



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Third Stakeholder Advisory
Group Meeting

20 May 2015

EPSRC
Pioneering research
and skills

**Lifelong Health
& Wellbeing**
Research for Healthy Ageing

**OXFORD
BROOKES
UNIVERSITY**

**CARDIFF
UNIVERSITY
PRIFYSGOL
CARDIFF**

**University of
Reading**

**UWE
BRISTOL** University of the
West of England

Objectives



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Third Stakeholder Advisory Group Meeting | 20 May 2015
Oxford Brookes University | Gipsy Lane, Headington
John Henry Brookes Building | Snow Room JHB408

AGENDA

Objectives

- 1) Report Preliminary Findings**
- 2) Provide Update on Approach for Wave II Data Collection**
- 3) Explain Approach to Analysis / Integrating Data**
- 4) Review Activity Targeted at Making an Impact**

20 May 2015 2

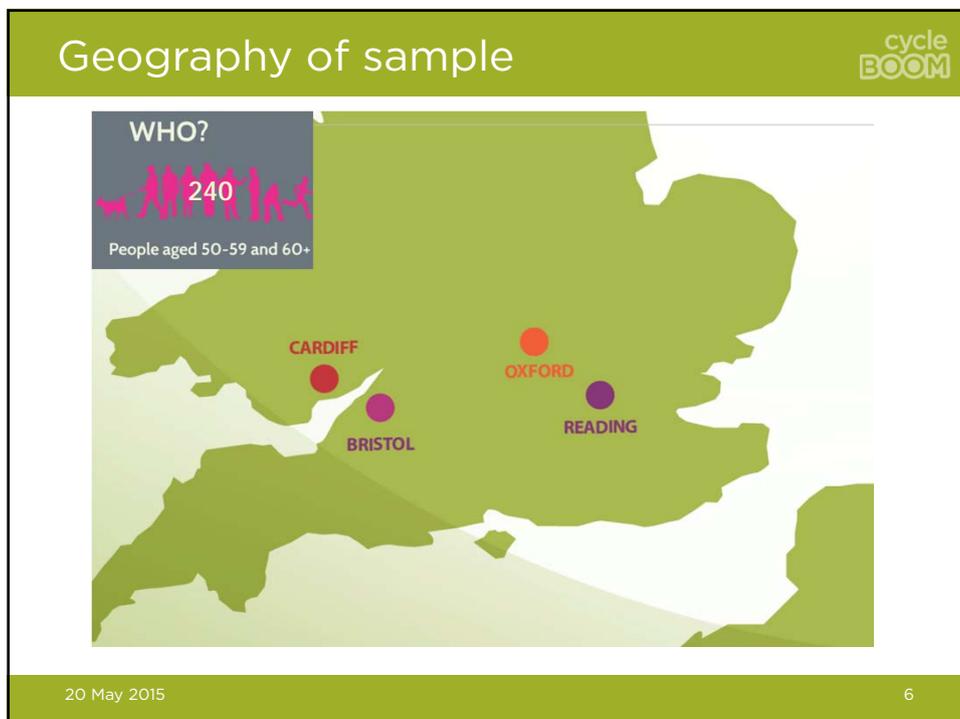
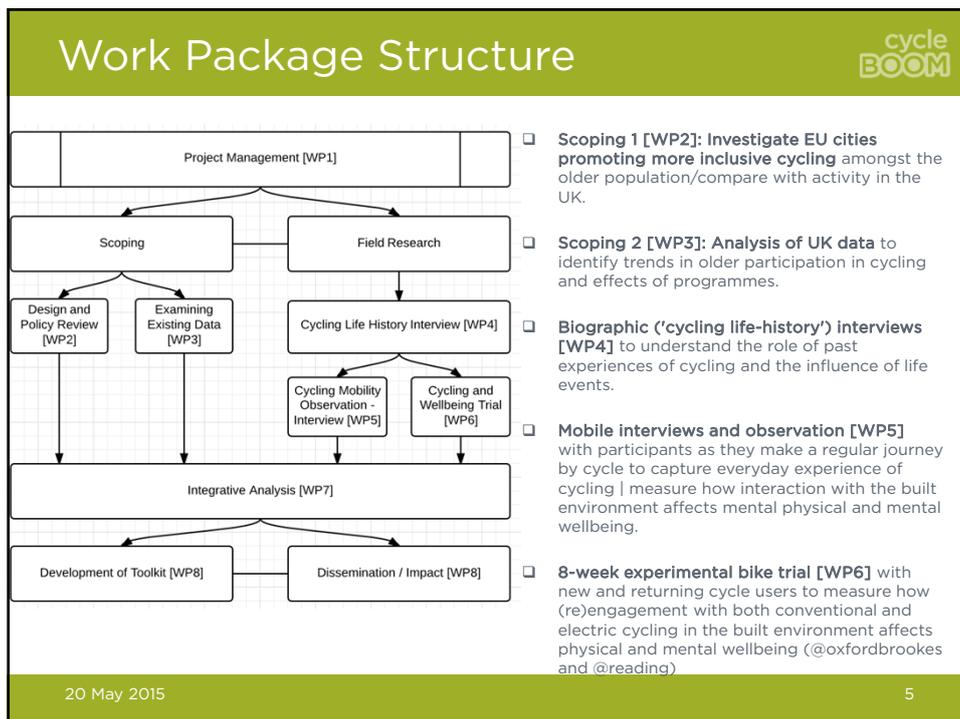
Agenda



Item	Time	
	09.45	Arrival Coffee
1.	10.00	Welcome & Introductions [Tim Jones, Oxford Brookes University (OBU)]
2.		cycle BOOM Update Mixed Methods Approach
3.		Project Results / Findings So Far: <ul style="list-style-type: none"> • Secondary Data Analysis Infographic [WP3] • EU Case Study Film [WP2] • Urban Design Audit [WP2] BREAK
		<ul style="list-style-type: none"> • Cycling Life History Interviews [WP4] • Cycling Mobility Observation Interviews [WP5] • Cycling and Wellbeing Trials [WP6] • A Participant's Experience of Taking Part in the Study
4.	12.00	Roundtable Discussion
	13.00	LUNCH
5.	14.00	Approach for Wave II Data Collection
6.	14.20	Analysis Methods Challenge of Integration
7.	15.40	Public Engagement Outreach Making An Impact
8.	15.00	Roundtable Discussion
	16.00	Date of the Next Meeting CLOSE

20 May 2015 3





cycle BOOM

Sampling Approach & Participant Journey

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

	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]			No trials	No trials
Pedal cycle	10	10		
Electric cycle	10	10		
Control	5	5		

Version 1.0 | Last updated Feb 12 2014

20 May 2015
7

cycle BOOM

Reflections

Team Time Trial
Collective effort | pacing | playing to strengths



Team cB holding it together...

Stage I - Oct 2014 - Mar 2015

Two-wave/stage data collection allowed:

- Familiarisation with geographical area & approach
- Honing of research technique/instruments
- Experimentation with 'novel' approaches
- Outreach and engagement

Stage II - From Apr 2015 - project end (Sept '16)

Challenges on the road ahead:

- Ensuring diversity of sample
- Consolidating research approach
- Engaging in a focused period of data analysis and constant comparative analysis
- Truly integrating data
- Linking academic findings to practical outcomes

20 May 2015
8



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Emerging Results and
Findings

EPSRC
Pioneering research
and skills

**Lifelong Health
& Wellbeing**
Research for Healthy Ageing

**OXFORD
BROOKES
UNIVERSITY**

**CARDIFF
UNIVERSITY
PRIFYSGOL
CARDYF**

**University of
Reading**

**UWE
BRISTOL** University of the
West of England



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Work Package 3:
Examining Existing Data

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

EPSRC
Pioneering research
and skills

**Lifelong Health
& Wellbeing**
Research for Healthy Ageing

**OXFORD
BROOKES
UNIVERSITY**

**CARDIFF
UNIVERSITY
PRIFYSGOL
CARDYF**

**University of
Reading**

**UWE
BRISTOL** University of the
West of England

Role of WP3

cycle
BOOM

- 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).

20 May 2015

11

Output of first stage

cycle
BOOM

Infographic 'Cycling in Later Life in the UK - The Potential'



20 May 2015

12

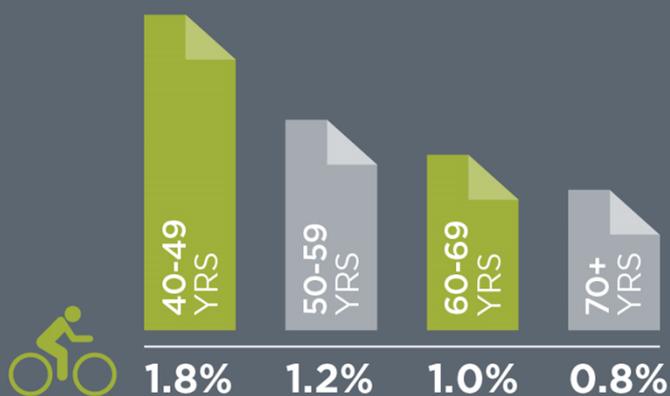
The potential for the return of an endangered species – the older cyclist

20 May 2015

13

LOW LEVEL OF CYCLING AMONG OLDER PEOPLE IN THE UK

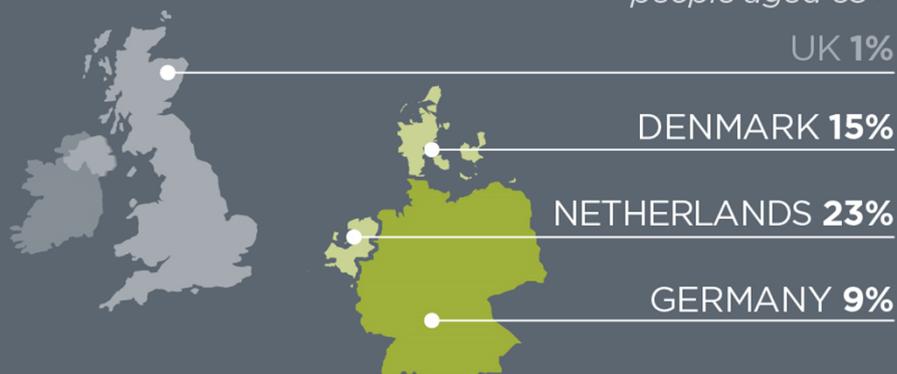
The share of journeys made by bicycle is low for all all age groups, but particularly low in older age.



DIFFERENT STORY ELSEWHERE

Cycling is an important method of transport in older age in other parts of Northern Europe.

*Share of journeys by
people aged 65+*



OLDER PEOPLE MAKE SHORTER, MORE LOCALISED CYCLE JOURNEYS

Older people's cycle journeys are **shorter** than younger adults' and are **usually for personal business or social purposes** (as opposed to commuting)

70+
YRS



1.8 miles

40-49
YRS



4.8 miles

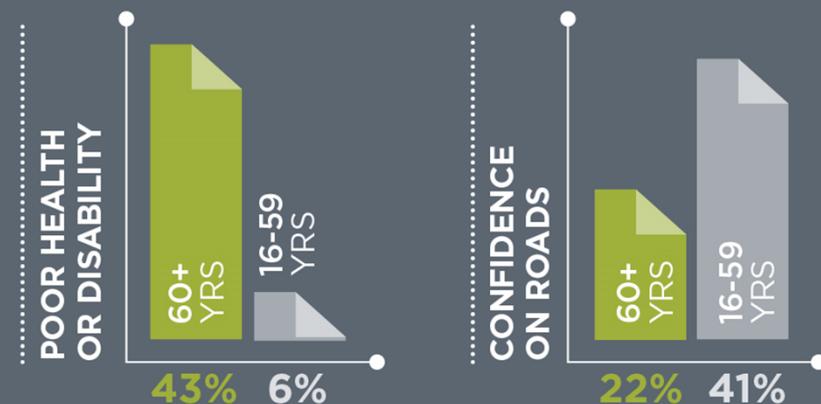
OLDER MEN CYCLE MORE THAN OLDER WOMEN

Older men are **twice as likely** to cycle as older women, raising concerns over equity.



LACK OF CONFIDENCE TO CYCLE ON ROADS

Nearly half of older people feel it is physically difficult for them to cycle and only **one in five** are confident cycling on roads.



BUT THERE IS POTENTIAL FOR MANY MORE OLDER PEOPLE TO CYCLE

60-69
YRS



27% of 60-69 year olds own a bicycle but only **1 in 9** regularly use their bike

CYCLE
PATHS



42% would cycle (more) if more **dedicated cycle paths**

E-BIKES



e-bikes support older people's cycling. In the Netherlands one third of all distance cycled is by e-bike!

MORE CYCLING WILL BENEFIT HEALTH IN LATER LIFE

Cycling could make a valuable contribution in promoting active ageing and prolonged independence and good health.



Physical activity declines with age to the extent that by 75 years only 1 in 10 men and 1 in 20 women **are sufficiently active for good health.**

ABSENCE OF OLDER PEOPLE CYCLING IS GETTING NOTICED

Public figures are starting to draw attention to the unequal distribution of cycling amongst the population.



*“At the moment cycling is disproportionately young and male and that’s because of the conditions. I suppose those are the people who feel able to cycle...What I want to see from these changes, and I think we will see, is far more women doing it, far more **older** people doing it”.*

London’s Cycling Commissioner Andrew Gilligan discussing the Mayor of London’s plans for cycling in the capital.

Objectives

cycle
BOOM

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.

Planned next steps

cycle
BOOM

- More comprehensive appreciation of the amount of cycling in later life in context of engagement in other physical activity (Active People Survey)
 - Contribution of cycling to physical activity
 - Variation by local authority
- Local variations in cycling attitudes and behaviour (NHTS, Census)
- Participation of older people in cycling initiatives
 - Sky Rides
 - Bike hire schemes
 - ...

20 May 2015

23



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

**Work Package 2 Scoping
Study Update**
EU Case Studies and Urban Design
Audit

*Emma Street and Philip Black
University of Reading*

EPSRC
Pioneering research
and skills

Lifelong Health
& Wellbeing
Research for Healthy Ageing

**OXFORD
BROOKES
UNIVERSITY**

**CARDIFF
UNIVERSITY
PRIFYSGOL
CARDIFF**

**University of
Reading**

**UWE
BRISTOL**
University of the
West of England

European case study visits

cycle
BOOM

- 2 x 3 day study visits to **Munich** in Germany and **Seville** in Spain, May and June 2014 to explore good practice in inclusive cycling
- Interviews with key stakeholders, cycle tours/visits (e.g. testing infrastructure), filming and audio recording
- Decision to focus on 'atypical' cycling cities and also to invite a northern/southern European comparison



20 May 2015

25

The Documentary Film

cycle
BOOM

20 May 2015

26

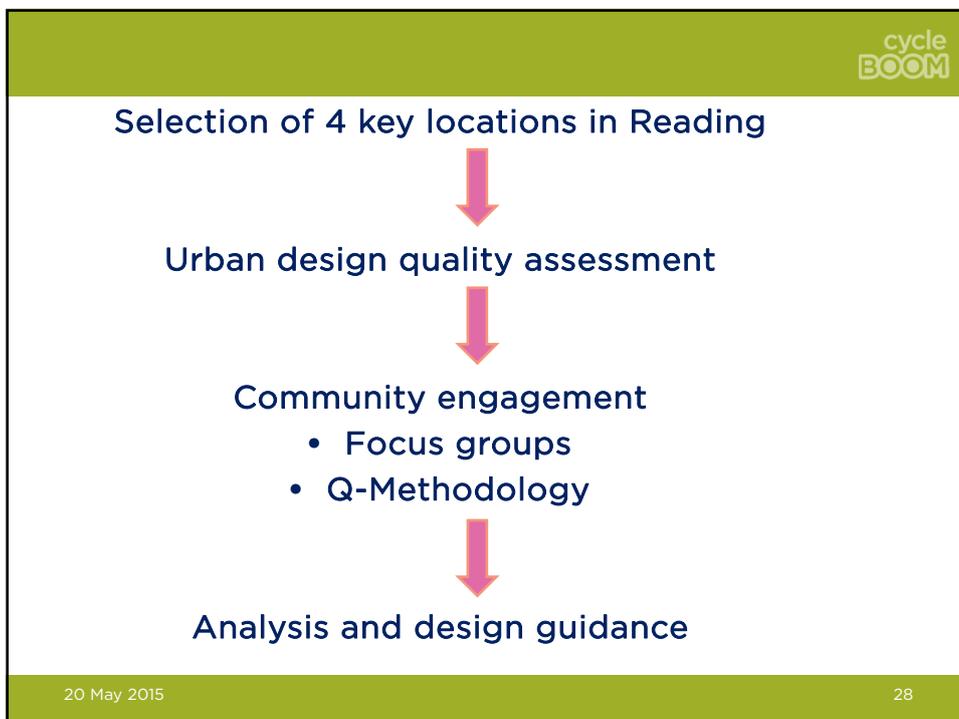
cycle BOOM
DESIGN FOR LIFELONG HEALTH & WELLBEING

Work Package 2
Urban Design Audit

Philip Black
University of Reading

cycling in
READING
An Urban Design Perspective
University of Reading | Reading Borough Council

EPSRC
Pioneering research and skills
 Lifelong Health & Wellbeing
Research for Healthy Ageing
 OXFORD BROOKES UNIVERSITY
 CARDIFF UNIVERSITY
PRIFYSGOL CARDYF
 University of Reading
 UWE BRISTOL
University of the West of England



Consensus (cycling sort)

cycle
BOOM



20 May 2015

29

Contention (cycling sort)

cycle
BOOM



20 May 2015

30

Between Design and Cycling








20 May 2015
31



- **Imageability**
Distinct / recognisable / memorable / patterns / landmarks
- **Enclosure**
Visually defined / proportions / outdoor room
- **Human scale**
Size and texture / speed / details / quality
- **Transparency**
See and perceive beyond edges / human activity / viewing
- **Complexity**
Visual richness / diversity / landscape / activity / perceivable ratios
- **Coherence**
Sense of visual order / scale, character and consistency of elements
- **Legibility**
Navigation / ease of movement / network / orientation / reference points
- **Tidiness**
Cleanliness / clutter / visual distractions / noise
- **Comfort**
Surface materials / widths / sense of safety / familiarity / facilities

20 May 2015
32

Design Guidance cycle
BOOM

Identifying the attributes, features and principles that influence or contribute to quality urban environments for cyclists



A reimagining and rearticulating of urban design principles from a cyclists perspective

20 May 2015 33



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Cycling Life History Interviews (WP4) & Naturalistic Cycling Mobility Observation Interviews (WP5)

Heather Jones (UWE) & Ben Spencer (OBU)

EPSRC Pioneering research and skills
Lifelong Health & Wellbeing Research for Healthy Ageing
OXFORD BROOKES UNIVERSITY
CARDIFF UNIVERSITY PRIFYSGOL CARDIFF
University of Reading
UWE BRISTOL University of the West of England

Life course approach

cycle
BOOM



“dynamically as the consequence of past experience and future expectation as well as the integration of internal motive and external constraint”

(Giele and Elder, 1998)

20 May 2015

35

Life history interviews

cycle
BOOM



- Participant narrative describing and explaining changes and continuities
 - mid- and later-life transitions
 - contemporary practice, outlook for future
 - Experience of cycling and ageing



- Techniques: grid, maps, panoramic street view, ‘cycling graph’
- View bike, cycle storage, immediate context
- Narrative and visual data

20 May 2015

36

Mobile observation & interview



- Participant's choice of route | time
- Handlebar cameras | sound | GPS
- Priming for interview

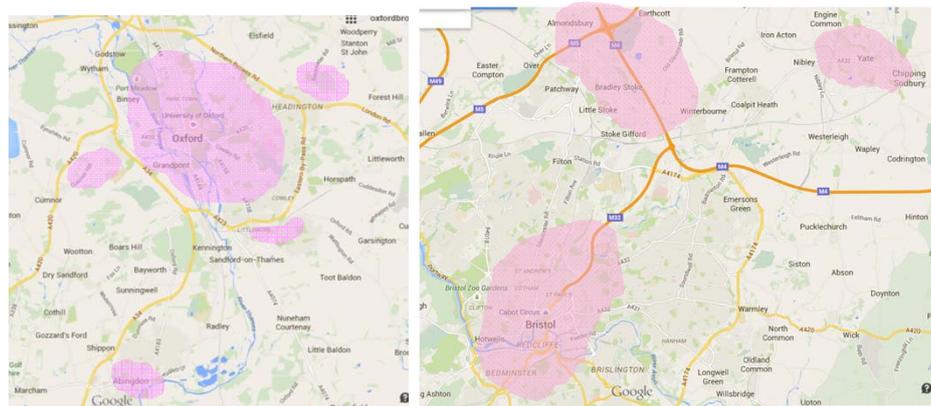


- Video elicitation interview
 - Participant commentates
 - Playback
 - Strategies and tactics: route choice, road position, manoeuvres, interactions, infrastructure, cycle-scape
 - Experiences: sensory, affective, social

20 May 2015

37

Geographical areas of focus



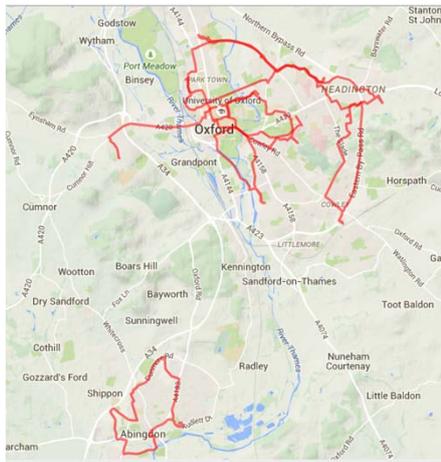
OXFORD

BRISTOL

20 May 2015

38

Collection of rides



OXFORD



BRISTOL

20 May 2015

39

James



Type: Continuous / expanded
 Small town
 Frequent for exercise / leisure / transport
 Ongoing / increasing through adulthood
 High / stable level anticipated

Past experiences: continued despite bad accident, not able to afford car - but no need

Internal motive: Enjoyment of cycling: fresh air/exploring, need for exercise

External opportunities/constraints: More time since retirement. Topography.

Physical: Good cycle path network in town and access to countryside but dangerous roads. Easy / secure storage and access to street.

Social: Tends to cycle solo, other social activities

20 May 2015

40

Edith

cycle
BOOM

Type: Diminished
Inner urban
Irregularly for transport
Ongoing through
adulthood

Past experiences: cycling
constrained but not
displaced altogether
when children young,
shared car

Internal motive: feeling that she ought to for wellbeing / environment

External opportunities/ constraints:

Physical: activity space and schedule more variable, faff of getting bike
out, particularly for short journeys, deterred by hills

Social: support from local bike shop, lacks others to cycle for with

20 May 2015

41

Flexibility & discretion

cycle
BOOM

when and where to cycle



20 May 2015

42

Storage, access and setting off

cycle
BOOM



20 May 2015

43

Connection to people and place

cycle
BOOM



20 May 2015

44

Competent- expert manoeuvres

cycle
BOOM



awareness of risks and capabilities

in-depth knowledge of routes

20 May 2015

45

Improvisation/resilience

cycle
BOOM

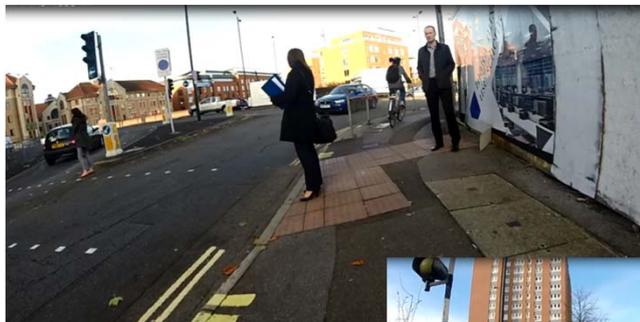


20 May 2015

46

Transgressions - justified & confessional

cycle
BOOM



20 May 2015

47

Adaptations: route

cycle
BOOM



Knitting together arteries,
designated routes,
public spaces, interstitial spaces



20 May 2015

48

Routes & manoeuvres

cycle
BOOM



20 May 2015

49

Monotony, impedance

cycle
BOOM



20 May 2015

50

Summary cycle
BOOM

Ageing...

...bodies and identity - cycling contraction/curtailment or solution

...bike - replace/upgrade dilemma

...infrastructure - management / maintenance

20 May 2015 51



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

Work Package 6

*Carlen van Reekum & Louise-Ann Leyland
University of Reading*

 **University of Reading**
CINN
Centre for Integrative
Neuroscience and
Neurodynamics

 **EPSRC**
Pioneering research
and skills

 **Lifelong Health
& Wellbeing**
Research for Healthy Ageing

**OXFORD
BROOKES
UNIVERSITY**

 **CARDIFF
UNIVERSITY**
PRIFYSGOL
CARDIFF

 **University of
Reading**

 **UWE
BRISTOL** University of the
West of England

Wellbeing and cognition trial



- 8 week period
 - 3 times a week for 30 minutes each time
 - Pedal bike or an e-bike
- Complete diary
- GPS device
- Cognition and wellbeing are measured before the trial (pre-trial) and after (post-trial)
 - Cognitive function: mental ability including memory, attention, decision making, goal planning, spatial reasoning etc.

20 May 2015

53

Domains measured



- Wellbeing/affect
- Physical and mental health
- Physical activity
- Cognitive function
 - “Executive function”
 - management (regulation, control) of cognitive processes, including working memory, reasoning, task flexibility, and problem solving as well as planning and execution

Compare pre-trial to post-trial score

20 May 2015

54

Preliminary results

cycle
BOOM

- 20 participants analysed so far for computerised cognitive tests
 - 9 E-bike
 - 8 Pedal
 - 3 Control
- Both groups of participants - enjoyed the trial, feel physically fitter and better more generally
- **Improvement** on accuracy in the cognitive tests measuring executive function
 - **92%** E-bike; **72%** Pedal
- Reaction times reduced for most (responding quicker)
 - 67% E-bike; 57% Pedal
- When reaction times increased, higher accuracy
- Practice effects?
 - Very little change (positive or negative) in control group

20 May 2015

55

The next year...

cycle
BOOM

- Collect 50 more experimental participants (on pedal and e-bike)
- Collect 15 more control participants
- Still need to investigate well-being
- Input and analyse data from the 3 wellbeing questionnaires, a health survey, a physical activity questionnaire, 7 cognitive pen-and-paper tasks
- Analyse data from the 5 computerised cognitive tasks
- Make sense of it all!
- Write up results

20 May 2015

56

Wellbeing trials: Focus Groups

cycle
BOOM

Overall positive experience of E-bikes:

- Mobility
 - Geographies - rediscovered | extended | deepened
 - Additional journeys and replacing car
 - "same amount of exercise but more pleasure because going further than my usual boundaries"
- Health and wellbeing
 - Greater confidence
 - Spatial awareness and control
 - Social
 - Motivation | engagement
- Negative experience of E-bikes:
 - E-bike weight | cost | security | stranding
 - Unsupportive infrastructure "Oxford is a dangerous city to cycle round"

20 May 2015

59

Brian (& Gill's) Experience

cycle
BOOM



20 May 2015

60

Roundtable Discussion

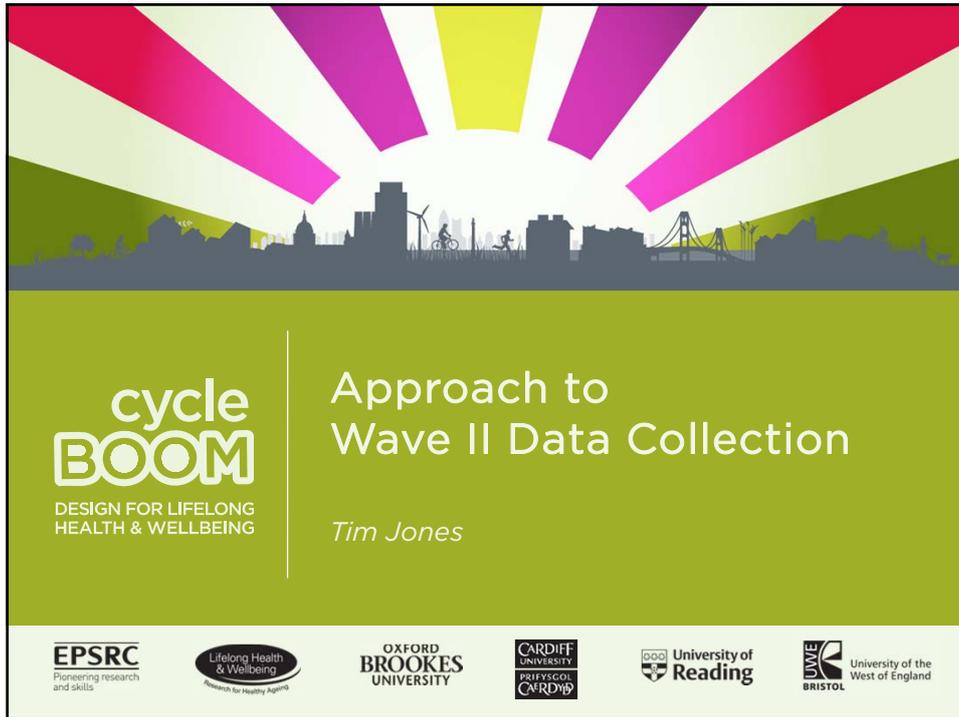


20 May 2015 cycle BOOM 61

**LUNCHTIME!
AT THE TERRACE**



20 May 2015 cycle BOOM 62



**cycle
BOOM**
DESIGN FOR LIFELONG
HEALTH & WELLBEING

**Approach to
Wave II Data Collection**

Tim Jones








WAVE II **cycle
BOOM**

Life history interviews [WP4]



- Orient towards middle to later adulthood
- Use visual mapping tools (i.e. google street view or paper map) throughout interview to understand interaction with space and place over time
- Explore more how cycling (perceptions and behaviour) has been affected by ageing
- Explore more future outlook for cycling
- Reprise of their cycling history for confirmation

20 May 2015 64

WAVE II





Mobile observation & video elicitation interview [WP5]

Effort into sampling returning/less experienced cycle users

Mobile Observation

- Reducing tech
- Repositioning cameras
- Priming participant before the ride to think about how they feel at points along their route/activity/ride

VEI

- Tactility - encouraging engagement with controls
- Screen-capture & video interview interaction
- Eliciting affect in the post-ride VEI
- Focusing in on design elements of the ride that are supportive and unsupportive for their style of cycling

20 May 2015
65





DESIGN FOR LIFELONG HEALTH & WELLBEING

WP5 Way-marked Route Update

Carl Mann: Cardiff University








Research Questions

cycle
BOOM

1. What factors shape experience of cycling as positive or negative for older people?
2. To what extent can we measure and map these experiences?
3. What functional and aesthetic principles do older cyclists perceive to be most important and base their route choice upon? To what extent do these perceptions differ according to experience and gender?
4. What strategies and tactics do older cyclists use to manipulate the emotional content of the journey, for example route choice and 'road' position?
5. Do returning cyclists differ from more experienced cyclists in their affective capacity?

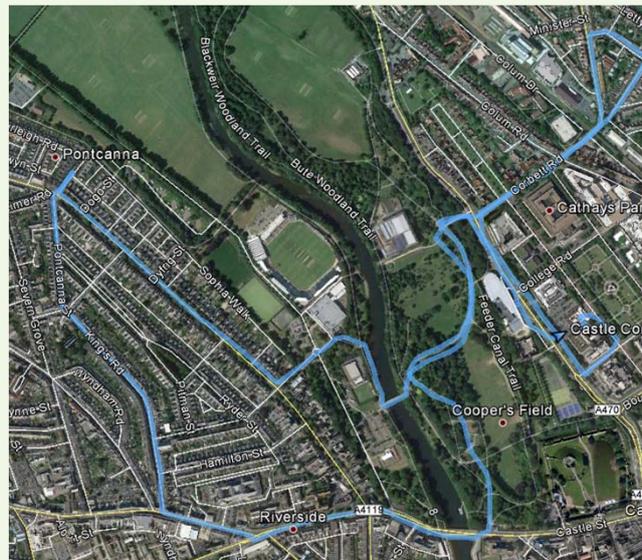
20 May 2015

67

Way-marked Rationale and Changes

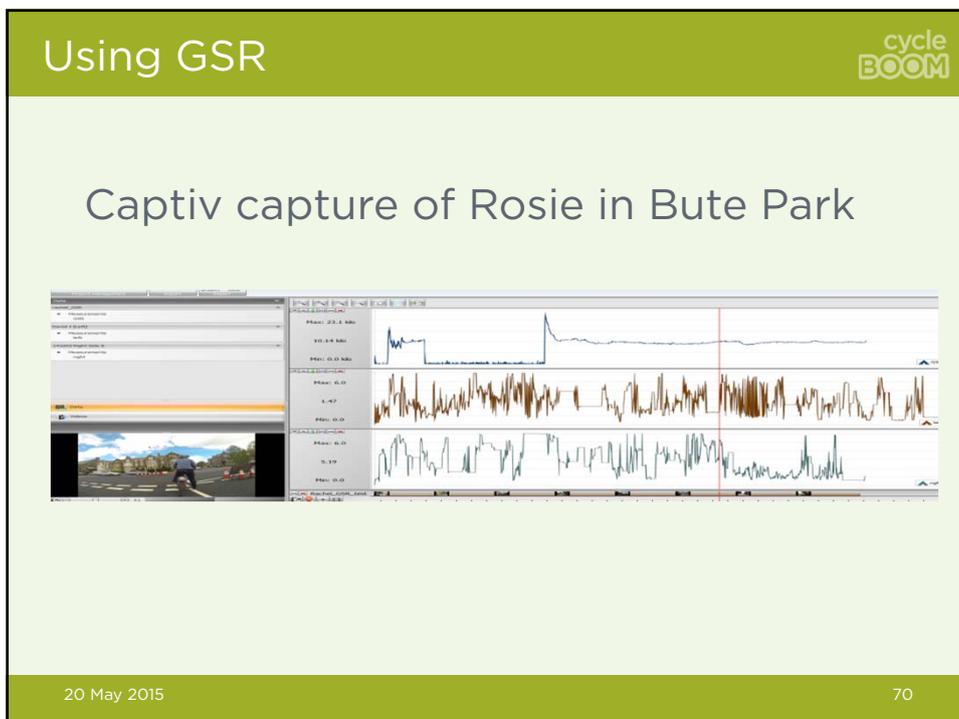
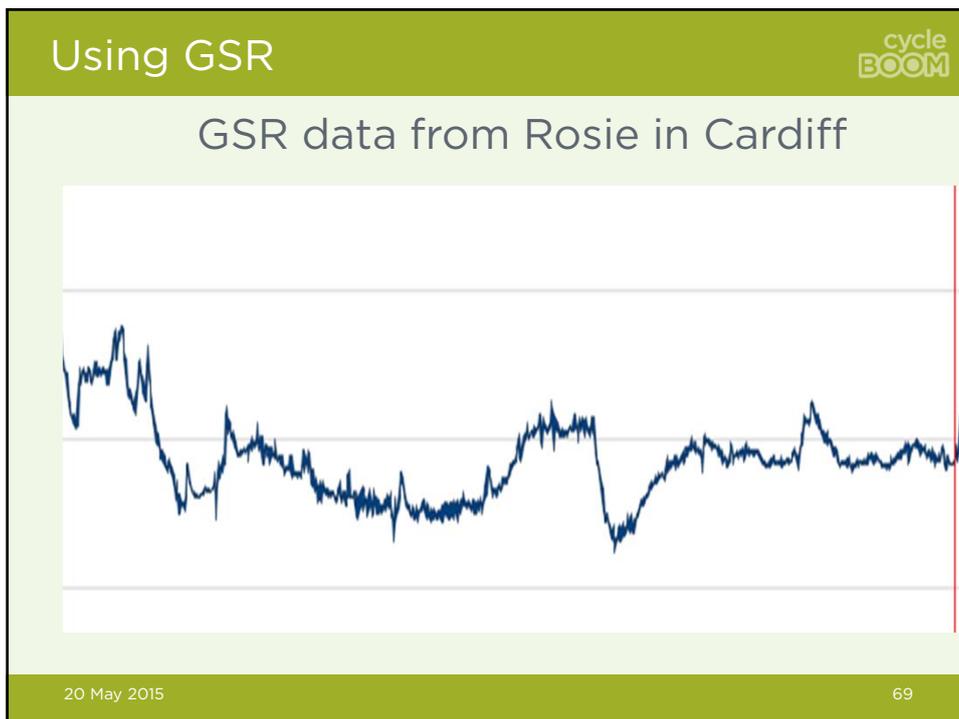
cycle
BOOM

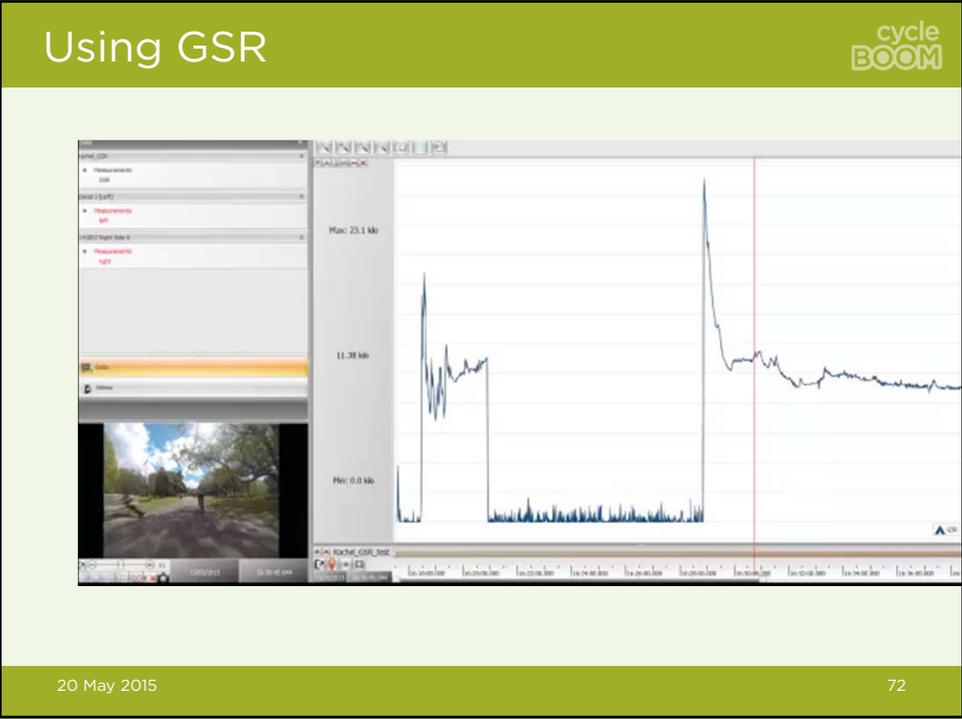
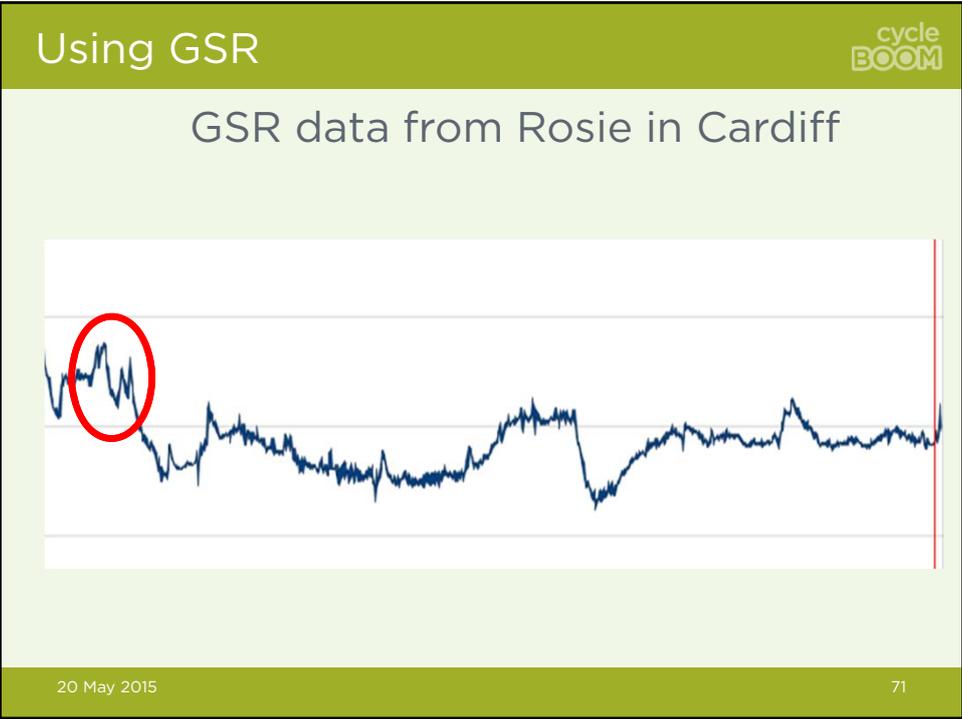
Cardiff Waymarked Route



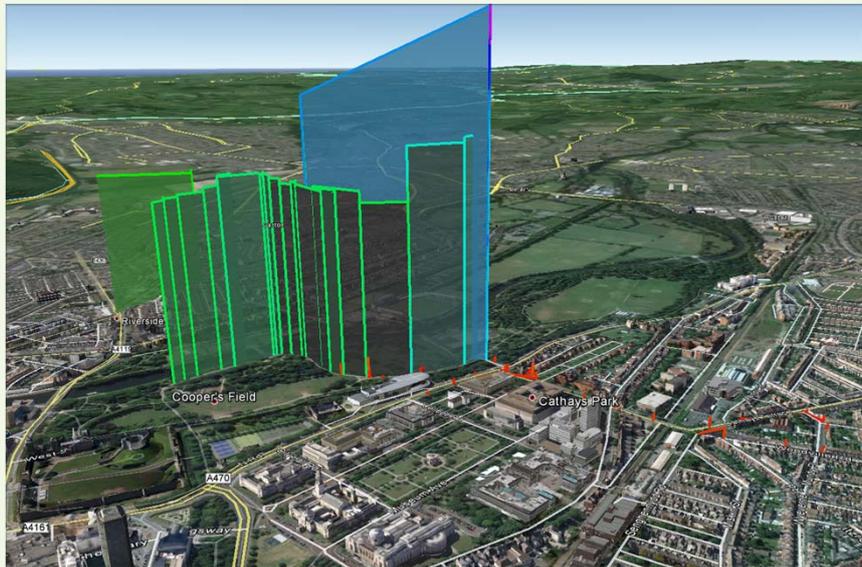
20 May 2015

68





Representing and analysing GSR data cycle BOOM



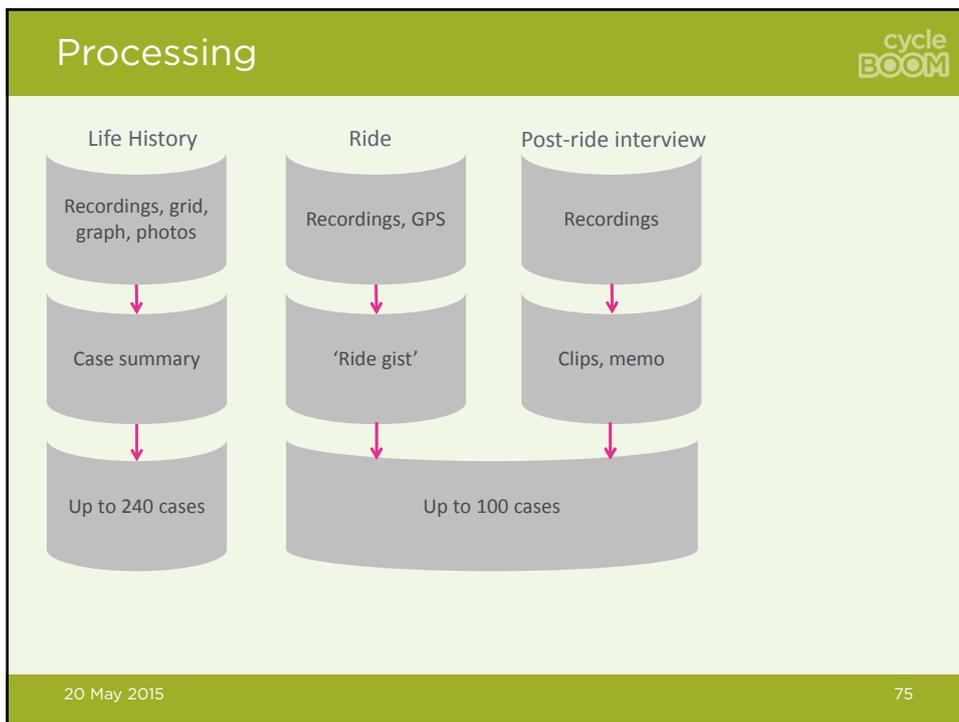
20 May 2015 73



cycle BOOM
DESIGN FOR LIFELONG HEALTH & WELLBEING

Analysis Methods | Challenge of Integration

EPSRC Pioneering research and skills
Lifelong Health & Wellbeing Research for Healthy Ageing
OXFORD BROOKES UNIVERSITY
CARDIFF UNIVERSITY PRIFYSGOL CARDIFF
University of Reading
UWE BRISTOL University of the West of England



Life history case summary example

cycle
BOOM

BIMBOI GOLDIE

Cycling: Goldie (58) lives in the north fringe of Bristol and worked fulltime as a cleaner at one of the large firms in the north fringe. Goldie had done but had a difficult time living in another town. She had three grown up children from an earlier marriage. Her daughter lived in the same neighbourhood and her youngest son had access to Goldie. Goldie didn't have a driving license and used her bike for much of her transport. Her boyfriend was overweight and had health problems so couldn't cycle. If they went anywhere together they would use his car.

Goldie had two bikes which were stored in her garden shed. Her regular bike had a rack but she didn't have panniers. She cycled to work and to a local retail centre in Bradley Grove and a regional shopping centre at Clifton Down. Goldie's cycling was limited to 3am which meant she left her house at 2.30am. It was a short cycle to work but involved a short section of A28 which at that time in the morning was deserted with the occasional 'juggernaut' coming to and from the retail centre. She described some stress about personal safety leaving her house at this time due to who might be about but was unconcerned by traffic.

Due to her early start Goldie had finished work by lunchtime. Some days she would go for a 'cycle run' to one of the local or regional shopping centres and carry her shopping home on the handlebars. Despite recent alterations to the dual carriageway which created a bus and cycle lane Goldie continued to use the 'down and back road' to get to Clifton Down. She talked about seeing other cycle messes on the road but not having anyone else to cycle with didn't think they would be much fun to do on her own.

Goldie grew up in Bristol and spent from a few years living in Oxford with her husband and two children had always lived in Bristol. She had a bike from the age of 12 and recalled cycling with friends and going further a field in their holidays, cycling for her paper round and cycling with father to go and visit grandparents. Goldie described these as 'fun days'.

When she was first married she lived in the passenger seats in her father's car before moving for a couple years to Oxford. It was in Oxford that she first cycled as an adult. 'Found a little bike up there I was running around on, again just local riding, father used to go to Summertown and work a parttime domestic job on Woodstock Road, and pedaled up there.' She didn't cycle in to Oxford always took the bus.

Goldie moved back to the inner suburbs of Bristol when her marriage ended. She used a seat on her bike to take her son to nursery, the older two were at school by this time. Her partner had a van and she used this to do the shopping. During these days, she did not have the time to go off on her own because of caring for her children so her cycling was limited to getting to work and taking her son to nursery. She then moved with a partner and children to Little Stoke (just over housing roads neighbouring Failand). She still had her bike but didn't see it as a useful bit of cycling. She put this down to her partner having the car, not really having anyone to go or anyone to cycle with.

Following the end of this relationship she moved to Patchway. Since this move she felt she had the freedom to get on her bike, she could 'go out on whatever I please'. She felt that when she moved she had wanted to get to know the area and find out where she was and could get to. Her perception was that there seemed to be more places she could get to by bike. Her youngest son moved with her and had helped her discover the area by bike. They had done two charity rides together including Bristol's Biggest Bike Ride. Goldie enthused about this ride and showed me the medals and certificates. She would like to do it again but didn't have anyone to do it with and wasn't sure how she would get to Bristol with her bike. During this most recent and ongoing phase Goldie had come off her bike on the way to work leaving her with a broken wheel and collapsed tyre. This resulted in her being off work for two months, with no pay.

Cycling and aging: Goldie thought she was slower getting up hills, finding them harder work. She wasn't sure if she could still manage Filton Hill. She described having to be more wary and have joints about now.

Outlook for cycling: Goldie wanted to keep on working and didn't expect that when she did have to give up work that this would impact on her cycling. She did not see her age and wanted to keep on cycling because she enjoyed it.

Goldie's summary of cycling biography: 'Well of course there are gaps, you know as far as having the children are concerned, you having to be mum for quite a few years so it has been sort of an on and off sort of thing, but from my younger days when I first started cycling it has been go stop, go stop and obviously now I feel just keeping going there is no way I intend to stop. I mean I just love it, I do enjoy being out on my bike and I'm getting off the time in the world to do it.'

Reflective memo:

Goldie appeared to have a resilient 'tough but often made seemed in good health and seemed cheerful, jumping up out of her chair to get pictures to show me. She was proud of her cycling and had applied to cycle Boom after seeing an advert in Patchway People. Goldie wasn't well off and didn't anticipate retiring because she couldn't afford it. She did most of her own bike maintenance.

Goldie had had two periods of cycling in adult life: one had started when she was living on the outskirts of Oxford with a young family, and continued when she moved back to Bristol when it involved transporting her youngest child to nursery on the bike. Goldie felt that cycling had been limited when she was bringing up children and that she hadn't had the time to use her bike whenever she wanted to. Goldie had tried but had never succeeded in learning to drive. At various points in her life getting with from a partner had made a contribution to her mobility. During these times Goldie felt she had not needed to use her bike so much.

Goldie's second phase of cycling had come when she moved to Patchway over ten years previously. Goldie identified freedom and motivation to cycle more with this move. This move, and associated break up, would have meant Goldie no longer had a partner who could provide lifts. Her son had moved with her and had been a support for finding routes and also going on organised leisure rides.

Goldie's cycling was local, the spatial limits seemed to be the local and regional shopping centres within the northern fringe and getting to work. She had a well-established set of routes for navigating the area. She didn't seem to consider cycling into Bristol or out beyond the city. Her very early off gave her the opportunity to make cycle trips during the day. Goldie seemed to have a system involving the time she rides she would like to do but had no one to cycle with. Her new partner wasn't particularly able to cycle and her son had now moved away.

RESTORED:



20 May 2015
76

Questions to drive analysis

cycle
BOOM

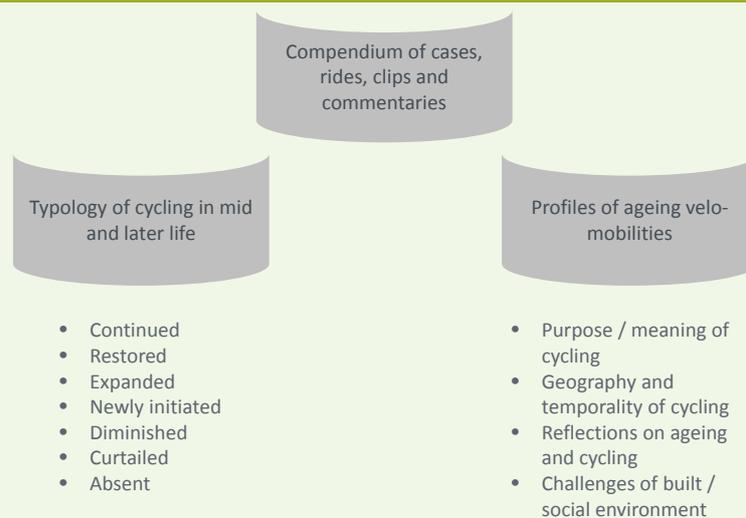
- What are the characteristics of older cycling trajectories and how does this shape future prospects?
- What are the key turning points/transitions that support or undermine cycling?
- What strategies & tactics do older individuals employ to continue cycling in older age?
- What is the relationship between design, cycling and wellbeing?

20 May 2015

79

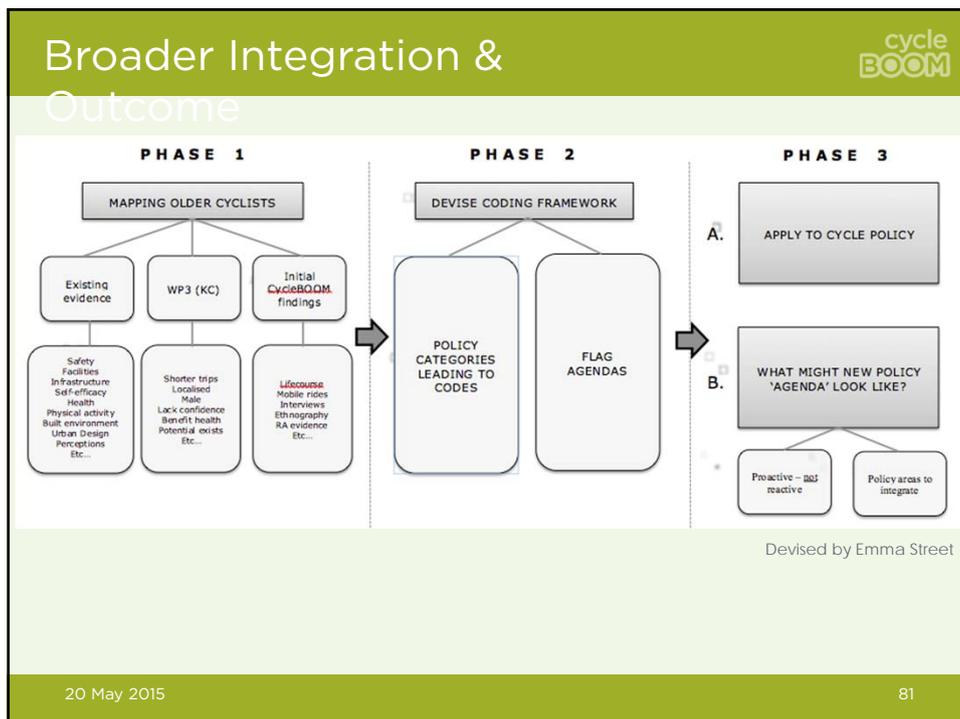
Linking it all together

cycle
BOOM



20 May 2015

80



DESIGN FOR LIFELONG HEALTH & WELLBEING

Public Engagement | Outreach | Making an Impact

Impact cycle BOOM

Developing more inclusive neighbourhoods , towns and cities

Designing products suited to the growing market of older people

Impact
The ultimate aim is to contribute to the national agenda for improving wellbeing and healthy ageing by providing evidence of how policies and programmes could help shape more supportive environments for cycling in older age. [Read more...](#)

20 May 2015
83

Domains: Active ageing cycle BOOM

The Fitness Gap

“The different between the best possible rate of decline and a person’s actual rate of decline...determined by social factors, decisions we make about life and the pressures that influence us.” Sir Muir Gray, *Sod 70!* [pp4-5]

20 May 2015
84

cycle
BOOM

Domains: Active Ageing

Active ageing

"Process of optimizing opportunities for health participation and security in order to enhance quality of life as people age."

WHO 2002



www.bikewalkroseburg.org

age-friendly *adj.* **1.** favourable to and accommodating of older people in some form. [GENERIC] *tone:* POSITIVE. **2.** a World Health Organization (WHO) policy concept [COPYRIGHTED] designating: 'policies, services and structures related to the physical and social environment that are designed to support and enable older people to "age actively" – that is, to live in security, enjoy good health and continue to participate fully in society.' **3.** defined through an interrelating set of eight Age-friendly® domains: *Outdoor Spaces and Buildings; Transportation; Housing; Social Participation; Respect and Social Inclusion; Civic Participation and Employment; Communication and Information; and Community*



20 May 2015
85

cycle
BOOM

Domains: Spatial Justice 'Right to the City'

'right to the city' *n. pl.*

1. literally, meaning the right to shape urban life. **EFFECT:** mobilising (potentially).

2. phrase originally coined by sociologist Henri Lefebvre in *Le Droit à la Ville* (published in 1968). Defined through a politicised notion of accessibility as a 'demand...[for] a transformed and renewed access to urban life'. Concept more recently popularised by geographer David Harvey [see David Harvey, "The Right to the City" *New Left Review* 53 (2008) pp. 23–40]. *tone:* OPTIMISTIC as in '[t]he freedom to make and remake our cities and ourselves is [...] one of the most precious yet most neglected of our human rights'. **OPERATIONAL MODEL:** collective. **3.** aligns with Age-friendly principles that foreground older people's active participation in urban life. **BENEFITS:** a healthy alternative to health-focused public policy discourse on ageing.



<https://departmentfortransport.wordpress.com/tag/altered-images/>

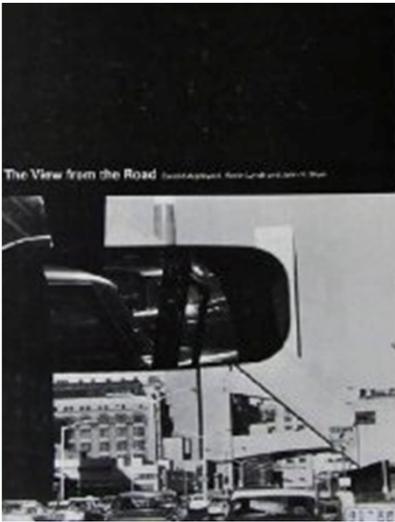
20 May 2015
86

cycle
BOOM

Domains: Planning & urban design

Preface

This monograph deals with the esthetics of highways: the way they look to the driver and his passengers, and what this implies for their design. We emphasize the potential beauty of these great engineering achievements, as contrasted with their current ugliness. Since the realization of this visual potential lies in the hands of the men who design them, this monograph is addressed to the highway engineer. We hope that he will find our ideas of use.



The View from the Road

The view from the saddle

Urban design vocabulary for cycling

20 May 2015
87

cycle
BOOM

Domains: Industry - Design Technology

Ceci n'est pas un vélo.





T&Cs apply. Offer ends 31st June. Bikes over £200.

Visit https://youtu.be/r5ldADWZ_Pk

20 May 2015
88

Potential outputs for policy and practice cycle BOOM

- Illustrate various aspects of cycling in later life using individual cases
 - Influence of retirement, becoming a carer, moving house
 - Relational aspects: partner, children, social groups
 - Cycling and health episodes | Restorative changes and curtailment
 - Adaptations associated with ageing
 - Contribution to wellbeing
 - Cycling promotion in the individual cycling life history
 - Cycling as part of transport modes
- Highlighting the churn behind the 3%|17% figures
- Older cyclists in different spatial contexts
 - mapping problem areas and possibilities

20 May 2015 89

Tailoring by spatial scale & location cycle BOOM

	Inner urban	Fringe
Home	Storing and manoeuvring bike to and from the street can be difficult at dwellings in high density areas. Manoeuvring it out to street could prove cumbersome	More space for storing bike in ancillary spaces/buildings, often level access to street.
Street	Set off areas could be crowded by refuse collection and parking Topography	More space for set off Topography
Neighbourhood	Squeezed-in cycling provision, lack of segregation	Proximity to hinterland Segregated pathways Intersections with distributor roads
City and fringes	Corridors and gyratories with high traffic volumes Alleyways, pedestrian routes, informal spaces afford direct routes/permeability links sometimes undesirable underpasses Topography	Greater distances to destinations Corridors and gyratories with high traffic volumes Topography

20 May 2015 90

Outputs | Impact: Activity since last SAG cycle
BOOM

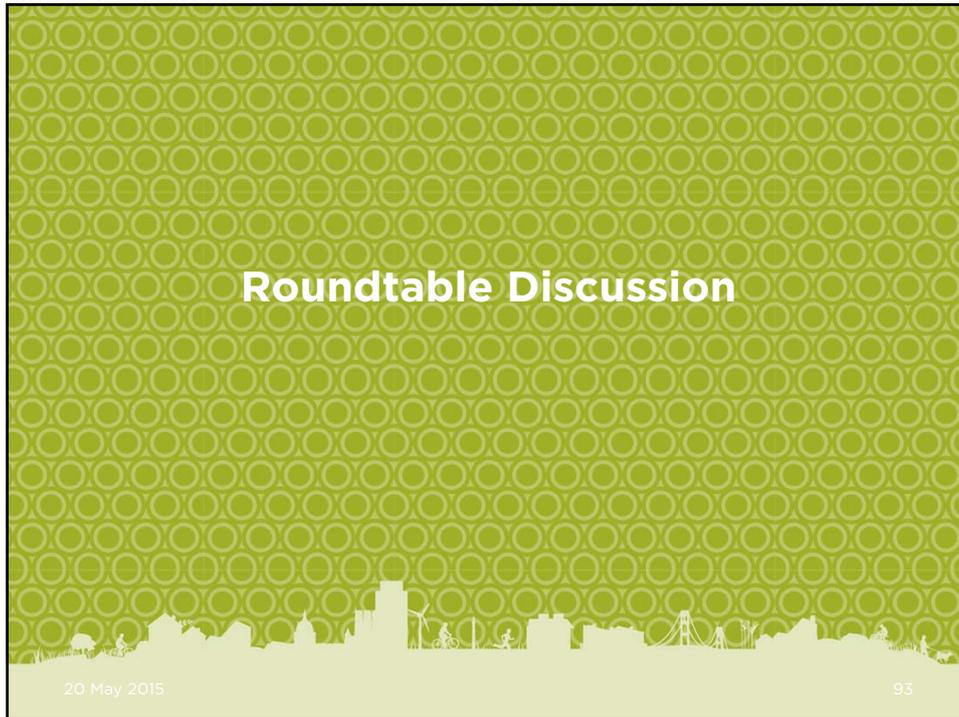
See handout

20 May 2015 91

Outputs | Impact: Future Events cycle
BOOM

- **Cycling and Society Annual Symposium**, Sept. 2015 & Sept. 2016
- **Royal Geographical Society with IBG 2015**, August 2015
- **BSG Annual Conference 2015**, Sept. 2015
- **8th European Public Health Conference**, October 2015
- **Association of American Geographers Annual Meeting**, April 2016
- **14th World Conference on Transport Research**, June 2016
- **6th International Conference on Traffic and Transport Psychology**, August 2016
- Special session on '**Design for Wellbeing: Ageing and Velomobility in the Built Environment**'. RGS with IBG, August 2016
- Special session on '**Researching with older people**'. 7th ESRC Research Methods Festival, July 2016
- **Final Project Conferences** | London & Leeds, Sept. 2016

20 May 2015 92



Roundtable Discussion

20 May 2015 93



THANK YOU!

NEXT SAG MEETING: AUTUMN 2015

PLEASE SEND FEEDBACK OR FORWARD
SUGGESTIONS FOR CONTENT OF NEXT
SAG MEETING TO
NICK BEALE
nbeale@brookes.ac.uk

20 May 2015 94