*0.13
Boats, their parts and accessories	*0.85	*0.83	np	**1.19	**0.76	**2.04	np	np	0.98
<i>Total</i>	<i>*1.11</i>	<i>*0.88</i>	<i>**0.45</i>	<i>**1.35</i>	<i>**0.86</i>	<i>**2.09</i>	<i>np</i>	<i>**1.05</i>	<i>1.11</i>
Sports, physical recreation and camping equipment									
Camping equipment	*0.16	*0.56	*0.50	**0.31	np	np	**0.47	**0.15	0.33
Fishing equipment	*0.28	*0.34	**0.35	*0.26	**1.64	*0.52	*1.74	np	0.46
Golf equipment	*0.19	*0.18	**0.24	*0.17	**0.14	**0.19	np	np	0.20
Sports or physical recreation footwear	1.20	1.60	*0.89	*1.05	*0.61	*0.59	*0.96	*1.12	1.14
Swimming pools	*3.42	*1.96	*6.98	**0.59	*2.82	np	*3.45	np	3.41
Other sports and physical recreation equipment	2.17	*2.64	*1.97	0.53	*1.60	*1.84	**2.63	*1.35	2.03
<i>Total</i>	<i>7.42</i>	<i>7.28</i>	<i>10.93</i>	<i>2.91</i>	<i>*6.88</i>	<i>*4.24</i>	<i>9.28</i>	<i>*6.92</i>	<i>7.57</i>
Sports and physical recreation services									
Hire of sports equipment	*0.02	**0.03	**0.02	np	np	**0.04	np	np	*0.06
Health and fitness studio charges	0.96	*1.62	*2.13	1.13	*1.10	*0.35	**2.15	*4.60	1.44
Sporting club subscriptions	0.68	1.47	*0.88	*0.50	**1.94	*1.39	**0.33	np	1.04
Spectator admission fees to sport	*0.98	1.06	*0.22	0.51	*0.25	*0.40	0.69	*1.33	0.73
Sports facility hire charges	2.31	2.41	2.14	2.00	2.40	1.65	3.29	*4.13	2.30
Sports lessons	1.17	1.16	0.86	*0.90	*1.10	*0.43	*0.62	*0.98	1.05
Physical recreation charges nec	0.56	0.37	0.21	*0.26	0.35	*0.29	*0.26	*1.02	0.40
<i>Total</i>	<i>6.68</i>	<i>8.12</i>	<i>6.46</i>	<i>5.37</i>	<i>7.44</i>	<i>4.55</i>	<i>7.43</i>	<i>12.86</i>	<i>7.02</i>
<b>Total expenditure on selected sports and physical recreation products</b>	<b>15.21</b>	<b>16.28</b>	<b>17.84</b>	<b>9.63</b>	<b>15.18</b>	<b>10.88</b>	<b>**42.17</b>	<b>20.83</b>	<b>15.70</b>
Total expenditure on all products	941.06	889.70	826.65	814.14	873.25	754.23	1,040.72	1,054.66	886.63
Average weekly household income (\$)	1,212	1,134	1,036	1,033	1,098	897	1,401	1,399	1,128
Number of households ('000)	2,523.5	1,906.0	1,526.4	626.5	770.5	198.2	56.2	128.7	7,735.8
Number of persons ('000)	6,602.2	4,871.3	3,764.8	1,502.6	1,932.6	472.6	145.8	314.8	19,606.6
* estimate has a relative standard error of between 25% and 50% and should be used with caution									
** estimate has a relative standard error greater than 50% but less than or equal to 75% and is considered too unreliable for general use									
np not available for publication but included in totals where applicable (relative standard error greater than 75%)									
(a) Comprises predominantly urban areas only.									

## Explanatory notes

### Introduction

1 The ABS collects information about the expenditure and income of households resident in private dwellings throughout Australia approximately every five years via the Household Expenditure Survey. This report presents some information from the 2003–04 Household Expenditure Survey about the purchase by households of sports and physical recreation products. It also presents a comparison at constant prices of this 2003–04 data with the data relating to sports and physical recreation purchases made by households during 1998–99.

2 For the 2003–04 Household Expenditure Survey, information was collected during personal interviews and from diaries in which survey participants recorded all their expenditure over a two-week period. For some of the less frequently purchased items, the time period asked about varied from three months (e.g. for video cassette recorders) to two years for real estate. Interviews were evenly spread throughout the financial year beginning July 2003 and ending June 2004.

### Expenditure classifications

3 The 2003–04 Household Expenditure Survey used the Household Expenditure Classification to categorise products. The *Australian Culture and Leisure Classifications* (ABS cat. no. 4902.0) (ACLC) was used as a guide to determine which of the Household Expenditure Classification categories were predominantly related to sports and physical recreation. See the appendix for examples of the products included in each of the categories presented in this report.

4 Because there is not an exact match between the categories of the Household Expenditure Classification and those of the Product Classification of the ACLC, there are instances of individual products which are out of scope of the ACLC being included, and in-scope products being excluded. For example; sports bags, gun oil and powder scales are all classed as sports and physical recreation equipment in the Household Expenditure Classification but are out of scope of the ACLC Product Classification.

5 There are some products which the ACLC deems in scope of sports and physical recreation, but which were included in other leisure categories of the Household Expenditure Classification for 1998–99. For 2003–04, many of these have been moved to sports and physical recreation categories of the Household Expenditure Classification.

- For 2003–04, in addition to the products included for 1998–99, the expenditure category Other sports and physical recreation equipment includes skipping ropes, roller blades, roller skates, skateboards and toboggans.
- For 2003–04, in addition to the products included for 1998–99, the expenditure category Sports facility hire charges includes tenpin bowling parties.
- For 2003–04, Physical recreation charges nec is a new Household Expenditure Classification category which the ACLC deems in scope of sports and physical recreation. It includes charges for horse riding, ice-skating, snooker and related games, swimming pool admission, parasailing and skydiving. Given that this expenditure category did not exist for 1998–99, it has been excluded from the comparison of sports and physical recreation expenditure over time which is presented in table 2.

6 Because of high relative standard errors being associated with the Household Expenditure Classification category Above ground pools, it was necessary to combine it with the category In-ground swimming pools in order to present useful data. For neatness of presentation, the combined category Swimming pools has been included in the report as part of the product group Sports, physical recreation and camping equipment. It should be noted that, in the ACLC Product

Classification, in-ground swimming pools are part of the product group Culture or Leisure Venues and Facilities.

7 The Household Expenditure Classification category Hire of sports equipment corresponds to an ACLC Product Classification category within the product group Leasing services of culture or leisure goods which is otherwise out of scope of sports and physical recreation. For neatness of presentation, Hire of sports equipment has been included in the report as part of the product group Sports and physical recreation services.

### **Constant prices**

8 To enable comparisons of household expenditure between the 2003–04 and 1998–99 surveys to be made without the effects of price changes, estimates from the 1998–99 survey have been adjusted to constant prices (average 2003–04 prices). These estimates have been derived using the Consumer Price Index (CPI) which is a general indicator of the rate of change in prices paid by metropolitan households for the goods and services they buy.

9 Each category of sports and physical recreation expenditure and other leisure expenditure recorded in the Household Expenditure Surveys was adjusted according to the change in the index of the relevant CPI sub-group. For example, spectator admission fees to sport were adjusted according to the Other recreational activities index which rose between 1998–99 and 2003–04. Boat parts and accessories were adjusted according to the Sports and recreational equipment index which fell between 1998–99 and 2003–04.

### **Reliability of the estimates**

10 Survey estimates are subject to two types of error, namely sampling error and non-sampling error. Sampling error arises because only a proportion of the entire population is surveyed. As the sample selected may not be representative of the entire population, the estimates produced from the survey may differ from the figures that would have been produced if information had been collected from all households.

11 A measure of this sampling variability is given by the standard error. It gives an indication of the extent to which an estimate may vary from the true figure. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all households had been enumerated and about 19 chances in 20 that the estimate will differ by less than two standard errors.

12 The standard error can be expressed as a percentage of the estimate. This is known as the relative standard error (RSE). Only estimates with a RSE of 25% or less are considered sufficiently reliable for most purposes. Those estimates with a RSE between 25% and 50% have been asterisked in this report and should be used with caution. Estimates with a RSE in excess of 50% but less than or equal to 75% have been annotated with two asterisks. These are considered too unreliable for general use. Estimates with a RSE in excess of 75% have been marked as not available for publication (np) but are included in totals where applicable.

13 Non-sampling errors arise from inaccuracies in collecting, recording and processing the data. These errors may arise regardless of whether a collection is a survey or a census. Major sources of non-sampling error are

- inability to obtain data from all households included in the sample
- errors in reporting on the part of both respondents and interviewers (e.g. because of misunderstandings about the data required, inability or unwillingness to provide the data, etc.)
- errors arising during processing of the survey data.

Every effort is made to minimise non-sampling errors.

## **APPENDIX - SPORTS, PHYSICAL RECREATION AND OTHER LEISURE CATEGORIES IN THE HOUSEHOLD EXPENDITURE CLASSIFICATION**

The following list gives examples of the types of items included in the categories of the Household Expenditure Classification which appear in this report. The industry and product classifications of the *Australian Culture and Leisure Classifications, 2001* (ABS Cat. no. 4902.0) were the guides used in determining which Household Expenditure Classification categories consisted wholly or predominantly of sports and physical recreation products.

### **SPORTS AND PHYSICAL RECREATION**

#### **SPORTS AND RECREATION VEHICLES**

Bicycles

Boats, their parts and accessories

- Anchor
- Anchor rope
- Boat
- Boat accessories
- Boat engine
- Boat licence
- Boat parts
- Boat ramp launching fee
- Canoe
- Depth sounder
- Kayak
- Life jacket
- Life raft
- Marine radio
- Oar
- Paddle
- Radar (marine)
- Rowing boat
- Sail for boat
- Sailing boat
- Sonar
- Yacht

#### **SPORTS, PHYSICAL RECREATION AND CAMPING EQUIPMENT**

Camping equipment

- Camp bed
- Camp stretcher
- Camping equipment
- Fly sheet
- Ground sheet
- Sleeping bag
- Space blanket
- Tent
- Tent pegs
- Tent poles

Fishing equipment

- Fishing bait
- Fishing equipment
- Fishing reel
- Fishing rod
- Fishing tackle

Tackle box (fishing)  
Wire trace

Golf equipment

Golf bag  
Golf balls  
Golf buggy  
Golf clubs  
Golf tees

Sports or physical recreation footwear

Football boots  
Golf shoes  
Gym boots  
Jogging shoes  
Running shoes  
Running spikes  
Sand shoes  
Sneakers  
Specialist sports shoes  
Sports and leisure footwear

Swimming pools

Above-ground swimming pool  
In-ground swimming pool  
Wading pool (children's)

Other sports and physical recreation equipment

Air rifle  
Archery set  
Bag (sports)  
Baseball  
Baseball base  
Baseball bat  
Baseball glove  
Basketball  
Basketball hoop  
Bat (cricket)  
Bathing cap  
Billiard balls  
Billiard table  
Bow (archery)  
Bowling ball  
Boxing gloves  
Bullets  
Cricket ball  
Cricket bat grip  
Cue (for billiards and similar games)  
Dart board  
Dart set  
Diving goggles  
Exercising equipment  
Football  
Go-cart  
Gun  
Gun cleaning kit  
Gun oil  
Headband (sport)

- Hockey ball
- Hockey stick
- Ice skates
- Mouth guard
- Powder scales (gun)
- Racquet press
- Rifle
- Roller blades
- Roller skates
- Shin pads
- Shot gun cartridges
- Shoulder pads
- Skateboard
- Ski equipment
- Skindiving equipment
- Skipping rope
- Snooker balls
- Snooker table
- Snow skis
- Soccer ball
- Softball
- Softball base
- Softball bat
- Softball glove
- Sports equipment nec
- Squash balls
- Squash racquet
- Surfboard
- Surfboard wax
- Swimming goggles
- Table tennis ball
- Table tennis bat
- Table tennis net
- Table tennis table
- Tennis balls
- Tennis racquet
- Toboggan
- Volleyball
- Volleyball net
- Waterskis
- Wetsuit
- Windsurfer

#### SPORTS AND PHYSICAL RECREATION SERVICES

##### Hire of sports equipment

- Bicycle hire
- Golf ball hire
- Golf club hire
- Ski equipment hire
- Sports racquet hire
- Towel hire

##### Health and fitness studio charges

- Aerobic class
- Callisthenics
- Exercise class
- Fitness assessment

- Fitness class
- Fitness membership
- Gym work-out
- Health parlour
- Sauna
- Slimming and health parlour
- Turkish bath

#### Sporting club subscriptions

- Bowling club fees
- Club and association subs (sports clubs)
- Cricket club fees
- Croquet club fees
- Football club subscription
- Golf club membership fees
- Hockey club fees
- Lodge subscription (sporting)
- Police boys club fees
- Sport club fee
- Swimming club fees
- Yacht club membership

#### Spectator admission fees to sport

- Car races admission fee
- Football admission fee
- Golf admission fee
- Hockey admission fee
- Horse races admission fee
- Soccer admission fee
- Sport fixture admission fee
- Tennis admission fee
- Wrestling admission fee

#### Sports facility hire charges

- Admission charge to participate in sports
- Badminton games
- Baseball fees
- Basketball fees
- Bowls game (participation fee)
- Bowls green fee
- Competition fee to participate in sport
- Competition payment (sport)
- Croquet game (participation fee)
- Driving range fees
- Go kart racing
- Golf caddy fees
- Golf cart fees
- Golf game (participation fee)
- Golf green fees
- Green fees (miscellaneous)
- Indoor bowls (fee)
- Indoor cricket game (fee)
- Indoor soccer game (fee)
- Indoor tennis (fee)
- Injury fund (football team)
- Licence (sports)
- Mini-golf game
- Netball game (fee)

- Shoe hire (ten pin bowling)
- Ski guide fees
- Ski lift fees
- Skiing fees/fares
- Sports fees and charges nec
- Sports participation fee
- Squash court hire
- Tennis club ball fee
- Tennis court hire
- Tennis game
- Tenpin bowling game (participation fee)
- Ten pin bowling party
- Trophy fund (e.g. for bowls)

#### Sports Lessons

- Basketball holiday program
- Coaching (sport)
- Cricket holiday program
- Football holiday program
- Gym lessons
- Hockey holiday program
- Karate lessons
- Netball holiday program
- Other sports holiday programs
- Soccer holiday program
- Sports lessons
- Squash lessons
- Swimming lessons
- Tennis lessons

#### Physical recreation charges nec

- Billiards game
- Eight ball game
- Entrance fee to swimming pool
- Horse riding
- Ice skating
- Kelly pool game
- Pool game fee
- Pool table fee
- Skating rink fees
- Snooker playing fee
- Parasailing ride
- Sky diving