Variation in active travel and the scope to increase participation: an analysis of Active People Survey and National Travel Survey data

Contents

This report was commissioned by Sport England and produced by Rachel Aldred of Westminster University

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1. Key messages

- Even across England, there are big differences in walking and cycling participation, with huge variation between local authorities for cycling participation.
- When we look at trip stages of similar length (a key determinant of whether people might walk or cycle), participation gaps remain, for instance by trip purpose and by region.
- This suggests substantial scope to increase active travel, by getting people to shift existing journeys (or parts of journeys) to walking or cycling.
- In London, 90% of stages under a mile are walked, but outside London this falls to 82%. Getting rates outside London to match those within London would mean 1.3 million more people would get at least one short walk on a typical day, including 130,000 more five to ten-year olds.
- If cycling rates were as high (based on distance) for all trip purposes as for commuting trips, the number of cycling trips per person would more than double, and the 'typical cyclist' would be someone travelling to the shops or for a day/night out rather than a commuter.
- For cycling, if as in Cambridge half of all adults were prepared to cycle some of their regular short trips, one in ten of all trip stages would be cycled, compared to one in sixty at present.
- Interventions that increase levels of walking and cycling can help us realise this unmet potential.

2. Introduction

2.1 About the Report

This report was commissioned by Sport England from Westminster University. It examines potential and scope for getting more people travelling actively (walking and cycling). It does this using two datasets: Active People Survey (2011/12-2015/16) and the National Travel Survey (2002-17). Both have strengths and limitations. APS[1] has a large sample size which allows us to look at local authority level, particularly useful for cycling which has strong variation by local authority (but not at regional level). However, its focus is on physical activity rather than travel behaviour. NTS does ask detailed questions about travel behaviour, and the kinds of trips people make, unlike APS including children. However, NTS has a smaller sample size, so only regional (not local authority) breakdowns are possible.

The report uses APS and NTS to (i) describe patterns of walking and cycling, and how they differ; (ii) look at participation gaps, for instance, differences between cycle commuting rates and levels of cycling for other trips, and (iii) explore in depth two more detailed, data-driven scenarios where walking or cycling increases. For walking, the scenario explores the impacts if age-based walking propensities across England equalled those in London for trip stages of under a mile. This adjusts for demographic differences, allows us to see impacts on different age groups, and is based on walkable – i.e. very short – trips that people are already making (rather than assuming people might start walking purely for leisure, or walk longer trips). For cycling, the assumption is that, as in Cambridge, half of all people (stratified by age and gender) are willing to cycle at least some short trip stages, and cycle journeys are then allocated to them based on how likely current cyclists are to cycle trip stages of different lengths. Both scenarios show substantial increases in walking or cycling levels.

Clearly changes will need to be made to realise this growth. Evidence from Sport England's recent review (2019) highlights the impact that high-quality infrastructure can have, supported with a suite of other enabling measures and measures to discourage car use. For instance, the People and Places study (Aldred et al, 2019) found that ambitious infrastructure changes in Outer London ("Mini-Hollands") were associated with residents doing around 45 minutes more per week active travel, largely made up of more walking. In a different context – but also an ambitious, high quality intervention – proximity to the Cambridge Busway Cycleway was strongly associated with an increase in active commuting (Panter et al, 2016). Other evidence shows that groups currently under-represented in active travel have more concerns about safety, so may need better infrastructure to get them travelling by foot or by bike (Aldred et al, 2017, Van Cauwenberg et al 2019). The changes needed are not easy but increasingly we are finding evidence that they can and do make a difference.

2.2 The Scenarios

- London Levels of Walking examines the difference it would make to daily walking activity if people outside London were as likely as those within London to walk some of their very short journeys.

- Cambridge Levels of Cycling examines the difference it would make to cycling levels if people across England were as likely to consider cycling for their shorter journeys as people in Cambridge.

[1] While APS has been replaced by ALS (Active Lives Survey), when writing there were only two years of ALS available, compared to five years of APS (important as some local authority sample sizes are still relatively small each year) and while there is now a Children's and Young People's ALS the first year dataset has not yet been released.

3. Data and Methods Used

This analysis uses data from Sport England's Active People Survey, from the 2011 Census, and from the Department for Transport's National Travel Survey. The data is used both to describe current levels of walking and cycling, and to look at the scope for increasing walking and/or cycling.

Scope for increasing walking and/or cycling can be defined in different ways. We could say, for instance: what would the effect be on active travel (or physical activity) if women cycled as much as men, or if everyone walked as frequently as people in the local authority where walking is most common? Some of these comparisons are discussed below. However, walking and cycling are primarily (though not only) methods of transport. Perhaps, London residents walk more simply because they have more local amenities and hence more local trips, and therefore it is not reasonable to expect people in other areas to walk at the same rates.

Travel survey data then becomes important. As well as information about amounts of walking and cycling, the National Travel Survey has information about all the journeys that people make – and we can use that to look at potential for 'mode shift'. For example, in high income countries people rarely walk three-mile trips, while in European countries and cities with high levels of cycling, three-mile journeys are quite often cycled. Thus, if in an area, people's trips were generally three miles long (to simplify), the area's walking potential would be low but its cycling potential moderate. By contrast, in an area where trips are typically 10 miles long, both walking and cycling potential would be low.

3.1 The Walking Analysis

The first part of the report focuses on walking. It uses APS data on walking participation and frequency to examine how walking levels vary across the country, including by urban or rural status. Participation gaps are highlighted. However, as noted above, not everyone has the same types of trip. Some people might make lots of very short trips, but others not. The travel survey data shows that the key near market for walking is trip stages[2] of under a mile. Therefore, the National Travel Survey data is then used to examine variation in rates of walking for these short trips, both geographically (London vs. rest of England), and demographically (by age).

The walking section then develops a 'London levels of walking' scenario. Rather than assuming everyone is equally free to increase their walking, it takes into account that Londoners may have shops, services, etc. closer to where they live, than people outside the capital, and hence travel more locally in the first place. It also segments by age group, because walking rates decline in the oldest age groups (and populations outside London tend to be older). Although the National Travel Survey has a week-long travel diary, people are only asked to provide information about short walks (under a mile) on one of those seven days. This is taken to represent a 'typical day'. The scenario then involves assuming that people outside London in each age group become as likely as Londoners to walk any short trip stages they currently make.

3.2 The Cycling Analysis

The second part of the report focuses on cycling. It uses APS data on cycling participation and frequency to examine how cycling levels vary across the country. Participation gaps are highlighted, and travel survey data is used to examine the association between types of trip (distance, and purpose) and likelihood of cycling. Using this, a scenario is developed that combines both APS and NTS. It uses APS to hypothesise a demographically segmented (by age and gender) level of cycling participation (based on Cambridge, where around half of people cycle in a given week). Then NTS is used, to measure cycling trip rates for current cyclists (based on distance), and then extending these rates to trips cycled outside Cambridge.

[2] A trip is a whole journey from a to b., for a specific purpose. Trip stages are the distinct parts of a trip that are made by different modes of transport, for example walking to a bus stop, or driving to a train station. Trip stages are used in this analysis to incorporate scope for shifting (or not) parts of trips to other modes, as well as whole trips.

4. Walking

4.1 Who walks, and where? Evidence from the Active People Survey

Walking by individual local authority

In the top 10 authorities for participation between 91-93% of people did some walking in the past 4 weeks.

Table 1: Top 10 authorities for past-month walking participation

Local authority	Percent walking at least once in past 4 weeks
Wandsworth	93.2%
Hammersmith and Fulham	92.8%
Camden	92.5%
Islington	92.3%
Kensington and Chelsea	92.3%
Richmond upon Thames	92.1%
Waverley	91.1%
Cambridge	91.0%
Haringey	90.8%
Westminster	90.8%

In the bottom 10 authorities for participation between 79-81% of people do some walking in the past month, a participation gap of around 12% compared to the top 10.

Table 2: Bottom 10 authorities for past-month walking participation

Local authority	Percent walking at least once in past 4 weeks
Sandwell	78.7%
Knowsley	79.0%
Tendring	79.2%
South Holland	79.2%
East Lindsey	79.4%
Barking and Dagenham	80.1%
North Lincolnshire	80.5%
Fenland	80.6%
Bolton	80.6%
Barnsley	80.7%

Characteristics of high and low-walking authorities

Except Waverley (in Surrey), and Cambridge, all the top 10 are London boroughs. High levels of public transport use (and hence many short 'trip stages' e.g. home to bus stop) are likely to be a factor in the high levels of walking found here. By contrast, the bottom ten are more diverse. Some, like Bolton and Sandwell, are dense metropolitan areas; Barking and Dagenham is a London borough, while others, like Fenland and South Holland, are rural. However, average participation in sports/recreation, cycling, and walking differs relatively little by area type.

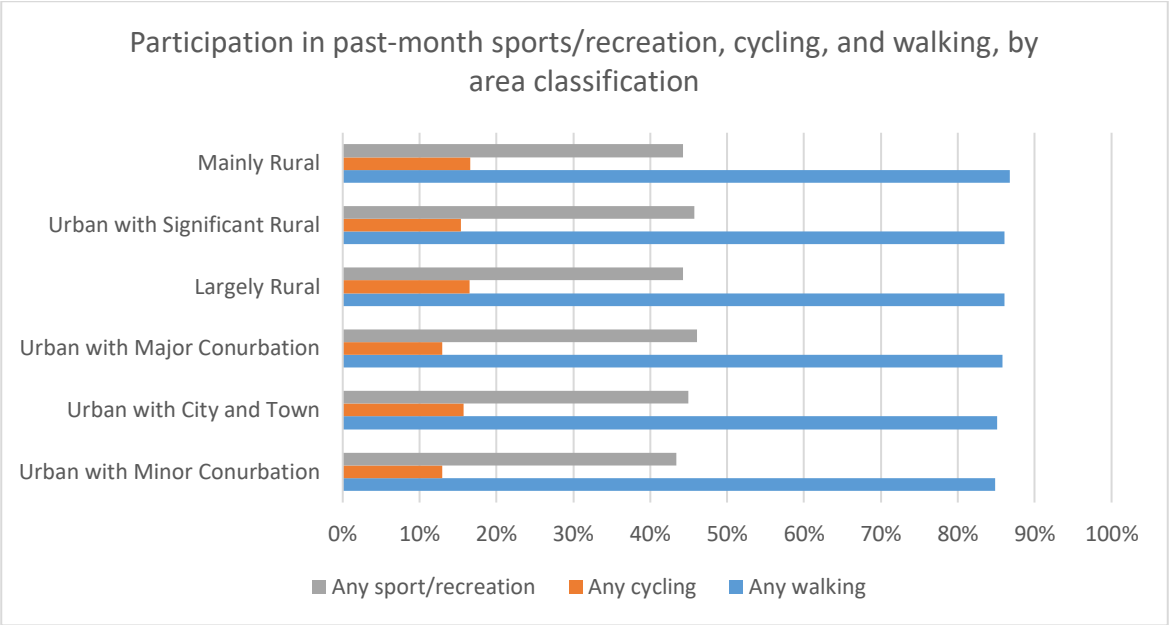

Figure 1: participation in sports/recreation, cycling, and walking, by area classification

Typical days of weekly walking can be calculated by dividing reported days of walking in the past 28 days by 4, and then rounding. In the 'bottom 10' not walking in a given week is relatively normalised, with 24.8% of respondents doing no walking in a typical week during the past month, compared to 29.5% who did some walking every day. By contrast in the top 10 few (12.2%) do not walk in a typical week, while 41.5% walk every day.

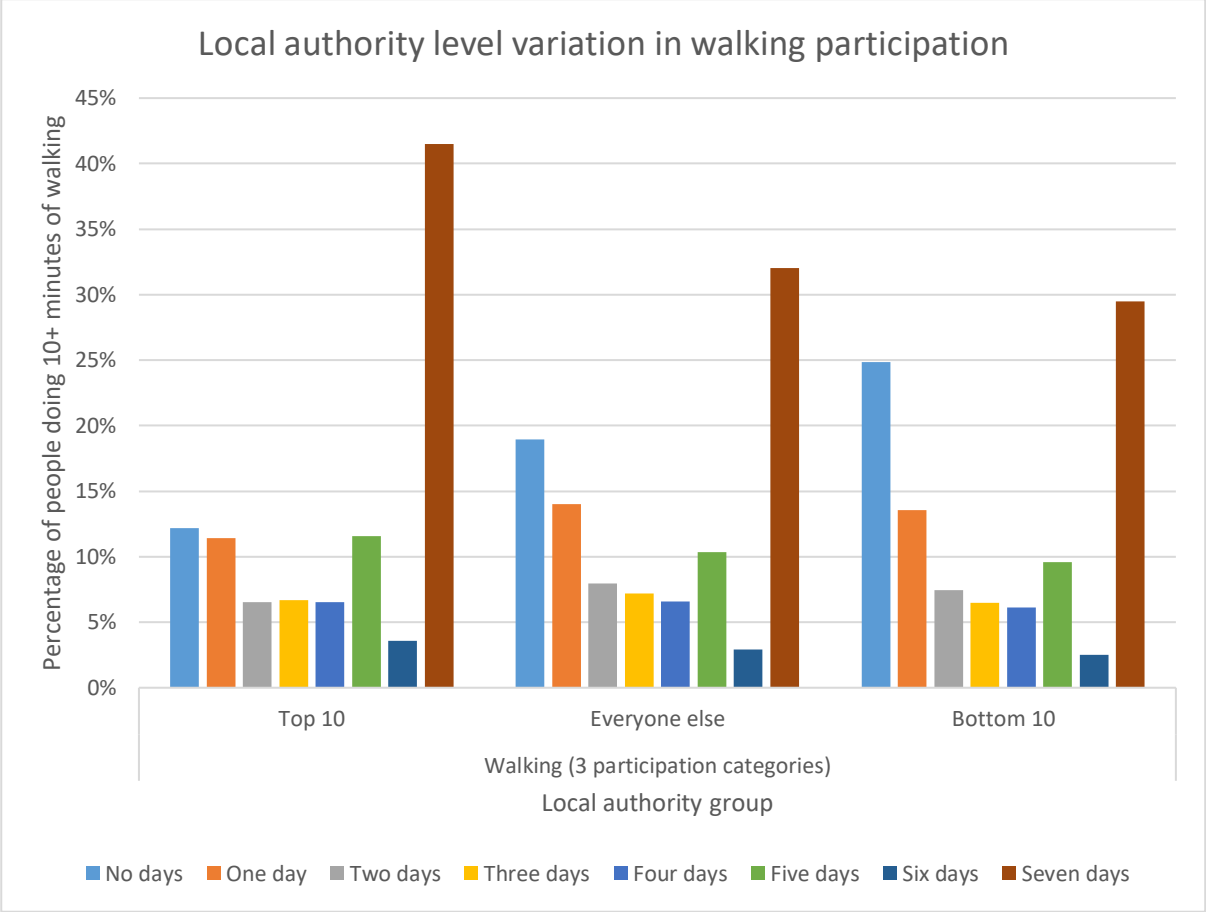

Figure 2: frequency of walking, by local authority group (Top 10 for walking, Bottom 10 for walking, all others)

4.2 Walking: scope for changing how people travel

Distance and other factors

Walking is often seen as something that 'just happens' and not subject to change. However, the discussion above highlights very different levels of walking, and there is increasing evidence that built environment interventions (amongst others) affect levels of walking (e.g. Aldred et al, 2019). We know that our best chance of increasing levels of physical activity is by ensuring it is built into everyday life. One way of identifying the potential for behaviour change is to look at how many 'walkable' trips people are currently making. For instance, in the top 10 local authorities, the reason that more than 40% of people are walking daily (compared to under 30% in the bottom 10) could be because they are more likely to have shops and services within walking distance. Another possible reason for divergence is demographics and differences in what is 'walkable' for different people. In a shire county with many older people, more people are likely to mobility impairments making it less likely that they will be able to walk even shorter trips.

While the Active People Survey does include demographic data, it does not contain any information on broader transport behaviour. Hence, this section of the walking chapter uses the National Travel Survey, a rolling household survey focused around transport behaviour. This allows us to pinpoint trips that might most easily be walked, and to establish scope for walking more of these short trips. Figure 3 illustrates how scope for more walking predominantly relates to very short trips, with walking propensity declining quickly as distance grows.

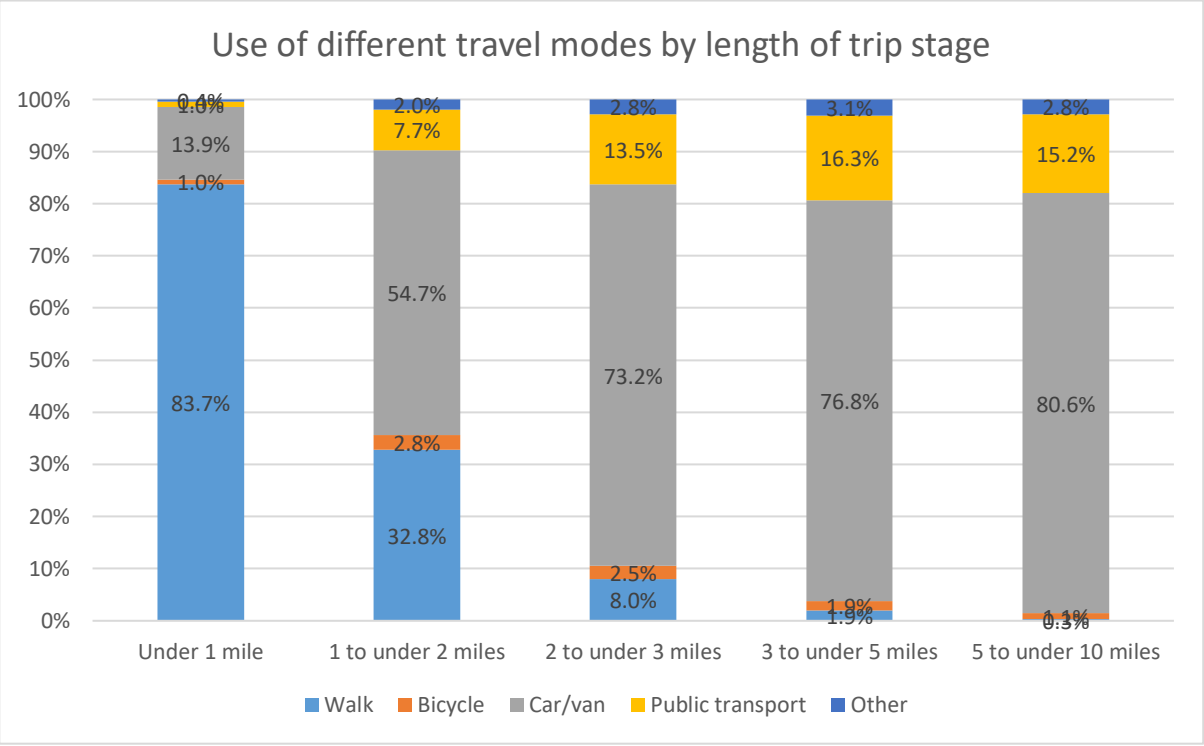

Figure 3: how length of trip stage affects mode of travel

How short journeys, and walking rates, vary inside and outside London

While overwhelmingly short stages of under a mile are walked, this is not the same everywhere. In London, 90.2% of short stages are walked, but outside London this falls to 81.9%. The chart below separates these rates by age group: above the age of 80, propensity to walk shorter trip stages starts to fall. It is also interesting to see to what extent Londoners' higher walk rates are reproduced among children and young people. The following analysis only uses data from days on which a person was asked to report short walks. This produces a better comparison for analysis only within that category, because people are only asked on one day of seven to include any walks of under a mile. It only includes data from 2016 and 2017, because

only those years contain in the trip stage dataset a variable flagging the day on which an individual was asked to report their short walks.

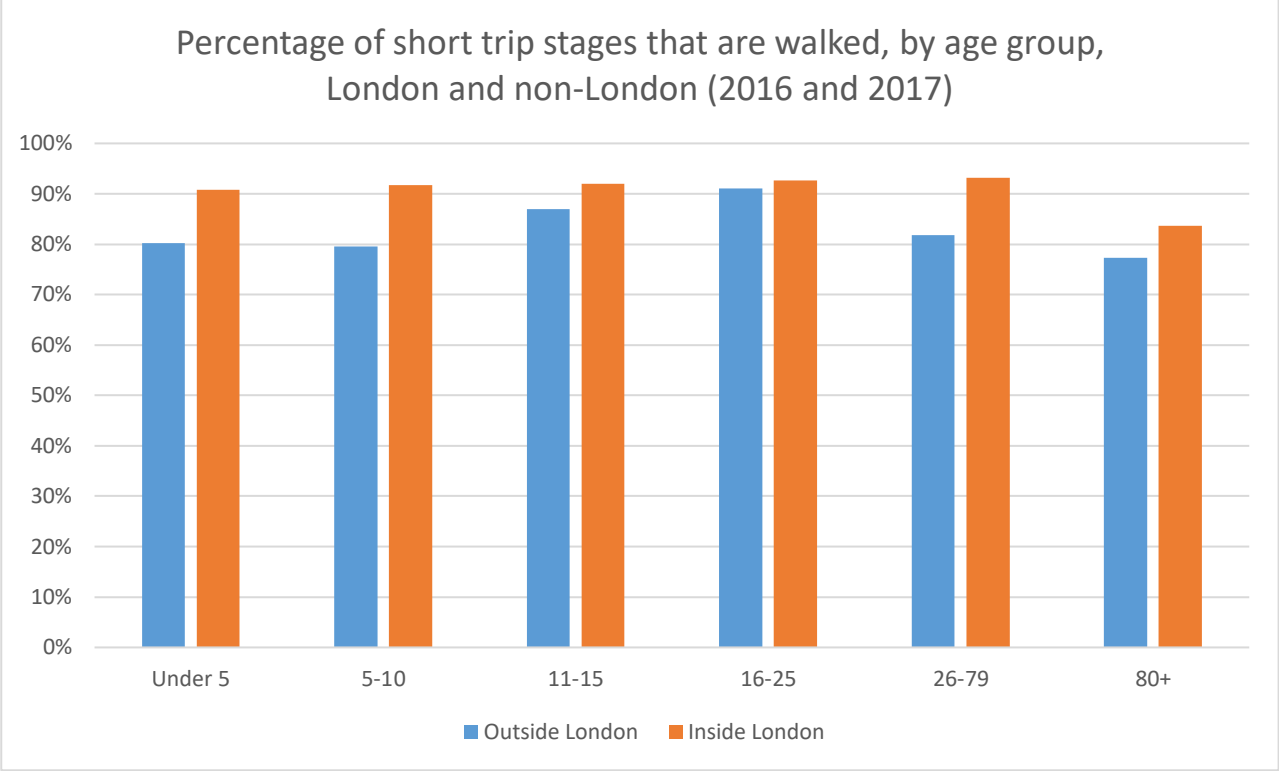

Figure 4: variation in walking propensities by London and non-London residents

Overall, there is a percentage point gap of 10%, in terms of the likelihood of walking short trip stages. However, the gap is much lower (as low as 2%) among 11-25 year olds, who show more similar short stage walking propensities inside and outside London (and relatively high, compared to other age groups outside London). For the oldest age groups, the gap is 6%. Among women, a slightly smaller percentage of very short trip stages are walked compared to men (83.3% vs. 84.1%). However, as women are more likely to walk longer trips than men and have more short-to-medium trip stages, women overall do somewhat more walking than men, as a proportion of all trip stages (30.5% vs. 28.0%).

However, it is also important to know what proportion of **individuals** are walking short trip stages. This gives a more accurate sense of potential for switching, which would result from individuals changing behaviour. Using the same data, the chart below shows the proportion of individuals in each age group who (i) made at least one short trip or stage on their 'short walk' day, and (ii) walked at least one of these short trip stages. While overall 94% of Londoners with any short trips or stages walked at least one of these, for non-Londoners the figure is 84%.

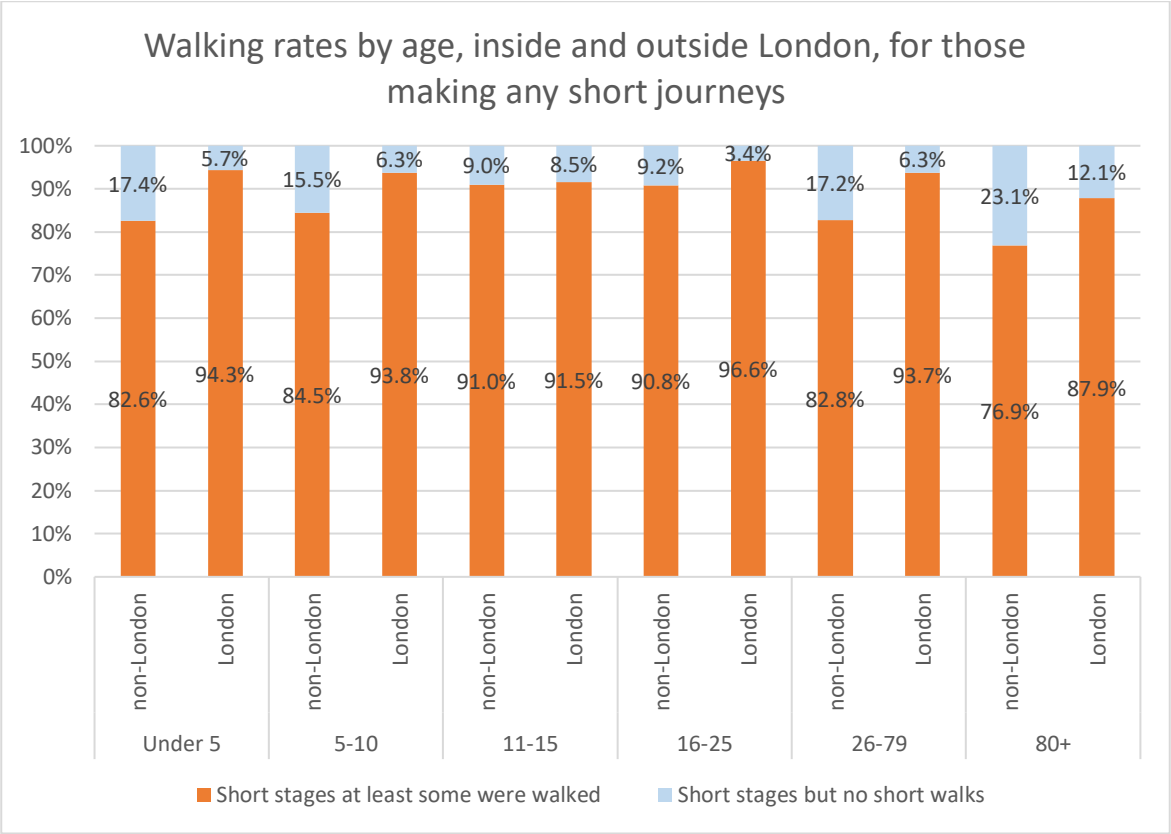

Figure 5: walking propensities among those making any short journeys on their 'short walk reporting day'.

We also need to know what percentage of Londoners and non-Londoners had any trip stages of less than a mile during their designated short walk reporting day. If some people do not make many short trips/trip stages in the first place, getting them walking daily would have to involve more than a change of journey mode. Figure 6 illustrates there is a (relatively small) difference here, with 42.1% of Londoners and 29.6% of non-Londoners reporting doing at least one short stage on a given day. This is important to take into account in thinking about scope for increased walking. (Note that generally, people who did any walking tended to walk all their short trip stages: 78% did so).

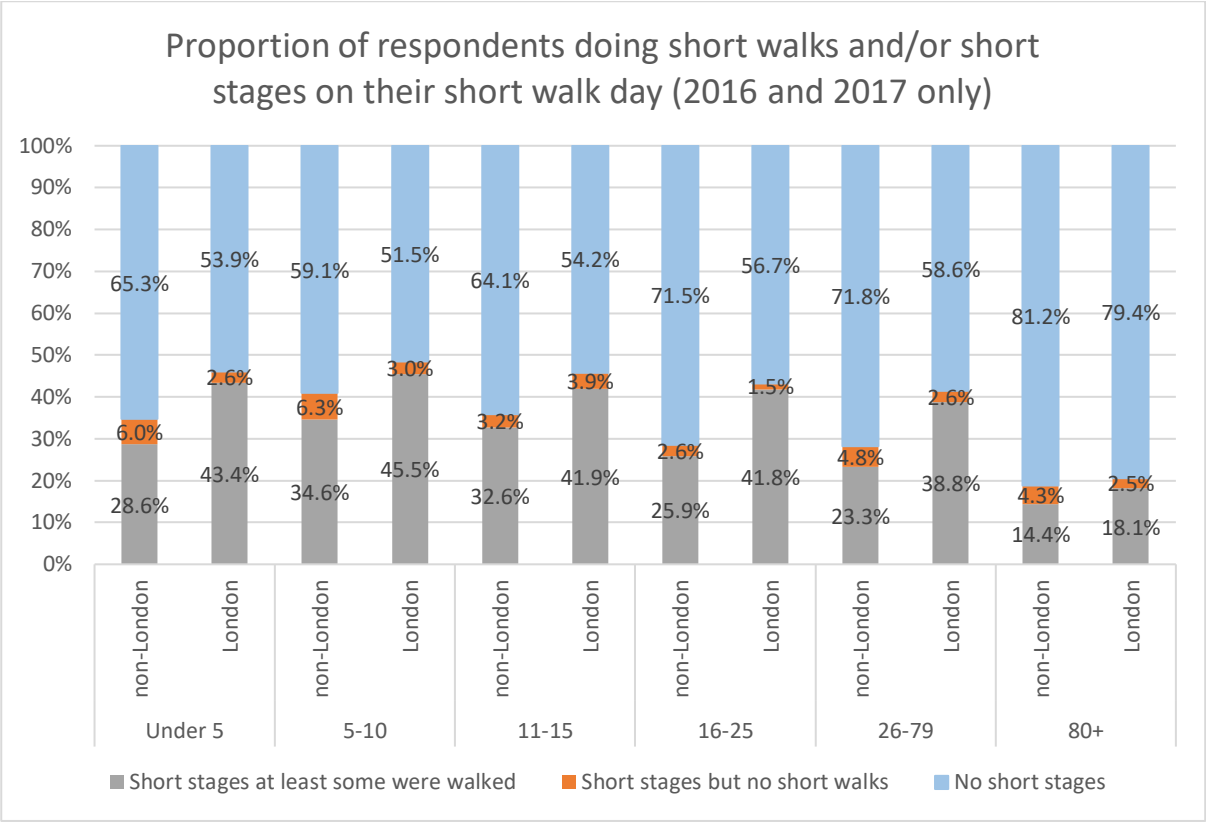

Figure 6: prevalence of short stages and short walk stages, London and non-London

The London Level of Walking Scenario

To summarise, the discussion above shows that Londoners do indeed have more short trip stages than non-Londoners. However, Londoners of in all age brackets are more likely than non-Londoners in the same age bracket to walk one or more of the short trip stages that they do make. Hence, there is still clear potential to increase walking, if we could get non-Londoners (by age group) to achieve the levels of walking for short stages that we see among Londoners.

This scenario assumes that people outside London might attain London rates of walking for very short trip stages. It does not assume **everyone** would walk **all** short trip stages, because some people might not be able to walk this distance, and some trips might involve carrying something so heavy or bulky that even a half mile walk would be impossible.

Applying London levels of walking to the data in Figure 5, we find that across the whole population, an additional 2.9% of non-Londoners might make at least one short walk on a typical day. (Figure 7 breaks this down by age.) While currently 24.9% of non-Londoners are making at least one short walk on a typical day, if they were as likely as Londoners to walk their short trip stages, this would mean that 27.6% would do so. This equates to an additional 1,335,825 people making at least one short walk on a given day.

In relative terms, this would be an increase of 11.5% on the numbers of non-Londoners currently making at least one short walk on a typical day (from 11.5 to 13 million people). Those aged under 11 see particularly high increases in walking, meaning that this scenario represents a particular boost for children's active mobility. The high rates of children's walking in London are likely to be related to London parents themselves being particularly likely to travel actively for short trips rather than take their children in the car. As there are almost 3.5 million children aged 5-10 living in England outside London, according to ONS (2017 mid-year population estimates), the scenario would mean an extra 131,590 children aged 5-10 would get at least short walk on a typical day.

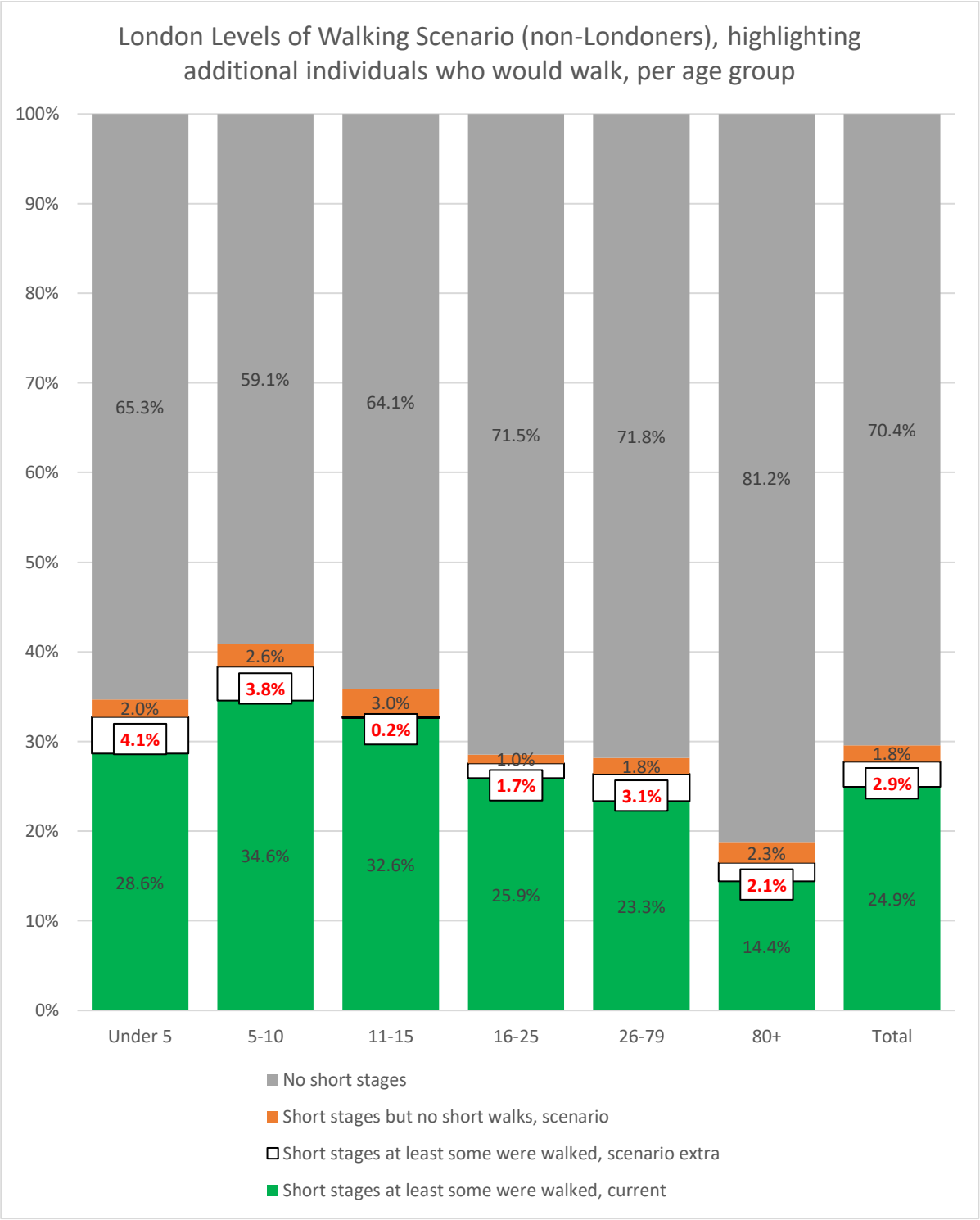

Figure 7: London Levels of Walking Scenario, by age group

Conclusion: London Levels of Walking Scenario

What difference would it make to daily walking activity if people outside London were as likely as those within London to walk some of their short journeys (under a mile)? **1.3 million more people would do some walking on a typical day, with particularly high increases in activity for children aged under 11.**

5 Cycling

5.1 Who cycles, and where? Evidence from the Active People Survey

Cycling by individual local authority

Cycling is much less prevalent in England than walking. In fact, there is only one local authority (Cambridge) where more people have cycled in the past four weeks than not.

Table 3: Top 10 local authorities for past-month cycling

Local authority	Percent cycling at least once in the past 4 weeks
Cambridge	55.6%
Oxford	39.5%
Richmond upon Thames	31.4%
South Cambridgeshire	30.8%
York	30.3%
Gosport	25.7%
Vale of White Horse	25.3%
Exeter	24.0%
Norwich	23.6%
Hackney	23.2%

In the bottom 10 authorities for participation between 7-8% of people do some cycling in a month, a participation gap of around 15% compared to Hackney, and of around 48% compared to Cambridge.

Table 4: Bottom 10 local authorities for past-month cycling

Local authority	Percent cycling at least once in the past 4 weeks
Burnley	6.7%
Harrow	7.1%
Sandwell	7.1%
Dudley	7.1%
Sunderland	7.5%
Barking and Dagenham	7.7%
Hyndburn	7.7%
Bradford	7.7%
Enfield	7.9%
Oldham	8.0%

Characteristics of high and low-cycling authorities

While the highest-walking areas shown in Table 1 are relatively homogenous (mostly London boroughs) there is more diversity in high-cycling areas. Some are smaller cities like Cambridge, or rural areas like the Vale of White Horse, and there are two London boroughs. By contrast, the lowest-cycling areas tend to be urban, with three London boroughs and several Northern towns. The scatter chart below indicates that there is a correlation between past-month cycling and past-month walking. Places with higher participation in cycling also tend to have higher participation in walking.

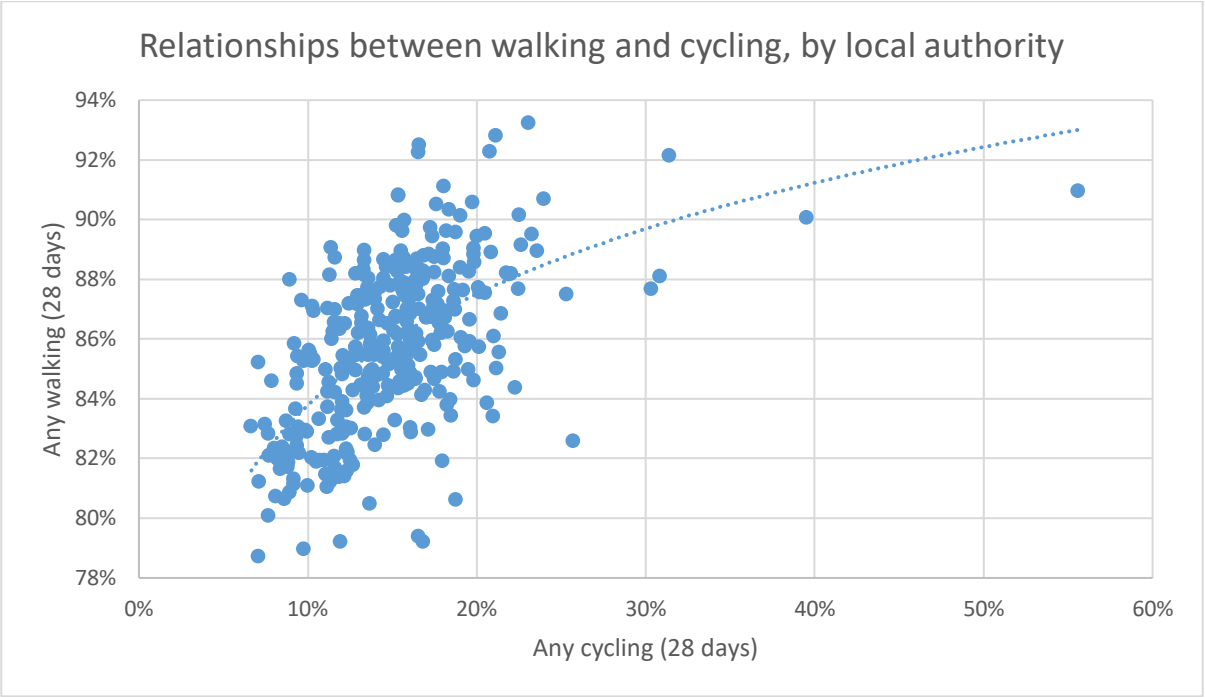

Figure 8: The relationship between past-month walking and past-month cycling

5.2 Cycling: scope for changing how people travel

Distance and other factors

Scope for more cycling, like walking, is shaped by distances. For cycling, this is more complex – while we might expect most people to be able to walk trip stages of under a mile, unless in unusual circumstances (e.g. travelling with a heavy and/or bulky item), cycling propensities are more diverse and cover a wider range of trip distances. The sharp decay seen for walking is gentler for cycling, with a trip of 2.5 miles only slightly less likely to be cycled than a trip of 1.5 miles.

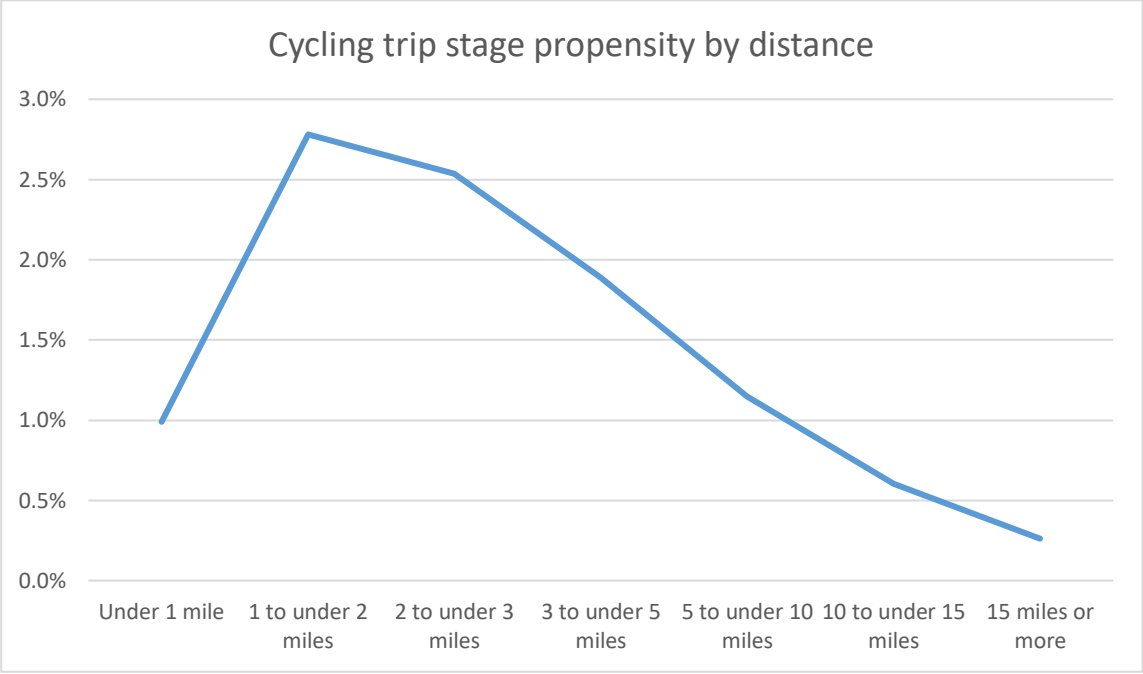

Figure 9: the relationship between distance and cycling propensity

This curve varies somewhat by region. Notably, in London the 'distance decay' curve is much flatter. While only 0.5% of very short trips in London are cycled, rising to a middling 2.6% of trips between 1 and 2 miles,

for longer trips (3-15 miles) cycling propensity is higher in London than in other parts of the country, with 2.1% of 5-10 mile trips by London residents cycled. By contrast in the relatively high-cycling East of England (for instance), 4.2% of trips between 1 and 2 miles are cycled, but only 1% of trips between 5 and 10 miles.

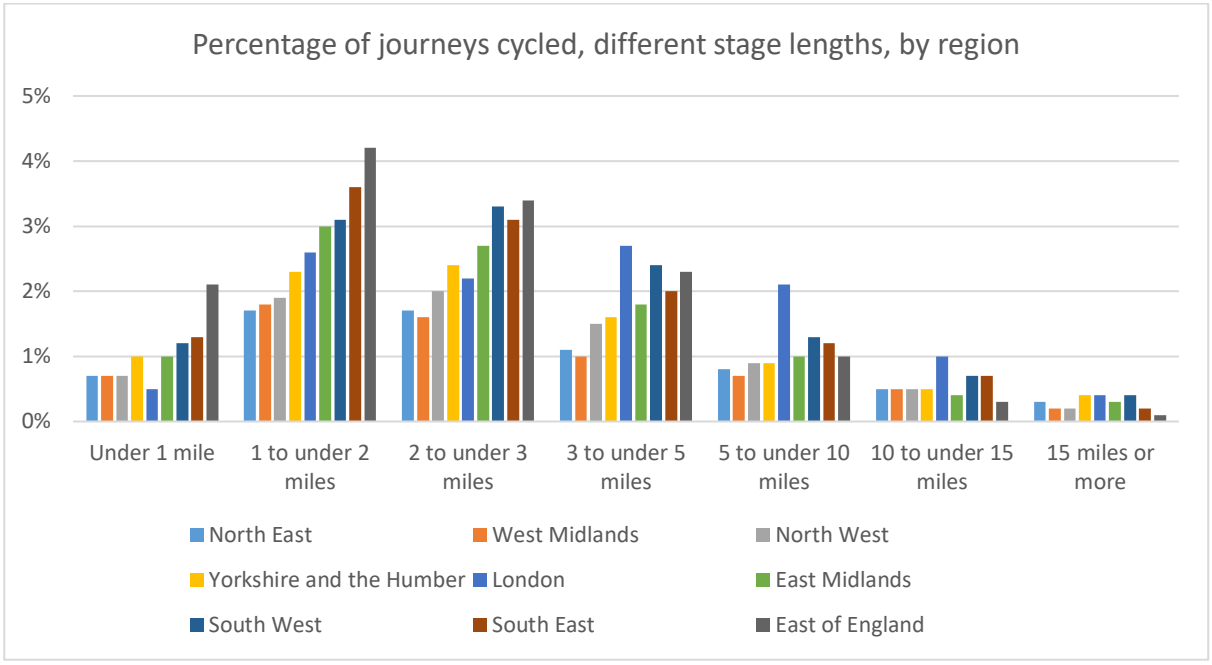

Figure 10: Cycling propensities by region, by distance

Different types of journey

In England (but not in, for instance, the Netherlands), the purpose of a journey strongly determines whether stages are likely to be cycled. While 3.3% of commute trip stages are cycled, this falls to 1.9% for leisure trips, and is 1.3% for business or education/escort education, and below 1% for other trip types.

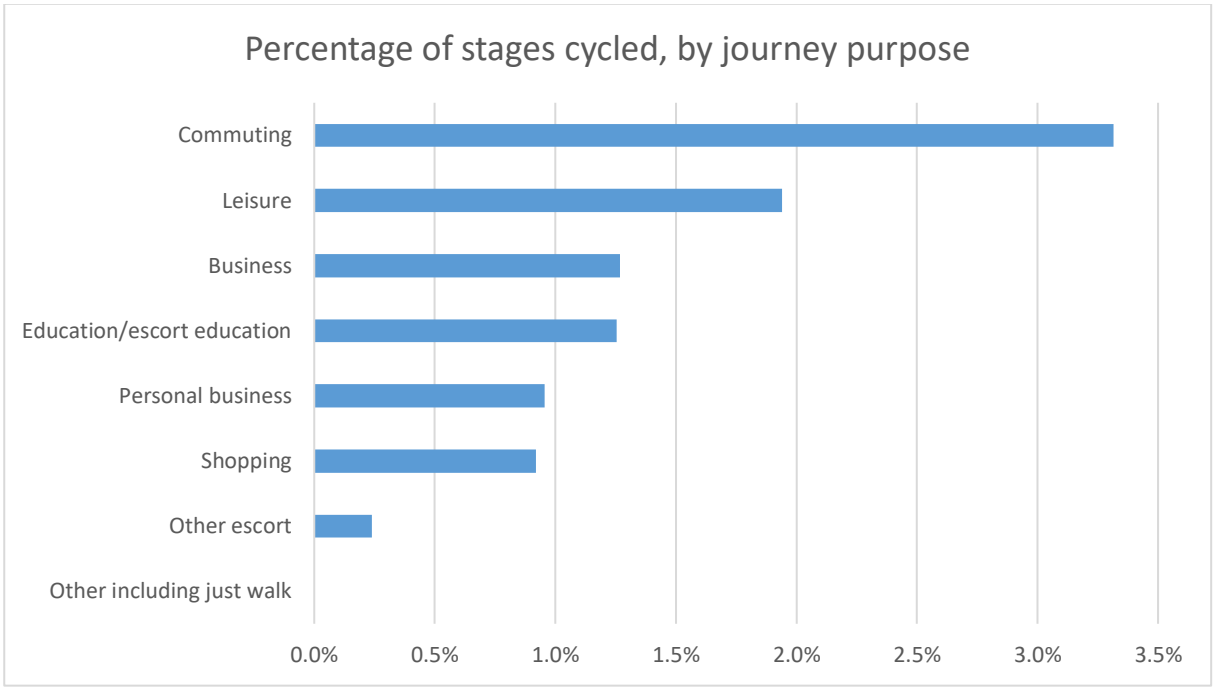

Figure 11: percentage of stages cycled, by journey purpose

Why are the rates so different by trip purpose? Does trip length play a role? It seems not: when we only look at trip stages under five miles, the picture becomes even starker: i.e., it is not that non-commute trips are much longer. Of commute trip stages under 5 miles, 4.8% are cycled, but for all other trip purposes,

cycling propensities for these shorter trips are half or less what they are for commuting. For instance, of education and escort education trip stages, only 1.4% of these are cycled. **Note that leisure does not mean making a bike ride (or other trip) purely as a form of leisure – it primarily means meeting friends or family, or going out (for a meal, to a film, and so on).**

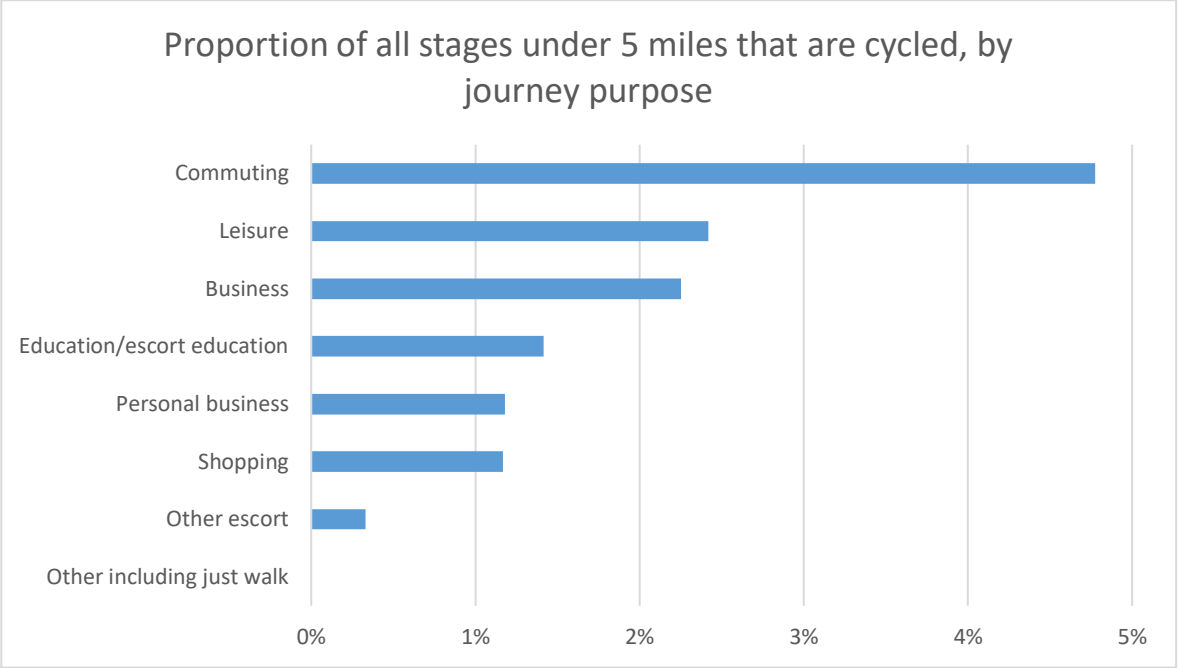

Figure 12: proportion of all stages under 5 miles that are cycled, by journey purpose

In high-cycling countries (and even within England in places such as Cambridge), we do not see this large discrepancy between commuting and other types of trip, like journeys to school. Because many trip stages to school or education are under 5 miles (more than three-quarters), there is great scope to increase cycling levels for this type of trip. If people were as likely to cycle stages under 5 miles for other types of trip as they are for commuting trips, educational trips and leisure trips have the greatest potential rise.

Currently, the average person makes 1089 trip stages each year, with on average 779 (or 72%) under five miles. At present only fifteen of these shorter stages are cycled, per person, although if we saw cycling propensities for all trips being the same as for commuting, this would more than double to 37. What is also interesting is how the picture of a 'cyclist' might change. At present, commuting is the most common reason for making a cycle trip stage of under 5 miles, followed by leisure.

However, if we achieved a cycle mode share of 4.8% of trip stages of under five miles for these other journey purposes, the cycle commuter would be much less dominant. We would see similar numbers of cycle commuters and of people travelling to schools or colleges. Both would be outnumbered by those travelling for leisure purposes and those doing the shopping.

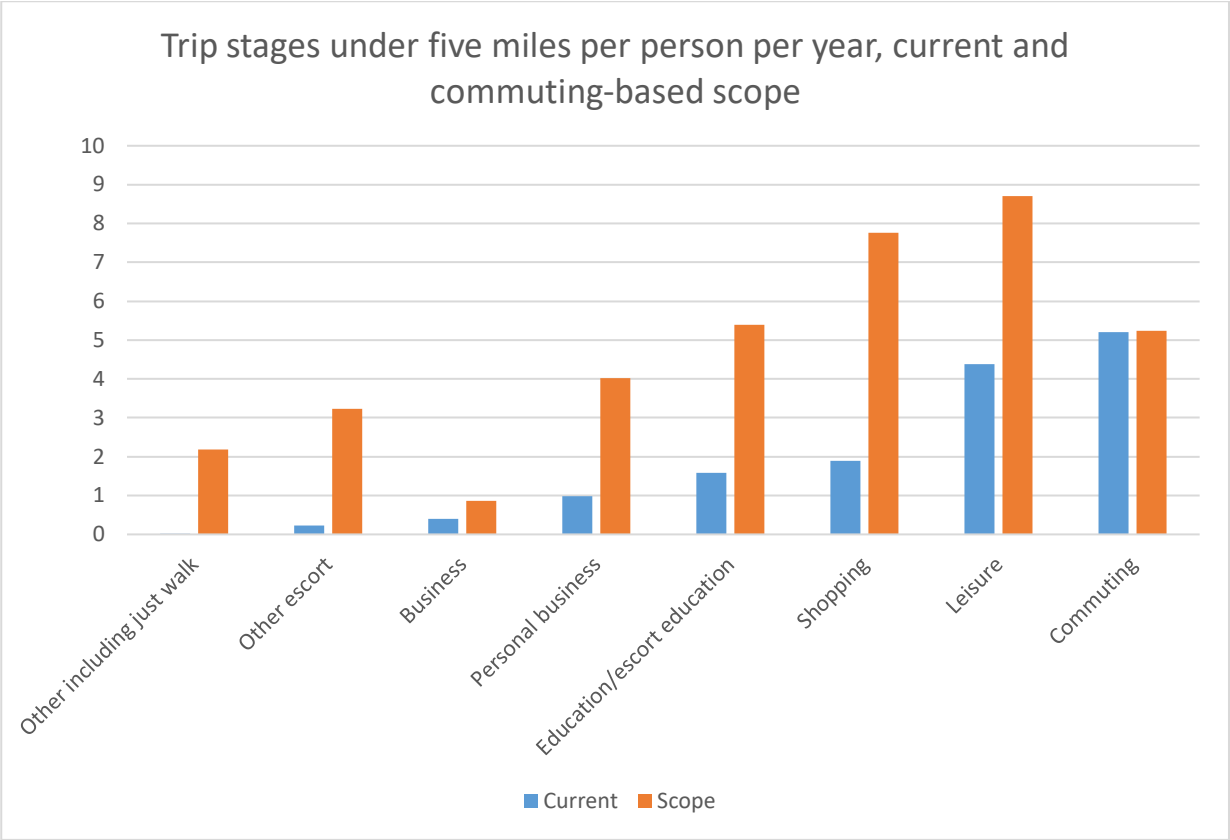

Figure 13: short trip stages by journey purpose and how that might change

Cycling and gender

Considering trips under five miles, a substantial gender gap exists, with men cycling 3% of trip stages under five miles and women only cycling 1% of these shorter trip stages.

Current cyclists: how likely are they to cycle specific trips?

An alternative way of exploring cycling is looking at the trips that current cyclists make. Imagine that 10% of short trips were cycled. This could imply that 100% of people cycle 10% of their short trips, that 10% of people cycle 100% of their short trips, or anything in between. The trip patterns of current cyclists show that people who cycle tend to use the mode for 20-33% of their shorter journeys. This is important as it highlights that an increase in cyclists does not mean everyone is expected to cycle all trips. Rather it is about ensuring that more people feel they can choose cycling for some shorter journeys, where it is the most appropriate mode. Very short journeys will still often be walked, and motorised modes will still serve many longer trips.

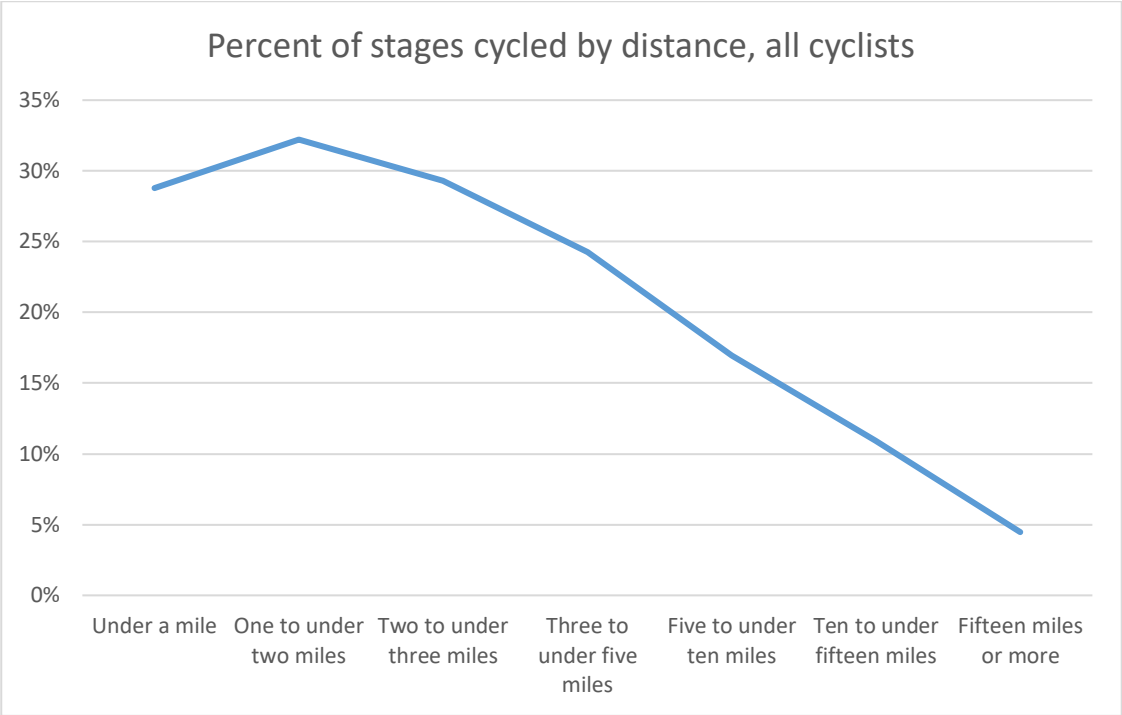

Figure 14: likelihood of cycling trip stages of different lengths, all cyclists

This distance-based propensity varies by gender and age. For gender, as found in the Propensity to Cycle Tool research[3], women's cycling propensity declines more sharply than men's (this is a reason why direct cycle routes and e-bikes may be particularly useful to women). Figure 15 highlights this relationship. Male cyclists will use their bike for one in five trip stages of 5-10 miles, but for women, this falls to just over 10%.

[3] https://www.gov.uk/government/publications/national-propensity-to-cycle-first-phase-development-study

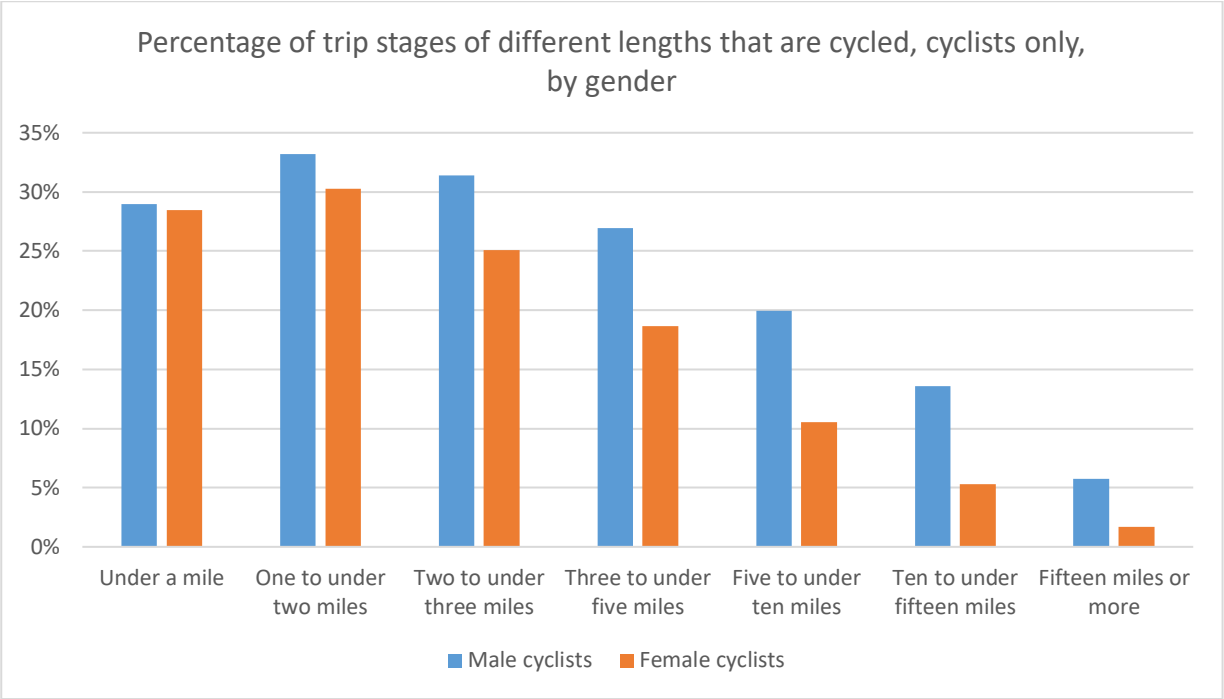

Figure 15: Relationship between gender and cycling propensity, by stage distance

For age, Figure 16 shows that children and older adults have a tendency to cycle that declines faster with distance than adults aged 26-79. This sharper 'distance decay' looks similar to the picture for women when compared to men. Indeed, there is likely to be some overlap, as women are more likely than men to be making trips with children. Numbers are small, but for cyclists in the oldest age groups, it is interesting to note that the likelihood of cycling stages under a mile is extremely high (>50%). This suggests that these people may find cycling short distances easier than walking.

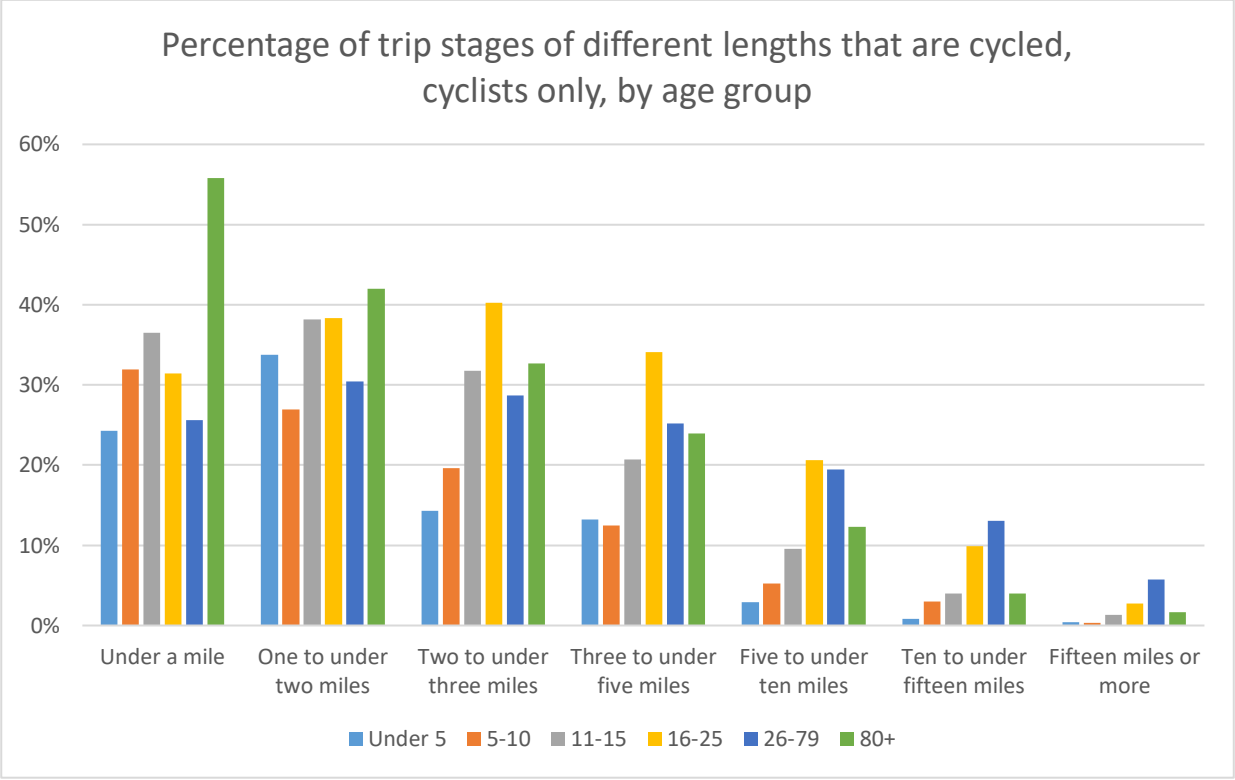

Figure 16: relationship between age and cycling propensity by stage distance

The Cambridge Levels of Cycling Scenario

The cycling scenario considered here involves people in other parts of the country being as likely to be a regular cyclist as those living in Cambridge, where around half of all adults have cycled in the past week for utility purposes. This report defines a regular cyclist as someone with the distance-based 'cycling propensities' of NTS participants who cycled in the past week, following the approach taken by Woodcock et al (2014) in their work on the Impacts of Cycling Tool. A regular cyclist, as discussed above, does not cycle all their journeys. As shown in Figure 14, if they have three trip stages between 1-2 miles long, the odds are they will cycle one of those, and this probabilistic approach is how the scenario works.

It is important to note that, using this approach, not all those allocated to be 'regular cyclists' would actually cycle in a given week. This is a realistic assumption: you could be someone who cycles regularly, but if all journeys are long in that week, or if you are accompanying a visiting non-cyclist, for example, you might well not cycle during those days.

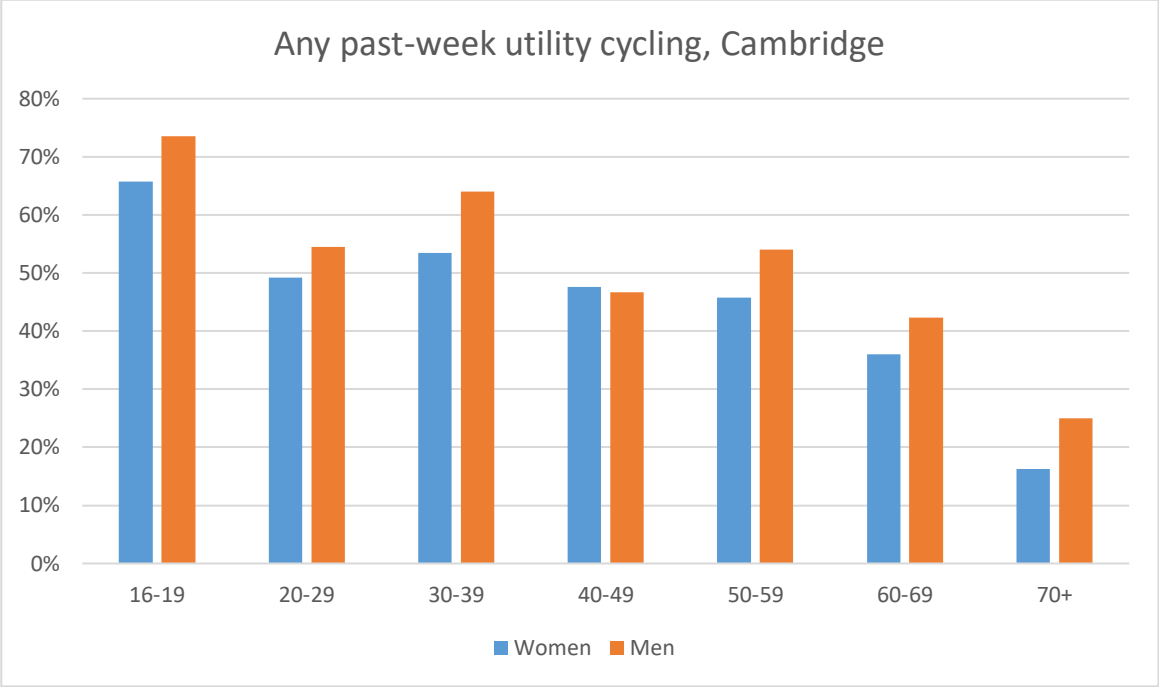

Figure 17: gender- and age-based cycling participation, Cambridge (APS)

The scenario does not assume everyone is equally likely to become a regular cyclist. Even in Cambridge, the APS shows some differences in participation by age and gender (Figure 17); albeit lower than inequalities that exist nationally. Therefore, in allocating people in the NTS dataset to be 'regular cyclists', this likelihood of being a cyclist in the first place has been adjusted by age and by gender. Once people have been allocated to be 'regular cyclists', the likelihood of cycling each of their trip stages has been calculated using women's distance-based cycling propensities.

In other words, people are randomly allocated to be cyclists or not, with probabilities stratified by age and gender; while then those selected to be cyclists have trip stages randomly allocated to cycling using women's distance-based probabilities (see Figure 15)**.** Why use women's cycling propensities? This is a way of making the assumptions used here more conservative (since women's propensities are lower than men's), which counteracts the inability to take distance into account and acknowledges that as cycling grows and diversifies, new cyclists may not achieve such high levels as existing cyclists.

The NTS does not provide detailed information on hilliness as it does for distance. Figure 18 illustrates that there is an inverse relationship between hilliness and cycling propensity, although this accounts for a relatively small proportion of the participation gap between England and higher-cycling countries. And

while Cambridge is flatter than much of England, its cycling levels are around eight times what one would expect based only on its relative hilliness. Hilly Bristol's are about four times more[4]. This data comes from the Propensity to Cycle Tool[5], whose 'Go Dutch' scenarios (where English people become as likely as Dutch people to cycle trips of similar length and hilliness) see commuting increase six or sevenfold, and school travel increase by twenty times over: indicating very large potential growth despite English topography. Nevertheless, some dampening effect is likely to remain; using women's rather than men's distance-based propensities will to some extent mimic this effect at a national level.

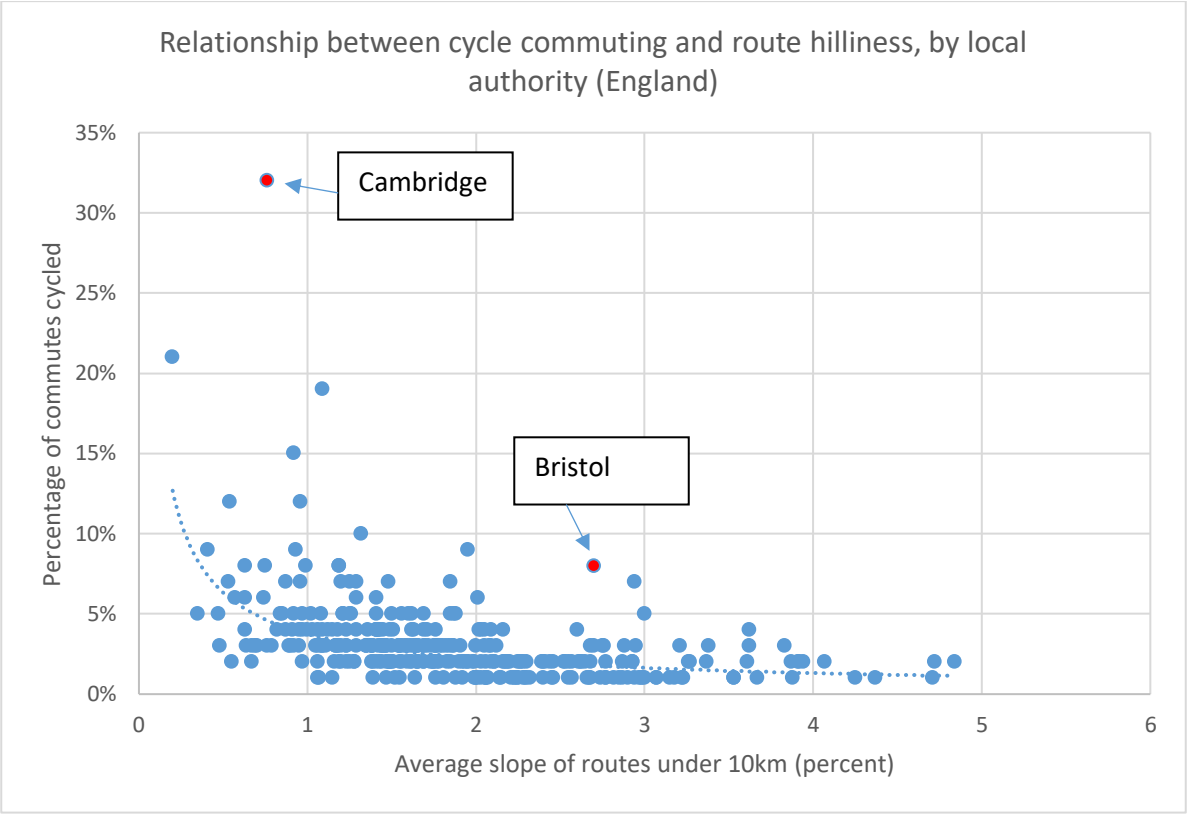

Figure 18: How route hilliness affects cycle commuting, by local authority (data source: www.pct.bike)

The scenario results find that cycling increases more than six-fold, to 9.8% of all trip stages (from 1.6%). This is split between shorter (<5 mile) and longer (5 mile +) trips as per the below. One in eight shorter trip stages is now cycled (up from under 2%), while around half (49.2%) of the new cycle trips would be those converted from the car.

[4] Cambridge and Bristol are highlighted on the graph.
[5] www.pct.bike

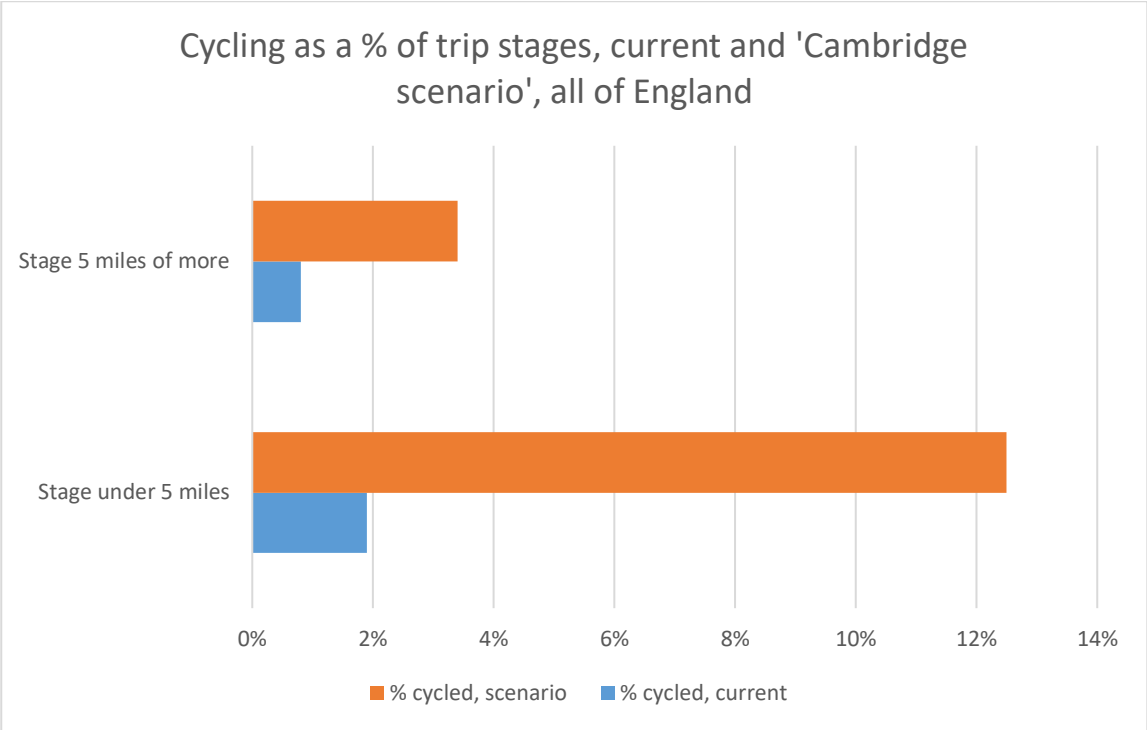

Figure 19: growth in cycling under the 'Cambridge scenario'

Conclusion: Cambridge Levels of Cycling Scenario

What difference would it make to cycling levels if people across England were as likely to consider cycling short trips as people in Cambridge? Adjusting for age and gender, we assume that, as in Cambridge, around half of English people will cycle some short journeys; based on cycling rates by journey distance for those women who currently cycle.

England's cycling mode share would increase from 2% to 10% of all trip stages.

6 Conclusions

This report has illustrated the scope for more walking and more cycling. It has firstly highlighted substantial gaps between local authorities in walking and cycling participation, and differences in how frequently people walk between higher and lower-walking areas. It has then moved on to explore gaps in the likelihood that people will walk or cycle journeys of different length. This is important in thinking about the likelihood of getting more people walking and cycling in the short to medium term. The scope for such behaviour change is likely to depend on them having short to medium length journeys that can feasibly be switched to walking and cycling.

Despite relatively high levels of walking short trip stages, the report highlights the potential for increasing this, based on London levels of walking by age. This suggests that London has managed to make walking more attractive (and car use less attractive, given the role of public transport in supporting short walks) than places outside the capital. Evidence suggests that interventions that seek to improve walking conditions and discourage car use (for instance, reducing through motor traffic in local neighbourhoods) can help increase walking levels, providing policy suggestions for places seeking to shift short trips to walking (in London, see Aldred et al 2019). This report highlights the scope for increasing walking activity, with an extra 1.3 million non-Londoners potentially benefiting from at least one short daily walk, if walking propensities rose to London levels. There is strong potential to increase walking among 5-10 year olds, a key group both because of levels of childhood obesity/physical activity and the potential to set behaviour patterns that may persist at older ages.

For cycling, the report uses participation levels in Cambridge to examine what we might see were (as in Cambridge) half the population to take up cycling for some of their shorter journeys, on a regular basis. People who cycle regularly do not cycle all shorter trips, and propensity declines as distance grows. Still, under the 'Cambridge scenario' we would potentially see one in ten trip stages cycled, compared to fewer than one in sixty at present. As with walking, factor including changes to the built environment can influence cycling levels. Increasing evidence (for instance, related to the separated Cambridge Busway Cycleway; Panter et al 2016) shows interventions such as introducing cycle tracks separated from motor traffic can help increase levels of cycling.

To conclude, based on existing trip patterns there is substantial scope to grow active travel, by enabling people to switch the mode they use for some of their shorter to medium trips.

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