

# Public support for bicycling and transport policies in inner Sydney, Australia: a cross-sectional survey

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**T**ransport policy is a fundamental element of urban planning and can have a significant impact on population health.<sup>1</sup> Decisions about government investment in different transport options (for example, heavy versus light rail, motorways or busways, pedestrian and bicycle paths) are determined by a complex interplay of factors, including ideology, vested interests, planning models, research evidence and public opinion.<sup>2</sup>

In general, even in motor vehicle dominated contexts, there is a high level of public support for public transport policies, and those policies that support walking and bicycling.<sup>3</sup> Personal experience with active commuting and positive attitudes toward walking and bicycling are usually associated with support for policies that encourage walking and bicycling for transport.<sup>4</sup> A review of public support for transport policies in the UK by Goodwin and Lyons found several major themes in the literature.<sup>5</sup> First, there was evidence of majority attitudes that traffic congestion is seen as a national (UK) problem, but less so for individual respondents and their families; second, there was a large majority (but not unanimous) support for improvements to public transport, reductions in speed and restrictions on traffic in residential areas, while road building and road pricing were divisive and controversial; and third, there was evidence of a graded willingness to change behaviour for environmental reasons. In the national Australian Transport Opinion conducted in September 2017, 42% of respondents said

## Abstract

**Objective:** To describe the degree of community support – and factors associated with this support – for a number of potential transport policy options among an inner-city sample of residents in Sydney, Australia.

**Methods:** This study analysed data collected from a cross-sectional online survey: Wave 3 of the Sydney Transport and Health Study, conducted in September–October 2015 (n=418).

**Results:** There was a high level of overall support for policies to make public transport cheaper (85%), have more bicycle paths separated from motor vehicles (82%) and have a public bike-share program (72%), with similar levels of support across usual commute mode, age and sex.

**Conclusions:** Despite a natural tendency for respondents to support transport policies that were of most relevance to themselves, it appeared that, in this sample, public support for public transport and bicycling policies remained strong across all respondents.

**Implications for public health:** Policies that support public transport and active travel and achieve positive health outcomes would be well received by inner-Sydney residents.

**Key words:** transport policy, active travel, bicycle, survey, health promotion

that the highest priority issue for transport in Australia was public transport improvements.<sup>6</sup> Globally, in addition to emphases on public transport, some governments and cities are enacting policies to encourage more transport trips by bicycle.<sup>7–9</sup> Increasing the bicycle mode share can contribute to reduced traffic congestion and increase the enjoyment of the commute,<sup>10</sup> and have significant personal and societal health benefits.<sup>11</sup> For example, in a large UK-based prospective cohort study, bicycling to work and mixed mode bicycling were associated with a significantly lower risk of cardiovascular disease (CVD), cancer and all-cause mortality.<sup>12</sup>

Many of the strategies to increase bicycling participation are well understood.<sup>13,14</sup> However, the exact approach that

optimally meets the needs of any single place will depend on local circumstances, and be subject to different opinions and perspectives. Policy makers can be conservative when making policy decisions, usually in an attempt to avoid potential alienation from some stakeholders.<sup>15</sup> At times, there may be a disconnection between public attitudes and desire, and the policies of elected policy makers. Data on public attitudes towards particular policy options can be very important for demonstrating what policies are most likely to be readily accepted by the public, and thereby help to realign public policies with public attitudes.<sup>16</sup> Urban transport policy discussion represents both an opportunity for problem solving as well as a potential source of conflict.

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One example of opportunity for bicycling policy and infrastructure development and conflict comes from the City of Sydney. The City of Sydney has made good progress towards creating an environment supportive of bicycling (including bicycle paths separated from traffic, on-road bike lanes and behaviour change strategies), resulting in genuine increases in the number of trips by bicycle.<sup>17–19</sup> There have also been some set-backs, such as the removal by the NSW State Government of a well-used city bicycle path, and significantly increased fines for bicycling-related traffic infringements (such as not wearing a helmet, riding through a red light, or riding dangerously [not defined]).<sup>20</sup> The role of bicycling in the transport mix in Sydney remains contested, and is part of the background context for the present study.

This paper describes the degree of community support – and factors associated with this support – for a number of potential transport policy options among an inner-city sample of residents in Sydney, Australia.

## Methods

### Design

The design for this study was a cross-sectional online survey, using data collected from Wave 3 of the Sydney Travel and Health Study (STAHS).<sup>21</sup> Briefly, the STAHS is a longitudinal, quasi-experimental study using a panel of participants to evaluate the impact of new bicycling infrastructure in inner Sydney.

### Sample

Participants (n=846) were initially recruited through various methods (online consumer panels, cold calling, social media, electronic circulation lists, mailbox drops and intercept events focused around bicycling) into the panel with agreeable participants then sent a URL to begin the survey. Baseline data were collected online in September and October 2013. Participants were identified as living in either the intervention or comparison area. The intervention area was defined as an area in close proximity to the new bicycle path along George Street, Redfern. The comparison area was in the Glebe area and included neighbourhoods a similar distance from the central business district and with a similar demographic profile, and where the local council had no plans to modify bicycling infrastructure during the study period. A map of the study area can be found in previous STAHS publications.<sup>19</sup> Participants

were eligible for the study, subject to the geographic constraints described above, if they were aged 18–55 years, had ridden a bicycle in their life and had no current disability preventing them from riding, and had sufficient English to complete the survey.<sup>21</sup>

The study was repeated in September–October 2014, four months after the bicycle path opened (Wave 2), and again in September–October 2015, 16 months after opening (Wave 3). The current analysis focused on the sample of participants in the third wave of data collection (n=418, 49.4% of the baseline sample).

### Variables

Participants were asked to rate the extent to which they agreed or disagreed with a series of transport policies that could be implemented in Sydney. These policies were: A public bicycle share program (like in London and Melbourne); Reducing motor vehicle speeds to 30km/h in built up areas; More bicycle paths (separated from cars); Implementing more traffic calming measures (e.g. more narrow streets and blocked street sections); Increasing the cost of car parking; Building more urban freeways; Making public transport cheaper; Reducing the price of petrol; Reducing the number of car parking places; More car-share spots; Giving adults a choice about wearing a helmet when cycling; Allowing bicycles to turn left when the light is red (if clear). Response options were ‘completely disagree’, ‘somewhat disagree’, ‘neither agree nor disagree’, ‘somewhat agree’, or ‘completely agree’. These questions were adapted from those used in New Zealand<sup>22</sup> and the UK.<sup>5</sup> For ease of analysis and presenting purposes these variables were dichotomised with ‘completely agree’ or ‘somewhat agree’ being combined, and ‘completely disagree’, ‘somewhat disagree’ or ‘neither agree nor disagree’ being grouped together.

Participants were also asked about their usual mode of travel to work or study: What is the main way you travel to/from work or study’, with the response options being public transport, motor vehicle, bicycle, walking or no travel. This question was validated in a separate study.<sup>23</sup> Car ownership was assessed by asking: How many motor vehicles in working order (e.g. cars, trucks, motorcycles) are there at your household? and bicycle ownership by asking: Is there a bicycle at your home that is available for you to ride?

### Statistical analyses

Post-stratification weightings were created to weight the sample to the inner-Sydney population for age and sex and stratified for area of residence within inner Sydney using 2011 census data,<sup>24</sup> given the data were collected in more than one area of the city. Support for the various policies was first compared across modes of travel to work/study using Pearson’s Chi-squared test. Multiple logistic regression analysis was then used to compare likelihood of support for each policy across transport modes adjusting for car ownership, bicycle ownership, age and sex. The overlap between ownership of bicycles (62.7%) and using a bicycle to commute (10.8%) was small and there was no collinearity in the data. Adjustment for intervention/comparison area made no difference to the results. Analyses were conducted using Stata version 13 (StataCorp LP, College Station, TX).

The research was approved by the Human Research Ethics Committee, The University of Sydney (protocol number 2012/2411).

## Results

The characteristics of the sample are presented in Table 1. Compared with the baseline sample,<sup>25</sup> there was some differential loss to follow-up including a higher proportion of young males. The weighted sample was similar to the baseline sample in terms of bicycle ownership, usual mode of travel to work, education and income. The initial oversampling of cyclists in the study allows for better comparison between mode options. As such, the weighted sample reflects fewer car drivers than the inner-Sydney population and a greater proportion of cyclists. Bicycle ownership in the sample, and in the Sydney population, was almost six times higher (62.7%) than the proportion of the respondents who rode a bicycle to work or study (10.8%), and was almost as high as car ownership, which was 81.1% of the sample.

### Active travel supportive policies

Among the weighted sample, the highest level of agreement for any policy intervention was for cheaper public transport (85% agreement) and more bicycle paths, separated from motor traffic (81.5% agreement), both of which are policies aimed at encouraging greater active travel.

These responses held irrespective of their modes travel to work or study ( $p=0.37$  or  $0.23$ ), see Table 2. Multivariate logistic regression models were used to understand the relative impact of factors influencing support or opposition to each policy (Table 3). After adjusting for all other factors, it was evident that car owners and bicycle owners were less supportive of policies to make public transport cheaper (both  $p<0.05$ ). Bicycle paths were accepted equally across demographic groups, with only bicycle owners being more likely to support interventions to develop more bicycle paths and being almost five times more likely to support this policy compared with non-bicycle owners (Adjusted Odds Ratio [AOR]: 4.70; 95%CI: 2.35-9.34), see Table 3.

Table 2 also shows support for a public bicycle share program was relatively high (71.6% agreement) and consistent across the sample with no group more or less supportive of the intervention, although it is interesting that the lowest level of support was from bicycle users (64.6%) while the highest was from walkers (80.7%), but this was not statistically significant. Policies that would allow bicycles to turn left into the flow of traffic at a red light were neutrally accepted across mode users (54.7% agreement); however, had the strongest level of support from bicycle commuters (93.0% agreement). Adjusting for all other factors in the model, bicycle commuters vs. public transport users (AOR:7.81, 95%CI: 2.41-25.28) and bicycle owners more broadly (AOR:3.69, 95%CI: 2.20-6.19) were more likely to support this policy. Bicycle commuters were also more likely to support the policy to allow adults the choice to wear helmets rather than mandatory use, as is the current legislation in Australia (55.2%,  $p=0.008$ ). Car users were the least supportive of car-share spots (42.9%,  $p=0.053$ ).

### Motor vehicle restrictive policies

Policies aimed at restricting motor traffic received lower levels of support. Reducing car parking received the lowest support of any policy (13.6% agreement overall), see Table 2. Yet, relative to the other modes of travel to work or study, bicycle commuters were more than five times as likely as public transport users to support this policy (AOR: 5.57, 95%CI: 1.98-15.70). Compared with public transport users, car commuters were less likely (but not statistically significantly) to support increasing the cost of parking (AOR: 0.62, 95%CI: 0.23-1.67) and bicycle commuters

**Table 1: Sample characteristics and comparisons with the inner Sydney population (n=418).**

	N*	Unweighted sample %	Weighted <sup>a</sup> sample %	Inner Sydney population %
<b>Sex</b>				
Male	156	37.3	52.1	52.2
Female	262	62.7	47.9	47.8
<b>Age group<sup>c</sup></b>				
18-24	45	10.8	19.6	14.8*
25-34	76	18.2	32.6	28.6
35-44	122	29.2	20.7	17.4
45-55 years	175	41.9	27.1	11.5
<b>Education</b>				
Less than tertiary	105	25.1	24.0	30.6
Tertiary	310	74.2	76.0	69.4
Missing	3	0.7	—	—
<b>Total household income per annum</b>				
Less than \$80,000	101	27.9	29.4	\$49,312 <sup>d</sup>
\$80,000 or more	261	72.1	70.6	
<b>Main mode of travel to work/study</b>				
Public transport	161	41.7	46.2	31.3
Car <sup>b</sup>	120	31.1	26.6	42.5
Bicycle	36	9.3	10.8	3.6
Walk	69	17.9	16.3	22.6
<b>Bicycle ownership</b>				
Yes	266	63.6	62.7	46.0 <sup>e</sup>
No	152	36.4	37.3	54.0
<b>Car ownership</b>				
Yes	354	84.7	81.1	63.6 <sup>f</sup>
No	64	15.3	18.9	36.4

Notes:

a: weighted to Australian bureau statistics 2011 Australian census

b: Car mode includes motor bike and taxis

c: Census data includes 15-17yo

d: average per annum

e: Bicycle ownership reflects the Greater Sydney region, which is lower than the inner Sydney level

f: Estimates calculated as number of vehicles registered in the inner-city by the population aged 20-79

\* May not add up due to missing values

**Table 2: Support for potential policies, by usual mode of transport to work (weighted).**

Potential policies	% agreed					P value <sup>a</sup>
	Overall	Mode of travel to work				
		Bicycle	Walk	Public transport	Car	
Public bicycle share program (like in London and Melbourne)	71.6	64.6	80.7	72.0	67.9	0.387
More bicycle paths (separated from cars)	81.5	89.0	82.4	77.1	85.7	0.231
Allowing bicycles to turn left when the light is red (if clear)	54.7	93.0	49.8	49.3	52.3	<0.001
Giving adults a choice about wearing a helmet when cycling	29.1	55.2	33.9	24.4	24.2	0.008
Making public transport cheaper	85.0	83.8	90.3	86.5	79.5	0.371
More car share spots	55.8	64.5	65.3	58.0	42.9	0.053
Reducing motor vehicle speeds to 30km in built up areas	30.9	38.8	36.9	33.7	19.2	0.083
Reducing the number of car parking places	13.6	37.8	16.9	10.6	7.4	<0.001
Increasing the cost of car parking	21.5	55.3	26.2	19.3	9.3	<0.001
Implementing more traffic calming measures (e.g. more narrow streets and blocked street sections)	32.4	62.8	31.1	31.5	23.1	<0.001
Reducing the price of petrol	34.3	16.5	26.4	33.5	47.3	0.011
Building more urban freeways	30.8	27.0	23.1	29.1	40.1	0.225

Notes:

a: Chi-squared test

significantly more likely to support increasing the cost of parking (AOR: 5.12, 95%CI: 1.86-14.14). Interventions to increase the cost of car parking also received little support (21.5% agreement); however, this also differed across modes, with 55.3% of bicycle commuters

agreeing while only 9.3% car commuters agreed ( $p<0.001$ ). In the logistic regression models, car users were again less supportive of increasing the cost of car parking while cyclists were more supportive compared with public transport users. Car owners were also

significantly less likely to support an increase in car parking costs (AOR: 0.38, 95%CI: 0.18-0.81).

Fewer participants were supportive of traffic calming measures such as narrowing streets and blocked street sections to reduce car-through traffic (32.4% agreement). Those less supportive of traffic calming measures were car owners (OR: 0.37, 95%CI: 0.18-0.76). Older participants >35 years were significantly more supportive of this measure compared with younger adults (AOR: 2.51, 95%CI: 1.44-4.39). Restrictions on motor vehicle speed to 30 km/h also received low support (30.9% agreement), although this must be interpreted in the context of this being a 20km/h reduction from the current default in residential areas. However, in the logistic regression models, car owners were less likely to support this policy compared with non-car owners, after adjusting for mode uses and demographic characteristics (AOR: 0.39, 95%CI: 0.20-0.76).

### Comparison policies

Two policies that supported motor vehicle use (reduce petrol price and build more motorways) were also included. Neither policy received much overall support: 34.3% of the sample agreed that the price of petrol should be reduced. Bicycle owners compared to non-owners were half as likely to support this policy (AOR: 0.46, 95%CI: 0.27-0.78), see Table 4. Surprisingly, car owners were no more likely to support this policy ( $p=0.504$ ). Support for building more urban freeways was similarly low (30.8%). Those supportive of more urban freeways were more likely to

be car commuters compared with public transport users (AOR: 2.14, 95%CI: 1.10-4.15).

### Discussion

Within the broad policy process, policy makers' decisions are often informed by research, including evidence of public opinions. In the case of transport policies, knowledge of community attitudes towards current and potential transport solutions is important.<sup>26</sup> Transport planning in Sydney and other Australian capital cities has historically, and continues to be, focused on motor vehicle solutions, such as building bigger and more extensive motorways.<sup>27</sup> However, motorised modes of transport are costly and unsustainable, and active travel options are important from a health, congestion avoidance and sustainability perspective.<sup>28,29</sup> In this study, the highest level of overall support among inner-Sydney residents was for active travel policies, including public transport. The majority of respondents supported policies to make public transport cheaper and building more bicycle paths separated from cars, and supported a public bike-share program, with similar levels of agreement across commute mode, age and sex. The lowest level of support was for motor vehicle restrictive policies; specifically, reducing the number of car parking places and increasing the cost of parking, with wide variation in support from motor vehicle users (lowest support) and bicycle users (most support). There were quite large differences in support for some policies by respondents' mode of transport to work, with motor vehicle users being least

supportive of strategies that encouraged active travel, and most supportive of building more urban freeways.

Policies supporting motor vehicle use also attracted very little support. This suggests that while Australian transport policy makers continue to believe the wider population is wedded to the car and in favour of policies that assist car travel, the reality is that public support (in inner Sydney at least) for these interventions is actually very low. It must also be stressed that this survey was conducted at a time when Sydney was embarking on the largest transport infrastructure program in recent history, involving a 10-year program of motorway expansion, which has been and continues to be divisive.

As expected, there is an overall pattern that respondents tended to support transport policies that were of most relevance to themselves. Yet, surprisingly, the differences between mode users were not as large as might have been expected. Independent of travel mode to work, bicycle ownership was associated with support for more bicycle paths and allowing bicycles to turn left on red lights, and not supportive of cheaper public transport or reducing the price of petrol. Car ownership was independently neither associated with supporting traffic calming measures, nor supportive of cheaper public transport or more car sharing parking places. In this sample, age and sex were not independently associated with any of the policies except that older respondents were supportive of traffic calming measures. According to Stopher and Stanley, people may support a transport service/facility they do not regularly use themselves for

**Table 3: Likelihood of support for active travel supportive policies using multiple logistic regression analysis.**

Agree with policy	Supportive policy											
	Public bicycle share program		More bicycle paths		Allowing bicycles to turn left		Choice about wearing a helmet		Making public transport cheaper		More car share spots	
	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P
<b>Mode user</b>		0.374		0.222		0.008		0.079		0.514		0.179
Public transport	1.00		1.00		1.00		1.00		1.00		1.00	
Bike	0.67 (0.24–1.86)		1.28 (0.39–4.25)		7.81 (2.41–25.28)		2.99 (1.20–7.42)		1.21 (0.33–4.47)		1.16 (0.44–3.05)	
Walk	1.71 (0.78–3.74)		1.45 (0.60–3.51)		0.96 (0.49–1.88)		1.78 (0.83–3.82)		1.70 (0.66–4.35)		1.48 (0.72–3.06)	
Car	0.99 (0.52–1.90)		2.33 (1.06–5.13)	0.222	1.07 (0.58–1.99)		1.15 (0.56–2.36)		0.79 (0.33–1.87)		0.65 (0.35–1.21)	
<b>Bike ownership</b>	1.33 (0.76–2.35)	0.316	4.70 (2.35–9.34)	<0.0001	3.69 (2.20–6.19)	<0.0001	1.69 (0.81–3.11)	0.095	0.32 (0.16–0.79)	0.012	1.31 (0.77–2.22)	0.316
<b>Car ownership</b>	0.49 (0.21–1.15)	0.102	0.50 (0.17–1.43)	0.194	0.93 (0.46–1.91)	0.848	0.56 (0.28–1.12)	0.099	0.26 (0.08–0.78)	0.017	0.40 (0.19–0.84)	0.016
<b>Age</b>												
18–34 years	1.00		1.00		1.00		1.00		1.00		1.00	
35–55 years	1.01 (0.59–1.72)	0.965	0.70 (0.38–1.30)	0.256	1.04 (0.63–1.71)	0.891	0.98 (0.57–1.69)	0.937	1.42 (0.67–2.98)	0.356	1.25 (0.63–1.70)	0.384
<b>Sex</b>												
Female	1.00		1.00		1.00		1.00		1.00		1.00	
Male	0.79 (0.47–1.31)	0.355	0.63 (0.33–1.21)	0.165	0.96 (0.58–1.59)	0.866	1.37 (0.79–2.38)	0.263	0.90 (0.45–1.80)	0.763	1.03 (0.63–1.70)	0.904

AOR: adjusted odds ratio; adjusting for other variables in the table

various reasons.<sup>30</sup> They may value having the option to use it on occasions, e.g. when their usual mode is unavailable (known as 'option value'). They may value the benefit the transport service/facility has for the community (altruism). Or, they may benefit indirectly, e.g. where a transport service/facility can be used by an individual's friends or relatives, who might otherwise depend on them for chauffeuring. The results from this study were broadly consistent with findings from the UK, where there were very high (over 95%) levels of support for improving public transport; and low support for building more motorways (33%).<sup>5</sup> There was, however, much greater support for measures to reduce speed limits in residential areas in the UK (76% support vs. 31% support in Sydney), although it must be reiterated the magnitude of reduction proposed clearly influences support, with a drop to 30km a relatively large decrease. Support for reducing speed limits was surprisingly low across all commuting modes, yet speed reductions can have a significant impact on road safety and the chance of collision.<sup>31</sup> Bicycle paths continued to receive good support from the public in this survey. New Zealand cyclists were also supportive of more bicycle lanes (88%) and paths (76%), and also more supportive of lower vehicle speeds (55%).<sup>22</sup> Public support for active travel policies should influence decision makers, but may not be sufficient. Qualitative research with 40 Australian senior representatives from state/territory governments, statutory authorities and non-government organisations identified two broad areas of policy intervention: 1) urban planning and provision of infrastructure to

promote active travel; and 2) discouraging the use of private motorised vehicles.<sup>15</sup> Of the interventions presented to policymakers, those relating to walkability/bicycling and physical activity facilities received greatest support. Interventions involving subsidies for public transport, or physical activity equipment, and the provision of more public transport infrastructure received least support. These were perceived by decision makers as not economically viable or unlikely to increase physical activity levels. Importantly, dominant barriers identified were the powerful 'road lobby', weaknesses in the planning system and the cost of potential interventions. Facilitators identified included the provision of evidence, collaboration across sectors, and synergies with climate change/environment agendas.<sup>15</sup> A greater policy focus on health outcomes is needed within the planning system if those policies that increase physical activity are to be implemented.

Similar barriers were observed among another group of community stakeholders. Qualitative research with 33 senior and middle-level administrators from public, private and community groups in a rapidly developing region in Queensland, Australia, identified perceived barriers and enablers to active transport.<sup>32</sup> Barriers included the importance – and current lack – of high-level political commitment and supportive funding to achieve real active transport outcomes; lack of a whole-of-government positive stand on active transport; a changing skill set required by transport planners – planning for active transport; and lack of incentives that encourage alternative transport or discourage

private motor vehicles.<sup>32</sup> Other identified barriers were related to lack of resources and limited relevant technical expertise; traditional road building institutional and practitioner cultures; and agencies not identifying their roles in active transport.<sup>32</sup>

Moving past these barriers and encouraging active transport is important, particularly as we consider the health of our cities in the future. Active transport offers enormous potential for increased community physical activity that is sustainable, and could contribute to improved community amenity through reduced congestion and less pollution from motor vehicles.<sup>11,29</sup> Internationally, it has been observed that cities with safer bicycling infrastructure have greater volumes of bicycle commuters.<sup>33</sup> Policies that ensure the provision of safe walking and bicycling, together with policies that support a shift away from motor transport solutions, are recognised as being important steps to improve the health of growing city populations.<sup>34</sup>

A strength of this analysis is the quantitative examination of support for transport policies in the inner-Sydney context, with levels of support assessed for different modes of transport to work, and differing car and bicycle ownership statuses. A limitation of this study is the loss to follow-up experienced in our cohort. To compensate, the data were weighted to reflect the demography of the study area. Clearly, this does not overcome the potential for those remaining to share different views from those who left, but we see this as unlikely. In addition, the study was conducted in inner Sydney, which is characterised by medium-density

**Table 4: Likelihood of support for motor vehicle restrictive or supportive policies using multiple logistic regression analysis.**

Agree with policy	Restrictive						Supportive					
	Reducing motor vehicle speeds		Reducing the number of car parking places		Increasing the cost of car parking		More traffic calming measures		Reducing the price of petrol		Building more urban freeways	
	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P	AOR(95%CI)	P
<b>Mode</b>		0.263		0.002		0.002		0.035		0.043		0.077
Public transport	1.00		1.00		1.00		1.00		1.00		1.00	
Bike	1.21 (0.48–3.07)		5.57 (1.98–15.70)		5.12 (1.86–14.14)		3.50 (1.22–10.06)		0.60 (0.19–1.91)		0.85 (0.29–2.49)	
Walk	1.24 (0.53–2.63)		1.64 (0.64–4.21)		1.70 (0.74–3.89)		0.99 (0.46–2.13)		0.69 (0.32–1.49)		0.88 (0.39–1.97)	
Car	0.55 (0.26–1.18)		0.81 (0.30–2.19)		0.62 (0.23–1.67)		0.70 (0.36–1.34)		1.82 (0.98–3.36)		2.14 (1.10–4.15)	
Bike ownership	1.06 (0.59–1.90)	0.845	1.42 (0.64–3.14)	0.393	1.48 (0.72–3.05)	0.285	1.33 (0.75–2.36)	0.327	0.46 (0.27–0.78)	0.004	0.98 (0.54–1.67)	0.852
Car ownership	0.39 (0.20–0.76)	0.006	0.57 (0.24–1.34)	0.196	0.38 (0.18–0.81)	0.012	0.37 (0.18–0.76)	0.007	1.31 (0.59–2.89)	0.504	0.54 (0.27–1.10)	0.091
<b>Age</b>												
18–34 years	1.00		1.00		1.00		1.00		1.00		1.00	
35–55 years	1.65 (0.93–2.92)	0.085	1.08 (0.52–2.23)	0.837	0.82 (0.49–1.54)	0.540	2.51 (1.44–4.39)	0.001	0.96 (0.57–1.59)	0.863	0.68 (0.40–1.16)	0.153
<b>Sex</b>												
Female	1.00		1.00		1.00		1.00		1.00		1.00	
Male	0.97 (0.55–1.71)	0.920	0.52 (0.25–1.10)	0.089	0.94 (0.49–1.80)	0.848	0.57 (0.50–1.47)	0.169	0.82 (0.49–1.37)	0.447	1.68 (0.98–2.86)	0.059

AOR: adjusted odds ratio; adjusting for other variables in the table

development and a legitimate choice of public and private transport options. We could see different responses in the low-density, car-oriented suburbs that characterise much of Sydney outside the central area, and in outer metropolitan areas of other Australian capital cities. Transport modes vary considerably in outer Sydney, where there is much less commuting by walking, bicycle or public transport,<sup>35</sup> and this is likely to affect support for car-oriented transport policies.

Because cyclists are over-represented in the sample, it is possible that attitudes towards active travel are positively skewed. For this reason, the sample was weighted to the population to observe differences. Also, the age range of participants excluded those older than 55 years, and it is likely that older adults have different attitudes towards transport policies than younger respondents.

## Conclusions

There is a high level of community support for the provision of cycle paths in this inner-Sydney sample, and for improvements to public transport. The implementation of policies to promote active transport would likely be well supported by inner-city residents.

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