



Ipsos-Eureka
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Nature-based outdoor recreation demand and preferences – Quantitative research findings

Greater Sydney

Prepared for Parks and Wildlife Group, NSW Department of
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This section outlines the
key findings from the research

EXECUTIVE SUMMARY

Research context

The current NSW State Plan has set the Parks and Wildlife Group (PWG) of the NSW Department of Environment and Climate Change and Water (DECCW) the target of increasing the number of visits to National Parks by 20% between 2006 and 2016. Meeting this target will require increasing the frequency with which locals and tourists currently access parks, as well as increasing the number of new users. Facilitating and managing such an increase poses significant planning, management, and marketing challenges.

The objective of this research is to explore the preferences, motivations and barriers in relation to participation in nature-based outdoor recreation. This includes obtaining data on current demand, as well as forecasts for the future, in order to identify the types of experiences and locations in which PWG should supply new nature-based outdoor recreation opportunities and the ways in which it should manage existing opportunities.

Research design

A questionnaire was developed on the basis of results of the exploratory qualitative phase of this research, and in close consultation with PWG. This survey measured current behaviour, interests, preferences, barriers and motivations in relation to a range of nature-based outdoor recreation experiences in different settings. It should be noted that current behaviour, interests, barriers and motivations were investigated in relation to nature-based outdoor recreation generally, not just in relation to activities carried out in National Parks, whilst preferences were investigated in relation to activities undertaken in a 'National Park, State Conservation Area, State Forest or Nature Reserve'.

The telephone survey was carried out with 2,807 NSW residents aged 18-75 years.

The sample was split into six geographical regions, and borders were mapped out with the assistance of the Australian Bureau of Statistics' 2008 Australian Standards Geographical Classification (ASGC). The regions were Greater Sydney, North Coast, Northern Tablelands, South Coast, Southern Tablelands, and Western NSW. Samples of n=400 were used in each geographic region, with the exception of Greater Sydney where a sample of n=800 was utilised.

This report presents the findings for the Greater Sydney area. The findings for the remaining five geographic regions can be found in their respective dedicated reports.

Participation

- Participation rates indicate the percentage of survey participants who had engaged in each of a list of outdoor recreation activities in the last 12 months. The top five activities in terms of participation rates were picnicking (87% participation), walking on roads or footpaths for recreation (84% participation), visiting landmarks, lookouts and scenery (79% participation), scenic driving with a car or motorbike (68% participation) and water sports (65% participation).
- Frequency of participation was calculated using the reported number of times that survey participants had participated in each of the outdoor recreation activities in the last 12 months. Means were then calculated (having first truncated frequencies so that extremely frequent participants did not skew the data) for those survey participants who had done each of the activities at least once in the last year (i.e. 'participants'). The data trimming process is described further in Section 4.2 Participation. The top five activities in terms of the frequency with which the activity was undertaken in the last year were walking on roads or footpaths for recreation (104.6 times per year), running or jogging outdoors (78.7), cycling on a sealed bike path or track (37.4), nature study (32.3) and water sports (31.8).
- Participants in each activity were asked whether they had participated in their local area, or further away or both. The majority of activities were practiced more often in the participants' local area, but a sizeable amount of participation occurred further afield.

Interest

- Both participants and non-participants in each of the outdoor recreation activities were asked to indicate how interested they would be in doing in each of the activities more often, if there was nothing stopping them from doing so, using a scale of 0 (not at all interested)

to 10 (extremely interested). Interest in more frequent participation was highest for picnicking, with a mean interest rating of 6.7 out of 10. This was followed by walking on roads or footpaths for recreation (6.3), visiting landmarks, lookouts and scenery (6.2), water sports (5.8), scenic driving with a car or motorbike (5.6), and attending outdoor concerts/music festivals (5.6).

- Mean interest ratings in participating more often in each of the outdoor recreation activities were greater for current participants (i.e. those who had participated in the last 12 months) than non-participants.
- Level of interest in participating more often in each of the outdoor recreation activities was then divided into three categories: low (0-3), moderate (4-6) and high (7-10). The top six interests based on the proportion of survey participants indicating high interest in participating more often were picnicking (62%), walking on roads or footpaths for recreation (58%), water sports (54%), visiting landmarks, lookouts and scenery (54%), scenic driving with a car or motorbike (48%), and attending outdoor concerts/music festivals (48%).

Barriers

- Barriers represent the things that survey participants cited as stopping them from participating more frequently in the activities in which they were interested. Survey participants provided open-ended responses that were later coded by the researchers. The most frequently mentioned barrier across all activities was time (85%), which can be considered to indicate the relative priority of particular activities. However, unmet demand appears to be present, with 31% of survey participants reporting a lack of local opportunities and 17% reporting a lack of awareness of any local opportunities.
- 'Actionable barriers', that is lack of local opportunities and lack of awareness of any local opportunities, were most commonly mentioned for visiting Aboriginal and other culture (34%), horse riding (28%), trail bike or quad bike riding (26%), cycling on a sealed bike path/track (25%), and snow sports (25%).

Preferences

- Preferences represent the natural and man-made features that survey participants cited wanting if they were to do the activities in a National Park, State Conservation Area, State Forest or Nature Reserve in their region (but not local parks or botanical gardens). Survey participants provided open-ended responses that were later coded by the researchers. The most frequently requested feature across all activities were toilets (50%). The next most common response was that no additional facilities were needed (49%). This was followed

by cleared paths or trails through the bush (39%), scenery/views (39%), rest areas/seat/picnic tables (32%), water/taps (26%), and good road conditions/accessibility (25%).

Motivations

- Survey participants were asked to indicate the extent to which a list of statements describing motivations to participate in outdoor recreation applied to them, on a scale of 0 to 10, where 0 was not at all and 10 was extremely. Overall, the three highest rated motivations were 'I like to get outdoors for the health benefits, like breathing the fresh air' (8.1 out of 10), 'I enjoy getting outdoors to spend time with my family or friends' (8.1) and 'I like to spend time outdoors to get a break from my day-to-day routine' (7.8).
- There were no notable differences in the motivations for those who either participated in or were highly interested in participating more often in different types of outdoor recreation activities.

Forecasting future participation

- Forecasting was carried out in order to estimate total participation figures for the year 2018 for each of the outdoor recreation activities. Weights developed to reflect the changes in NSW from 2009 to 2018 in both the demographic (age by gender) profile and absolute population size were used to achieve this¹. There were no changes in the relative popularity of different activities and the bulk of the change in this model was due to the projected increase in the NSW population of 11%.
- A second series of analyses was carried out in order to forecast the changes that may result if PWG was to address two of the main 'actionable barriers' in relation to each of the outdoor recreation activities: lack of local opportunities and lack of awareness of local opportunities. These analyses estimated the increase in participation frequency among both current participants and non participants using the data on participation frequency, stated interest in doing an activity more often, and actionable barriers.
 - In percentage terms, when compared to current participation, it was forecasted that horse riding would more than double in 2018 if actionable barriers were

¹ Based on Australian Bureau of Statistics 3222.0 Population Projections, Australia, TABLE B1. Population projections, By age and sex, New South Wales - Series B. Series B largely reflects current trends in fertility, life expectancy at birth, net overseas migration and net interstate migration.

addressed, rising 106% compared to current overall participation. Trail bike or quad bike riding (72%), snow sports (71%), volunteer work for the environment (61%) and visiting Aboriginal and other cultural heritage sites (43%) were also predicted to have large increases. This analysis showed that, in terms of increase in forecasted number of times Greater Sydney residents will participate in one year, water sports had the highest increase with the addressing of actionable barriers, with a predicted 10.5 million additional events.

- These analyses were then replicated using a cohort approach, which assumes that the interest and times per year will remain the same for participants in 2018.
 - The largest increase using this approach due to population change was for running and jogging outdoors, which was forecasted to rise from 101.3 million times per year in 2009 to 152.4 million times per year in 2018. In percentage terms, when compared to current participation, it was forecasted that horse riding (128%), trail bike or quad bike riding (106%), snow sports (101%), rock climbing, abseiling, caving or canyoning (75%), volunteer work for the environment (75%), running or jogging outdoors (53%) and visiting Aboriginal and other cultural heritage sites (50%) would increase by at least 50% should actionable barriers be addressed. Addressing actionable barriers saw the largest impact for water sports, in terms of forecasted number of times per year, with a further 12.4 million times per year predicted should these barriers be removed.
- The assumptions of the cohort approach led to higher predictions than the demographic approach for certain activities, particularly those that had higher frequency of participation among the 18 to 24 year old age group, such as running or jogging outdoors.
 - Using this approach, if actionable barriers are addressed, running or jogging outdoors will increase by 53.3 million events in 2018, compared to only 9.2 million events under the demographic approach. Similarly, activities that had a higher frequency of participation among the oldest participants, such as walking on roads or footpaths for recreation, had a higher forecast using the demographic approach.

This section outlines the background to the project, and specifies the research objectives

RESEARCH CONTEXT

2.1 Background

The current NSW State Plan has set the Parks and Wildlife Group (PWG) of the NSW Department of Environment and Climate Change and Water (DECCW) the target of increasing the number of visits to National Parks by 20% between 2006 and 2016. Meeting this target will require increasing the frequency with which locals and tourists currently access parks, as well as increasing the number of new users. Facilitating and managing such an increase poses significant planning, management, and marketing challenges.

The objective of this research is to explore the preferences, motivations and barriers in relation to participation in nature-based outdoor recreation. This includes obtaining data on current demand, as well as forecasts for the future, in order to identify the types of experiences and locations in which PWG should supply new nature-based outdoor recreation opportunities and the ways in which it should manage existing opportunities. The research will inform strategies for increasing demand among current and prospective outdoor recreation participants.

2.2 Research objectives

Overall, the aims of the project were to understand and measure the motivations, barriers and preferences of nature-based outdoor recreation users and potential users, and the demand for a range of nature-based outdoor recreation experiences. This was achieved over two stages of research.

Specifically, the research aims were to:

- Identify the optimal approach for obtaining the precision required to understand demand, motivations and preferences for segments of the community such as basic demographic groups at regional scales, including the adoption of regional study areas if required.
- Gain an understanding of the nature-based outdoor recreation experiences people are seeking, the motivations of people who choose to participate in particular experiences, and their preferred settings for participating in these experiences.
- Gain insights to improve the application of the PWG visitor segmentation (messaging segmentation).
- Gain an understanding of the reasons people do not participate in particular nature-based outdoor recreation experiences or do not participate more frequently in particular experiences.
- Estimate the current demand for a range of nature-based outdoor recreation experiences in different settings. The main focus of the study is demand for experiences in the local area, but the demand for experiences undertaken when travelling within NSW is also of interest.
- Forecast likely changes in demand for a range of nature-based outdoor recreation experiences in different settings from 2009 to 2018.

This section provides details of the overall research methodology

RESEARCH DESIGN

3.1 Research approach

The overall research approach for this project is illustrated diagrammatically below. This document reports on the second research phase of the project, which involved a telephone survey.



3.2 Telephone survey

Conduct of the survey

A questionnaire was developed on the basis of results of the exploratory qualitative phase of this research, and in close consultation with PWG. It allowed us to measure current behaviour, interests, preferences, barriers and motivations in relation to a range of nature-based outdoor recreation experiences in different settings. It should be noted that current behaviour, interests, barriers and motivations were investigated in relation to nature-based outdoor recreation generally, not just in relation to activities carried out in National Parks, whilst preferences were investigated in relation to activities undertaken in a 'National Park, State Conservation Area, State Forest or Nature Reserve'. The full questionnaire appears in Appendix A. The survey was conducted by I-view from 30th April to 25th May 2009, and averaged 21 minutes in duration.

Survey sample

The telephone survey was carried out with 2,807 NSW residents aged 18-75 years, including current and prospective participants of nature-based outdoor recreation experiences. RDDialer, which is a source of randomly generated landline numbers for exclusive use of Australian Market and Social Research Organisation (AMSRO) members, was used to obtain the sample frame.

The sample was split into six geographical regions, and borders were mapped out with the assistance of the Australian Bureau of Statistics' 2008 Australian Standards Geographical Classification (ASGC). The regions were:

- **Greater Sydney:** Bordered on the south by Stanwell Tops and in the north by Gosford. The Blue Mountains create the western border with Lithgow the furthest west locality.
- **North Coast:** Beginning at the Queensland border in the north and runs down the coast to the Greater Sydney Border. The North Coast includes the cities of Newcastle, Taree, Coffs Harbour, Grafton and Lismore.
- **Northern Tablelands:** Adjoining the North Coast from the Queensland border down to Greater Sydney. Included are the New England and the Hunter regions, Tamworth, Armidale, Walcha and Maitland.
- **South Coast:** Runs from Wollongong along the southern coast to the Victorian Border and as far west as the Great Dividing Range.

- **Southern Tablelands:** Adjoins the South Coast from the south-west corner of Greater Sydney to the Victorian border and includes Wagga Wagga, Goulburn, Albury and ACT.
- **Western NSW:** Adjoins the Northern and Southern Tablelands and runs west and south to the border with South Australia.

The map below shows these regions. A breakdown of regions by postcodes is found in Appendix B.



Samples of n=400 were used in each geographic region, with the exception of Greater Sydney (n=800) in which a larger sample was used to provide greater accuracy of results within that area. A sample of 400 enables us to be 95% confident that a feature of the local population we are surveying is in fact within a range of $\pm 5.0\%$ around what the survey tells us, whereas the confidence interval provided by a sample of 800 is $\pm 3.5\%$.

In order to provide accurate estimates of demand, quotas were established within each location stratum, such that those who participated in the survey matched the age and gender profile of the local population. As a result, it was not necessary to weight the data. Sample quotas per location are shown in Table 3.2.1, below.

Table 3.2.1. Quotas for age and gender within location

Gender	Age group	Greater Sydney	North Coast	New England Tablelands	Western NSW	South Coast	Southern Tablelands
Male	18-34	141	53	56	56	55	70
	35-54	160	80	79	82	77	81
	55-75	94	64	62	63	64	48
Female	18-34	143	53	58	55	54	69
	35-54	165	84	82	82	83	83
	55-75	97	66	63	62	67	49
Total (n=2,800)		800 (100%)	400 (100%)	400 (100%)	400 (100%)	400 (100%)	400 (100%)

The response rate for the survey was 28.7%, based on the number of completed surveys divided by the number of completed surveys plus the number of refusals. A response rate of around 30% is standard for survey of 20-25 minutes that covers a non-sensitive topic. As the reasons why individuals chose not to participate in the survey were not recorded, it is not possible to know whether their refusal to do so resulted in any systematic bias into the data. It is possible, however, that busier individuals were less inclined to participate in the 20 minute survey (or indeed to be contacted on their home telephone in the first place), and are therefore underrepresented in the sample. This may mean that the influence of time pressures, for example, as a barrier to the participation in outdoor recreation activities may be somewhat underestimated in the findings (though, it is worth noting that, averaged across all activities, 85% of those who participated in the survey cited time as a barrier to participation in activities).

3.3 Quantitative analysis

All statistical analyses were conducted in-house, using SPSS and Q Research Software. Coding and editing of variables and statistical manipulations were conducted as appropriate, and weighting was used in the forecasting.

When significant differences are noted in mean tables, green font indicates that the mean for that group (e.g. male 18-24) was significantly higher than the combined mean of all other groups. In contrast, red font indicates the mean for that group (e.g. male 18-24) was significantly lower than the combined mean of all other groups. The statistical test conducted was an independent samples t-test, and alpha was set at .05.

When significant differences are noted in tables that report percentages, green font indicates that the proportion of participants in that group (e.g. male 18-24) was significantly greater

than would be expected if participation was equally distributed across all groups. In contrast, red font indicates that the proportion of participants in that group (e.g. male 18-24) was significantly less than would be expected if participation was equally distributed across all groups. The statistical test conducted was a Standardised and Adjusted Residual Analysis, and alpha was set at .05.

This section presents the findings of the quantitative telephone survey for the Greater Sydney area

RESEARCH FINDINGS

4.1 Introduction

This section presents the findings of the quantitative telephone survey for the Greater Sydney area, which will be useful for land managers in the Greater Sydney area and any area that receives significant visitation from Greater Sydney residents. The findings for the remaining five geographic regions (North Coast, South Coast, North Tablelands, South Tablelands, and Western NSW) can be found in their respective, dedicated reports. The findings can be used for a number of different land management challenges, including the following:

- **Planning supply of nature-based outdoor recreation experiences**

The figures and data tables in this section and the appendices provide rich data for land managers to form an understanding of demand and thereby inform planning to supply nature-based outdoor recreation experiences. By looking at the following data alongside data on the current supply of nature-based outdoor recreation experiences in a region, land managers can identify gaps where more experiences are required:

- **Total participation** is the total number of occasions an activity is undertaken across the region annually. It helps us to consider the supply required, where activities with a high total participation require a large amount of supply.
- The four forecasts of **total future annual participation** are predictions of the total number of occasions an activity will be undertaken across the region in 2018.

- **Participation rates** indicate the size of the audience for a particular activity. Activities with a high participation rate are likely to involve a broad audience. The breakdown of participation rates by local area and further afield indicates the extent to which supply is required locally or elsewhere in NSW or both.

While being useful indicators of the amount of supply required, **total participation** and **participation rates** are limited in that they are themselves influenced by the supply of an activity (if there is little or no supply total participation will be suppressed even if demand is high). A richer picture of the amount of supply required is revealed by looking at data on **interest in participating more often** alongside **actionable barriers**:

- **Interest in participating more often** is a measure of the strength of interest in the population in participating more often in an activity.
- There are many barriers preventing people who are interested in participating more often from doing so. **Actionable barriers** are barriers related to supply or awareness of supply. Activities which rank highly on both interest in participating more often and actionable barriers usually require more supply than indicated by the total participation and participation rates.

Where gaps are identified, land managers can use **preferences for participation** to help make decisions about where and how to supply experiences. Preferences indicate the natural and man-made features respondents prefer when undertaking an activity. They include features of site (scenery, accessibility, terrain, shade, swimming areas etc.), facilities (toilets, rest areas, seats and picnic tables, children's playgrounds etc.) and the experience (other people present, isolation, crowds, restrictions etc.).

Preferences for participation also indicate the diversity of experiences required across the region. Activities which receive a high ranking for a high level of facilities (toilets, rest areas, seats and picnic tables, children's playgrounds etc.) and also receive a high ranking for limited facilities (completely unspoilt surroundings, no additional facilities) need a diversity of supply. Activities which receive a high ranking for other people present and for isolation also need a diversity of supply.

▪ **Providing high quality nature-based outdoor recreation experiences**

The figures and data tables in this section and the appendices provide the following data to inform development of new nature-based outdoor recreation experiences and revitalisation of existing experiences:

- **Preferences for participation** indicate the natural and man-made features of the site, facilities and experience that respondents prefer, which high quality experiences may incorporate.
- **Barriers to more frequent participation** are the barriers preventing people who are interested in participating in an activity more often from doing so. They include barriers that may be addressed when providing experiences (e.g. facilities, skills and equipment, accessibility, safety etc.).
- **Promoting nature-based outdoor recreation experiences**

The figures and data tables in this section and the appendices provide data to inform promotion of nature-based outdoor recreation experiences:

- **Actionable barriers** are barriers related to supply or awareness of supply. By looking at actionable barriers alongside data on the current supply of nature-based outdoor recreation experiences in a region, land managers can identify promotion needs. More promotion of current supply may be required for activities which appear to have plenty of supply but rank highly on actionable barriers.
- **Age and gender** data help define who is participating in activities. Depending on the purpose of promotions, land managers may wish to target promotions to age and gender groups that are frequent participants, or they may wish to target promotions to groups whose participation is currently limited.
- The breakdown of **participation rates** by local area and further afield indicates where promotions are best targeted. Land managers elsewhere in NSW may wish to promote activities in Greater Sydney if participation rates further afield are high.
- **Barriers to more frequent participation** are the barriers preventing people who are interested in participating in an activity more often from doing so. They include barriers that targeted promotions may address.
- **Preferences for participation** indicate the natural and man-made features which may be attractive in promotions. They also indicate areas where it may be necessary to manage expectations (e.g. facilities).
- **Mean ratings of personal applicability of motivations** indicate the relative strength of motivations that drive people to undertake nature-based outdoor recreation activities which may be used in promotions to attract participants.

4.2 Participation

Survey participants were asked how many times they had done each of a list of 25 outdoor recreation activities in the last 12 months. These activities were:

- Attending outdoor concerts/music festivals
- Bush or nature walking for less than two hours on trails, tracks or boardwalks
- Bushwalking or hiking for two hours or more, but not overnight
- Bushwalking or hiking with overnight camping
- Car camping, that is, camping within easy walking distance of your car
- Cycling on a sealed bike path or track
- Cycling on roads or footpaths for recreation, not just to get to and from places
- Cycling or mountain biking on an unsealed road or track
- Fishing
- Four-wheel driving on unsealed roads or tracks
- Horse riding
- Nature study, including bird or other wildlife watching, tree and flora appreciation, nature photography or painting/drawing
- Picnicking, including outdoor social gatherings like weddings, family reunions, club fun days, etc.
- Rock climbing, abseiling, caving or canyoning
- Running or jogging outdoors
- Scenic driving with a car or motorbike
- Snow sports, including skiing, snowboarding, tobogganing
- Sports involving motorised watercraft, including motorboating, speedboating, jet skiing, water-skiing and wakeboarding

- Sports involving non-motorised watercraft, including sailing, canoeing, rowing, kayaking and rafting
- Trail bike or quad bike riding
- Visiting Aboriginal and other cultural heritage sites
- Visiting landmarks, lookouts and scenery
- Volunteer work for the environment, for example, bush regeneration
- Walking on roads or footpaths for recreation, not just to get to and from places
- Water sports, including outdoor swimming, snorkelling, surfing, bodyboarding, wind surfing and kite surfing

Please note that the names of these activities have been abbreviated in the charts due to space constraints.

Participation rates

Survey participants who responded zero were considered non-participants in that activity for the purposes of this survey, while those who responded one or more times were considered current participants. In the sample of Greater Sydney residents, six (0.7%) had not participated in any of the activities in the last year. These participants still provided responses to the other questions in the survey.

Participation rates, or the percentage of people who had participated in each of the outdoor recreation activities in the last year, are presented in Figures 4.2.1 and 4.2.2.

Figure 4.2.1 Participation rates for outdoor recreation activities in the last 12 months
– Part I

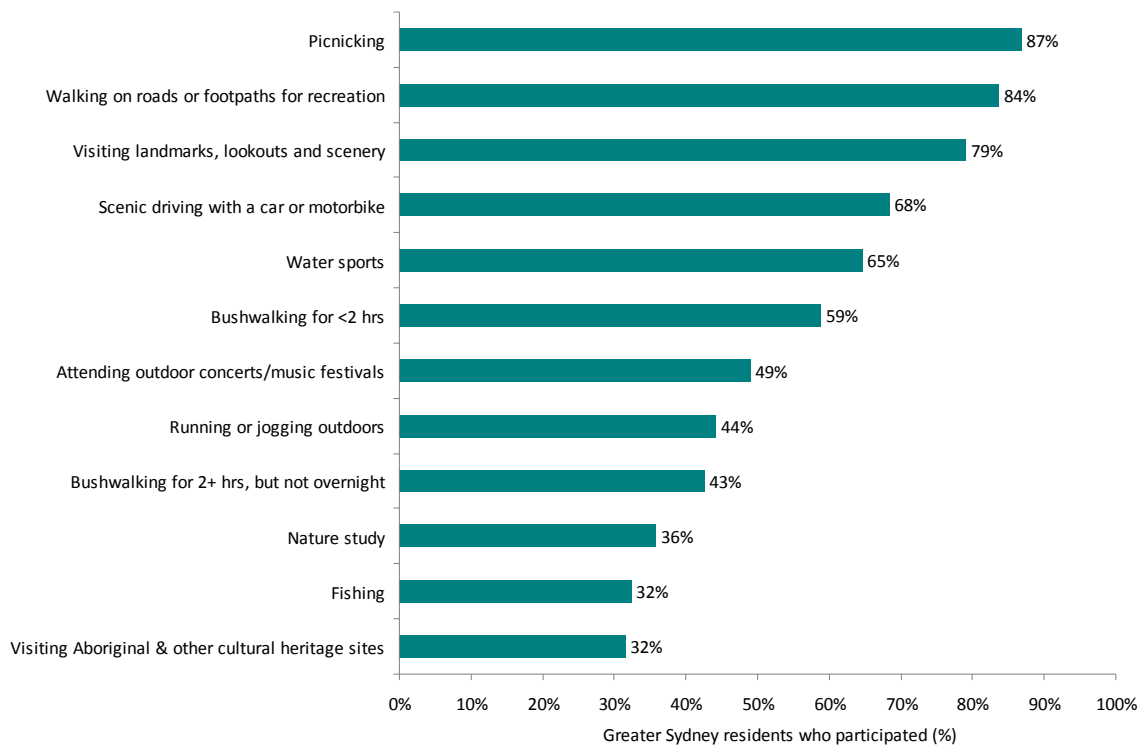
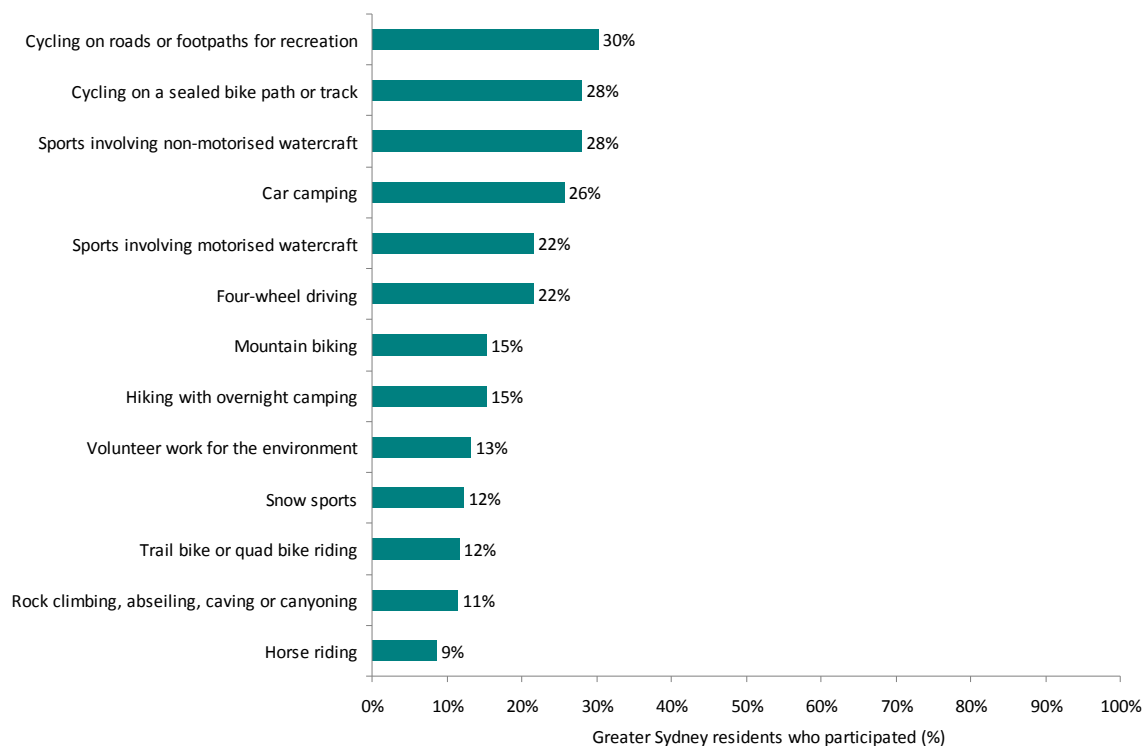


Figure 4.2.2 Participation rates for outdoor recreation activities in the last 12 months
– Part II



As can be seen from Figures 4.2.1 and 4.2.2, the top five activities in terms of participation rates were picnicking (87%), walking on roads or footpaths for recreation (84%), visiting landmarks, lookouts and scenery (79%), scenic driving with a car or motorbike (68%) and water sports (65%).

Participation rates for the top five outdoor recreation activities broken down by age and gender are presented in Table 4.2.1. The breakdowns for the remainder of the activities can be found in Appendix C.

Table 4.2.1 Participation rates for top five outdoor recreation activities by age and gender

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Picnicking	80%	90%	91%	84%	84%	90%	92%	86%	87%
Walking on roads or footpaths for recreation	80%	77%	81%	80%	87%	83%	91%	88%	84%
Visiting landmarks, lookouts and scenery	71%	81%	79%	79%	87%	78%	73%	82%	79%
Scenic driving with a car or motorbike	69%	72%	60%	72%	60%	65%	71%	70%	68%
Water sports	65%	72%	69%	60%	75%	66%	73%	56%	65%

There were no statistically significant differences observed between groups in participation rates for these five activities.

Frequency of participation

As noted above, participants were asked to estimate the number of times they had participated in each of the outdoor recreation activities in the last 12 months. Means for the frequency of participation, which indicate the average number of times the activity was participated in over the last year, were then calculated.

A small number of participants reported extremely frequent participation. These participants were re-contacted and asked to confirm their responses as part of the data checking process. In terms of Greater Sydney, 61 participants reported extremely frequent participation for one or more activities. Of these 61 participants, 12 confirmed their responses, while 33 revised at least one of their answers. The remaining 16 participants were unable to be contacted again. The data set was then updated to include respondents' revised answers.

To prevent outliers from skewing the mean frequency of participation for each activity, responses in the revised data set were truncated according to the cut-offs shown in the table below. These cut-offs were chosen as plausible upper-bounds, based on both commonsense and an examination of the data. Truncation simply entails reducing scores above a cut-off

point to that cut-off point. Therefore, all participants who reported, for example, walking on roads or footpaths more than 365 times in the last year had their score reduced to 365. The percentage of Greater Sydney participants (i.e. those who had participated in the activity at least once in the past 12 months) who had their data truncated for each activity type is shown in Table 4.2.2.

Table 4.2.2 Data trimming

	Cut-off	% participants	n
Walking on roads or footpaths for recreation	>365	0.1%	1
Bushwalking for <2 hrs	>365	0.0%	0
Bushwalking for 2+ hrs, but not overnight	>104	0.3%	1
Hiking with overnight camping	>26	0.8%	1
Running or jogging outdoors	>365	0.0%	0
Cycling on roads or footpaths for recreation	>365	0.0%	0
Cycling on a sealed bike path or track	>365	0.0%	0
Mountain biking	>365	0.0%	0
Picnicking	>104	0.1%	1
Car camping	>26	1.5%	3
Snow sports	>26	3.0%	3
Water sports	>365	0.2%	1
Sports involving motorised watercraft	>104	0.6%	1
Sports involving non-motorised watercraft	>104	2.2%	5
Scenic driving with a car or motorbike	>104	1.3%	7
Four-wheel driving	>208	0.6%	1
Trail bike or quad bike riding	>365	0.0%	0
Rock climbing, abseiling, caving or canyoning	>52	1.1%	1
Visiting landmarks, lookouts and scenery	>104	0.3%	2
Visiting Aboriginal and other cultural heritage sites	>52	0.8%	2
Nature study	>365	0.0%	0
Volunteer work for the environment	>208	0.9%	1
Attending outdoor concerts/music festivals	>12	2.3%	9
Fishing	>365	0.0%	0
Horse riding	>365	0.0%	0

Mean frequency of participation in each of the outdoor recreation activities for participants only (i.e. the average number of times that participants had participated in each of the outdoor activities) in the last year are presented in Figures 4.2.3 and 4.2.4.

Figure 4.2.3 Frequency of participation in outdoor recreation activities in the last 12 months (participants only) – Part I

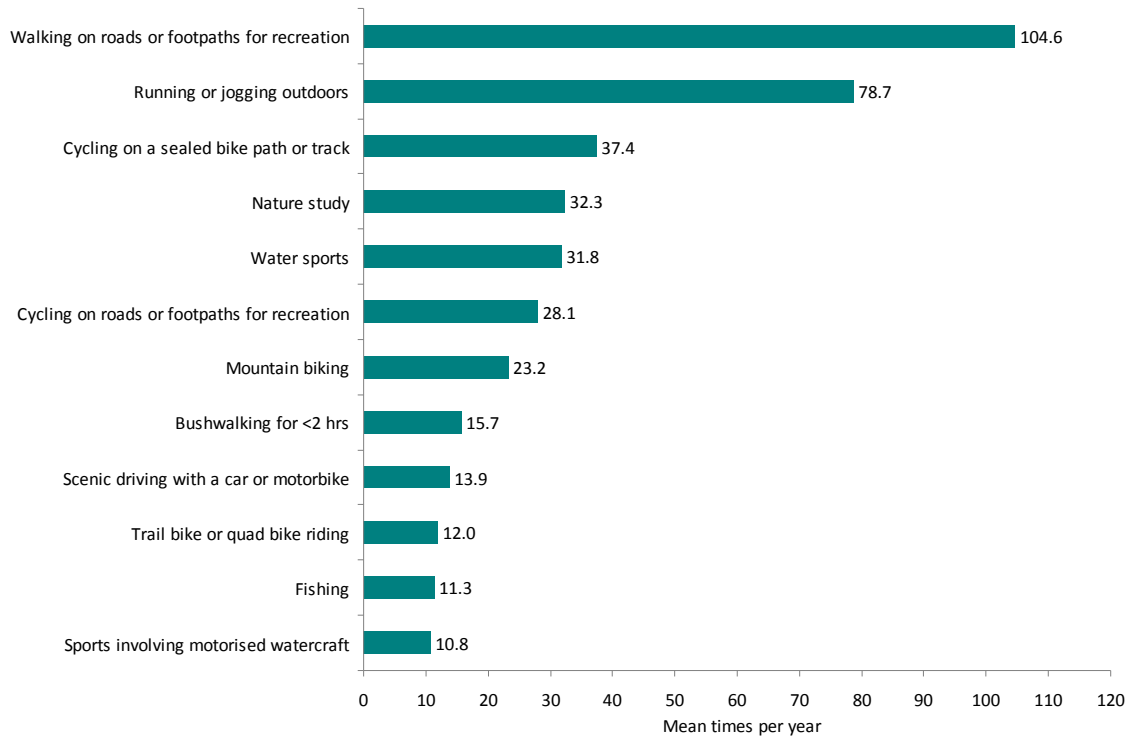
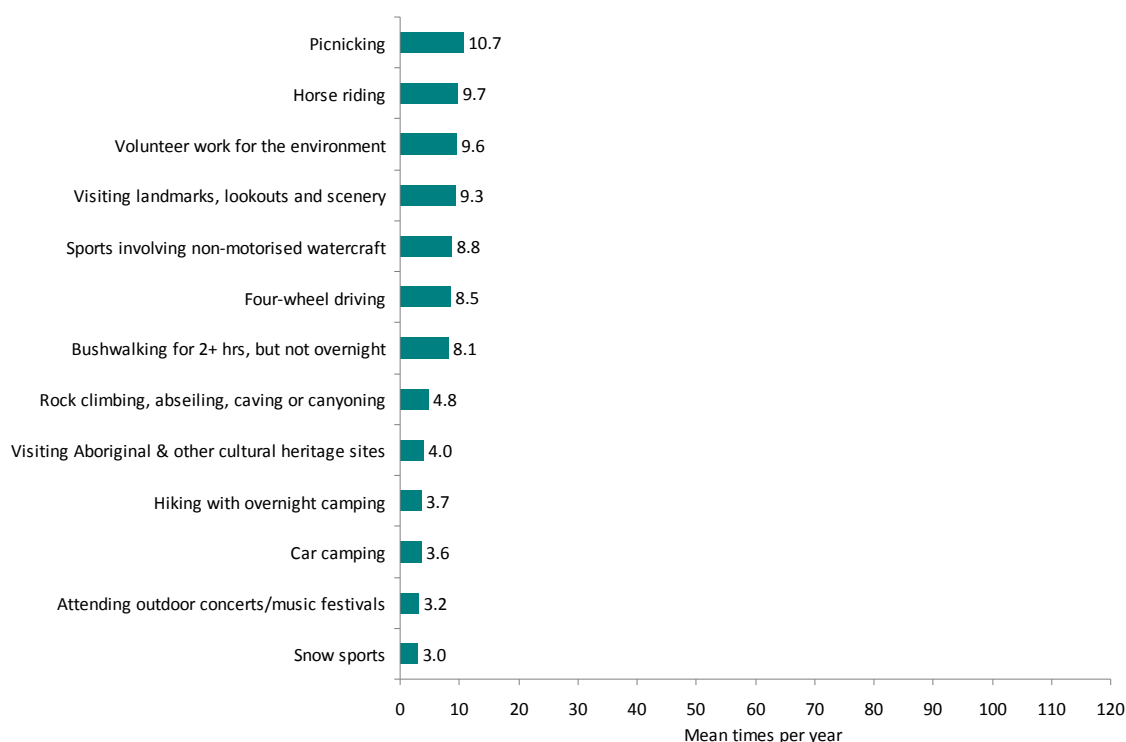


Figure 4.2.4 Frequency of participation in outdoor recreation activities in the last 12 months (participants only) – Part II



Looking at the mean frequency of participation in activities by participants (Figures 4.2.3 and 4.2.4), walking on roads or footpaths for recreation (104.6 times per year) was the most frequently engaged in activity, followed by running or jogging outdoors (78.7). The next three most frequently participated in activities were cycling on a sealed bike path or track (37.4), nature study (32.3) and water sports (31.8).

Means for the frequency of participation by participants in the top five outdoor recreation activities broken down by age and gender are presented in Table 4.2.2. The breakdowns for the remainder of the activities can be found in Appendix C.

Table 4.2.3 Frequency of participation in top five outdoor recreation activities by age and gender (participants only)

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	76	81	91	111	105	99	96	128	105
Running or jogging outdoors	100	80	63	79	105	61	32	100	79
Cycling on a sealed bike path or track	26	33	72	37	3	56	36	21	37
Nature study	28	18	7	38	41	37	33	36	32
Water sports	30	28	30	37	38	21	32	33	32

As Table 4.2.3 shows, males aged 35-44 had a significantly lower mean frequency of participation in nature study (7 times per year). Females aged 35-44 had a significantly lower mean frequency of participation in running or jogging outdoors (32 times per year) and those aged 18-24 had a significantly lower mean frequency of participation in cycling on a sealed bike path or track (3 times per year).

Means for the frequency of participation across both participants and non-participants (i.e. the average number of times that both participants and non-participants had participated in each of the outdoor activities) in the last year for each of the outdoor recreation activities are presented in Figures 4.2.5 and 4.2.6.

Figure 4.2.5 Frequency of participation in outdoor recreation activities in the last 12 months (participants and non-participants) – Part I

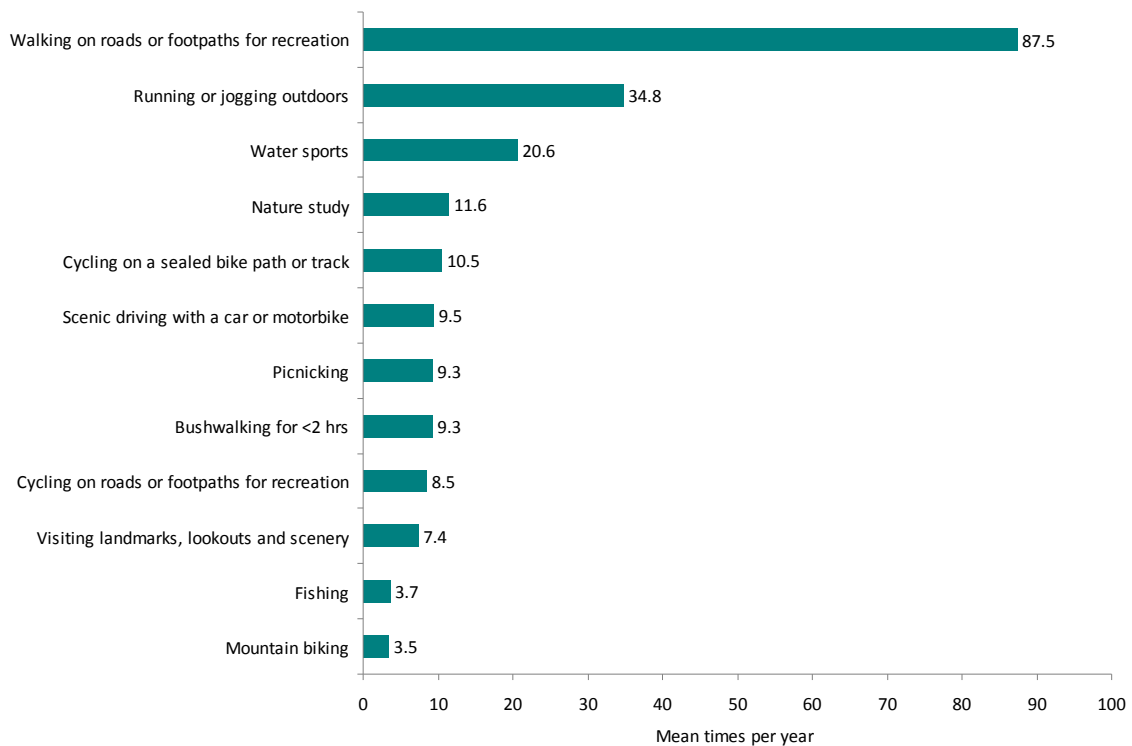
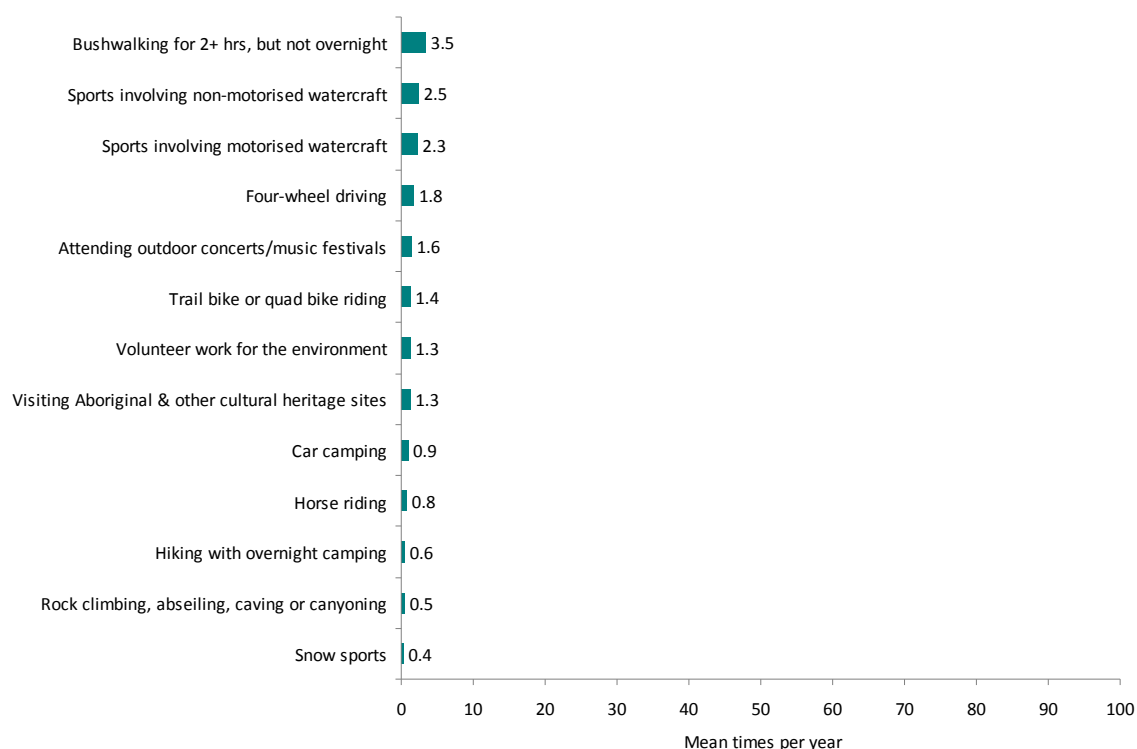


Figure 4.2.6 Frequency of participation in outdoor recreation activities in the last 12 months (participants and non-participants) – Part II



Averaging across participants and non-participants, walking on roads or footpaths for recreation (87.5) was by far the most frequently engaged in activity. This was followed by running or jogging outdoors (34.8), water sports (20.6), nature study (11.6), and cycling on a sealed bike path or track.

Means for the frequency of participation by both participants and non-participants in the top five outdoor recreation activities broken down by age and gender are presented in Table 4.2.4. The breakdowns for the remainder of the activities can be found in Appendix C.

Table 4.2.4 Frequency of participation in the top five outdoor recreation activities by age and gender (participants and non-participants)

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	61	62	74	89	91	82	87	113	87
Running or jogging outdoors	90	54	35	21	76	34	12	20	35
Water sports	20	20	21	22	28	14	24	18	21
Nature study	8	5	2	15	17	12	12	15	12
Cycling on a sealed bike path or track	10	11	30	10	1	11	13	4	11

As Table 4.2.4 shows, walking on roads or footpaths for recreation frequency was significantly higher among females aged from 45 to 75 years (113 times per year). Running or jogging outdoors had a significantly higher mean frequency of participation among 18 to 24 year old males (90 times per year) and 18 to 24 year old females (76 times per year), and a significantly lower frequency among 45-75 year old males (21 times per year), 35-44 year old females (12 times per year), and 45-75 year old females (20 times per year). In addition, males aged from 35 to 44 years old had a significantly lower mean frequency of participation in nature study (2 times per year). For cycling on a sealed bike path or track, it was found that there was a significantly lower mean frequency of participation for females aged 18 to 24 years old (1 time per year) and females aged 45 to 75 years old (4 times per year).

Total participation figures were estimated for each of the outdoor recreation activities for the last 12 months by multiplying, in each age by gender subgroup:

- the mean frequency of participation (including both participants and non-participants);
- and the number of people in each age by gender group in the population for that region.

Overall total participation figures for each of the outdoor recreation activities are presented in Figures 4.2.7 and 4.2.8. The 45-75 year old age bracket was split into three 10 year age bands for the calculation of overall total participation displayed in the figures below.

Figure 4.2.7 Total participation in outdoor recreation activities in the last 12 months
– Part I

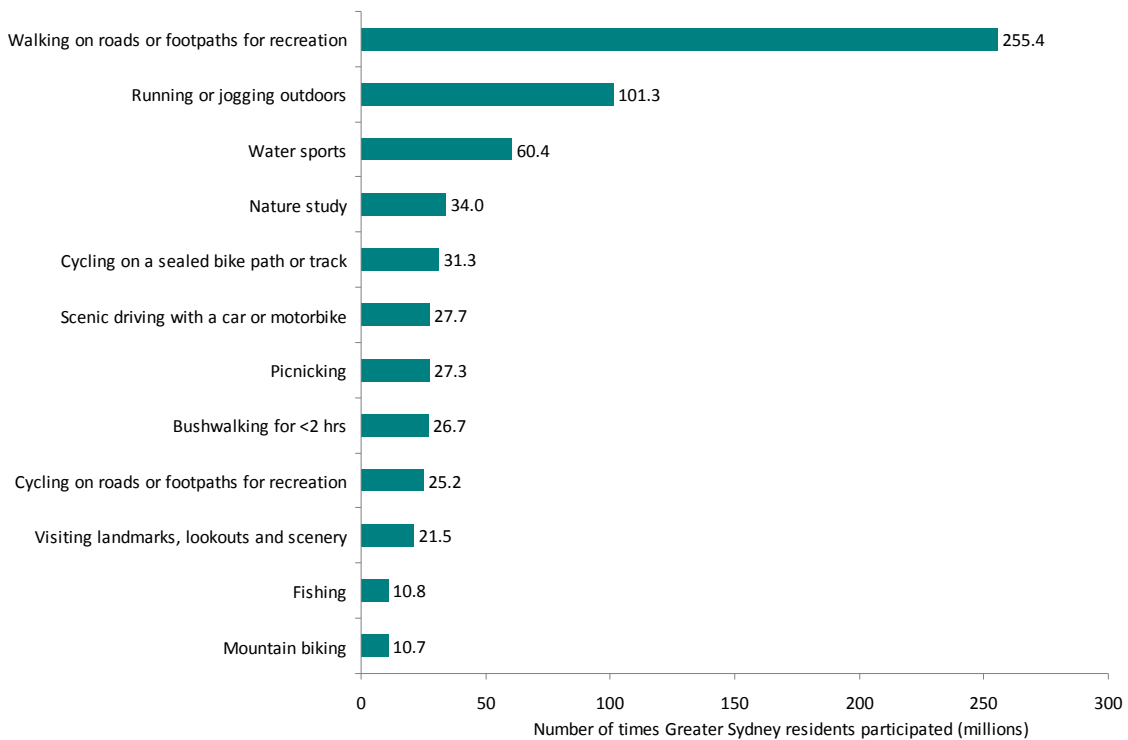
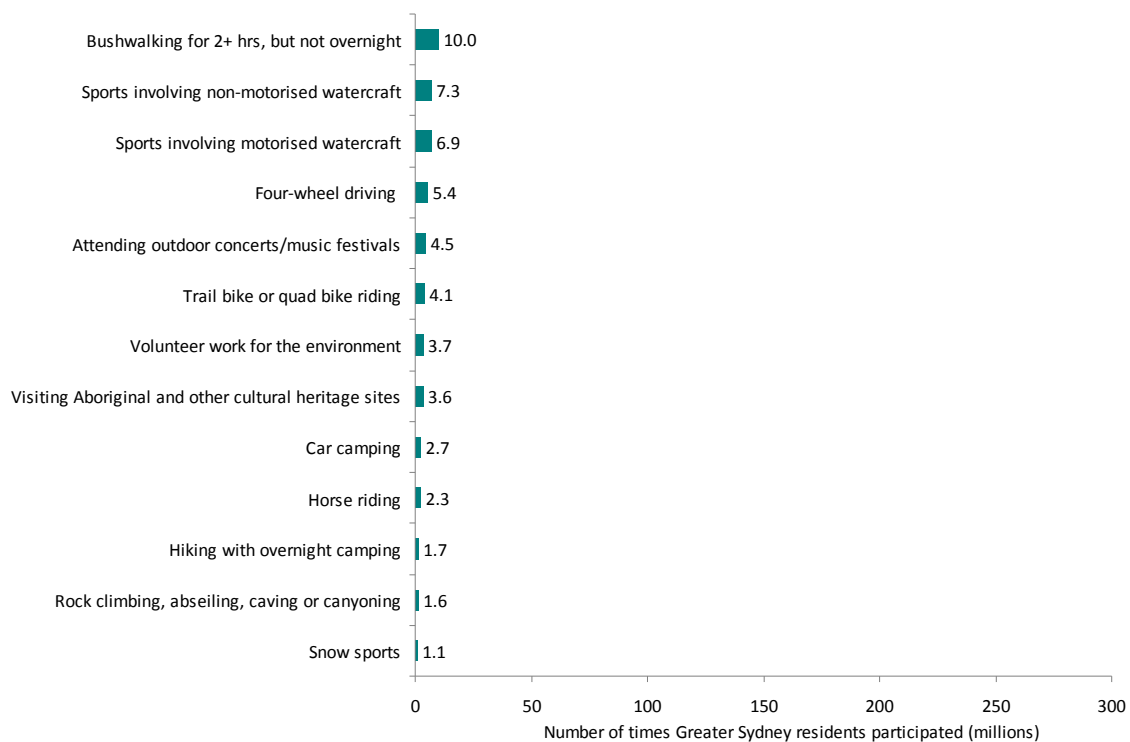


Figure 4.2.8 Total participation in outdoor recreation activities in the last 12 months
– Part II



As can be seen from Figures 4.2.7 and 4.2.8, the top five activities were walking on roads or footpaths for recreation (255.4 million), running or jogging outdoors (101.3 million), water sports (60.4 million), nature study (34.0 million), and cycling on a sealed bike path or track (31.3 million).

Total participation figures for the top five outdoor recreation activities broken down by age and gender are presented in Table 4.2.5. The breakdowns for the remainder of the activities can be found in Appendix C. These figures are calculated using the same age and gender subgroups used throughout the rest of the report, so they differ slightly from Figures 4.2.7 and 4.2.8 above.

Table 4.2.5 Total participation in the top five outdoor recreation activities by age and gender (millions) *

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	12	19	23	55	18	26	28	72	254
Running or jogging outdoors	18	17	11	13	15	11	4	13	102
Water sports	4	6	6	14	6	5	8	12	60
Nature study	2	1	1	9	3	4	4	9	34
Cycling on a sealed bike path or track	2	3	9	6	0	3	4	2	31

* No significance testing done for this table

Location

Participants in each activity were asked whether they had participated in their local area, further away, or both.

Proportions of participants who had participated in their local area and further afield, in addition to total participation rates, are provided in Figures 4.2.9 and 4.2.10.

Figure 4.2.9 Participation rates for outdoor recreation activities in the last 12 months by local area and further away – Part I

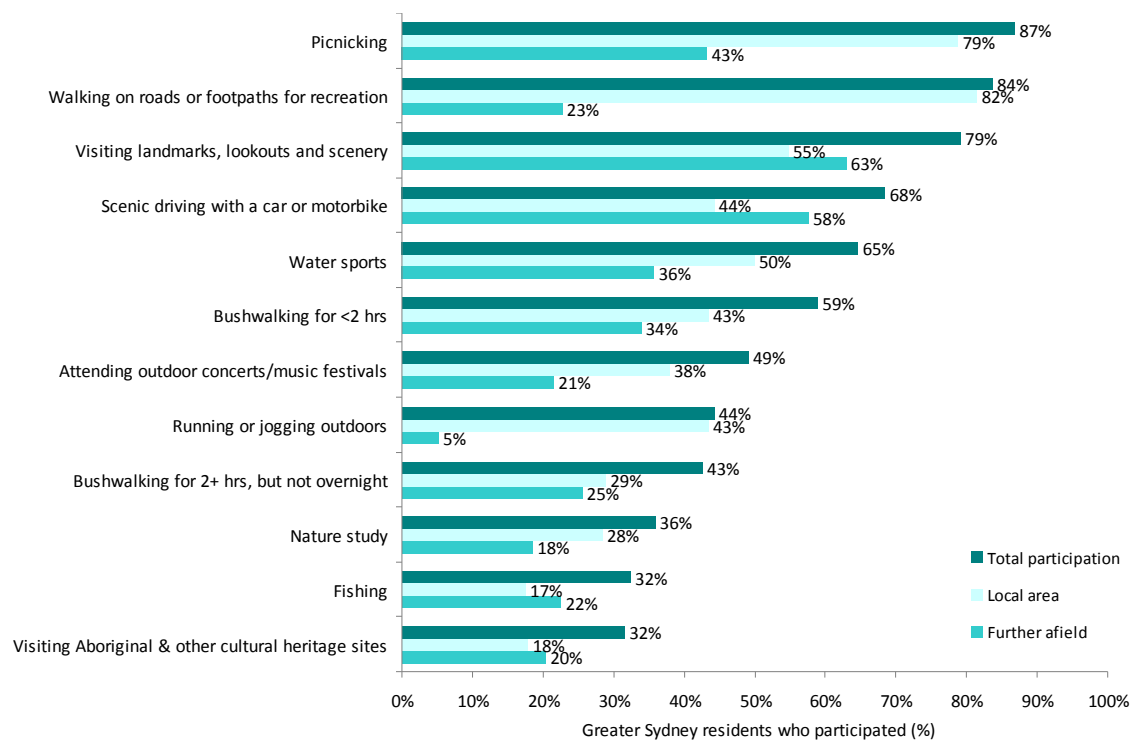
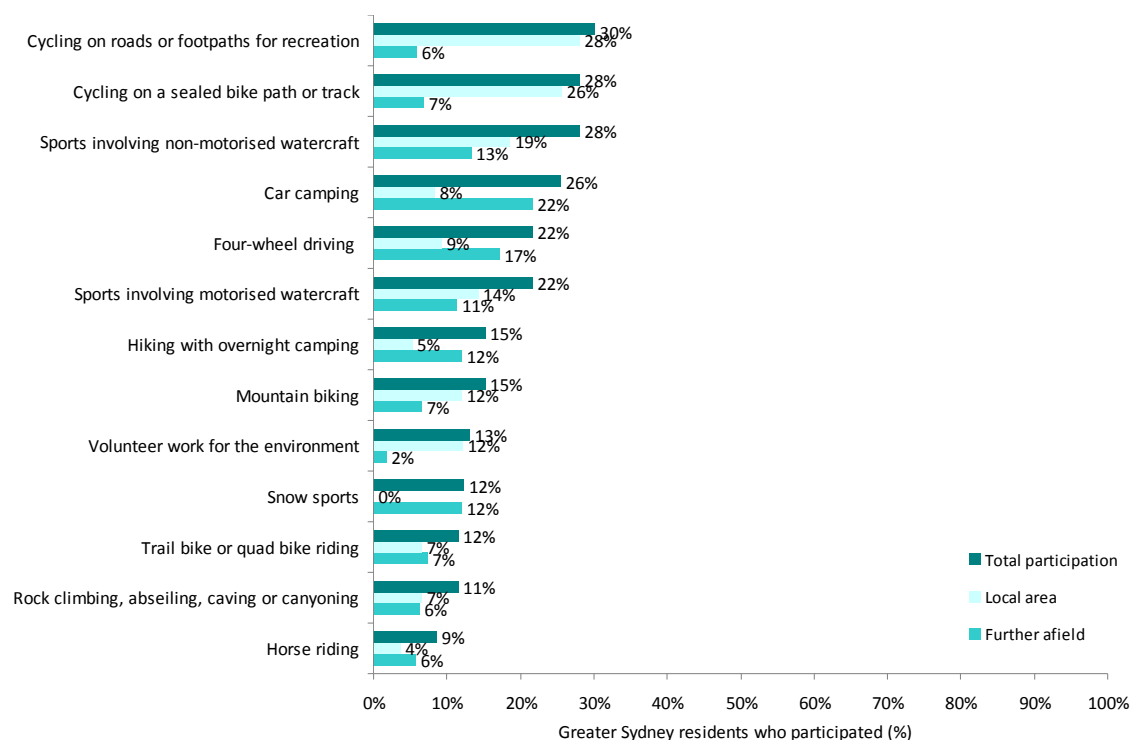


Figure 4.2.10 Participation rates for outdoor recreation activities in the last 12 months by local area and further away – Part II



As can be seen from Figures 4.2.9 and 4.2.10, while more people reported having participated in the activities in their local area, there was a sizeable proportion of people who reported participation further afield.

4.3 Interest

Both participants and non-participants in each of the outdoor recreation activities were asked to indicate how interested they would be in doing in each of the activities more often, if there was nothing stopping them from doing so. They were directed to use a scale of 0 to 10, where 0 was not at all interested and 10 was extremely interested.

Mean interest ratings in participating more often in each of the outdoor recreation activities are presented in Figures 4.3.1 and 4.3.2.

Figure 4.3.1 Interest in more frequent participation in outdoor recreation activities – Part I

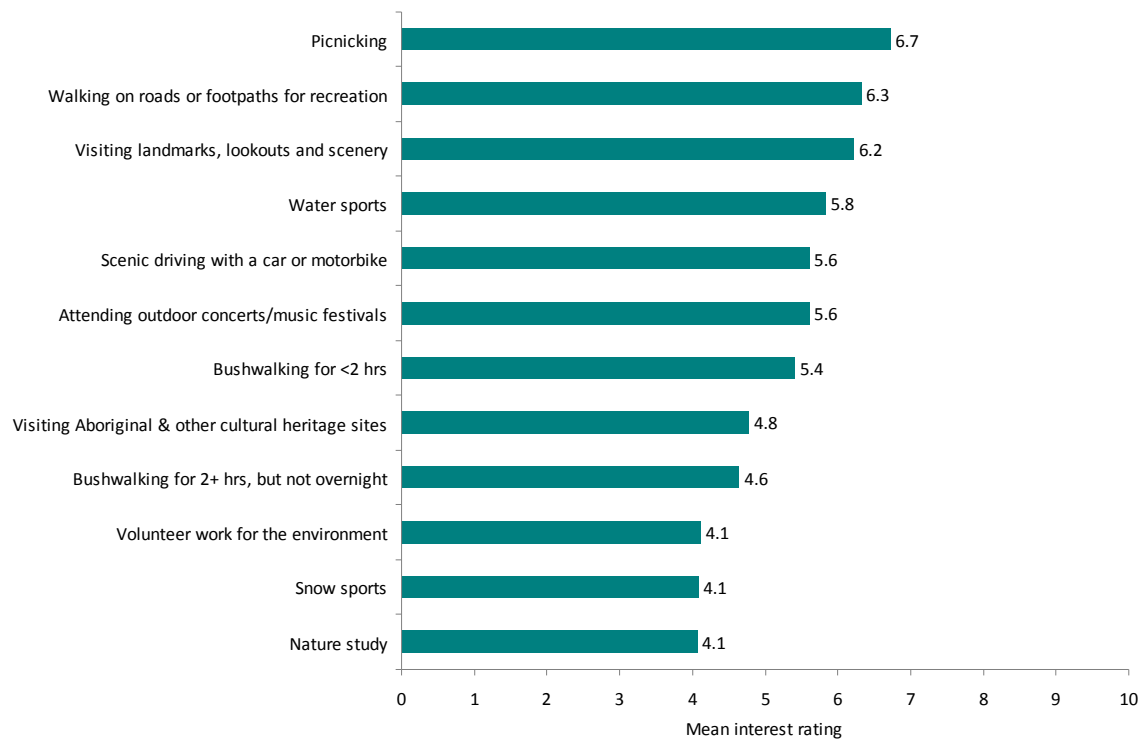
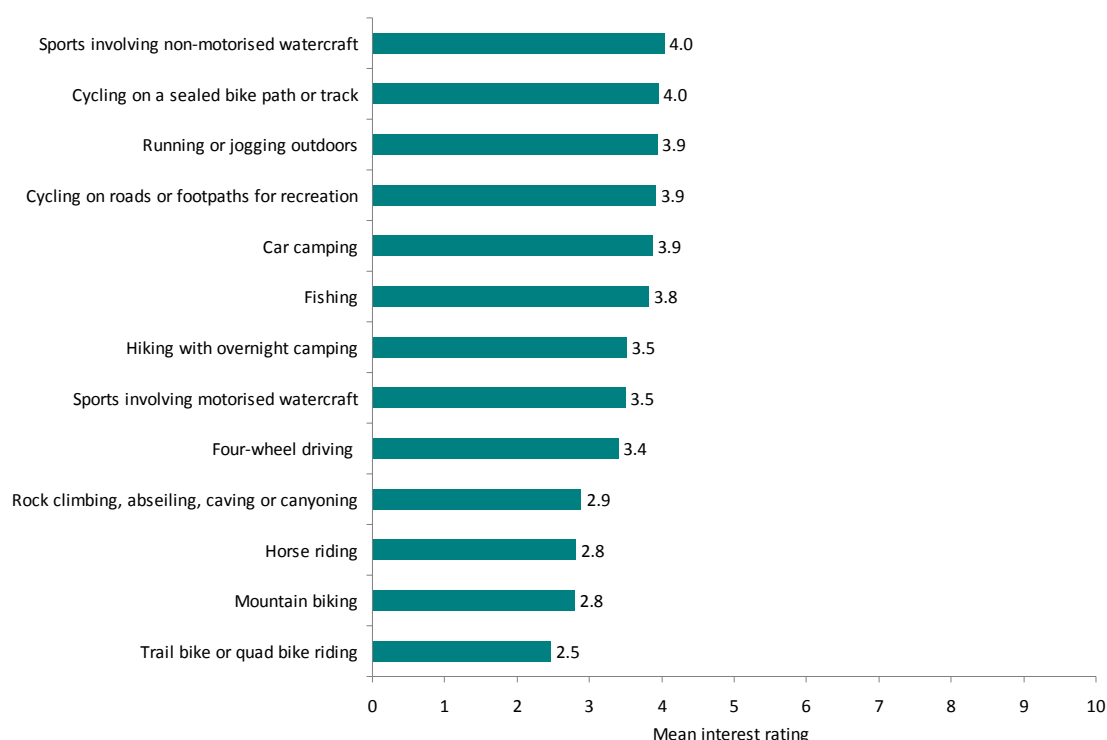


Figure 4.3.2 Interest in more frequent participation in outdoor recreation activities – Part II



As can be seen in Figure 4.3.1, interest in more frequent participation was highest for picnicking, with a mean interest rating of 6.7 out of 10. This was followed by walking on roads or footpaths for recreation (6.3), visiting landmarks, lookouts and scenery (6.2), water sports (5.8), scenic driving with a car or motorbike (5.6), and attending outdoor concerts/music festivals (5.6). The activity with the lowest mean interest rating was trail bike or quad bike riding, with a rating of 2.5, as shown in Figure 4.3.2.

Mean interest ratings in participating more often in each of the outdoor recreation activities broken down by age and gender are presented in Table 4.3.1. The breakdowns for the remainder of the activities can be found in Appendix C.

Table 4.3.1 Interest in more frequent participation in outdoor recreation activities by age and gender

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Picnicking	5.9	6.9	6.7	6.1	7.2	7.4	7.5	6.6	6.7
Walking on roads or footpaths for recreation	5.7	5.7	5.9	5.6	6.5	6.8	7.2	7.0	6.3
Visiting landmarks, lookouts and scenery	5.7	6.2	6.1	6.0	6.9	6.2	6.6	6.3	6.2
Water sports	6.4	6.5	6.1	4.9	7.7	5.9	6.7	5.2	5.8
Scenic driving with a car or motorbike	5.8	5.8	5.4	5.8	5.8	5.3	5.9	5.4	5.6
Attending outdoor concerts/music festivals	6.7	6.0	6.1	4.5	7.2	6.1	5.9	5.0	5.6
Bushwalking for <2 hrs	5.2	4.7	5.9	5.3	6.4	5.2	6.2	5.2	5.4

As Table 4.3.1 shows, interest for more frequent participation in picnicking was significantly higher among females aged 25-34 (7.4) and those aged 35-44 (7.5); and significantly lower among males aged 45-75.

Interest in walking on roads or footpaths for recreation was significantly higher among females aged 35 to 44 (7.2) and females aged 45-75 (7.0) and significantly lower among males aged 45-75 (5.6).

Interest in water sports was significantly higher among females aged 18-24 (7.7) and significantly lower among males aged 45-75 (4.9) and females aged 45-75 (5.2).

Similarly, interest in attending outdoor concerts/music festivals was significantly higher among males aged 18-24 (6.7) and females aged 18-24 (7.2) and significantly lower among males aged 45-75 (4.5) and females aged 45-75 (5.0).

Mean interest ratings in participating more often in each of the outdoor recreation activities were greater for current participants than non-participants, as can be seen in Figures 4.3.3 and 4.3.4.

Figure 4.3.3 Interest in more frequent participation in outdoor recreation activities by participation status – Part I

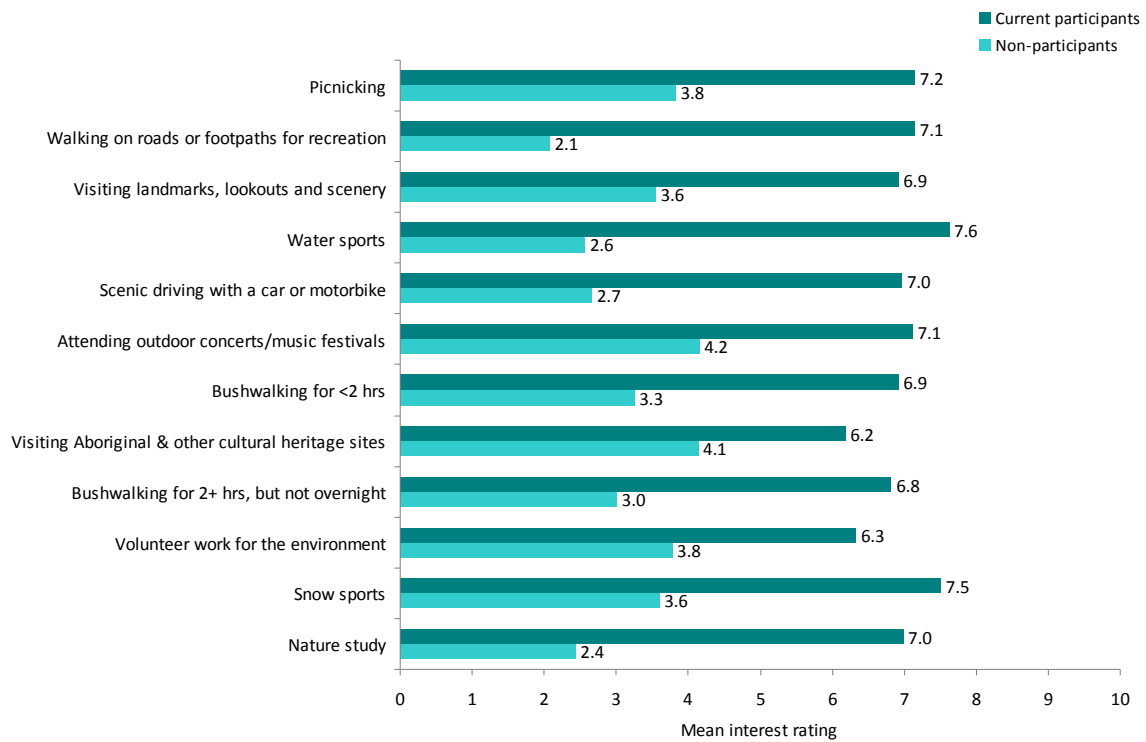
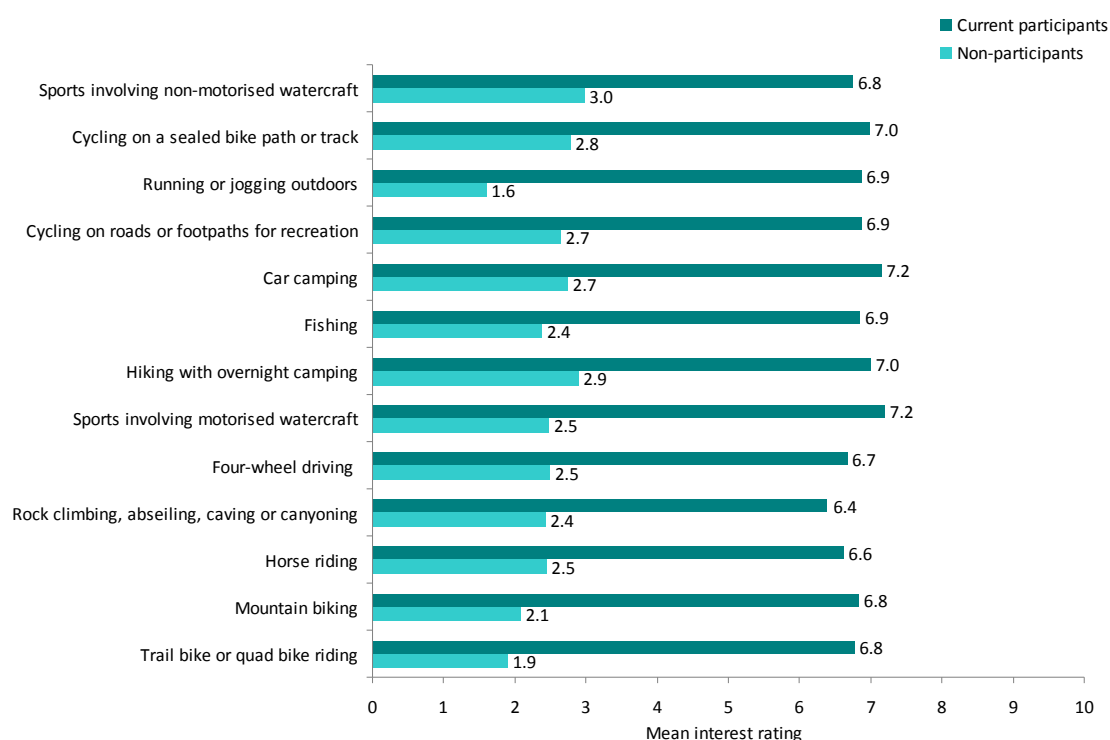


Figure 4.3.4 Interest in more frequent participation in outdoor recreation activities by participation status – Part II



As Figure 4.3.3 shows, the highest difference in interest ratings between participants and non-participants is for walking on roads or footpaths for recreation (7.1 for participants, 2.1 for non-participants). The activities with the highest mean ratings among non-participants were attending outdoor concerts and music festivals (4.2) and visiting Aboriginal and other cultural heritage sites (4.1). The activities with the highest mean ratings among participants were water sports (7.6) and snow sports (7.5). The lowest mean interest ratings among non-participants were for running or jogging outdoors (1.6) and trail or quad bike riding (1.9), as shown in Figure 4.3.4.

Level of interest in participating more often in each of the outdoor recreation activities was divided into three categories: low (0-3), moderate (4-6) and high (7-10). The proportions of survey participants spread across the interest categories for each activity are presented in Figures 4.3.5 and 4.3.6.

Figure 4.3.5 Categories of interest in more frequent participation in outdoor recreation activities – Part I

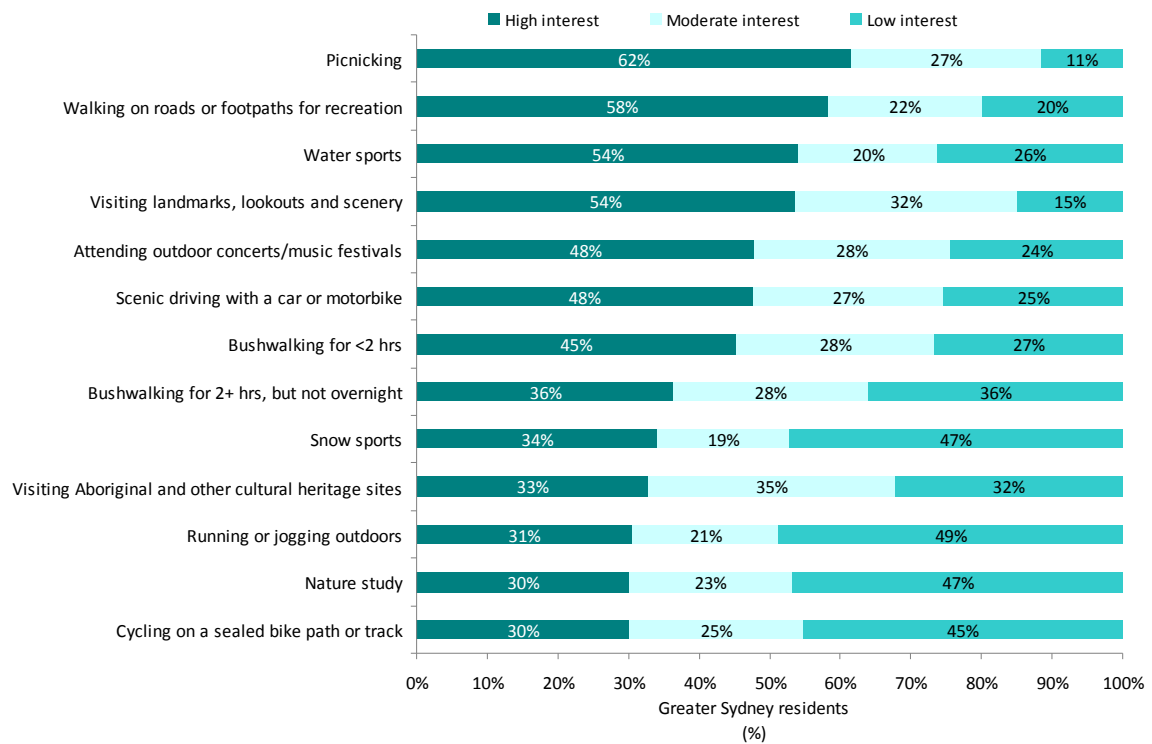
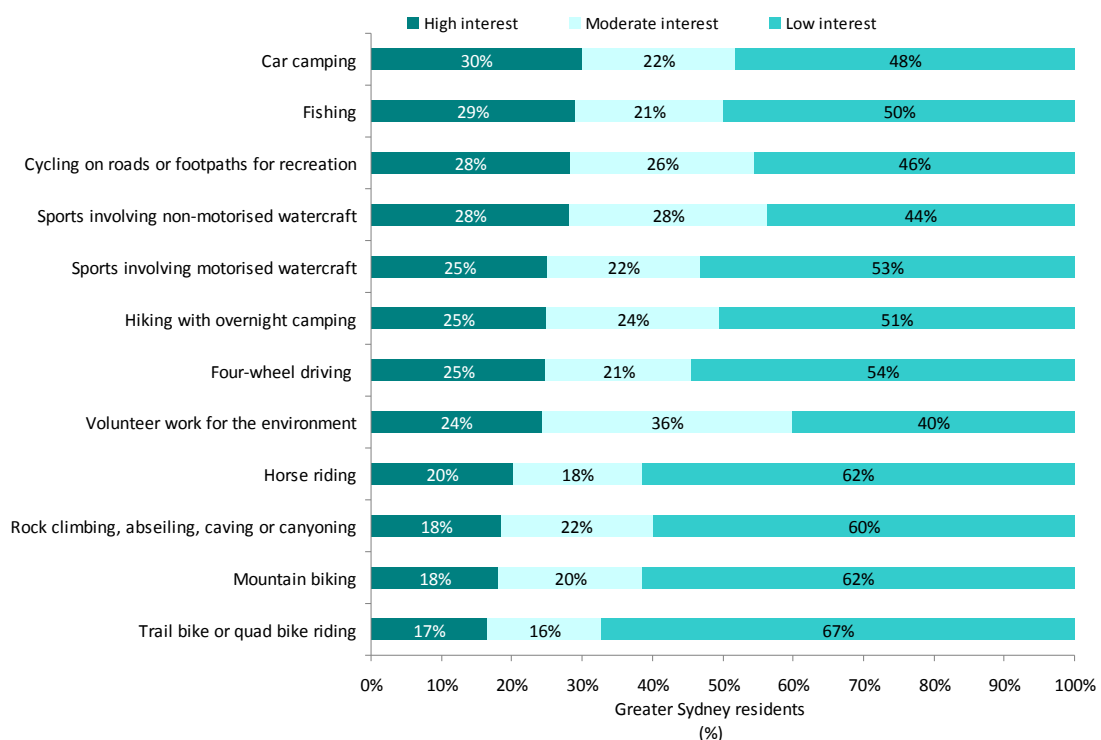


Figure 4.3.6 Categories of interest in more frequent participation in outdoor recreation activities – Part II



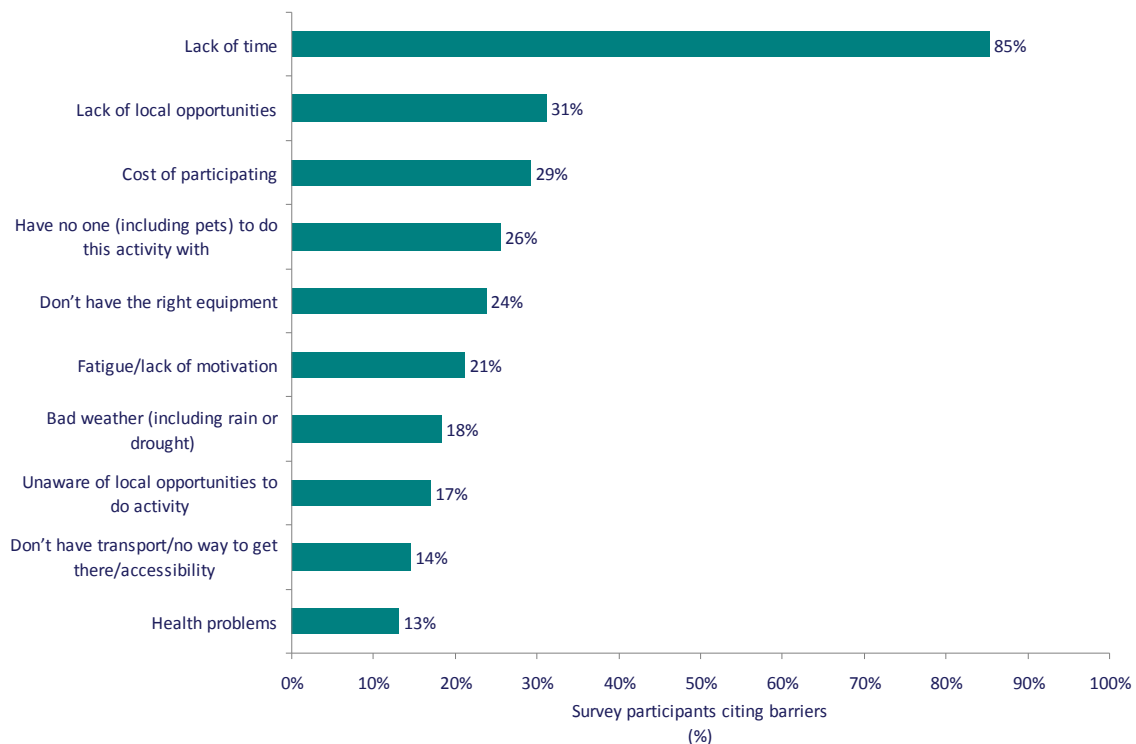
As can be seen in Figures 4.3.5 and 4.3.6, the top six activities based on proportion of survey participants indicating high interest in participating in an activity more often were similar to those based on mean interest ratings. These were picnicking (62%), walking on roads or footpaths for recreation (58%), water sports (54%), visiting landmarks, lookouts and scenery (54%), scenic driving with a car or motorbike (48%), and attending outdoor concerts/music festivals was on par with the latter (48%).

4.4 Barriers

Survey participants were asked an additional question about a subset of activities that they indicated they would be interested in doing more often (that is, to which they gave a score of at least 5 out of 10), regardless of whether they currently participated in the activity. For these activities, survey participants were asked to indicate some of the things stopping them from doing so. Survey participants provided open-ended responses, which were later coded by the researchers. To reduce the burden on participants, they were asked to provide a response on barriers for a maximum of five activities.

The top 10 barriers overall are presented in Figure 4.4.1 (refer to Appendix C for the remainder of the barriers). Participants who reported no barriers, or indicated that they were not interested in doing the activity more often, were excluded from the analysis.

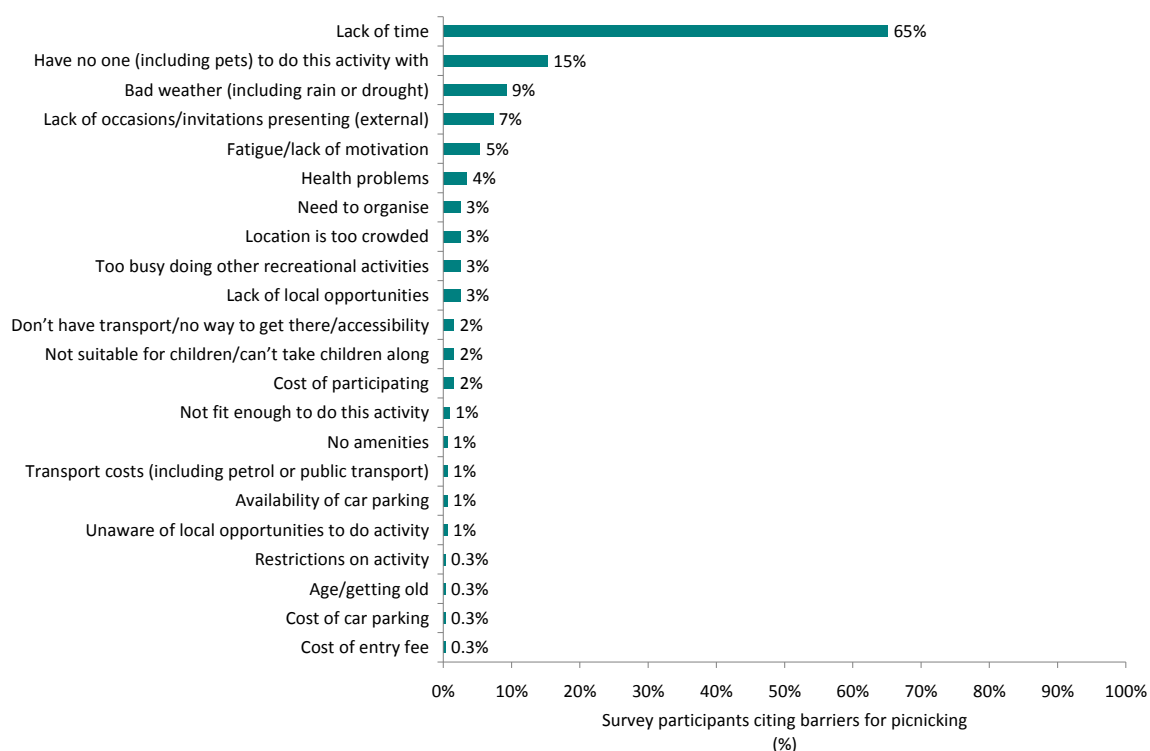
Figure 4.4.1 Barriers to more frequent participation in outdoor recreation averaged over activities



The most frequently mentioned barrier across all activities was time (85%), which can be considered to indicate the relative priority of particular activities. However, unmet demand appears to be present, with 31% reporting a lack of local opportunities and 17% reporting a lack of awareness of any local opportunities.

The barriers for picnicking, the outdoor recreation activity for which there was the greatest interest in participating more often, are outlined in Figure 4.4.2. The barriers for the remainder of the activities can be found in Appendix C.

Figure 4.4.2 Barriers to more frequent participation in picnicking



Lack of time (65%) was the most frequently mentioned barrier for picnicking. This was followed by 'have no one (including pets) to do this activity with' (15%), 'bad weather (including rain or drought)' (9%), and 'lack of occasions or invitations presenting themselves' (7%).

Actionable barriers

Two of the main barriers to participating in activities more often were identified as 'actionable barriers': lack of local opportunities and lack of awareness of local opportunities. These actionable barriers, together with interest in doing activities more often, may represent unmet demand for these activities and are opportunities to increase participation. The following charts show the proportion of participants who when asked about barriers responded with an actionable barrier, for each activity. Proportion of respondents citing an actionable barrier broken down by ages and gender can be found in Appendix C.

Figure 4.4.3 Actionable barriers - Part I

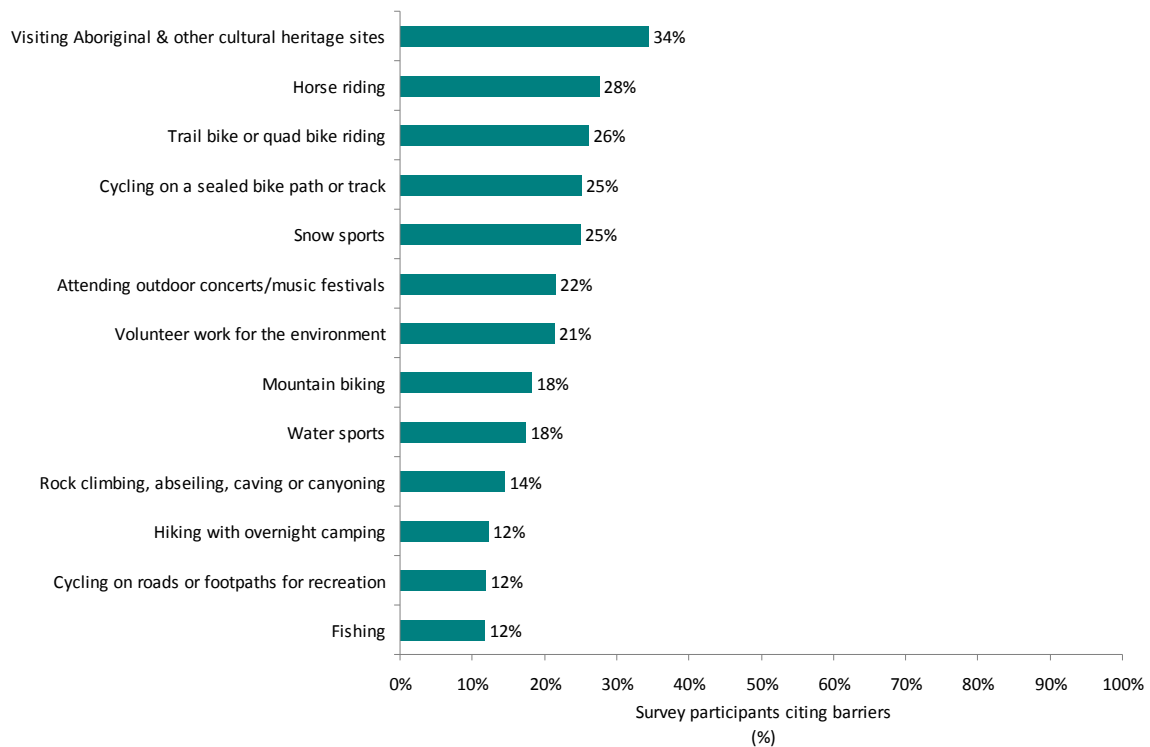
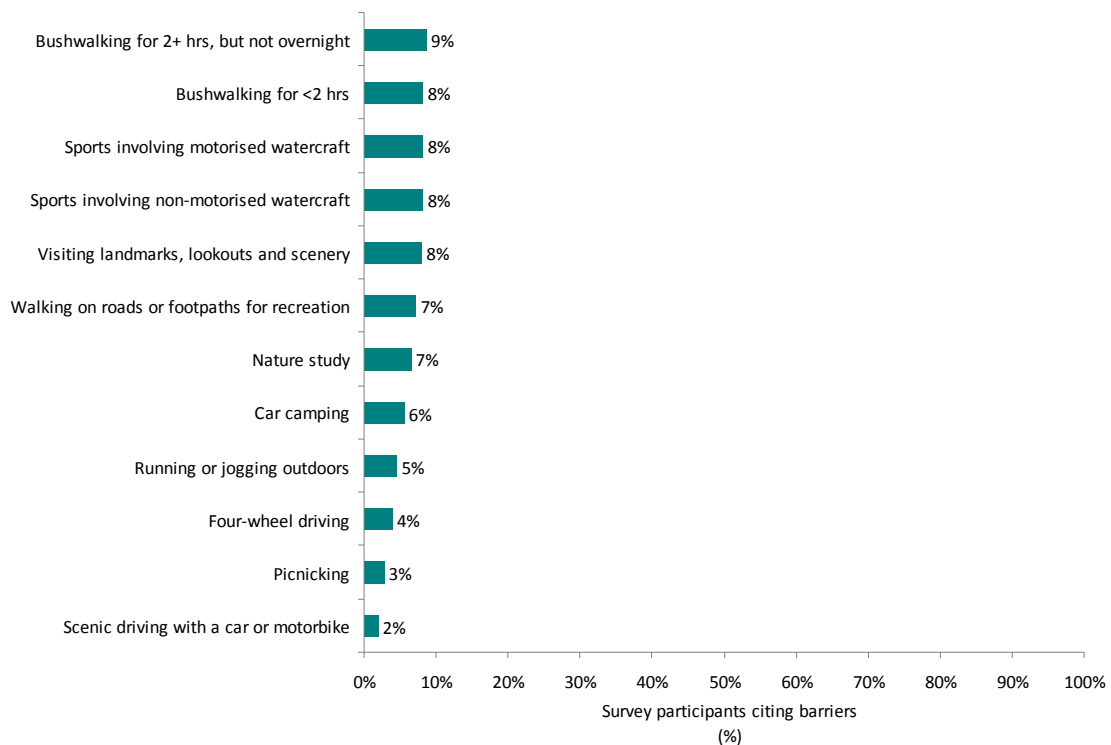


Figure 4.4.4 Actionable barriers - Part II



As Figure 4.4.3 shows, the activity with the highest proportion citing actionable barriers was 'visiting Aboriginal and other cultural heritage sites', with 34% citing at least one actionable barrier. Horse riding (28%), trail bike or quad bike riding (26%), cycling on a sealed bike path or track (25%) and snow sports (25%) all had at least one quarter citing an actionable barrier.

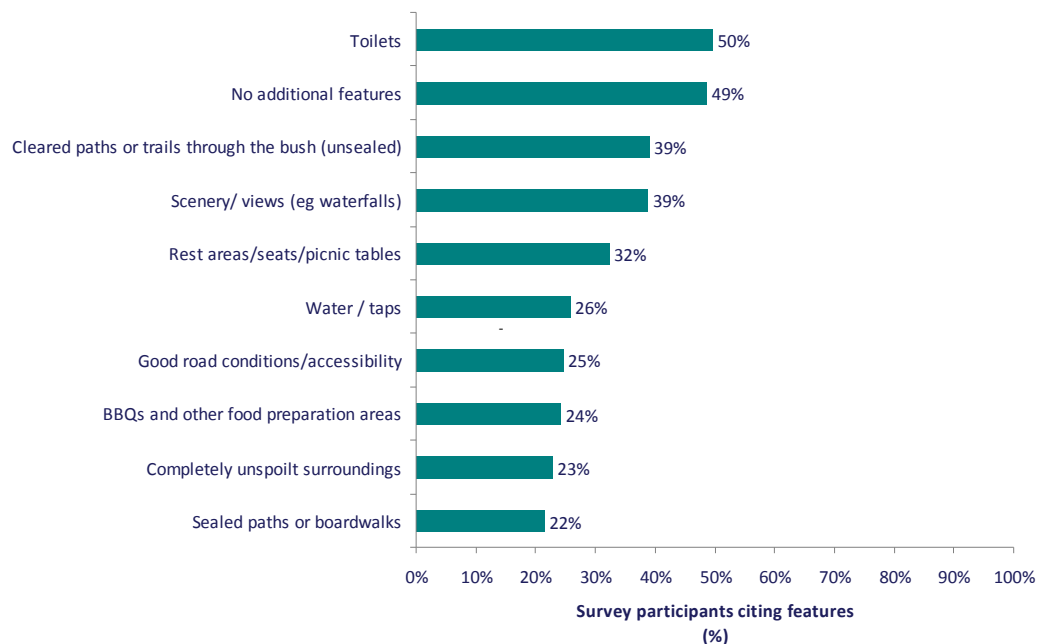
The activities with the least proportion naming actionable barriers were scenic driving (2%), picnicking (3%), four-wheel driving (4%) and running or jogging outdoors (5%), as shown in Figure 4.4.4.

4.5 Preferences

Survey participants were asked to answer a further question on a subset of activities that they had either performed in the last 12 months, or indicated they would be interested in doing more often (that is, to which they gave a score of at least 5 out of 10). Survey participants were asked to imagine that they were going to do each of the activities in a National Park, State Conservation Area, State Forest or Nature Reserve in their region (but not in a local council park or botanical garden). They were then asked what would be the main features (either natural or man-made) that they would want if they were going to do the activity in one of these locations. Survey participants provided open-ended responses, which were later coded by the researchers. To reduce the burden on survey participants, they were asked to provide a response for a maximum of five activities.

The top 10 preferences overall are presented in Figure 4.5.1 (refer to Appendix C for the remainder of the features).

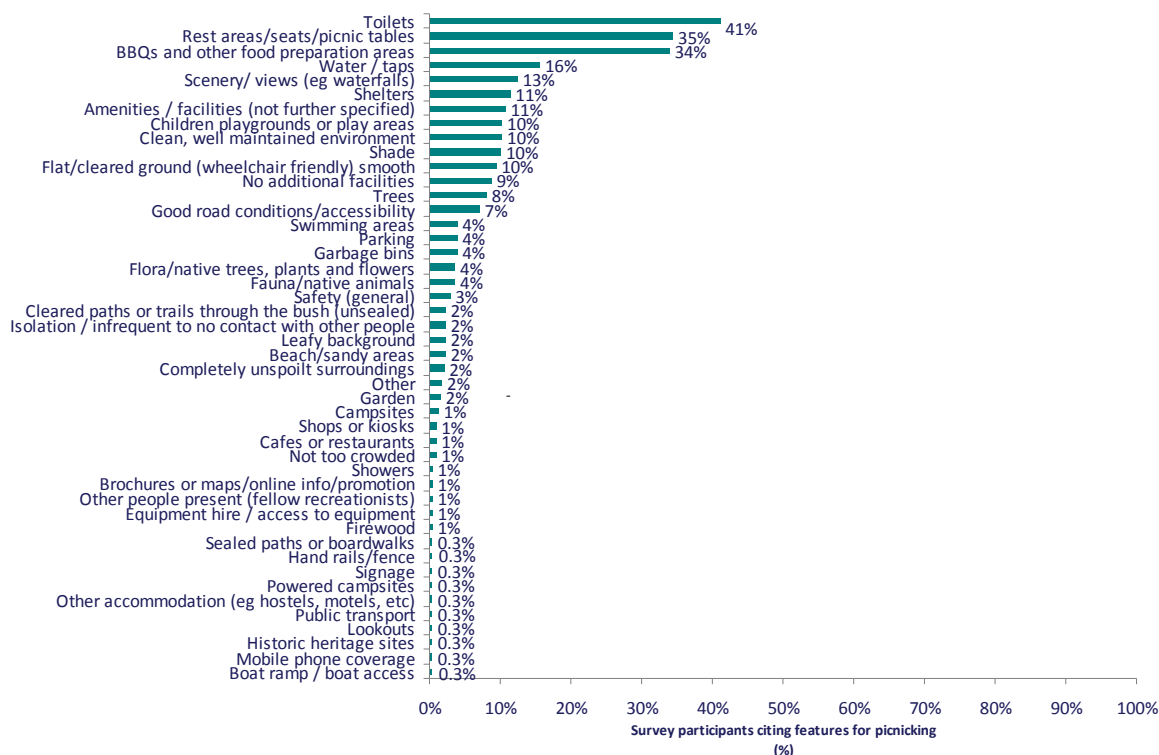
Figure 4.5.1 Top 10 preferences for participation in outdoor recreation averaged over activities



The most frequently requested feature across all activities was toilets (50%). Interestingly, the next most common response was that no additional features were required (49%). This was followed by cleared unsealed paths or trails through the bush (39%) and scenery/views (39%).

The preferences for picnicking, the outdoor recreation activity for which there was the greatest interest in participating more often, are outlined in Figure 4.5.2. The preferences for the remainder of the activities can be found in Appendix C.

Figure 4.5.2 Preferences for picnicking



Toilets (41%) were the most requested preference for picnicking, followed by rest areas, such as seats and picnic tables (35%), and barbecues and other food preparation areas (34%).

4.6 Motivations

Lastly, survey participants were asked to indicate the extent to which a list of statements describing motivations to participate in outdoor recreation applied to them, on a scale of 0 to 10, where 0 was not at all and 10 was extremely.

Mean ratings of personal applicability of each of the motivations to participate in outdoor recreation activities are presented in Figures 4.6.1 and 4.6.2.

Figure 4.6.1 Mean ratings of personal applicability of motivations to participate in outdoor recreation activities– Part I

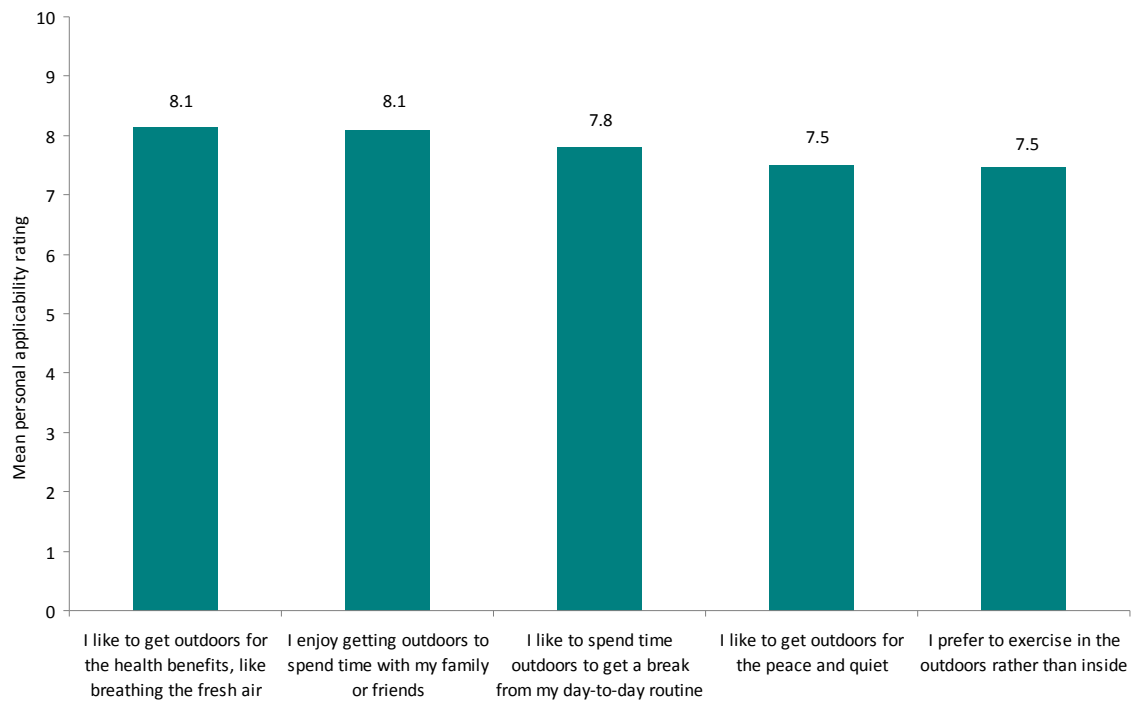
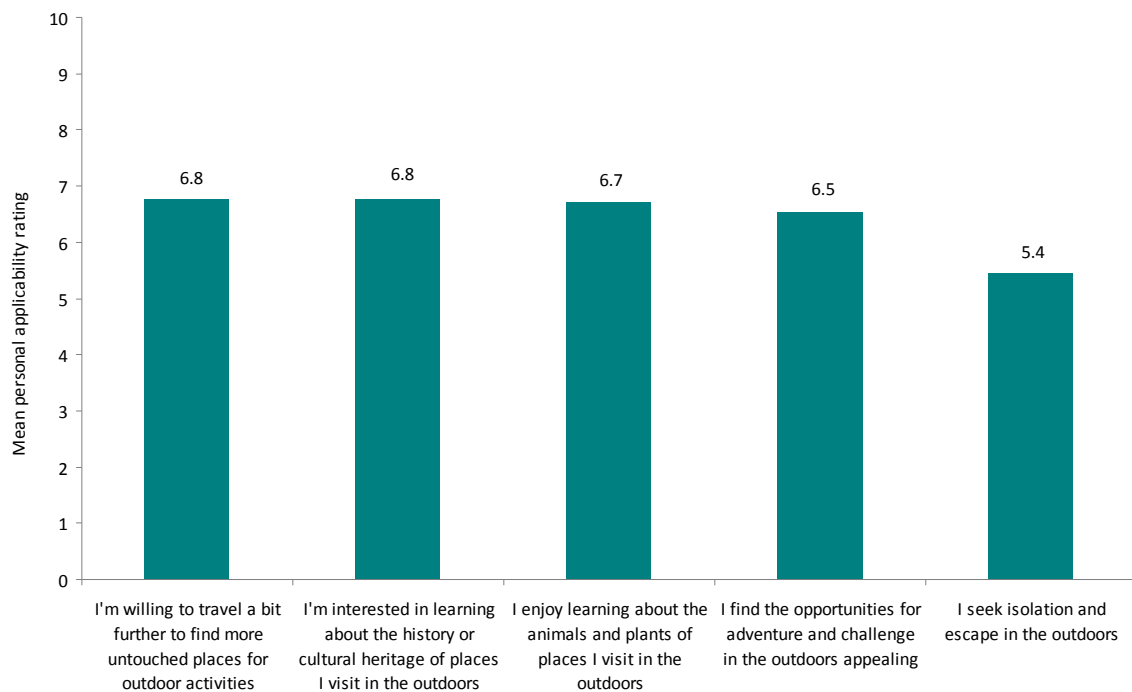


Figure 4.6.2 Mean ratings of personal applicability of motivations to participate in outdoor recreation activities– Part II



As the figures above show, the three highest rated motivations were 'I like to get outdoors for the health benefits, like breathing the fresh air' (8.1 out of 10), 'I enjoy getting outdoors to spend time with my family or friends' (8.1) and 'I like to spend time outdoors to get a break from my day-to-day routine' (7.8).

Mean ratings of personal applicability of each of the motivations to participate in outdoor recreation activities broken down by age and gender are presented in Table 4.6.2.

Table 4.6.2 Mean ratings of personal applicability of motivations to participate in outdoor recreation activities by age and gender

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
I like to get outdoors for the health benefits, like breathing the fresh air	7.5	8.0	8.0	8.1	7.6	8.4	8.2	8.4	8.1
I enjoy getting outdoors to spend time with my family or friends	7.9	8.0	8.1	7.7	8.2	8.5	8.7	8.1	8.1
I like to spend time outdoors to get a break from my day-to-day routine	7.3	7.7	7.7	7.6	7.8	8.1	8.1	7.9	7.8
I like to get outdoors for the peace and quiet	7.5	7.3	7.4	7.5	7.4	7.7	7.4	7.6	7.5
I prefer to exercise in the outdoors rather than inside	7.7	7.5	7.8	7.6	7.7	7.4	7.4	7.1	7.5
I'm willing to travel a bit further to find more untouched places for outdoor activities	6.9	6.5	7.1	6.8	6.8	7.3	6.7	6.5	6.8
I'm interested in learning about the history or cultural heritage of places I visit in the outdoors	6.2	6.4	6.9	6.8	6.3	6.7	6.8	7.2	6.8
I enjoy learning about the animals and plants of places I visit in the outdoors	5.8	6.3	6.5	6.8	6.3	6.7	6.7	7.3	6.7
I find the opportunities for adventure and challenge in the outdoors appealing	7.1	7.0	7.1	6.4	7.1	6.8	6.1	5.9	6.5
I seek isolation and escape in the outdoors	5.3	5.6	5.8	5.4	5.6	5.6	5.5	5.2	5.4

Among age and gender groups, it was found that the mean rating of 'I enjoy getting outdoors to spend time with my family or friends' was significantly higher (8.7) among females aged 35-44. Females aged 45-75 had a significantly higher mean rating of the motivation 'I enjoy

learning about the animals and plants of places I visit in the outdoors' (7.3) and a significantly lower mean rating of the motivation 'I find the opportunities for adventure and challenge in the outdoors appealing' (5.9).

There were no notable differences in motivations for those who either participated in or were highly interested in participating more often in different types of outdoor recreation activities. Those tables are found in Appendix C.

4.7 Forecasting future participation

Demographic approach

Scenario 1: Participation changes due to demographic change in population

Future participation figures for the year 2018 were estimated for each of the outdoor recreation activities for the last 12 months by multiplying:

- the mean frequency of participation (including both participants and non-participants); and
- the number of people in each age by gender group in the projected population for that region.

The projected population was determined by weighting each age and gender subgroup by weights according to the changes in population across NSW estimated by the Australian Bureau of Statistics². These weights are found in Appendix D. This method adjusts for both change in demographic profile (age by gender groups) and change in absolute size of the population, and estimated population figures. An assumption of this approach is that recreational interests stay the same within age/gender groups (e.g. a constant proportion of 30 year old males will continue to be interested in bike riding).

In contrast, a cohort approach assumes that interests are carried by individuals across age groups (e.g. a constant proportion of "2009's 30 year old males" will continue to be interested in bike riding, even as they age). It can be seen that both approaches rest upon assumptions that may, in time, prove incorrect. For that reason, we have looked at each scenario under both the cohort and demographic approach in this section.

² Based on Australian Bureau of Statistics 3222.0 Population Projections, Australia, TABLE B1. Population projections, By age and sex, New South Wales - Series B. Series B largely reflects current trends in fertility, life expectancy at birth, net overseas migration and net interstate migration.

Total current and estimated total participation figures for 2018 for each of the outdoor recreation activities are presented in Figures 4.7.1 and 4.7.2. Please note that the current participation figures will differ slightly from those reported in the table in Section 4.2 and tables in Appendix C, as the 45-75 age group was split into three 10-year age bands for forecasting.

Figure 4.7.1 Total current and predicted future participation in outdoor recreation activities – Part I

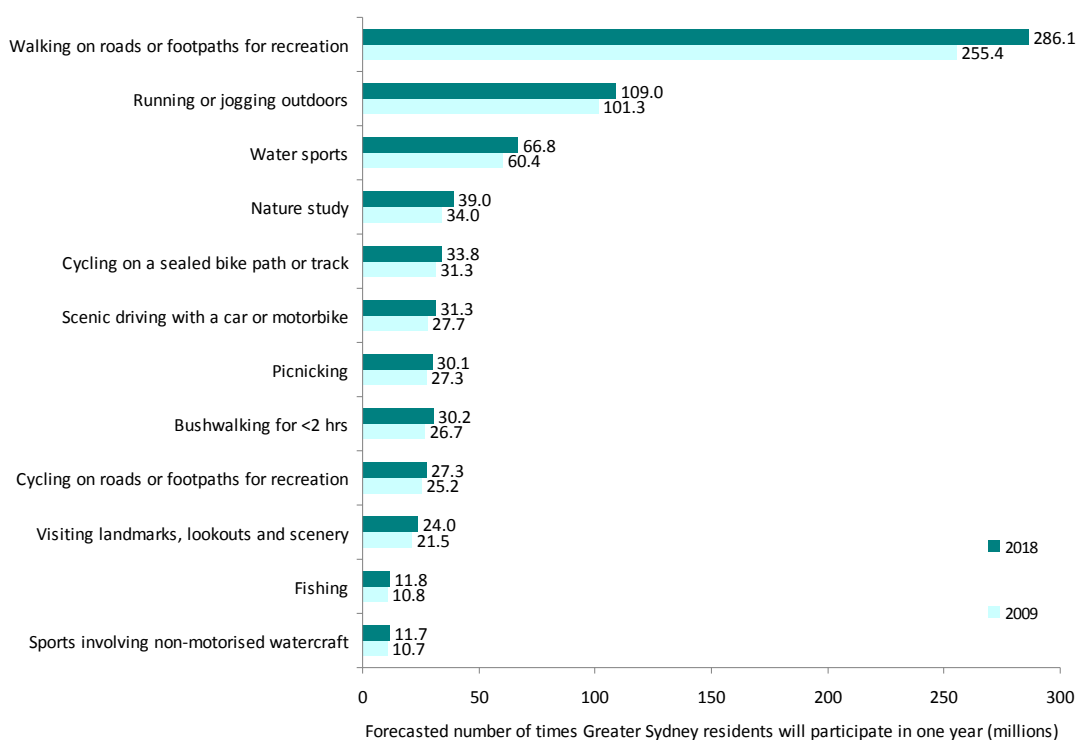
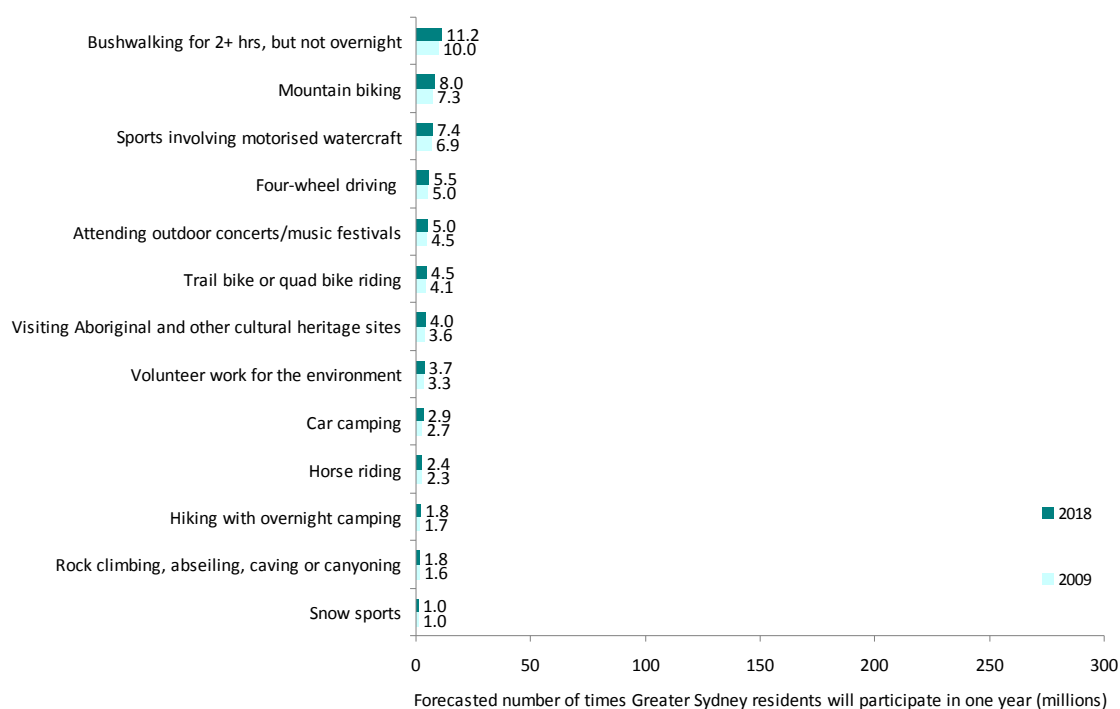


Figure 4.7.2 Total current and predicted future participation participation in outdoor recreation activities – Part II



Changes to the demographic (age x gender) profile of the NSW adult population are not substantial over the period 2009 to 2018. The greatest change over this period is clearly in terms of absolute population, which is projected to increase in NSW by 11%. This, however, only results in an absolute increase in the number of people participating in the activities, rather than relative changes in the popularity of different activities.

Scenario 2: Actionable barriers are addressed and both participation and frequency increase

A second forecasting analysis was conducted to include an estimation of how participation rates and frequencies may change if PWG was to address two of the main 'actionable barriers' in relation to each of the outdoor recreation activities: lack of local opportunities and lack of awareness of local opportunities. The forecasted level of participation was derived from the participant's current frequency of participation, stated interest in doing the activity more often, and the proportion who cited actionable barriers for that activity. The technique used to model frequency is described in further detail in Appendix D.

Estimated total participation figures for 2018, assuming PWG was to provide new opportunities and market the range of opportunities for the activity in the local area, and estimating impacts

on frequencies, for each of the outdoor recreation activities are presented in Figures 4.7.3 and 4.7.4.

Figure 4.7.3 Total current and predicted future participation in outdoor recreation activities, including if actionable barriers are addressed, and adjusting for frequency – Part I

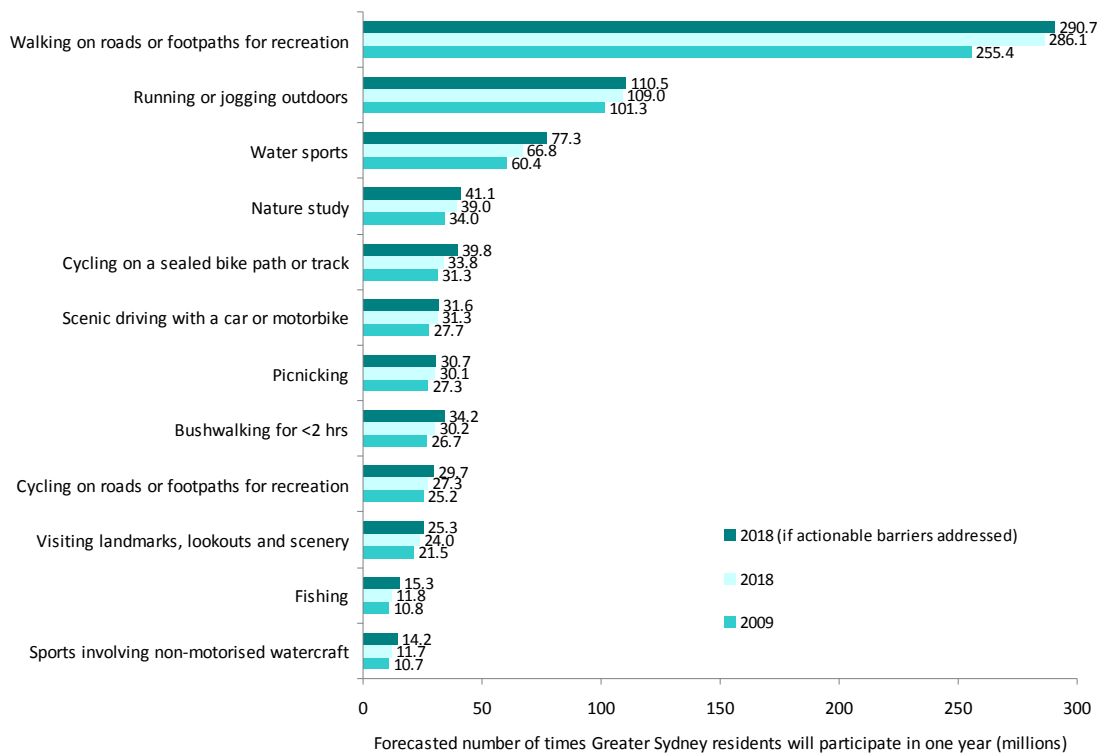
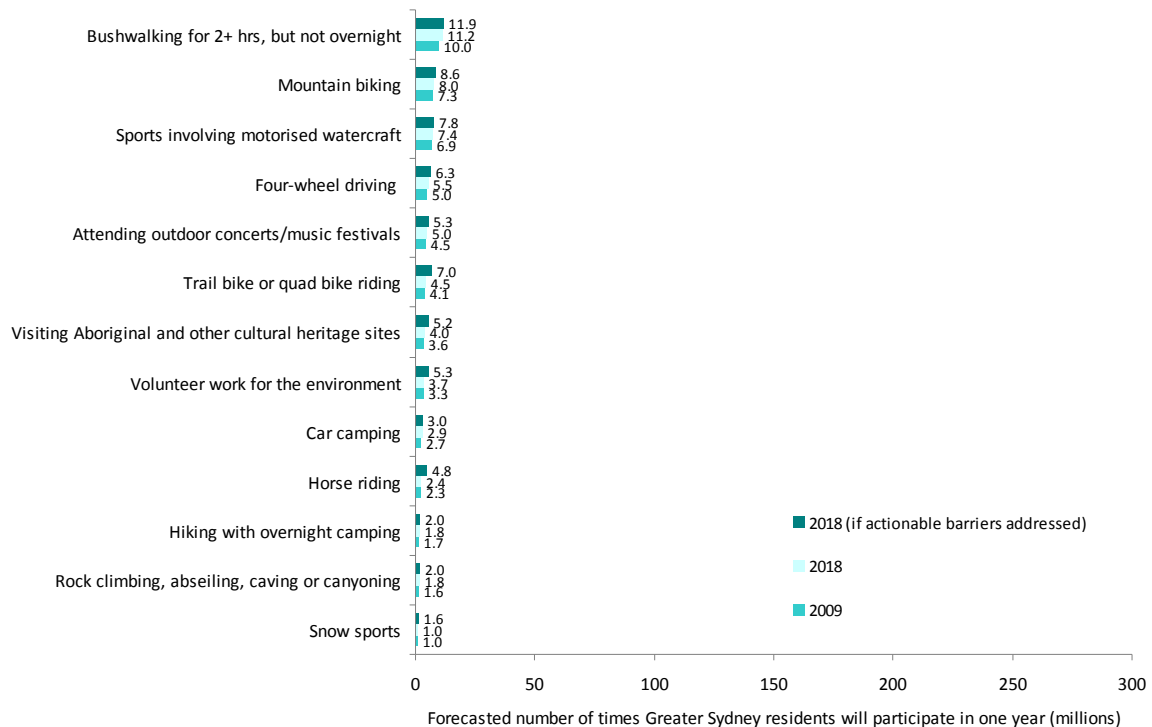


Figure 4.7.4 Total current predicted future participation in outdoor recreation activities, including if actionable barriers are addressed, and adjusting for frequency – Part II



As can be seen, this modelling approach leads to greater changes in predicted participation. The highest increase in future annual participation is for water sports, rising from a predicted 66.8 million events in 2018 to 77.3 million events if actionable barriers are addressed (an increase of 10.5 million events). The smallest increase in future annual participation were for the activities four-wheel driving, hiking with overnight camping, and rock climbing, abseiling, caving or canyoning, which were all estimated to rise by 0.2 million events if actionable barriers are addressed.

The following charts show the difference between 2009 and 2018 in both scenarios, firstly in terms of forecasted number of times, then in terms of percentage.

Figure 4.7.5 Forecasted changes in total participation - Part I

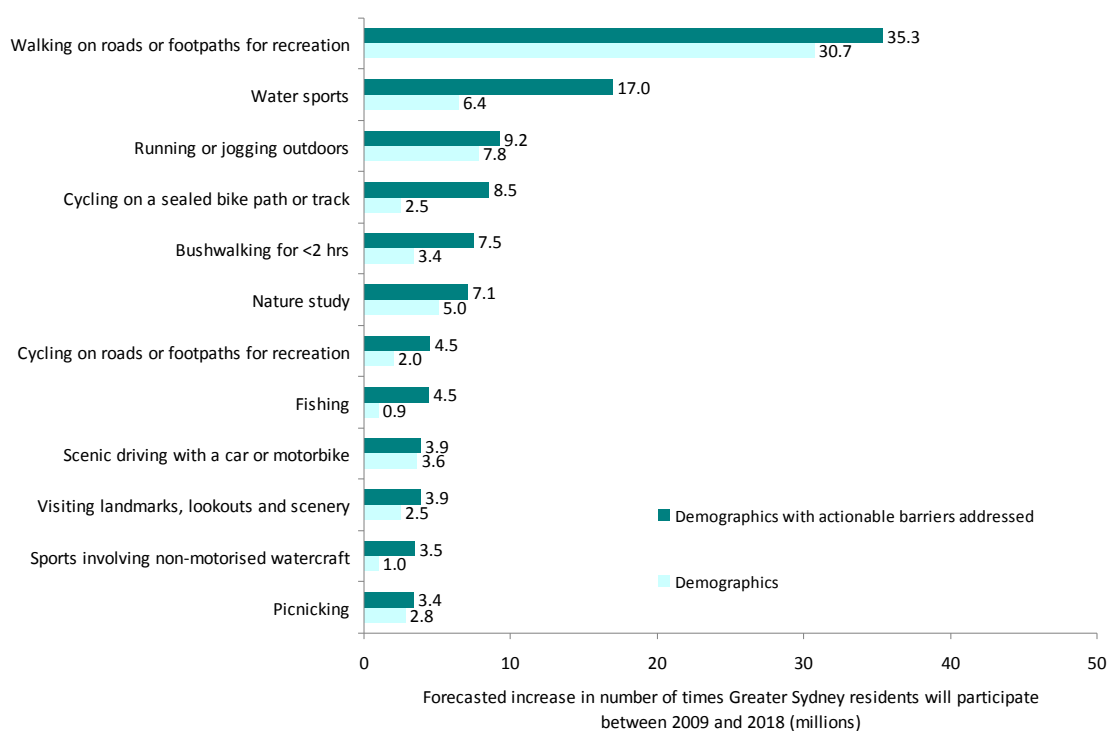
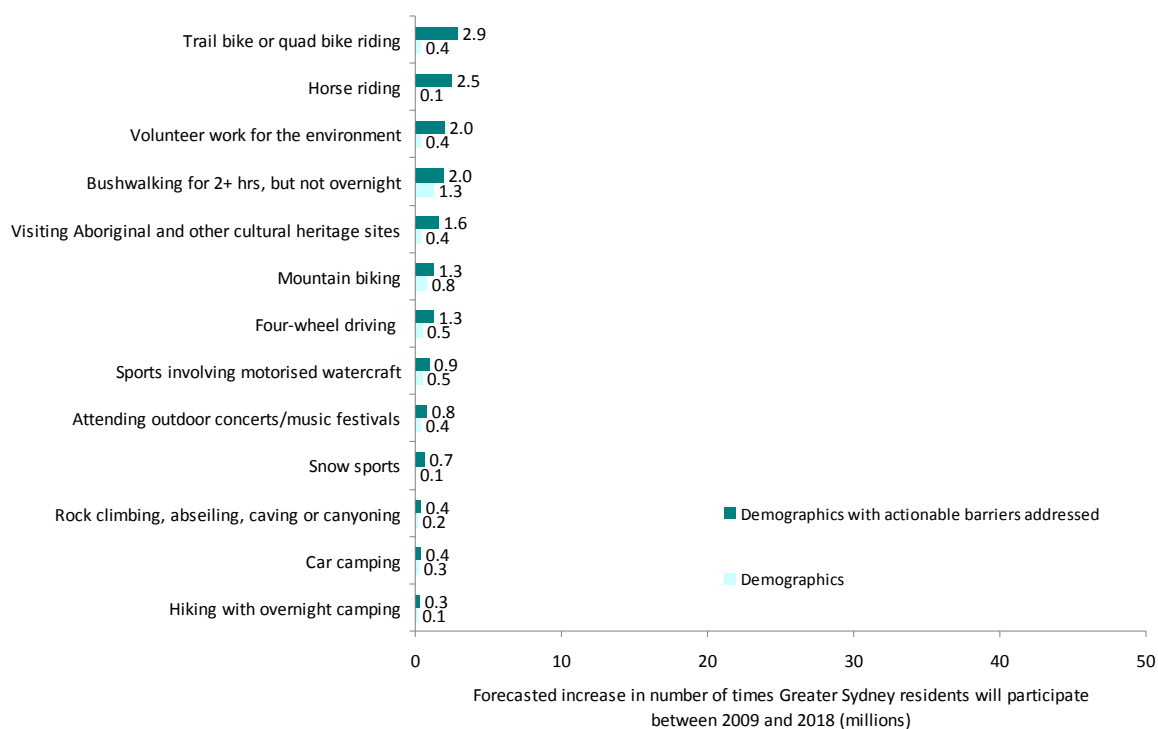


Figure 4.7.6 Forecasted changes in total participation - Part II



As the Figure 4.7.5 shows, if actionable barriers are addressed, walking on roads or footpaths for recreation will have the largest increase in total participation in 2018, rising by 30.7 million events in 2018 and by a further 4.6 million events if actionable barriers are addressed.

The lowest change in total annual participation from 2009 to 2018 is predicted for hiking with overnight camping, rising by 0.1 million events in 2018 and by 0.3 million events if actionable barriers are addressed, as shown in Figure 4.7.6.

The next two charts look at the percentage change in annual participation under the two scenarios.

Figure 4.7.7 Forecasted changes (%) in total participation - Part I

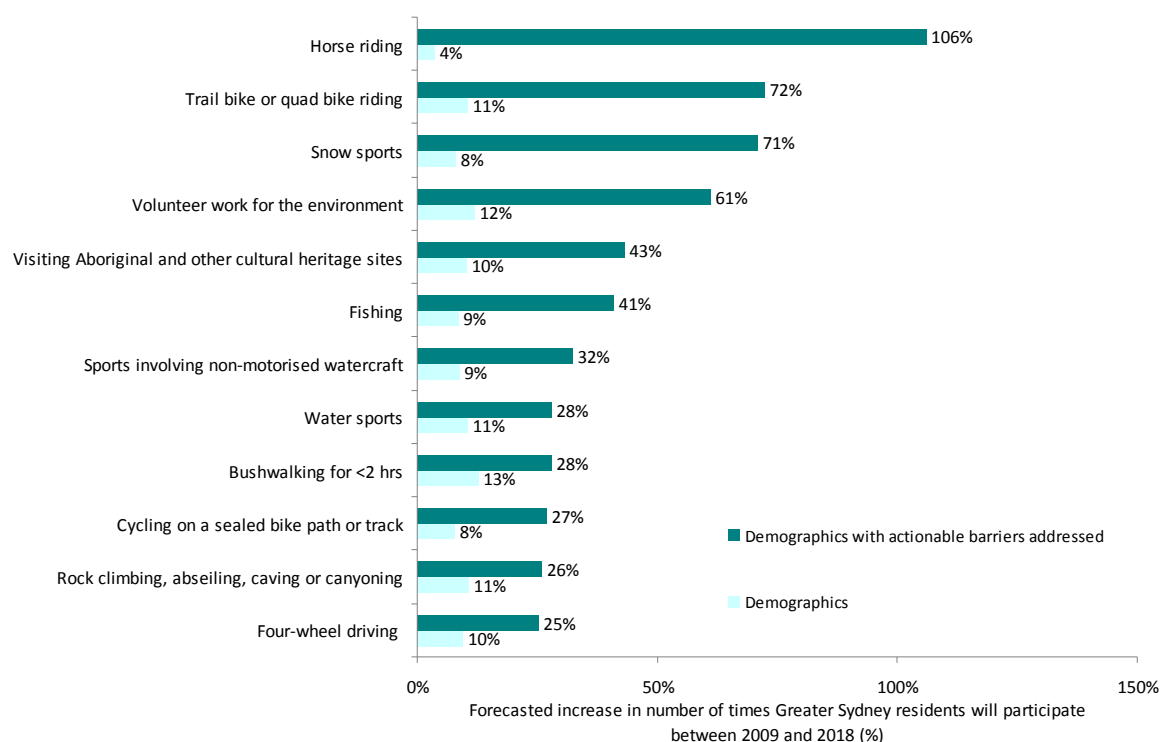
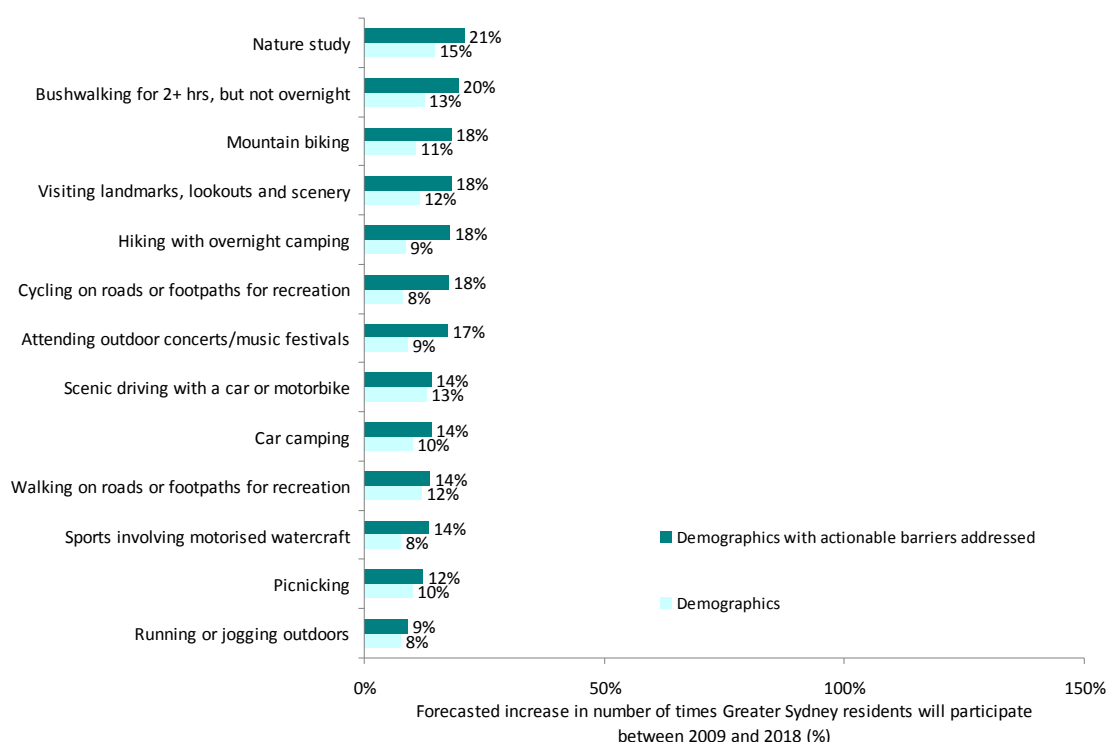


Figure 4.7.8 Forecasted changes (%) in total participation - Part II



As Figure 4.7.7 shows, it is predicted that horse riding will increase by 106% in 2018 if actionable barriers are addressed. This is followed by trail or quad bike riding (72%), snow sports (71%), volunteer work for the environment (61%), and visiting Aboriginal and other cultural heritage sites (43%). These large percentage increases are for activities that have lower frequencies of current participation. A closer look reveals that horse riding has an average interest rating of 2.8, which is at the lower end of all activities. However, the spike in predicted activity is partly due to the high level of actionable barriers for this activity (28% of participants cite an actionable barrier, second only to visiting Aboriginal and other cultural heritage sites which had 34%). The increase in predicted activity is also due to the pattern of participation in these less frequent activities. To show the pattern in demand for each activity, current participants were split into quintiles, based on the number of times they had participated in the activity in the past 12 months.

The following charts show the contribution to the total number of events that each quintile makes. Note that for some activities, there is not sufficient variability at the lower ends of frequency to split the sample into quintiles. For example, for the activity horse riding, the cut-off for the first quintile is 1 ride per year, and this 'quintile' actually makes up 50% of total horse-riders. Therefore the next cut-off, of 2 rides per year, is shown in the chart as the 3rd quintile, and makes up 17% of total horse-riders.

Figure 4.7.9. Contribution of each quintile to total participation in activities - Part I

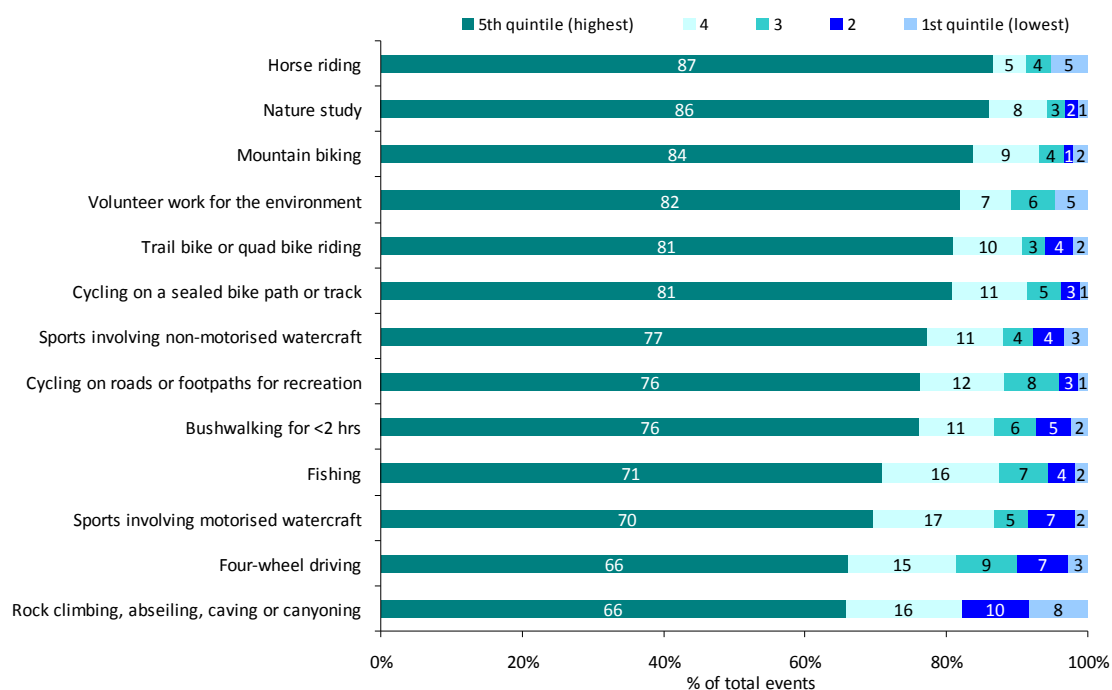
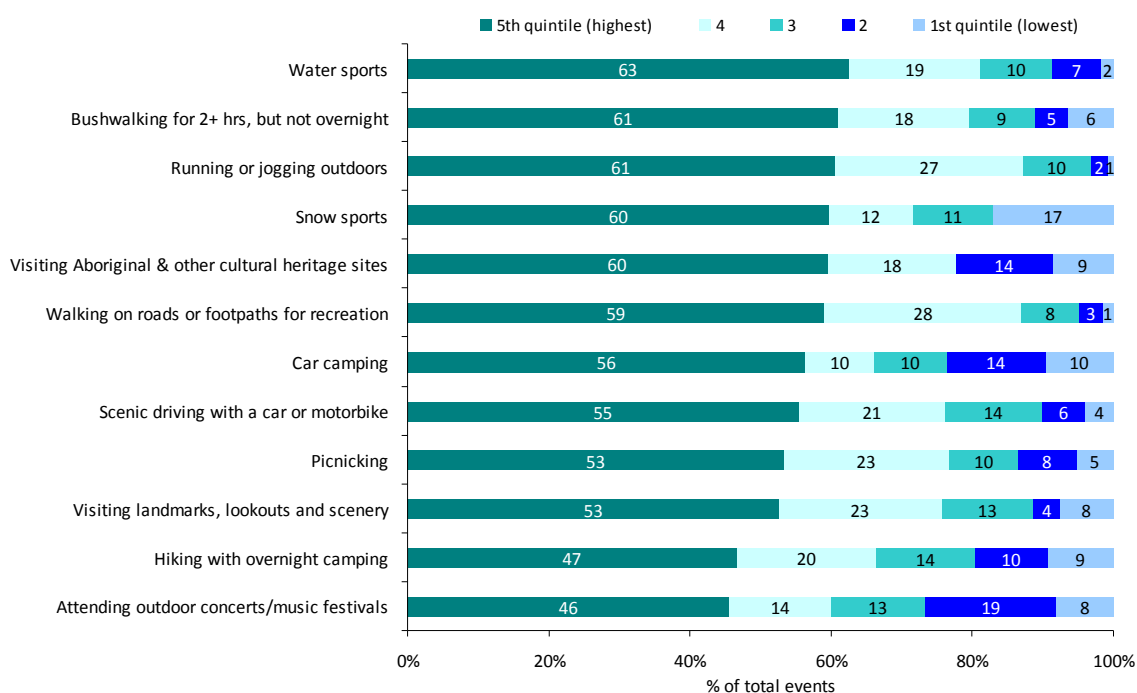


Figure 4.7.10. Contribution of each quintile to total participation in activities - Part II



As Figures 4.7.9 and 4.7.10 show, for horse riding, the highest quintile contributes 87% of total horse-riding. In a further five activities (nature study, mountain biking, volunteer work for the environment, trail bike or quad bike riding, and cycling on a sealed bike path or track), the top

quintile makes up at least 80% of the total events. The activities attending outdoor concerts/music festivals, and hiking with overnight camping had the most equitable distributions, with the top quintile making up less than half of the total events.

The skews in demand can explain the higher predicted increases for the activities of horse riding and trail or quad bike riding. The relatively high proportion of actionable barriers for the activities of visiting Aboriginal and other cultural heritage sites and snow sports can partly explain the large predicted increase in these events (although it may be argued that providing local opportunities for snow sports may be difficult to action in some areas).

The next section replicates the two scenarios using the cohort approach.

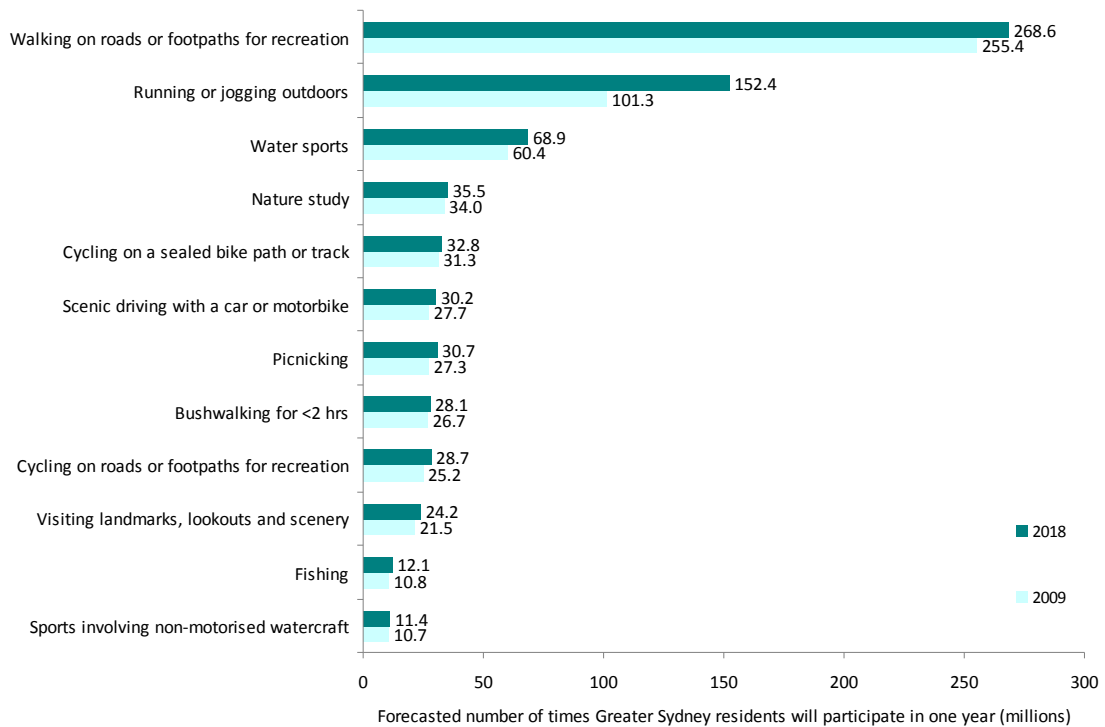
Cohort approach

Scenario 1: Participation changes due to demographic change in population - Cohort approach

The cohort approach uses current participation and frequency rates for each age group and multiplies them by the projected population in 9 years time. For instance, the current participation rate among 25-34 year old males for walking (77%) is multiplied by the mean frequency for 25-34 year old male participants (81 times a year) and then multiplied by the projected population of 34-43 year old males in 2018 (327,638) to estimate the cohort in 2018. For the younger population, we have assumed that 18-26 year olds in 2018 will be participating in the same way as 18-24 year olds are currently. The weights used to estimate the population in 2018 are found in Appendix D.

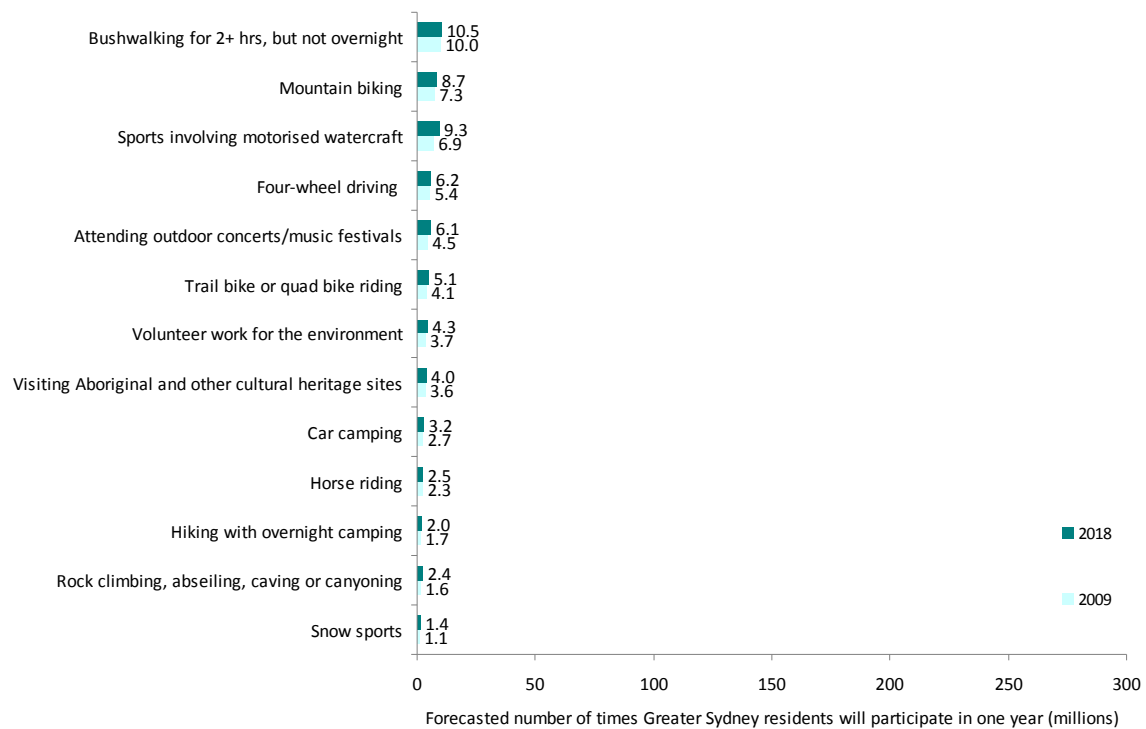
As the following charts show, the cohort approach shows little differences in many activities.

Figure 4.7.11. Total current and predicted future participation in outdoor recreation activities, cohort approach– Part I



As the chart above shows, there were few large increases in any activities. The largest increase predicted was for running or jogging outdoors, rising from 101.3 million to 140.1 million events.

Figure 4.7.12. Total current and predicted future participation in outdoor recreation activities, cohort approach– Part II



Among the less frequent activities, the difference in predicted total events was minimal.

Scenario 2: Actionable barriers are addressed and both participation and frequency increase - Cohort approach

The projected population used in these estimations are derived from the cohort approach. The following charts show the predicted changes in total events.

Figure 4.7.13 Total current and predicted future participation in outdoor recreation activities, including if actionable barriers are addressed, and adjusting for frequency (cohorts)– Part I

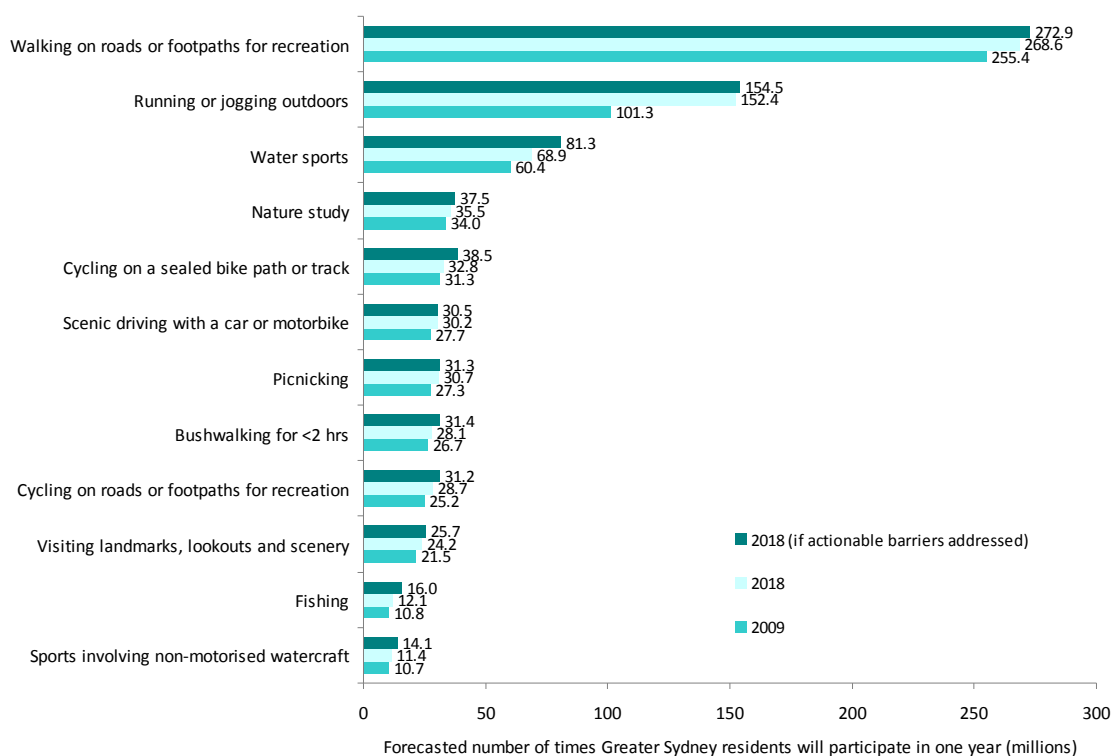
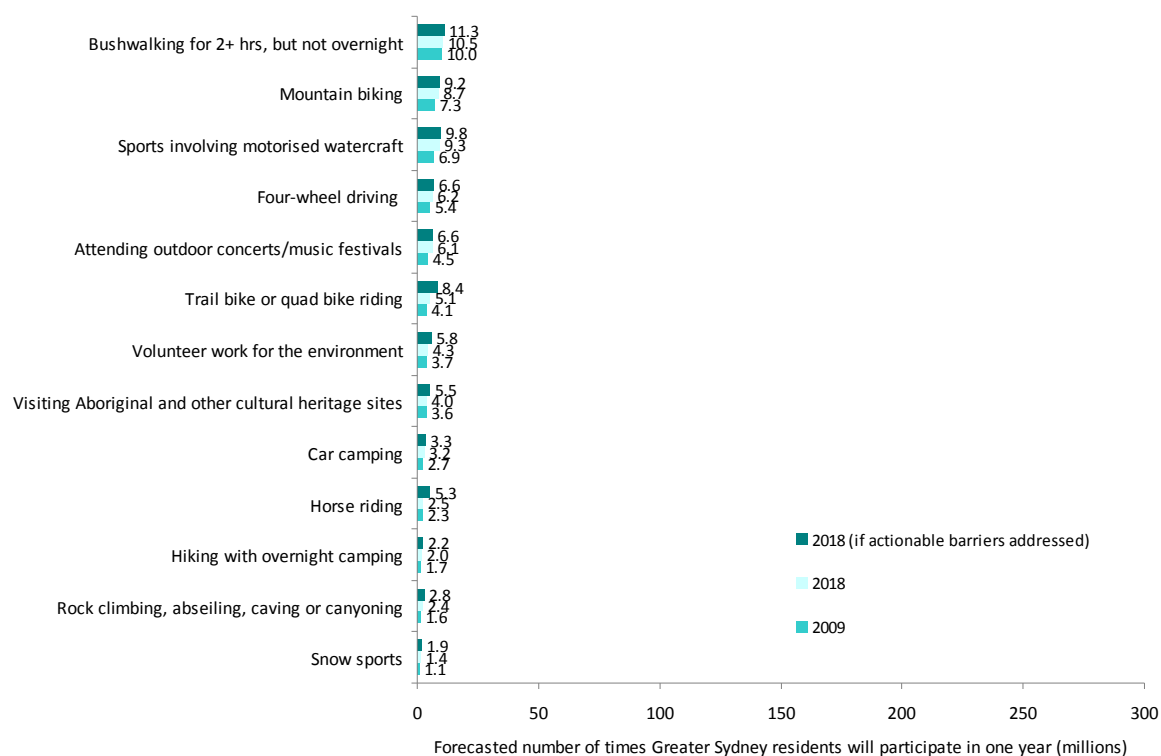


Figure 4.7.14 Total current and predicted future participation in outdoor recreation activities, including if actionable barriers are addressed, and adjusting for frequency (cohorts) – Part II



As Figure 4.7.13 and 4.7.14 show, when modelling for the effect of addressing actionable barriers on frequency, there are few large increases in predicted events. The largest increase is for water sports, with a further 12.4 million events predicted should actionable barriers be addressed.

Contrasting the two approaches

The assumptions of the two approaches lead to different results. The cohort approach, by only looking at the population from 18-75 and estimating its frequency of participation in 9 years time makes assumptions about the participation levels of those currently aged 9 to 17 years, which are not measured in this study. Further, the qualitative research conducted in an earlier phase of the project found that frequency of participation varied among participants as they got older.

As described earlier, the demographic approach assumes that today's 30 year olds will act in the same way as the 30 year olds of 2018. It will neglect some of the generational differences identified in the qualitative research, particularly that lifestyle trends may continue the apparent shift away from outdoor activities for younger age groups.

The following charts show the predicted difference between 2009 and 2018 in both scenarios, under both the demographic and cohort approaches.

Figure 4.7.15. Forecasted changes in total participation - Part I

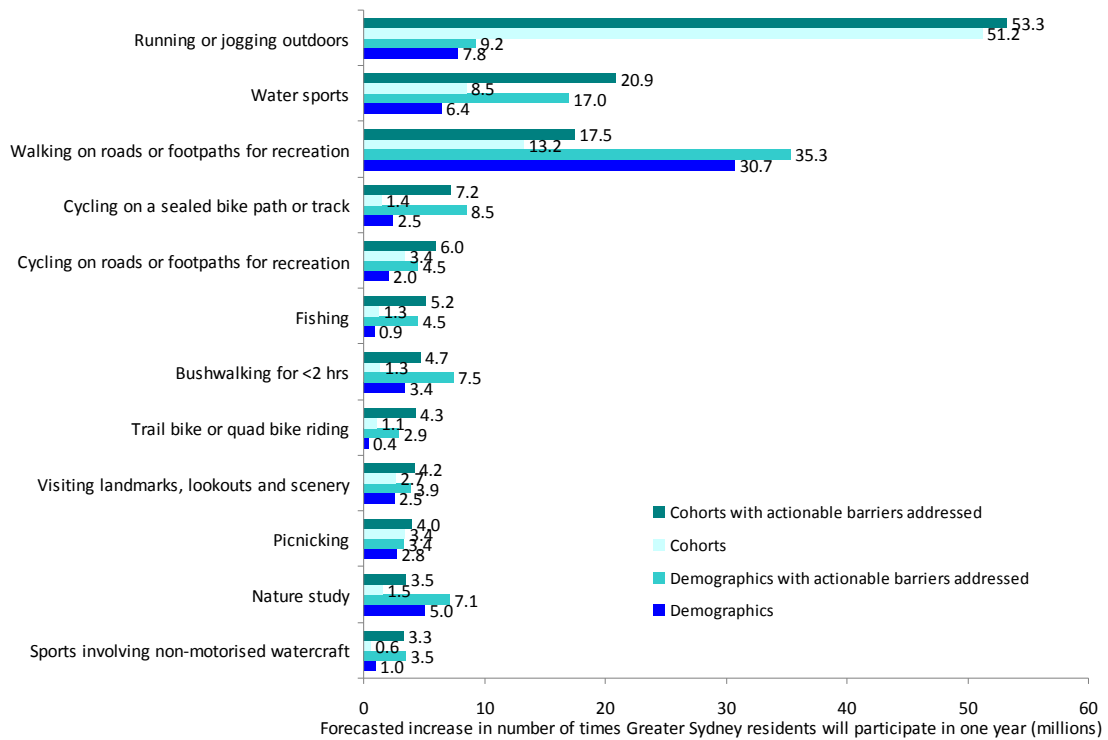
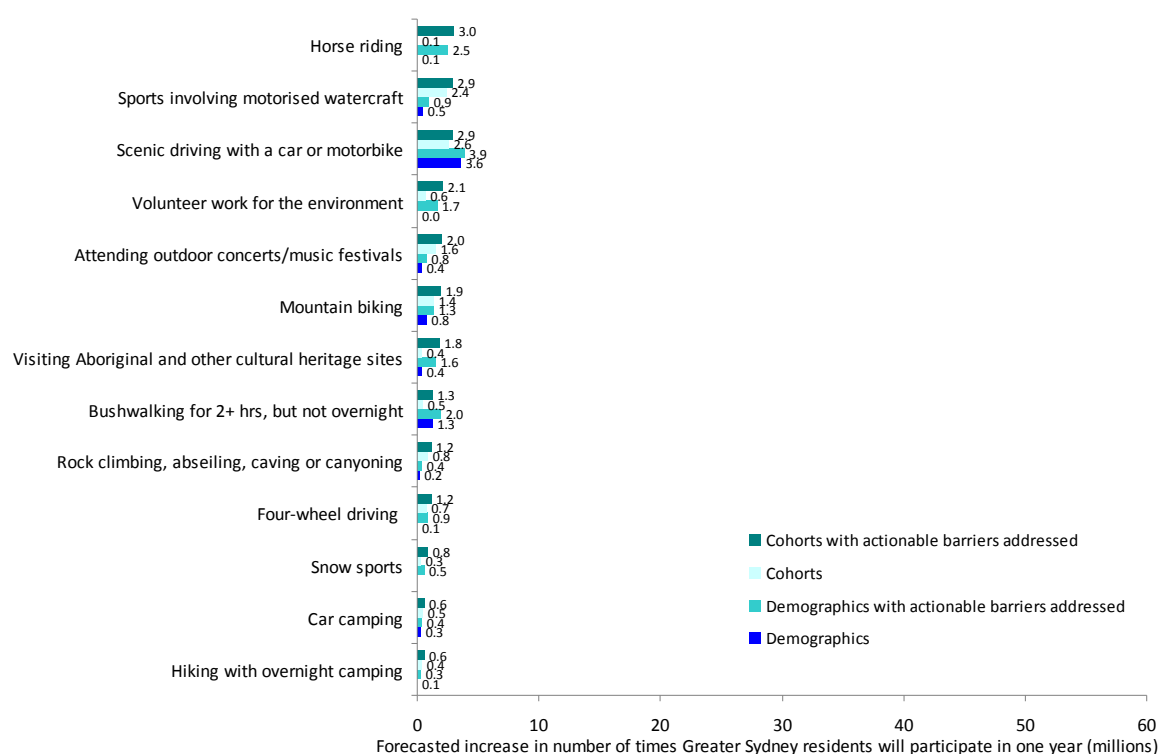


Figure 4.7.16. Forecasted changes in total participation - Part II



As the charts above show, the cohort approach leads to a higher increase predicted in total events for running or jogging outdoors, with an increase of 51.2 million events for cohort approach compared to 7.8 million events for demographics approach (if actionable barriers are addressed, the comparison is 53.3 million events for cohort approach to 9.2 million events for demographic approach). Running or jogging outdoors has a higher frequency among 18-24 year olds than other age groups, so the cohort approach's assumptions lead to a higher estimate of future participation for this activity, and similar activities that are more frequent among younger age groups.

The next set of charts show the percentage increase for both scenarios under the two approaches.

Figure 4.7.17 Forecasted changes (%) in total participation - Part I

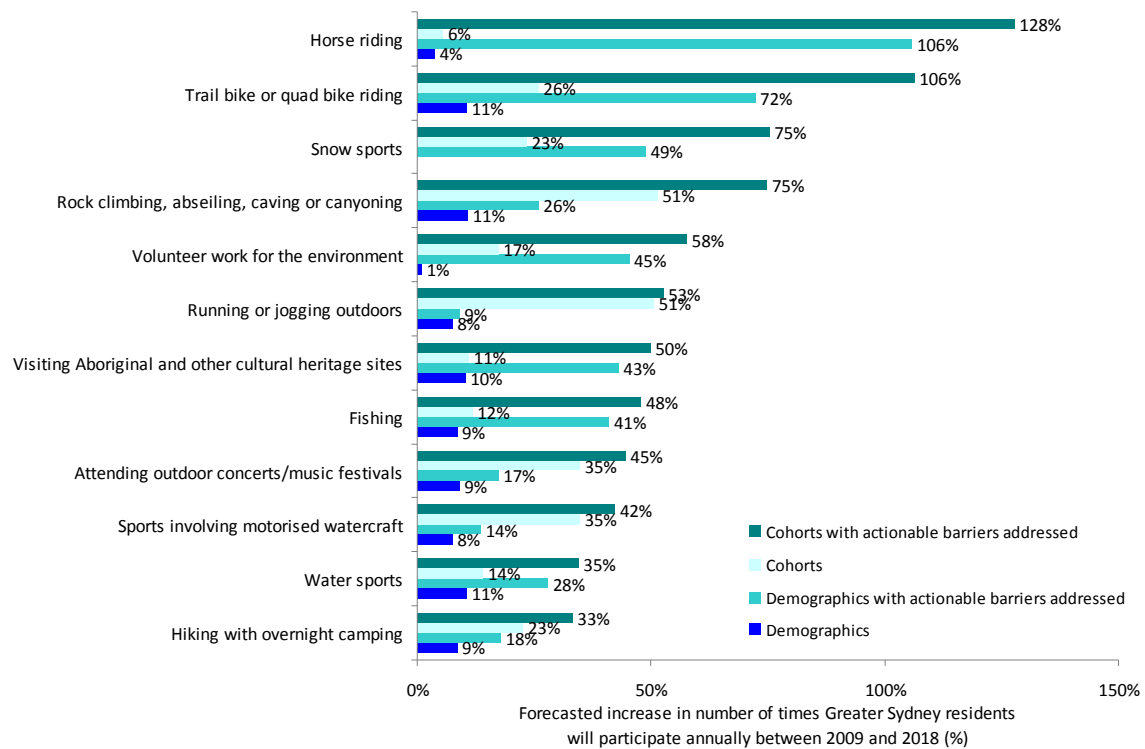
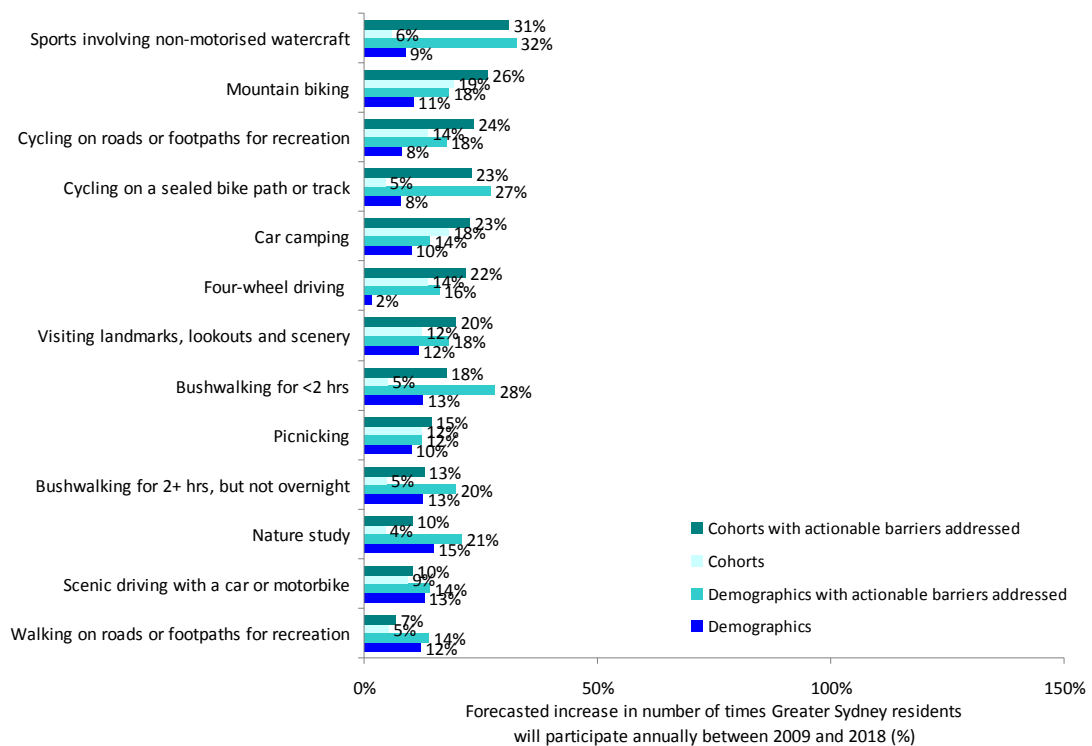


Figure 4.7.18 Forecasted changes (%) in total participation - Part II



As Figures 4.7.17 and 4.7.18 show, the predicted increase in percentage varied between the cohort and demographic approaches, particularly in activities that had a bias in frequency of participation towards the youngest age groups, such as running or jogging outdoors, and oldest age groups, such as walking on roads or footpaths for recreation.

A

APPENDIX A: QUESTIONNAIRE

NATURE-BASED OUTDOOR RECREATION SURVEY Ipsos Public Affairs project #4272

To be administered using computer-assisted telephone interviewing. Headings will not appear in field version.

PLEASE REFER TO EXCEL FILE FOR POSTCODES INCLUDED IN EACH OF THE REGIONS.

PLEASE OBSERVE THE FOLLOWING QUOTAS.

Gender	Age group	Greater Sydney	North Coast	New England Tablelands	Western NSW	South Coast	Southern Tablelands
Male	18-34	141	53	56	56	55	70
	35-54	160	80	79	82	77	81
	55-75	94	64	62	63	64	48
Female	18-34	143	53	58	55	54	69
	35-54	165	84	82	82	83	83
	55-75	97	66	63	62	67	49
Total (N=2,800)		800 (100%)	400 (100%)	400 (100%)	400 (100%)	400 (100%)	400 (100%)

Introduction

Hello, my name is [INTERVIEWER] and I'm calling from Ipsos-Eureka Social Research Institute.

We are conducting a research project on outdoor recreation on behalf of a NSW Government department. We are not trying to sell you anything; your responses will be used only for

research purposes and will remain confidential. The survey will take around [AVERAGE DURATION].

IF TIME INCONVENIENT, ARRANGE CALL BACK

IF NOT INTERESTED: Is there anyone else over 18 who might be interested in participating?

IF CLIENT QUERIED: I'm sorry, I can't tell you the client's name until the end of the survey, because it might affect the way you answer the questions, but I will be able to tell you at the end.

IF QUERIED ABOUT BONA FIDES OF RESEARCH: I can provide the names of people who will verify the legitimate nature of this research project. The first is the Australian Market and Social Research Society enquiry line on 1300 36 4830. The second is the Project Manager at Ipsos-Eureka Social Research Institute, Ben Barnes, on (02) 9550 5100.

IF QUERIED ABOUT HOW NAME WAS SOURCED: We are contacting people using random digit dialling.

IF THE INTERVIEW WILL BE MONITORED: My supervisor may be monitoring the interview for quality control purposes. If you do not wish this to occur, please let me know.

Screening

First let me check that you are one of the people we need to talk to.

S1. Can you tell me your postcode? [RECORD. OBSERVE QUOTAS FOR LOCATION.] [IF NOT RECOGNISED, ASK WHETHER IN NSW. IF NOT, TERMINATE WITH THANKS, IF IN NSW, ASK FOR TOWN OR SUBURB, OR NEAREST TOWN OR SUBURB IF RURAL/REMOTE. IF REFUSE ON THIS QUESTION, TERMINATE WITH THANKS.]

S2. [RECORD GENDER. OBSERVE QUOTAS WITHIN LOCATION.]

S3. Into which of the following age bands do you fall? [READ OUT.]

Under 18 years	DOES NOT QUALIFY
18-24 years	OBSERVE QUOTAS
25-34	OBSERVE QUOTAS
35-44	OBSERVE QUOTAS
45-54	OBSERVE QUOTAS
55-64	OBSERVE QUOTAS



Ipsos-Eureka
Social Research Institute

65-75	OBSERVE QUOTAS
Over 75 years	DOES NOT QUALIFY
REFUSED	DOES NOT QUALIFY

IF DOES NOT QUALIFY: Unfortunately you're not one of the people we need to talk to for this particular survey. Thanks for being willing to participate.

1 Participation in nature-based outdoor recreation

Great, you're definitely one of the people we need to talk to. First, I'm going to read out a list of outdoor activities, and I'd like you to give me an estimate of **how many times** you've done them **in the last 12 months**.

If you've done the activity, I'd like to know whether that's been in the [INSERT NAME OF AREA: GREATER SYDNEY / NEW ENGLAND TABLELANDS / NORTH COAST / WESTERN NSW / SOUTH COAST / SOUTHERN TABLELANDS] area, or somewhere else in NSW, or both.

And I'd also like you to tell me **how interested** you would be in doing each activity more often, if there was nothing stopping you from doing so. I'll prompt you as we go along.

1.1 So, the first one is [RANDOMISE. READ OUT FIRST ACTIVITY]. How many times would you have done that in the last 12 months? [RECORD NUMBER. IF UNSURE, PROBE FOR BEST ESTIMATE. NOTE THIS QUESTION IS ABOUT NUMBER OF TIMES, NOT NUMBER OF DAYS]

1.2 [IF Q1.1>1. EXCEPT DO NOT ASK FOR K. SNOW SPORTS UNLESS IN SOUTHERN TABLELANDS.] Was that in your local area, or further away, or both. [IF Q1.1=1 EXCEPT DO NOT ASK FOR K. SNOW SPORTS UNLESS IN SOUTHERN TABLELANDS. Was that in your local area or further away] [RECORD CODE LOCAL AREA=1, FURTHER AFIELD=2, BOTH=3.] [IF QUERIED, LOCAL AREA IS WITHIN 100KM FROM WHERE YOU LIVE]

1.3 And how interested would you be in [READ OUT FIRST ACTIVITY] more often, on a scale of 0 to 10, where 0 is not at all interested and 10 is extremely interested? [RECORD RATING] [NOTE FOR INTERVIEWERS: *Where an activity category includes multiple types of pursuits, e.g. snow sports, record level of interest for the one they are most interested in doing more often.*]

[GO THROUGH Q1.1, Q1.2 AND Q1.3 FOR EACH ACTIVITY IN LIST.]

Activity [RANDOMISE ORDER. RETAIN ORDER FOR SUBSEQUENT SECTIONS.]	Q1.1 Frequency in last 12	Q1.2 Local area or further	Q1.3 Interest in doing more
---	---------------------------------	-------------------------------------	--------------------------------------



	months	away or both	often
HIGH INCIDENCE ACTIVITIES			
a. Bush or nature walking for less than two hours on trails, tracks or boardwalks			
b. Bushwalking or hiking for two hours or more, but not overnight			
c. Cycling or mountain biking on an unsealed road or track			
d. Cycling on roads or footpaths for recreation, not just to get to and from places [NOTE FOR INTERVIEWERS: <i>This includes cycling on roads, in dedicated cycle lanes and on footpaths where cycling is allowed</i>]			
e. Cycling on a sealed bike path or track [NOTE FOR INTERVIEWERS: <i>This includes any cycling on sealed paths or tracks away from roads and footpaths, e.g. in a park</i>]			
f. Water sports, including outdoor swimming, snorkelling, surfing, bodyboarding, wind surfing and kite surfing			
g. Picnicking, including outdoor social gatherings like weddings, family reunions, club fun days, etc.			
h. Car camping, that is, camping within easy walking distance of your car			
LOW INCIDENCE ACTIVITIES			
i. Bushwalking or hiking with overnight camping			
j. Walking on roads or footpaths for recreation, not just to get to and from places			
k. Running or jogging outdoors			
l. Snow sports, including skiing, snowboarding, tobogganing		only ask if Southern Tablelands	
m. Sports involving motorised watercraft, including motorboating, speedboating, jet skiing, water-skiing and wakeboarding			
n. Sports involving non-motorised watercraft, including sailing, canoeing, rowing, kayaking and rafting			

o. Scenic driving with a car or motorbike			
p. Four-wheel driving on unsealed roads or tracks			
q. Trail bike or quad bike riding			
r. Rock climbing, abseiling, caving or canyoning			
s. Visiting landmarks, lookouts and scenery			
t. Visiting Aboriginal and other cultural heritage sites			
u. Nature study, including bird or other wildlife watching, tree and flora appreciation, nature photography or painting/drawing			
v. Volunteer work for the environment, for example, bush regeneration			
w. Attending outdoor concerts/music festivals			
x. Fishing			
y. Horse riding			

1.4 [If 1 to 5 activities are given a rating of 5 or more at Q1.3, include all of these activities at this question, regardless of whether they are high or low incidence. If more than 5 activities are given a rating of 5 or more at Q1.3, observe the following selection criteria:

- o Where **1, 2 or 3 low** incidence activities and **more than 2 high** incidence activities are rated 5 or higher, include **all of the low** incidence activities, and **4, 3 or 2 activities randomly selected from the high** incidence activities (for a total of 5 activities),
- o Where **1 or 2 high** incidence activities and **more than 3 low** incidence activities are rated 5 or higher, include **all of the high** incidence activities and **4 or 3 randomly selected from the low** incidence activities (for a total of 5 activities),
- o Where **more than 3 low** incidence activities and **more than 2 high** incidence activities are rated 5 or higher, include **a random selection of 3 low and 2 high** incidence activities.
- o Where **0 low** incidence are rated 5 or higher, include **a random selection of 5 high incidence activities**

- Where **0 high** incidence are rated 5 or higher, include **a random selection of 5 low incidence activities.**]

You said that you'd be interested in [READ OUT FIRST ACTIVITY] more often. What are some of the **things** stopping you from doing so? [RECORD VERBATIM. PROBE FOR DETAILED RESPONSES. IF RESPONSE IS VAGUE OR UNCLEAR, ASK: What do you mean by [RESPONSE]?] What else? [REPEAT FOR SUBSEQUENT ACTIVITIES.]

[NOTE FOR INTERVIEWERS: *The list below provides examples of the types of responses we are expecting to give you an idea of the level of detail required from responses.* **DO NOT CODE RESPONSES.**]

LACK OF TIME DUE TO WORK COMMITMENTS
LACK OF TIME DUE TO FAMILY COMMITMENTS
LACK OF TIME (NOT FURTHER SPECIFIED)
UNAWARE OF LOCAL OPPORTUNITIES TO DO ACTIVITY
LACK OF OPPORTUNITIES/FACILITIES TO DO IT IN LOCAL AREA
COST OF ENTRY FEE
COST OF CAR PARKING
AVAILABILITY OF CAR PARKING
COST OF GETTING THERE (PETROL OR PUBLIC TRANSPORT)
COST OF EQUIPMENT REQUIRED TO DO ACTIVITY
COST OF PARTICIPATING IN ACTIVITY (PER EPISODE/OCCASION)
NOT SUITABLE FOR CHILDREN/CAN'T TAKE CHILDREN ALONG
HAVE NO ONE TO DO THIS ACTIVITY WITH
THE WEATHER/BAD WEATHER/RAIN
HEALTH PROBLEMS
DON'T HAVE THE RIGHT EQUIPMENT
DON'T HAVE TRANSPORT/NO WAY TO GET THERE
NOT FIT ENOUGH TO DO THIS ACTIVITY
FEAR OF GETTING INJURED
FEAR OF WILDLIFE / GETTING BITTEN/STUNG ETC

FEAR OF BEING ISOLATED
FEAR FOR OWN SAFETY AMONG STRANGERS
TOO BUSY DOING OTHER RECREATIONAL ACTIVITIES
LOCATION IS TOO CROWDED
OPENING HOURS NOT CONVENIENT
LACK OF MOTIVATION

1.5 [If 1 to 5 activities are given a rating of 5 or more at Q1.3, or frequency greater than 0 at 1.1, include all of these activities at this question, regardless of whether they are high or low incidence. If more than 5 activities are given a rating of 5 or more at Q1.3, or frequency greater than 0 at 1.1,, observe the following selection criteria:

- o Where **1, 2 or 3 low** incidence activities and **more than 2 high** incidence activities are rated 5 or higher, include **all of the low** incidence activities, and **4, 3 or 2 activities randomly selected from the high** incidence activities (for a total of 5 activities),
- o Where **1 or 2 high** incidence activities and **more than 3 low** incidence activities are rated 5 or higher, include **all of the high** incidence activities and **4 or 3 randomly selected from the low** incidence activities (for a total of 5 activities),
- o Where **more than 3 low** incidence activities and **more than 2 high** incidence activities are rated 5 or higher, include **a random selection of 3 low and 2 high** incidence activities.
- o Where **0 low** incidence are rated 5 or higher, include **a random selection of 5 high incidence activities**
- o Where **0 high** incidence are rated 5 or higher, include **a random selection of 5 low incidence activities**.

WHERE POSSIBLE, GENERATE SELECTION THAT IS DIFFERENT FROM THAT USED AT Q1.4]

Now I'm going to ask you about some of the activities that you have done in the last 12 months, or that you would be interested in doing more often. For each activity, I'd like you to imagine that you were going to do it in a National Park, State Conservation Area,



State Forest or Nature Reserve in your region. I DON'T mean local council parks or botanical gardens.

I'd like you to tell me what would be the main features (either natural or man-made) that you would want if you were going to do the activity in one of these locations.

So, the first one is [READ OUT FIRST ACTIVITY]. What would be the natural or man-made main features you would want? [RECORD VERBATIM. PROBE FOR DETAILED RESPONSES. What do you mean by [RESPONSE]?] What other natural or man-made features would you want? [REPEAT FOR SUBSEQUENT ACTIVITIES.]

[NOTE FOR INTERVIEWERS: *The list below provides examples of the types of responses we are expecting to give you an idea of the level of detail required from responses. DO NOT CODE RESPONSES*]

TOILETS
SHOWERS
CHANGE ROOMS
PICNIC TABLES AND CHAIRS
BBQ'S AND OTHER FOOD PREPARATION AREAS
WATER / TAPS
CLEARED PATHS OR TRAILS THROUGH THE BUSH (UNSEALED)
SEALED PATHS OR BOARDWALKS
HAND RAILS
SHOPS OR KIOSKS
CAFES OR RESTAURANTS
CHILDREN'S PLAYGROUNDS OR PLAY AREAS
SIGNAGE
VISITORS' CENTRE
INFORMATION BOARDS
GUIDED TOURS
BROCHURES OR MAPS
RANGER / MANAGEMENT PRESENCE



CAMPSITES
POWERED CAMPSITES
CABINS
OTHER ACCOMMODATION (E.G. HOSTELS, MOTELS, ETC)
ISOLATION / INFREQUENT TO NO CONTACT WITH OTHER PEOPLE
NOT TOO CROWDED
OTHER PEOPLE PRESENT (FELLOW RECREATIONISTS)
SWIMMING AREAS
GOOD ROAD CONDITIONS
PARKING
PUBLIC TRANSPORT
LOOKOUTS
SCENERY/ VIEWS (E.G. WATERFALLS)
ABORIGINAL HERITAGE SITES
HISTORIC HERITAGE SITES
FLORA/NATIVE TREES, PLANTS AND FLOWERS
FAUNA/NATIVE ANIMALS
NO EVIDENCE OF HUMAN INTERFERENCE IN LANDSCAPE / COMPLETELY UNSPOILT SURROUNDINGS
LEAFY BACKGROUND
TREES
GARBAGE BINS
PICNIC SHELTERS
SHADE
MOBILE PHONE COVERAGE
ACCESS TO EMERGENCY SERVICES

2 Motivations

- 2.1 Now I'm going to read out some statements. Using a scale of 0 to 10, I'd like you to tell me how much each statement describes you, where 0 is not at all and 10 is very much.
[RANDOMISE ORDER.]

a. I seek isolation and escape in the outdoors.
b. I enjoy getting outdoors to spend time with my family or friends.
c. I'm willing to travel a bit further to find more untouched places for outdoor activities.
d. I find the opportunities for adventure and challenge in the outdoors appealing.
e. I'm interested in learning about the history or cultural heritage of places I visit in the outdoors.
f. I enjoy learning about the animals and plants of places I visit in the outdoors.
g. I like to spend time outdoors to get a break from my day-to-day routine.
h. I like to get outdoors for the health benefits, like breathing the fresh air.
i. I like to get outdoors for the peace and quiet.
j. I prefer to exercise in the outdoors rather than inside.

3 Demographics

Thanks for that. We're almost finished. Just a few final questions, to make sure we've spoken to a good cross-section of people.

- 3.1 What is the highest level of education that you have attained? [SINGLE RESPONSE. DO NOT READ OUT, BUT PROMPT AS NECESSARY.]

No formal schooling	1
Primary school	2
Junior high school (Years 7-10)	3
Senior high school (Years 11-12)	4
TAFE/Technical college	5
University	6
Something else [RECORD VERBATIM]	7

REFUSED	98
CAN'T SAY / DON'T KNOW	99

3.2 Which of the following best describes your household? [READ OUT]

A solo household (just you)	1
A couple	2
A family group	3
A shared household	4
Or something else? [RECORD VERBATIM]	5
REFUSED	98

3.3 [IF Q3.2=3, 4, 5] How many children younger than 18 years live in your household?
[RECORD NUMBER. CODE '98' IF REFUSED]

3.4 [IF Q3.3>0] And of these children, how many are aged ... [READ OUT AGE GROUPS.
RECORD NUMBERS UNTIL TOTAL=Q3.3.]

0-2	[RECORD NUMBER]
3-5	[RECORD NUMBER]
6-12	[RECORD NUMBER]
13-15	[RECORD NUMBER]
16-17	[RECORD NUMBER]

3.5 In what countries were your mother and father born? [RECORD CODES]

	Mother	Father
Australia	1	1
United Kingdom	2	2
New Zealand	3	3
Italy	4	4
China	5	5



Vietnam	6	6
India	7	7
Philippines	8	8
Greece	9	9
South Africa	10	10
Germany	11	11
Malaysia	12	12
Netherlands	13	13
Lebanon	14	14
Hong Kong	15	15
Other [RECORD VERBATIM]	16	16
REFUSED	98	98
CAN'T SAY / DON'T KNOW	99	99

4 Closing

That's the end of our survey. Thanks for helping us out. We are conducting this survey on behalf of NSW National Parks. The findings will be used to help decide what sorts of outdoor activities and facilities to provide, so that they are in line with what people want.

B

APPENDIX B: POSTCODE DEFINING REGIONS

Greater Sydney

2000	2044	2090	2131	2170	2219	2569	2784
2006	2045	2092	2132	2171	2220	2570	2785
2007	2046	2093	2133	2172	2221	2571	2786
2008	2047	2094	2134	2173	2222	2572	2845
2009	2048	2095	2135	2174	2223	2745	
2010	2049	2096	2136	2175	2224	2747	
2011	2050	2097	2137	2176	2225	2748	
2015	2060	2099	2138	2177	2226	2749	
2016	2061	2100	2140	2178	2227	2750	
2017	2062	2101	2141	2179	2228	2752	
2018	2063	2102	2142	2190	2229	2753	
2019	2064	2103	2143	2191	2230	2754	
2020	2065	2104	2144	2192	2231	2755	
2021	2066	2105	2145	2193	2232	2756	
2022	2067	2106	2146	2194	2233	2757	
2023	2068	2107	2147	2195	2234	2758	
2024	2069	2108	2148	2196	2250	2759	
2025	2070	2109	2150	2197	2251	2760	
2026	2071	2110	2151	2198	2256	2761	
2027	2072	2111	2152	2199	2257	2762	
2028	2073	2112	2153	2200	2258	2763	
2029	2074	2113	2154	2203	2260	2765	
2030	2075	2114	2155	2204	2261	2766	
2031	2076	2115	2156	2205	2508	2767	
2032	2077	2116	2157	2206	2555	2768	
2033	2079	2117	2158	2207	2556	2770	
2034	2080	2118	2159	2208	2557	2773	
2035	2081	2119	2160	2209	2558	2775	
2036	2082	2120	2161	2210	2559	2775	
2037	2083	2121	2162	2211	2560	2776	
2038	2084	2122	2163	2212	2563	2777	
2039	2085	2125	2164	2213	2564	2778	
2040	2086	2126	2165	2214	2565	2779	
2041	2087	2127	2166	2216	2566	2780	
2042	2088	2128	2167	2217	2567	2782	
2043	2089	2130	2168	2218	2568	2783	

North Coast

2259	2294	2320	2428	2460	2485
2262	2295	2321	2429	2462	2486
2263	2296	2322	2430	2463	2487
2264	2297	2323	2431	2464	2488
2265	2298	2324	2439	2465	2489
2267	2299	2325	2440	2466	2490
2278	2300	2326	2441	2469	2898
2280	2302	2327	2443	2470	
2281	2303	2330	2444	2471	
2282	2304	2331	2445	2472	
2283	2305	2334	2446	2473	
2284	2306	2335	2447	2474	
2285	2307	2415	2448	2477	
2286	2311	2420	2449	2478	
2287	2312	2421	2450	2479	
2289	2315	2422	2452	2480	
2290	2316	2423	2453	2481	
2291	2317	2424	2454	2482	
2292	2318	2425	2455	2483	
2293	2319	2426	2456	2484	

Northern Tablelands

2328	2341	2352	2361	2382	2403	2475
2329	2342	2353	2365	2388	2404	2476
2333	2343	2354	2369	2390	2405	
2336	2344	2355	2370	2397	2406	
2337	2345	2356	2371	2399	2408	
2338	2346	2358	2372	2400	2409	
2339	2347	2359	2380	2401	2410	
2340	2350	2360	2381	2402	2411	

South Coast

2500	2517	2528	2536	2545	2573
2502	2518	2529	2537	2546	2574
2505	2519	2530	2538	2548	2575
2506	2525	2533	2539	2549	2576
2515	2526	2534	2540	2550	2577
2516	2527	2535	2541	2551	2578



Southern Tablelands

2579	2603	2622	2643	2665	2794
2580	2604	2623	2644	2666	2803
2581	2605	2624	2645	2668	2807
2582	2606	2625	2646	2700	2808
2583	2607	2626	2647	2701	2900
2584	2609	2627	2649	2702	2902
2585	2611	2628	2650	2703	2903
2586	2612	2629	2652	2720	2904
2587	2614	2630	2653	2722	2905
2588	2615	2631	2655	2725	2906
2590	2617	2632	2656	2726	2911
2594	2618	2633	2658	2727	2912
2600	2619	2640	2659	2729	2913
2601	2620	2641	2660	2730	2914
2602	2621	2642	2663	2793	

Western NSW

2357	2707	2736	2806	2834	2865	3644
2379	2710	2737	2809	2835	2866	
2386	2711	2738	2810	2836	2867	
2387	2712	2739	2820	2839	2868	
2395	2713	2787	2821	2840	2869	
2396	2714	2790	2823	2842	2870	
2648	2715	2791	2824	2843	2871	
2669	2716	2792	2825	2844	2873	
2671	2717	2795	2827	2846	2874	
2672	2721	2797	2828	2847	2875	
2675	2731	2798	2829	2848	2876	
2680	2732	2799	2830	2849	2877	
2681	2733	2800	2831	2850	2878	
2705	2734	2804	2832	2852	2879	
2706	2735	2805	2833	2864	2880	

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PARTICIPATION

Table 1. Participation rates for outdoor recreation activities by age and gender

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Picnicking	80%	90%	91%	84%	84%	90%	92%	86%	87%
Walking on roads or footpaths for recreation	80%	77%	81%	80%	87%	83%	91%	88%	84%
Visiting landmarks, lookouts and scenery	71%	81%	79%	79%	87%	78%	73%	82%	79%
Scenic driving with a car or motorbike	69%	72%	60%	72%	60%	65%	71%	70%	68%
Water sports	65%	72%	69%	60%	75%	66%	73%	56%	65%
Bushwalking for <2 hrs	55%	53%	56%	62%	78%	47%	67%	58%	59%
Attending outdoor concerts/music festivals	65%	59%	47%	42%	71%	52%	38%	43%	49%
Running or jogging outdoors	89%	67%	56%	27%	73%	56%	38%	20%	44%
Bushwalking for 2+ hrs, but not overnight	36%	41%	41%	54%	53%	36%	31%	41%	43%
Nature study	27%	26%	31%	39%	42%	33%	37%	41%	36%
Fishing	55%	47%	40%	34%	29%	32%	29%	18%	32%
Visiting Aboriginal & other cultural heritage sites	29%	30%	27%	35%	38%	31%	31%	31%	32%
Cycling on roads or footpaths for recreation	49%	40%	46%	31%	35%	19%	32%	16%	30%
Cycling on a sealed bike path or track	40%	34%	42%	28%	29%	19%	36%	17%	28%
Sports involving non-motorised watercraft	33%	30%	36%	27%	36%	32%	21%	22%	28%
Car camping	35%	35%	32%	20%	27%	27%	32%	17%	26%
Sports involving motorised watercraft	31%	27%	25%	23%	27%	22%	17%	15%	22%
Four-wheel driving	29%	27%	28%	22%	16%	25%	14%	17%	22%
Hiking with overnight camping	31%	23%	14%	10%	20%	15%	14%	11%	15%
Mountain biking	38%	22%	31%	12%	13%	13%	13%	4%	15%
Volunteer work for the environment	25%	12%	11%	13%	18%	7%	10%	15%	13%
Snow sports	22%	19%	11%	6%	25%	14%	12%	9%	12%
Trail bike or quad bike riding	27%	20%	12%	10%	13%	14%	10%	3%	12%
Rock climbing, abseiling, caving or canyoning	36%	22%	12%	8%	25%	8%	1%	4%	11%

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Horse riding	16%	7%	11%	6%	16%	13%	8%	5%	9%



Table 2. Frequency of participation in outdoor recreation activities by age and gender (participants only)

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	76	81	91	111	105	99	96	128	105
Running or jogging outdoors	101	80	63	79	105	61	32	100	79
Cycling on a sealed bike path or track	26	33	72	37	3	56	36	22	37
Nature study	28	18	7	38	41	37	33	36	32
Water sports	30	28	30	37	38	21	33	33	32
Cycling on roads or footpaths for recreation	29	23	37	35	7	22	27	28	28
Mountain biking	9	33	33	20	2	24	47	4	23
Bushwalking for <2 hrs	19	10	9	19	10	17	14	20	16
Scenic driving with a car or motorbike	17	12	16	13	14	14	10	16	14
Trail bike or quad bike riding	11	30	16	7	3	6	4	7	12
Fishing	9	10	23	12	5	5	7	13	11
Sports involving motorised watercraft	12	12	10	10	16	9	18	6	11
Picnicking	12	14	12	8	11	11	15	9	11
Horse riding	3	3	3	5	3	3	10	48	10
Visiting landmarks, lookouts and scenery	3	5	7	18	16	10	2	9	10
Sports involving non-motorised watercraft	12	11	7	10	9	9	10	9	9
Volunteer work for the environment	8	4	12	13	14	3	10	6	9
Bushwalking for 2+ hrs, but not overnight	10	6	16	8	3	7	5	9	9
Four-wheel driving	9	9	10	9	6	9	4	8	8
Rock climbing, abseiling, caving or canyoning	4	3	9	2	6	3	1	9	5
Visiting Aboriginal & other cultural heritage sites	5	5	6	4	3	3	3	3	4
Hiking with overnight camping	3	3	5	4	3	3	6	4	4
Car camping	4	5	3	4	3	4	3	3	4
Attending outdoor concerts/music festivals	5	3	3	3	3	3	3	3	3
Snow sports	2	4	3	3	2	2	5	4	3

Table 3. Frequency of participation in outdoor recreation activities by age and gender (participants and non-participants)

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	61	62	74	89	91	82	87	113	88
Running or jogging outdoors	90	54	35	21	76	34	12	20	35
Water sports	20	20	21	22	28	14	24	19	21
Nature study	8	5	2	15	17	12	12	15	12
Cycling on a sealed bike path or track	10	11	30	10	1	11	13	4	11
Scenic driving with a car or motorbike	12	9	10	9	8	9	7	11	10
Picnicking	9	12	11	7	9	10	14	8	9
Bushwalking for <2 hrs	10	5	5	12	8	8	9	12	9
Cycling on roads or footpaths for recreation	14	9	17	11	2	4	9	4	9
Visiting landmarks, lookouts and scenery	8	9	6	8	8	7	7	7	7
Fishing	5	5	9	4	1	2	2	2	4
Mountain biking	3	7	10	2	0	3	6	0	4
Bushwalking for 2+ hrs, but not overnight	3	4	4	5	3	3	1	3	4
Sports involving non-motorised watercraft	3	1	4	4	5	1	2	1	3
Sports involving motorised watercraft	4	3	2	2	4	2	3	1	2
Four-wheel driving	3	2	5	2	1	2	1	2	2
Attending outdoor concerts/music festivals	3	2	2	1	2	2	1	1	2
Trail bike or quad bike riding	3	6	2	1	0	1	0	0	1
Visiting Aboriginal & other cultural heritage sites	1	1	1	2	3	1	0	1	1
Volunteer work for the environment	1	1	2	2	1	1	1	1	1
Car camping	1	2	1	1	1	1	1	1	1
Horse riding	0	0	0	0	1	0	1	2	1
Hiking with overnight camping	1	1	1	0	1	1	1	0	1
Rock climbing, abseiling, caving or canyoning	2	1	1	0	2	0	0	0	1
Snow sports	0	1	0	0	1	0	1	0	0

Table 4. Total participation in outdoor recreation activities in the last 12 months (in millions)*

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Walking on roads or footpaths for recreation	12	19	23	55	18	26	28	72	254
Running or jogging outdoors	18	17	11	13	15	11	4	13	102
Water sports	4	6	6	14	6	5	8	12	60
Nature study	2	1	1	9	3	4	4	9	34
Cycling on a sealed bike path or track	2	3	9	6	0	3	4	2	31
Scenic driving with a car or motorbike	2	3	3	6	2	3	2	7	28
Picnicking	2	4	3	4	2	3	4	5	27
Bushwalking for <2 hrs	2	2	1	7	2	3	3	7	27
Cycling on roads or footpaths for recreation	3	3	5	7	0	1	3	3	25
Visiting landmarks, lookouts and scenery	2	3	2	5	2	2	2	4	22
Fishing	1	1	3	3	0	1	1	1	11
Mountain biking	1	2	3	1	0	1	2	0	11
Bushwalking for 2+ hrs, but not overnight	1	1	1	3	1	1	0	2	10
Sports involving non-motorised watercraft	1	0	1	2	1	0	1	1	7
Sports involving motorised watercraft	1	1	1	1	1	1	1	1	7
Four-wheel driving	1	1	1	1	0	1	0	1	5
Attending outdoor concerts/music festivals	1	1	0	1	0	1	0	1	5
Trail bike or quad bike riding	1	2	1	0	0	0	0	0	4
Volunteer work for the environment	0	0	0	1	1	0	0	1	4
Visiting Aboriginal & other cultural heritage sites	0	0	1	1	0	0	0	1	4
Car camping	0	0	0	1	0	0	0	0	3
Horse riding	0	0	0	0	0	0	0	1	2
Hiking with overnight camping	0	0	0	0	0	0	0	0	2
Rock climbing, abseiling, caving or canyoning	0	0	0	0	0	0	0	0	2
Snow sports	0	0	0	0	0	0	0	0	1

* No significance testing done for this table

INTEREST

Table 5. Interest in more frequent participation in outdoor recreation activities by age and gender

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Picnicking	5.9	6.9	6.7	6.1	7.2	7.4	7.5	6.6	6.7
Walking on roads or footpaths for recreation	5.7	5.7	5.9	5.6	6.5	6.8	7.2	7.0	6.3
Visiting landmarks, lookouts and scenery	5.7	6.2	6.1	6.0	6.9	6.2	6.6	6.3	6.2
Water sports	6.4	6.5	6.1	4.9	7.7	5.9	6.7	5.2	5.8
Scenic driving with a car or motorbike	5.8	5.8	5.4	5.8	5.8	5.3	5.9	5.4	5.6
Attending outdoor concerts/music festivals	6.7	6.0	6.1	4.5	7.2	6.1	5.9	5.0	5.6
Bushwalking for <2 hrs	5.2	4.7	5.9	5.3	6.4	5.2	6.2	5.2	5.4
Visiting Aboriginal and other cultural heritage sites	4.8	4.5	4.9	4.5	5.2	4.8	5.3	4.8	4.8
Bushwalking for 2+ hrs, but not overnight	4.5	4.4	5.5	4.5	5.4	4.7	4.5	4.2	4.6
Volunteer work for the environment	4.5	4.2	4.0	3.5	5.1	4.9	4.4	3.8	4.1
Snow sports	7.1	5.2	5.6	2.1	7.3	4.6	4.6	2.5	4.1
Nature study	3.8	4.0	3.6	3.8	4.3	4.1	4.5	4.4	4.1
Sports involving non-motorised watercraft	5.1	4.6	4.7	3.6	5.6	4.0	4.1	3.1	4.0
Cycling on a sealed bike path or track	5.0	4.3	5.0	3.6	4.0	4.0	5.4	2.8	4.0
Running or jogging outdoors	6.6	5.6	5.0	2.4	6.6	5.2	3.4	2.1	3.9
Cycling on roads or footpaths for recreation	5.0	4.7	5.2	3.4	4.7	4.0	4.7	2.6	3.9
Car camping	4.6	4.5	4.7	3.6	4.6	4.5	4.5	2.5	3.9
Fishing	5.6	5.2	4.2	3.9	3.5	3.6	3.6	2.8	3.8
Hiking with overnight camping	4.7	4.0	4.8	2.6	5.1	3.9	3.9	2.4	3.5
Sports involving motorised watercraft	6.4	4.6	4.3	2.6	5.3	3.7	3.8	1.9	3.5
Four-wheel driving	5.3	4.3	4.0	2.8	3.5	4.3	3.5	2.2	3.4
Rock climbing, abseiling, caving or canyoning	5.9	4.3	3.1	1.8	5.5	3.3	2.4	1.5	2.9
Horse riding	3.8	3.3	3.2	1.4	5.2	3.7	3.4	2.1	2.8
Mountain biking	5.1	4.0	4.6	2.0	3.8	3.1	2.9	1.0	2.8
Trail bike or quad bike riding	5.8	3.9	3.0	1.5	4.3	2.7	2.0	1.0	2.5

BARRIERS AND PREFERENCES

Table 6. Barriers to more frequent participation in outdoor recreation averaged over activities

Barriers	%
Lack of time	85.3%
Lack of local opportunities	31.1%
Cost of participating	29.2%
Have no one (including pets) to do this activity with	25.5%
Don't have the right equipment	23.8%
Fatigue/lack of motivation	21.2%
Bad weather (including rain or drought)	18.3%
Unaware of local opportunities to do activity	17.0%
Don't have transport/no way to get there/accessibility	14.5%
Health problems	13.1%
Too busy doing other recreational activities	8.5%
Not suitable for children/can't take children along	8.4%
Not fit enough to do this activity	7.2%
Transport costs (including petrol or public transport)	7.0%
Fear of getting injured	5.7%
Need to organise	5.2%
No music i like on offer	4.4%
No experience/skilled	4.1%
Cost of equipment required to do activity	3.7%
Lack of occasions/invitations presenting (external)	3.4%
Traffic	3.3%
Location is too crowded	2.7%
Only do this when travelling	2.7%
No licence	2.0%
Age/getting old	1.8%
Poor quality/maintenance of roads/paths; no suitable walking paths	1.8%
Safety concerns	1.7%
Restrictions on activity	1.4%
Seasonal/prefer warmer weather	1.1%
Fear for own safety among strangers	1.0%
Lack of variety/bored with local opportunities	1.0%
No lighting/dark when i want	1.0%
Cost of entry fee	0.9%
Availability of car parking	0.8%
Fear of wildlife / getting bitten/stung etc	0.6%
Opening hours not convenient	0.6%
No amenities	0.6%
Cost of car parking	0.5%
Fear of being isolated	0.5%
Environmental concern	0.5%
No toilets	0.4%
Difficulty using/carrying equipment	0.4%
Cannot take pets along	0.3%
Accommodation	0.3%
Pollution	0.3%
Ease of phone coverage/emergency	0.1%
Access to water at sites	0.1%
Access to car at sites	0.1%
Prefer flat tracks	0.1%

Table 7. Preferences for participation in outdoor recreation averaged over activities

Preference	%
Toilets	49.7%
No additional features	48.8%
Cleared paths or trails through the bush (unsealed)	39.1%
Scenery/ views (eg waterfalls)	38.8%
Rest areas/seats/picnic tables	32.4%
Water / taps	25.8%
Good road conditions/accessibility	24.6%
BBQs and other food preparation areas	24.2%
Completely unspoilt surroundings	23.0%
Sealed paths or boardwalks	21.6%
Signage	19.7%
Safety (general)	18.6%
Fauna/native animals	18.1%
Clean, well maintained environment	16.7%
Flora/native trees, plants and flowers	16.1%
Trees	15.6%
Information boards	14.4%
Shelters	13.6%
Parking	13.2%
Amenities / facilities (not further specified)	12.9%
Brochures or maps/online info/promotion	12.0%
Equipment hire / access to equipment	10.3%
Flat/cleared ground (wheelchair friendly) smooth water	10.3%
Cafes or restaurants	10.0%
Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	9.9%
Shade	8.9%
Shops or kiosks	8.0%
Lookouts	7.9%
Swimming areas	7.5%
Children playgrounds or play areas	6.6%
Boat ramp / boat access	6.3%
Beach/sandy areas	6.3%
Showers	6.1%
Campsites	5.9%
Not too crowded	5.5%
Garbage bins	5.5%
Access to emergency services	5.5%
Other	5.4%
Separate wide paths away from traffic/cycles	4.9%
Isolation / infrequent to no contact with other people	4.8%
Historic heritage sites	4.6%
Instructors / coaches / training	4.6%
Public transport	4.5%
Leafy background	4.5%
Guided tours/audioguides	4.3%
Aboriginal heritage sites	4.0%
Change rooms	3.8%
Ranger / management presence	3.6%
Other accommodation (eg hostels, motels, etc)	3.5%
Ski lifts	3.5%
Visitors' centre	3.0%
Jetty	3.0%
Lighting	2.8%
Other people present (fellow recreationists)	2.6%
Hand rails/fence	2.1%
Mobile phone coverage	1.9%
Garden	1.9%
Cabins	1.5%
Ease restrictions	1.4%
Fish cleaning areas	1.0%
Fuel	0.8%

Preference	%
More restrictions	0.5%
Powered campsites	0.4%
Events	0.3%
Increased opening times	0.3%



Table 8. Barriers and preferences - Attending outdoor concerts and music festivals

Barriers	%	Preferences	%
Lack of time	47%	Toilets	34%
Cost of participating	33%	No additional facilities	18%
Lack of local opportunities	19%	Rest areas/seats/picnic tables	13%
No music i like on offer	18%	Other	13%
Have no one (including pets) to do this activity with	7%	Shops or kiosks	12%
Not suitable for children/can't take children along	6%	Cafes or restaurants	8%
Unaware of local opportunities to do activity	5%	Shelters	7%
Bad weather (including rain or drought)	4%	Parking	7%
Health problems	3%	Flat/cleared ground (wheelchair friendly) smooth water	7%
Don't have transport/no way to get there/accessibility	3%	Public transport	7%
Transport costs (including petrol or public transport)	2%	Shade	6%
Location is too crowded	2%	Safety (general)	6%
Too busy doing other recreational activities	2%	Good road conditions/accessibility	5%
Opening hours not convenient	2%	Amenities / facilities (not further specified)	5%
Fatigue/lack of motivation	2%	Scenery/ views (eg waterfalls)	4%
Age/getting old	1%	Water / taps	4%
Accommodation	1%	Trees	3%
Cost of car parking	1%	Garbage bins	2%
Fear for own safety among strangers	1%	Fauna/native animals	2%
Seasonal/prefer warmer weather	1%	BBQs and other food preparation areas	2%
		Completely unspoilt surroundings	2%
		Not too crowded	2%
		Other accommodation (eg hostels, motels, etc)	2%
		Children playgrounds or play areas	2%
		Sealed paths or boardwalks	2%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	1%
		Clean, well maintained environment	1%
		Equipment hire / access to equipment	1%
		Ranger / management presence	1%
		Brochures or maps/online info/promotion	1%
		Signage	1%
		Change rooms	1%
		Ease restrictions	1%
		Lighting	1%
		Garden	1%
		Access to emergency services	1%
		Flora/native trees, plants and flowers	1%
		Other people present (fellow recreationists)	1%
		Isolation / infrequent to no contact with other people	1%
		Hand rails/fence	1%

Table 9. Barriers and preferences - Bushwalking for less than two hours

Barriers	%	Preferences	%
Lack of time	67%	Cleared paths or trails through the bush (unsealed)	25%
Health problems	10%	Scenery/ views (eg waterfalls)	17%
Fatigue/lack of motivation	7%	Signage	16%
Have no one (including pets) to do this activity with	7%	No additional facilities	15%
Lack of local opportunities	6%	Toilets	13%
Not suitable for children/can't take children along	5%	Fauna/native animals	11%
Too busy doing other recreational activities	5%	Completely unspoilt surroundings	10%
Don't have transport/no way to get there/accessibility	4%	Rest areas/seats/picnic tables	9%
Unaware of local opportunities to do activity	3%	Flora/native trees, plants and flowers	8%
Cost of participating	3%	Information boards	7%
Bad weather (including rain or drought)	2%	Trees	6%
Poor quality/maintenance of roads/paths; no suitable walking paths	1%	Water / taps	6%
Only do this when travelling	1%	Brochures or maps/online info/promotion	5%
Don't have the right equipment	0.5%	Sealed paths or boardwalks	5%
Fear of wildlife / getting bitten/stung etc	0.5%	Parking	4%
Fear of being isolated	0.5%	Good road conditions/accessibility	4%
Age/getting old	0.5%	Lookouts	3%
Safety concerns	0.5%	Children playgrounds or play areas	2%
Seasonal/prefer warmer weather	0.5%	Historic heritage sites	2%
No lighting/dark when i want	0.5%	Hand rails/fence	2%
		Flat/cleared ground (wheelchair friendly) smooth water	2%
		Safety (general)	2%
		Clean, well maintained environment	1%
		BBQs and other food preparation areas	1%
		Mobile phone coverage	1%
		Shade	1%
		Shelters	1%
		Garbage bins	1%
		Guided tours/audioguides	1%
		Cafes or restaurants	1%
		Shops or kiosks	1%
		More restrictions	0.4%
		Lighting	0.4%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	0.4%
		Amenities / facilities (not further specified)	0.4%
		Aboriginal heritage sites	0.4%
		Public transport	0.4%
		Swimming areas	0.4%
		Other people present (fellow recreationists)	0.4%
		Not too crowded	0.4%
		Visitors' centre	0.4%

Table 10. Barriers and preferences - Bushwalking for more than two hours, but not overnight

Barriers	%	Preferences	%
Lack of time	67%	Cleared paths or trails through the bush (unsealed)	28%
Have no one (including pets) to do this activity with	21%	Scenery/ views (eg waterfalls)	22%
Don't have transport/no way to get there/accessibility	7%	Toilets	17%
Lack of local opportunities	6%	Fauna/native animals	13%
Fatigue/lack of motivation	6%	Signage	11%
Bad weather (including rain or drought)	5%	No additional facilities	10%
Too busy doing other recreational activities	5%	Completely unspoilt surroundings	10%
Cost of participating	4%	Flora/native trees, plants and flowers	9%
Health problems	4%	Water / taps	9%
Unaware of local opportunities to do activity	3%	Rest areas/seats/picnic tables	9%
Need to organise	3%	Good road conditions/accessibility	7%
Not suitable for children/can't take children along	2%	Safety (general)	5%
Don't have the right equipment	2%	Shelters	5%
Difficulty using/carrying equipment	1%	Parking	5%
Availability of car parking	1%	Trees	4%
Transport costs (including petrol or public transport)	1%	Information boards	4%
Cost of equipment required to do activity	1%	Mobile phone coverage	3%
Not fit enough to do this activity	1%	Brochures or maps/online info/promotion	3%
Fear of getting injured	1%	Public transport	3%
Fear of wildlife / getting bitten/stung etc	1%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	2%
Traffic	1%	Garbage bins	2%
Poor quality/maintenance of roads/paths; no suitable walking paths	1%	Lookouts	2%
Lack of variety/bored with local opportunities	1%	Shops or kiosks	2%
No toilets	1%	Hand rails/fence	2%
No amenities	1%	Access to emergency services	1%
Ease of phone coverage/emergency	1%	Shade	1%
		Leafy background	1%
		Aboriginal heritage sites	1%
		BBQs and other food preparation areas	1%
		Flat/cleared ground (wheelchair friendly) smooth water	1%
		Historic heritage sites	1%
		Swimming areas	1%
		Not too crowded	1%
		Campsites	1%
		Guided tours/audioguides	1%
		Children playgrounds or play areas	1%
		Cafes or restaurants	1%
		Change rooms	1%

Table 11. Barriers and preferences - Car camping

Barriers	%	Preferences	%
Lack of time	65%	Toilets	47%
Have no one (including pets) to do this activity with	14%	Water / taps	24%
Bad weather (including rain or drought)	8%	BBQs and other food preparation areas	19%
Cost of participating	7%	Showers	15%
Not suitable for children/can't take children along	7%	Amenities / facilities (not further specified)	12%
Don't have transport/no way to get there/accessibility	7%	Campsites	12%
Don't have the right equipment	4%	No additional facilities	10%
Unaware of local opportunities to do activity	4%	Good road conditions/accessibility	8%
Health problems	4%	Scenery/ views (eg waterfalls)	8%
Fatigue/lack of motivation	4%	Swimming areas	8%
Too busy doing other recreational activities	3%	Cleared paths or trails through the bush (unsealed)	7%
Lack of local opportunities	2%	Safety (general)	5%
Need to organise	1%	Rest areas/seats/picnic tables	5%
Cost of equipment required to do activity	1%	Clean, well maintained environment	5%
Not fit enough to do this activity	1%	Parking	5%
Fear of getting injured	1%	Beach/sandy areas	4%
Fear for own safety among strangers	1%	Flat/cleared ground (wheelchair friendly) smooth water	4%
Location is too crowded	1%	Fauna/native animals	3%
Traffic	1%	Not too crowded	3%
Only do this when travelling	1%	Powered campsites	3%
Cannot take pets along	1%	Children playgrounds or play areas	3%
Restrictions on activity	1%	Trees	2%
		Completely unspoilt surroundings	2%
		Flora/native trees, plants and flowers	2%
		Other	2%
		Firewood	2%
		Garbage bins	2%
		Leafy background	2%
		Signage	2%
		Boat ramp / boat access	1%
		Shade	1%
		Shelters	1%
		Isolation / infrequent to no contact with other people	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Cabins	1%
		Brochures or maps/online info/promotion	1%
		Information boards	1%
		Increased opening times	1%
		Ease restrictions	1%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	1%
		Fish cleaning areas	1%
		Mobile phone coverage	1%

		Historic heritage sites	1%
		Lookouts	1%
		Public transport	1%
		Shops or kiosks	1%



Table 12. Barriers and preferences - Cycling on a sealed bike path or track

Barriers	%	Preferences	%
Lack of time	37%	Sealed paths or boardwalks	36%
Lack of local opportunities	24%	Cleared paths or trails through the bush (unsealed)	25%
Don't have the right equipment	20%	Scenery/ views (eg waterfalls)	17%
Not suitable for children/can't take children along	9%	Separate wide paths away from traffic/cycles	12%
Fear of getting injured	8%	Water / taps	9%
Traffic	6%	Good road conditions/accessibility	8%
Too busy doing other recreational activities	5%	Toilets	8%
Fatigue/lack of motivation	5%	No additional facilities	6%
Health problems	4%	Safety (general)	6%
Bad weather (including rain or drought)	4%	Flora/native trees, plants and flowers	6%
Cost of equipment required to do activity	3%	Signage	6%
Not fit enough to do this activity	3%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	5%
Need to organise	3%	Rest areas/seats/picnic tables	4%
Unaware of local opportunities to do activity	2%	Equipment hire / access to equipment	3%
Don't have transport/no way to get there/accessibility	2%	Shade	3%
Location is too crowded	1%	Trees	3%
No experience/skilled	1%	Public transport	3%
Have no one (including pets) to do this activity with	1%	Completely unspoilt surroundings	2%
Prefer flat tracks	1%	Fauna/native animals	2%
		Lookouts	2%
		BBQs and other food preparation areas	2%
		Flat/cleared ground (wheelchair friendly) smooth water	1%
		Clean, well maintained environment	1%
		Access to emergency services	1%
		Swimming areas	1%
		Not too crowded	1%
		Isolation / infrequent to no contact with other people	1%
		Information boards	1%
		Amenities / facilities (not further specified)	1%
		Mobile phone coverage	1%
		Shelters	1%
		Other people present (fellow recreationists)	1%
		Brochures or maps/online info/promotion	1%
		Cafes or restaurants	1%
		Showers	1%

Table 13. Barriers and preferences - Cycling on roads or footpaths for recreation

Barriers	%	Preferences	%
Lack of time	41%	Sealed paths or boardwalks	48%
Don't have the right equipment	22%	Cleared paths or trails through the bush (unsealed)	42%
Lack of local opportunities	12%	No additional facilities	12%
Fear of getting injured	10%	Good road conditions/accessibility	11%
Fatigue/lack of motivation	9%	Safety (general)	10%
Health problems	7%	Signage	10%
Have no one (including pets) to do this activity with	5%	Flora/native trees, plants and flowers	7%
Traffic	5%	Scenery/ views (eg waterfalls)	7%
Not suitable for children/can't take children along	5%	Fauna/native animals	6%
Not fit enough to do this activity	5%	Rest areas/seats/picnic tables	6%
Bad weather (including rain or drought)	3%	Toilets	6%
No experience/skilled	2%	Separate wide paths away from traffic/cycles	5%
Cost of equipment required to do activity	2%	Trees	5%
Poor quality/maintenance of roads/paths; no suitable walking paths	2%	Water / taps	5%
Need to organise	2%	Lighting	5%
Unaware of local opportunities to do activity	1%	Completely unspoilt surroundings	4%
Cost of participating	1%	Cafes or restaurants	4%
Don't have transport/no way to get there/accessibility	1%	Brochures or maps/online info/promotion	3%
Fear for own safety among strangers	1%	Public transport	2%
Location is too crowded	1%	Equipment hire / access to equipment	2%
Safety concerns	1%	Lookouts	2%
		Information boards	2%
		BBQs and other food preparation areas	2%
		Garden	1%
		Clean, well maintained environment	1%
		Access to emergency services	1%
		Mobile phone coverage	1%
		Shade	1%
		Shelters	1%
		Garbage bins	1%
		Historic heritage sites	1%
		Parking	1%
		Isolation / infrequent to no contact with other people	1%

Table 14. Barriers and preferences - Fishing

Barriers	%	Preferences	%
Lack of time	58%	No additional facilities	24%
Have no one (including pets) to do this activity with	14%	Jetty	13%
Don't have the right equipment	12%	Toilets	11%
Lack of local opportunities	11%	Fauna/native animals	9%
Health problems	9%	Equipment hire / access to equipment	8%
Don't have transport/no way to get there/accessibility	5%	Water / taps	7%
No licence	5%	Boat ramp / boat access	6%
Only do this when travelling	4%	Parking	6%
No experience/skilled	3%	Completely unspoilt surroundings	5%
Cost of participating	2%	BBQs and other food preparation areas	5%
Seasonal/prefer warmer weather	2%	Fish cleaning areas	5%
Need to organise	2%	Good road conditions/accessibility	5%
Not suitable for children/can't take children along	2%	Rest areas/seats/picnic tables	4%
Too busy doing other recreational activities	2%	Clean, well maintained environment	3%
Fatigue/lack of motivation	2%	Shops or kiosks	3%
Restrictions on activity	2%	Cleared paths or trails through the bush (unsealed)	3%
Unaware of local opportunities to do activity	1%	Beach/sandy areas	3%
Cost of equipment required to do activity	1%	Shelters	3%
Bad weather (including rain or drought)	1%	Scenery/ views (eg waterfalls)	3%
Fear for own safety among strangers	1%	Other	2%
Location is too crowded	1%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	2%
Age/getting old	1%	Amenities / facilities (not further specified)	2%
Safety concerns	1%	Other people present (fellow recreationists)	2%
Lack of occasions/invitations presenting (external)	1%	Not too crowded	2%
Pollution	1%	Cafes or restaurants	2%
		Sealed paths or boardwalks	2%
		More restrictions	1%
		Ease restrictions	1%
		Safety (general)	1%
		Garbage bins	1%
		Signage	1%
		Lighting	1%
		Trees	1%
		Historic heritage sites	1%
		Isolation / infrequent to no contact with other people	1%
		Ranger / management presence	1%
		Information boards	1%
		Hand rails/fence	1%

Table 15. Barriers and preferences - Four-wheel driving

Barriers	%	Preferences	%
Lack of time	46%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	15%
Don't have the right equipment	35%	Good road conditions/accessibility	15%
Have no one (including pets) to do this activity with	9%	No additional facilities	14%
Cost of participating	6%	Scenery/ views (eg waterfalls)	12%
Fatigue/lack of motivation	4%	Toilets	12%
No experience/skilled	4%	Cleared paths or trails through the bush (unsealed)	8%
Restrictions on activity	4%	Rest areas/seats/picnic tables	8%
Unaware of local opportunities to do activity	3%	Signage	7%
Cost of equipment required to do activity	3%	Completely unspoilt surroundings	6%
Transport costs (including petrol or public transport)	2%	BBQs and other food preparation areas	6%
Not suitable for children/can't take children along	2%	Separate wide paths away from traffic/cycles	4%
Lack of local opportunities	1%	Access to emergency services	4%
Bad weather (including rain or drought)	1%	Brochures or maps/online info/promotion	4%
Don't have transport/no way to get there/accessibility	1%	Sealed paths or boardwalks	4%
Not fit enough to do this activity	1%	Fuel	3%
Fear for own safety among strangers	1%	Clean, well maintained environment	3%
No licence	1%	Shelters	3%
		Beach/sandy areas	2%
		Ease restrictions	2%
		Leafy background	2%
		Other people present (fellow recreationists)	2%
		Other accommodation (eg hostels, motels, etc)	2%
		Visitors' centre	2%
		Water / taps	2%
		Amenities / facilities (not further specified)	1%
		Instructors / coaches / training	1%
		Equipment hire / access to equipment	1%
		Safety (general)	1%
		Garbage bins	1%
		Trees	1%
		Historic heritage sites	1%
		Isolation / infrequent to no contact with other people	1%
		Powered campsites	1%
		Cafes or restaurants	1%
		Showers	1%

Table 16. Barriers and preferences - Hiking with overnight camping

Barriers	%	Preferences	%
Lack of time	63%	Toilets	29%
Have no one (including pets) to do this activity with	16%	Water / taps	23%
Not suitable for children/can't take children along	14%	Campsites	21%
Unaware of local opportunities to do activity	7%	Scenery/ views (eg waterfalls)	13%
Cost of participating	6%	Completely unspoilt surroundings	12%
Don't have the right equipment	6%	BBQs and other food preparation areas	10%
Lack of local opportunities	5%	Cleared paths or trails through the bush (unsealed)	9%
Bad weather (including rain or drought)	3%	No additional facilities	8%
Need to organise	3%	Amenities / facilities (not further specified)	8%
Don't have transport/no way to get there/accessibility	2%	Safety (general)	6%
Fear for own safety among strangers	2%	Fauna/native animals	6%
Too busy doing other recreational activities	2%	Cabins	6%
Fatigue/lack of motivation	2%	Rest areas/seats/picnic tables	6%
Safety concerns	2%	Trees	5%
No toilets	2%	Signage	5%
Cost of equipment required to do activity	1%	Flora/native trees, plants and flowers	4%
Health problems	1%	Equipment hire / access to equipment	3%
Not fit enough to do this activity	1%	Parking	3%
Fear of being isolated	1%	Good road conditions/accessibility	3%
Lack of variety/bored with local opportunities	1%	Cafes or restaurants	3%
No amenities	1%	Showers	3%
Access to water at sites	1%	Garbage bins	2%
Access to car at sites	1%	Brochures or maps/online info/promotion	2%
No experience/skilled	1%	Information boards	2%
		Visitors' centre	2%
		Hand rails/fence	2%
		Ease restrictions	1%
		Clean, well maintained environment	1%
		Access to emergency services	1%
		Mobile phone coverage	1%
		Shade	1%
		Shelters	1%
		Leafy background	1%
		Aboriginal heritage sites	1%
		Lookouts	1%
		Public transport	1%
		Not too crowded	1%
		Isolation / infrequent to no contact with other people	1%
		Ranger / management presence	1%
		Shops or kiosks	1%

Table 17. Barriers and preferences - Horse riding

Barriers	%	Preferences	%
Lack of time	42%	Cleared paths or trails through the bush (unsealed)	29%
Lack of local opportunities	22%	No additional facilities	25%
Cost of participating	22%	Scenery/ views (eg waterfalls)	15%
Don't have the right equipment	13%	Equipment hire / access to equipment	11%
Unaware of local opportunities to do activity	7%	Instructors / coaches / training	7%
Have no one (including pets) to do this activity with	7%	Flat/cleared ground (wheelchair friendly) smooth water	6%
Health problems	5%	Clean, well maintained environment	6%
Fear of getting injured	4%	Completely unspoilt surroundings	6%
Cost of equipment required to do activity	3%	Flora/native trees, plants and flowers	6%
Too busy doing other recreational activities	3%	Brochures or maps/online info/promotion	6%
Age/getting old	3%	Signage	6%
Not suitable for children/can't take children along	1%	Safety (general)	4%
Not fit enough to do this activity	1%	Leafy background	4%
Location is too crowded	1%	BBQs and other food preparation areas	4%
No experience/skilled	1%	Toilets	4%
Need to organise	1%	Other	3%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	3%
		Access to emergency services	3%
		Trees	3%
		Rest areas/seats/picnic tables	3%
		Increased opening times	1%
		Separate wide paths away from traffic/cycles	1%
		Amenities / facilities (not further specified)	1%
		Shade	1%
		Fauna/native animals	1%
		Parking	1%
		Good road conditions/accessibility	1%
		Other people present (fellow recreationists)	1%
		Isolation / infrequent to no contact with other people	1%
		Hand rails/fence	1%
		Water / taps	1%

Table 18. Barriers and preferences - Mountain biking

Barriers	%	Preferences	%
Lack of time	45%	Cleared paths or trails through the bush (unsealed)	22%
Don't have the right equipment	27%	Sealed paths or boardwalks	21%
Lack of local opportunities	14%	No additional facilities	14%
Have no one (including pets) to do this activity with	10%	Scenery/ views (eg waterfalls)	14%
Don't have transport/no way to get there/accessibility	6%	Completely unspoilt surroundings	12%
Fear of getting injured	6%	Signage	10%
Unaware of local opportunities to do activity	5%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	9%
Not suitable for children/can't take children along	5%	Water / taps	8%
Health problems	5%	Toilets	8%
No experience/skilled	5%	Flora/native trees, plants and flowers	6%
Bad weather (including rain or drought)	4%	Good road conditions/accessibility	6%
Cost of participating	3%	Separate wide paths away from traffic/cycles	5%
Not fit enough to do this activity	3%	Access to emergency services	4%
Fatigue/lack of motivation	3%	Lighting	3%
Transport costs (including petrol or public transport)	1%	Clean, well maintained environment	3%
Cost of equipment required to do activity	1%	Safety (general)	3%
Too busy doing other recreational activities	1%	Fauna/native animals	3%
Safety concerns	1%	Swimming areas	3%
Need to organise	1%	Brochures or maps/online info/promotion	3%
		Instructors / coaches / training	1%
		Trees	1%
		Lookouts	1%
		Parking	1%
		Isolation / infrequent to no contact with other people	1%
		Guided tours/audioguides	1%
		Cafes or restaurants	1%
		Shops or kiosks	1%
		Rest areas/seats/picnic tables	1%

Table 19. Barriers and preferences - Nature study

Barriers	%	Preferences	%
Lack of time	69%	No additional facilities	18%
Have no one (including pets) to do this activity with	8%	Flora/native trees, plants and flowers	18%
Health problems	8%	Fauna/native animals	17%
Cost of participating	7%	Scenery/ views (eg waterfalls)	15%
Fatigue/lack of motivation	5%	Completely unspoilt surroundings	11%
Lack of local opportunities	5%	Information boards	10%
Unaware of local opportunities to do activity	4%	Rest areas/seats/picnic tables	10%
Don't have transport/no way to get there/accessibility	4%	Trees	9%
Too busy doing other recreational activities	4%	Signage	9%
Only do this when travelling	3%	Clean, well maintained environment	7%
No experience/skilled	3%	Lookouts	7%
Transport costs (including petrol or public transport)	2%	Sealed paths or boardwalks	6%
Cost of equipment required to do activity	2%	Toilets	6%
Bad weather (including rain or drought)	2%	Cleared paths or trails through the bush (unsealed)	5%
Don't have the right equipment	2%	Safety (general)	4%
Cost of entry fee	1%	BBQs and other food preparation areas	4%
Not suitable for children/can't take children along	1%	Amenities / facilities (not further specified)	3%
Age/getting old	1%	Equipment hire / access to equipment	3%
Safety concerns	1%	Shelters	3%
Poor quality/maintenance of roads/paths; no suitable walking paths	1%	Leafy background	3%
Seasonal/prefer warmer weather	1%	Parking	3%
Need to organise	1%	Good road conditions/accessibility	3%
		Brochures or maps/online info/promotion	3%
		Guided tours/audioguides	3%
		Garden	2%
		Shade	2%
		Isolation / infrequent to no contact with other people	2%
		Visitors' centre	2%
		Garbage bins	1%
		Historic heritage sites	1%
		Ranger / management presence	1%
		Children playgrounds or play areas	1%
		Cafes or restaurants	1%
		Other	1%
		Separate wide paths away from traffic/cycles	1%
		Boat ramp / boat access	1%
		Instructors / coaches / training	1%
		Access to emergency services	1%
		Shops or kiosks	1%
		Water / taps	1%

Table 20. Barriers and preferences - Picnicking

Barriers	%	Preferences	%
Lack of time	65%	Toilets	41%
Have no one (including pets) to do this activity with	15%	Rest areas/seats/picnic tables	35%
Bad weather (including rain or drought)	9%	BBQs and other food preparation areas	34%
Lack of occasions/invitations presenting (external)	7%	Water / taps	16%
Fatigue/lack of motivation	5%	Scenery/ views (eg waterfalls)	13%
Health problems	4%	Shelters	11%
Lack of local opportunities	3%	Amenities / facilities (not further specified)	11%
Too busy doing other recreational activities	3%	Clean, well maintained environment	10%
Location is too crowded	3%	Children playgrounds or play areas	10%
Need to organise	3%	Shade	10%
Cost of participating	2%	Flat/cleared ground (wheelchair friendly) smooth water	10%
Not suitable for children/can't take children along	2%	No additional facilities	9%
Don't have transport/no way to get there/accessibility	2%	Trees	8%
Not fit enough to do this activity	1%	Good road conditions/accessibility	7%
Unaware of local opportunities to do activity	1%	Garbage bins	4%
Availability of car parking	1%	Parking	4%
Transport costs (including petrol or public transport)	1%	Swimming areas	4%
No amenities	1%	Fauna/native animals	4%
Cost of entry fee	0.3%	Flora/native trees, plants and flowers	4%
Cost of car parking	0.3%	Safety (general)	3%
Age/getting old	0.3%	Beach/sandy areas	2%
Restrictions on activity	0.3%	Leafy background	2%
		Isolation / infrequent to no contact with other people	2%
		Cleared paths or trails through the bush (unsealed)	2%
		Completely unspoilt surroundings	2%
		Other	2%
		Garden	2%
		Campsites	1%
		Not too crowded	1%
		Cafes or restaurants	1%
		Shops or kiosks	1%
		Firewood	1%
		Equipment hire / access to equipment	1%
		Other people present (fellow recreationists)	1%
		Brochures or maps/online info/promotion	1%
		Showers	1%
		Boat ramp / boat access	0.3%
		Mobile phone coverage	0.3%
		Historic heritage sites	0.3%
		Lookouts	0.3%
		Public transport	0.3%
		Other accommodation (eg hostels, motels, etc)	0.3%

		Powered campsites	0.3%
		Signage	0.3%
		Hand rails/fence	0.3%
		Sealed paths or boardwalks	0.3%



Table 21. Barriers and preferences - Rock climbing, abseiling, or canyoning

Barriers	%	Preferences	%
Lack of time	49%	No additional facilities	30%
Don't have transport/no way to get there/accessibility	19%	Safety (general)	21%
Don't have the right equipment	12%	Equipment hire / access to equipment	14%
Cost of participating	10%	Scenery/ views (eg waterfalls)	12%
Lack of local opportunities	9%	Toilets	12%
Fear of getting injured	7%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	5%
Unaware of local opportunities to do activity	6%	Completely unspoilt surroundings	5%
Have no one (including pets) to do this activity with	6%	Shops or kiosks	5%
No experience/skilled	6%	Water / taps	5%
Cost of equipment required to do activity	4%	Instructors / coaches / training	4%
Too busy doing other recreational activities	4%	Parking	4%
Fatigue/lack of motivation	4%	Good road conditions/accessibility	4%
Not suitable for children/can't take children along	3%	Brochures or maps/online info/promotion	4%
Health problems	3%	Signage	4%
Not fit enough to do this activity	3%	Access to emergency services	3%
Age/getting old	1%	Trees	3%
No licence	1%	Fauna/native animals	3%
		Flora/native trees, plants and flowers	3%
		Public transport	3%
		Campsites	3%
		Information boards	3%
		Cleared paths or trails through the bush (unsealed)	3%
		BBQs and other food preparation areas	3%
		Rest areas/seats/picnic tables	3%
		Showers	3%
		Flat/cleared ground (wheelchair friendly) smooth water	1%
		Boat ramp / boat access	1%
		Shelters	1%
		Garbage bins	1%
		Leafy background	1%
		Guided tours/audioguides	1%
		Visitors' centre	1%
		Hand rails/fence	1%
		Change rooms	1%

Table 22. Barriers and preferences - Running or jogging outdoors

Barriers	%	Preferences	%
Lack of time	59%	Cleared paths or trails through the bush (unsealed)	43%
Fatigue/lack of motivation	24%	No additional facilities	21%
Health problems	12%	Scenery/ views (eg waterfalls)	14%
Bad weather (including rain or drought)	10%	Water / taps	13%
Too busy doing other recreational activities	5%	Completely unspoilt surroundings	11%
Lack of local opportunities	3%	Rest areas/seats/picnic tables	8%
Not fit enough to do this activity	3%	Trees	7%
No lighting/dark when i want	3%	Signage	6%
Unaware of local opportunities to do activity	2%	Toilets	5%
Cost of participating	2%	Flat/cleared ground (wheelchair friendly) smooth water	4%
Have no one (including pets) to do this activity with	2%	Lighting	4%
Safety concerns	2%	Safety (general)	4%
Fear for own safety among strangers	1%	Shade	3%
Age/getting old	1%	Flora/native trees, plants and flowers	3%
		Fauna/native animals	2%
		Parking	2%
		Brochures or maps/online info/promotion	2%
		Sealed paths or boardwalks	2%
		Cafes or restaurants	1%
		Garden	1%
		Amenities / facilities (not further specified)	1%
		Access to emergency services	1%
		Shelters	1%
		Garbage bins	1%
		Public transport	1%
		Good road conditions/accessibility	1%
		Other people present (fellow recreationists)	1%
		Information boards	1%
		Visitors' centre	1%
		Shops or kiosks	1%
		Hand rails/fence	1%

Table 23. Barriers and preferences - Scenic driving with a car or motorbike

Barriers	%	Preferences	%
Lack of time	64%	Scenery/ views (eg waterfalls)	24%
Transport costs (including petrol or public transport)	14%	No additional facilities	16%
Cost of participating	9%	Good road conditions/accessibility	15%
Fatigue/lack of motivation	5%	Rest areas/seats/picnic tables	12%
Have no one (including pets) to do this activity with	4%	Lookouts	11%
Health problems	4%	Toilets	10%
No licence	3%	Signage	8%
Don't have the right equipment	3%	Parking	6%
Don't have transport/no way to get there/accessibility	3%	Brochures or maps/online info/promotion	6%
Not suitable for children/can't take children along	2%	Information boards	5%
Not fit enough to do this activity	2%	Shelters	4%
Environmental concern	2%	Completely unspoilt surroundings	4%
Unaware of local opportunities to do activity	2%	BBQs and other food preparation areas	4%
Too busy doing other recreational activities	2%	Amenities / facilities (not further specified)	4%
Traffic	2%	Fauna/native animals	4%
Lack of local opportunities	1%	Flora/native trees, plants and flowers	4%
Fear of getting injured	1%	Cafes or restaurants	4%
Age/getting old	1%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	3%
Lack of occasions/invitations presenting (external)	1%	Safety (general)	3%
		Water / taps	3%
		Trees	2%
		Leafy background	2%
		Historic heritage sites	2%
		Shops or kiosks	2%
		Equipment hire / access to equipment	1%
		Isolation / infrequent to no contact with other people	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Visitors' centre	1%
		Sealed paths or boardwalks	1%
		Fuel	1%
		Clean, well maintained environment	1%
		Access to emergency services	1%
		Mobile phone coverage	1%
		Shade	1%
		Garbage bins	1%
		Not too crowded	1%
		Guided tours/audioguides	1%
		Beach/sandy areas	0.4%
		Events	0.4%
		Separate wide paths away from traffic/cycles	0.4%
		Lighting	0.4%
		Boat ramp / boat access	0.4%

		Aboriginal heritage sites	0.4%
		Swimming areas	0.4%
		Ranger / management presence	0.4%
		Cleared paths or trails through the bush (unsealed)	0.4%
		Showers	0.4%

Table 24. Barriers and preferences - Snow sports

Barriers	%	Preferences	%
Lack of time	46%	No additional facilities	33%
Cost of participating	45%	Ski lifts	23%
Lack of local opportunities	25%	Cafes or restaurants	14%
Not fit enough to do this activity	8%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	13%
Bad weather (including rain or drought)	8%	Other accommodation (eg hostels, motels, etc)	11%
Not suitable for children/can't take children along	6%	Good road conditions/accessibility	10%
Have no one (including pets) to do this activity with	4%	Toilets	6%
Don't have the right equipment	3%	Instructors / coaches / training	4%
Fatigue/lack of motivation	3%	Equipment hire / access to equipment	4%
Need to organise	3%	Scenery/ views (eg waterfalls)	4%
Transport costs (including petrol or public transport)	2%	Completely unspoilt surroundings	3%
Cost of equipment required to do activity	2%	Public transport	3%
Too busy doing other recreational activities	2%	Not too crowded	3%
No experience/skilled	2%	Cabins	3%
Health problems	1%	Children playgrounds or play areas	3%
Location is too crowded	1%	Amenities / facilities (not further specified)	2%
		Safety (general)	2%
		Shelters	2%
		Cleared paths or trails through the bush (unsealed)	2%
		Separate wide paths away from traffic/cycles	2%
		Clean, well maintained environment	2%
		Trees	2%
		Parking	2%
		Flat/cleared ground (wheelchair friendly) smooth water	1%
		Lookouts	1%
		Campsites	1%
		Ranger / management presence	1%
		Guided tours/audioguides	1%
		Visitors' centre	1%
		Signage	1%
		Water / taps	1%
		BBQs and other food preparation areas	1%
		Rest areas/seats/picnic tables	1%
		Showers	1%

Table 25. Barriers and preferences - Sports involving motorised watercraft

Barriers	%	Preferences	%
Lack of time	44%	No additional facilities	21%
Cost of participating	24%	Boat ramp / boat access	18%
Don't have the right equipment	24%	Toilets	11%
Don't have transport/no way to get there/accessibility	7%	Equipment hire / access to equipment	10%
Lack of local opportunities	6%	Good road conditions/accessibility	9%
Have no one (including pets) to do this activity with	6%	Water / taps	9%
Bad weather (including rain or drought)	6%	Clean, well maintained environment	7%
Fatigue/lack of motivation	5%	Parking	7%
Not suitable for children/can't take children along	3%	BBQs and other food preparation areas	7%
Not fit enough to do this activity	3%	Safety (general)	6%
Too busy doing other recreational activities	3%	Completely unspoilt surroundings	5%
Unaware of local opportunities to do activity	2%	Shelters	5%
Cost of equipment required to do activity	2%	Scenery/ views (eg waterfalls)	5%
Health problems	2%	Flat/cleared ground (wheelchair friendly) smooth water	4%
No licence	2%	Jetty	4%
Transport costs (including petrol or public transport)	1%	Not too crowded	4%
Opening hours not convenient	1%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	3%
Restrictions on activity	1%	Instructors / coaches / training	3%
		Children playgrounds or play areas	3%
		Rest areas/seats/picnic tables	3%
		Change rooms	3%
		Beach/sandy areas	2%
		Shade	2%
		Other people present (fellow recreationists)	2%
		Shops or kiosks	2%
		Showers	2%
		Fuel	1%
		Ease restrictions	1%
		Lighting	1%
		Trees	1%
		Fauna/native animals	1%
		Historic heritage sites	1%
		Lookouts	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Ranger / management presence	1%
		Brochures or maps/online info/promotion	1%
		Information boards	1%
		Visitors' centre	1%
		Cafes or restaurants	1%

Table 26. Barriers and preferences - Sports involving non-motorised watercraft

Barriers	%	Preferences	%
Lack of time	58%	No additional facilities	19%
Cost of participating	21%	Clean, well maintained environment	10%
Don't have transport/no way to get there/accessibility	18%	Boat ramp / boat access	10%
Don't have the right equipment	13%	Scenery/ views (eg waterfalls)	10%
Cost of equipment required to do activity	6%	Safety (general)	8%
Lack of local opportunities	5%	Parking	8%
Have no one (including pets) to do this activity with	5%	Completely unspoilt surroundings	7%
Unaware of local opportunities to do activity	3%	Toilets	7%
Bad weather (including rain or drought)	3%	Beach/sandy areas	6%
Not fit enough to do this activity	3%	Water / taps	6%
Fatigue/lack of motivation	3%	Flat/cleared ground (wheelchair friendly) smooth water	6%
Not suitable for children/can't take children along	2%	Good road conditions/accessibility	6%
Health problems	2%	BBQs and other food preparation areas	6%
Too busy doing other recreational activities	2%	Equipment hire / access to equipment	5%
Cost of entry fee	1%	Signage	5%
Transport costs (including petrol or public transport)	1%	Rest areas/seats/picnic tables	5%
Fear for own safety among strangers	1%	Not too crowded	4%
No amenities	1%	Isolation / infrequent to no contact with other people	4%
		Ranger / management presence	4%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	3%
		Amenities / facilities (not further specified)	3%
		Instructors / coaches / training	3%
		Shelters	3%
		Trees	3%
		Fauna/native animals	3%
		Brochures or maps/online info/promotion	3%
		Information boards	3%
		Cafes or restaurants	3%
		Garbage bins	2%
		Swimming areas	2%
		Shops or kiosks	2%
		Showers	2%
		Events	1%
		Separate wide paths away from traffic/cycles	1%
		Jetty	1%
		Leafy background	1%
		Flora/native trees, plants and flowers	1%
		Other people present (fellow recreationists)	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Campsites	1%
		Visitors' centre	1%
		Children playgrounds or play areas	1%

Table 27. Barriers and preferences - Trail or quad bike riding

Barriers	%	Preferences	%
Lack of time	33%	Cleared paths or trails through the bush (unsealed)	34%
Don't have the right equipment	28%	No additional facilities	17%
Lack of local opportunities	19%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	11%
Don't have transport/no way to get there/accessibility	13%	Completely unspoilt surroundings	8%
Cost of participating	10%	Toilets	8%
Unaware of local opportunities to do activity	7%	Water / taps	6%
Fatigue/lack of motivation	7%	Rest areas/seats/picnic tables	6%
Fear of getting injured	4%	Ease restrictions	5%
Have no one (including pets) to do this activity with	3%	Clean, well maintained environment	5%
Bad weather (including rain or drought)	3%	Safety (general)	5%
Health problems	3%	Mobile phone coverage	5%
Restrictions on activity	3%	Trees	5%
Cost of equipment required to do activity	1%	Signage	5%
Not suitable for children/can't take children along	1%	Instructors / coaches / training	3%
Not fit enough to do this activity	1%	Access to emergency services	3%
Too busy doing other recreational activities	1%	Leafy background	3%
Age/getting old	1%	Fauna/native animals	3%
Only do this when travelling	1%	Flora/native trees, plants and flowers	3%
		Scenery/ views (eg waterfalls)	3%
		Campsites	3%
		Brochures or maps/online info/promotion	3%
		Information boards	3%
		Other	2%
		Separate wide paths away from traffic/cycles	2%
		Flat/cleared ground (wheelchair friendly) smooth water	2%
		Amenities / facilities (not further specified)	2%
		Equipment hire / access to equipment	2%
		Shade	2%
		Parking	2%
		Good road conditions/accessibility	2%
		Visitors' centre	2%
		Sealed paths or boardwalks	2%
		BBQs and other food preparation areas	2%
		Change rooms	2%

Table 28. Barriers and preferences - Visiting Aboriginal and other cultural heritage sites

Barriers	%	Preferences	%
Lack of time	55%	Information boards	24%
Unaware of local opportunities to do activity	27%	No additional facilities	22%
Lack of local opportunities	13%	Aboriginal heritage sites	15%
Cost of participating	7%	Guided tours/audioguides	13%
Don't have transport/no way to get there/accessibility	7%	Toilets	11%
Transport costs (including petrol or public transport)	5%	Brochures or maps/online info/promotion	10%
Have no one (including pets) to do this activity with	5%	Signage	10%
Health problems	4%	Completely unspoilt surroundings	9%
Too busy doing other recreational activities	4%	Clean, well maintained environment	6%
Fatigue/lack of motivation	2%	Scenery/ views (eg waterfalls)	5%
Need to organise	2%	Rest areas/seats/picnic tables	5%
Not suitable for children/can't take children along	1%	Sealed paths or boardwalks	4%
Not fit enough to do this activity	1%	Amenities / facilities (not further specified)	3%
Age/getting old	1%	Shops or kiosks	3%
Lack of variety/bored with local opportunities	1%	Cleared paths or trails through the bush (unsealed)	3%
Only do this when travelling	1%	BBQs and other food preparation areas	3%
Lack of occasions/invitations presenting (external)	1%	Good road conditions/accessibility	2%
		Isolation / infrequent to no contact with other people	2%
		Visitors' centre	2%
		Cafes or restaurants	2%
		Water / taps	2%
		Other	2%
		Shelters	2%
		Historic heritage sites	2%
		Lookouts	2%
		Public transport	1%
		Not too crowded	1%
		Safety (general)	1%
		Access to emergency services	1%
		Garbage bins	1%
		Trees	1%
		Leafy background	1%
		Fauna/native animals	1%
		Flora/native trees, plants and flowers	1%
		Parking	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Ranger / management presence	1%
		Children playgrounds or play areas	1%
		Hand rails/fence	1%
		Showers	1%

Table 29. Barriers and preferences - Visiting landmarks, lookouts and scenery

Barriers	%	Preferences	%
Lack of time	70%	Scenery/ views (eg waterfalls)	26%
Cost of participating	9%	Toilets	22%
Have no one (including pets) to do this activity with	8%	No additional facilities	12%
Unaware of local opportunities to do activity	6%	Information boards	10%
Don't have transport/no way to get there/accessibility	6%	Rest areas/seats/picnic tables	10%
Health problems	6%	Completely unspoilt surroundings	9%
Transport costs (including petrol or public transport)	5%	Safety (general)	8%
Only do this when travelling	4%	Signage	8%
Need to organise	4%	Good road conditions/accessibility	7%
Fatigue/lack of motivation	4%	Water / taps	6%
Lack of local opportunities	4%	Historic heritage sites	5%
Too busy doing other recreational activities	4%	Parking	5%
Lack of variety/bored with local opportunities	2%	Brochures or maps/online info/promotion	5%
Availability of car parking	1%	Lookouts	4%
Not suitable for children/can't take children along	1%	Sealed paths or boardwalks	4%
Age/getting old	1%	Amenities / facilities (not further specified)	4%
Seasonal/prefer warmer weather	1%	Trees	4%
Cost of entry fee	0.4%	Flora/native trees, plants and flowers	4%
Bad weather (including rain or drought)	0.4%	Shops or kiosks	4%
Traffic	0.4%	Shelters	3%
Cannot take pets along	0.4%	Fauna/native animals	3%
No experience/skilled	0.4%	Cafes or restaurants	3%
		Clean, well maintained environment	3%
		BBQs and other food preparation areas	3%
		Leafy background	2%
		Equipment hire / access to equipment	2%
		Garbage bins	2%
		Cleared paths or trails through the bush (unsealed)	2%
		Flat/cleared ground (wheelchair friendly) smooth water	1%
		Public transport	1%
		Children playgrounds or play areas	1%
		Shade	1%
		Aboriginal heritage sites	1%
		Not too crowded	1%
		Isolation / infrequent to no contact with other people	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Campsites	1%
		Guided tours/audioguides	1%
		Visitors' centre	1%
		Hand rails/fence	1%
		Ease restrictions	0.4%
		Garden	0.4%

		Boat ramp / boat access	0.4%
		Mobile phone coverage	0.4%
		Change rooms	0.4%



Table 30. Barriers and preferences - Volunteer work for the environment

Barriers	%	Preferences	%
Lack of time	70%	No additional facilities	32%
Unaware of local opportunities to do activity	20%	Toilets	13%
Health problems	7%	Brochures or maps/online info/promotion	8%
Fatigue/lack of motivation	7%	Instructors / coaches / training	7%
Don't have transport/no way to get there/accessibility	4%	Flora/native trees, plants and flowers	7%
Too busy doing other recreational activities	3%	Completely unspoilt surroundings	6%
Lack of local opportunities	2%	Clean, well maintained environment	5%
Cost of participating	2%	Trees	5%
Need to organise	2%	Scenery/ views (eg waterfalls)	5%
Not suitable for children/can't take children along	1%	Water / taps	5%
Have no one (including pets) to do this activity with	1%	Equipment hire / access to equipment	4%
Don't have the right equipment	1%	Garbage bins	4%
Opening hours not convenient	1%	Ranger / management presence	4%
Only do this when travelling	1%	Safety (general)	3%
Lack of occasions/invitations presenting (external)	1%	Good road conditions/accessibility	3%
		Other people present (fellow recreationists)	3%
		Fauna/native animals	2%
		BBQs and other food preparation areas	2%
		Rest areas/seats/picnic tables	2%
		Other	2%
		Shelters	2%
		Signage	2%
		Showers	2%
		Beach/sandy areas	1%
		Garden	1%
		Amenities / facilities (not further specified)	1%
		Access to emergency services	1%
		Public transport	1%
		Parking	1%
		Isolation / infrequent to no contact with other people	1%
		Other accommodation (eg hostels, motels, etc)	1%
		Visitors' centre	1%
		Children playgrounds or play areas	1%

Table 31. Barriers and preferences - Walking on roads or footpaths for recreation

Barriers	%	Preferences	%
Lack of time	64%	Cleared paths or trails through the bush (unsealed)	35%
Fatigue/lack of motivation	13%	No additional facilities	19%
Health problems	11%	Scenery/ views (eg waterfalls)	14%
Bad weather (including rain or drought)	9%	Trees	8%
Lack of local opportunities	8%	Toilets	7%
Poor quality/maintenance of roads/paths; no suitable walking paths	5%	Rest areas/seats/picnic tables	6%
Have no one (including pets) to do this activity with	4%	Water / taps	6%
Too busy doing other recreational activities	3%	Safety (general)	5%
Traffic	3%	Completely unspoilt surroundings	5%
Safety concerns	3%	Flora/native trees, plants and flowers	5%
Unaware of local opportunities to do activity	2%	Signage	4%
No lighting/dark when i want	2%	Garbage bins	3%
Don't have transport/no way to get there/accessibility	1%	Fauna/native animals	3%
Not fit enough to do this activity	1%	Sealed paths or boardwalks	3%
Fear of getting injured	1%	Garden	2%
Age/getting old	1%	Lighting	2%
Transport costs (including petrol or public transport)	1%	Clean, well maintained environment	2%
Not suitable for children/can't take children along	1%	Shade	2%
Don't have the right equipment	1%	Good road conditions/accessibility	2%
Fear of being isolated	1%	Children playgrounds or play areas	2%
Location is too crowded	1%	Flat/cleared ground (wheelchair friendly) smooth water	1%
Seasonal/prefer warmer weather	1%	More restrictions	1%
Need to organise	1%	Other people present (fellow recreationists)	1%
		Brochures or maps/online info/promotion	1%
		Separate wide paths away from traffic/cycles	1%
		Shelters	1%
		Historic heritage sites	1%
		Lookouts	1%
		Parking	1%
		Not too crowded	1%
		Isolation / infrequent to no contact with other people	1%
		Cafes or restaurants	1%
		Shops or kiosks	1%
		BBQs and other food preparation areas	1%
		Events	0.4%
		Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	0.4%
		Amenities / facilities (not further specified)	0.4%
		Access to emergency services	0.4%
		Mobile phone coverage	0.4%
		Aboriginal heritage sites	0.4%
		Swimming areas	0.4%

		Campsites	0.4%
		Ranger / management presence	0.4%
		Information boards	0.4%
		Showers	0.4%



Table 32. Barriers and preferences - Water sports

Barriers	%	Preferences	%
Lack of time	57%	No additional facilities	17%
Bad weather (including rain or drought)	20%	Toilets	17%
Lack of local opportunities	18%	Clean, well maintained environment	16%
Cost of participating	8%	Swimming areas	12%
Not fit enough to do this activity	8%	Safety (general)	9%
Fatigue/lack of motivation	7%	Completely unspoilt surroundings	9%
Have no one (including pets) to do this activity with	4%	Change rooms	9%
Too busy doing other recreational activities	3%	Access to emergency services	8%
Not suitable for children/can't take children along	2%	Beach/sandy areas	8%
Health problems	2%	Parking	8%
Don't have the right equipment	2%	Showers	6%
Don't have transport/no way to get there/accessibility	2%	Good road conditions/accessibility	5%
Fear of getting injured	2%	Rest areas/seats/picnic tables	5%
No experience/skilled	2%	Fauna/native animals	4%
Cost of entry fee	1%	Cafes or restaurants	4%
Fear of wildlife / getting bitten/stung etc	1%	Shops or kiosks	4%
Cost of car parking	1%	Scenery/ views (eg waterfalls)	4%
Cost of equipment required to do activity	1%	Ranger / management presence	4%
Unaware of local opportunities to do activity	0.4%	Equipment hire / access to equipment	4%
Availability of car parking	0.4%	Shelters	4%
Transport costs (including petrol or public transport)	0.4%	Not too crowded	4%
Fear of being isolated	0.4%	Flora/native trees, plants and flowers	3%
Fear for own safety among strangers	0.4%	BBQs and other food preparation areas	3%
Location is too crowded	0.4%	Signage	3%
Traffic	0.4%	Instructors / coaches / training	2%
Only do this when travelling	0.4%	Children playgrounds or play areas	2%
Difficulty using/carrying equipment	0.4%	Variety of terrain/ interesting/ challenging terrain/ obstacles/ jumps etc	2%
Pollution	0.4%	Amenities / facilities (not further specified)	2%
		Boat ramp / boat access	2%
		Garbage bins	2%
		Shade	2%
		Trees	2%
		Historic heritage sites	2%
		Isolation / infrequent to no contact with other people	2%
		Information boards	2%
		Water / taps	2%
		Other people present (fellow recreationists)	1%
		Campsites	1%
		Cleared paths or trails through the bush (unsealed)	1%
		Flat/cleared ground (wheelchair friendly)	1%
		smooth water	1%
		Jetty	1%

		Brochures or maps/online info/promotion	1%
		Visitors' centre	1%
		Sealed paths or boardwalks	1%
		Separate wide paths away from traffic/cycles	0.4%
		Fish cleaning areas	0.4%
		Mobile phone coverage	0.4%
		Public transport	0.4%
		Other accommodation (eg hostels, motels, etc)	0.4%

Table 33. Actionable barriers for outdoor recreation activities by age and gender*

	Male				Female				Total
	18-24	25-34	35-44	45-75	18-24	25-34	35-44	45-75	
Visiting Aboriginal & other cultural heritage sites	33%	36%	43%	24%	30%	53%	50%	30%	34%
Horse riding	67%	44%	33%	27%	25%	11%	9%	23%	28%
Trail bike or quad bike riding	44%	27%	43%	20%	43%	11%	0%	20%	26%
Cycling on a sealed bike path or track	14%	13%	21%	42%	0%	27%	11%	35%	25%
Snow sports	27%	29%	8%	32%	58%	21%	10%	14%	25%
Attending outdoor concerts/music festivals	0%	21%	13%	30%	11%	26%	33%	16%	22%
Volunteer work for the environment	44%	20%	29%	15%	25%	20%	19%	21%	21%
Mountain biking	38%	0%	20%	0%	29%	17%	13%	25%	18%
Water sports	33%	9%	11%	17%	24%	16%	22%	17%	18%
Rock climbing, abseiling, caving or canyoning	17%	13%	0%	36%	0%	0%	33%	13%	14%
Hiking with overnight camping	8%	0%	0%	5%	25%	33%	9%	21%	12%
Cycling on roads or footpaths for recreation	8%	17%	16%	12%	8%	18%	7%	10%	12%
Fishing	21%	16%	11%	6%	20%	8%	18%	8%	12%
Bushwalking for 2+ hrs, but not overnight	21%	0%	6%	10%	8%	7%	9%	7%	9%
Bushwalking for <2 hrs	22%	10%	0%	6%	14%	15%	3%	7%	8%
Sports involving motorised watercraft	9%	0%	0%	0%	38%	6%	13%	17%	8%
Sports involving non-motorised watercraft	9%	6%	21%	4%	15%	0%	0%	8%	8%
Visiting landmarks, lookouts and scenery	25%	0%	0%	8%	5%	4%	11%	13%	8%
Walking on roads or footpaths for recreation	0%	14%	33%	11%	0%	0%	0%	0%	7%
Nature study	11%	14%	0%	4%	17%	8%	15%	2%	7%
Car camping	25%	0%	0%	4%	22%	0%	5%	7%	6%
Running or jogging outdoors	0%	5%	11%	4%	8%	0%	0%	6%	5%
Four-wheel driving	10%	0%	13%	0%	25%	0%	0%	0%	4%
Picnicking	0%	7%	3%	3%	9%	0%	3%	1%	3%
Scenic driving with a car or motorbike	0%	0%	0%	4%	14%	8%	0%	0%	2%

* No significance testing done for this table, as base varies

MOTIVATIONS

Table 34. Motivations among participants in activities

Average	I like to get outdoors for the health benefits, like breathing the fresh air	I enjoy getting outdoors to spend time with my family or friends	I like to spend time outdoors to get a break from my day-to-day routine	I like to get outdoors for the peace and quiet	I prefer to exercise in the outdoors rather than inside	I'm willing to travel a bit further to find more untouched places for outdoor activities	I'm interested in learning about the history or cultural heritage of places I visit in the outdoors	I enjoy learning about the animals and plants of places I visit in the outdoors	I find the opportunities for adventure and challenge in the outdoors appealing	I seek isolation and escape in the outdoors
Picnicking	8.2	8.3	7.9	7.7	7.6	7.0	6.9	6.8	6.7	5.6
Walking on roads or footpaths for recreation	8.2	8.2	7.9	7.6	7.6	6.9	6.9	6.8	6.6	5.5
Visiting landmarks, lookouts and scenery	8.3	8.2	8.0	7.6	7.6	7.1	7.0	6.9	6.8	5.6
Scenic driving with a car or motorbike	8.3	8.2	7.9	7.7	7.5	7.2	7.0	6.9	6.8	5.6
Water sports	8.3	8.4	8.0	7.7	7.8	7.2	6.9	6.9	7.1	5.6
Bushwalking for <2 hrs	8.4	8.4	8.2	7.7	7.9	7.4	7.2	7.2	7.1	5.7
Attending outdoor concerts/music festivals	8.4	8.4	8.0	7.7	7.7	7.2	7.1	7.0	7.0	5.5
Running or jogging outdoors	8.2	8.3	7.9	7.7	7.9	7.0	6.6	6.7	7.1	5.5
Bushwalking for 2+ hrs, but not overnight	8.5	8.4	8.2	7.9	8.0	7.4	7.2	7.2	7.3	5.9
Nature study	8.5	8.4	8.1	7.8	7.7	7.3	7.5	7.8	7.0	5.6
Fishing	8.2	8.4	8.1	7.8	7.7	7.3	6.8	6.9	7.0	5.8
Visiting Aboriginal & other cultural heritage sites	8.3	8.4	8.3	7.8	8.0	7.6	7.6	7.4	7.2	5.9
Cycling on roads or footpaths for recreation	8.3	8.4	8.1	7.8	8.0	7.4	6.8	6.8	7.3	6.0
Cycling on a sealed bike path or track	8.3	8.5	8.2	8.0	8.1	7.5	7.0	7.0	7.5	6.1
Sports involving non-motorised watercraft	8.5	8.6	8.4	8.0	8.0	7.6	7.2	7.3	7.7	6.0

Car camping	8.2	8.7	8.2	7.8	8.0	7.5	7.0	7.0	7.5	6.0
Sports involving motorised watercraft	8.3	8.6	8.3	7.8	7.7	7.5	6.8	6.9	7.3	5.7
Four-wheel driving	8.3	8.6	8.0	7.8	7.9	7.5	7.0	6.9	7.5	6.0
Hiking with overnight camping	8.7	8.7	8.5	8.2	8.1	7.8	7.2	7.2	7.9	6.2
Mountain biking	8.5	8.5	8.0	7.8	8.3	7.4	6.7	6.6	7.6	6.1
Volunteer work for the environment	8.4	8.4	8.3	8.0	7.8	7.3	7.3	7.5	7.3	6.1
Snow sports	8.2	8.6	8.4	8.1	8.0	7.5	7.1	7.1	7.6	5.7
Trail bike or quad bike riding	8.1	8.8	8.1	7.5	7.9	7.2	6.5	6.4	7.6	5.8
Rock climbing, abseiling, caving or canyoning	8.3	8.7	8.4	7.9	8.3	7.7	6.9	7.0	8.3	6.2
Horse riding	7.7	8.1	7.7	7.7	7.8	7.1	6.7	6.7	7.2	6.0

Table 35. Motivations among those very interested in doing activities more often

Average	I like to get outdoors for the health benefits, like breathing the fresh air	I enjoy getting outdoors to spend time with my family or friends	I like to spend time outdoors to get a break from my day-to-day routine	I like to get outdoors for the peace and quiet	I prefer to exercise in the outdoors rather than inside	I'm willing to travel a bit further to find more untouched places for outdoor activities	I'm interested in learning about the history or cultural heritage of places I visit in the outdoors	I enjoy learning about the animals and plants of places I visit in the outdoors	I find the opportunities for adventure and challenge in the outdoors appealing	I seek isolation and escape in the outdoors
Walking on roads or footpaths for recreation	8.9	8.7	8.6	8.1	8.2	7.5	7.4	7.5	7.1	5.9
Bushwalking for <2 hrs	9.2	9.0	9.1	8.6	8.5	8.0	8.2	8.2	7.7	6.3
Bushwalking for 2+ hrs, but not overnight	9.2	9.1	9.0	8.7	8.7	8.4	7.8	8.0	8.1	6.6
Hiking with overnight camping	9.3	9.0	9.3	8.8	8.6	8.5	7.9	7.8	8.7	7.4
Running or jogging outdoors	8.7	8.8	8.3	7.9	8.4	7.5	7.2	7.3	7.8	5.6
Cycling on roads or footpaths for recreation	9.3	9.0	9.0	8.5	8.7	7.8	7.9	7.9	7.9	6.6
Cycling on a sealed bike path or track	9.1	9.0	8.7	8.5	8.2	8.0	7.6	7.7	7.9	6.3
Mountain biking	9.3	9.2	9.0	8.8	8.7	8.2	7.8	7.4	8.9	6.3
Picnicking	8.8	9.0	8.5	8.2	8.1	7.6	7.7	7.4	7.0	5.6
Car camping	9.1	9.3	8.8	8.4	8.6	8.4	7.8	7.6	7.8	6.7
Snow sports	8.6	8.9	8.4	7.9	8.1	7.6	7.0	7.0	8.0	5.9
Water sports	8.7	8.8	8.6	8.1	8.3	7.7	7.5	7.5	7.7	6.0

Sports involving motorised watercraft	8.5	9.1	8.7	8.1	8.2	8.1	7.0	7.2	8.3	6.3
Sports involving non-motorised watercraft	9.1	8.9	9.2	8.4	8.6	8.3	8.0	8.1	8.3	6.1
Scenic driving with a car or motorbike	8.5	8.7	8.3	7.8	7.8	7.9	7.7	7.6	7.1	5.6
Four-wheel driving	8.7	9.0	8.9	8.7	8.2	8.5	7.9	7.6	8.7	6.7
Trail bike or quad bike riding	8.2	9.2	8.8	8.1	8.7	8.0	6.7	6.8	8.6	6.3
Rock climbing, abseiling, caving or canyoning	9.1	9.3	8.7	8.5	8.6	8.5	7.8	7.5	9.0	6.8
Visiting landmarks, lookouts and scenery	9.0	8.9	8.7	8.1	8.0	8.0	8.0	7.8	7.6	5.8
Visiting Aboriginal & other cultural heritage sites	9.0	8.9	8.8	8.2	8.2	7.8	9.0	8.4	7.5	6.1
Nature study	8.9	8.7	8.6	8.1	8.2	8.0	8.2	8.7	7.6	6.3
Volunteer work for the environment	9.3	9.1	9.0	8.3	8.6	7.8	8.6	8.7	8.0	6.3
Attending outdoor concerts/music festivals	8.9	8.9	8.5	8.1	7.9	7.8	7.6	7.4	7.7	5.6
Fishing	8.6	8.8	8.3	8.1	8.0	7.8	7.3	7.3	7.1	6.3
Horse riding	8.9	8.9	8.2	8.6	7.8	7.9	7.9	7.8	7.3	6.4

APPENDIX D: FORECASTING METHODOLOGY

The forecasted populations for the demographic and cohort approach are found in the tables below. The percentage increase is the estimated increase in that age by gender group across the NSW population, as modeled by the Australian Bureau of Statistics³. This percentage was then applied as a weight to the 2009 population figures for Greater Sydney to derive the 2018 estimated population.

Forecasted population - Demographic approach

		2009	2018 estimate	% increase
Male	18-24	204,467	213,151	4%
	25-34	309,891	359,255	16%
	35-44	309,495	321,761	4%
	45-54	273,259	278,617	2%
	55-64	210,982	240,427	14%
	65-75	132,585	185,950	40%
Female	18-24	201,811	209,496	4%
	25-34	319,688	363,607	14%
	35-44	320,188	329,624	3%
	45-54	283,584	290,663	2%
	55-64	211,197	247,168	17%
	65-75	144,535	201,192	39%
Total		2,921,682	3,240,911	11%

³ Based on Australian Bureau of Statistics 3222.0 Population Projections, Australia, TABLE B1. Population projections, By age and sex, New South Wales - Series B. Series B largely reflects current trends in fertility, life expectancy at birth, net overseas migration and net interstate migration.

Forecasted population - Cohort approach

		2009	2018 estimate	% increase
Male	18-33	480,779	532,882	11%
	34-43	311,735	327,638	5%
	44-53	280,252	283,874	1%
	54-63	219,465	248,190	13%
	64-73	128,468	177,189	38%
	74-75	19,980	27,896	40%
Female	18-33	486,420	532,511	9%
	34-43	323,398	335,732	4%
	44-53	290,137	295,784	2%
	54-63	220,615	255,437	16%
	64-73	136,883	189,123	38%
	74-75	23,550	31,604	34%
Total		2,921,682	3,237,859	11%

Scenario 2: Actionable barriers are addressed and both participation and frequency increase

Method for estimating frequency

Interest in doing an activity more often was converted into a probability, according to the following scale:

Stated interest	Probability
0-4	0%
5	16.66666667%
6	33.33333333%
7	50%
8	66.66666667%
9	83.33333333%
10	100%

- For non-participants, this probability was multiplied by the proportion that cited at least one of the two 'actionable barriers' (averaged across the total sample, due to low cell sizes). Recall that barriers were only asked of those whose stated interest was at least five, as it was assumed that those who had a stated interest of lower would not actually participate more in the future.
- For current participants, their highest possible level of future participation was estimated to be that of the participant 10% higher. For example, for an activity with 100 current participants in Greater Sydney, if these participants were lined up from least to most frequent, the participant will move up 10 places (10%) along this 'line'. This would be their highest possible level of future participation. So the least frequent participant, at the start of the line, would in the future, shift to participate at the level of the 11th person along the line.
 - Similarly to the calculation for non-participants, the extent of a participant's shift was reduced by multiplying by probability and by the proportion who cited

actionable barriers. For example, for the activity horse riding, one current participant has a stated interest of 7 and does the activity 6 times a year. When the participants are ordered from least to most frequent, this participant is 57th along the line. As horse riding has 70 participants, the highest possible level of future participation is that of the 64th person along the line, which is 12 times per year. From their stated interest, we estimate that their probability of shifting to 12 times per year (the highest possible level of future participation) is 50%. Across the whole sample, 28% cited an actionable barrier for horse riding. The final estimate is calculated as shown in the diagram below

Figure D1. Calculation of forecasted participation for current participants

$$6 + ((12 - 6) \times 50\% \times 28\%) = 6.4$$

↑

Current participation
(times per year)

⏟

Potential shift
(difference between frequency of activity of participant 7 places higher and current participation)

↑

Probability of moving higher
(estimated from stated interest in doing activity more often)

↑

Actionable barriers
(averaged across whole sample due to small cell sizes)

↑

Forecasted participation
(times per year)

- In cases where the participant 10% further up ‘the line’ had the same level of participation, the highest possible level of participation was assumed to be 1 time pre year higher.
- For those in the top 10% of participation, the cut-off values were used as the highest possible level of future participation (see Section 4.2, Table 4.2.2, Data Trimming).



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