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Supporting Modal Shift to Active Travel in Market Towns in Oxfordshire

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Background

- Oxfordshire County Council (OCC) set out their ambition to improve walking and cycling rates in Local Transport and Connectivity Plan (July 2022) and Active Travel Strategy (July 2022)
- The current study focuses on initiatives to improve cycling and walking in the market towns of Bicester and Witney.
- This includes **infrastructure improvements** (such as changes to traffic flows, reduced traffic speeds and new infrastructure for walking and cycling), **schools- and family-focussed projects, and a range of community activation projects** designed in partnership with local community groups to encourage modal shift to active travel.

Physical activity and active travel

- UK Chief Medical Officers recommend adults undertake at least 150 minutes of moderate-intensity of physical activity a week. Only **61%** of adults in England do[1].
- Physical inactivity contributes to 1 in 6 deaths in the UK (PHE 2016)
- **Active travel -** making routine journeys in physically active ways – is a potential solution
- Department for Transport latest Cycling and Walking Investment Strategy (2022) sets out the ambition that "*Cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030*"[2].
- This requires significant **modal shift**. 72% of all trips in England are under 5 miles, but most of these are made by car[3].

1. https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-exercise/physical-activity/latest
2. https://www.gov.uk/government/publications/the-second-cycling-and-walking-investment-strategyhttps://www.gov.uk/government/publications/the-second-cycling-and-walking-investment-strategy.
3. https://www.gov.uk/government/statistics/national-travel-survey-2021

Active Travel in market towns

- Modal shift towards active travel is well-researched in cities but less research has been undertaken in market towns where infrastructure and public transport may be less well developed.

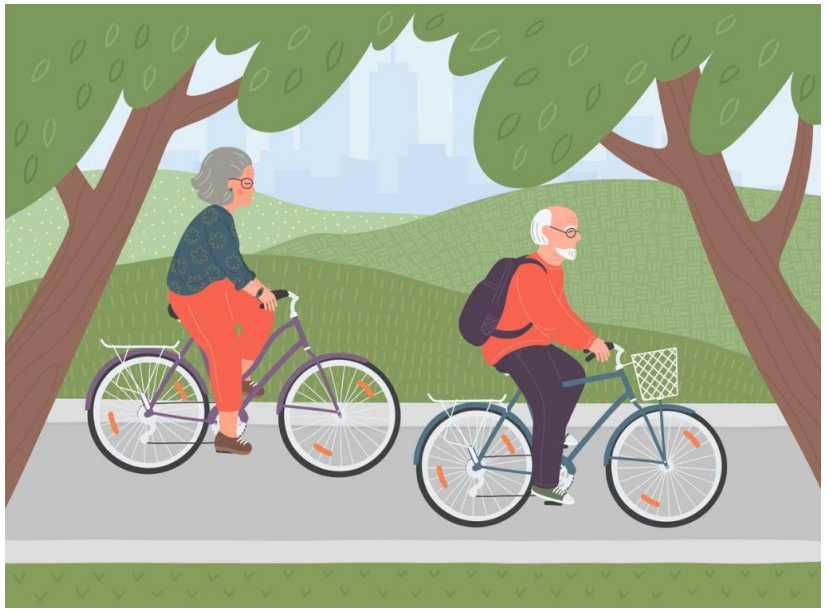
- Market towns have changed from being simply rural market and service centres to multifunctional areas of employment, services and visitor attractions, and home to a diverse range of residents with varying needs, including **retired adults** and **working-aged adults** who 'commute out' to other areas daily (Powe and Hart 2008)

- This research study aimed to address the following question:

  What is the impact of active travel interventions on commuters and older adults (aged over 65 years)? Can the interventions implemented in large, urban areas be successfully replicated in market towns?

Active Travel in older adults – what is known

- Active travel behaviour is influenced by the availability and accessibility of destinations – they need to be an achievable distance to walk or cycle (Cerin et al 2017; Lee & Dean 2018)
- Infrastructure is important: well-maintained footpaths, benches and the streetlights (Van Cauwenberg et al, 2018, 2019)
- Older cyclists prefer off-road cycle paths separated from traffic (Aldred & Dales 2017)



Active Travel and commuting– what is known

- Active commuting is associated with having a sedentary job, a shorter commute, and lack of free car parking (Ferrer et al 2018).
- New cycling and walking infrastructure that lacks connectivity is unlikely to promote active travel (Sahlqvist et al 2015).
- Fully integrated approaches, including new infrastructure, cycle hubs at public transport stations, traffic calming etc. may be more successful (Aldred et al 2019).

Study aims and objectives

- To understand how new cycling and walking infrastructure and community activation projects might support modal shift to active travel amongst commuters and older adults making **within-town** journeys in Witney and Bicester.
- Two target population groups of interest:
    - Older adults (65-75years) who live independently
    - Working adults who commute to work at least three days per week

Study Methods

- Qualitative study
- Focus groups with commuters and adults who live in Witney or Bicester (focus on newer estates where infrastructure work had been introduced)
- ‘Go-along’ journeys – accompanied journeys by bike or on foot
- Recruitment supported by Thames Valley and South Midlands Clinical Research Network

Research on walking and cycling in Bicester

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Walking and cycling in Witney

Concerned about traffic congestion, air quality, health and fitness? Want to talk about local opportunities for walking and cycling to work or local services in Witney?

Researchers from the **University of Bristol** are conducting research about how Witney residents might be encouraged to walk or cycle more.

Who can get involved?

Witney residents who fit into one of the following groups:

a) commute to work at least three days a week

OR

b) are aged between 65-75 years

You should be able to live and travel independently and safely, with good mobility. **We are not looking to recruit people who already walk or cycle frequently.**

What would happen?

You will be invited to attend an hour-long focus group in a public venue. The discussion will include what might encourage more walking or cycling as an alternative to car use, and your opinions of existing facilities for walking and cycling in Witney.

Focus group participants will be offered a **£30 gift voucher** as a thank you for their time and input.

The study is funded by the National Institute for Health Research (NIHR).

To find out more please email tricia.jessiman@bristol.ac.uk or call Tricia on 07977 902012.

Participant Recruitment Notice Focus groups V1 11.12.21 WITNEY

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Participants

Focus groups (6), 33 participants in total

Group	Town	Participant type	No.
1	Witney	Commuters	3
2	Witney	Commuters	3
3	Witney	Older Adults	5
4	Witney	Older Adults	7
5	Bicester	Commuters	6
6	Bicester	Older adults	9

Data collection May-Oct 2022

Go-along interviews (8)

	Town	Participant type	Gender	Mode
GO1	Witney	Older adult	M	Walk
GO2	Witney	Older adult	M	Cycle
GO3	Witney	Commuter	F	Cycle
GO4	Witney	Commuter	F	Walk
GO5	Bicester	Older adult	M	Cycle
GO6	Bicester	Older adult	M	Cycle
GO7	Bicester	Older adult	F	Walk
GO8	Witney	Commuter	F	Walk

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Travel mode preferences

Reasons to walk or cycle

Older adults

- No car/never learned to drive
- Convenience – quicker than driving
- Pleasant route
- Loss of license*
- **Health**

If you asked me to give a ranking order of why I cycle, health is always going to be the number one. The time to get down the town is important to me. There's a social aspect to it, I've met lots of people through cycling. But to go back to health, that is the case, and it remains the number-one reason why I cycle.
Male older adult

Commuters

- No car/never learned to drive
- Convenience – quicker than driving
- Pleasant route
- Difficult to park the car
- Saves money
- Climate change

*Items in red are unique to each participant group

Disadvantages of walking

Older adults:

- Poor paths – overgrown and/or uneven
- Hills
- Time
- Carrying heavy items (‘the big shop’)
- Shared paths with cyclists – too narrow to walk side by side; feel intimidated by cyclists
- Pavement cyclists
- Unlit paths (will not use in dark; this is also true for female commuters)

You have to walk in the road because the hedgerows are just never kept back. Anyone with any disability would struggle down there. …[]…I mean, I'd love to be able to walk every day, but I just feel it's not safe to do so.

Male older adult

I find because I've always used a car, my life is timed like, "I've got 10 minutes. I can go and do x," having to go to Sainsbury's and I can carry. I try occasionally to get the bus. I try to walk, and then I go, "I can't carry all this”.

Female older adult

It’s the conflict with cyclists actually. I’m sorry to say. Four times in the last year I’ve had close scrapes, where either- once I was injured, but that was a child just tearing round the corner, that just happened. Two or three times it’s adults on pavements that are fairly narrow, and one I actually had an argument with because he said, “It’s not illegal, cycling on the pavement and so on.” Well, it is, actually.

Male older adult

Disadvantages of cycling

Older adults:

- Lack of confidence ("*I'm too old*"; accidents)
- Poor infrastructure:
  - No connectivity of paths into town centre
  - Unlit paths
  - Feel unsafe on roads
- Traffic congestion; intimidation
- Hills
- Weather
- Cannot offer lifts
- Expense of electric bikes
- Concern about theft

I always cycled, but the path, it wasn't a proper cycle path, and it was too narrow. And anyway, I fell off and fractured my pelvis, so I was shot off to hospital for that.

Female older adult

The path is unlit so in the winter that stops me from cycling that path, for a number of reasons. Kids like to loiter along there and all those- and I just don't feel safe. I won't cycle on the road anyway.

Male older adult

When there's a build-up of traffic behind me, I pull over. That's not [me] doing his good deed for the day, or perhaps I should say it is, it's actually [me] being aware that the people behind me by now are getting frustrated, and that puts me at risk.

Male older adult

Disadvantages of cycling

Commuters:

- Poor infrastructure:
  - Unlit paths
  - Feel unsafe on roads
- Traffic congestion; intimidation (Gender?)
- Personal safety
- Concern about theft
- Commute is too far
- ‘Getting ready to cycle’

For me, there’s an added thing of if you’re out and about at night, I wouldn't want to cycle on my own. I don’t have somebody at home, so if I’m aware that I’m going to be on my own and coming back late, then I will take the car, which I’m annoyed with. I shouldn't feel like that.

Female commuter

At some point there’s a big queue of traffic. I feel pressure that the cars are thinking, “You’re not a car, get over to the side, I’m going to overtake you even though there is nowhere to overtake.” You’re just going to squish me into a box and I’ll have to…Often I just get off the bike and walk. I think part of it is that I’m a woman as well, I honestly do. A male car driver won’t see that I’m in charge.

Female commuter

Walking, you just get out and you walk, but cycling you’ve got to get the bike out the garage, you’ve got to find all the stuff, make sure the tyres are pumped up etc. It’s just a lot more hassle.

Female commuter

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Cycling in a market town

The good news

- Cycle lanes are numerous – most are shared-use, off-road preferred
- Good signage
- Compact and relatively flat

Impediments to cycling in market towns

Poor infrastructure is a key barrier

- Lack of off-road cycle paths
- Narrow roads
- ‘close’ passes and impatient drivers
- Poorly maintained paths –potholes, uneven surfaces, overgrowth, litter and glass

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Impediments to cycling in market towns continued…

- Poorly lit paths
- **Fewer cyclists in market towns leads to perception that cycling is less normalised and drivers less 'cyclist 'aware'**
- In Bicester, traffic calming measures on one new estate (high kerbs, narrow carriageway, green barriers between carriageways) deters older cyclists who worry that they hold up traffic with no space to pass
- Advisory painted paths on roads lead to conflict with drivers; often parked over

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Walking in a market town

Impediments to walking in market towns

- Older adults were more likely than commuters to have concerns about walking
- Again, poor infrastructure was the main problem
  - Poor maintenance of paths and pavements/unpaved paths
  - Overgrowth
  - Risk of collision with cyclists on shared paths

Impediments to walking in market towns

- Poor lighting (a concern also shared by female commuters)
- Long pedestrian (and cyclist) crossing times on A41 in Bicester

There's a section if you get into Madley, after the new toucan crossing, walk in a bit and then you have to go down and then back up. And this sort of down and back up – and everybody knows I'm talking about – it's not lit. …[]…it's trees and it's dark, so I won't go there. As soon as it's even dusky, I just feel nervous, and so I won't do it. So then I think well the only alternative is walking all the way round, or I'll drive.

Female commuter

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What might encourage modal shift in market towns?

Participant perceptions of active travel interventions

- **New and improved infrastructure a priority:**
- **Off-road** cycle and walking paths
- Where these are shared, encourage ‘share with care’
- Signage to encourage walking and cycling
- Better path maintenance, and better lighting
- **Prioritising** pedestrians and cyclists at crossings and junctions

It means you’re at the front, and I find them, personally, really useful if I’m turning right, because I’m in the right place and I’m ahead. I don’t have to worry about moving out, I’m already there..

Male commuter

Participant perceptions of active travel interventions

- **Reduced traffic speeds** broadly supported in residential areas, but not by commuting car drivers.
  - Requires enforcement

- More secure bike parking, especially for **e-bikes**

Community interventions to encourage modal shift towards active travel

- Guided walks and cycles
- Bike loans
- Bike maintenance sessions

- Those who had taken part really liked them, but there was a general **lack of awareness** of all of these

I've got a Bicester buddy who's going to guide me along. We'll go on cycle rides together, and that's just what I need, just to get used to the roads.
Female older adult

The group health walks I did. They start at one of the doctor's practices. They take you different- I didn't realise there were so many walks you could do round here. I was absolutely flabbergasted. Very good.
Female older adult

I also think that bike maintenance sessions are quite useful…[]…You do want a bike that actually is fit for purpose, and sometimes people need to know- not everybody has been shown how to repair cycles and if they checked it perhaps once a year, they'd probably be a bit safer.
Male commuter

Education, promotion, and culture change

- Better awareness of community projects to promote active travel
- Focus on the positive aspects of walking and cycling
- Role modelling – in schools and in the community

- For cycling especially, social norms may be different in a market town
- There *is* safety in numbers: more cyclists; fewer collisions (Jacobsen 2015; Robinson 2005)

There's never been a better time to start people thinking about this kind of stuff because everyone is financially worse off and mental health has never been worse. These are all really good things about active travel.

Female commuter

You need people of all different colours, ages, being out there. You need to be seeing people actively travelling, people that look like you so you can relate and think, "Oh actually, I could be doing this."

Female older adult

Road users hate us, hate cyclists. …[]…I feel less safe cycling in Witney than I used to in Oxford. That feels a bit weird. It shouldn't feel that way.

Female commuter

Recommendations to Oxfordshire County Council

- Focus on the **advantages** of active travel – health, environment, cost of living
- Community activation projects like guided walks and cycles, loan schemes etc need to be better promoted
- Infrastructure: improved connectivity of paths and lanes; lighting
- Maintenance: ground surfaces and overgrowth
- Cycling safety and security
- Social norms – cycling in a market town

Conclusions 1/3

- Market towns have **intrinsic advantages** for active travel - relatively compact with most routine destinations within easy reach. Nearer meeting criteria for ‘20-minute neighbourhood’ than many larger towns and cities (Emery and Thrift 2021).

- Barriers to active travel for older adults and commuters broadly similar to those identified in research in larger urban areas: **poor infrastructure**

Conclusions 2/3

- More delineated paths; better connectivity
- Maintenance of cycle and footpaths
- Lighting
- Secure cycle parking, including bike lockers.
- These findings are broadly supported by research conducted in UK cities and towns by Sustrans[1,2].
- Improved accessibility for pedestrians is also likely to improve access for ‘wheelers’; those using wheelchairs and/or mobility scooters

1. https://www.sustrans.org.uk/media/11493/sustrans-arup-walking-for-everyone-inclusive-walking-report.pdf
2. https://www.sustrans.org.uk/media/7377/cycling_for_everyone-sustrans-arup.pdf

Conclusions 3/3

- Market towns are not much different than cities when it comes to promoting active travel. Policies are most likely to be effective when they include integrated and complementary measures targeted at a range of levels from individual behaviour change to population level measures like large-scale infrastructure improvements.

- But ***attitudes*** towards active travel, in particular cycling, may differ in market towns and initiatives to change the social norms around cycling may be required to increase active travel rates.

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OXFORDSHIRE COUNTY COUNCIL

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References

Aldred R, Croft J, Goodman A. Impacts of an active travel intervention with a cycling focus in a suburban context: One-year findings from an evaluation of London's in-progress mini-Hollands programme. Transportation research part A: policy and practice. 2019 May 1;123:147-69. doi.org/10.1016/j.tra.2018.05.018

Aldred R, Dales J. Diversifying and normalising cycling in London, UK: An exploratory study on the influence of infrastructure. Journal of Transport & Health. 2017 Mar 1;4:348-62.

Cerin E, Nathan A, Van Cauwenberg J, Barnett DW, Barnett A. The neighbourhood physical environment and active travel in older adults: a systematic review and meta-analysis. International journal of Behavioral Nutrition and Physical Activity. 2017 Dec;14(1):1-23. https://doi.org/10.1186/s12966-017-0471-5

Emery T, Thrift J. 20-Minute Neighbourhoods – Creating Healthier, Active, Prosperous Communities An Introduction for Council Planners in England. Town and County Planning Association 2021. Available from https://tcpa.org.uk/wp-content/uploads/2021/11/final_20mnguide-compressed.pdf Accessed 25 Nov 2022

Ferrer HB, Cooper A, Audrey S. Associations of mode of travel to work with physical activity, and individual, interpersonal, organisational, and environmental characteristics. Journal of Transport & Health. 2018 Jun 1;9:45-55. https://doi.org/10.1016/j.jth.2018.01.009

Jacobsen PL. Safety in numbers: more walkers and bicyclists, safer walking and bicycling. Injury prevention. 2015 Aug 1;21(4):271-5.

Lee E, Dean J. Perceptions of walkability and determinants of walking behaviour among urban seniors in Toronto, Canada. Journal of transport & health. 2018 Jun 1;9:309-20.

Powe N, Hart T. Market towns: understanding and maintaining functionality. Town Planning Review. 2008 Jul 1;79(4):347-71.

Public Health England. Working Together to Promote Active Travel A briefing for local authorities. 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523460/Working_Together_to_Promote_Active_Travel_A_briefing_for_local_authorities.pdf. Accessed 25 Nov 2022.

Robinson DL. Safety in numbers in Australia: more walkers and bicyclists, safer walking and bicycling. Health promotion journal of Australia. 2005;16(1):47-51

Sahlqvist S, Goodman A, Jones T, Powell J, Song Y, Ogilvie D. Mechanisms underpinning use of new walking and cycling infrastructure in different contexts: mixed-method analysis. International Journal of Behavioral Nutrition and Physical Activity. 2015 Dec;12(1):1-5. https://doi.org/10.1186/s12966-015-0185-5

Van Cauwenberg J, De Bourdeaudhuij I, Clarys P, De Geus B, Deforche B. Older adults' environmental preferences for transportation cycling. Journal of Transport & Health. 2019 Jun 1;13:185-99.

Van Cauwenberg J, Clarys P, De Bourdeaudhuij I, Ghekiere A, De Geus B, Owen N, Deforche B. Environmental influences on older adults' transportation cycling experiences: A study using bike-along interviews. Landscape and Urban Planning. 2018 Jan 1;169:37-46. 10.1016/j.landurbplan.2017.08.003