

Encouraging and enabling active travel: cycling

Dr Ben Spencer | Research Fellow | Oxford Brookes University



cycle
BOOM

DESIGN FOR LIFELONG
HEALTH & WELLBEING

3 year mixed methods study
4 cities

Accompanied rides

Cycling and wellbeing (e)bike trial

Biographical interviews

Policy / data analysis

LOW LEVEL OF CYCLING AMONG OLDER PEOPLE IN THE UK

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



LACK OF CONFIDENCE OR CAPABILITY TO CYCLE ON UK 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.



“Riding an e-bike seems more fun than riding an ordinary bike.” Aline, 60s, Oxford.

“I feel that the electric bike has enabled us to make journeys that we might not otherwise have done and get out enjoying the countryside.” Alysia (& husband), 50s, Oxford.

Experience – E-bikes

- Enjoyment and thrill
- Cope with ailments
- Safer – junctions / hills
- Greater distances
- Discovery
- Ride with others
- Varied (and zero) assistance

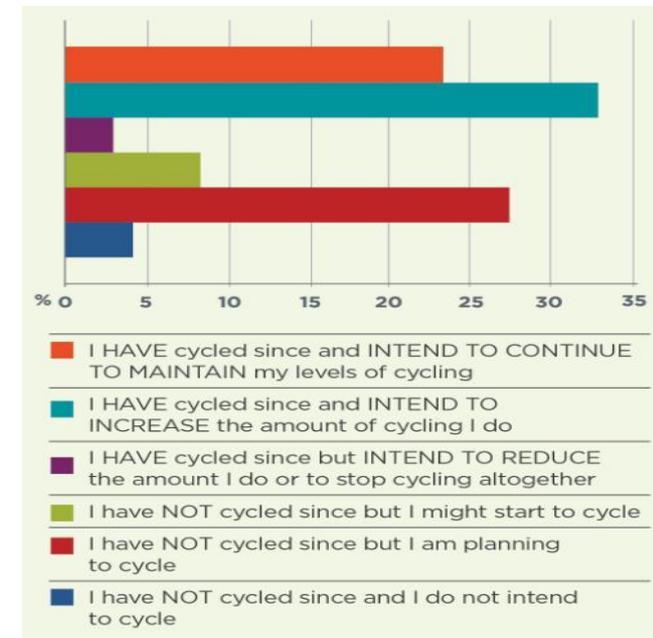
Test	Pedal	E-bike
Executive function	+ve effect	+ve effect
Processing speed	No change	+ve effect
Self-reported mental health	No change	+ve effect

Executive function: inhibition (Stroop Task) and updating (Letter Updating Task). Processing speed: reaction times in 'go' trials of the Stop-It task. Self-reported mental health: Health Survey Short Form (SF) – 36

‘a similar (sometimes larger) effect for the e-bike group compared to the pedal cyclists... Both pedal cycles and e-bikes can enable increased physical activity and engagement with the outdoor environment with e-bikes potentially providing greater benefits.’

Leyland L, Spencer B, Beale N, Jones T, van Reekum CM, 'The effect of cycling on cognitive function and well-being in older adults' PLoS ONE 14 (2) (2019)

- **Over two-thirds** of the participants thought that their wellbeing had improved **a little or a lot**
- 58 per cent reported that they had cycled and intended to increase or maintain their level of cycling
- A further 27 per cent reported that they had stopped but were actively planning to start cycling
- 19 went on to purchase an e-bike and a further 12 purchased a pedal cycle.



Older cycling is partial and resigned to specific times and spaces because of **poor and largely unsupportive infrastructure for everyday cycling**... There is an urgent need to act now to develop the infrastructure fit for an ageing society.

Improvements that enable cycling by older people have broader benefits for pedestrians, drivers and other cyclists of different ages and abilities... **inclusive design**

Cycling offers the potential for positive experience by providing older people with the means to participate in meaningful activity: to engage with landscape, foster personal relationships and maintain social contact with the outside world. **The broader health and wellbeing benefits of cycling need to be recognized, promoted and supported** through activities, events and programmes.

Global Age-friendly Cities: A Guide

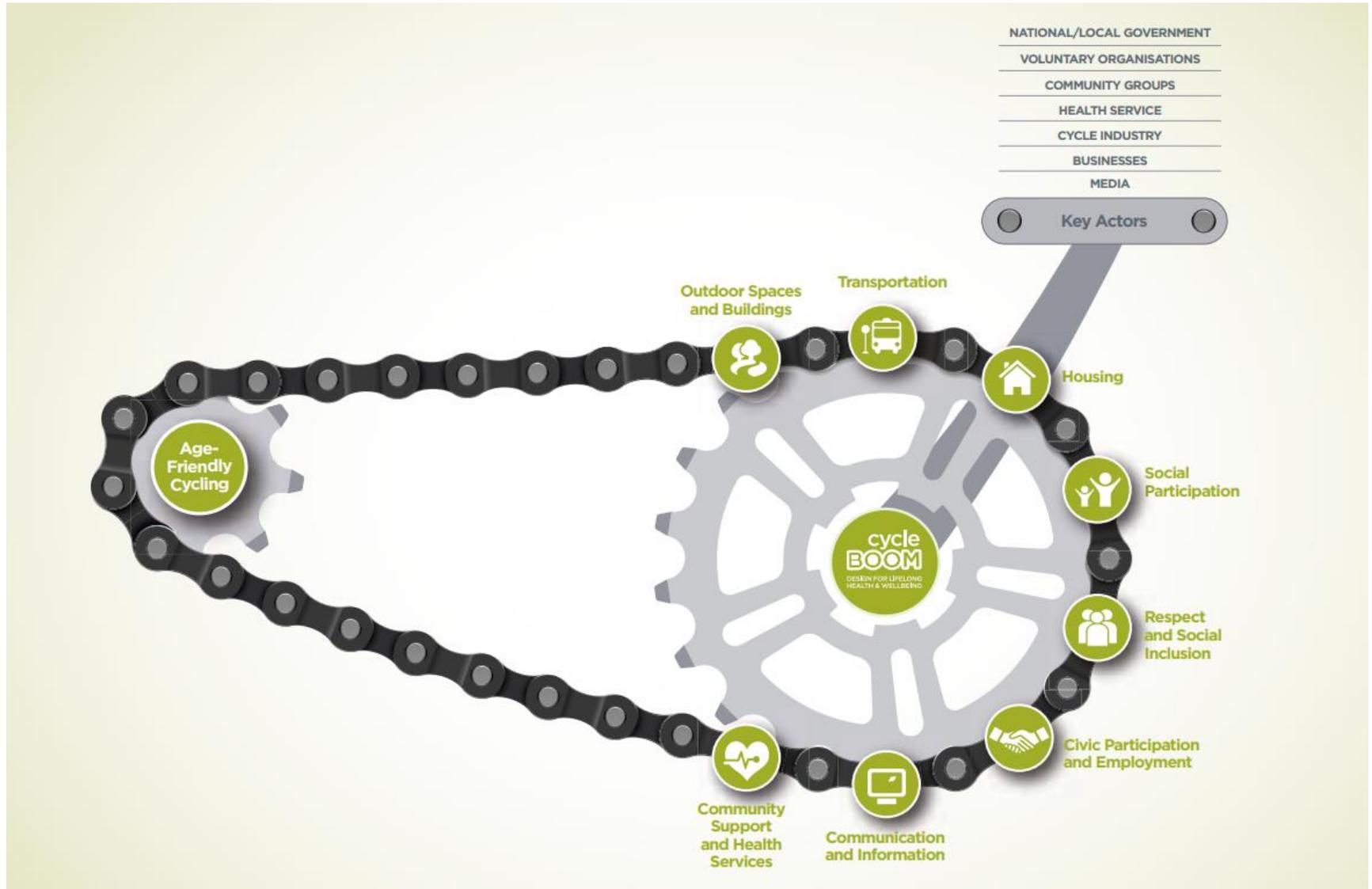


Calls for attention to the needs of the most vulnerable people in society (i.e. older adults and children in order to increase the number of people who become or remain physically active.

Recognises the important role cycling (and walking) in achieving this ambition.

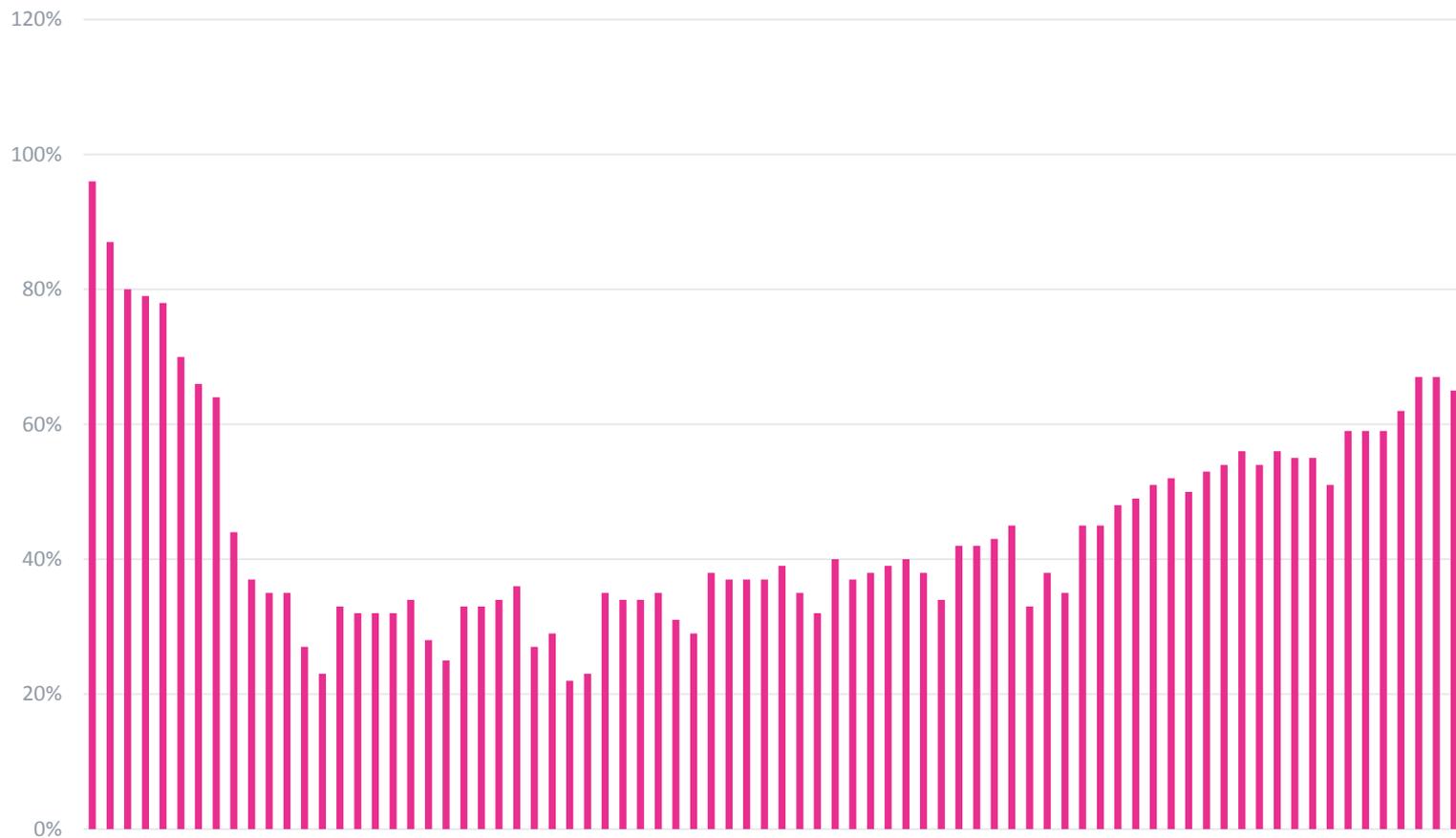
'Because active ageing is a lifelong process, an age-friendly city is not just "elderly friendly". Barrier-free buildings and streets enhance the mobility and independence of people with disabilities, young as well as old.'

WHO (2007) *Global Age-friendly Cities: A Guide*.



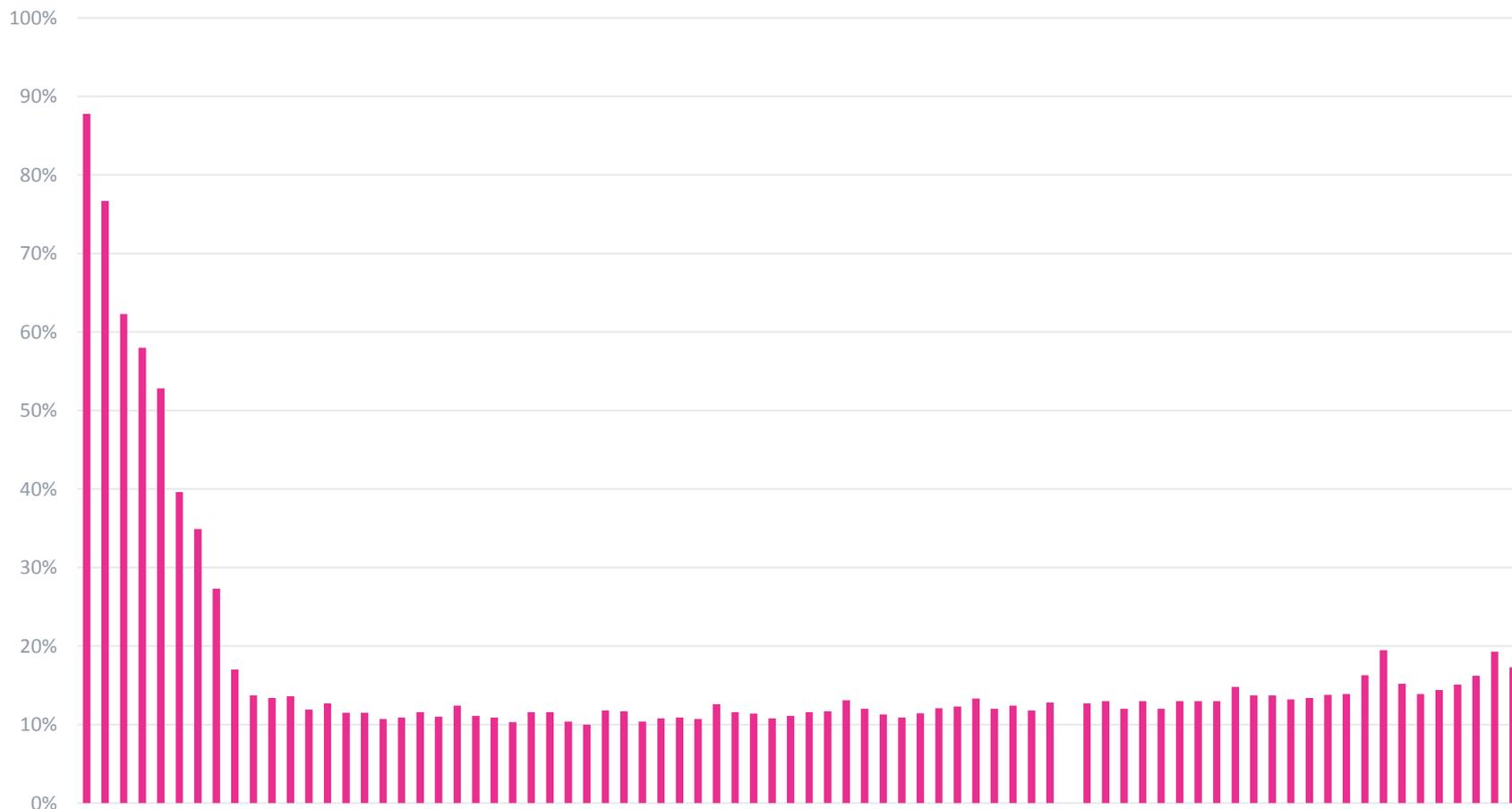


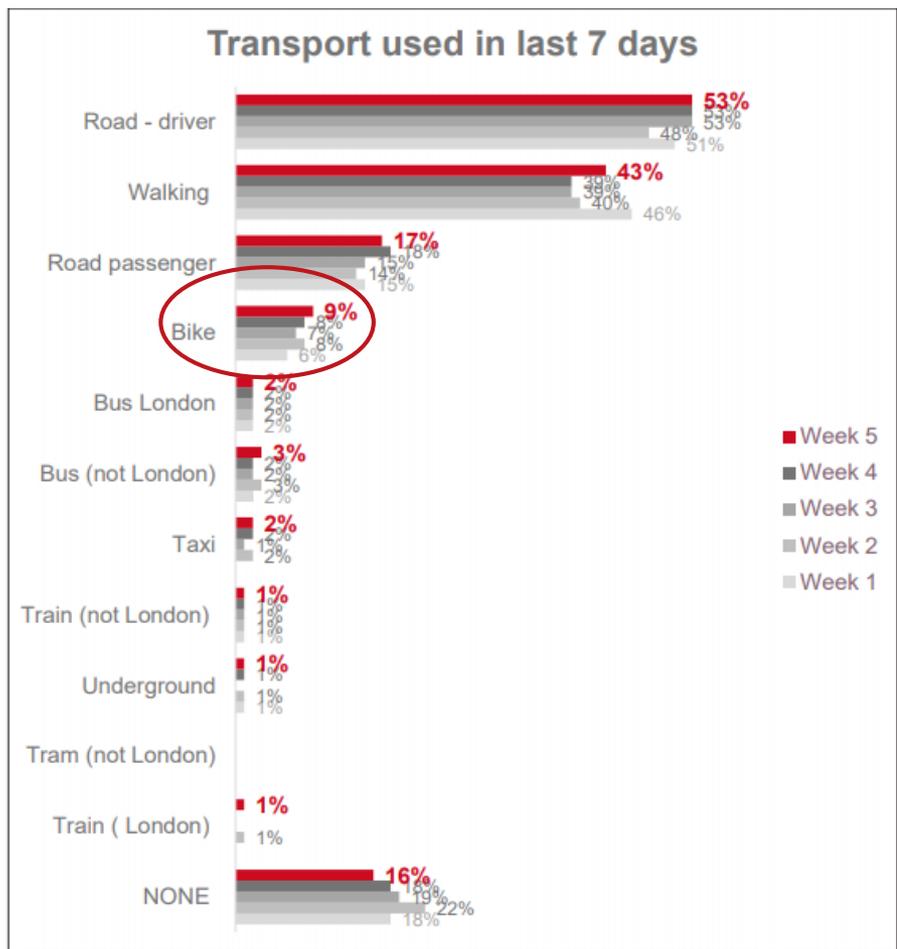
GB car journeys 16 March – 3 June (comparison to Feb 2020)



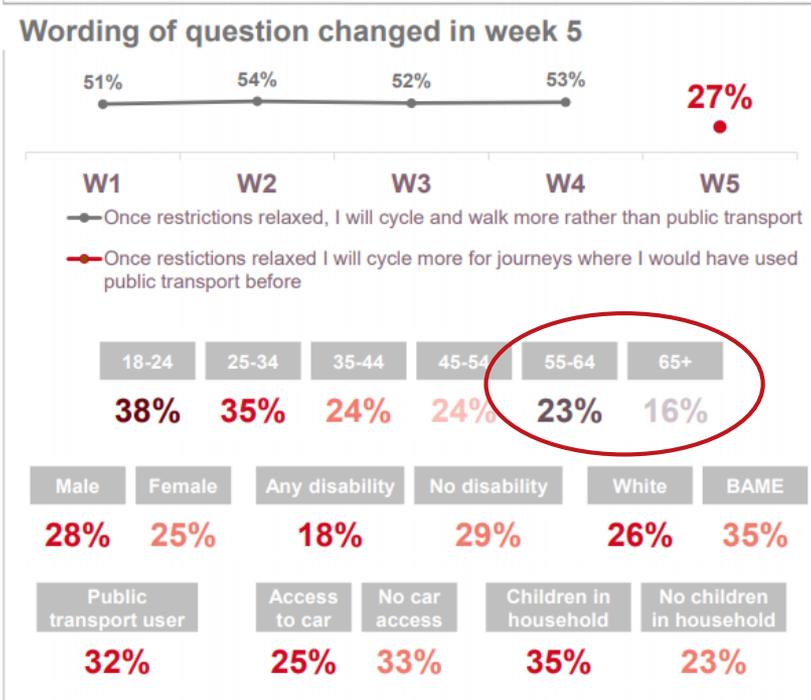
DfT Transport use since 16 March 2020 <https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic>

GB Bus use (excl London in comparison to Feb 2020)





Around a quarter say that in the future they are more likely to cycle for journeys where they previously used public transport



Sport England: cycling up from 8% (1st week April) to 16% (18 May).
Transport Scotland: cycle journeys week 20-26 April up 120% on typical figures.

Travel during Covid-19 tracking research - week 5: 5 June 2020 Transport Focus 2020

Streets closed to motor vehicles but open for people walking and cycling

Creation of temporary cycleway separated from cars

Widening of pedestrian footway (by extending it into the road)

Installation of road filters (plant containers, bollards) to prevent through motor traffic (including Low Traffic Neighbourhoods)

Reduced speed limits for motor vehicles





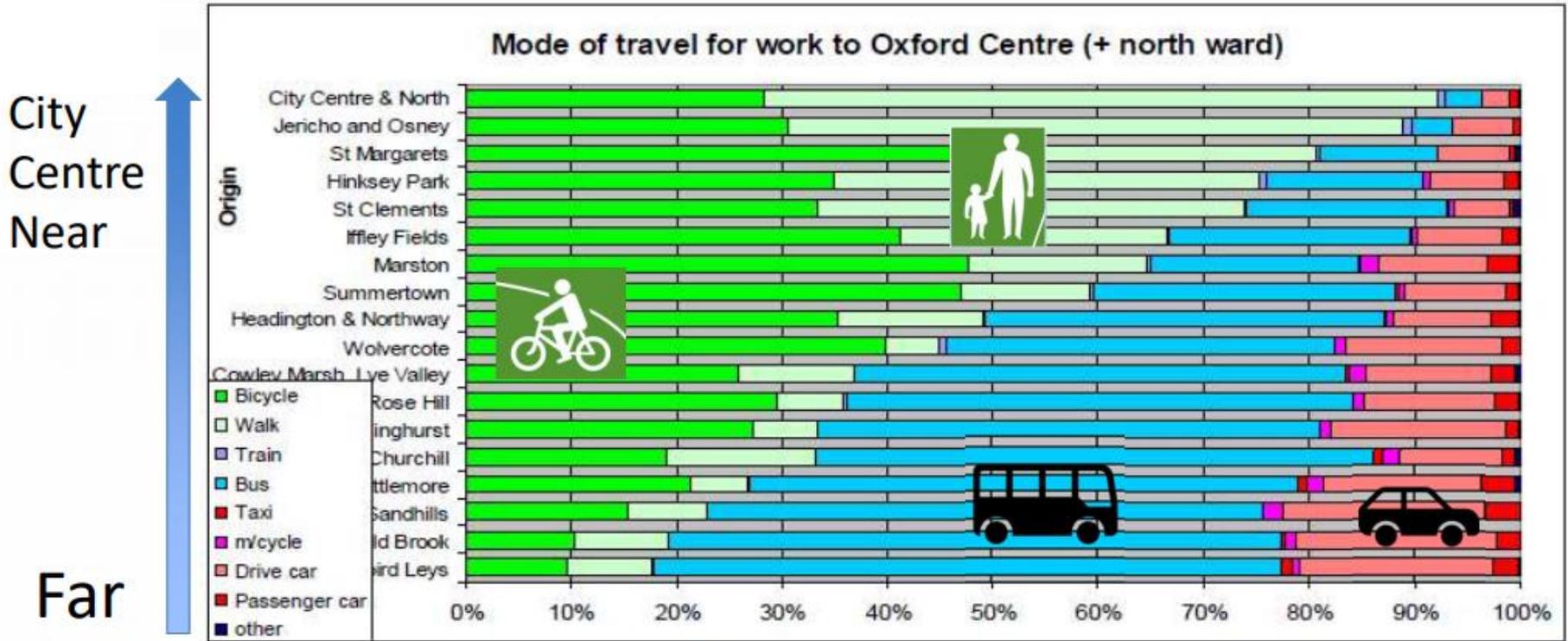
May 9 Department for Transport £250 million emergency active travel fund

“The government therefore expects local authorities to make significant changes to their road layouts to give more space to cyclists and pedestrians. Such changes will help embed altered behaviours and demonstrate the positive effects of active travel.... make sure you do what is necessary to ensure transport networks support recovery from the COVID-19 emergency and provide a lasting legacy of greener, safer transport.”

“Anything that does not meaningfully alter the status quo on the road will not be funded . . .”

Updated Cycling and Walking Investment Strategy and £2bn funding summer 2020

Modal shift from bus



City Centre
Near

Far

Outside

+ 6000 Park and Ride trips

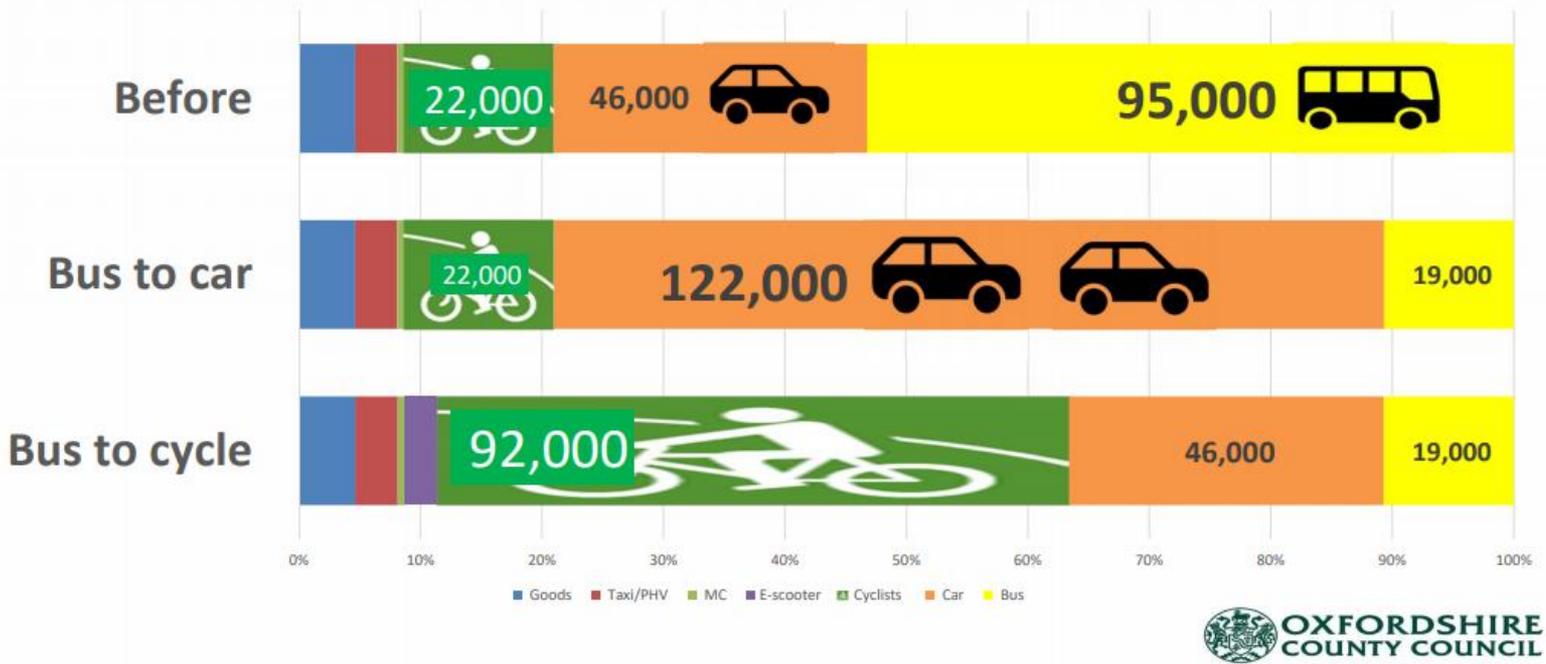


Thanks to Patrick Lingwood, Active and Healthy Travel Officer, Oxfordshire County Council

Modal shift from bus – to bike or car?

Oxford City Centre: 95,000 bus trips daily

Oxford Inner Cordon



Thanks to Patrick Lingwood, Active and Healthy Travel Officer, Oxfordshire County Council

Inclusive design approach for all ages and abilities e.g. barriers to walking

Acting fast – working at ‘hyper speed’ (TfL) vs co-production

Taking the space – Pop-Up... then keeping the space Pop-Down?

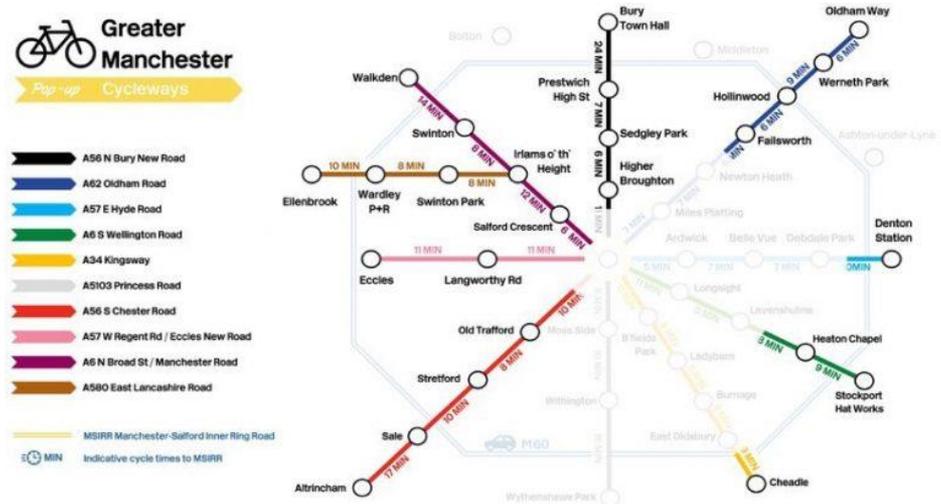
Just easy-wins? Rural / Suburb / City is it where it is most needed?

Networks, continuity and junctions

Aesthetics and legibility

Bike parking and security

Political will and officer capacity



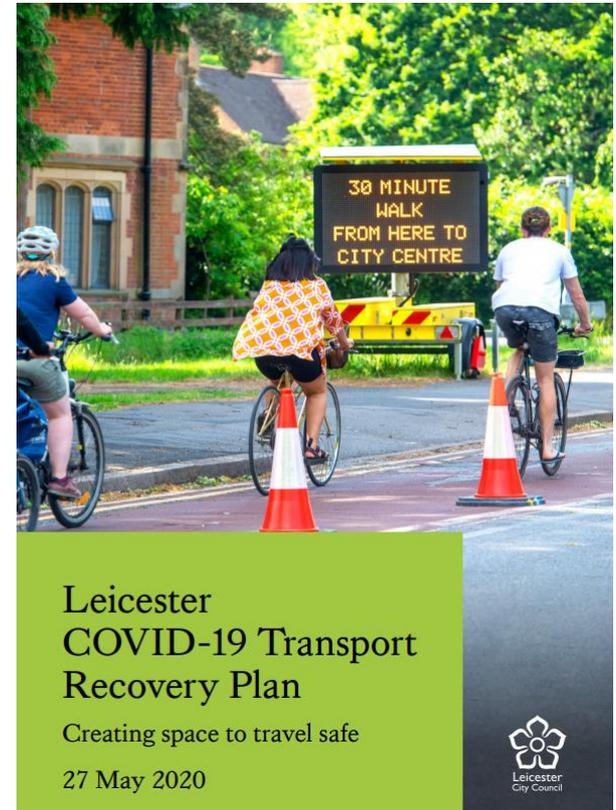
Leicester Transport Recovery Plan

Key principles

Safety – adhering to Government advice in terms of social distancing, safe design of any changes to streets and creating schemes which tackle transport emissions to protect the health of residents

Sustainability – supporting climate emergency work and helping to create a sustainable local economy

Social equity – providing fair access to all in an inclusive city



Thank you

Ben Spencer

bspencer@brookes.ac.uk

www.cycleboom.org