



cycle BOOM

DESIGN FOR LIFELONG
HEALTH & WELLBEING

First Stakeholder Advisory Group Meeting

12 March 2014

Item	Time	
	09.45	Arrival Coffee
1.	10.00	Welcome & Introductions [Tim Jones, Oxford Brookes University (OBU)] <ul style="list-style-type: none"> Meeting Objectives Advisory Group Terms of Reference Project Branding
2.		cycle BOOM Overview [Tim Jones, OBU] <ul style="list-style-type: none"> Overview of Work Packages
3.		WP2: Design and Policy Scoping [Emma Street, University of Reading]
4.		WP3: Examining Existing Data [Kiron Chatterjee, University of the West of England (UWE)]
5.		WP4: Cycling Life History Interviews [Heather Jones, UWE]
6.		WP5: Cycling Mobility Observation Interviews [Justin Spinney, Cardiff University]
7.		WP6: Cycling and Wellbeing Trial [Carien van Reekum, University of Reading]
8.	12.00	Roundtable Discussion <ul style="list-style-type: none"> General Approach Methods
	13.00	LUNCH
9.	14.00	April - September 2014 Plan <ul style="list-style-type: none"> Recruitment Participant Journey
10.	15.00	Roundtable Discussion <ul style="list-style-type: none"> Recruitment and the 'Participant Journey' Impact Stakeholder Involvement Date of the Next Meeting
	16.00	CLOSE



Design for Wellbeing: Ageing and Mobility in the Built Environment

Call Type: Expressions of Interest

Closing date for Expressions of Interest: 12:00 noon on 10 September 2012

Closing date for full proposals for invited applicants only: 16:00 on 28 November 2012

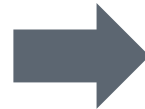
Summary

The Engineering and Physical Sciences Research Council (EPSRC) is leading a call with the Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC) for evidence led research into ageing and mobility in the built environment. The call is being run under the auspices of the Lifelong Health and Wellbeing (LLHW) cross-council ageing research programme which supports research addressing factors throughout life that influence health and wellbeing in older age.

The EPSRC, ESRC and AHRC invite research proposals from interdisciplinary consortia able to address the scope and interdisciplinary ambitions of the call.

There is up to £7M available through this call: EPSRC will commit up to £4M, ESRC up to £2M and AHRC up to £1M to support a maximum of five large multi-disciplinary projects of up to three years. A two stage process

Promoting
Independent Cycling
for Enhancing Later
Life Experience and
Social Synergy
through Design
(PRICELESS Design)



- Brings together representatives of organisations with specialist knowledge or interest in how built environment design and bicycle technology affects cycling mobility and wellbeing amongst the older population.
- Established to support the project and advise on how to ensure the project findings have an impact within policy making and industry.



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WP2: Design and Policy Scoping

Emma Street & Philip Black:
University of Reading

Aim:

To develop understanding of older people's mobility and its relationship to wellbeing.

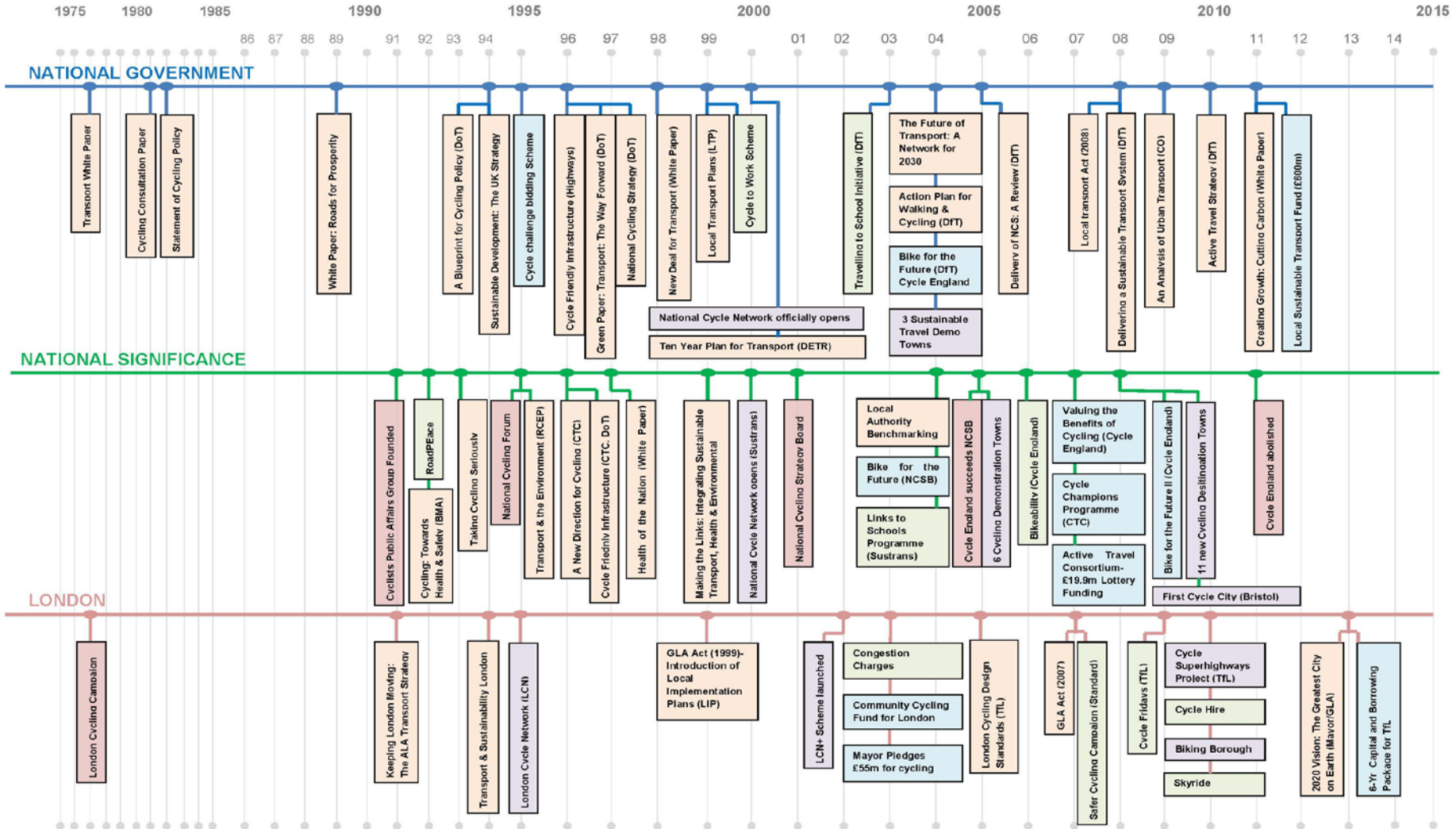


- **Explore** the ways in which older people's mobility is constructed and understood in government policy;
- **Identify** examples of best practice in relation to older people's engagement in cycling;
- **Assess** the barriers preventing older people from cycling and the factors likely to increase cycling into old age;
- **Understand** the relationship between cycling and the social, physical and mental wellbeing of older people;
- **Review** existing research adopting a life course approach;
- **Engage** policymakers and the wider public in mobility and ageing issues.

Policy Review

- A historical and thematic overview of policy related to cycling in the UK.
- Timeline of significant cycling events / policies nationally; in London; in Cardiff, Oxford, Reading and Bristol
- Overview of how dominant policy discourses have changed over time
- Understanding the emerging role of wellbeing and health in 'official' cycle policy and guidance

WP2: Policy Timeline



- **Review** of the academic literature, existing datasets and sources (e.g. surveys), and government policies and programmes relating to design, wellbeing and (cycling) mobility
- **Thematic approach** – Mobility; wellbeing; ageing; design

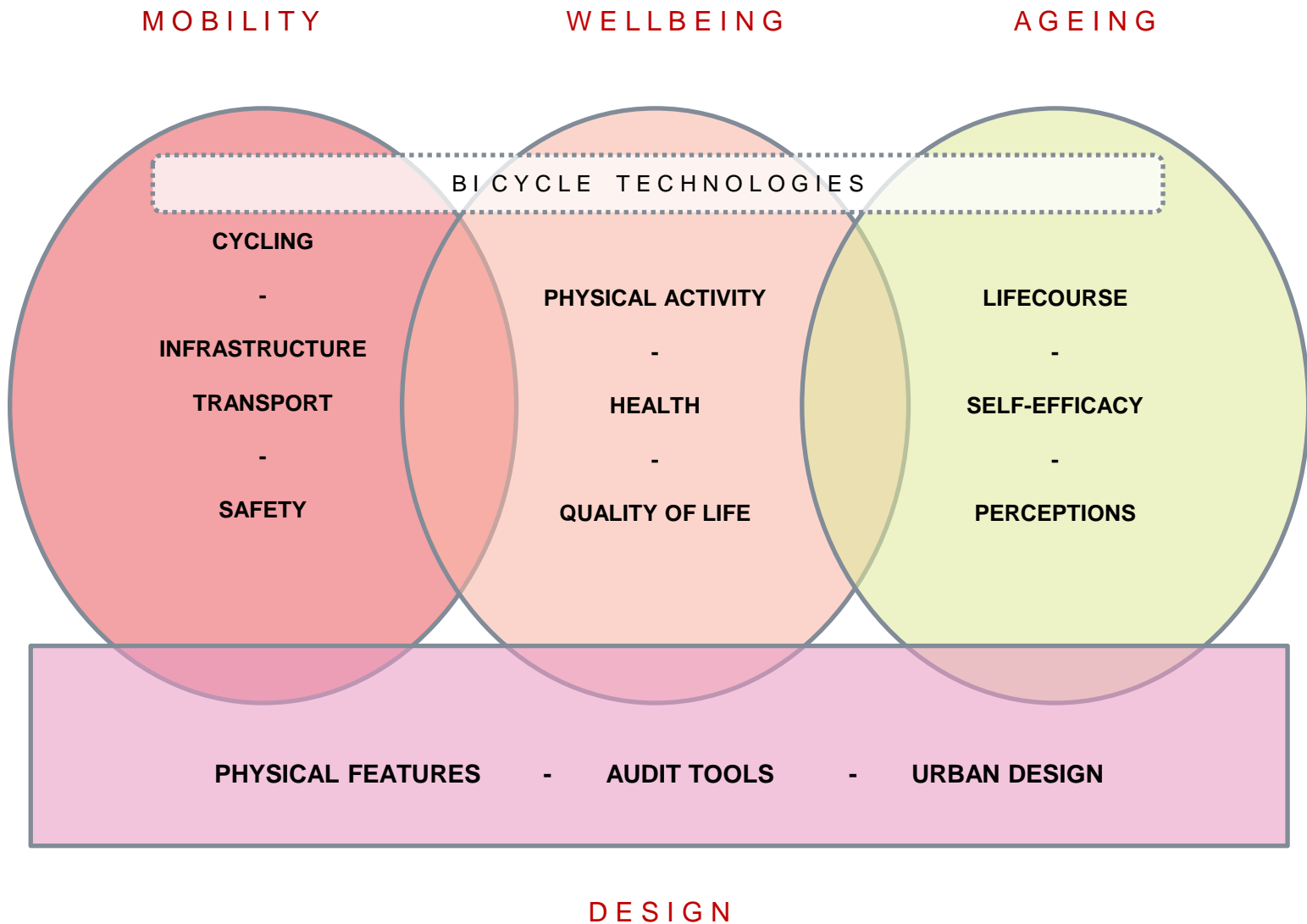


Figure 1: Four Key Themes for Scoping Exercise

- 4 UK case study locations
 - Reading
 - Oxford
 - Cardiff
 - Bristol
- Interviews with local stakeholders to build picture of activity/context at each site



- Seville, Spain

- Regional capital
- Historic urban core
- Low cycle rates (x10 increase in cycling 2006-10)
- Stakeholder interviews
- 8-80 initiative
- Links to Bogota, Colombia



- Munich, Germany

- Regional capital
- MobilTUM 2014 conference
- Cycling for older people initiatives
- Stakeholder interviews



- **Scoping study report** combining policy and thematic/literature review
- Building a comprehensive picture of older people and cycling at national and urban/local scale
- Evidence base to inform and support other work packages, and enhance understanding of place-specific factors such as governance frameworks in case study cities

WP3: Examining Existing Data

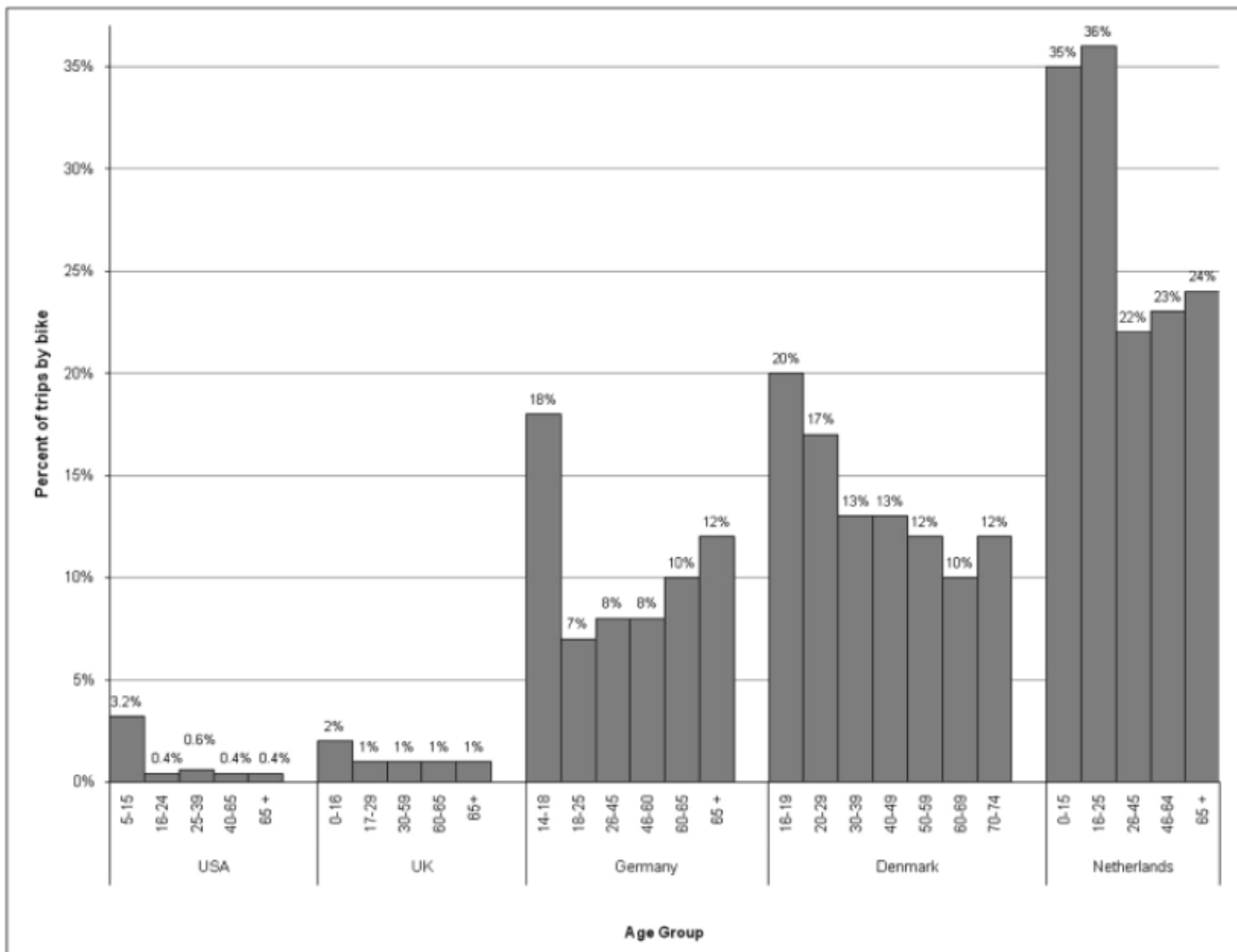
Kiron Chatterjee: University of the West of England (UWE)

- Set the scene and inform the rest of project.
- Generate complementary findings to those of other work packages.
- Establish authoritative, up-to-date evidence on older people and cycling in UK.
 - Statistical evidence at national and local level.
 - Qualitative insights from locations across UK.
- Not attempting to benchmark UK against other countries (but see WP2).

1. Create a rich description of older people's participation in cycling.
2. Provide informative profiles of older cyclists.
3. Reveal the motivations and barriers for older people cycling.
4. Assess the success of cycling initiatives in engaging older people.
5. Map out the potential expanded market for older people cycling.
6. Identify limitations of existing data on older people cycling and remedies to this.

What we already know

National comparison



Indicator:
Share of
trips by
bicycle

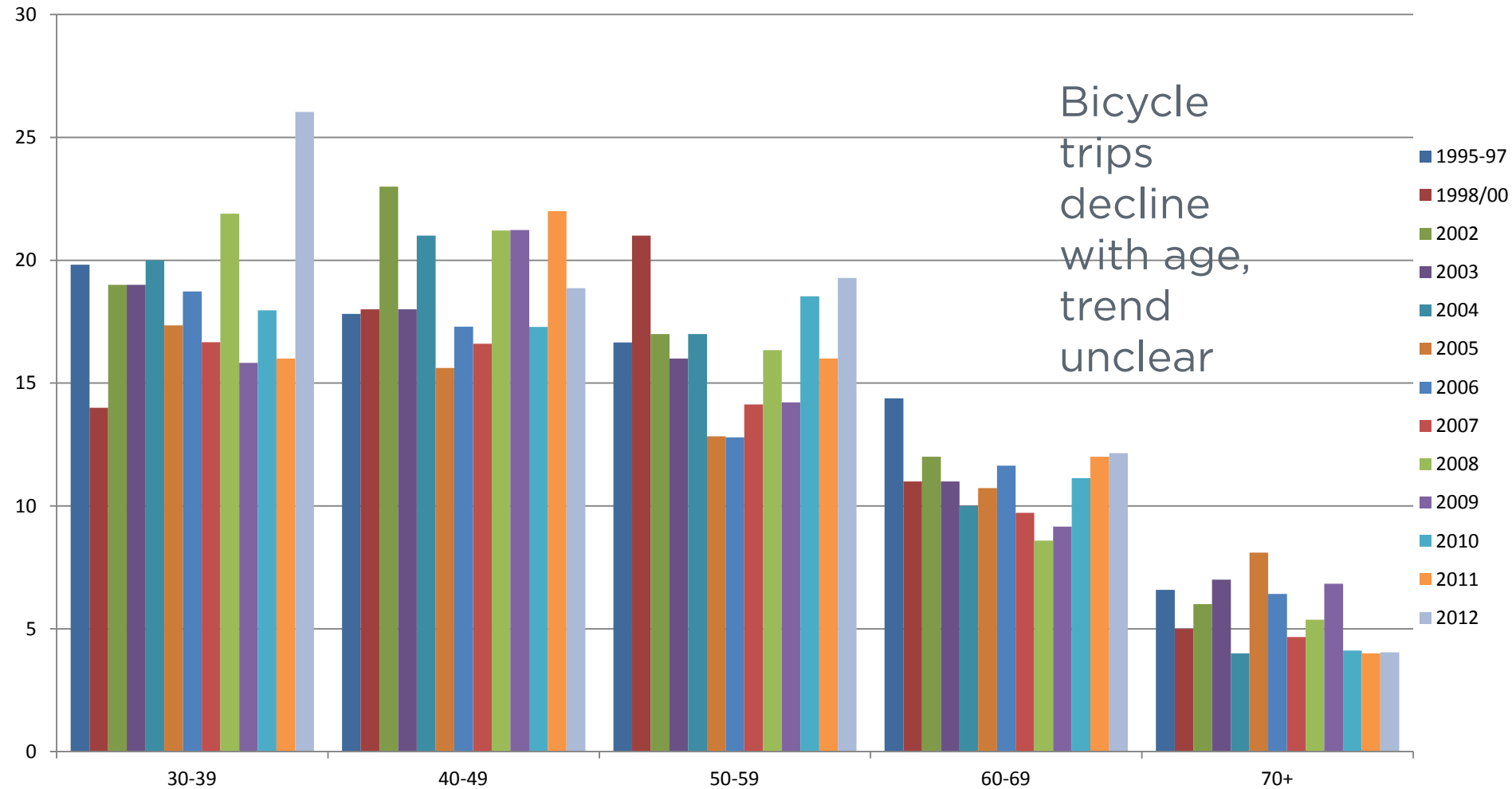
Period:
2000-02

Source:
Pucher and
Buehler
(2008)

Low bike
share
across age
groups in
UK

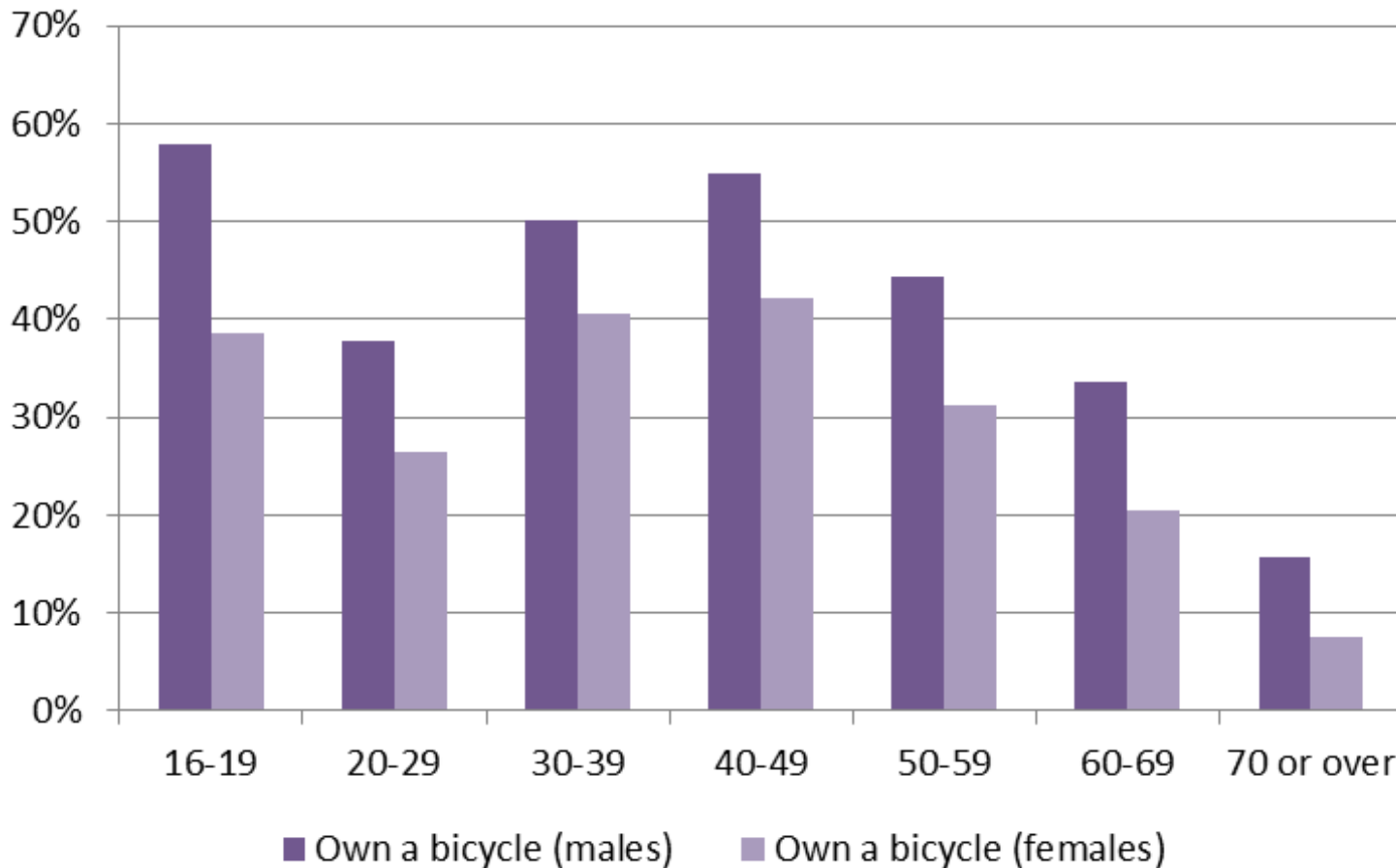
Trend over last 15 years in GB

Indicator: Bicycle trips per person per year (source: NTS)



Richer description of bicycle ownership and use

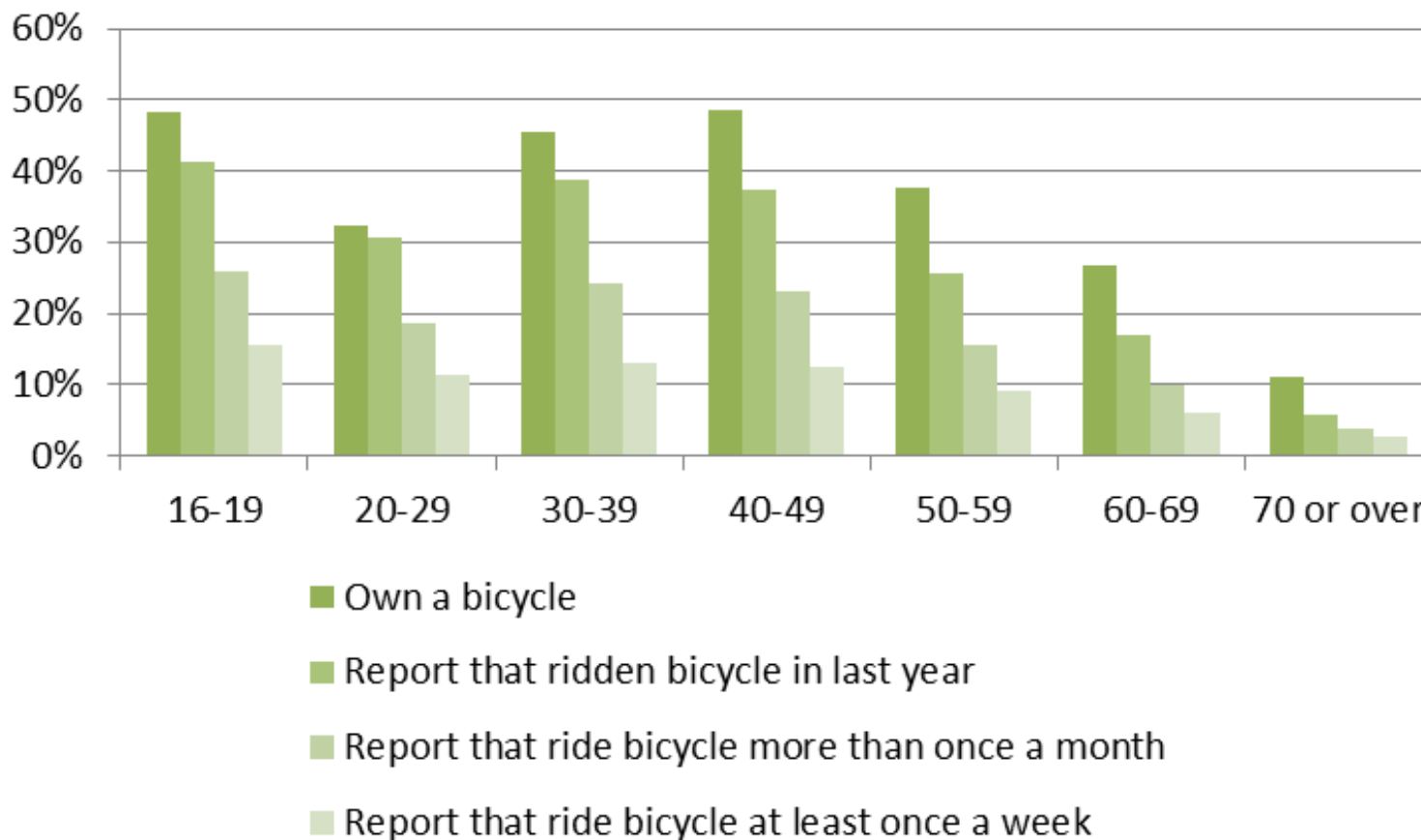
Bicycle ownership



Period: 2008-10
Source: NTS

Peaks at 40-49 and drops off sharply for both males and females

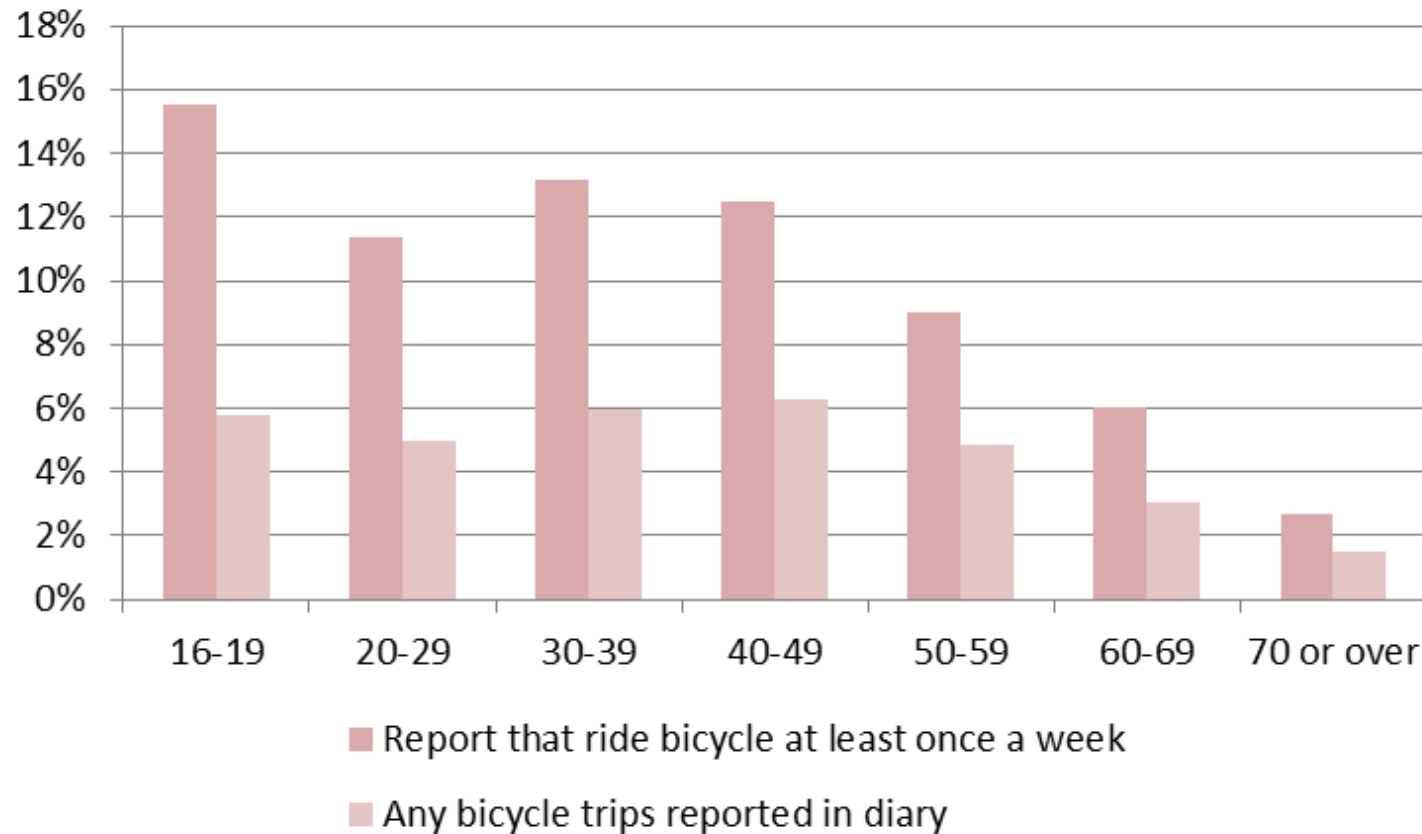
Self reported bicycle usage



Period: 2008-10
Source: NTS

Under-utilisation of bicycles across age groups. Large potential for more cycling!

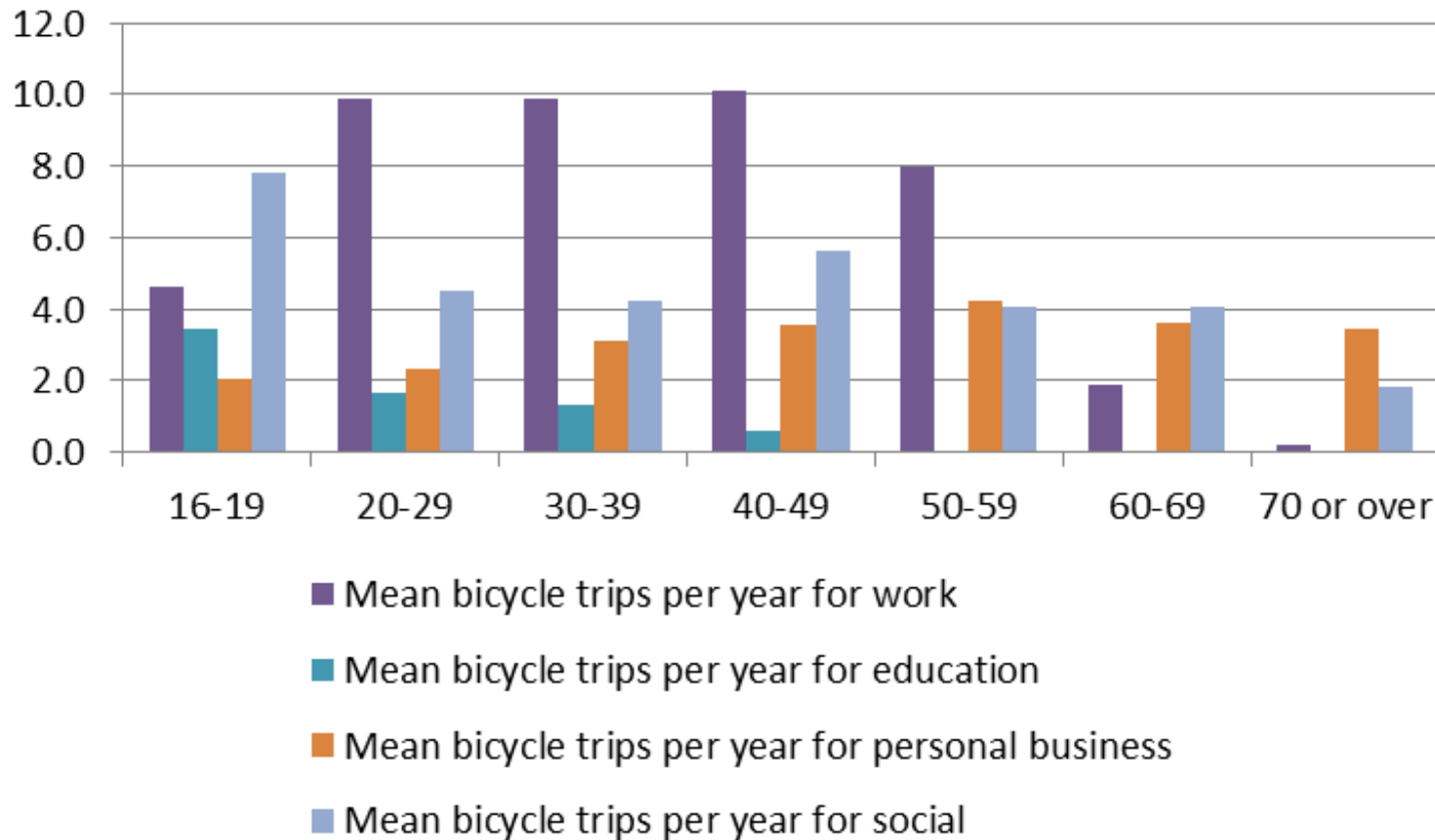
Bicycle trips recorded in diaries



Period: 2008-10
Source: NTS

Confirms decline in bicycle trips with age (diaries indicate half usage levels of self reporting)

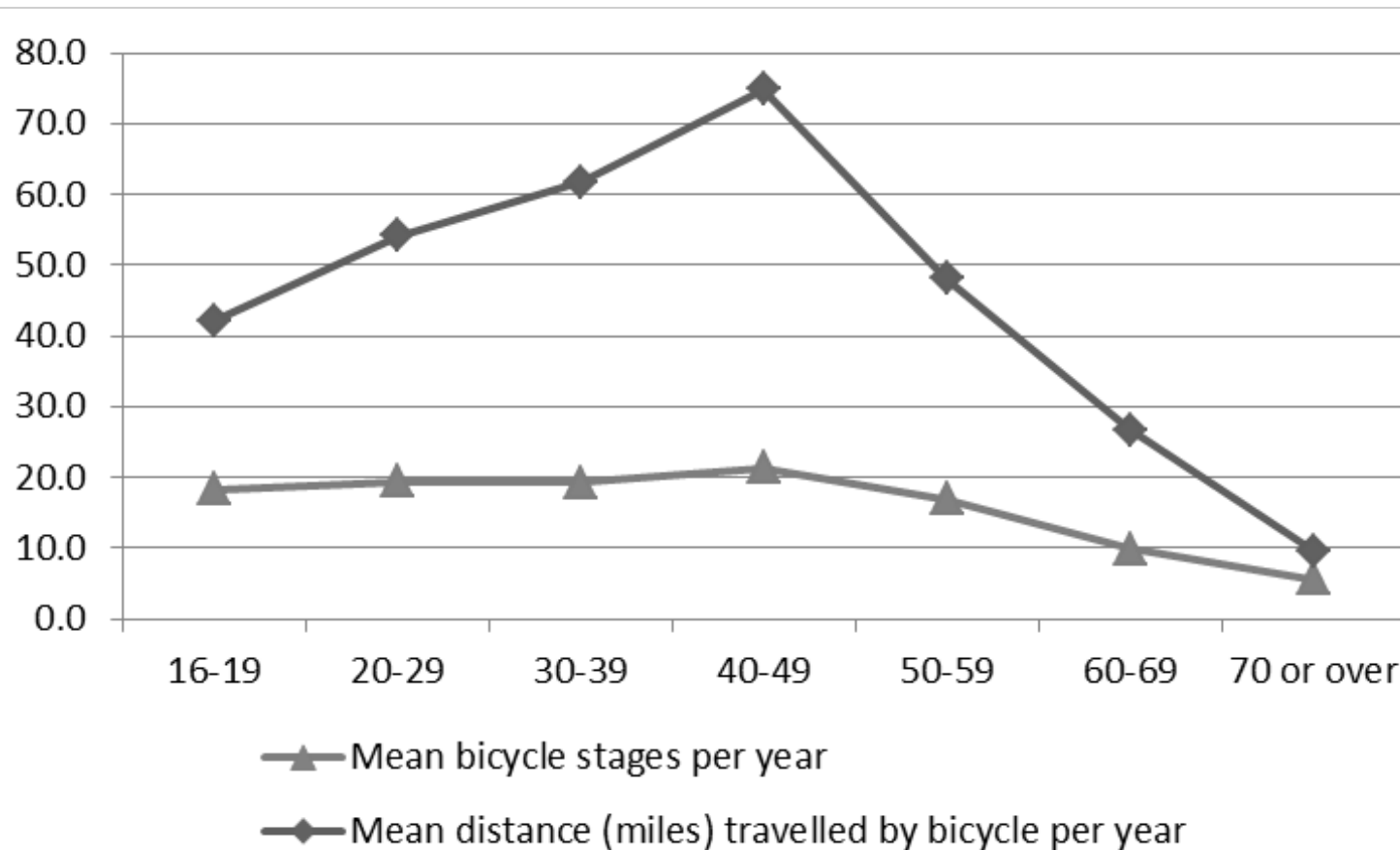
Purpose of bicycle trips



Period: 2008-10
Source: NTS

Personal business and social become main purposes as age

Bicycle stages and distance



Period: 2008-10
Source: NTS

Distance falls more steeply than stages as age

Profiles of older cyclists

Profile of older cyclists (60-69)

Characteristic	Own bike	Report bike trip
Across all aged 60-69	27%	3.0%
Live in Metro area	16%	1.0%
Live in rural area	38%	3.5%
Live in purpose-built flat	12%	2.9%
Live in detached home	37%	3.5%
Own 0 cars	14%	3.5%
Own 2 cars	36%	2.9%
Lowest income quintile	22%	3.7%
Highest income quintile	41%	3.6%
Female	20%	1.9%
Male	34%	4.3%
Non-white	7%	1.6%
White	28%	3.1%

Period: 2008-10
Source: NTS

Own bikes - wealthy, male and white!

Use bikes - male and white but more mixed

Settlement type	16-59	60+
London	5.9%	2.2%
Metro	3.9%	1.0%
Other urban over 250k	6.6%	2.7%
Urban 25k to 250k	6.0%	2.3%
Urban 10k to 25k	5.5%	2.9%
Urban 3k to 10k	5.0%	2.5%
Rural	5.4%	2.6%
Overall	5.6%	2.3%

Indicator:
Any bicycle
trips reported
in diary
Period: 2008-
10
Source: NTS

60+ relatively
more likely to
cycle in
smaller
settlements
(than 16-59)

Agreement with statement	16-59	60+
Disability/health making it difficult to cycle	6%	43%
Not kind of person who rides bicycle	30%	48%
Confident cycling on roads	41%	22%
Too dangerous for me to cycle on roads	57%	72%
Cycle (more) if more dedicated cycle paths	55%	42%
Rather cycle than use public transport	40%	18%
I (would) enjoy cycling as a leisure activity	72%	45%

Period: 2009-10
Source: DfT Climate Change and Transport Choices Segmentation Model project (N=3923)

Less able/
inclined to
cycle and
discouraged
to cycle on
roads

- Contribution of cycling to physical activity and association with health and wellbeing (HSE)
- Cycling for leisure (APS)
- Bicyclist accident involvement (Stats 19)
- Local variation in bicycle use and the profile of bicyclists (NHTS, APS)
- Route user age profiles (Sustrans)
- Engagement of older people in cycling initiatives (e.g. Sky Ride participant data)
- Cycling experiences and thoughts (interviews from UWAC, Cycling City and Town evaluation)

- Do you have suggestions for priorities?
- Can you suggest data sources that would be useful?
- What do we want to know but there is no data currently available?

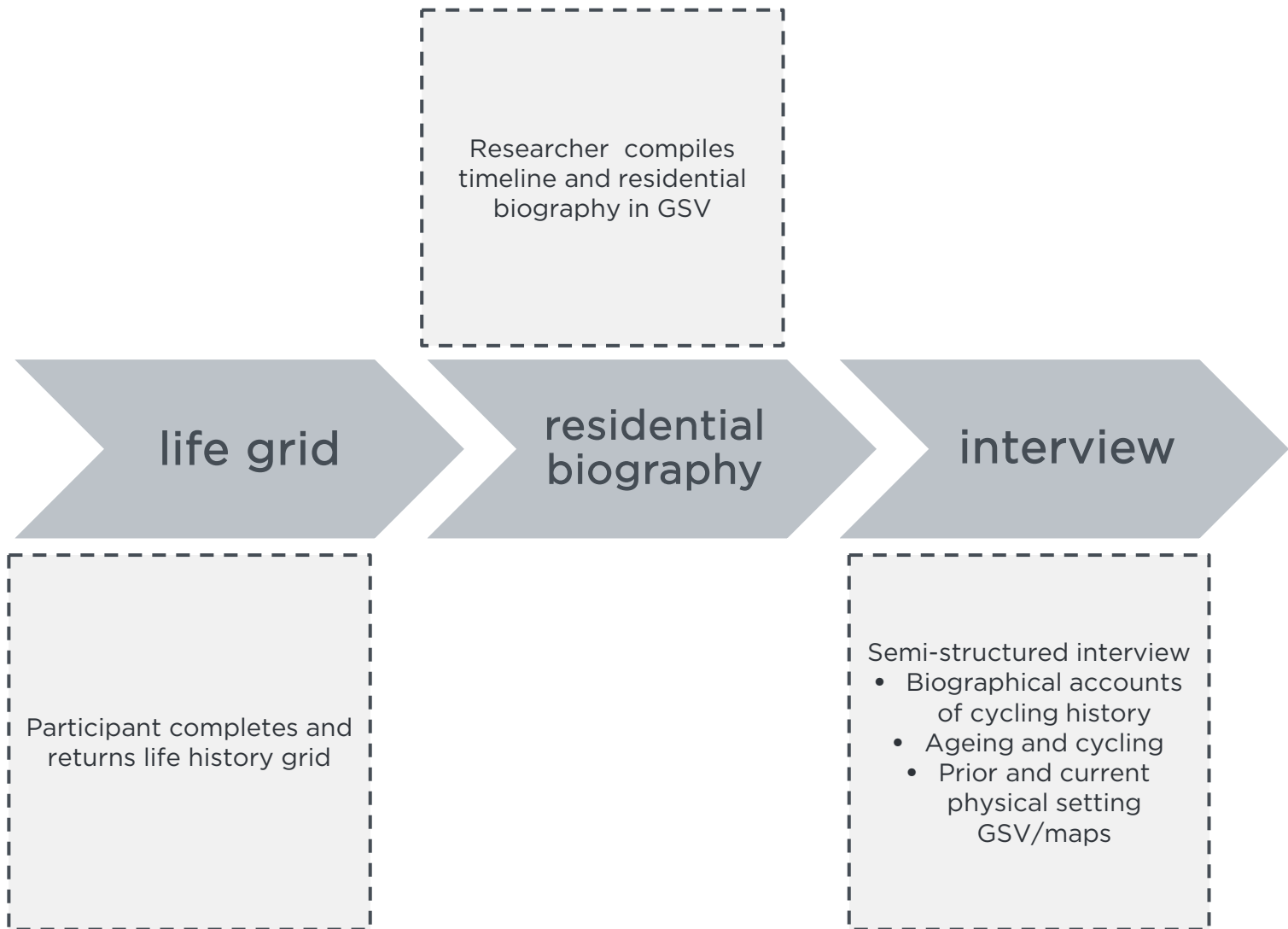
WP4: Cycling Life History Interviews

Heather Jones: University of the West of England (UWE)

- 1) Currently cycling
- 2) Early adulthood but no longer
- 3) Mid-adulthood and/or early but no longer

Through individual life histories of cycling reveal

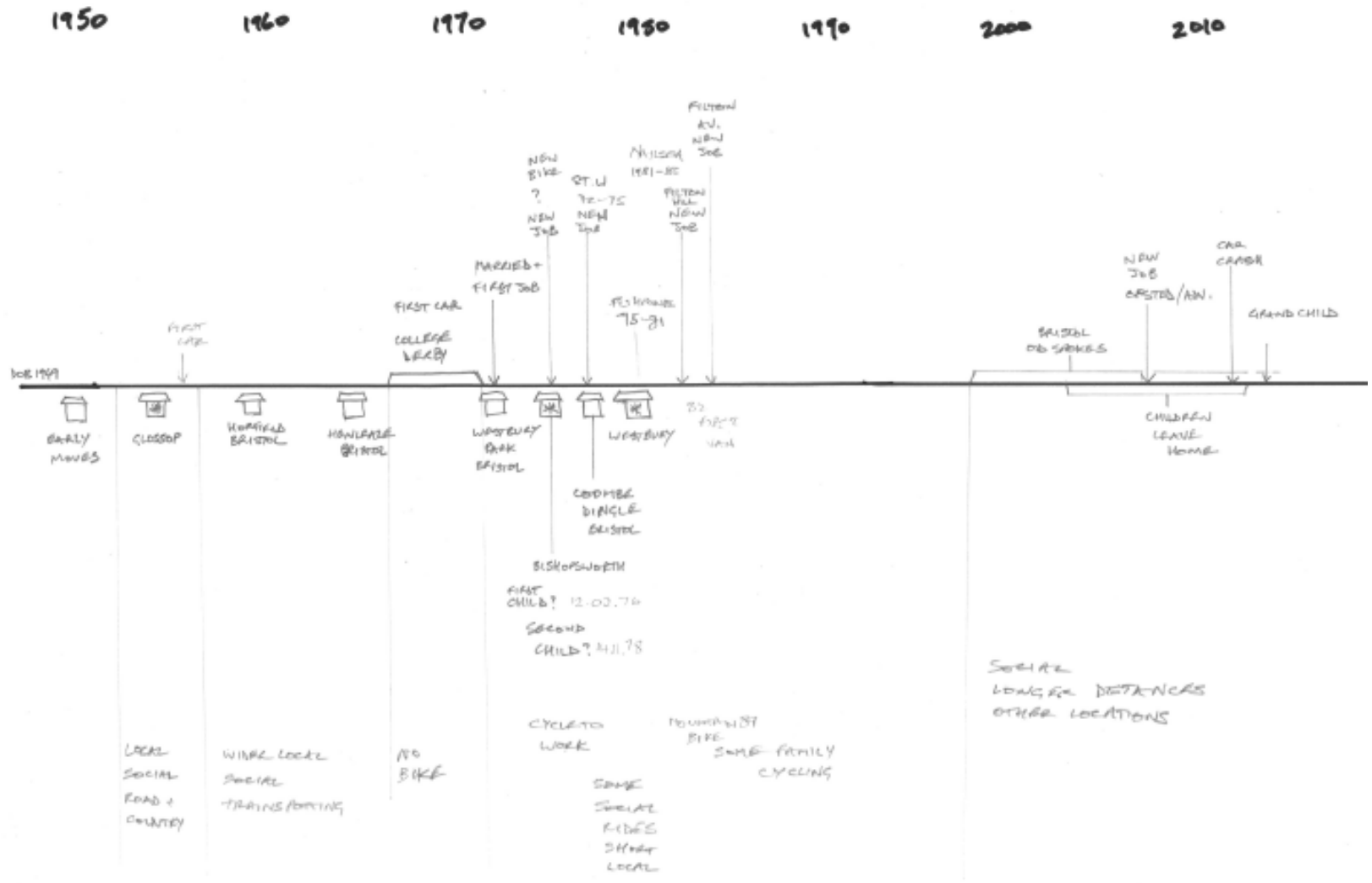
- whole-life view on engagement with cycling
 - Behaviour change and continuity in relation to life events and transitions and evolving social and physical settings
 - potential to cycle through life
- experience and narratives of cycling and ageing
 - How cycling is affected by mid / later adulthood transitions?
e.g. changing work patterns, family structure, roles, health
 - Adaptive, restorative and diminishing changes
 - Outlook for future cycling
 - What narrative forms are present ?



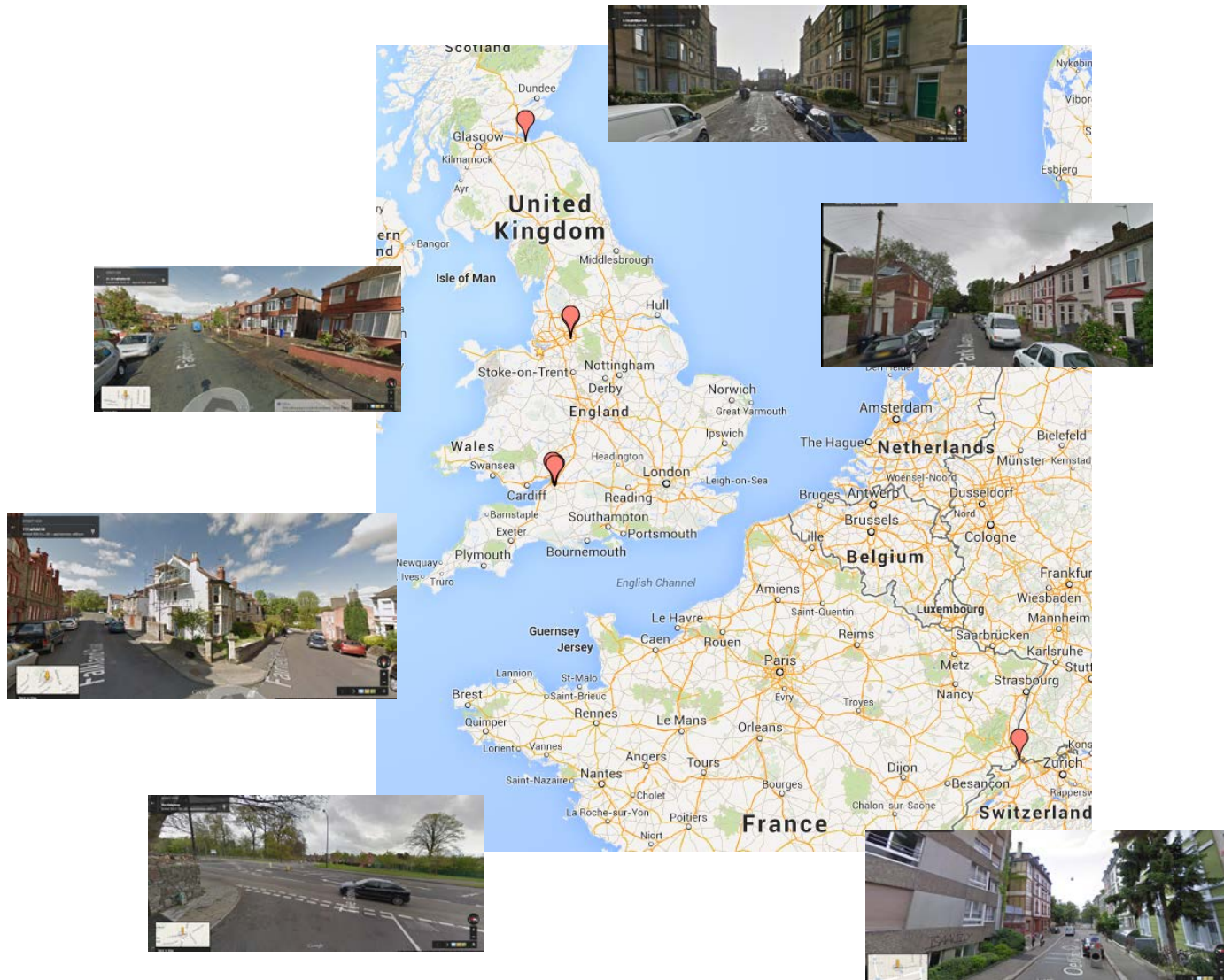
Life history grid

Year of birth:	1963	1950s	1960s	1970s	1980s	1990s	2000s	2010s	
Residence			HARLOW, ESSEX	1977 ADFARTON HEREFORDSHIRE TO 1980	CHATHAM KENT 82-83 CLYRD HEREFORD TO 1982 BRISTOL 1983	WESTBURY ON TRYM	WESTBURY ON TRYM	WESTBURY ON TRYM	
Household			MUM, DAD, OLDER SISTER	M, D, SISTER	M, D 2 WORK COLLEAGUES IN HOUSE STUDENT	PROFESSIONAL WITH FAMILY MARRIED 1991 DAUGHTER 1992 SON 1995	HE, WIFE, SAW DAUGHTER	DAUGHTER TO UNIVERSITY 2010 SON TOWN 2011	
Education / work (paid / unpaid)			PRIMARY SCHOOL 1968	SECONDARY SCHOOL HARLOW THEN WISMALE, HEREFORD 1977	SIXTH FORM LEDNETHOL 1980-82 PAID WORK 82-83 UNIVERSITY 83-86	PAID JOB 1986 NAILSEA	JOB FILTON 1988	2005 JOB CENTRE OF BRISTOL. 2005-2010	JOB CHIPPENHAM WILTS 2010-NOW
Activities / hobbies / leisure				FOOTBALL SPORT ADVENTURES WITH FRIENDS	FOOTBALL BASKETBALL (SCHOOL + UNIV.) FOOTBALL AT WEEKENDS	ACTIVE HOLIDAYS	WALKING WITH KIDS, FRIENDS 5-A-SIDE		
Transport			KIDS BIKES IMMEDIATE AREA	1975 FIRST "REAL" BIKE 5-SPEED RACER	USE OF CAR 1981 BOUGHT GOOD BIKE 1980 BIKES SOLD IT IN 1990	NO BIKE KIDS HAVE NEVER HAD BIKES			
Cycling - owned or had access to a bike			TOY BIKES ETC						
Cycling - activity				WENT EVERYWHERE ON BIKE FROM 1975	1986 THEN GOT A CAR	CYCLED AT CENTRE PARKS ONCE	NO OTHER BIKE USE.		

Timeline



GSV residential biography





- Ageing and cycling
- Past routes
- Aspiration for cycling

- How to tailor the method for interviews with those no longer cycling and may not have for some time
 - Not making it an inquisition
 - times of potential cycling
 - Exploring outlook for cycling
- How to use GSV/maps in interviews and in analysis?

WP5: Cycling Mobility Observation | Interviews

Justin Spinney & Nick Humes:
Cardiff University

WP6: Cycling and Wellbeing Trial

Carien van Reekum:
University of Reading



- Is exercise and better cognitive performance in older age causal?
- Better cardiovascular/cerebrovascular health?
- Effects of other factors:
 - Depression
 - Social interaction/engagement

- AIM: To test the impact of (re)discovering cycling on mental health and wellbeing in older adults.
- What is well-being?
 - Mental & physical health
 - (Social) engagement
 - (Life) satisfaction
 - Purpose in life
 - Feeling “happy”
- Approach taken: focus on cognitive performance and self-reported well-being

- Cognitive function
- Eudaimonic wellbeing
- Hedonic wellbeing (life satisfaction)
- Physical health

- Participants:
 - 80 Middle to older aged (50 and up) – not currently cycling
 - From different WPs
 - Recruited in Reading & Oxford
 - Half will e-bike
 - 20 same-aged controls
- 3 x per week for 30 mins each
 - Self-reported recording of actual activity level (frequency, duration, distance)

- Standardised tests – MMSE (but too global – initial testing for profiling reasons)
- General processing – incl memory
- Executive function: Shifting, updating, inhibition (Miyake et al., 2000), “working memory”
- Tasks:
 - CERAD elements
 - Letter memory
 - Plus-minus
 - Stroop/Go-No Go/Eriksen flanker task
 - Pro-active interference

- Eudaimonic vs hedonic well-being
- Hedonic WB: Satisfaction with Life Scale (Diener, 1985)

Below are five statements with which you may agree or disagree. Please circle the item that best reflects your agreement with each item. Please be open and honest in your responding.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Slightly disagree
- 4 = Neither agree nor disagree
- 5 = Slightly agree
- 6 = Agree
- 7 = Strongly agree

-
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. In most ways my life is close to my ideal. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. The conditions of my life are excellent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I am satisfied with my life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. So far I have gotten the important things I want in life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. If I could live my life over, I would change almost nothing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- Scales of Psychological Well-Being (PWB, Ryff, 1989)
- Autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance
- Items include
 - “I have confidence in my opinions, even if they are contrary to the general consensus”
 - “I am quite good at managing the many responsibilities of my daily life”
 - “I think it is important to have new experiences that challenge how you think about yourself and the world”
 - “People would describe me as a giving person, willing to share my time with others”
 - “I am an active person in carrying out the plans I set for myself“
 - “Some people wander aimlessly through life, but I am not one of them”
 - “When I look at the story of my life, I am pleased with how things have turned out”

- The SF-36v2 Health Survey
 - vitality
 - physical functioning
 - bodily pain
 - general health perceptions
 - physical role functioning
 - emotional role functioning
 - social role functioning
 - mental health

- Outcomes:
 - Cycling as another means for exercise to promote mental and physical health
 - Demonstrating better health will stimulate the public to (re)engage in cycling
 - Policy making
- Issues:
 - Compliance
 - Age distribution of volunteers
 - Cycle ownership, maintenance & repair
 - Safety of participants throughout the trial

- Your task is to name the colour of the ink that a word is printed in, and ignore the meaning of the word:

RED

GREEN

BLUE

GREEN

BLUE

RED

WHITE

BLUE

BLACK

RED

BLACK

GREEN

1. Are you aware of any policies or programmes promoting older people's cycling in the UK or EU?
2. Do you have suggestions for any other possible data sources to analyse?
3. Do you have any comments on the empirical methods we are proposing?

Recruitment and Participant Journey

Tim Jones, Ben Spencer, Nick Beale:
Oxford Brookes University

cycle BOOM

sampling approach and participant journey

SAMPLING FRAME

Oxford | Reading | Bristol | Cardiff
Selected Urban | Suburban | Peri-urban areas

TARGET SAMPLE POPULATION

240 older people [120 Wave 1 in 2014 | 120 Wave 2 in 2015]
Male | female
Age 50-59 | 60-69 | 70+
English Indices of deprivation

SAMPLE RECRUITMENT

www.cycleboom.org | events | media | groups | snowballing | hanging out

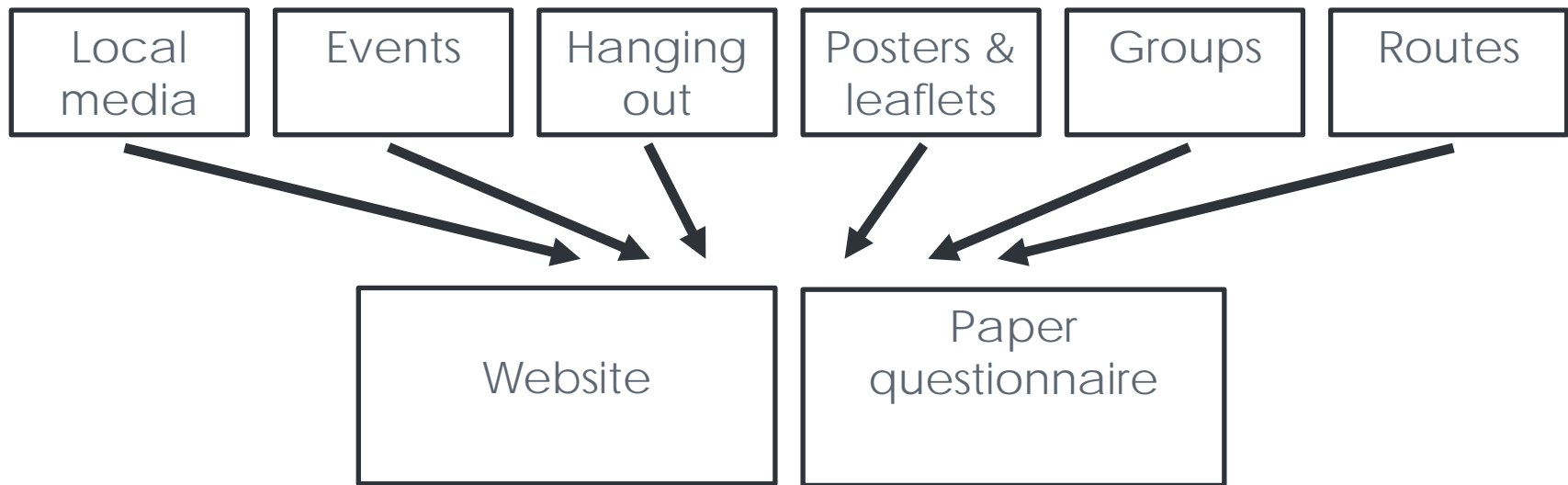
SAMPLE SCREENING SURVEY

currently cycle | do not currently cycle

PARTICIPANT JOURNEY | WAVE 1

METHOD	OXFORD	READING	BRISTOL	CARDIFF
Cycling life history interview [n=120]	10 ↓	10 ↓	15 ↓	15 ↓
Cycling mobility observation-interview [n=50]	20 ↓	20 ↓	15	15
Cycling and wellbeing trial [n=40 + 10 control]	10 ↓	10 ↓	No trials	No trials
Pedal cycle	10	10		
Electric cycle	10	10		
Control	5	5		

Version 1.0 | Last updated Feb 12 2014



A white icon of two stylized human figures, one slightly taller than the other, representing participation or a study.

Participate in our study

A white icon of an open book or document, representing a newsletter or subscription.


Subscribe to our
newsletter

A white icon of three books standing upright, representing a blog or articles.

Read our blog

A white icon of the Twitter bird logo, representing social media.

Follow our Tweets

A white icon of the letter 'P' inside a circle, representing the Pinterest logo.

Pin your cycling photos

You are here: [Home](#) / [Contact](#) / Register Your Interest

Register Your Interest

We are looking for a diverse range of participants approaching later life (aged 50-59) and in later life (age 60+) living in the Bristol, Cardiff, Oxford and Reading areas to take part in our cycle BOOM study. We are especially interested in hearing from people who don't regularly cycle any more.

Whether you cycle or not, we are interested in hearing from you! We will be selecting people in the first quarter of 2014. We will get in touch with those we'd like to work with by the end of March 2014. If you have not heard from us by that date then unfortunately we will not have been able to select you to participate in the study.

Privacy policy: The information requested below will allow us to draw a diverse sample of participants.

All information is collected and stored in line with our [privacy policy](#), this also covers data security, including details on 128-bit SSL encryption.

Participant questionnaire



ADHESIVE AREA | ADHESIVE AREA | ADHESIVE AREA | ADHESIVE AREA | ADHESIVE AREA

The cycle BOOM team are looking for a diverse range of participants approaching later life (aged 50-59) and in later life (age 60+) living in XXXX [details of neighbourhood] to take part in our cycle BOOM study

We are especially interested in hearing from people who regularly cycle any amount

Whether your cycle or you are interested in hearing from us, please complete the form below. Alternatively you can visit www.cycleboom.org and complete the form online

How will we use the information you provide?
We collect and store information in order to consider whether you are a suitable candidate to take part in the study. We will not share your information with third parties unless it is required by law.

The information you provide will be used in accordance with the Data Protection Act 1998. All information collected about you during the study will be kept strictly confidential and stored securely at Oxford Brookes University or in another secure data facility.

Access to your information
You have the right to request a copy of your personal information that we hold about you. You may also withdraw your consent at any point and request that your information be removed from our database. If you would like a copy of your information, please contact our Project Manager, Nick Beale, on 01865 482752 or email nbeale@ox.ac.uk

Further information
Nick Beale - Cycle BOOM Project Manager
Project 665 482752
Tel: 01865 482752
Email: nbeale@ox.ac.uk

www.cycleboom.org

Once you have completed the form, you can send it back to us directly using the adhesive sticker on the reverse of this document, or you can post it to the address below.

cycle BOOM
DESIGN FOR LIFELONG HEALTH & WELLBEING

cycle BOOM
Design for lifelong health and wellbeing

PARTICIPATION FORM

FREEPOST XXXXX
cycle BOOM
Oxford Brookes University
Department of Planning
Harington Road Campus
Oxford OX3 0BP

ROYAL MAIL
POSTAGE WILL BE PAID BY ADDRESSEE

PARTICIPATION FORM

Thank you for your interest in taking part in the study, please complete the form below. Alternatively you can visit www.cycleboom.org and complete the form online

First name		Gender	
Last name			
Year of birth*			
Ethnic group (Please tick one)	<input type="checkbox"/> White		
	<input type="checkbox"/> Asian or British Asian		
	<input type="checkbox"/> Black or African/Caribbean/Black British		
	<input type="checkbox"/> Mixed or multiple ethnic group		
	<input type="checkbox"/> Other ethnic group (please specify):		
What is your economic status?	<input type="checkbox"/> Rather not say:		
	<input type="checkbox"/> Full-time employment		
	<input type="checkbox"/> Part-time employment		
	<input type="checkbox"/> Away from work on sick leave/maternity leave or temporarily off work		
	<input type="checkbox"/> Retired		
	<input type="checkbox"/> Looking after family home		
	<input type="checkbox"/> Student		
<input type="checkbox"/> Other (please specify):			

Are your day-to-day activities limited because of a health problem or disability that has lasted, or is expected to last, at least 12 months?

	Yes, limited a little	No
--	-----------------------	----

Select which sentence best describes your current thinking about cycling?

<input type="checkbox"/> I am not planning to ride a bicycle in the future	<input type="checkbox"/> I am thinking of riding a bicycle in the future	<input type="checkbox"/> I am planning to ride a bicycle this year
<input type="checkbox"/> I already ride a bicycle but I am planning on stopping this year	<input type="checkbox"/> I already ride a bicycle and I intend to continue to do so this year	

What was your age when you last rode a bicycle?

* Participants year of birth must be before 1964 to qualify for this study

For further information on this study please visit our website www.cycleboom.org or see overleaf for contact details.

What is your full postcode?

When you last rode a bicycle was it for...?

Practical purposes (e.g. going to work/ shops/visiting friends)	
Recreational purposes (e.g. just going out for a ride)	
Practical AND recreational purposes	
Don't know/not applicable:	

Please select whether you currently...

Do NOT own a cycle and NOT interested in getting one	
Do NOT own a cycle but thinking about getting one	
Own a pedal cycle only	
Own an electric cycle only	
Own a pedal cycle and an electric cycle	

What is your full postcode?

We ask this so that we can identify the geographical spread of potential participants. This information is kept strictly confidential and is not passed on to any third-party organisations.

Email address:

Phone number:

Any other comments:

OXFORD BROOKES UNIVERSITY

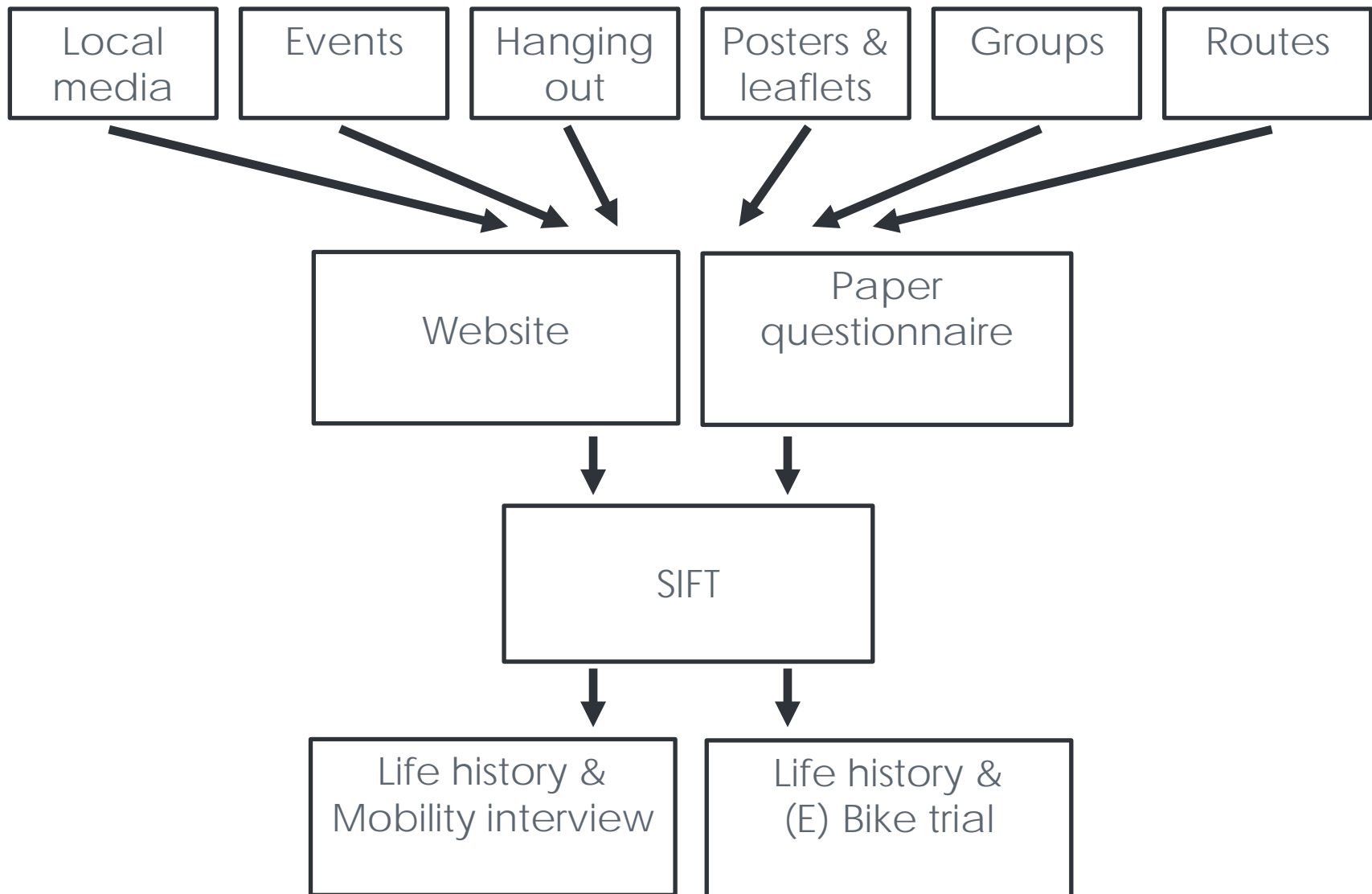
CARDIFF UNIVERSITY METROPOLITAN

UNIVERSITY OF READING

UNIVERSITY OF THE WEST OF ENGLAND

EPSRC
Engineering and Physical Sciences Research Council
Academy for the Lifelong Health and Wellbeing programme grant no. EP/I025421

OXFORD BROOKES UNIVERSITY
Lifelong Health & Wellbeing



Participant information



What is the purpose of the study?
 cycle BOOM is a study to understand cycling amongst the older population in the UK and how this affects independence, health and wellbeing. The aim is to advise policy makers and practitioners how our environment and technologies can be designed to help people to continue to cycle in older age or to reconnect with cycling. This will be done through a 'toolkit' of advice and guidance supported by a short documentary film.

The cycle BOOM study is a 3-year project that started in October 2013 and that is funded under the UK Research Councils' Lifelong Health and Wellbeing programme. The study is being led by Oxford Brookes University in partnership with the University of Reading, University of the West of England (Bristol) and Cardiff University.

Why have I been invited to participate?
 cycle BOOM is working with people aged over 50 with different levels of cycling experience living in the Oxford, Reading, Bristol and Cardiff areas. You have been selected to take part based on the background information you provided us with in the screening survey. Altogether we are inviting around 240 people living in the four study areas to take part. These are people with a variety of experiences of cycling and will include people who no longer cycle and those who have more recent experience of cycling.

Do I have to take part?
 It is completely up to you to decide whether or not to take part in the study. If you decide to take part then you will need to sign and return the enclosed consent form to the project manager at the contact address overleaf. You are free to withdraw from the study at any time without giving a reason.

What will happen to me if I take part?
 This part of the cycle BOOM study involves two tasks (Task A & B). If you no longer cycle you will only be asked to take part in task A. If you currently cycle you will be asked to take part in task A and B.

Who is organising and funding the research?
 cycle BOOM is being led by Dr Tim Jones a Senior Research Fellow in the Department of Planning at Oxford Brookes University, The University of Reading, the University of the West of England (Bristol) and Cardiff University and are partners in the research.

cycle BOOM is funded by the UK Research Councils through the Lifelong Health and Wellbeing (LLHW) programme.

The study has been reviewed and passed by the Research Ethics Committees of Oxford Brookes (Ref No 2000) and University of Reading (Ref No 2000) and complies with the requirements of Cardiff University and the University of the West of England.

Contact for further information
 If you require any further information please contact:

Nick Beale - cycle BOOM Project Manager
 Oxford Brookes University, Department of Planning
 Headington Road Campus, Oxford OX3 0BP
 Tel: **01865 482752**
 Email: **nbeale@brookes.ac.uk**

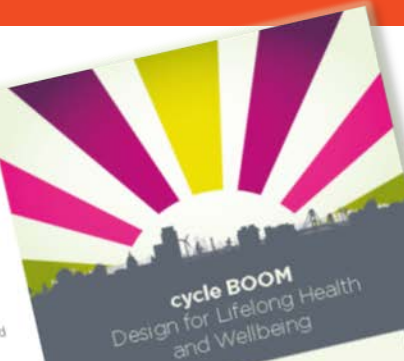
- Further details are available at www.cycleboom.org
- <http://bit.ly/1gprGwY>

If you have any concerns about the way in which the study has been conducted, please contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk

Request our newsletter and bookmark our blog at www.cycleboom.org
 Follow us on Twitter [www.twitter.com/cycle_BOOM](https://twitter.com/cycle_BOOM)
 Like us on Facebook www.facebook.com/cycleboom



Research Grant No EP/K037242/1



You are invited to take part in the cycle BOOM study.
 Before you decide whether or not to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.



www.cycleboom.org
 Research Grant No. EP/K037242/1

ten years after it is finished. After this time it will be destroyed. It is also a condition of our research funding that the data we collect must be shared and stored in a national repository. We will anonymise our data and place it in the UK Data Archive.

What will happen to the results of the research study?
 Everyone who takes part in cycle BOOM will be given the option to receive a short report on the main findings. We will publicise the toolkit and documentary film through the national and local media and partner organisations. We will also be running seminars and conferences to tell people about our results as well as blogging and tweeting throughout the project.

What should I do if I want to take part?
 If you are happy to take part please complete and sign the attached consent form and return it to the project manager using the contact details below. We will then contact you within 14 days of receiving it to confirm your participation and to confirm survey arrangements.

TASK A: CYCLING LIFE HISTORY INTERVIEW



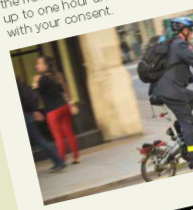
This task will involve mailing you a 'life history grid' in the post for completion in your own time. On the grid we ask you to provide brief details on where you have lived, family circumstances, places of education, and methods of transport/hobbies/leisure activity, and when you have cycled in your life. The task is relatively straightforward and will take no longer than one hour. After completing it you will need to return the 'life history grid' in the pre-paid envelope. If you are unsure of how to complete the task you can contact us for support using the details at the end of this document.

We will contact you within 7 days of receiving your 'life history grid' to organise a follow up interview. This can take place at your home, at the University or another convenient public place and will take no longer than one hour. We will use an illustrated timeline at the interview (compiled from the 'life history grid') to explore the role that cycling has or has not played during your lifetime. The interview will also involve looking at some maps and street view images of the places you have lived to better understand the geographical context for cycling. We will ask your permission to audio record the interview to help with our analysis and also your permission to return at a later date to film a documentary video targeted at illustrating our findings. If you no longer cycle you will not be required to take part in task B.

TASK B: CYCLING MOBILITY OBSERVATION-INTERVIEWS

If you currently cycle we will arrange a separate occasion to observe you taking part in a routine journey or a cycle by cycle. This could be a regular journey you make to the shops, for example, or a recreational activity that you regularly take part in. We will ask you to wear a head mounted electroencephalography (EEG) sensor to measure the electrical activity in the brain and electromyography (EMG) to measure electrical activity by the muscles in your face. You will be asked to wear eye-tracking glasses to record eye activity. A video recorder will be mounted on your bicycle handlebar to record your facial expressions. The devices are safe, fit comfortably and will also track your speed and your local GPS. Proximity sensors will follow you as you cycle. The researcher will be fitted with a video camera and they will be fitted with a video camera on your bike and to capture your experience as if you were riding but to capture your speed, speed of movement, about your usual business. The devices will capture rich data on your route, speed, movement, expression, EEG and EMG, eye-movement to passing motor vehicles. From this we will map your physical and emotional reactions through different environments.

After this ride the researcher will contact you and arrange to interview you within 7 days of the video footage of your ride on a laptop. The researcher will then contact you to discuss about the decisions you made at the time and your emotional state up to one hour and, once again, with your consent.



Oxford – Registered Interest

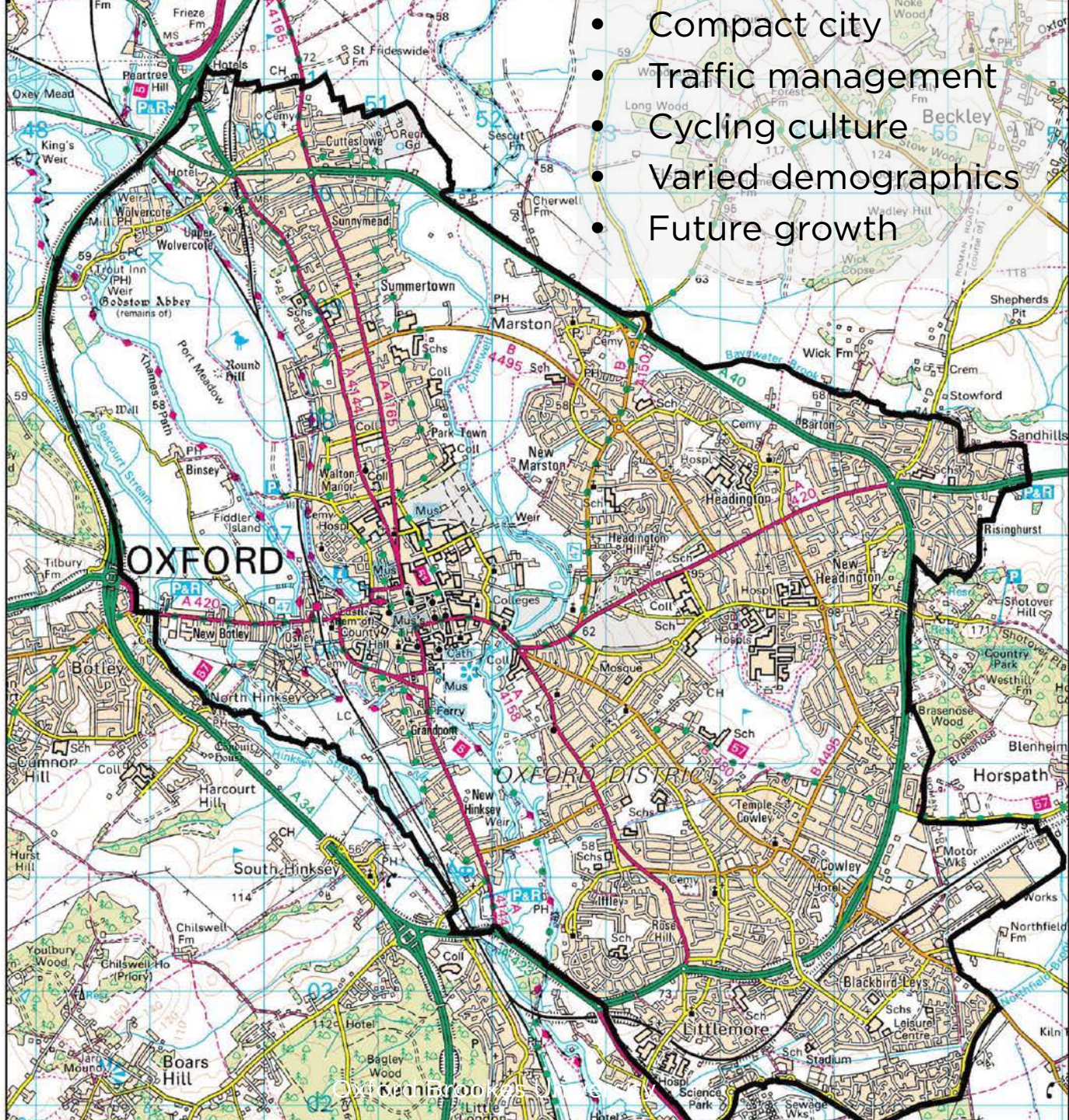


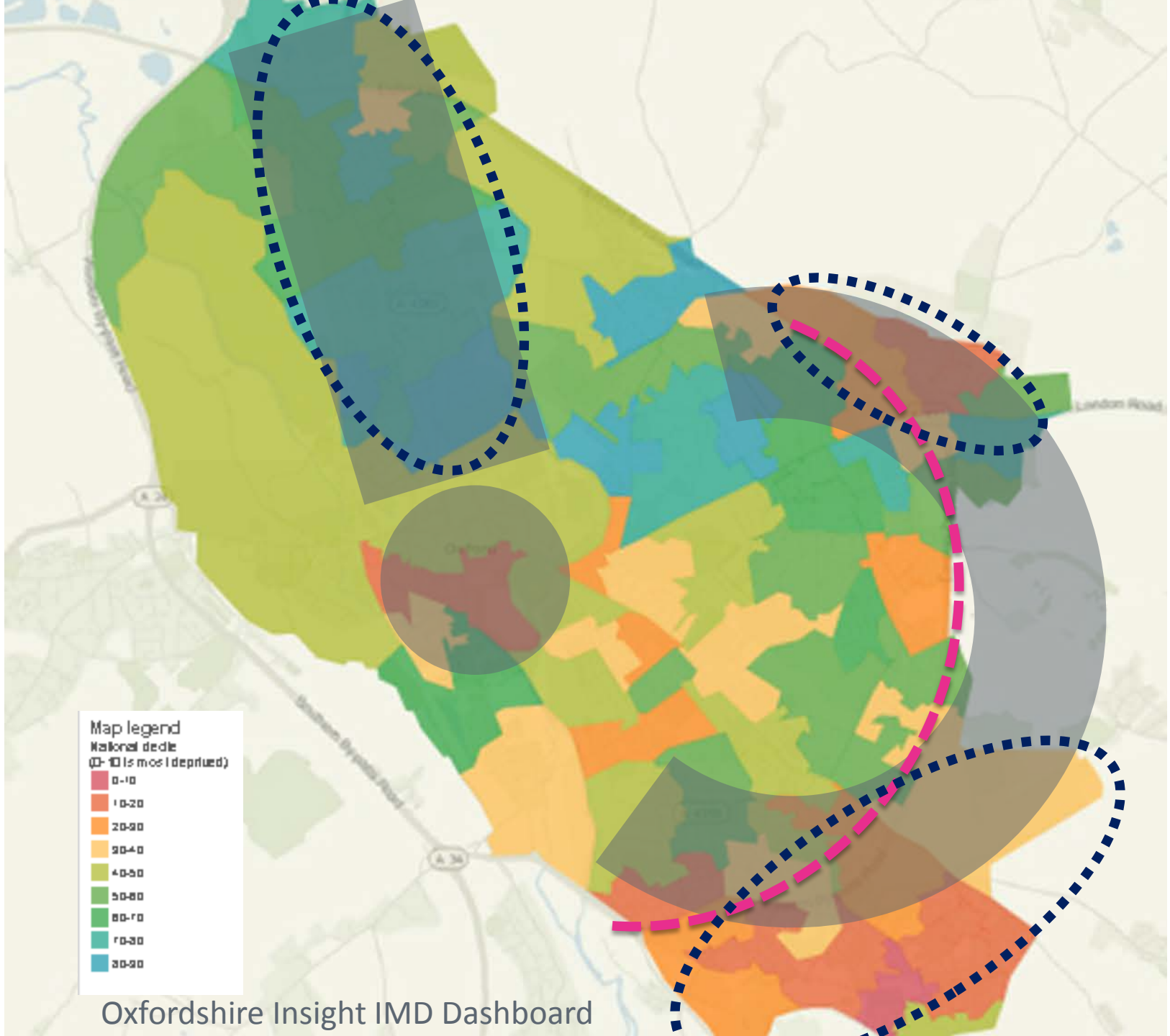
Oxford – Registered Interest

METHOD	OXFORD		I'll let you decide			
Cycling life history interview [n=120]	M: 50-59:	3	M: 50-59:	0	1	0
	M: 60-69:	8	M: 60-69:	1	5	0
	M: 70+:	4	M: 70+:	0	0	0
	F: 50-59:	1	F: 50-59:	0	3	0
	F: 60-69:	5	F: 60-69:	2	2	3
	F: 70+:	4	F: 70+:	0	0	0
Cycling mobility observation- interview [n=50]	M: 50-59:	3				
	M: 60-69:	8				
	M: 70+:	2				
	F: 50-59:	0				
	F: 60-69:	5				
	F: 70+:	1				
Cycling and wellbeing trial [n=40 + 10 control]			M: 50-59:	0	4	1
			M: 60-69:	1	8	3
			M: 70+:	0	4	0
	Pedal cycle		F: 50-59:	0	2	3
	Electric cycle		F: 60-69:	2	6	8
			F: 70+:	0	6	1
				e-Bike only		

Approach to sampling: Oxford (shire)

- Compact city
- Traffic management
- Cycling culture
- Varied demographics
- Future growth





Map legend
National scale
(0-10 is most deprived)

0-10
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100

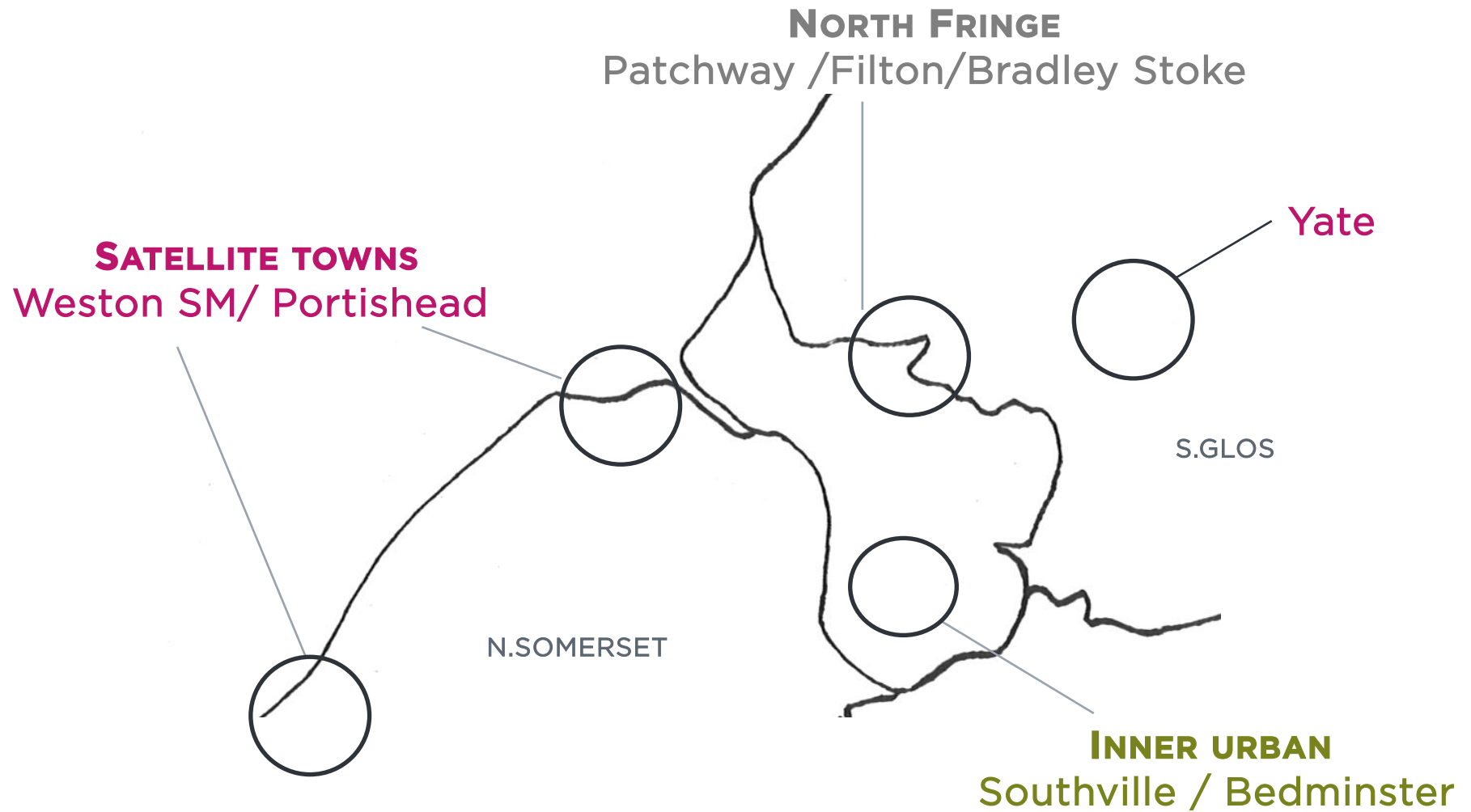


Pop 28,700 (2001)
15 miles to Oxford
Fast growing
Conventional road hierarchy
Mix of housing types
Slightly higher age profile than Oxford
NCN route 51

Pop 36,600 (2001)
5 miles to Oxford
Fast growing
Conventional road hierarchy
Mix of housing types
Slightly higher age profile than Oxford
NCN route 5

Candidate areas: West of England





Filton, Patchway, Bradley Stoke



- contiguous with Bristol
- bounded by M4/M5
- population ~ 50,000
- Major employment
 - Significant commuter movements
 - North Bristol SusCom
 - LSTF smarter choices promotion and key routes
- Cycling City Legacy
 - Concorde way
- Some hills



Patchway/ Filton
1930-1960s
Priority neighbourhoods

Bradley Stoke
1980s/1990s



- South of city centre, bounded by river to north
- Gentrified/deprived
- Hilly
- R+NCN 33 + 4
- Cycling city legacy
 - Malago greenway
- 20 mph zone
- LSTF: river crossings
- Traditional high street



Bedminster & Southville



late c19th &
early c20th
High density
terraced/ semi-
detached/ flats

Interspersed
with former
and current
industry



- Circa 75,000
- 18 miles from Bristol
- older age profile and ageing.
- 1% most deprived
- C19th seaside resort/ late C20th + C21st growth
 - Enterprise area
- Reasonably flat
- LSTF: limited cycling measures
- NCN 33 + 26

- 22,000
- 8 miles from Bristol
- dormitory town
- recent growth and ageing
- retirement developments
- More affluent
- LSTF: enhanced routes
- NCN 41 + 26

Weston Super Mare



1950s/60s/70s housing
medium density

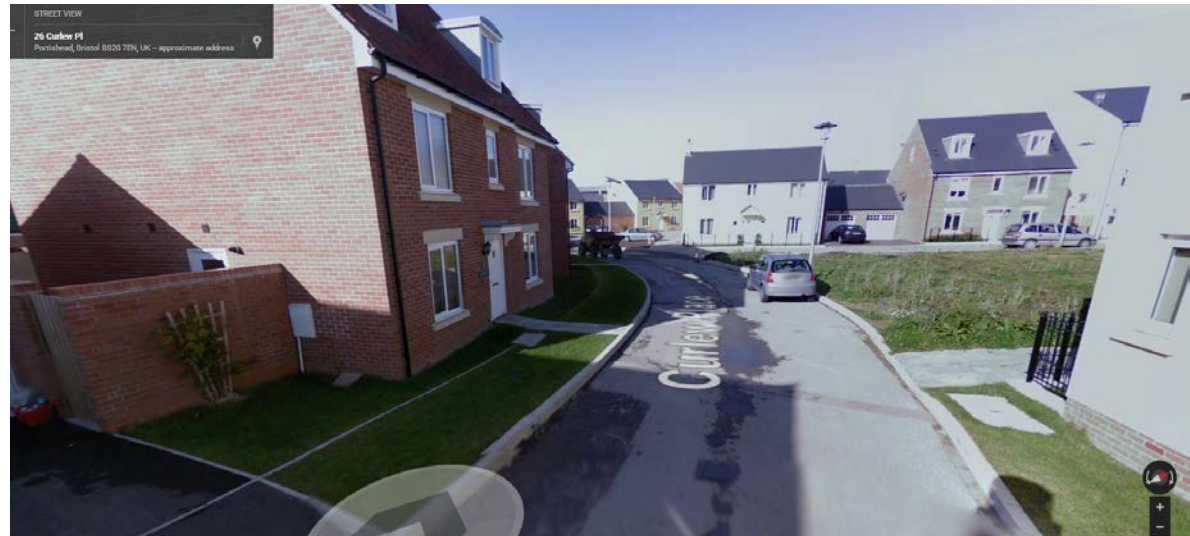


C21st 'urban villages' /
extensions





medium density,
1970s/80s and c21st
housing estates



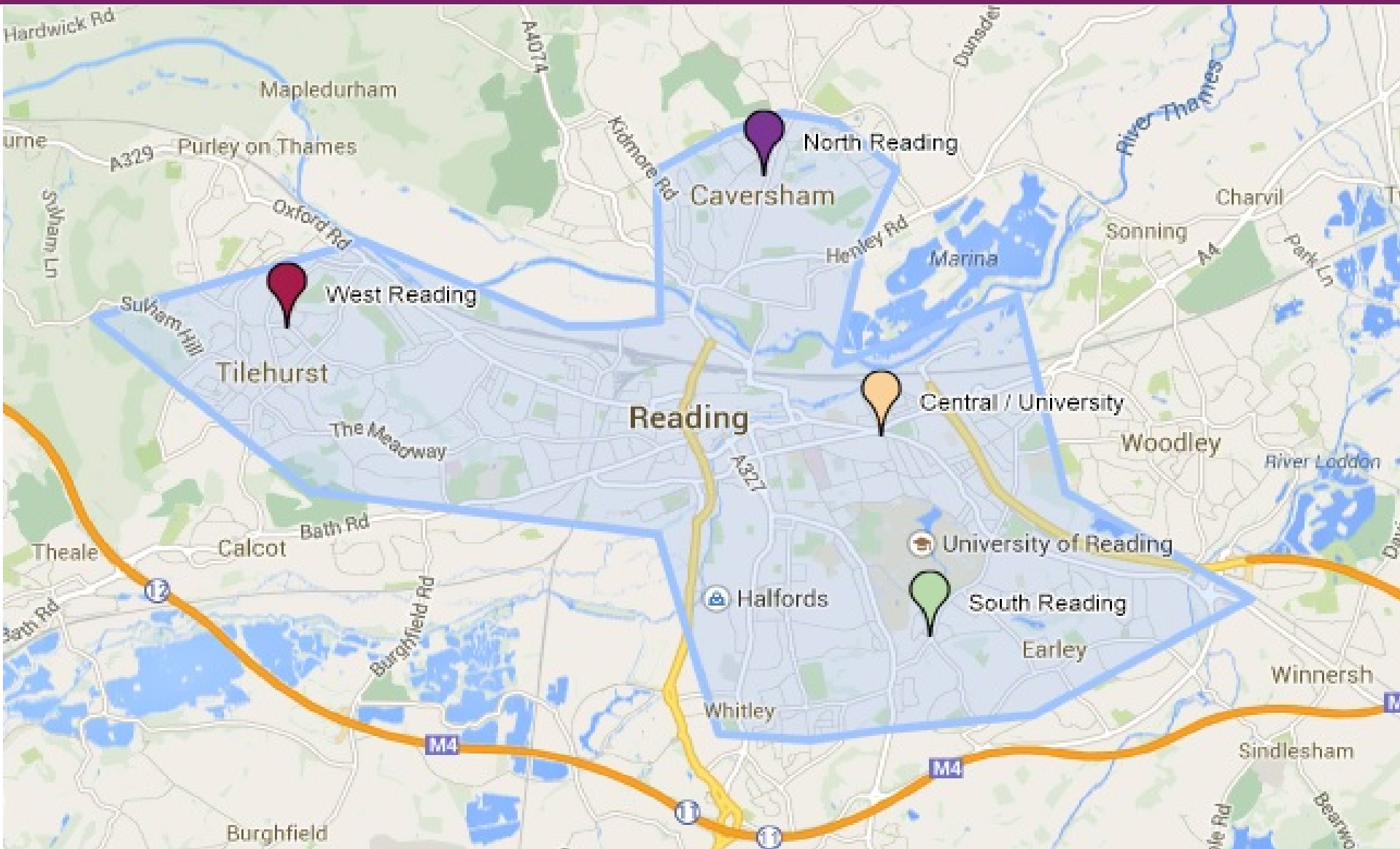
Candidate areas: Reading



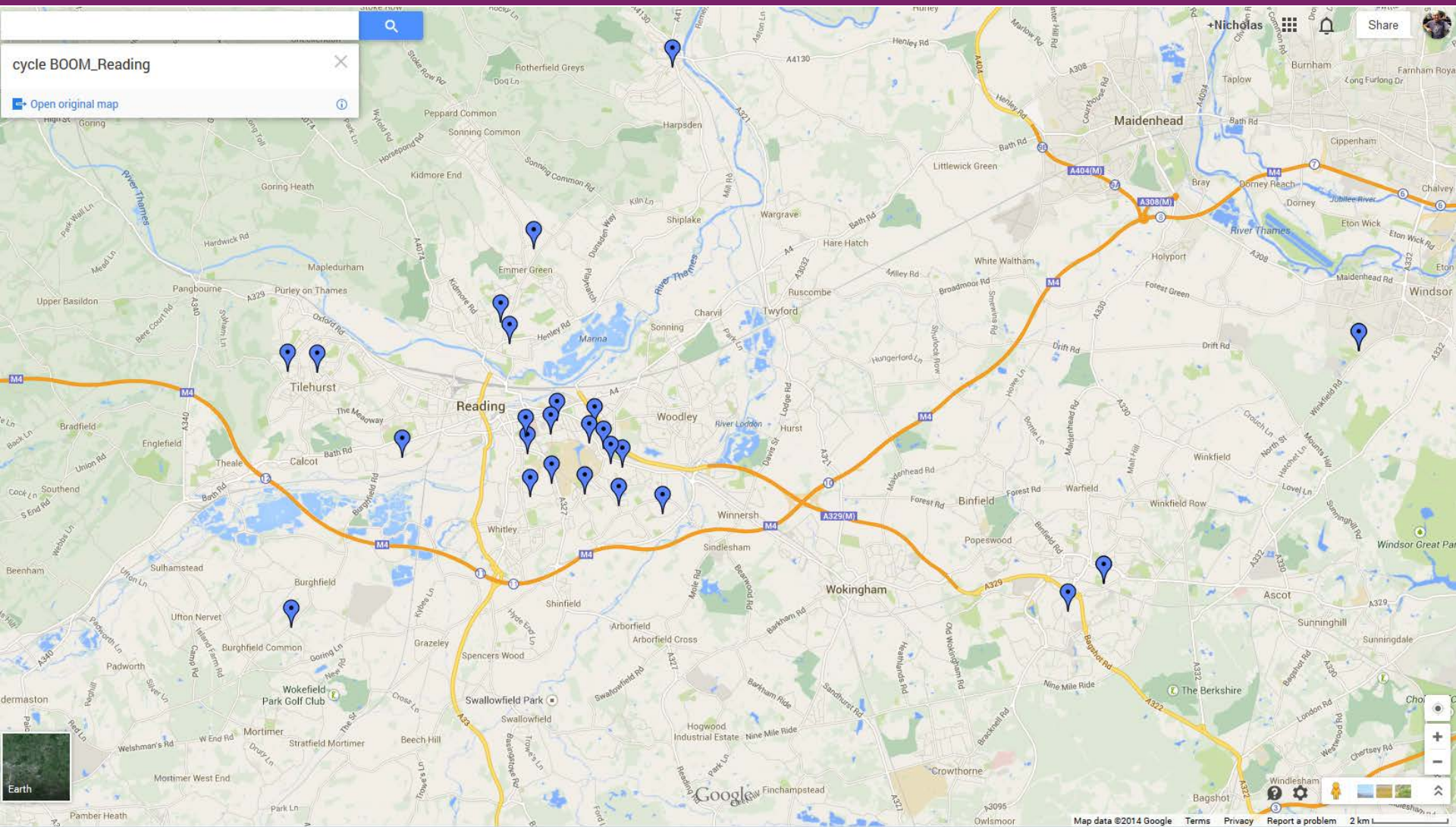


- Caversham – *North Reading*
- Tilehurst – *West Reading*
- Town / University – *Central Reading*
- Earley / Lower Earley – *South Reading*

Reading Case Study



Reading: Recruitment



Approach to sampling: Cardiff

1. Do you have any comments on the overall approach to recruitment?
2. Do you have any comments on the places we are targeting within the four case study areas?
3. Do you have any ideas on generating impact for the study?



cycle BOOM

DESIGN FOR LIFELONG
HEALTH & WELLBEING

First Stakeholder Advisory Group Meeting

12 March 2014