

Bike Share in Adelaide - user perspectives

DATE AND TIME

Thu 18 October 2018
12:00 – 14:00 BST

LOCATION

Old Fire Station
University of Salford
Salford
M5 4NL
United Kingdom



University of
Salford
MANCHESTER

**Sustainable
Transport
Futures**

**Seminar #1
Bike Share**

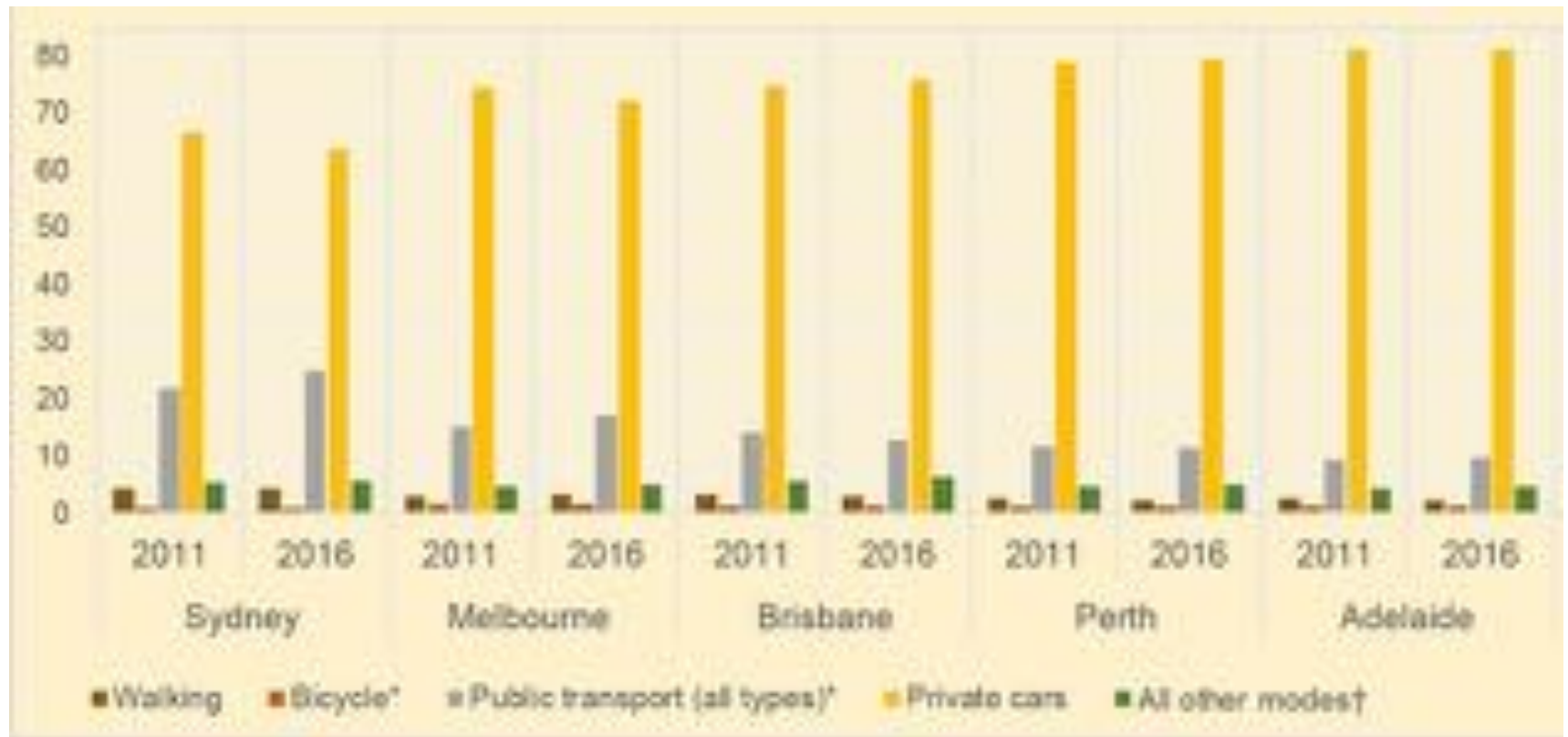
- **Dr Andrew Allan**, Senior Lecturer, University of South Australia
- **Dr Ali Soltani**, Research Fellow, University of South Australia



**University of
South Australia**

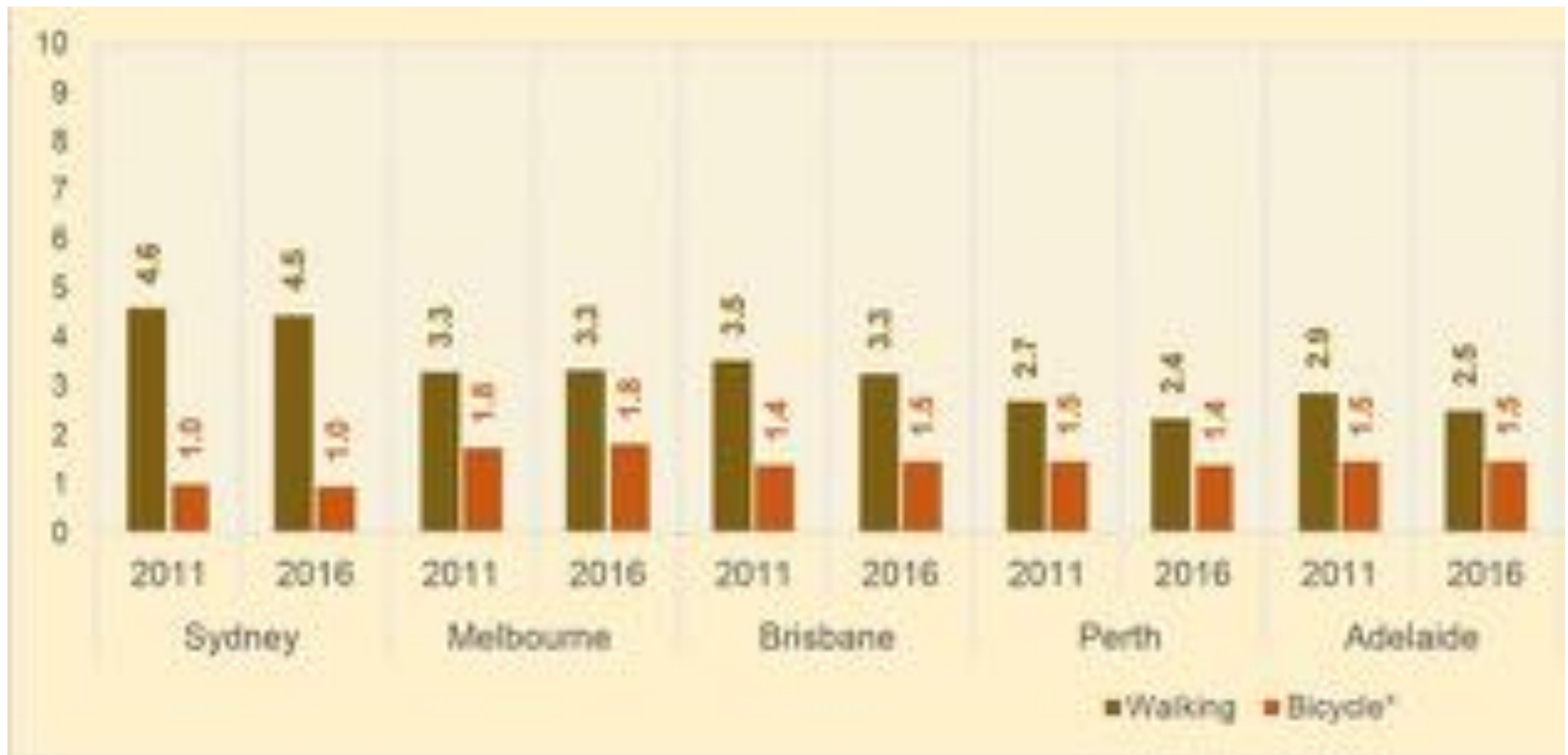
About Australia:

Commuting modal share in Australian major cities (metro level)



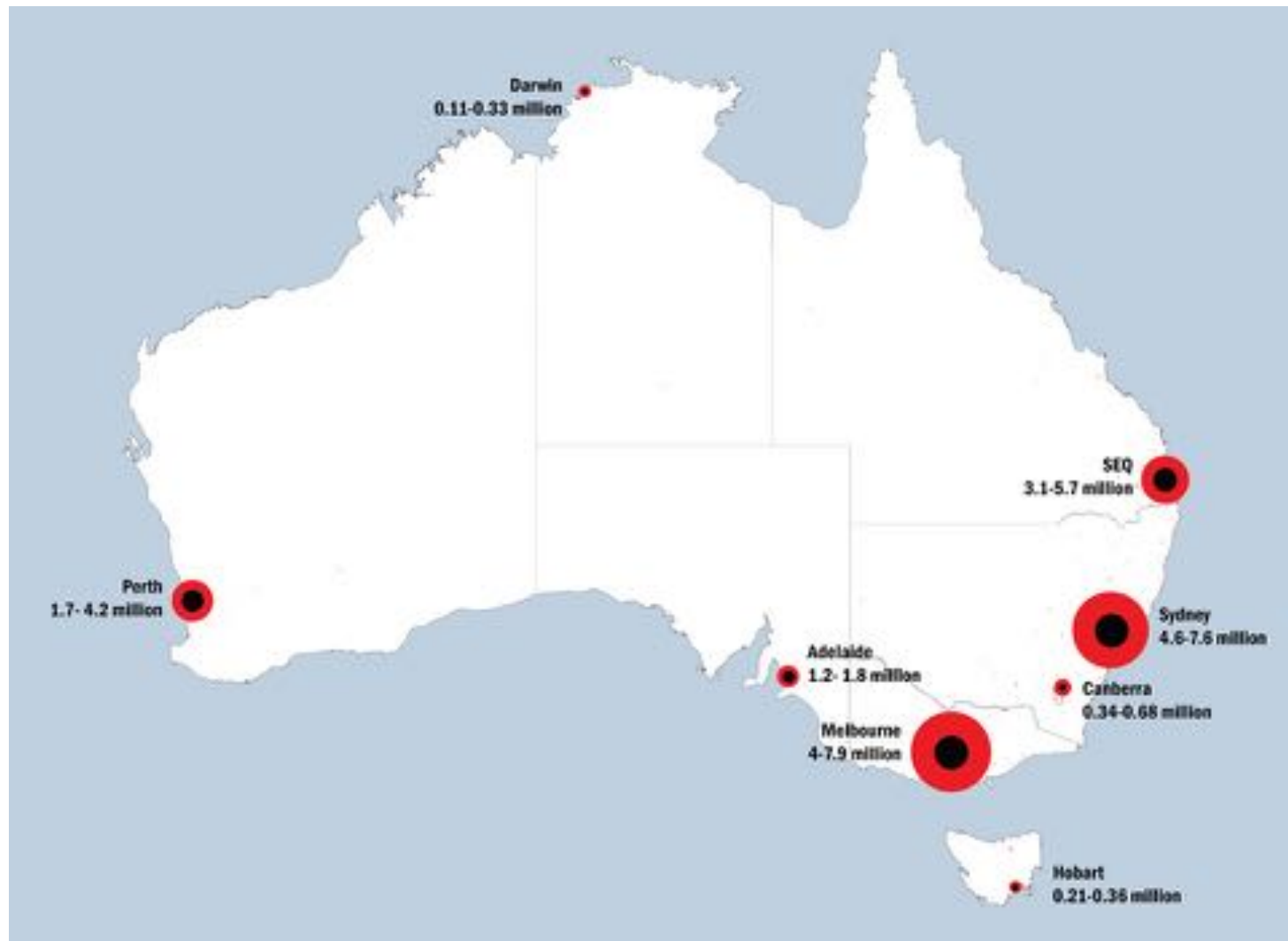
Source: ABS, 2011; 2016

About Australia: Active Modes in Australian Major Cities (metro level)



Source: ABS, 2011; 2016

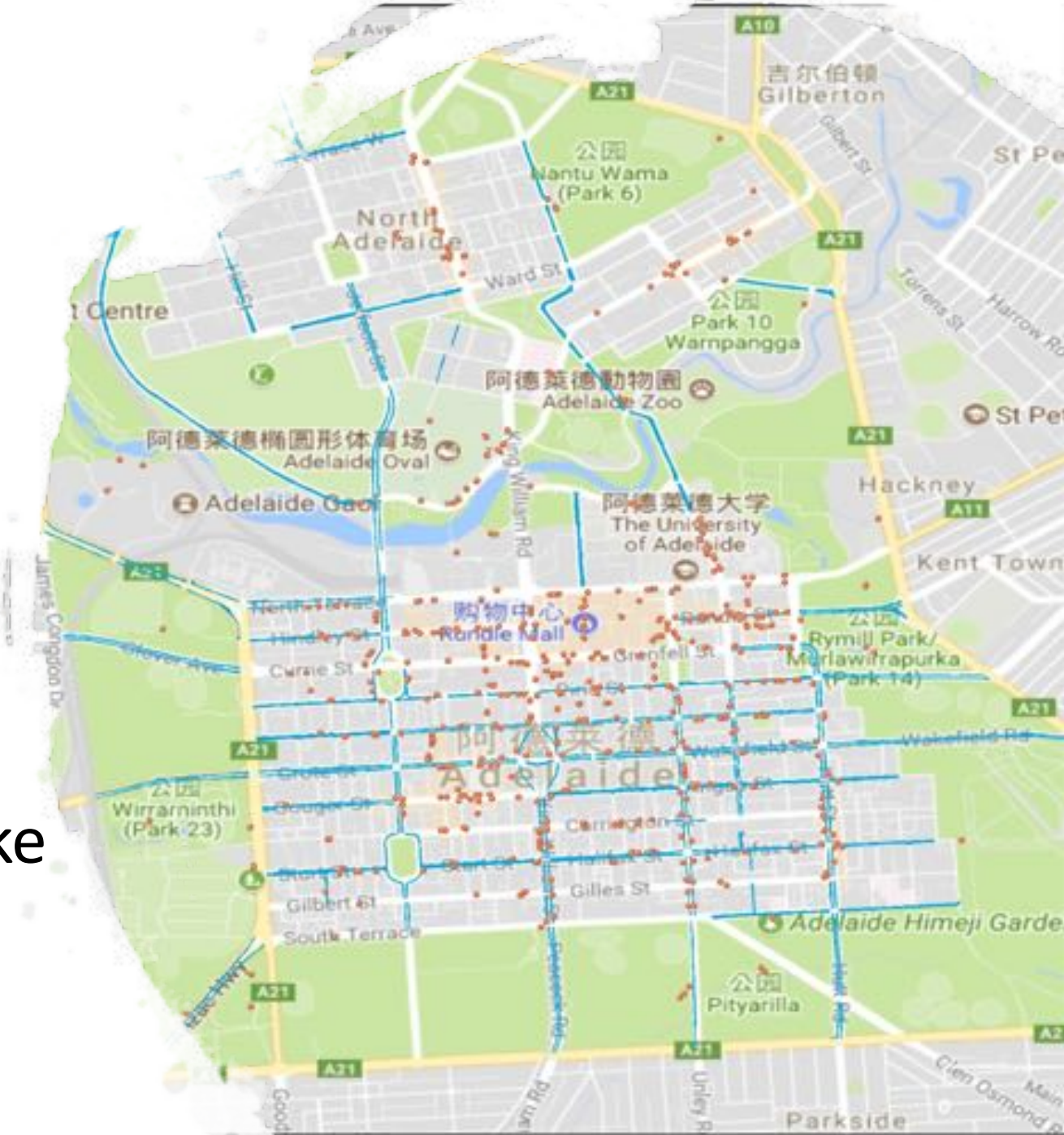
Australia's Major Cities



City of Adelaide (Adelaide's CBD)



Adelaide's Bike Network



Why is the City of Adelaide is ideal for bike-sharing schemes?

- Relatively **low car dependency** compared to the rest of the Greater Adelaide region;
- A **higher share of non-motorised** and public transit;
- **Younger population**;
- A **large share of students, visitors** and non-residents of Australia;
- A **large share of middle-income** households;
- A **good mix of different land uses and mix of dwelling types**;
- **Restrictions** on the availability of parking spaces.

Current Sharing-bike Plans

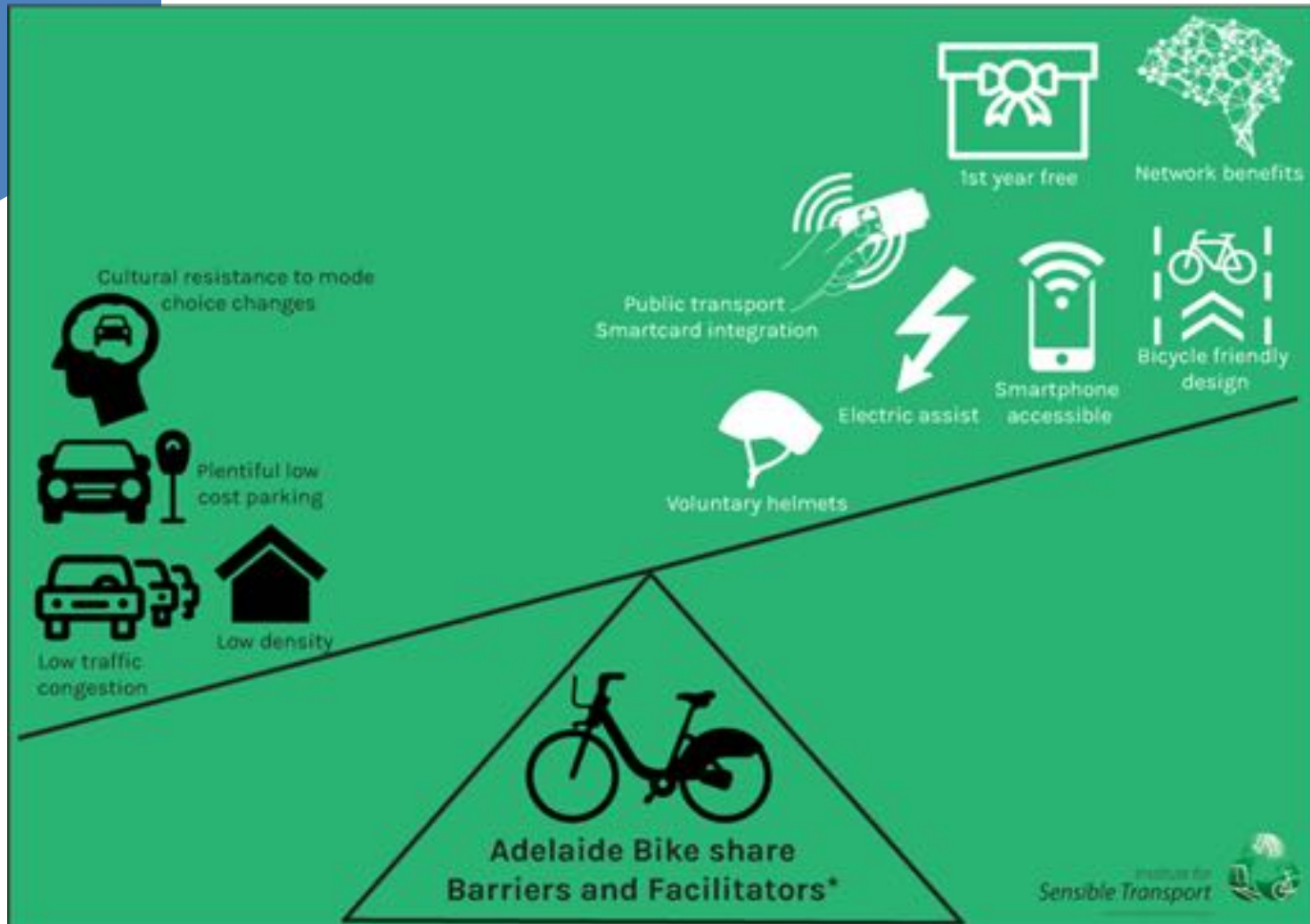
- oFo (China-based)
- O’Bike (Singapore-based)
- Adelaide Free Bike (AFB)-Adelaide City Council

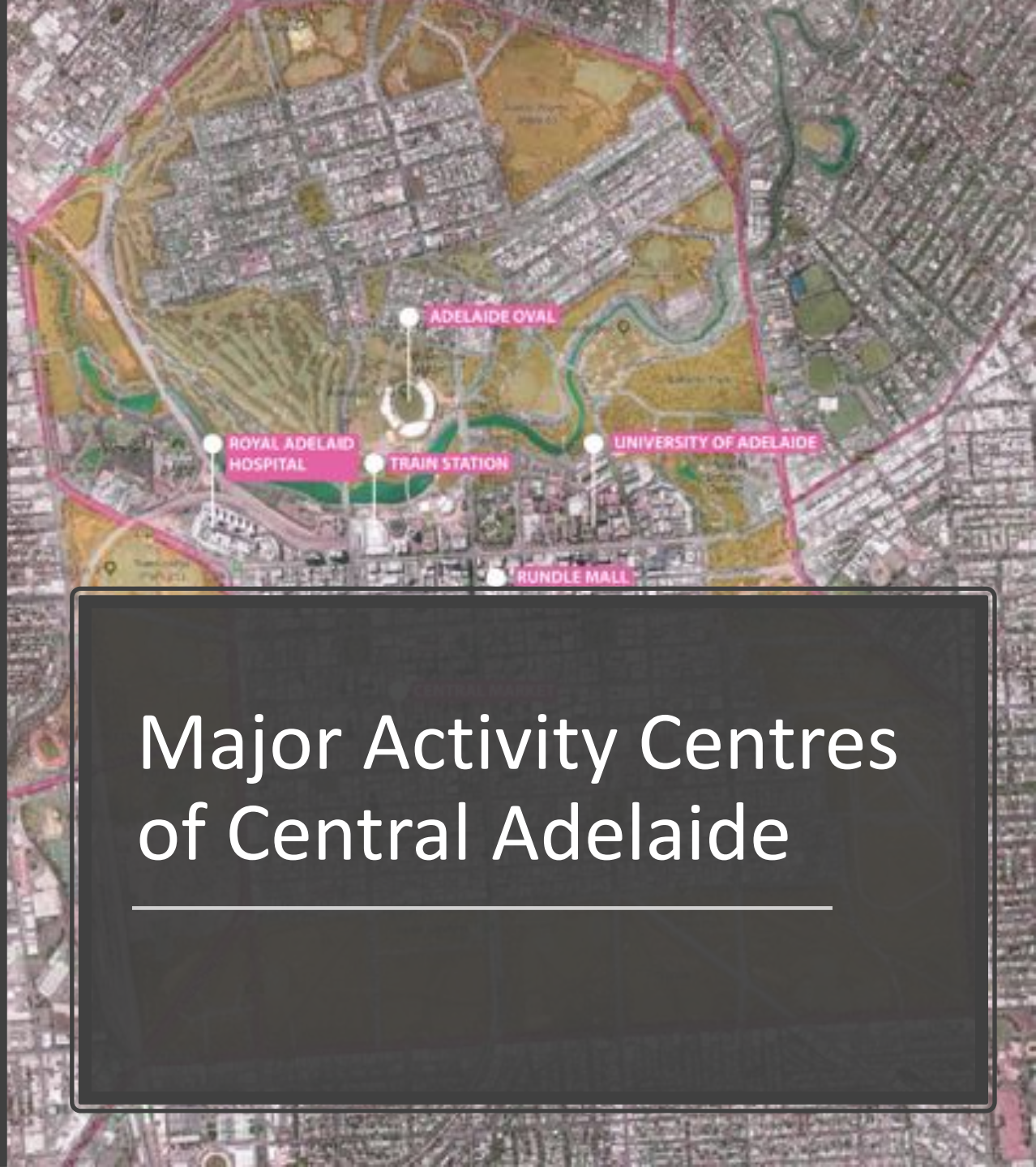


Current Bike-Sharing Plans

Name of BSS	Operator(s)	Year of operation	Number of stations/bikes	Cost of usage	Payment method	Availability of Smartphone apps	GPS trackers
Adelaide Free Bikes	Adelaide City Council, Bike SA	2005	- 27 stations (20 city center; 7 suburbs) - Over 200 bikes	Free (A\$250 charge applied if bikes are not returned).	-	No	No
oFo	oFo company (China)	2017	- No docking stations - 50 bikes with an increase to 200 bikes in 2018	A\$2 for 30 minutes, A\$5 charge per ride	Available functions to pay via mobile app using Credit cards/debit cards, PayPal, cash	Yes	Yes
O'Bike	O'Bike company (Singapore)	2017	- No docking stations - 100 bikes	A\$2 for 30 minutes; A\$69 Refundable deposit	Available functions to pay via mobile app	Yes	Yes

Former studies





Major Activity Centres of Central Adelaide



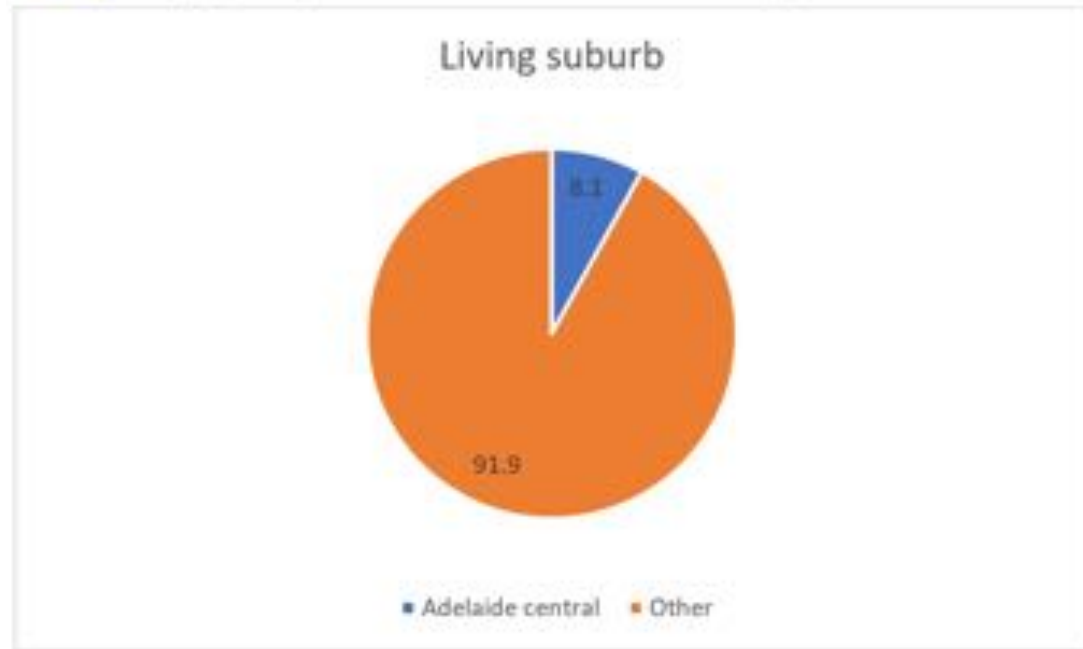
Major Activity Centres of Central Adelaide

Travel Survey of Commuters(n=408) within 6 Major Centres

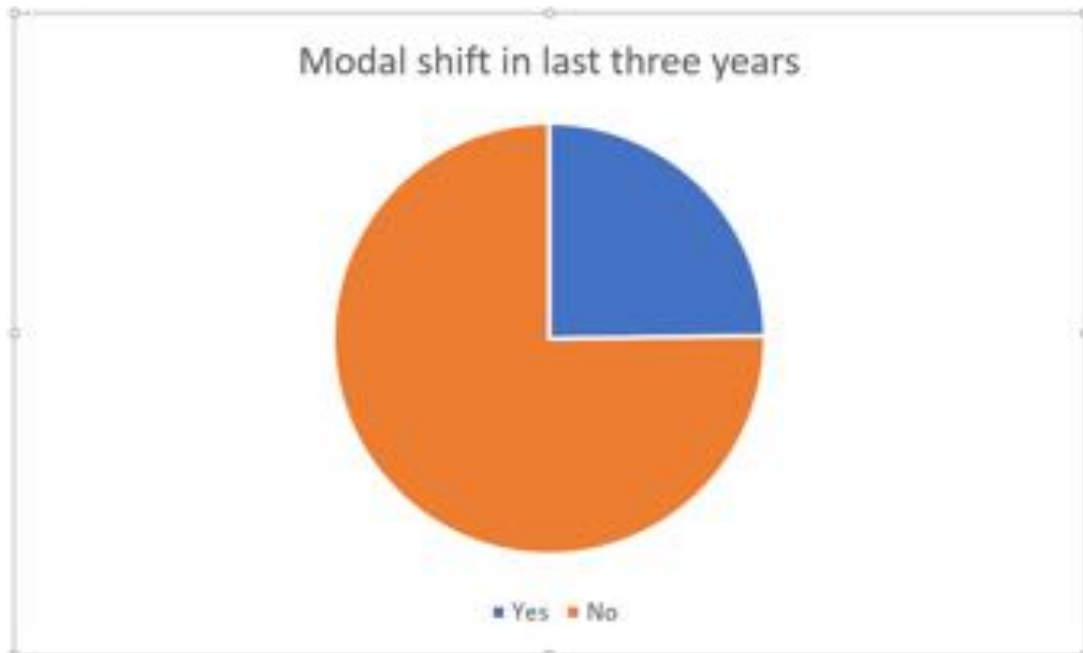
- **Dates of intercept survey and recruiting**
- Intercept Interviewing took place between 20-24 March 2018.
- 8 interviewers participated in intercept work
- The online interview for recruited participants and panel members took place between 27 March – 9 April 2018.

LOCATION	ONLINE	INTERCEPT	TOTAL
Rundle Mall	48	34	82
Train Station	63	23	86
Central Market	39	29	68
Adelaide Oval	24	40	64
New RAH/Sahmri	14	30	44
North Terrace	20	44	64
TOTAL	208	200	408

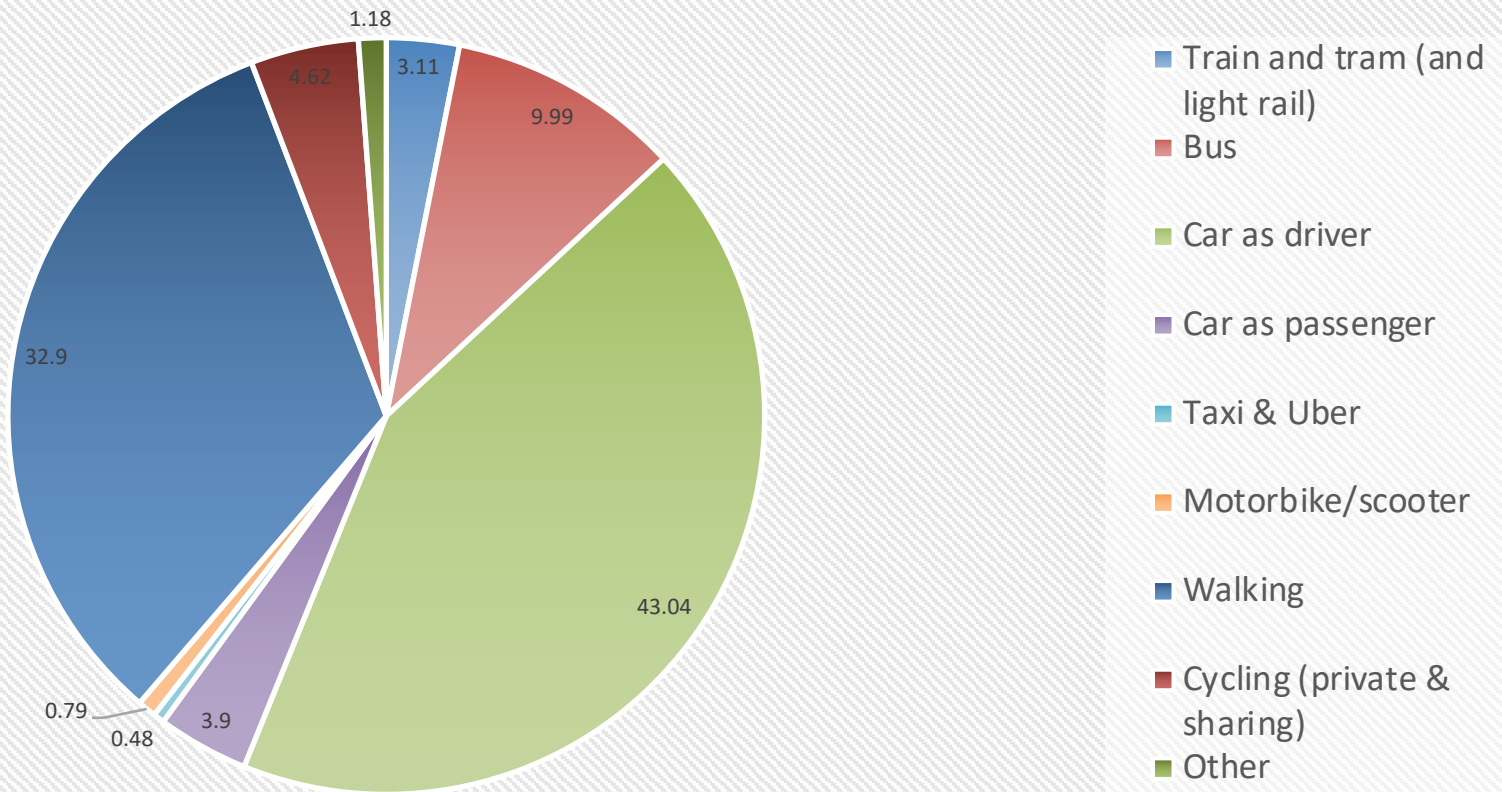
Living location of participants



Experienced a modal shift within last three years?



Modal choice for work trips (percent) in Central Adelaide

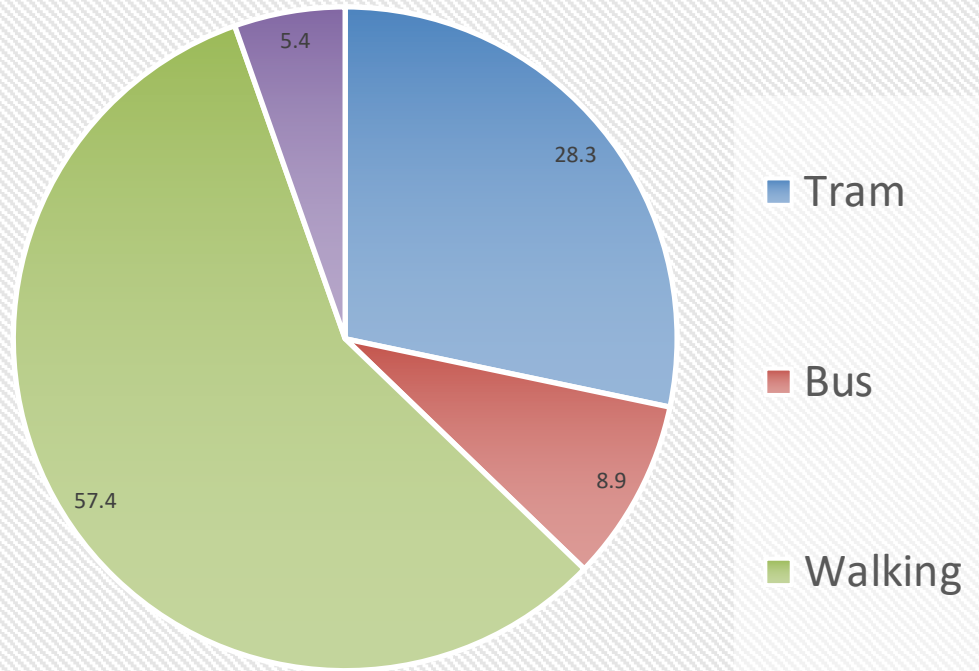


Modal choice

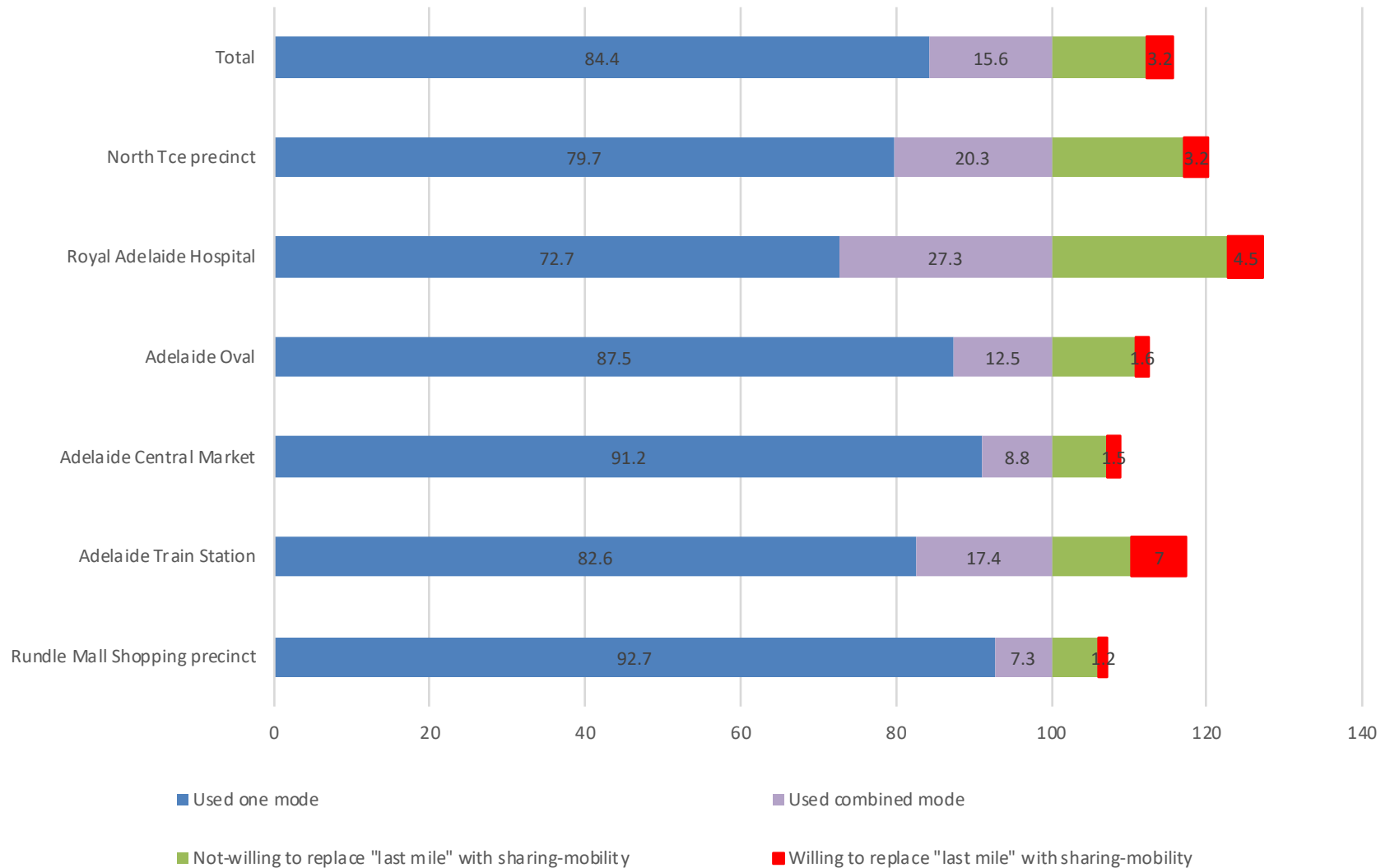
Modal choice for the "last mile"

Shared-bikes can be an alternative to Tram and Walking trips

Mode choice for "last mile" segment (percent)



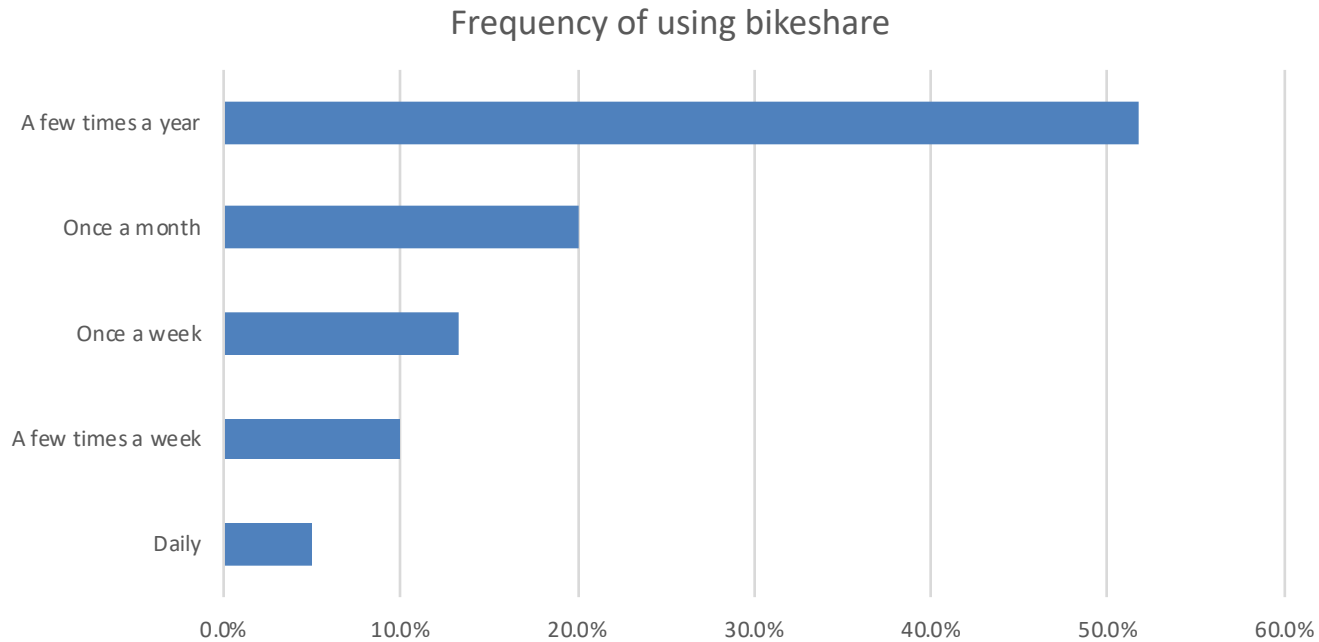
Reluctance to Shift “last mile” to Sharing-mobility



Qualitative Survey on Sharing-mobility Users (n=60)

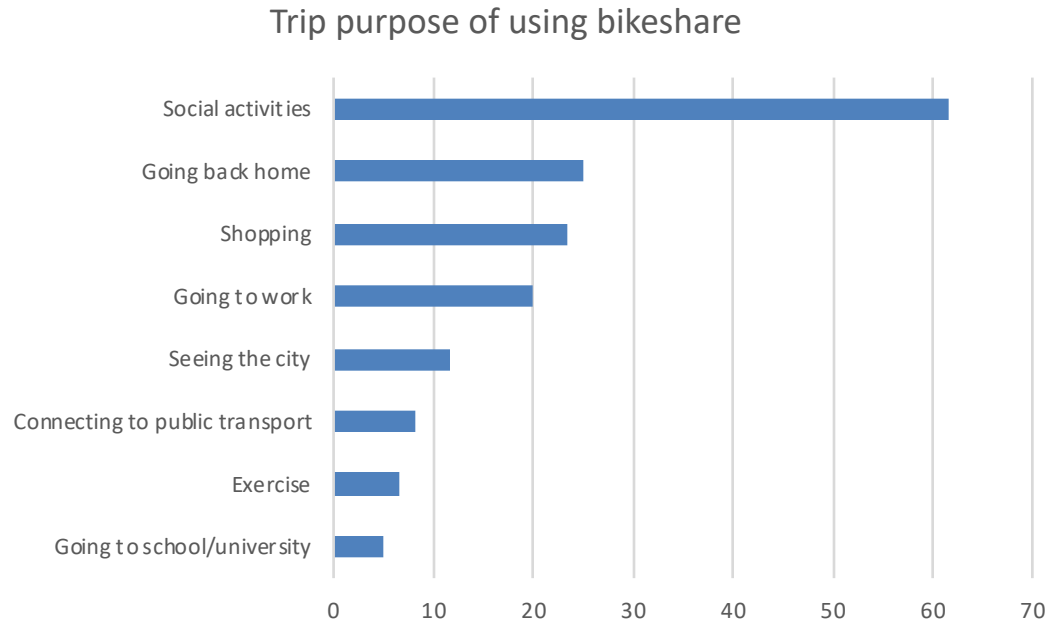


Frequency of Bike Usage



- Usage of service was low as only 5% used it everyday
- Over 50% of users used it only a few times a year

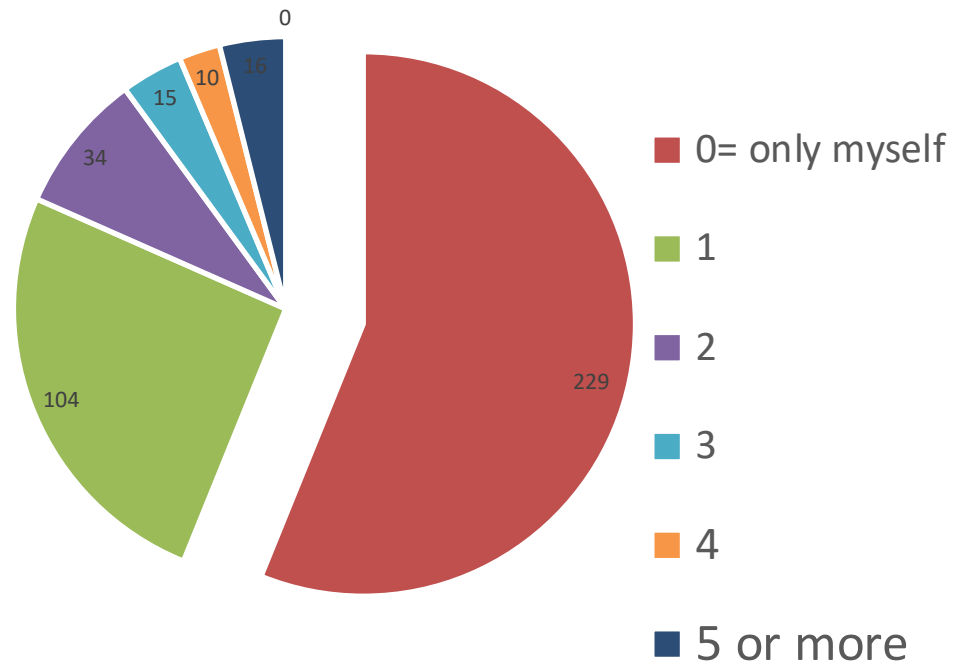
Trip Purpose



- Main purposes were social/recreation; going back home (if the user lived within a bikeable distance) and shopping (from nearby)
- It is less popular for fixed plan trips like commuting to work or school
- There is evidence of the potential for using it as connecting to public transport and exercise

Sharing bike
was less
practical for
those
travelling as
a group

How many people accompanied you in this journey?



Socio-demographics and bike-share usage frequency



Gender

- According to T-test, males were recorded to be more frequent users than female counterparts.



Age Groups

- According to one-way ANOVA test, Younger groups (25-39) were more likely to have participation in using bikeshare than the old ones



Education Level

- No significant differences between educational groups

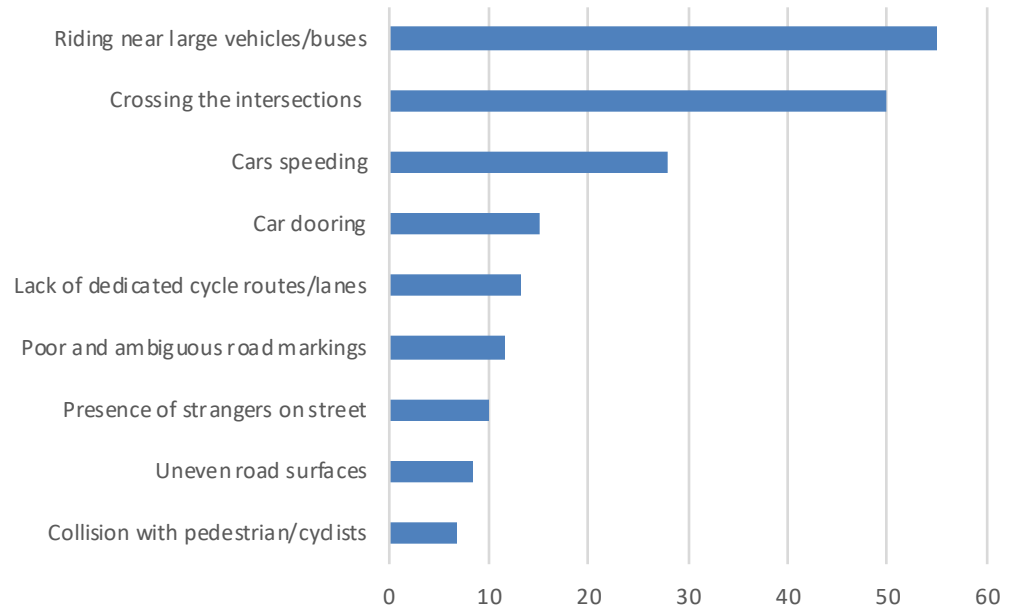


Income Level

- No significant differences between income groups

Safety Concerns while Riding

Main safety concerns while riding

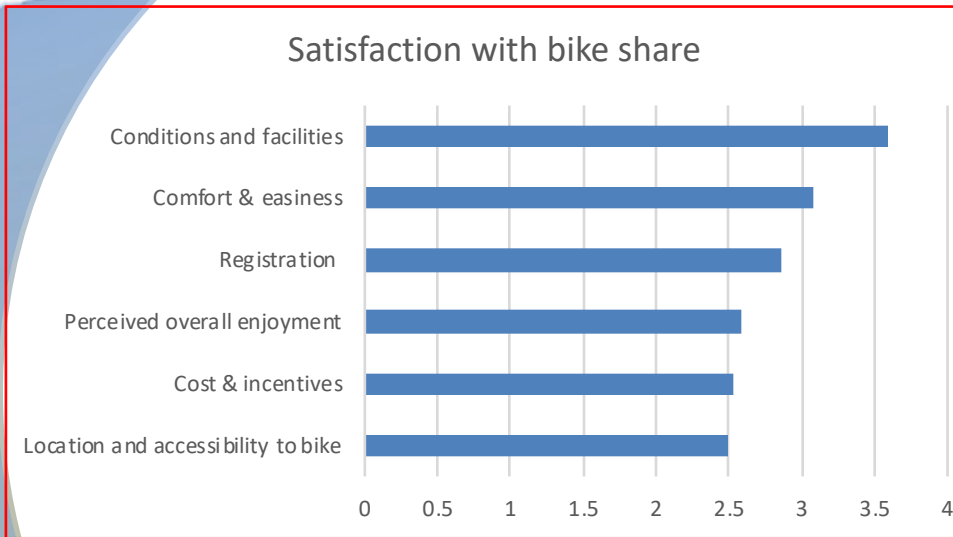
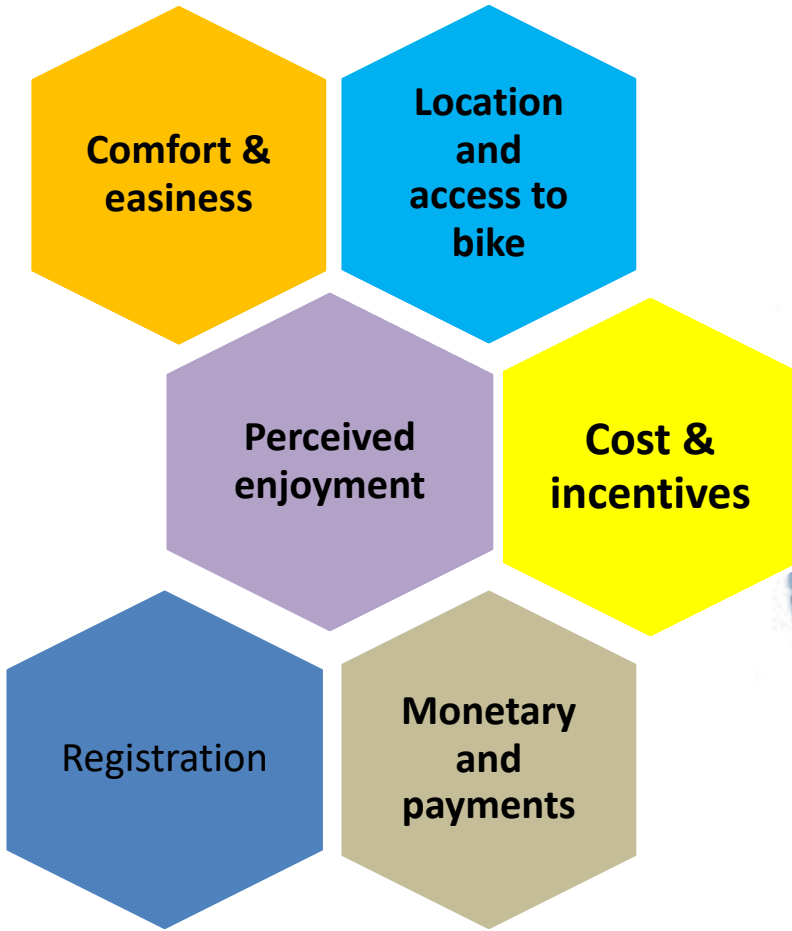


- Riding near large vehicles
- Crossing the intersections
- Cars speeding

Satisfaction with the Service

Attribute	Index	Users' satisfaction	Rating
Location and access to bike	Service coverage areas (suburbs)	2.15	L
	Distribution and location of bikeshare system	2.48	L
	Possibility of finding unused share bikes' location	3.23	M
	Availability at pick up and drop off (walking distance to access a bike)	2.17	L
	Average 1	2.51	M
Registration	Mobile apps	2.21	L
	Sign up process & registration	2.18	L
	Personal information confidentiality	3.32	M
	Status & image and the reliability of the brand	2.90	M
	Average 2	2.86	M
Cost & incentives	Incentives for repeating use	3.05	M
	Cost of usage	2.90	M
	Using credit cards to pay upfront deposit & payment process	1.97	L
	Membership fee deposit	2.21	L
	Average 3	2.53	M
Comfort & easiness	Maintenance; cleanness & condition of the bike	3.81	H
	Comfort of bicycle ride	3.06	M
	Easiness of carrying bag	1.77	L
	Comfort with bike height/size and seat can be adjusted	3.02	M
	Bike stands easily when parking	3.72	H
	Easy locking/unlocking system	2.92	M
	Easy warning bell	3.74	H
	Comfort when using pedals	3.62	H
	Comfort when parking at off-street parking	2.92	M
	Comfort for family/group riding	2.08	L
Average 4	3.07	M	
Conditions and facilities	Adequate lighting systems	3.82	H
	Adequate braking system	4.01	H
	Adequate gearing	3.07	M
	Tires with adequate pressure	4.02	H
	Helmet availability (attached to bike) & cleanness	3.07	M
Average 5	3.60	H	
Perceived overall enjoyment	Enjoyable when riding oFo	2.64	M
	Enjoyable when riding O'Bike	2.97	M
	Enjoyable when riding AFB	2.12	M
	Average 6	2.58	M

Satisfaction with the Service



Satisfaction with the Service

- **Low satisfaction** with accessing the bikes; geographical coverage and distribution of dockless bikes
- **Low satisfaction** with registration; payment process; membership deposit and mob app
- **Reasonable medium satisfaction** with cost of usage & incentives for frequent users & comfort when riding
- **High satisfaction** with condition of the bikes; advertising & marketing

Conclusion & Summary

- Main purposes were social/recreation; going back home (if the user lived within a bikeable distance) and shopping (located nearby)
- Usage of service was low as only 5% used it everyday
- The main safety concerns for users were: Riding near large vehicles; Crossing the intersections; Cars speeding
- Concerns were observed with membership & deposit
- Low satisfaction with finding a bike and service coverage for suburbs
- The dockless system and arbitrary distribution of bikes made it more complicated for users who wish to plan for integrating it with public transport
- Not all BSS users are experienced and/or professional cyclists thus they tend to have a lower sense of safety on urban roads
- Improvement of the built environment for cyclists (particularly with infrastructure) is essential in encouraging BSS users with regard to reducing their vulnerability amongst traffic.

Acknowledgement

- Graeme Sherriff, Sustainable Housing and Urban Studies Unit, University of Salford
- Project RP2021e: Greening Inner-Urban Travel, Research Node for Low Carbon Living, CRC
-

Q & A

THANK
YOU