Designing cities to support cycling in later life: Challenges and opportunities in Bristol





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Background

In the UK cycling accounts for a small proportion of mobility across the age spectrum and is particularly low for those over fifty. As both active mobility and recreation, cycling can promote wellbeing through exercise, social contact and connection to community. An ageing population provides the necessity to design and manage urban spaces in ways that support independent and active mobility amongst older citizens. This includes mobility using bicycles.

Cycle Boom is a multi-disciplinary project studying the practices, experiences and meanings of cycling for older adults to understand how to support maintenance or reconnection with cycling in later life. Detailed research has been conducted with 18 older cycle users in the Bristol area involving a biographical interview, a videoed ride and a post ride video-elicitation interview. These bring to light some of the challenges and opportunities older cycle users encounter for cycling in urban areas.



Recommendations

Bicycle design: bike trials, hire, purchase, trade-in schemes allowing older cycle users to access lighter, more ergonomic and power-assisted cycles

Cycle training and orientation to routes within and beyond locality.

Residential streetscapes: on-street cycle storage, management of parking and refuse, speed reduction.

Surfacing: durable with good grip

Narrow geometry of roundabouts in outer urban neighbourhoods to reduce traffic speeds.

Junctions: Protected space and time for cycle users. Limit need to manoeuvre into traffic flows.

Findings

Adapting with age

Accumulated knowledge and skills but increasing caution and sense of vulnerability. Changes in strength, fitness, flexibility, balance or acuity of senses can undermine confidence and comfort- prompting adaptations e.g. wing mirror on handlebars, or retrenchment of cycling activity.

Discomfort looking over shoulder, complicated by vision changes, can undermine confidence to cycle with traffic. Adapting by completely stopping to turn upper body or dismounting and wheeling the bike.

More flexibility but also contraction of cycling

Retirement and reduced working afford more discretion about when and where to cycle. Cycling becomes a means for local trips as well as building routine for active retirement. Route selection and scheduling to avoid times and places whengrip felt less sure (e.g. fallen leaves, surface water, ice), visibility poor or peak travel periods. This can retrench domain for cycling.

Cycling in the urban centre

Bristol's compact, historical inner core offers short, direct routes into and across the city. Some principally followed main arterial routes, others had intricate routesthat link main and quieter roads, parks and interstitial spaces, bypassed major junctions and steep topography. High intensity and unpredictable movement of pedestrians and other bicycles provoked unease. More experienced cycle users enjoyed the challenge of busy sections......

....urban fringe

Quieter residential streets together with segregated cycle ways parallel to distributor roads enabled some to forge routes with limited exposure to traffic. Some borders to cycle paths unrewarding. Setting off generally easier than in higher density inner urban areas but regularly having to cross broad distributor roads – needing to judge fast moving vehicles to find gap and some borders to cycle paths were unrewarding.

Orbital journeys around fringe for employment or social activities, leisure rides into Hinterland and exercise rides confined to the bounds of the locality. Venturing into the city often seen as too far or intimidating.

Storage and setting off

Storage and access influences the ease of coming and going.

Quality of routes

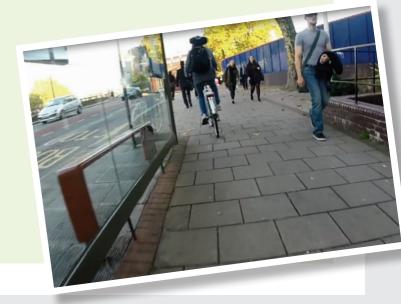
Uneven, deteriorated and slippery surfaces disconcerting and cause discomfort. Mixing with faster traffic provoked trepidation - the uncertainty of finding a gap, manoeuvring earlier or later to avoid sense of impeding traffic.

Transgressions

Occasional transgressions into space not permitted for cycling, either to avoid tackling higher speed corridors and going beyond what felt comfortable and safe.

"because I don't like the vehicles, they frighten me.

[crosses the ring road] the lights were with us so I did
what was the best thing because otherwise it is right
up and round so I cut across here and pedestrians
don't use this very much so you kind of feel safe
enough to...."



Conclusion

Although rates of cycling are low, there is appetite and ability to cycle within cities amongst the older age group. This empirical work suggests that comfort and confidence for cycling in urban settings can be diminished by age-related bodily changes, that older cycle users may be more sensitive to the immediacy of motorised traffic, uneven surfaces and surface grip and topography and may adjust the timing and scope of their cycling to avoid exposure to these. The bicycle itself influences the experience of cycling in urban environments; therefore facilitating access to lighter, ergonomic, as well as power-assisted cycles may extend cycling careers.

The propensity for individuals to curtail their cycling activity and ambitions as they grow older could be viewed as a failure of the design and management of urban spaces rather than an inevitable, natural aspect of ageing. Older cyclists' confidence to cycle whenever and wherever they would like in cities should be supported by establishing and managing routes which avoid the need to mix with motorised traffic flows and reduce the need to negotiate tight spaces.

Cycle Boom is funded as part of a UK research council programme into Lifelong Health and Wellbeing, Grant No. EP/K037242/1. Dr Jones and Dr Chatterjee are working in collaboration with researchers at the Universities of Reading, Cardiff and Oxford Brookes. The project is led by Dr Tim Jones at Oxford Brookes University.