

# National Cycling Participation Survey

2019

CITY OF SYDNEY



marketsolutions  
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CDM  
RESEARCH

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# 1 Introduction

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## 1.1 Background

The National Cycling Participation Survey (NCPS) is a standardised survey that has been repeated biennially since 2011. The NCPS provides data on cycling participation at a national level and allows for estimates of participation for each state and territory, and the capital cities and non-capital areas within each state and territory. However, the sample sizes are inadequate for analysis at the local government level. Local governments may commission the survey in order to support their efforts to encourage bicycle riding within their communities

The primary objective of the survey is to measure *participation* rather than *travel*. Participation is defined as the number of individuals who have cycled for any journey or purpose and in any location over a specified time period. By comparison, travel is the number of cycling trips that occurred over that time period, and may include the distance travelled, purpose and so on. Participation is much easier to define, and for individuals to recall, than travel. It is reasonable to expect an individual would remember whether they had ridden a bicycle over the past week, month or year, but far less likely they would be able to accurately recall the number of trips they have made over that period. Further details on the method and results used in NCPS are reported in detail elsewhere<sup>1</sup>.

The survey is a telephone-based survey of residents of the study area. The sample was sourced from two commercial phone number lists (Alpha Five and Survey Pages). A random sample of landline and mobile numbers within each geographic area was selected from the Alpha Five list and a 50/50 split between landline and mobile numbers was obtained from the Survey Pages list with an intentional bias towards younger age groups (as these groups tend to be under-reported in telephone surveys).

As cycling participation is greatest among children, it is critical that the survey have coverage of this group. Data on cycling participation of those aged under 15 is obtained by asking an adult in the household to report on behalf of other household members, including children. The survey fieldwork is undertaken by Market Solutions Pty Ltd and the data analysis and reporting is provided by CDM Research.

## 1.2 Weighting

The person-level data are weighted at the gender and age level (2 – 9, 10 – 24, 25 – 49, 50+) to the ABS census 2016 population. The household-level data are weighted to ABS census 2011 household size (1, 2, 3, 4, 5, 6+ usual residents). The number of persons cycling is estimated by expanding the 2016 weights to estimated resident population for 30 June 2018 provided by the ABS.

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<sup>1</sup> Munro, C. (2011) *Australian Cycling Participation: Results of the 2011 National Cycling Participation Survey*, Austroads Publication No. AP-C91-11.

### 1.3 Statistical significance

The estimates presented in this report are based on a sample of residents from the City of Sydney local government area. These estimates are subject to sampling variability as only a proportion of residents were interviewed. The approach adopted in this report to represent this variability is to identify estimates where the relative standard error (RSE) exceeds 25% (denoted by a \*) and exceeds 50% (denoted by \*\*). Larger RSEs imply lower accuracy. As such, estimates denoted with a \* should be treated with caution and those denoted with \*\* should be considered unreliable.

In some instances, for example for participation rates, the 95% confidence interval is reported. This represents the range within which we would expect the true population estimate to reside 95% of the time. Significant differences between parameters are present where the point estimate falls outside the confidence interval of a comparison parameter.

### 1.4 Survey sample

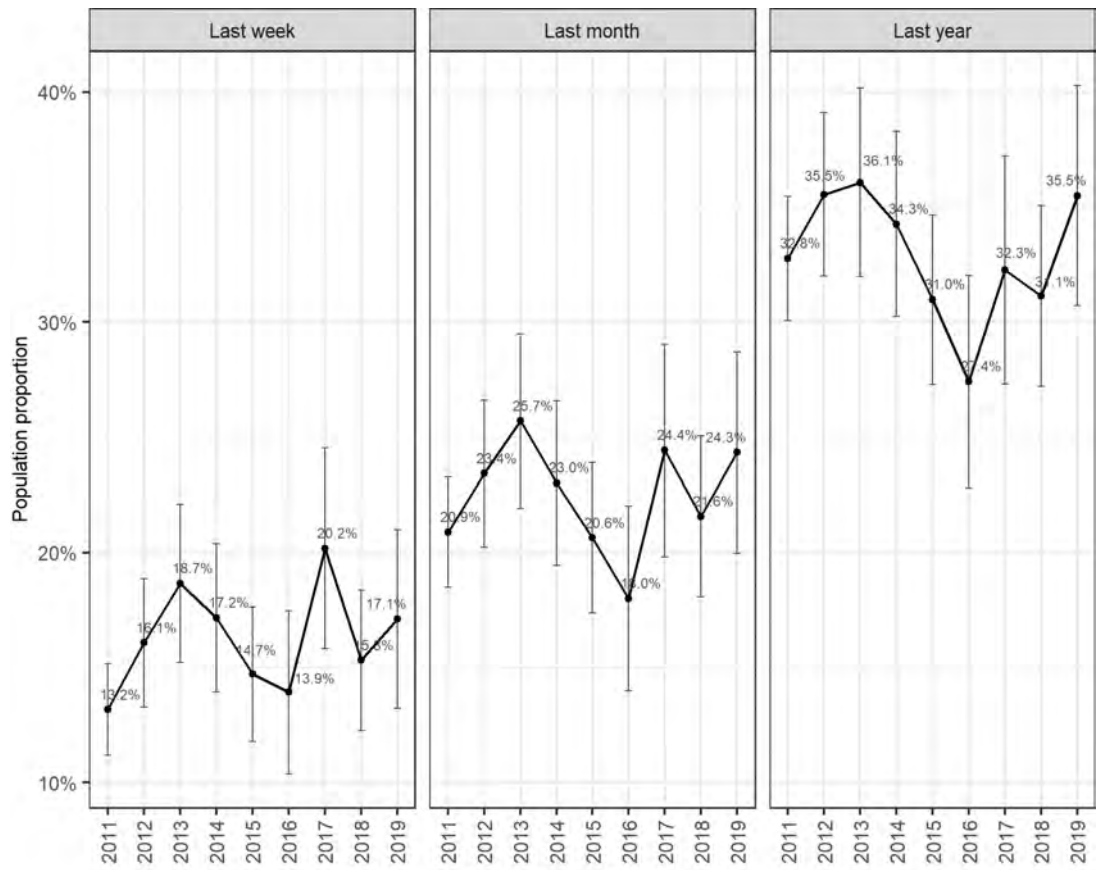
The sample consisted of 426 households containing 768 individuals. From the sample of 426 main respondents (i.e. the individual aged 15 or above with the next birthday that was selected for the interview) 73 had cycled at least once in the past year and so were presented with the perceptions component of the survey.

### 1.5 Regional comparisons

The data presented herein is compared to other relevant areas. Data for these other areas is from the 2019 National Cycling Participation Survey, which was conducted between March and May 2019.

## 2 Results

The survey suggests that 17.1% (95% CI: 13.2% - 21.0%) of City of Sydney residents ride a bicycle in a typical week. More than one third (35.5%, 95% CI: 30.7% - 40.3%) had done so in the past year (Figure 2.1).

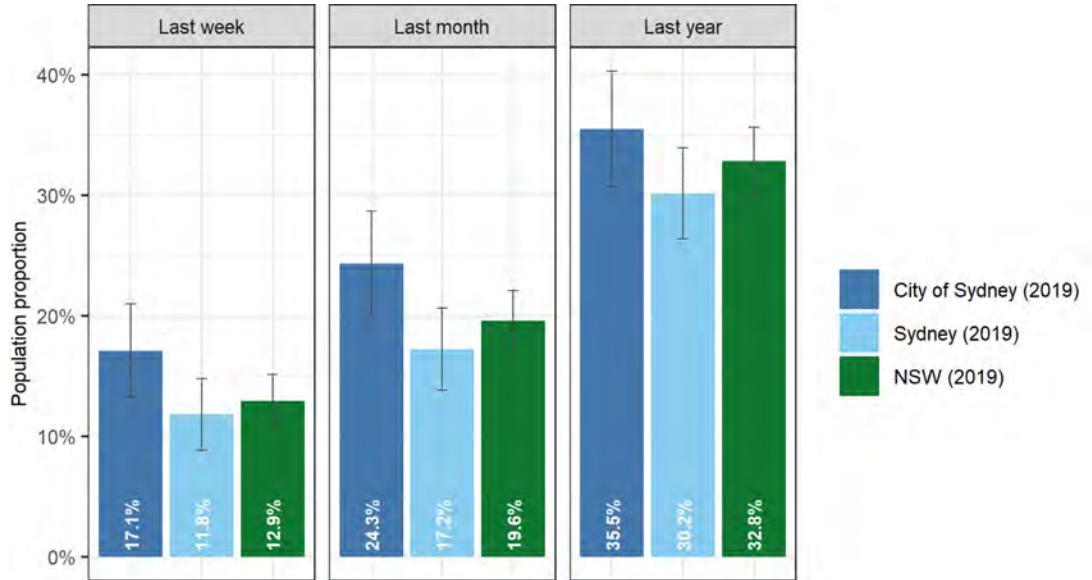


Sample: All persons

■ Figure 2.1: Cycling participation of residents (error bars represent 95% confidence intervals)

These participation rates translate to approximately 41,100 residents riding in a typical week and 85,300 residents riding at least once in a typical year.

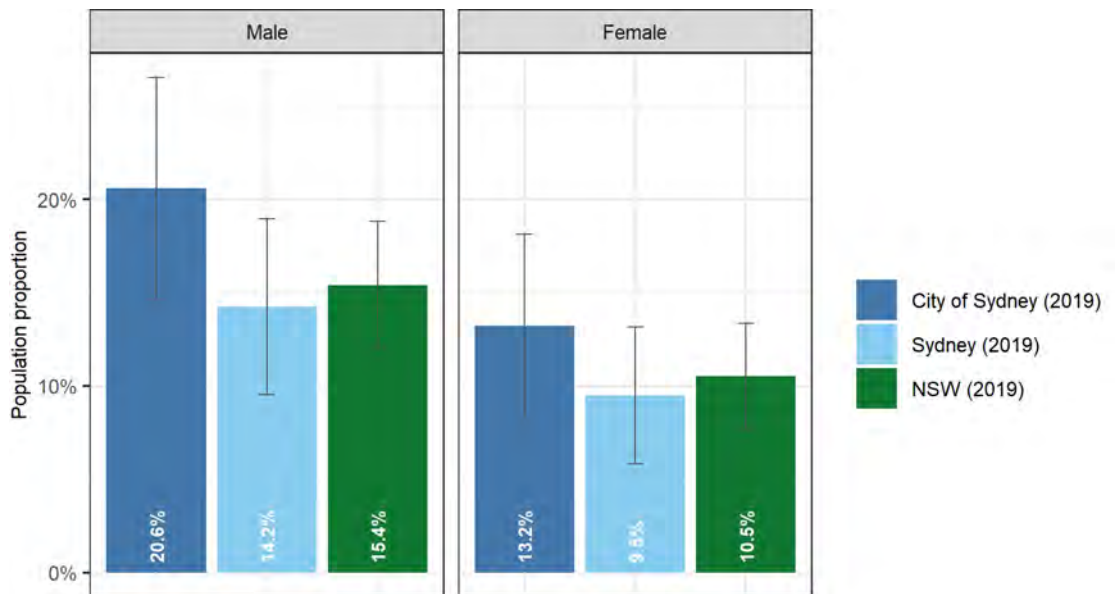
The cycling participation rate by residents of the City of Sydney is significantly higher than the metropolitan and state averages (Figure 2.2).



Sample: All persons

■ Figure 2.2: Cycling participation comparison by area

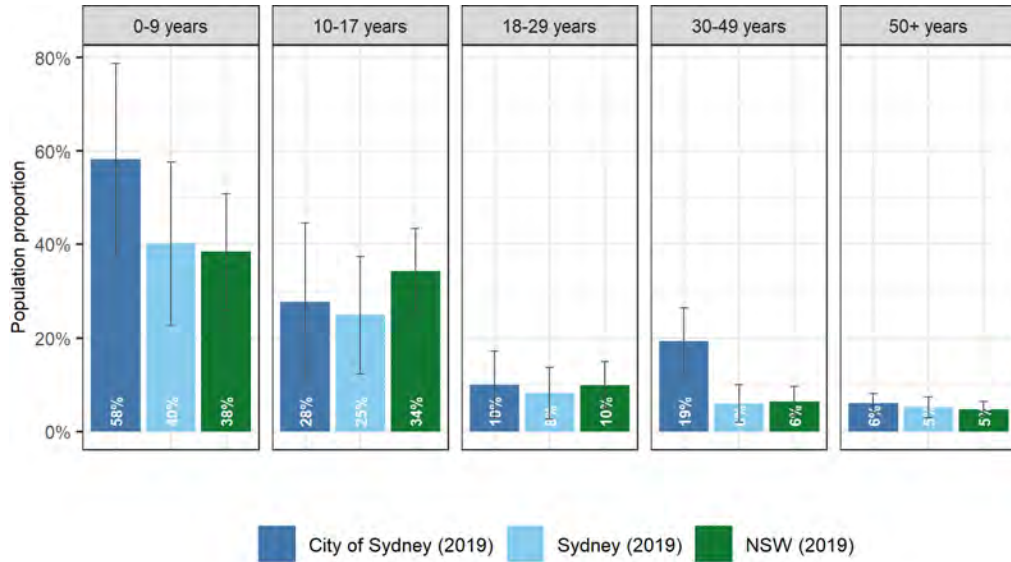
Males are significantly more likely to have ridden in the past week than females (Figure 2.3). Both male and female residents of the City of Sydney are more likely to have ridden than males and females in other parts of Sydney and NSW.



Sample: All persons, cycling participation in past week

■ Figure 2.3: Cycling participation by gender

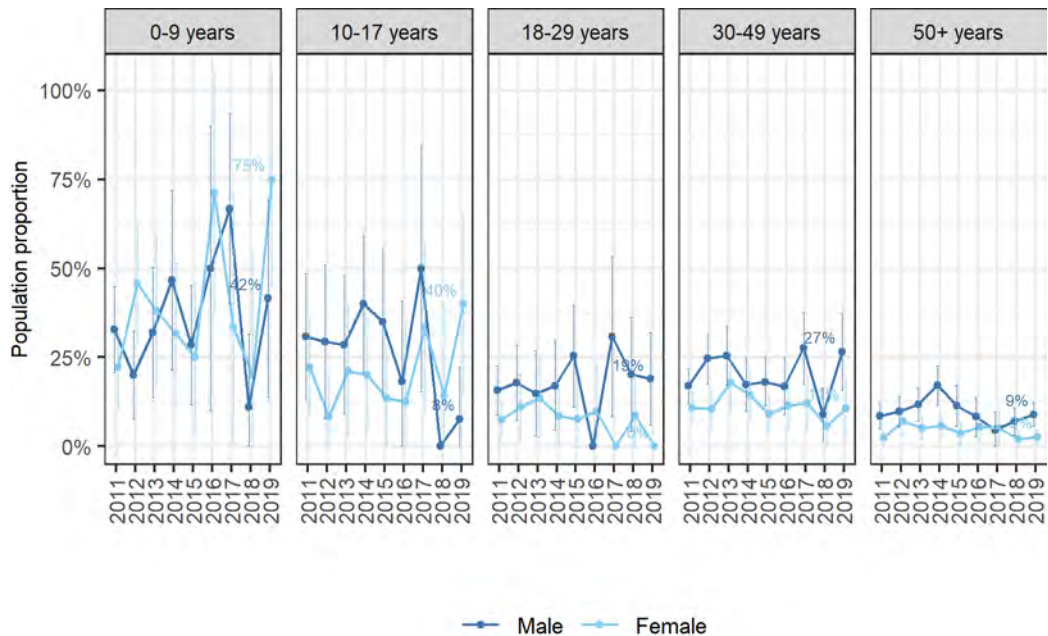
The highest cycling participation rate (measured as those who had ridden in the past week) was among children aged under 10 (Figure 2.4). The higher participation rate among City of Sydney residents appears to be motivated primarily by young children and adults aged 30 to 49.



Sample: All persons, cycling participation in past week

■ Figure 2.4: Cycling participation by age

The participation rate by gender and age group is shown in Figure 2.5. The large margins of error within groups make it difficult to ascertain trends. However, it may be that cycling participation by young children has increased since the survey was first conducted in 2011.

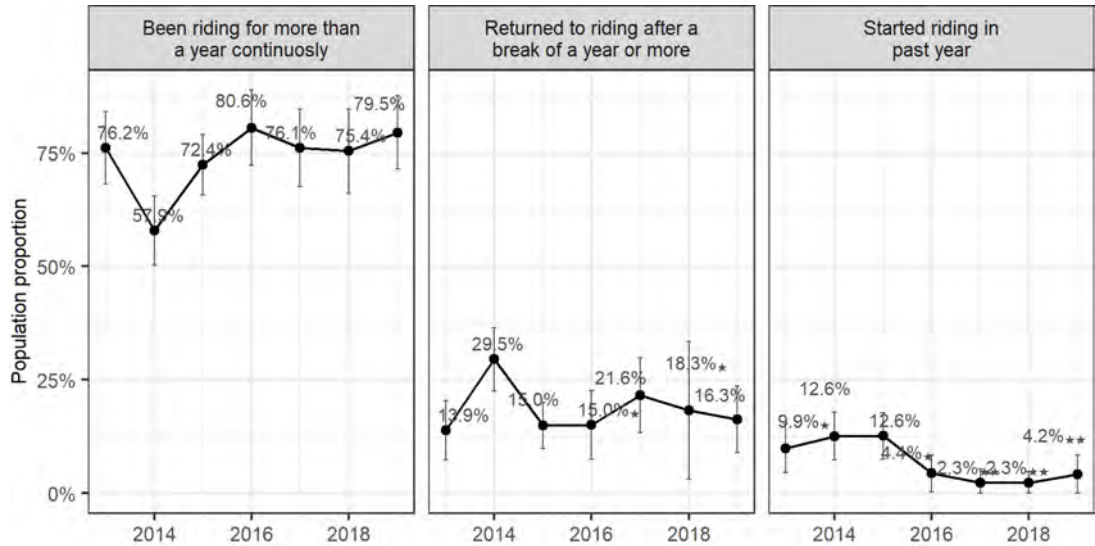


Sample: All persons, cycling participation in past week

■ Figure 2.5: Cycling participation by age and gender



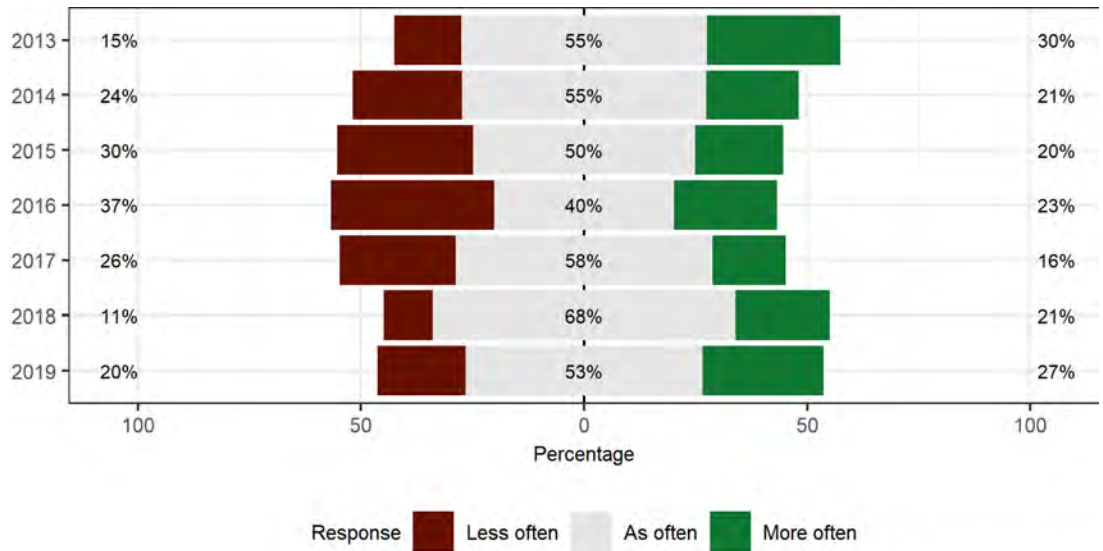
Those who indicated that they had ridden at least once over the past year were asked whether they had been cycling for a long period consistently, had recently started riding again or were altogether new to riding. This sample corresponds only to those aged 15 and over, which will contribute to the low proportion of those new to cycling. From this group 80% have been riding continuously for a year or more, 16% have returned to riding after a break and 4% have started riding in the past year (Figure 2.6).



Sample: Persons aged 15+ who had ridden in the past year  
 \* Estimate should be treated with caution.  
 \*\* Estimate should be considered unreliable.

■ Figure 2.6: Cycling history

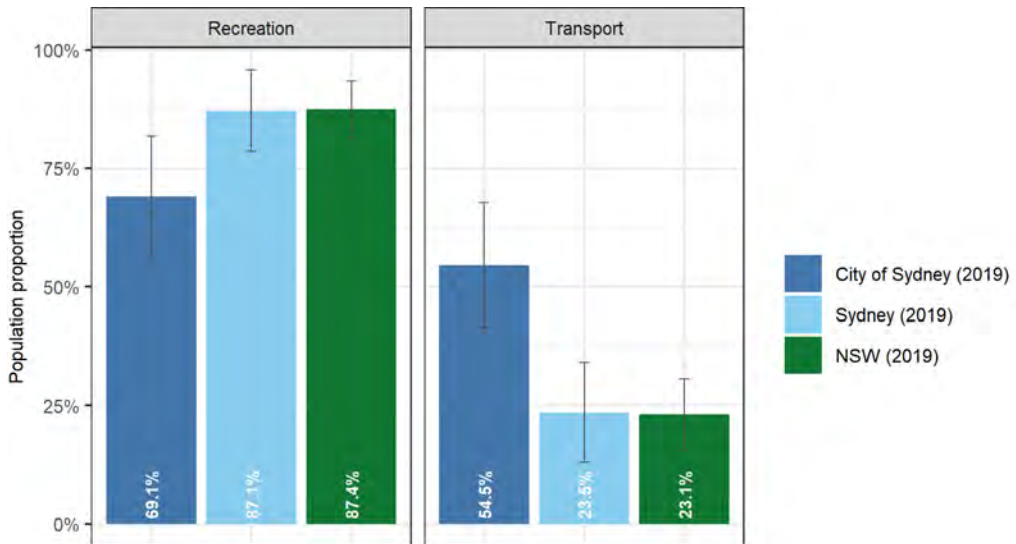
Among those who had ridden in the past year and were aged 15 or over who had indicated they had been riding continuously for more than a year, slightly more (27%) indicated they were riding more often than less often (20%) (Figure 2.7).



Sample: Persons aged 15+ who had ridden in the past year

■ Figure 2.7: Cycling frequency

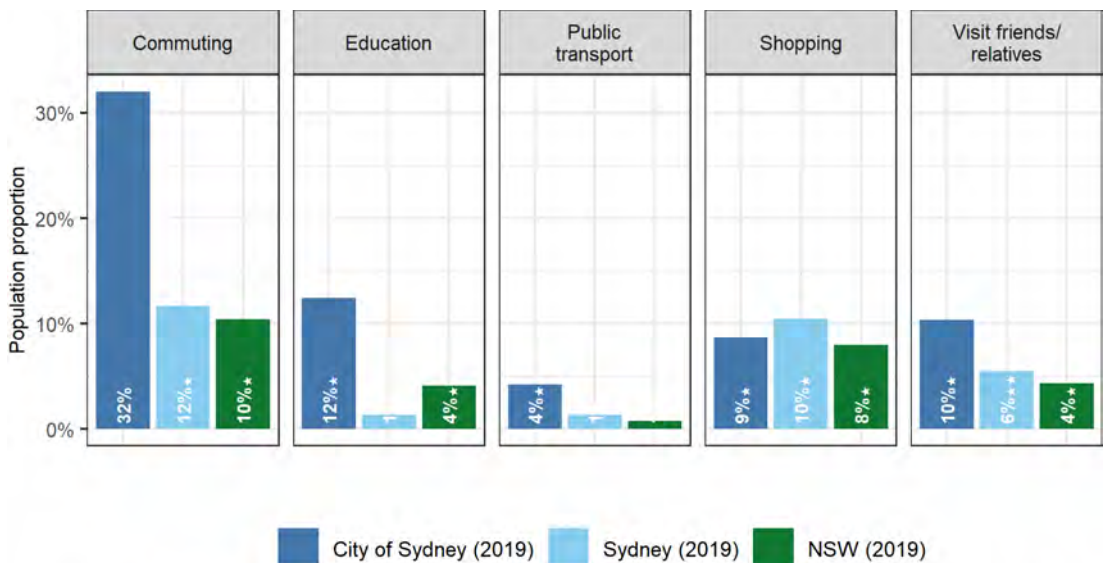
Of the residents who cycled in the past month, 69% cycled for recreation and 55% used a bicycle for transport (Figure 2.8). The proportion riding for transport is more than twice the Sydney and NSW averages.



Sample: All persons who had ridden in the past month

■ Figure 2.8: Cycling for recreation in comparison to cycling for transport

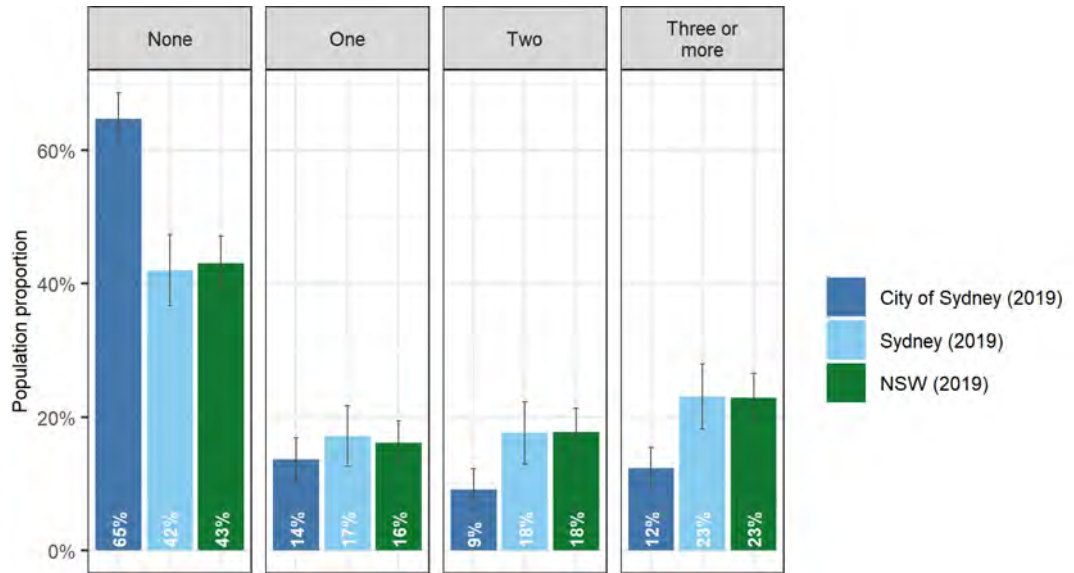
Among those who had ridden at least once in the past month and had travelled at least once for each of the transport purposes (commuting, education, public transport, shopping and visiting friends or relatives) most had ridden for commuting, education or shopping (Figure 2.9). Very few had ridden to access public transport.



Sample: All persons who had ridden in the past month and who had travelled for each purpose (by any mode).  
 \* Estimate should be treated with caution.  
 \*\* Estimate should be considered unreliable.

■ Figure 2.9: Purpose of cycling for transport

While the cycling participation rate among City of Sydney residents is higher than average the bicycle ownership rate is significantly lower (Figure 2.10).



Sample: All households

■ Figure 2.10: Bicycle ownership by household

## Appendix A: Data Tables

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The following table summarises the survey results. Estimates are provided for each parameter, as well as the 95% confidence interval and a confidence rating. This confidence rating provides an indication of the sampling variability relative to the size of the estimate using relative standard errors. The lower the relative standard error the lower the sampling variability is relative to the size of the estimate. A relative standard error of less than 25% is indicated by three stars, between 25% and 50% by two stars and above 50% by one star. A score of three stars indicates a high level of confidence such that the estimate can be treated with a high degree of confidence. A confidence rating of two stars indicates a moderate level of confidence, such that the estimate should be treated with caution. One star represents a situation where there is very low confidence in the estimate, and it is unlikely to be reliable.

**Table A.1: Participation statistics**

<b>Sample statistics</b>			
No. of households	426		
No. of individuals	768		
<b>Cycling participation</b>	<b>Estimate</b>	<b>95% confidence interval</b>	<b>Confidence rating</b>
% who rode last week	17.1%	13.2%-21.0%	★★★
% who rode last month	24.3%	20.0%-28.7%	★★★
% who rode in past year	35.5%	30.7%-40.3%	★★★
No. who rode last week	41,100	31,800-50,400	★★★
No. who rode last month	58,400	48,000-68,900	★★★
No. who rode in past year	85,300	73,800-96,800	★★★
<b>Participation by demography</b>			
<b>Gender</b>			
% of males who rode last week	20.6%	14.7%-26.5%	★★★
% of females who rode last week	13.2%	8.4%-18.1%	★★★
<b>Age</b>			
% of 0-9 years who rode last week	58.3%	37.8%-78.7%	★★★
% of 10-17 years who rode last week	27.7%	10.8%-44.6%	★★
% of 18-29 years who rode last week	10.1%	2.9%-17.2%	★★
% of 30-49 years who rode last week	19.3%	12.4%-26.3%	★★★
% of 50+ years who rode last week	6.1%	4.0%-8.1%	★★★
<b>Gender by age</b>			
Male: 0-9 years	41.7%	13.8%-69.6%	★★
Male: 10-17 years	7.7%	0.0%-22.2%	★
Male: 18-29 years	19.0%	6.0%-31.9%	★★
Male: 30-49 years	26.6%	15.7%-37.4%	★★★
Male: 50+ years	9.0%	5.5%-12.4%	★★★
Female: 0-9 years	75.0%	45.0%-105.0%	★★★
Female: 10-17 years	40.0%	15.2%-64.8%	★★
Female: 18-29 years	0.0%	0.0%-0.0%	
Female: 30-49 years	10.7%	2.6%-18.8%	★★
Female: 50+ years	2.6%	0.7%-4.6%	★★

**Table A.1 (cont.): Participation statistics**

Participation by purpose	Estimate	95% confidence interval	Confidence rating
<b>Summary</b>			
% of those who rode in past week for recreation/exercise	69.1%	56.3%-81.8%	★★★
% of those who rode in past week for transport	54.5%	41.4%-67.7%	★★★
<b>Detail</b>			
% of those who rode in past week for commuting	32.0%	19.8%-44.3%	★★★
% of those who rode in past week for education	12.5%	3.8%-21.1%	★★
% of those who rode in past week for shopping	8.7%	1.7%-15.7%	★★
% of those who rode in past week to train/tram/bus	4.2%	0.0%-9.8%	★
% of those who rode in past week to visit friends/relatives	10.4%	2.0%-18.7%	★★
<b>Cycling travel</b>			
<i>Caution: cycling travel estimates are biased by self-reporting and recall limitations, and should be treated with a high level of caution.</i>			
Average number of days ridden by those that had ridden in past week	3.4	2.8-3.9	★★★
Average time ridden (mins) in past week by those that that had ridden	195	142-248	★★★
<b>Household characteristics</b>			
<b>Working bicycles (incl. electrically assisted)</b>			
% of households without a working bicycle	64.7%	60.7%-68.7%	★★★
% of households with one working bicycle	13.7%	10.5%-16.9%	★★★
% of households with two working bicycles	9.2%	6.1%-12.3%	★★★
% of households with three or more working bicycles	12.4%	9.3%-15.5%	★★★
<b>Working electrically assisted bicycles</b>			
% of households without a working electrically assisted bicycle	100.0%	100.0%-100.0%	★★★
% of households with one working electrically assisted bicycle	0.0%	0.0%-0.0%	
% of households with two working electrically assisted bicycles	0.0%	0.0%-0.0%	
% of households with three or more working electrically assisted bicycles	0.0%	0.0%-0.0%	

## Appendix B: Survey Script

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### INTRODUCTION

My name is (...) calling on behalf of [insert relevant state roads authority or Council] from Market Solutions, a social and market research company. Today we are conducting a quick survey about the travel habits of people across Australia. The survey will be used to track travel patterns over time. Would you be able to spend a few minutes describing a little about the way you get around?

RESPONDENTS MUST BE AGED 15 YEARS OR OVER. DO NOT MENTION CYCLING IN INTRO.

Your responses will be held strictly confidential. My supervisor may listen to parts of this interview to assist in quality control monitoring.

CONTINUE	1
Schedule Callback	2
Soft refusal	3
Hard refusal	4
Non qualifying	5
Not a residential number	6
Terminated early	7
Communication difficulty	8
Language other than English	9
No contact on final attempt	10
Over quota	11
Duplicate	12
Away for duration of study	13
Non working number	14
No answer	15
Answering machine – msg left	16
Answer mach. – other attempts	17
Engaged	18
Incorrect details	19

### CONFIRM LOCATION (LGA, REGION)

Q.1. We are interested in speaking to people who live in [READ IN POSTCODE]. Can you confirm this is your postcode?



Yes 1  
No (SPECIFY POSTCODE) 2

Q.2. Ask only Council samples – otherwise go to next question  
And can you confirm that your council area is (READ IN COUNCIL AREA)?  
INSERT COUNCIL AREA .....

CHECK QUOTAS AND CONTINUE OR TERMINATE AS REQUIRED

SECTION 1: MAIN RESPONDENT'S TRAVEL

Q.3. In the last 7 days, have you used any of the following? (READ OUT) (ACCEPT MULTIPLES)

Car as a driver	1
Car as a passenger	2
Motorcycle	3
Train	4
Bus	5
Tram	6
Bicycle, even just riding in your backyard	7
None of the above	8

INTERVIEWER NOTE: DEFINITIONS OF BICYCLES INCLUSIONS:

- ADULT AND CHILDREN'S BICYCLES WITH TWO OR MORE WHEELS
- CHILDRENS BICYCLES WITH TRAINING WHEELS

EXCLUSIONS:

- ANY REGISTERED VEHICLES (E.G. MOPEDS)
- CHILDREN RIDING TOYS SUCH AS TRICYCLES AND SCOOTERS
- CHILDREN WHO ARE IN A SEAT OR TRAILER ON A BICYCLE
- RIDING ON A STATIONARY EXERCISE BICYCLE

Q.4. Ask if did not ride in the last 7 days – otherwise go to next question

When did you last ride a bicycle? (READ OUT) (ONE ONLY)

- |                       |   |
|-----------------------|---|
| In the last 2 weeks   | 1 |
| In the last 3 weeks   | 2 |
| In the last 4 weeks   | 3 |
| More than a month ago | 4 |
| More than a year ago  | 5 |
| Never                 | 6 |

Q.5. Ask if last rode in the last 7 days – otherwise go to Q.7

In the last 7 days, on how many days did you ride a bicycle?

INSERT NO. DAYS .....

Q.6. What is your best estimate of the total time you have spent riding over the past 7 days?

INTERVIEWER NOTE: Record number of HOURS. e.g. 90 minutes should be recorded as 1.5 hours.

INSERT NO. OF HOURS .....

Q.7. Ask if rode in past 4 weeks – otherwise go to next question

For what purposes did you ride over the last 7 days/2 weeks/3 weeks/4 weeks? (READ OUT) (ACCEPT MULTIPLES)

- |  |   |
|--|---|
| To or from work                        | 1 |
| To or from school, university or study | 2 |
| To or from shopping                    | 3 |
| For recreation or exercise             | 4 |
| To get a train, bus or tram            | 5 |
| To visit friends or relatives          | 6 |
| Some other reason (Specify)            | 7 |

Q.8. Ask if rode in past year – otherwise go to Q.10

Which of the following statements best describes you? Would you say you... (READ OUT)

- |  |   |
|--|---|
| Are new to cycling (started cycling in the last 12 months)     | 1 |
| Have started to cycle again after a break of 12 months or more | 2 |
| Have been cycling for more than 12 months                      | 3 |

Q.9. Ask if rode in past year and have been cycling for more than 12 months – otherwise go to next question

And would you say that you... (READ OUT)

- |                                       |   |
|---------------------------------------|---|
| Cycle more frequently than a year ago | 1 |
| Cycle as frequently as a year ago     | 2 |
| Cycle less frequently than a year ago | 3 |

## SECTION 2: MAIN RESPONDENT'S DEMOGRAPHICS

We are interested in understanding a little about those who ride bikes and those who do not. This will help us understand how interest in cycling changes over time.

Q.10. Just a couple of questions now to help us analyse responses.

GENDER: (RECORD AUTOMATICALLY)

- |        |   |
|--------|---|
| Male   | 1 |
| Female | 2 |

Q.11. AGE: What is your age? (INSERT 99 FOR DON'T KNOW – NONE SHOULD BE UNDER 15 YEARS OF AGE)

- |                  |    |
|------------------|----|
| Under 2 years    | 1  |
| 2 to 4 years     | 2  |
| 5 to 9 years     | 3  |
| 10 to 14 years   | 4  |
| 15 to 17 years   | 5  |
| 18 to 24 years   | 6  |
| 25 to 29 years   | 7  |
| 30 to 39 years   | 8  |
| 40 to 49 years   | 9  |
| 50 to 59 years   | 10 |
| 60 to 69 years   | 11 |
| 70 to 79 years   | 12 |
| 80 years or over | 13 |
| (Refused)        | 14 |

Q.12. OCCUPATION: Which of the following categories apply to you at the moment?  
(READ OUT) (ACCEPT MULTIPLES)

Student – Full time	1
Student – Part time	2
Work – Full time (>35hrs/week)	3
Work – Part time (<35hrs/week)	4
Work – Casual	5
Work – Unpaid voluntary work	6
Unemployed and looking for work	7
Home duties	8
Pensioner – not retirement age	9
Retired – on pension	10
Retired – not on pension	11
Other (Specify)	12
(Refused)	13

Q.13. How many people usually live in your household? INCLUDE ALL AGES – A  
RESIDENT IS SOMEONE WHO HAS, OR WILL, LIVE AT THE HOUSEHOLD FOR A  
PERIOD OF AT LEAST 3 MONTHS

RECORD NUMBER.....

Ask next section if household has more than 1 member – otherwise go to close

**SECTION 3: OTHER HOUSEHOLD MEMBERS TRAVEL**

**INTRO > 2 PEOPLE IN HOUSEHOLD:**

We would now like to understand a little about the way the other people in your household use bikes and get a little detail about them. Starting with the oldest person in the household other than yourself and working down, could you tell me...?

**INTRO = 2 PEOPLE IN HOUSEHOLD:**

We would now like to understand a little about the way other people in your household use a bike and get a little detail about them, could you tell me...?

ASK Q.14 – Q.21 FOR EACH OTHER HOUSEHOLD MEMBER THEN GO TO CLOSE

Q.14. GENDER: What is their gender?

Male	1
Female	2

Q.15. AGE: What is their age? (INSERT 99 FOR DON'T KNOW)

Under 2 years	1
2 to 4 years	2
5 to 9 years	3
10 to 14 years	4
15 to 17 years	5
18 to 24 years	6
25 to 29 years	7
30 to 39 years	8
40 to 49 years	9
50 to 59 years	10
60 to 69 years	11
70 to 79 years	12
80 years or over	13
(Refused)	14
(Don't know)	15

Q.16. Ask for each person aged five years or over – otherwise go to next section  
OCCUPATION: Which of the following categories apply to THIS PERSON at the moment?  
(READ OUT) (ACCEPT MULTIPLES)

Student – Full time	1
Student – Part time	2
Work – Full time (>35hrs/week)	3
Work – Part time (<35hrs/week)	4
Work – Casual	5
Work – Unpaid voluntary work	6
Unemployed and looking for work	7
Home duties	8
Pensioner – not retirement age	9
Retired – on pension	10
Retired – not on pension	11

Other (Specify)	12
(Refused)	13
Child – not school age	14

Q.17. In the last 7 days, has this person used any of the following methods of transport?  
(READ OUT) (ACCEPT MULTIPLES)

Car as a driver	1
Car as a passenger	2
Motorcycle	3
Train	4
Bus	5
Tram	6
Bicycle, even just riding in your backyard	7
None of the above	8
(Don't know)	7

**INTERVIEWER NOTE: DEFINITIONS OF BICYCLES**

**INCLUSIONS:**

- ADULT AND CHILDREN'S BICYCLES WITH TWO OR MORE WHEELS
- CHILDRENS BICYCLES WITH TRAINING WHEELS

**EXCLUSIONS:**

- ANY REGISTERED VEHICLES (E.G. MOPEDS)
- CHILDREN RIDING TOYS SUCH AS TRICYCLES AND SCOOTERS
- CHILDREN WHO ARE IN A SEAT OR TRAILER ON A BICYCLE
- RIDING ON A STATIONARY EXERCISE BICYCLE

Q.18. Ask if did not ride in the last 7 days – otherwise go to next question  
When did THIS PERSON last ride a bicycle? (READ OUT) (ONE ONLY)

In the last 2 weeks	1
In the last 3 weeks	2
In the last 4 weeks	3
More than a month ago	4
More than a year ago	5

Never 6  
(Don't know) 7

Q.19. Ask if last rode in the last 7 days – otherwise go to Q21

In the last 7 days, on how many days did they ride a bicycle? (RECORD 99 FOR DON'T KNOW)

INSERT NO. DAYS .....

Q.20. What is your best estimate of the total time they have spent riding over the past 7 days?

(RECORD 99 FOR DON'T KNOW)

INTERVIEWER NOTE: Record number of HOURS. E.g. 60 minutes should be recorded as 1 hour.

INSERT NO. OF HOURS .....

Q.21. Ask if rode in past 4 weeks, otherwise go to next question

For what purposes did they ride over the last 7 days/2 weeks/3 weeks/4 weeks? (READ OUT) (ACCEPT MULTIPLES)

To or from work	1
To or from school, university or study	2
To or from shopping	3
For recreation or exercise	4
To get a train, bus or tram	5
To visit friends or relatives	6
Some other reason (Specify)	7
Don't know	8

Q.22. How many bicycles in working order are in your household? INTERVIEWER NOTE: DEFINITIONS OF BICYCLES

INCLUSIONS:

- ADULT AND CHILDREN'S BICYCLES WITH TWO OR MORE WHEELS
- CHILDRENS BICYCLES WITH TRAINING WHEELS

EXCLUSIONS:

- ANY REGISTERED VEHICLES (E.G. MOPEDS)
- CHILDREN RIDING TOYS SUCH AS TRICYCLES AND SCOOTERS
- CHILDREN WHO ARE IN A SEAT OR TRAILER ON A BICYCLE
- RIDING ON A STATIONARY EXERCISE BICYCLE

RECORD NUMBER.....

CLOSE

Q23. As part of quality control procedures, someone from our project team may wish to re-contact you to verify a couple of responses you provided today. For this reason, may I please have your first name?

RECORD FIRST NAME

Q24. As this is market research, it is carried out in compliance with the Privacy Act and the information you provided will be used only for research purposes. Your answers will be combined with those of other participants, no individual responses will be identified.

We do re-contact people from time to time for related research projects. Would it be okay if we contacted you again in the future to invite you to participate in any similar research? We will only use this information to contact you to invite you to participate in research, your details will not be passed on to any third party.

IF AGREE, SAY: We will only keep your contact details on record for 12 months. You may ask to have your details removed at any time over the next 12 months.

- |                                 |   |
|---------------------------------|---|
| Agree to future research        | 1 |
| Do not agree to future research | 2 |

CLOSE: That's the end of the interview. Thank you for your time and responses. My name is (...) from Market Solutions, if you have any queries about this survey feel free to call this office during business hours – would you like the number? (Provide number if required – 03 9372 8400. If you have any general queries, you can call the Market Research Society's Survey Line on 1300 364 830.

RECORD INTERVIEWER'S ID



AUDITING (OFFICE ONLY)

Q25. Was the date and time of interview correct?

Yes 1

No 2

Q26. Was the interview recorded correctly?

Yes 1

No 2

Q27. Was the interviewer courteous?

Yes 1

No 2

Q28. AUDITOR'S ID

ENTER ID.....