

Analysis of Cycling Potential 2016

Policy Analysis Report
March 2017

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Executive summary

Key findings

- Londoners make 8.17 million daily trips by motorised modes (car, motorcycle, taxi or public transport) that could be cycled,
- More than half of the potential trips are made by car, with the rest largely made by bus
- Almost half of all potentially cyclable trips are made for shopping and leisure purposes, with one in six made for commuting reasons
- Of the 8.17 million potentially cyclable trips made every day, 6.47 million would take less than 20 minutes for most people to cycle and of these, 2.4 million trips could be walked all the way
- In addition to trips that could be cycled all the way, there are 1.55 million journey stages made each day that could be cycled as part of journeys that could not be cycled in their entirety
- Most of these potentially cyclable stages are made by bus or Underground
- Much of the potential identified is different to current cycling behaviour – only 2.54 million of the potentially cyclable trips are similar to current cycling trips
- Most of these trips similar to current behaviour – 60 per cent – are made by public transport, and are more likely to be made for work purposes than the overall potential. These trips are also more likely to be made within inner and central London

In 2010, TfL published ground-breaking analysis identifying the potential for growth in cycle travel, providing planners and policy-makers with new tools to help them target cycling infrastructure and other interventions where they would be most effective. These tools, described by the All Party Parliamentary Cycling Group as 'seminal', have been used extensively both by TfL and by the London boroughs.

This report presents the results of an updated version of one of these tools – the Analysis of Cycling Potential – which outlines potential for growth in cycling.

This updated version of the Analysis of Cycling Potential adds new analysis and criteria to the 2010 work, to develop a more accurate picture of potential cycling growth among London residents. In summary, the new tool:

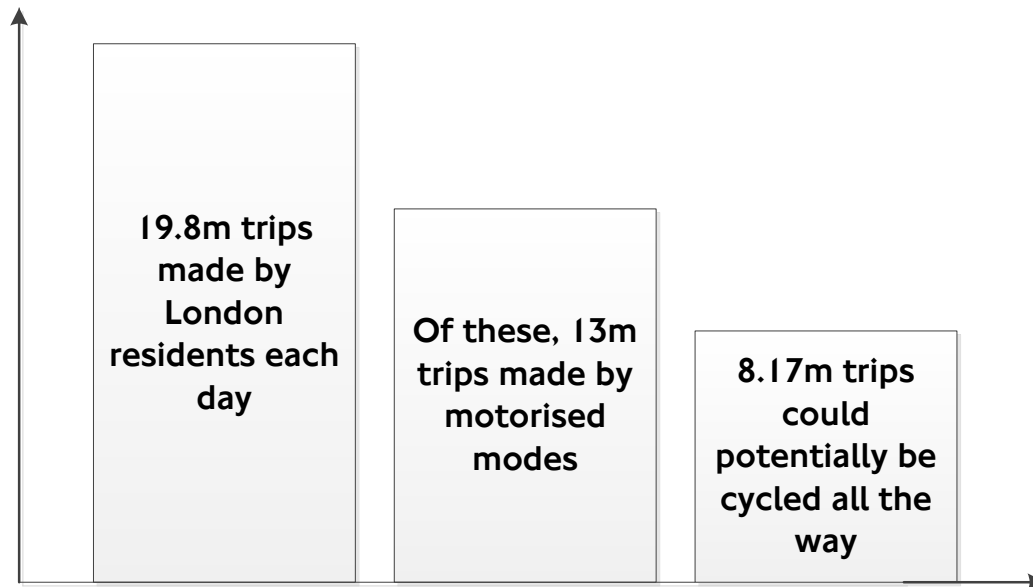
- uses updated data on current travel patterns, based on the London Travel Demand Survey (LTDS) data from 2012 to 2015
- uses new criteria to determine whether a trip is cyclable
- introduces a new two-tiered approach to the analysis, identifying the impact on cycling potential of an enhanced cycling environment, and identifying the potential trips most similar to existing cycle trips

- includes analysis of the potential for cycling as part of a longer trip made by another mode, such as cycling to and from a train station (potentially cyclable stages)

Potentially cyclable trips

There are 8.17 million trips per average day in London that are potentially cyclable in their entirety.

Figure E1: summary of potentially cyclable trips

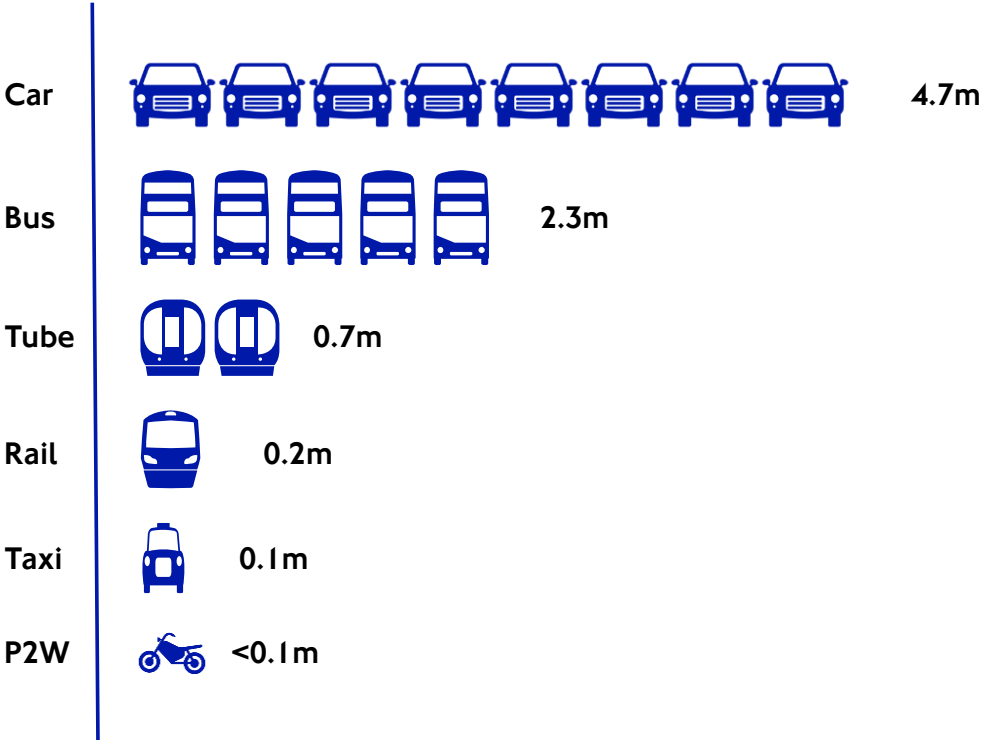


Source: LTDS 2012/13 – 2014/15

The cycling potential of 8.17m trips a day is equivalent to 41 per cent of all daily trips in London (by all modes) – in addition to existing cycle trips – and is 62 per cent of trips by motorised modes.

The greatest potential for cycling comes from those people currently travelling by car – for every trip currently made by rail or Underground that could be cycled, there are more than five made by car (see Figure E2),

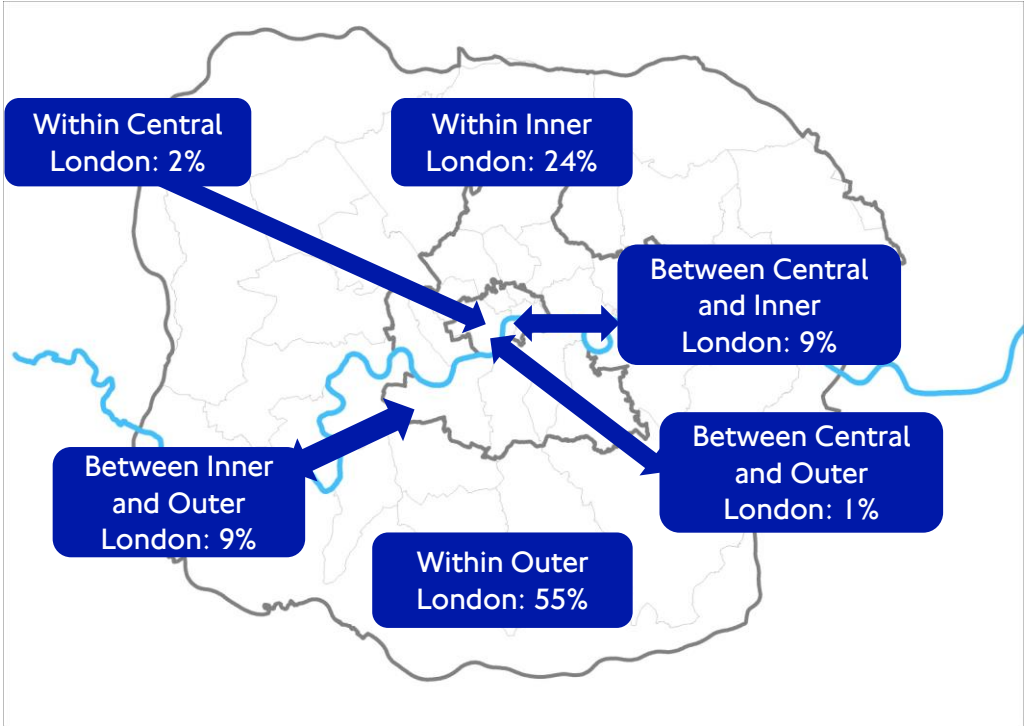
Figure E2: potentially cyclable trips per day, by mode currently used



Source: LTDS 2012/13 – 2014/15

The greatest unmet potential for growth is within outer London, where 55 per cent of potentially cyclable trips take place (see Figure E3).

Figure E3: location of potentially cyclable trips



Source: LTDS 2012/13 – 2014/15

We define the 'total potential' as the number of trips currently cycled, added to the number of potentially cyclable trips. Only five per cent of the 'total potential' in outer London is currently cycled, compared to nine per cent for inner London and 14 per cent for central London (equivalent to Zone 1).

Other key findings

- A high density of potentially cyclable trips are made within central and parts of inner London and around the outer London metropolitan town centres
- With regards to the trip makers, much of this potential comes from women, ethnic minorities, younger and older people, and those on a lower income

Potentially cyclable stages

Of the trips not entirely cyclable, individual journey stages could still be cycled as part of the trip.

In total, 1.5 million of these journey stages are potentially cyclable. Of those, most are currently made by either Underground or bus and are more prevalent in inner and central London, with more than 21 per cent of potentially cyclable stages made entirely within central London, compared to 1.5 per cent of potentially cyclable trips.

Comparing the potential to current cycling behaviour

The second tier of the new Analysis of Cycling Potential looks at those potentially cyclable trips and stages that share characteristics with trips already cycled.

There are just over 2.5 million trips and 1.1 million stages identified as being like current cycling behaviour.

These trips and stages are more likely to be currently made by public transport, particularly in central and inner London.

Conclusions

This report concludes:

- There is significant potential for cycling among London residents – more than half of all trips made by residents using motorised modes could be cycled
- The most significant barrier to realising this potential is that most cyclable trips are made by people that do not cycle at all – we need to encourage people who don't cycle to start
- This includes achieving greater gender equality among London cyclists – only 27 per cent of current cycle trips are made by women, compared to 55 per cent of potentially cyclable trips. Similarly, black, Asian and minority ethnic (BAME) groups account for 15 per cent of current cycle trips, but 38 per cent of potentially cyclable trips
- There is still potential to increase cycle trip-making among those that already cycle in London, among both frequent and infrequent cyclists

- Few trips made by people travelling in a group are currently cycled, yet almost half of all potentially cyclable trips are made by people travelling with at least one other person. Prioritising schemes that encourage take-up of group cycling will be crucial to unlocking the potential for cycling in London
- While the overall number of potentially cyclable trips across central London and parts of inner London is lower than in outer London, there is a high density of trips in these areas. Combined with the number of potentially cyclable stages, this shows why interventions in the heart of the city are important to increase cycling
- One in three potentially cyclable trips have either an origin or a destination in one of the Greater London Authority (GLA) defined town centres and there is great potential for highly dispersed trips across outer London to be cycled, demonstrating the need to invest in interventions that reach all Londoners
- Most potentially cyclable trips across London either start or finish at home. It is therefore crucial that people feel comfortable cycling on local streets near their homes and have places to store their cycles

Further information

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1. Introduction

The Analysis of Cycling Potential aims to assess the potential for growth in cycle travel in the Capital. The goal is to better understand the nature of this potential, in terms of what type of trips, people and places offer the best opportunity for growth. The analysis, carried out by Transport for London (TfL), makes the best use of available data to inform policy development.

Introducing the analysis

Originally developed in 2010, the Analysis of Cycling Potential sought to identify trips currently made by London residents which could reasonably be cycled all the way, but are not cycled at present.

The analysis is derived from TfL's London Travel Demand Survey (LTDS), a continuous household survey of the London area, covering all London boroughs and the City of London. It records detailed information about the household, the people that live there, and the trips they make. Each year, approximately 8,000 households take part in the survey and provide an insight into how Londoners travel.

The report seeks to quantify the nature and extent of the potential for cycling in London by identifying trips currently made by other modes, and assessing whether they could be cycled, based on a set of criteria about the person and trip.

Cycling analysis at TfL

The Analysis of Cycling Potential is part of a suite of analytical tools for cycling developed by TfL. It includes two modelling tools – Cynemon and CYPET – which estimate the impact of cycling policy and infrastructure interventions on cyclist level of service and demand.

Cynemon (Cycling Network model for London) is a new model – the first of its kind in the country – which combines data from a bespoke mobile phone app developed for the study, new 'big data' sources (including STRAVA data, from an app used by cyclists) and existing cycle count data. It estimates cyclist routes, journey times and flows at a strategic level across London for scheme and policy appraisal.

CYPET (Cycling Policy Evaluation Tool) is a spreadsheet-based tool for testing the impact of proposed cycling schemes in London and helps identify which interventions, in which locations, will have the greatest impact on the number of cycling trips.

The models show where cycling is currently taking place, the demand patterns associated with certain cycle provision and the demand and re-routing effects of changes to infrastructure.

The suite also includes TfL's new multi-modal customer segmentation tool, the Transport Classification of Londoners (TCoL). This evaluates travel behaviour influences to identify households most amenable to cycling now and in future. It classifies the London population into nine segments (made up of 32 sub-segments). The segmentation is a geo-demographic classification derived from the London Output Area Classification.

In combination, these tools can identify those segments of the population where there is greatest potential for growth in cycle travel in future.

Structure of the report

- Chapter 2 describes the methodology used to identify potentially cyclable trips, and how the methodology has changed from the 2010 Analysis of Cycling Potential
- Chapter 3 summarises the trips made by Londoners which could reasonably be cycled all the way but are not cycled at present, and the residents making those trips
- Chapter 4 outlines where these potentially cyclable trips are being made and identifies locations with the greatest potential for cycling growth. It presents analysis of areas containing dense 'clusters' of potentially cyclable trips, as well as analysis of town centres (as designated in the London Plan)
- Chapter 5 describes the method used to identify stages of trips that could be cycled (ie, while the entire trip could not reasonably be cycled all the way, parts of the trip could be)
- Chapter 6 brings together the analysis of potentially cyclable trips and stages to assess the total potential
- Chapter 7 looks at how the findings of the Analysis of Cycling Potential compares to the current profile of cyclists and cycle trips and the number of cyclable trips and stages that are most closely aligned to current cycle trips
- Chapter 8 presents the conclusions from the analysis

2. Methodology

This chapter describes the methodology used to identify potentially cyclable trips made by Londoners, how that methodology has been updated from the 2010 Analysis of Cycling Potential methodology and the implications of that change.

2010 Analysis of Cycling Potential

The original Analysis of Cycling Potential was developed in 2010 and was derived from three years worth of data from TfL's London Travel Demand Survey (LTDS), captured between 2005 and 2008.

The original analysis sought to identify trips which could reasonably be cycled all the way, but that were not cycled at the time. A trip is defined as a one-way movement from one place to another to achieve a single main purpose. More than one mode of transport may be used during a single trip; the analysis looked at trips currently made by a motorised mode (car, motorcycle, taxi or public transport) that could be cycled all the way.

All trips made by motorised modes were assessed according to a set of criteria based upon the characteristics of currently cycled trips. The filters were designed to reflect the characteristics of the majority of trips made by bicycle and to act as a 'rule of thumb' to identify trips most likely to be considered cyclable by most people.

The filters used in the 2010 analysis are shown in Table 2.1.

Table 2.1: 2010 cycling potential elimination criteria

Criteria	Filter
Encumbrance	Person carrying a heavy or bulky load
Trip length	Trip is longer than 8km
Journey time	Trip would take more than 20% extra time to cycle
Age	Traveller is over five and under 64
Time of travel	Trip is made between 8pm and 6am
Disability	Traveller has a disability affecting their travel
Current mode	Trip made by van, dial-a-ride, plane or boat

Updating the analysis

Before analysing current trips, a review of the 2010 criteria was carried out using LTDS data from 2011 and 2014 to determine whether the existing criteria were still appropriate. This review indicated that changes to many of the criteria were needed, to better reflect the changing profile of cycling in London.

In particular, it was determined that a two-tiered approach to the analysis would be appropriate. The two tiers were defined as:

- cycling potential based on behaviours that will be enabled through the provision of an enhanced cycling environment and culture; and
- cycling potential like current behaviour, which quantifies potential cycle trips most similar in profile to existing cycle trips made in London

Chapters 3-6 focus on the first level, detailing the potential for cycling based on the provision of an enhanced cycling environment and culture, with chapter 7 analysing how that potential differs from those potentially cyclable trips that are most similar in profile to existing cycle trips.

Defining the cycling potential

The first tier of cycling potential is designed to identify trips we would determine to be potentially cyclable if an enhanced cycling environment was provided in London, to encourage a culture of cycling more widely across the city.

The criteria highlighted in Table 2.1 were amended to better reflect this future scenario. The changes made were:

- Relaxing the encumbrance criteria to only exclude trips made by people carrying heavy tools or work equipment or with a pram/pushchair. This also reflects the profile of existing cycle trips
- Removing the disability filter, on the grounds that disability should be no barrier to being able to cycle
- Eliminating the time of travel filter, on the basis that the time someone is travelling should not prevent cycle travel
- Taking out the journey time filter, as this fails to take into account the reliability of cycle journeys (compared to the reliability of car or public transport journey times), and the reasons people choose to cycle
- Increasing the trip length filter to 10km for commuting trips, to reflect evidence that people cycle further for these trips than for trips for other purposes
- Changing the age filter to be distance-based, on the grounds that age should be no barrier to cycling, but that children or older people are less willing to cycle longer distances
- Introducing a trip chaining filter, to eliminate trips made as part of a wider series of trips that could not all be cycled (see below)

A summary of the filters used for the updated 2016 cycling potential is shown in Table 2.2.

Table 2.2: 2016 cycling potential criteria

Criteria	Filter
Encumbrance	The person making the trip is carrying tools or heavy work equipment, or a pram/pushchair
Trip length	The trip is for commuting and is more than 10km, otherwise more than 8km.
Age	Trip is longer than 8km (or 10km for commuting) for those aged 5-64; 5km for ages 65-79 (all purposes); and 3km for age 80+ (all purposes)
Current mode	Trip made by van, dial-a-ride, plane or boat
Trip chaining	The trip is part of a wider chain of trips that cannot be cycled in its entirety.

Trip chaining

A trip chain is a series of individual trips that (to the person making the trip) are linked together due to the nature or location of the trip. One example of such a chain would be a person travelling from home to work, then work to the shops and then from the shops back home.

The identification of trip chains has been completed using journey purpose information provided by the individual. Each trip recorded by an individual is assumed to be linked to all preceding trips until the individual returns home. If a further trip is made by that person, that becomes the start of a new trip chain.

To apply this filter, trips considered potentially cyclable according to all other criteria were reviewed together with the other trips in their trip chain. If one or more of the other trips in that chain had already been assessed as not being potentially cyclable, the potentially cyclable trips in that chain were also removed. For example, in the chain above, if the trip from home to work is too long to be cycled, the remaining trips in the chain – work to shops and shops to home – are also eliminated under the assumption that the person would not have a bicycle with them for the second and third trips.

Defining the cycling potential based on current behaviour

In addition to the criteria used to define the first tier of cycling potential, the 2016 update also sought to create a second tier of analysis, to identify not only trips that could be cycled but are not at present, but those that are most similar to trips already cycled.

To this end, the review of the criteria sought to define a more restrictive set of filters than is defined for the wider cycling potential in Table 2.2. Some of these filters are consistent with the 2010 cycling potential, while some have been relaxed slightly. A summary of the difference between the first tier of cycling potential and the second tier of potential, based on current behaviour, is:

- The time-of-day filter has been reapplied, though not as strictly as was applied in 2010, to reflect that cycling trips are more likely to occur later in the evening than in 2010
- Applying the age filter used in 2010, to reflect the lack of small children and older people cycling at present
- Applying the disability filter used in 2010, to reflect the lack of disabled Londoners making cycle trips
- Introducing a group size filter to the analysis, to reflect the fact that most cycle trips made by London residents are done so alone

A summary of the filters used to define the 2016 cycling potential like current behaviour is shown in Table 2.3.

Table 2.3: 2016 cycling potential criteria like current behaviour

Criteria	Filter
Encumbrance	The person making the trip is carrying tools or heavy work equipment, or a pram/pushchair.
Disability	The person has any form of disability affecting their daily activity.
Trip length	The trip is for commuting and is longer than 10km, or is for another non-escort purpose and is more than 8km.
Age	Trip is longer than 8km (or 10km for commuting) for those aged 5-64; 5km for ages 65-79 (all purposes); and 3km for age 80+ (all purposes).
Time of travel	The trip takes place between 10pm and 6am.
Current mode	Trip made by van, dial-a-ride, plane or boat.
Trip chaining	The trip is part of a wider chain of trips that cannot be cycled in its entirety.

Summary of the new criteria

Table 2.4 compares the original criteria used in the 2010 Analysis of Cycling Potential with the two tiers of criteria used in the updated 2016 analysis.

Table 2.4: cycling potential analysis criteria 2010-2016

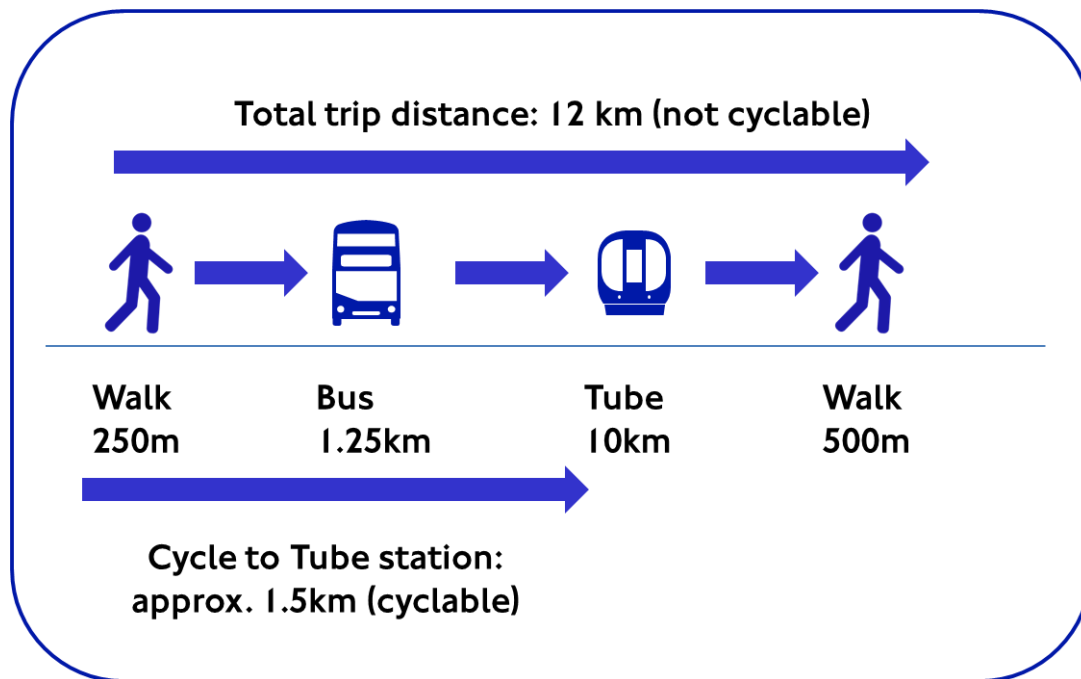
Criteria	2016 cycling potential	2016 cycling potential – like current behaviour	2010 cycling potential
	Trips are deemed not to be potentially cyclable if they meet any of the following criteria:		
Encumbrance	The person making the trip is carrying tools or heavy work equipment, or a pram/pushchair.		The person making the trip is carrying a heavy or bulky load.
Age	Trip is longer than 8km (or 10km for commuting) for those aged 5-64; 5km for ages 65-79 (all purposes); and 3km for age 80+ (all purposes)	The person making the trip is either under 5, or over 64 years of age.	
Disability	No disability criteria	The person has any form of disability affecting their daily activity.	The person making the trip has a disability affecting their travel.
Trip length	Combined with journey purpose and age	Combined with journey purpose	The trip is longer than 8km.
Trip purpose	The trip is for commuting and is more 10km, or is for another non-escort purpose and is longer than 8km.		No trip purpose criteria
Time of day	No time of day criteria	The trip takes place between 10pm and 6am.	The trip is made between 8pm and 6am.
Travel time	No travel time criteria		The trip takes more than 20% longer to cycle.
Group size	No group size criteria	The trip involves more than one person	No group size criteria
Current mode of travel	The trip is made by van, dial-a-ride, plane or boat.		
Trip chaining	The trip is part of a wider chain of trips that cannot be cycled in its entirety.		No trip chain criteria

Defining potentially cyclable stages

The analysis of potentially cyclable trip stages is based on LTDS data from 2012/13 to 2014/15.

The definition of a potentially cyclable stage is a trip stage currently made by a motorised mode that could instead be cycled, but where the trip as a whole could not be cycled (see Figure 2.1).

Figure 2.1: example of a potentially cyclable stage



The analysis of potentially cyclable stages only includes trips that were not deemed cyclable solely on the basis of distance. Any trip excluded on the basis of one of the other criteria (such as encumbrance) was not considered in this analysis, given that this would still be true of the individual trip stages.

Trips with a single stage made by a mechanised mode were also not considered as part of this potentially cyclable stage analysis, on the basis that if the *trip* had not previously been considered cyclable, it is unrealistic to consider this *stage* to be cyclable.

Caveats

The filters act as a 'rule of thumb' to identify trips most likely to be cyclable. As a result, some trips are excluded which could, in fact, be cycled. Indeed, some trips currently cycled would be excluded based on the criteria stated. In particular, some people may cycle faster and further than average (average of existing cycle trips used 8km/10km trip length criteria), and so would be willing to cycle trips excluded here as not potentially cyclable.

Walking trips are not included as part of this analysis; while it is likely that part of the realisation of cycle trips in London will come from trips currently walked, this report focuses on trips currently made by non-active travel modes.

There is much we do not know about the trips identified as potentially cyclable and the people making them. In particular, we do not know who the person may be travelling with and whether or not the trip is potentially cyclable for them. It is likely that some of the trips identified as potentially cyclable could not, in fact, be cycled.

The analysis is limited to trips and stages made by Londoners, ie, excluding those who travel to London from elsewhere to work, shop and use services... Therefore this

analysis is likely to understate the potential for growth in cycle travel in central London, which receives a high volume of daily visitors and tourists.

Finally, it is necessary to draw on a wider range of data sources to draw conclusions about whether or not these trips could or would transfer to cycling, or under what circumstances such a change might happen.

3. Potentially cyclable trips

Key findings

- Londoners currently make 8.17 million daily trips by mechanised modes which are potentially cyclable
- More than half of the potential trips are currently made by car with the remainder largely made by bus
- Almost half of all potentially cyclable trips are made for shopping and leisure purposes, with one in six made for commuting reasons
- Of the 8.17 million potentially cyclable trips made every day, 6.47 million would take less than 20 minutes for most people to cycle
- There is a large cycling potential among women, ethnic minorities, younger and older people and those on a lower income

This chapter presents a summary of the potential for cycling in terms of the nature of trips being made and compares the characteristics of potentially cyclable trips with current travel by cycle.

How many potentially cyclable trips are made by Londoners each day?

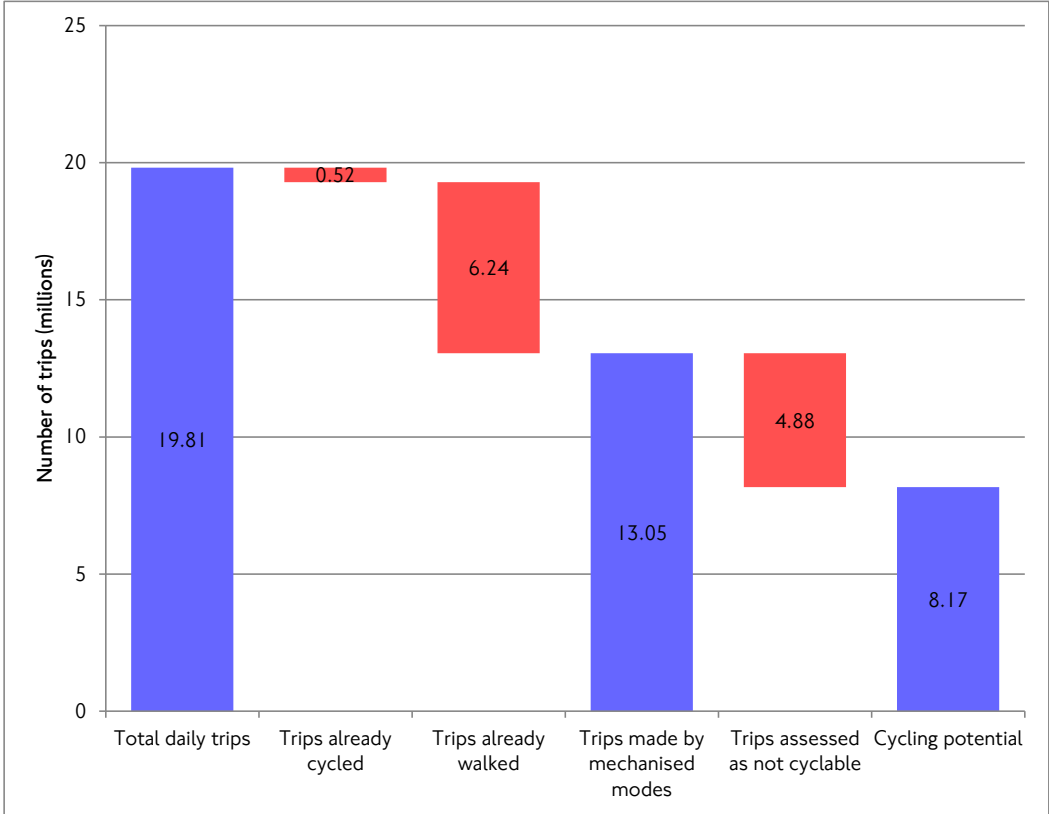
Between 2012 and 2015, London residents made an average of 19.8 million trips per day. Of these, just over 520,000 were cycled and 6.3 million walked. The remainder – 13.1 million trips – were made by motorised modes, primarily car, bus, Underground and rail.

This analysis shows that 8.17 million trips – 62 per cent – currently made by motorised modes could be cycled, based on the known characteristics of the trip.

Assuming that the ‘total potential’ is the sum of the currently cycled and potentially cyclable trips, approximately six per cent of potentially cyclable trips are actually being cycled at present.

Figure 3.1 provides a summary of the analysis.

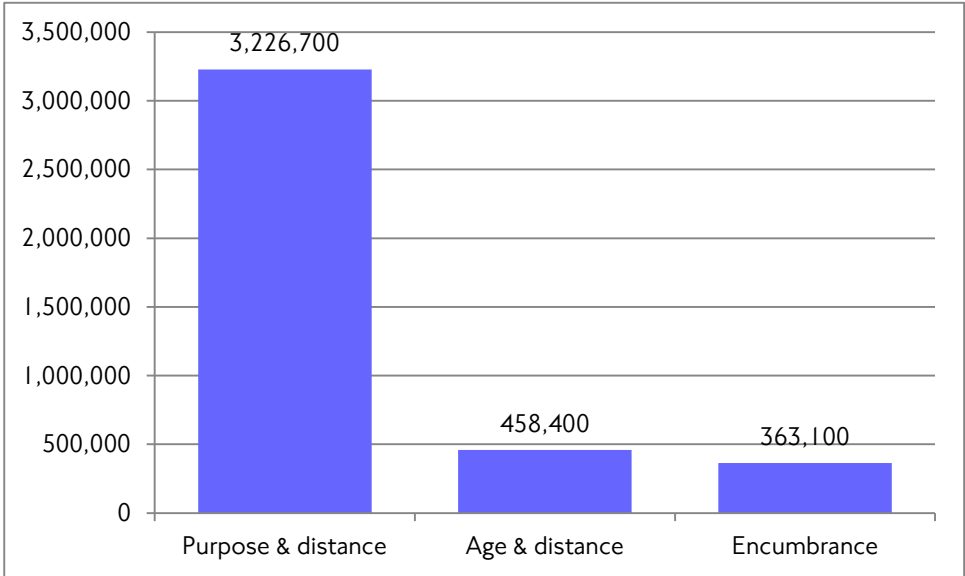
Figure 3.1: process to identify potentially cyclable trips



Source: LTDS 2012/13 – 2014/15

As shown in figure 3.2, most trips that are not potentially cyclable are more than 8km in length (or for commuting trips, longer than 10km). A smaller proportion of cyclable trips have been excluded on the basis of age and encumbrance.

Figure 3.2: motorised trips excluded as not cyclable, by reason for exclusion

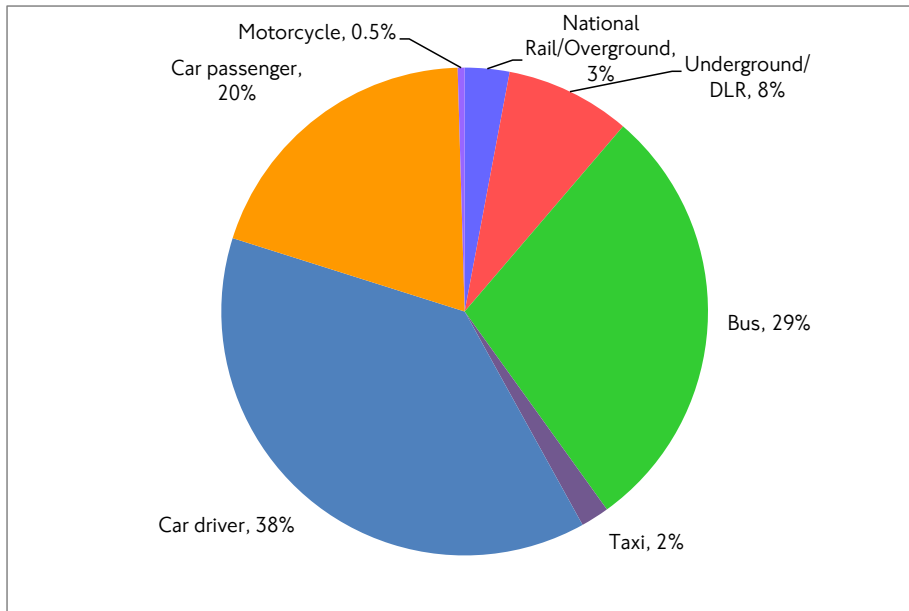


Source: LTDS 2012/13 – 2014/15

How are potentially cyclable trips currently being made?

Fewer than four in 10 trips identified as being potentially cyclable are currently driven. A further 20 per cent are made by people travelling as a passenger in a car and 29 per cent made by bus.

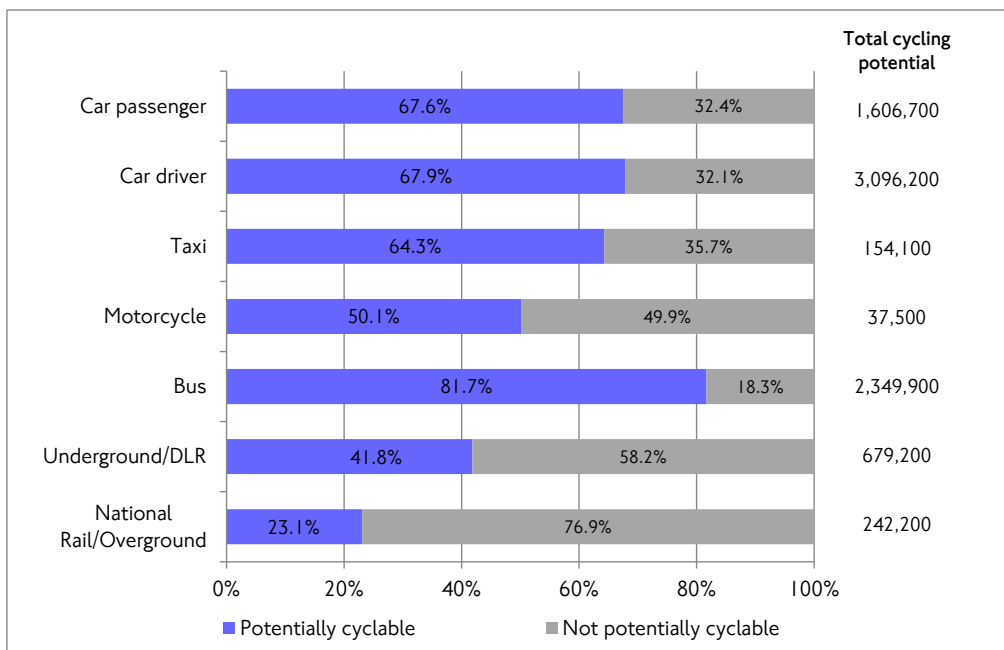
Figure 3.3: cycling potential – trips by current mode



Source: LTDS 2012/13 – 2014/15

Trips made by National Rail or Overground were the least likely to be potentially cyclable, reflecting the longer average distance travelled by rail.

Figure 3.4: trips by each mode identified as potential cycle trips or otherwise



Source: LTDS 2012/13 – 2014/15

What is the purpose of these trips?

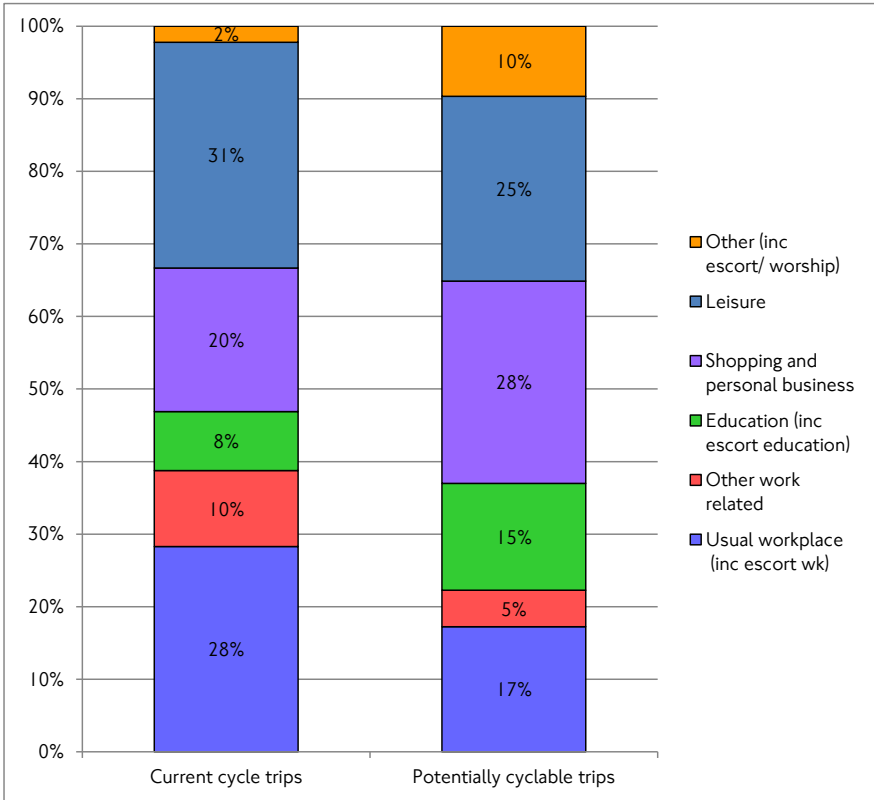
Nearly half (47 per cent) of the potential trips were for leisure and shopping, with most trips made either by bus or by car (the latter as the driver or a passenger). Around one in seven potential trips are escort trips (largely by car, for non-work reasons).

Within the potential, commuting trips account for 17 per cent, which is significantly different to its share of current cycle trips (28 per cent).

Looking at both current mode and journey purpose of the cycling potential, Rail and Underground potentially cyclable trips are more likely to be for commuting than for any other trip purpose (49 per cent of National Rail/Overground trips and 43 per cent of Underground or DLR trips that could be cycled are commuting trips). This compares to 15 per cent of cyclable car driver and bus trips.

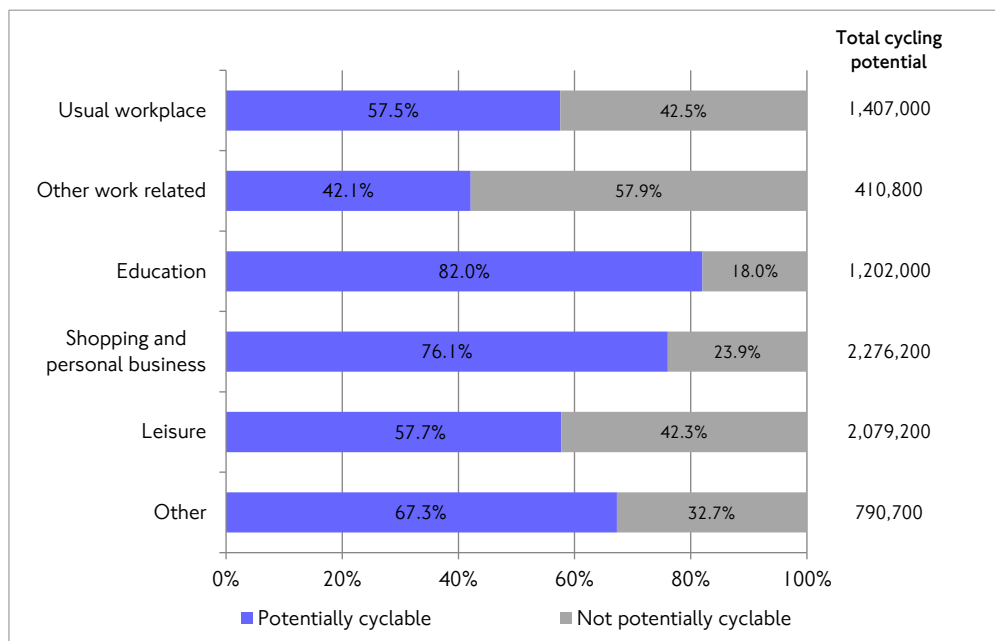
The purposes of currently cyclable car driver trips are fairly evenly spread, with 23 per cent made for shopping and 21 per cent for entertainment or social reasons. Among the potentially cyclable bus trips these figures are similar, with 25 per cent for shopping, 23 per cent for entertainment or social reasons and 17 per cent travelling for education reasons.

Figure 3.5: trips by each purpose identified as potential cycle trips or otherwise



Source: LTDS 2012/13 – 2014/15

Figure 3.6: trips by each purpose identified as potential cycle trips or otherwise



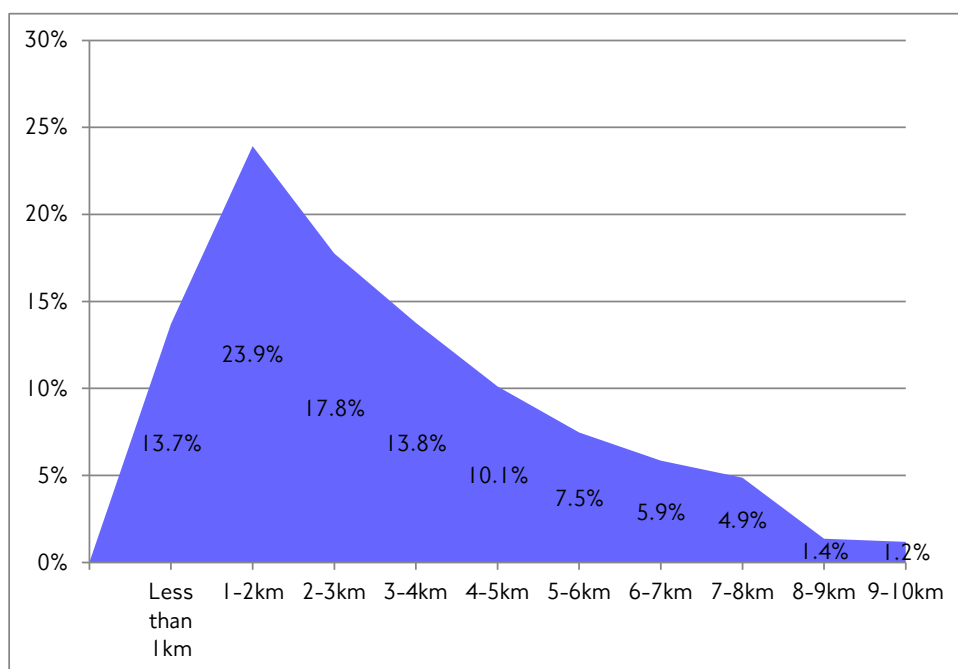
Source: LTDS 2012/13 – 2014/15

How far are potentially cyclable trips?

More than half of the potential for cycling is for trips shorter than 3km.

As shown in Figure 3.7, the greatest share of the potential cycle trips is 1-2km in length (24 per cent). More than half of potentially cyclable trips are less than 3km.

Figure 3.7: potential cycle trips by distance (crow-fly)



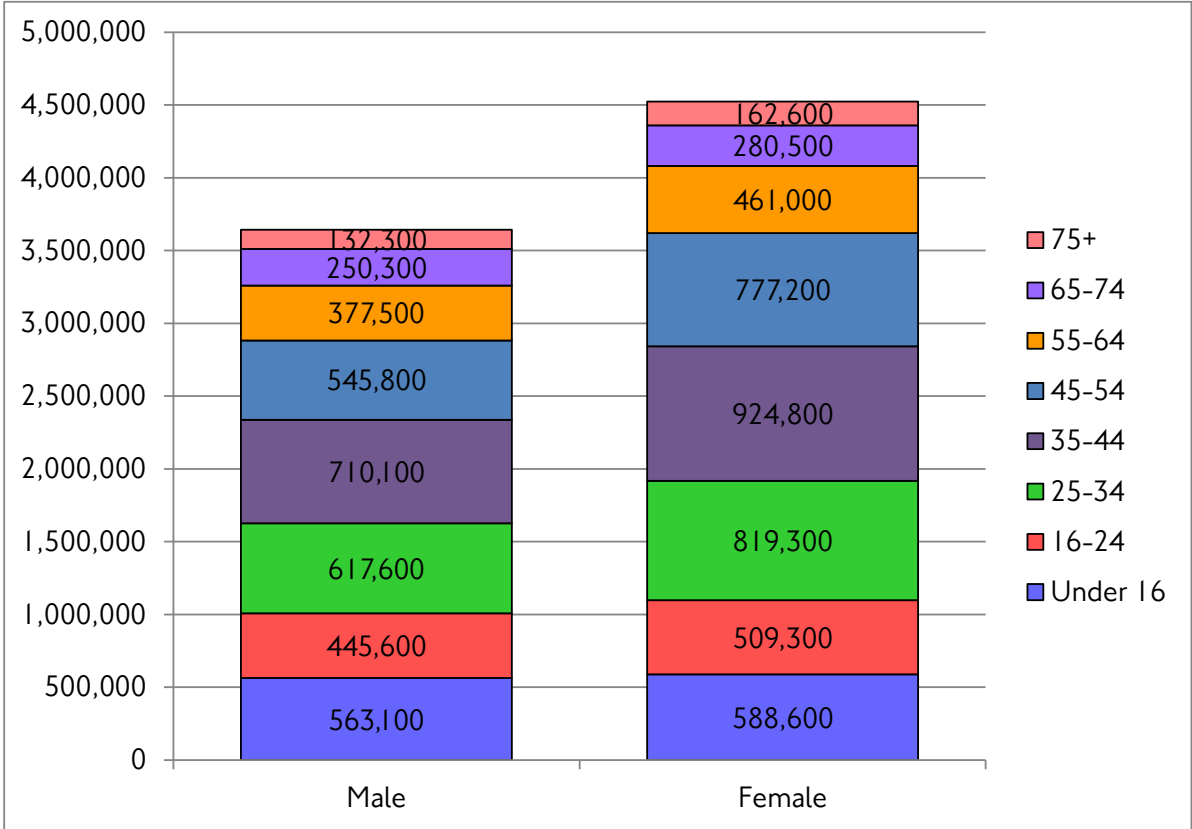
Source: LTDS 2012/13 – 2014/15

Who is making potentially cyclable trips?

The potential for cycling is greater among women. Just over 4.5 million potentially cyclable trips (55 per cent) are made by women, compared to just over 3.6 million cyclable trips for men (see Figure 3.8). This difference is most pronounced among those aged 25-54.

By mode, potentially cyclable trips made by men are more likely to be car driver trips, with women more likely to be travelling by bus. The split by journey purpose was fairly even, with women slightly more likely to be making shopping trips, with men slightly more likely to be making work or entertainment trips.

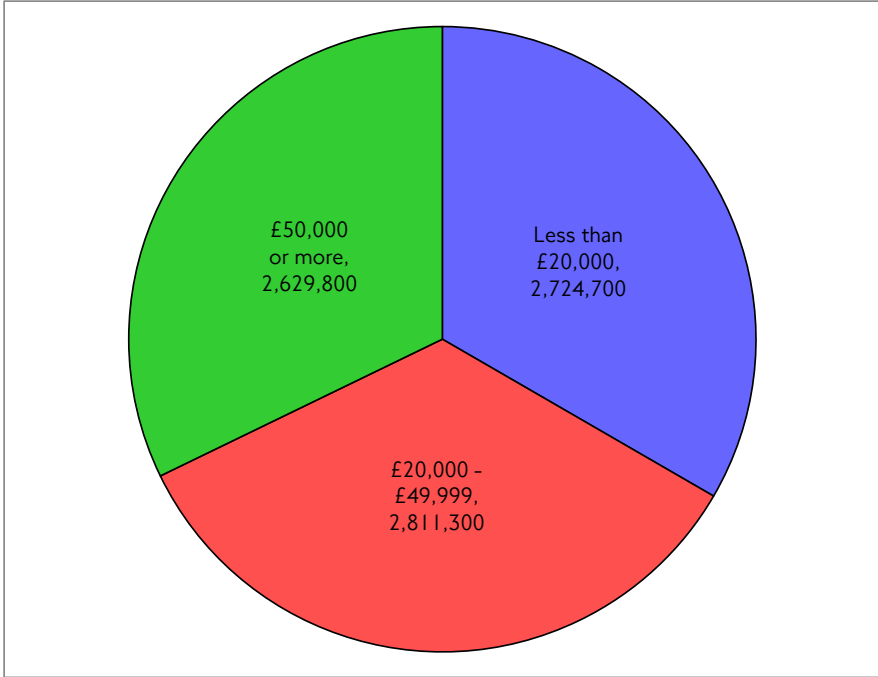
Figure 3.8: potential cycle trips by age and gender



Source: LTDS 2012/13 – 2014/15

The potential for cycling is broadly similar across different income groups. The share of potentially cyclable trips among low income households is 33 per cent.

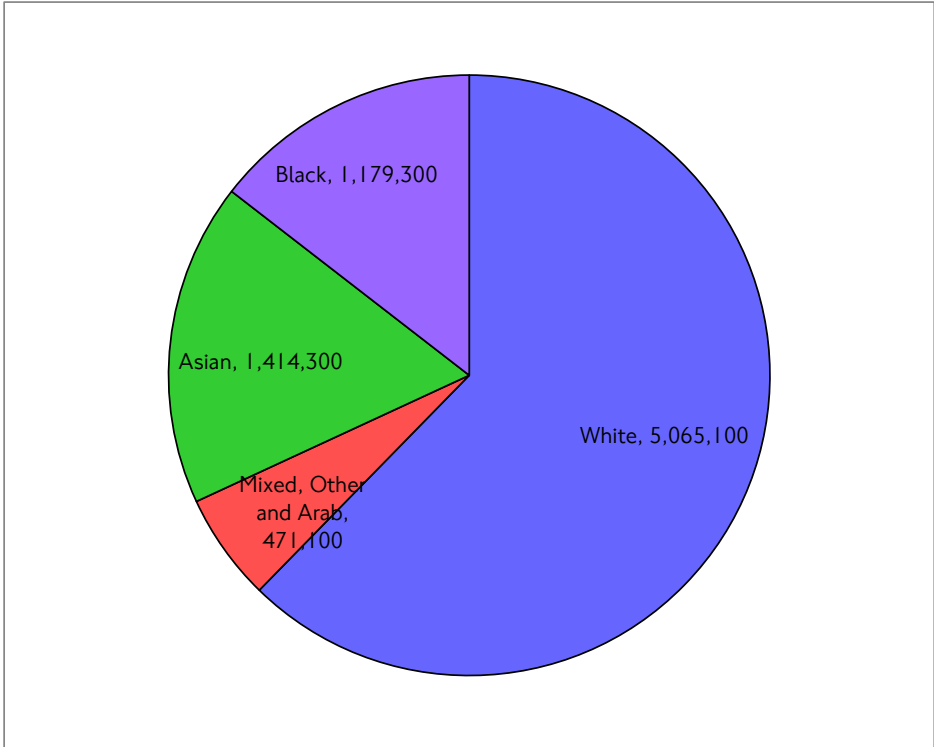
Figure 3.9: cycling potential by household income



Source: LTDS 2012/13 – 2014/15

The ethnic profile of potentially cyclable trips reflects the ethnic mix of London’s population, with 62 per cent of potentially cyclable trips made by white people and 38% of the potential made by people from BAME groups.

Figure 3.10: cycling potential by ethnicity



Source: LTDS 2012/13 – 2014/15

4. Where are potentially cyclable trips being made?

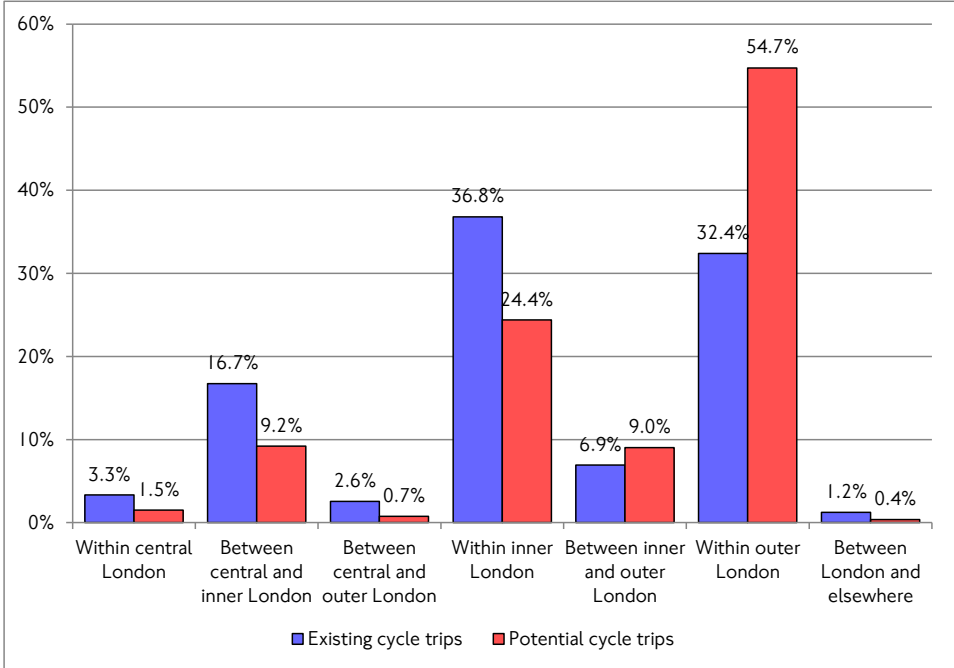
Key Findings

- There are 24 per cent of potentially cyclable trips made wholly within inner London, 54 per cent in outer London and nine per cent travelling between the two regions
- There are a lot of potentially cyclable trips made within central and parts of inner London. In particular, Lambeth, Southwark and Wandsworth showed the greatest potential
- There is also significant opportunity for cycling in and around the outer London metropolitan town centres, including Croydon, Bromley and Kingston

Introduction

Just over half (54 per cent) of all current potential cyclable trips are made entirely within outer London, with 64 per cent of the potentially cyclable trips having an origin or destination in that area. In inner London, 24 per cent of trips made were cyclable, while central London has a lower cycling potential. The level of cycling potential for central London is consistent with the profile of existing cycle trips, while the profile for inner and outer London is reversed, with inner London having a more existing cycle trips than outer London. Figure 4.1 compares the location profile of existing and potential cycle trips.

Figure 4.1: origin and destination of current and potential cycle trips



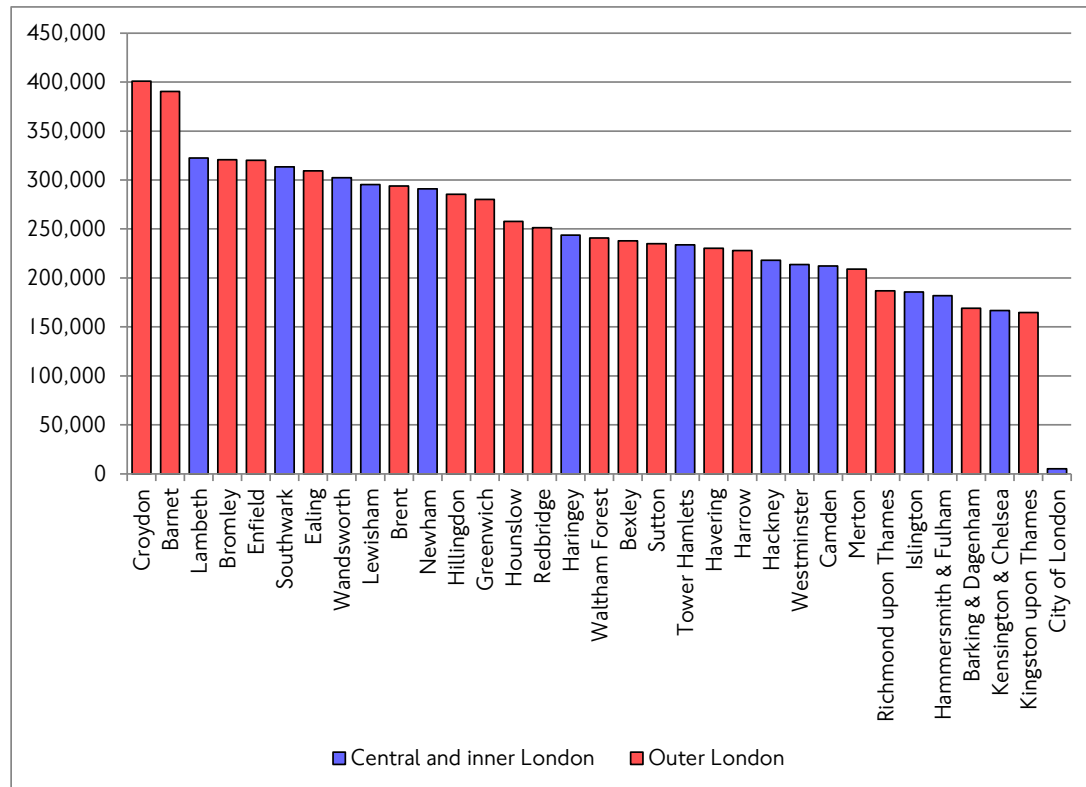
Source: LTDS 2012/13 – 2014/15

Note: central London defined as the Central Activities Zone, broadly equivalent to Zone 1.

Cycling potential by borough of residence

There are a significant number of potentially cyclable trips (at least 150,000 daily trips) in all boroughs, except the City of London. Croydon and Barnet have the highest number of daily potentially cyclable trips, with 400,000 and 390,000 respectively.

Figure 4.2: potentially cyclable trips by borough of residence



Source: LTDS 2012/13 – 2014/15

Table 4.1 shows the percentage of cyclable trips that are currently cycled by residents of each borough. Around six per cent of potentially cyclable trips are already cycled – nine per cent for central and inner London and four per cent for outer London.

Table 4.1: potential cycle trips by borough of residence

Borough of Residence	Existing cycle trips	Potentially cyclable trips	Total potential achieved	Potentially cyclable trips per resident
Camden	20,500	212,100	9%	0.9
City of London	8,400	5,100	62%	0.6
Hackney	35,200	218,100	14%	0.8
Hammersmith & Fulham	13,700	181,800	7%	1.0
Haringey	20,800	243,700	8%	0.9
Islington	27,200	185,800	13%	0.9
Kensington & Chelsea	15,900	166,800	9%	1.1
Lambeth	40,200	322,500	11%	1.0
Lewisham	18,400	264,200	7%	0.9
Newham	15,500	291,000	5%	0.9
Southwark	30,400	313,300	9%	1.0
Tower Hamlets	21,200	233,900	8%	0.9
Wandsworth	37,200	302,400	11%	1.0
Westminster	10,100	213,600	5%	0.9
Inner London	314,700	3,154,300	9%	0.9
Barking & Dagenham	10,000	169,100	6%	0.9
Barnet	8,700	390,400	2%	1.1
Bexley	3,500	237,900	1%	1.0
Brent	12,600	293,900	4%	0.9
Bromley	8,300	320,800	3%	1.0
Croydon	6,100	400,800	1%	1.1
Ealing	20,600	309,200	6%	0.9
Enfield	5,200	320,200	2%	1.0
Greenwich	14,200	280,200	5%	1.1
Harrow	4,400	228,100	2%	0.9
Havering	4,200	230,200	2%	0.9
Hillingdon	8,400	285,500	3%	1.0
Hounslow	16,300	257,800	6%	1.0
Kingston upon Thames	16,600	164,600	9%	1.0
Merton	13,700	208,900	6%	1.0
Redbridge	7,200	251,200	3%	0.9
Richmond upon Thames	32,100	186,800	15%	1.0
Sutton	7,700	234,900	3%	1.2
Waltham Forest	8,400	240,700	3%	0.9
Outer London	208,200	5,011,200	4%	1.0
London average	522,700	8,165,800	6%	1.0

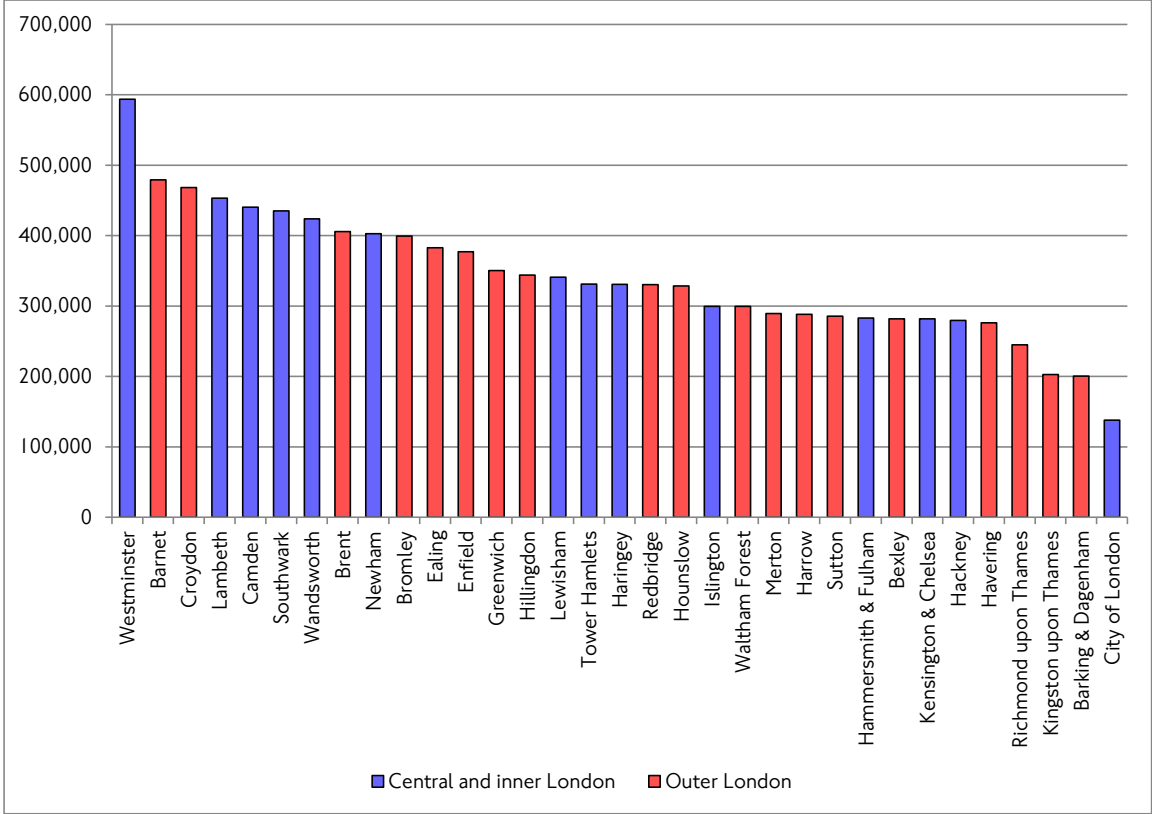
Source: LTDS 2012/13 – 2014/15

Cycling potential by origin and destination

The profile of potentially cyclable trips by the origin and destination points of the trip is markedly different to the profile by borough of residence.

The boroughs with the highest number of trips with either an origin or destination (or both) in that borough are now as likely to be in central and inner London as they are in outer London. Westminster has the highest number of potentially cyclable trips, followed by Barnet and Croydon.

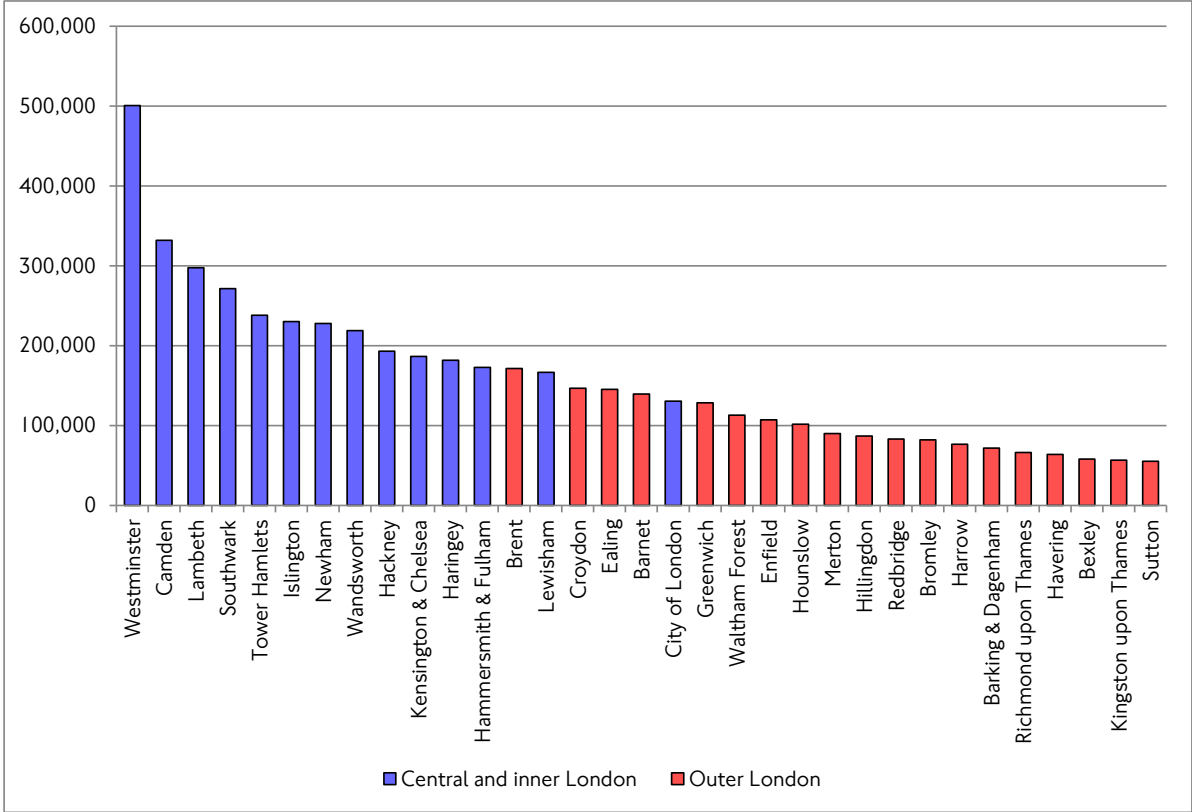
Figure 4.3: potentially cyclable trips by borough origin/destination



Source: LTDS 2012/13 – 2014/15

Figure 4.4 shows that the potentially cyclable trips currently made by public transport mainly take place in central and inner London boroughs. The 12 boroughs with the highest number of potentially cyclable trips currently made by public transport are Westminster, Camden and Lambeth (500,000, 330,000 and 300,000 respectively). By contrast, Bexley, Sutton and Kingston-upon-Thames each have just under 60,000 potentially cyclable trips currently made by public transport.

Figure 4.4: potentially cyclable trips made by public transport – by borough origin/destination

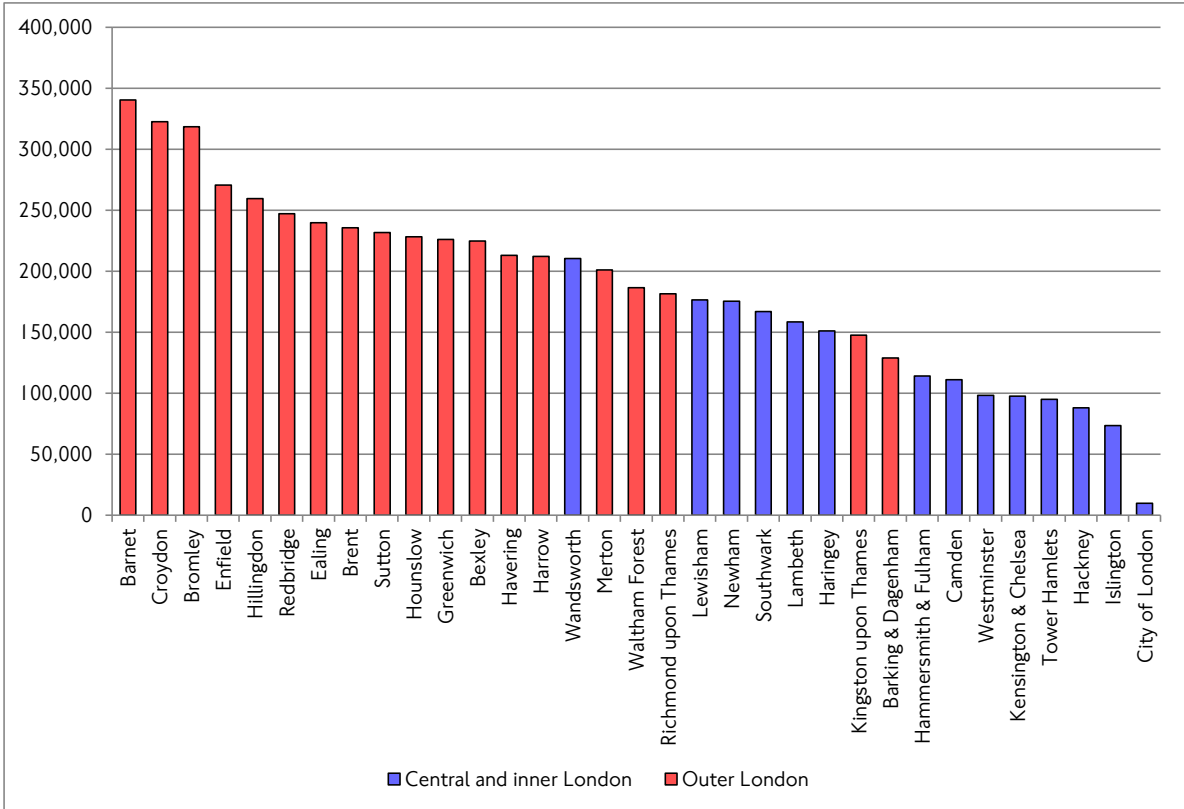


Source: LTDS 2012/13 – 2014/15

The number of potentially cyclable trips currently made by private vehicles (car or motorcycle) is significantly higher in outer London (see Figure 4.5). The 14 boroughs with the highest number of potentially cyclable trips currently made by private vehicles are all in outer London, with Barnet, Croydon and Bromley each having over 300,000 private vehicle trips that could be cycled every day.

These two figures highlight the vast difference between the profile of cyclable trips currently by public transport and those made by private vehicles – two-thirds of cyclable trips with an origin or destination in central and inner London are made by public transport, compared to just 30 per cent in outer London.

Figure 4.5: potentially cyclable trips made by private vehicles – by borough origin/destination

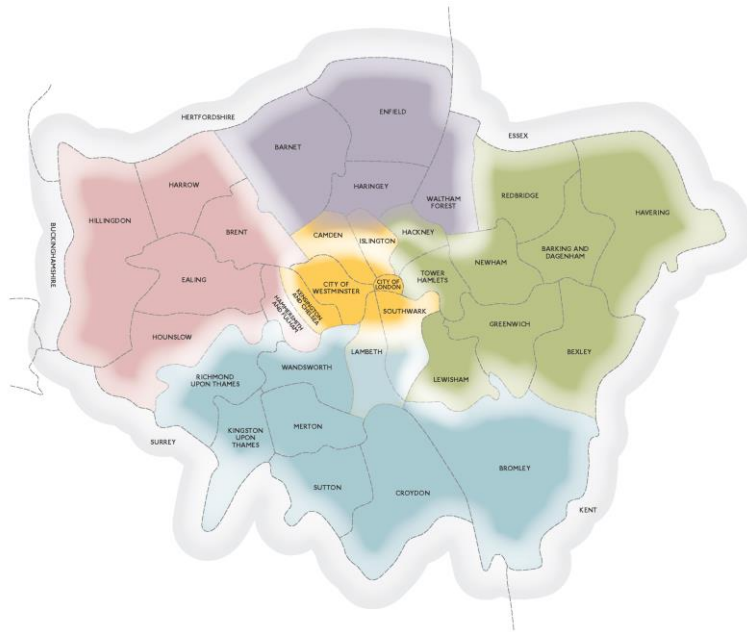


Source: LTDS 2012/13 – 2014/15

Cycling potential by sub-region

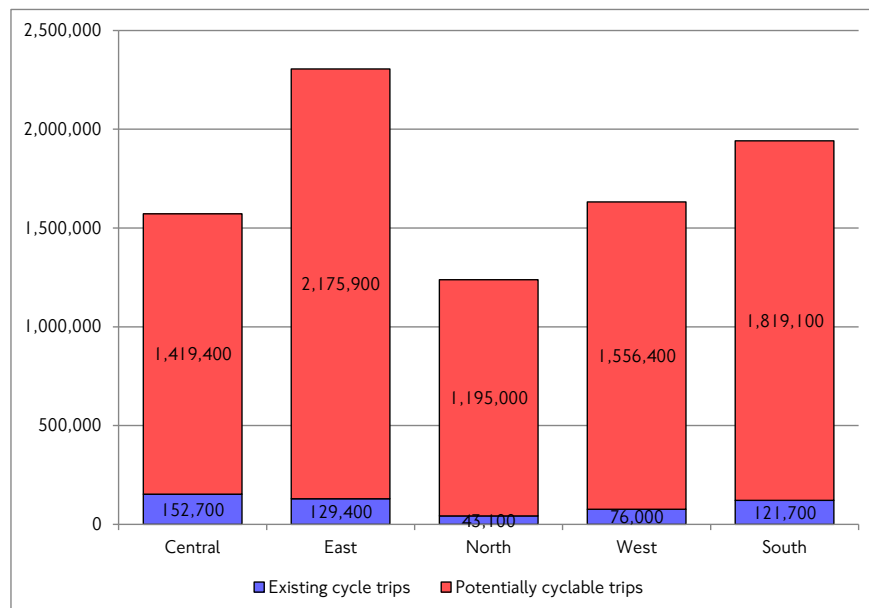
This section summarises cycling potential at a sub-regional level. There are five sub-regions: central, east, north, south and west London (see Figure 4.6). The sub-regions are considered to have ‘fuzzy’ boundaries, recognising that any consideration of transport challenges and other issues has cross-boundary impacts.

Figure 4.6 Map of the London sub-regions



This analysis shows notable potential for cycling across each of the five sub-regions. Of the five sub-regions, the east has the greatest potential, accounting for nearly 2.3 million (27 per cent) of potentially cyclable trips.

Figure 4.7: existing and potential cycle trips by sub-region



Source: LTDS 2012/13 – 2014/15

Analysis of cycling potential in town centres

There is significant potential for cycling trips to and from town centres within London. Just under a third of the potentially cyclable trips have either an origin or a destination in a town centre (as defined in the London Plan). These town centres are split into three categories:

- International centres (West End and Knightsbridge)
- Metropolitan town centres (typically large town centres found in outer London)
- Major town centres (slightly smaller than the Metropolitan centres, found across both inner and outer London)

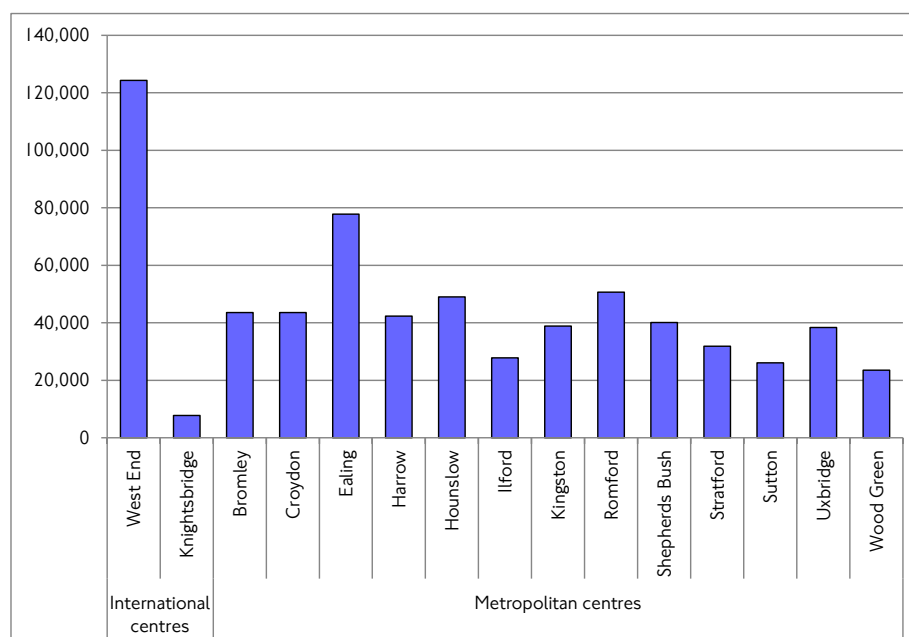
Trips are concentrated in the West End, certain metropolitan town centres (in particular, Croydon) and in some of the major town centre locations, namely Canary Wharf, Peckham, Camden and Lewisham.

Shopping (45 per cent) and entertainment (20 per cent) account for nearly two-thirds of all travel to town centres that could be cycled.

More than half (52 per cent) of cyclable travel to and from town centres is currently made by public transport, of which most is made by bus (though the car mode share is higher among town centres in outer London).

Figure 4.8 provides a summary for each of the 13 outer London metropolitan town centres (as well as the two international centres) identified in the London Plan, with Table 4.2 providing the same information in tabular form for each of the 35 major town centres.

Figure 4.8: potential cycle trips to/from International and metropolitan town centres



Source: LTDS 2012/13 – 2014/15

Table 4.2: potential cycle trips to/from major town centres

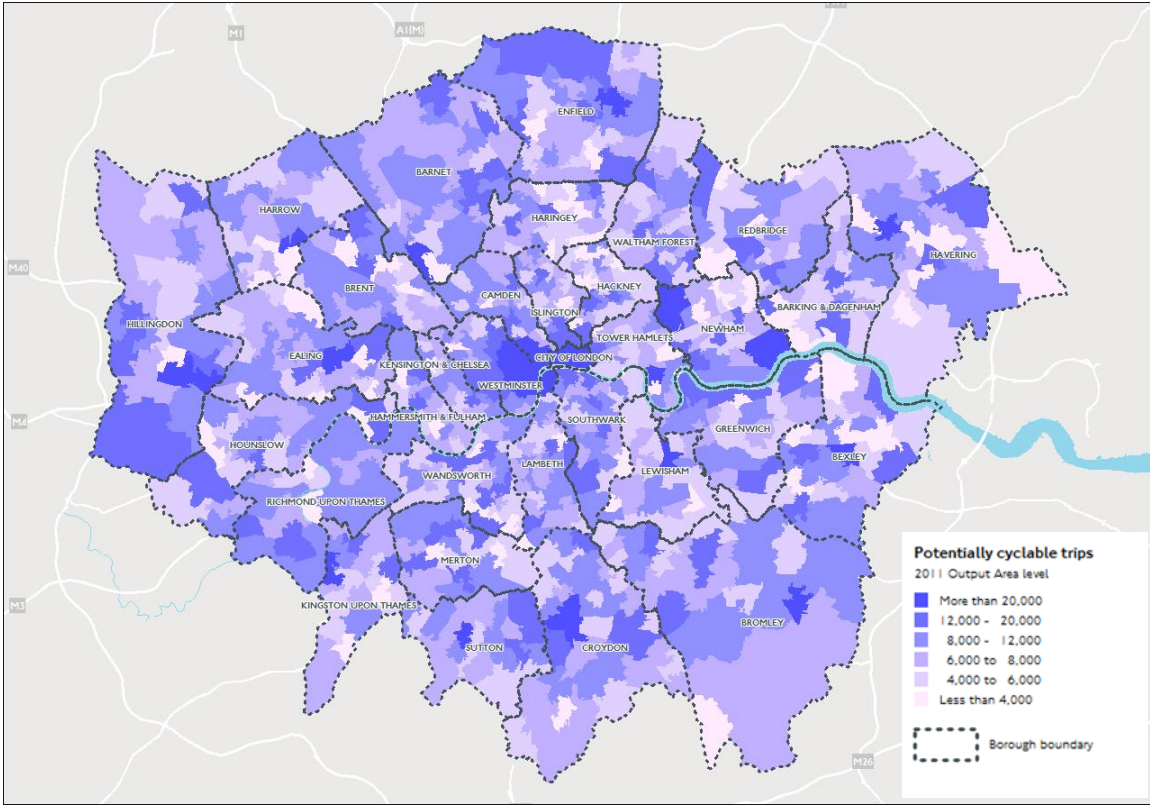
Centre	Borough	Cycling potential
Angel	Islington	28,600
Barking	Barking & Dagenham	20,500
Bexleyheath	Bexley	42,300
Brixton	Lambeth	27,900
Camden Town	Camden	32,100
Canary Wharf	Tower Hamlets	37,900
Catford	Catford	12,100
Chiswick	Hounslow	15,600
Clapham Junction	Lambeth	30,000
Dalston	Hackney	15,900
East Ham	Newham	23,300
Edgware	Barnet	17,100
Eltham	Greenwich	21,200
Enfield Town	Enfield	21,200
Fulham	Hammersmith & Fulham	12,000
Hammersmith	Hammersmith & Fulham	24,600
Kensington High Street	Kensington & Chelsea	18,200
Kilburn	Brent	17,400
King's Road East	Kensington & Chelsea	19,100
Lewisham	Lewisham	35,700
Nags Head	Islington	25,300
Orpington	Bromley	25,100
Peckham	Southwark	37,800
Putney	Wandsworth	19,200
Queensway/Westbourne Grove	Westminster	11,300
Richmond	Richmond upon Thames	18,300
Southall	Ealing	16,400
Streatham	Lambeth	17,600
Tooting	Wandsworth	16,400
Walthamstow	Waltham Forest	20,500
Wandsworth	Wandsworth	23,100
Wembley	Brent	13,800
Whitechapel	Tower Hamlets	5,500
Wimbledon	Merton	25,800
Woolwich	Greenwich	33,400
Total		782,200

Source: LTDS 2012/13 – 2014/15

Areas with high density cycling potential

The cycling potential map (Figure 4.9) shows a high density of potentially cyclable trips in some central and inner London boroughs, particularly the City of London, Westminster, Kensington and Chelsea, Camden, Islington, Lambeth and Hammersmith & Fulham.

Figure 4.9: total cycling potential – trip origins



Source: LTDS 2012/13 – 2014/15

5. Potentially cyclable stages

Key findings

- There are 1.55 million journey stages made each day that could be cycled as part of journeys that could not be cycled in their entirety.
- Most potentially cyclable stages are made by bus or Underground.

Introduction

This chapter explores the potential for additional cycling as a part of a longer journey using public transport. These are trips that, when considered as a whole, are not considered to be cyclable, but that have stages of the trip that could be cycled, such as someone driving or taking the bus to a rail station.

Considerations for analysis

As shown in chapter 1, there are approximately four million trips currently made by motorised modes each day that were not deemed as being potentially cyclable, with most of these excluded on the basis of distance (ie, being further than 8km, or 10km for commuting trips).

Of these, around half were made by car (32 per cent as the driver, 17 per cent as a passenger), with most of the remainder made by public transport (with the exception of a few motorcycle and taxi trips).

The analysis of potentially cyclable trip stages only includes those not deemed cyclable solely on the basis of distance. Any trip excluded on the basis of one of the other criteria was not considered in this analysis, given that this would still be true of the individual trip stages.

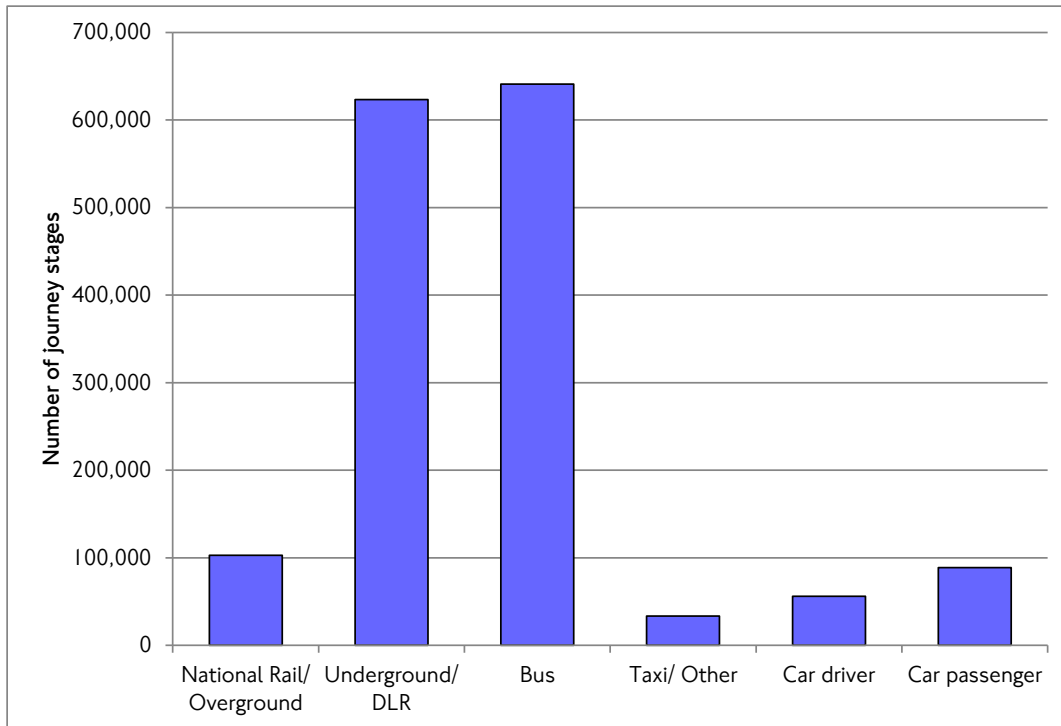
On the basis that people are unlikely to cycle as far when making part of a journey than they would be for an entire journey, we have set the distance limit for potentially cyclable stages to be 5km for anyone aged under 65, and 3km for anyone aged 65 or over. This is consistent with previous research into distances that cyclists are willing to cycle to a station.

Trips with a single stage made by a motorised mode (eg, a person walking to a bus stop, taking a bus, and then walking from the bus stop to their destination) are not considered as part of this potentially cyclable stage analysis, on the basis that if the *trip* had not been considered cyclable, it is unrealistic to consider this *stage* to be cyclable. By the same reasoning, trips made solely by car, or trips with a single public transport stage (and no private vehicle stages) were not considered.

Summary of cycle stage potential

Among the trips considered as part of this cyclable stage analysis, 1.55 million stages were identified as being potentially cyclable. Most of the potentially cyclable stages are currently either made by bus or by Underground (Figure 5.1).

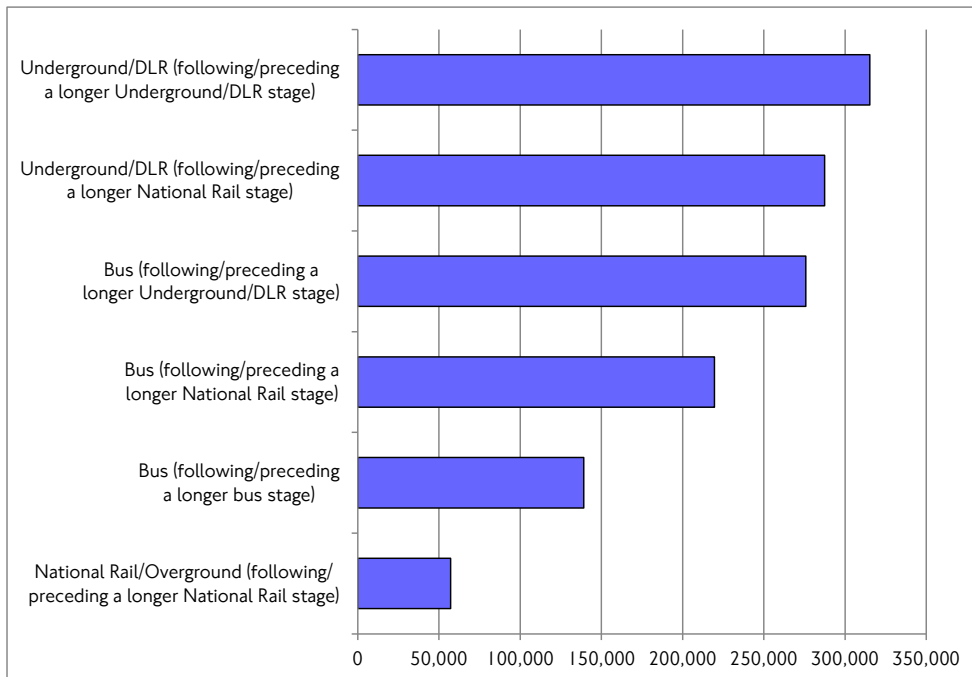
Figure 5.1: potentially cyclable stages, by current stage mode



Source: LTDS 2012/13 – 2014/15

Most potentially cyclable stages are Underground or DLR stages, made as part of trip involving a longer journey by the same mode (ie, a trip involving at least one Underground/DLR interchange). This is closely followed by Underground or DLR stages, made as part of trip involving a longer journey by National Rail or Overground, and bus stages, made as part of trip involving a longer journey by Underground or DLR.

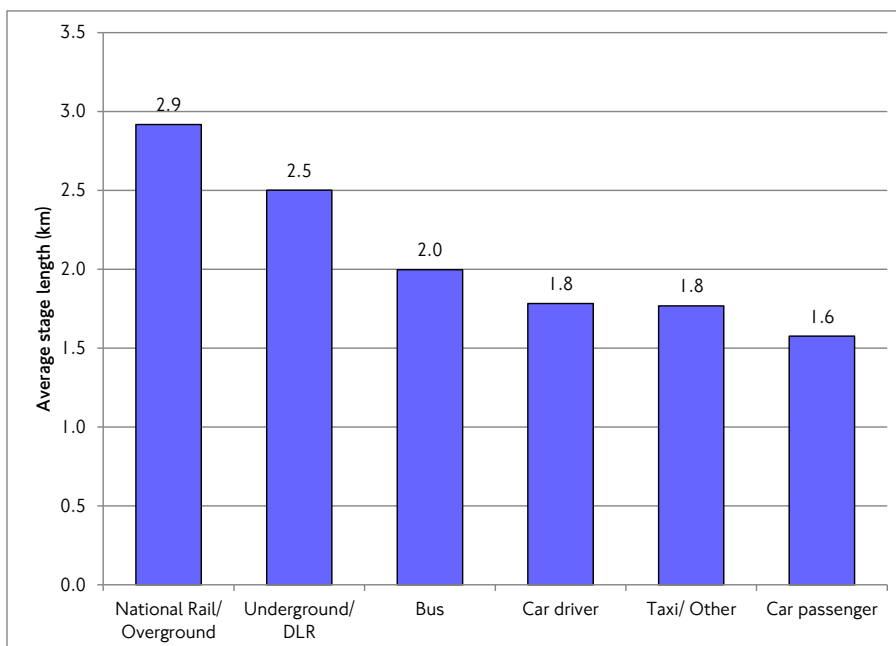
Figure 5.2: potentially cyclable stages, by current stage mode and trip main mode



Source: LTDS 2012/13 – 2014/15

As with the potentially cyclable trips, stages that are potentially cyclable are typically longer when made by public transport than by car. Stages that are currently made either by National Rail or Overground are on average 2.9km, compared to around 1.9km for car driver stages.

Figure 5.3: average trip length of potentially cyclable stages by current stage mode

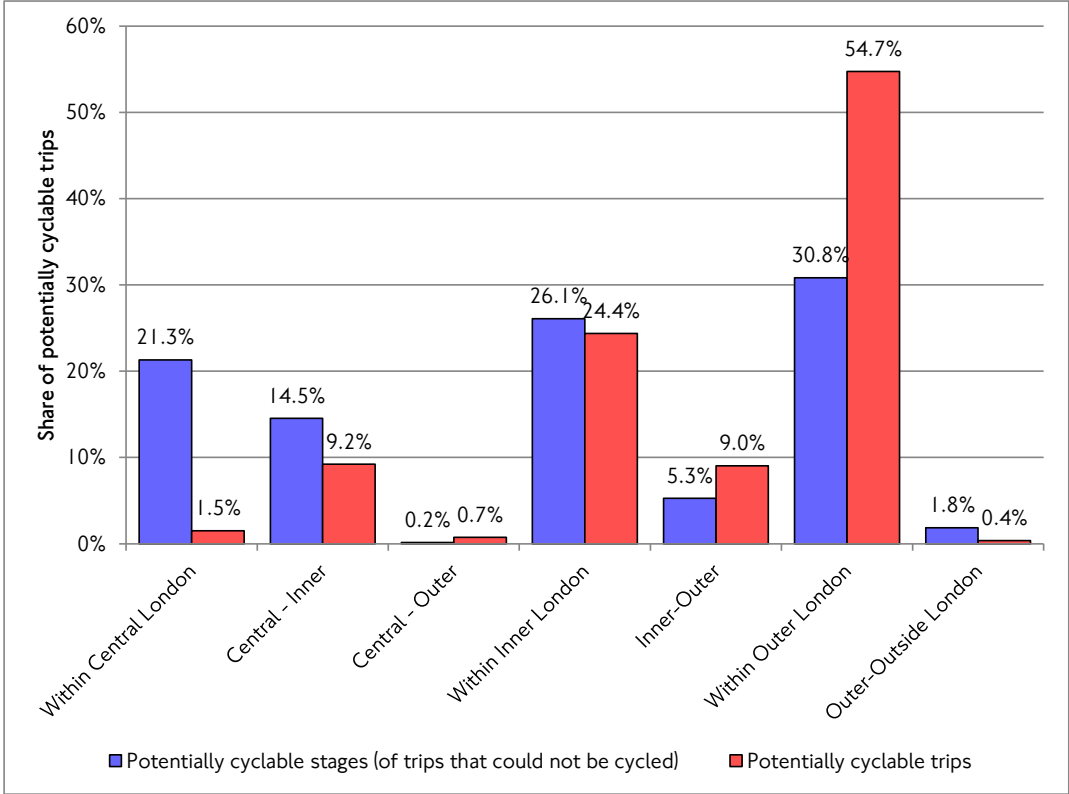


Source: LTDS 2012/13 – 2014/15

Where are potentially cyclable stages made?

The location of potentially cyclable stages is markedly different to the profile of potentially cyclable trips, with a much greater emphasis on central London. More than 21 per cent of potentially cyclable stages are made entirely in central London, compared to 1.5 per cent of potentially cyclable trips. By contrast, just over 30 per cent of potentially cyclable stages are made in outer London, compared to nearly 55 per cent of potentially cyclable trips.

Figure 5.4: origin and destination of current and potential cycle stages and trips, London residents



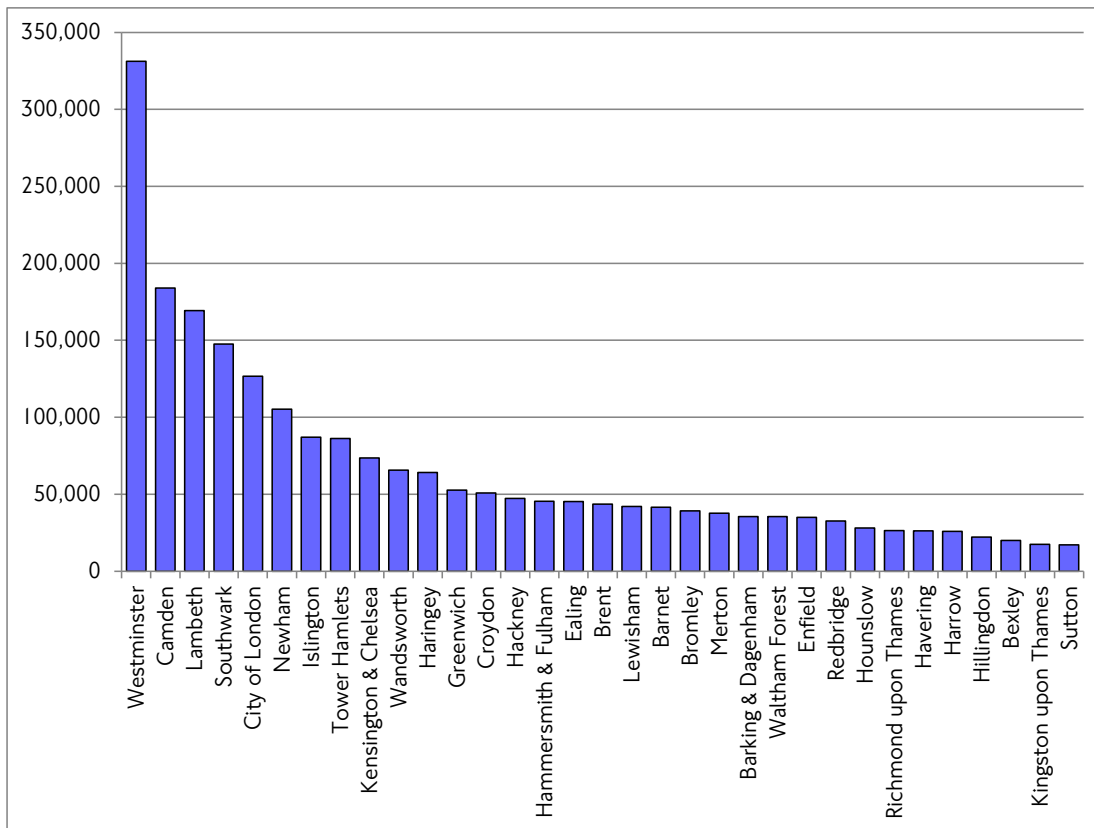
Source: LTDS 2012/13 – 2014/15

As shown in Figure 5.5, potentially cyclable stages are more heavily concentrated in central boroughs, such as Westminster, Camden and Lambeth. Westminster has nearly twice the total number of potentially cyclable stages of any other boroughs (in terms of the number of stages with an origin or destination within the borough), with 330,000 stages per day that could be cycled. By contrast, the 15 boroughs with the lowest number of cyclable stages are all in outer London. In particular, Sutton, Bexley and Kingston all have less than 20,000 daily cyclable stages – little over five per cent of the total for Westminster.

The boroughs with the highest number of cyclable stages (Westminster, Camden, City of London and Lambeth) are those with the greatest potential to switch from Underground at present. In other central and inner London boroughs – such as Wandsworth, Haringey, Hammersmith & Fulham and Lewisham – there is more emphasis on bus and rail stages that could be cycled. Across outer London, there is more potential for bus stages to be cycled, though in a handful of boroughs (Brent,

Ealing and Greenwich, in particular) there is more potential for rail stages to be cycled.

Figure 5.5: potentially cyclable stages, by borough of origin/destination



Source: LTDS 2012/13 – 2014/15

6. The total potential for cycling

Key findings

Combining the potentially cyclable trips and stages yields a total of 9.71 million trips and stages that could be cycled.

There is significant potential (ie, more than 200,000 daily trips) in all 33 London boroughs, with central London boroughs – in particular Westminster, Camden and Lambeth – having the greatest overall levels of cycling potential.

Introduction

This chapter brings together the analysis detailed in the previous three chapters, to look at the overall potential for cycling, after both the potential trips and stages have been combined.

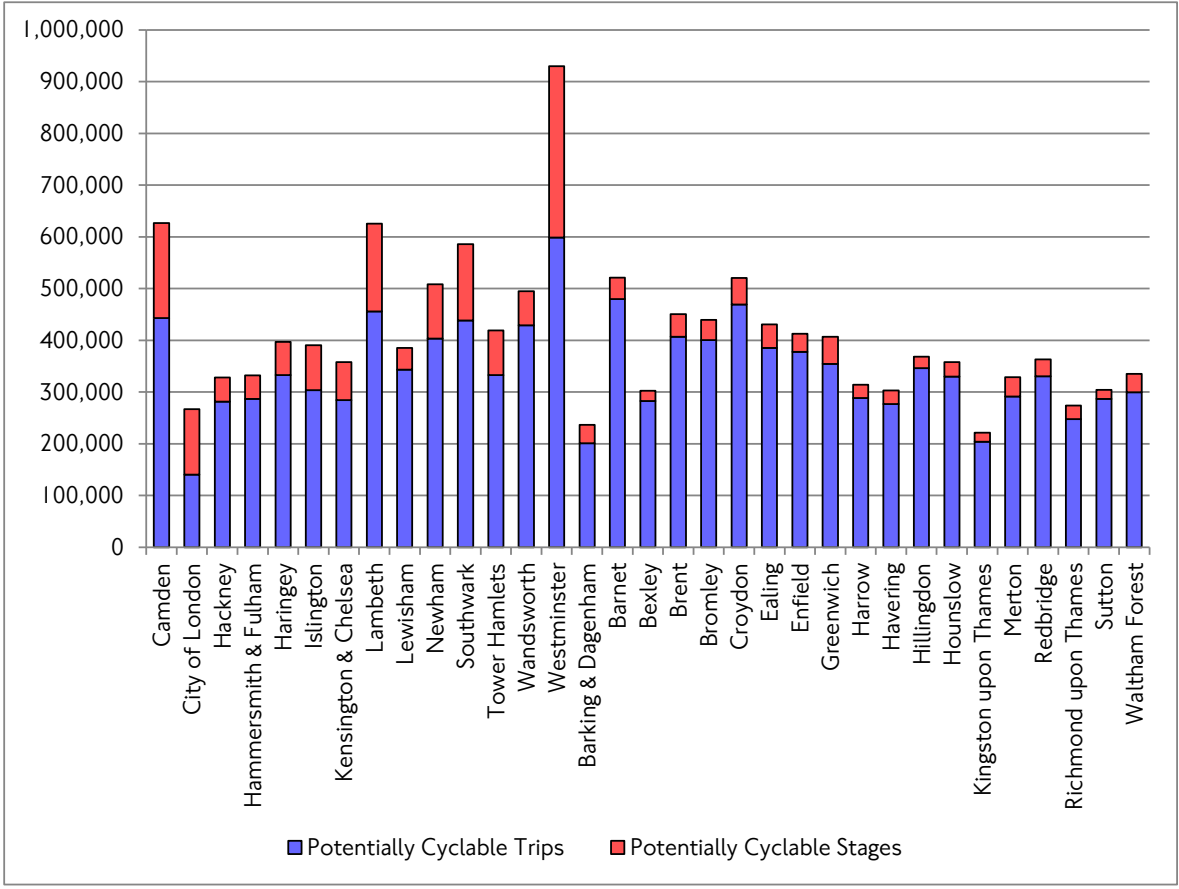
Summary of potentially cyclable trips and stages

In total, there are 9.71 million trips and stages that are potentially cyclable. Of these, 8.16 million (84 per cent) are potentially cyclable trips (ie, where the trip could be cycled all the way), with the remaining 1.55 million being potentially cyclable stages (ie, where the trip could not be entirely cycled, but part of the journey could be).

The boroughs with the highest overall potential are in central London (see Figure 6.1), in particular, Westminster where around 930,000 trips and stages with an origin or destination in the borough are made each day. Camden and Lambeth each have around 625,000 potential trips and stages. The overall total is skewed towards central and inner London boroughs, largely due to the higher number of potentially cyclable stages compared to outer London. Nevertheless, there are more than 200,000 daily trips and stages with an origin or destination in each of the 19 outer London boroughs (including more than 500,000 in both Barnet and Croydon).

The number of trips reported are (when combined) significantly higher than the total number of potentially cyclable trips and stages – this is because including the origin and destination effectively double counts all trips in the data.

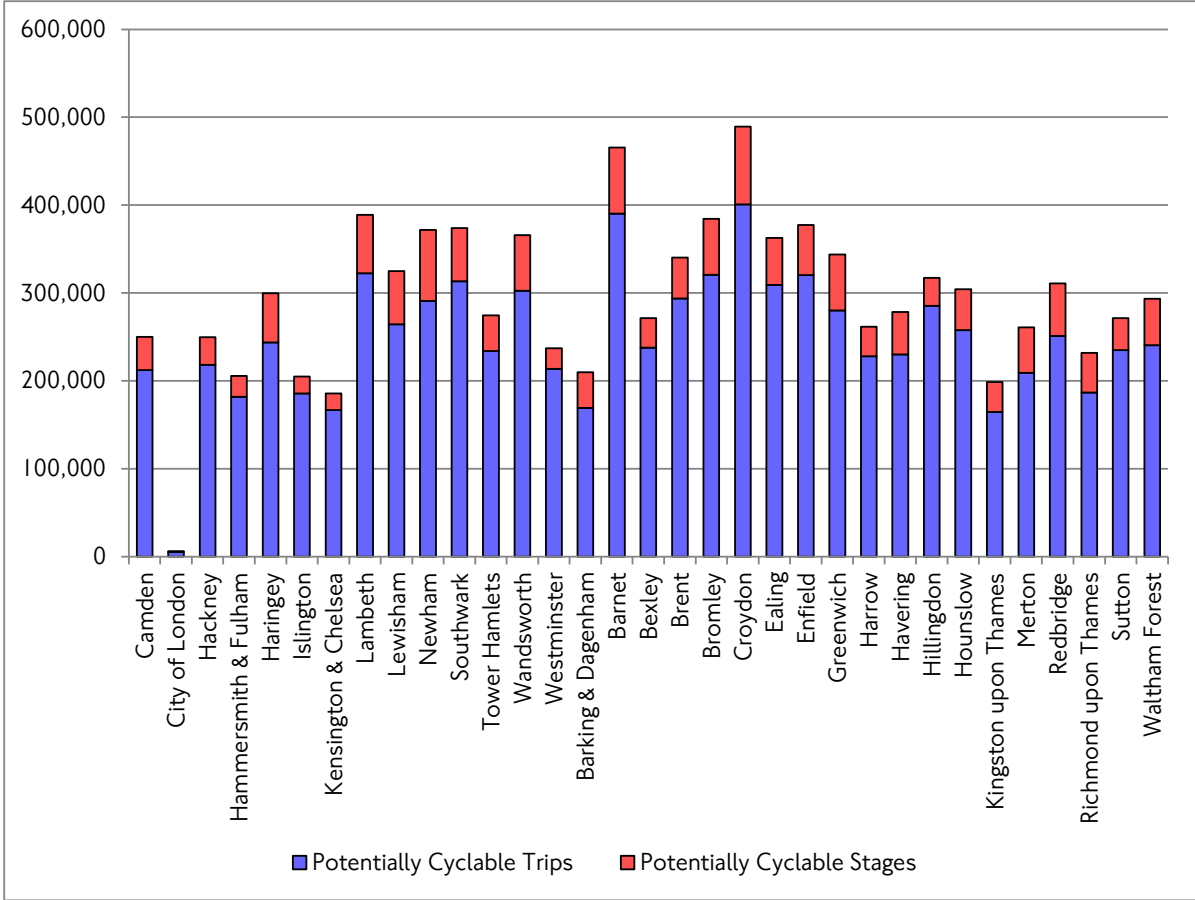
Figure 6.1: potentially cyclable trips and stages – origins and destinations (by borough)



Source: LTDS 2012/13 – 2014/15

The profile of potentially cyclable trips and stages is very different for the borough of residence of the person making the trip. Outer London has much more cycling potential, with Barnet and Croydon residents showing the most potential (more than 400,000 trips and stages made by residents of each borough).

Figure 6.2: potentially cyclable trips and stages by borough of residence



Source: LTDS 2012/13 – 2014/15

Because the number of potentially cyclable trips is more than five times the number of potentially cyclable stages, the profile of the overall potential is similar to that reported in chapters three and four, namely:

- Most of the cycling potential is currently made by car, although potentially cyclable stages largely come from bus and Underground journeys
- Leisure and shopping trips account for around half of the potential, with around half of the potentially cyclable stages being for commuting or other work reasons
- There is a slightly higher proportion of the overall cycling potential made by women, though men have more potentially cyclable stages.

7. Current and potential cycle trips

Key findings

- Only 2.54 million of the potentially cyclable trips are similar to current cycling trips (using the criteria defined in chapter 2).
- Most of these trips – 60 per cent – are made by public transport, and are more likely to be made for commuting or other work purposes than the overall potential.
- These trips are also more likely to be made within inner and central London.
- There are 1.07 million potentially cyclable stages similar to current cycle stages.
- The profile of people making potentially cyclable trips is markedly different to that of people already making cycle trips, particularly in terms of gender and ethnicity.

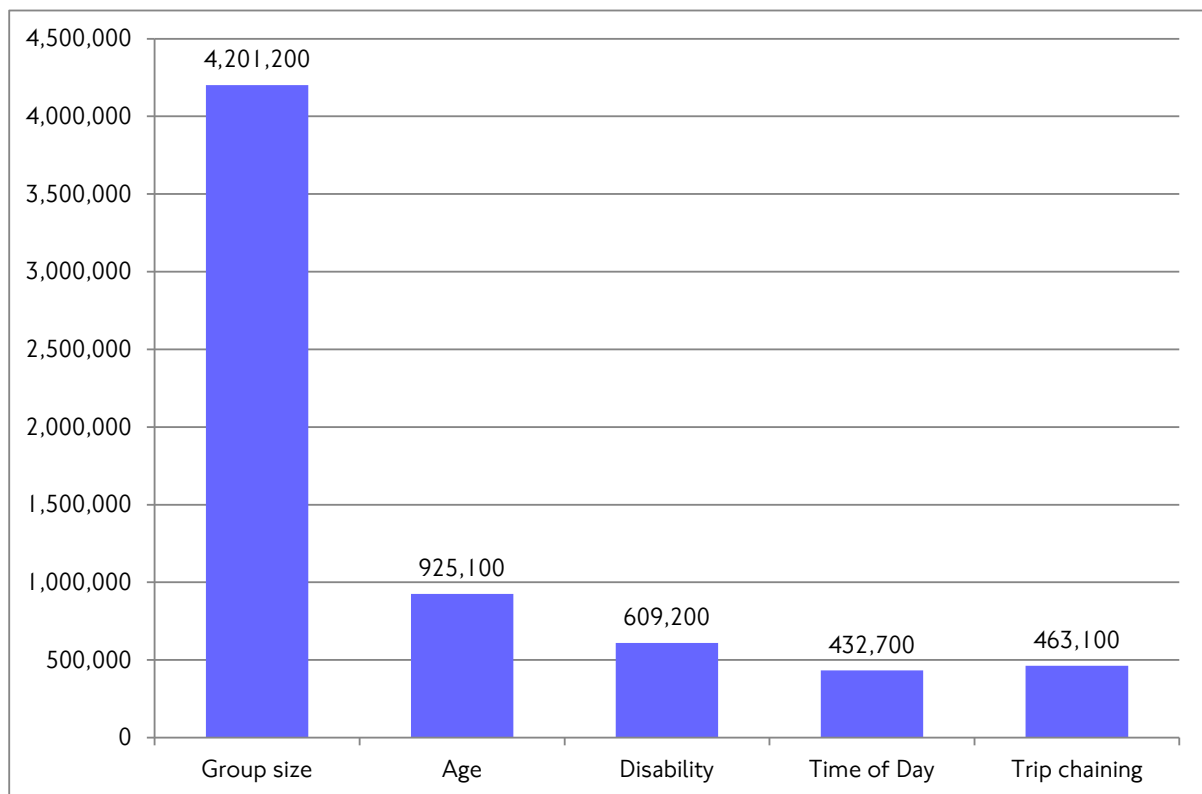
Introduction

As outlined in chapter 2, the 2016 Analysis of Cycling Potential is presented at two levels. Chapters 3-6 have summarised the analysis of the overall potential, and this chapter looks at the second tier, the cycling potential similar to the profile of current cycle trips.

Impact on potentially cyclable trips

Of the 8.17 million potentially cyclable trips, only 2.54 million were identified as similar to current cycling behaviour. The remaining 5.62 million (69 per cent) are atypical of current cycling trips. Many of the trips are atypical of current behaviour on the basis of group size, with many trips via motorised modes made in groups of two or more. By contrast, most current cycle trips are made by people travelling alone. Figure 7.1 summarises the reasons why trips identified as potentially cyclable were atypical of current cycling behaviour (the 5.62 million figure above).

Figure 7.1: reasons potentially cyclable trips are atypical of current behaviour

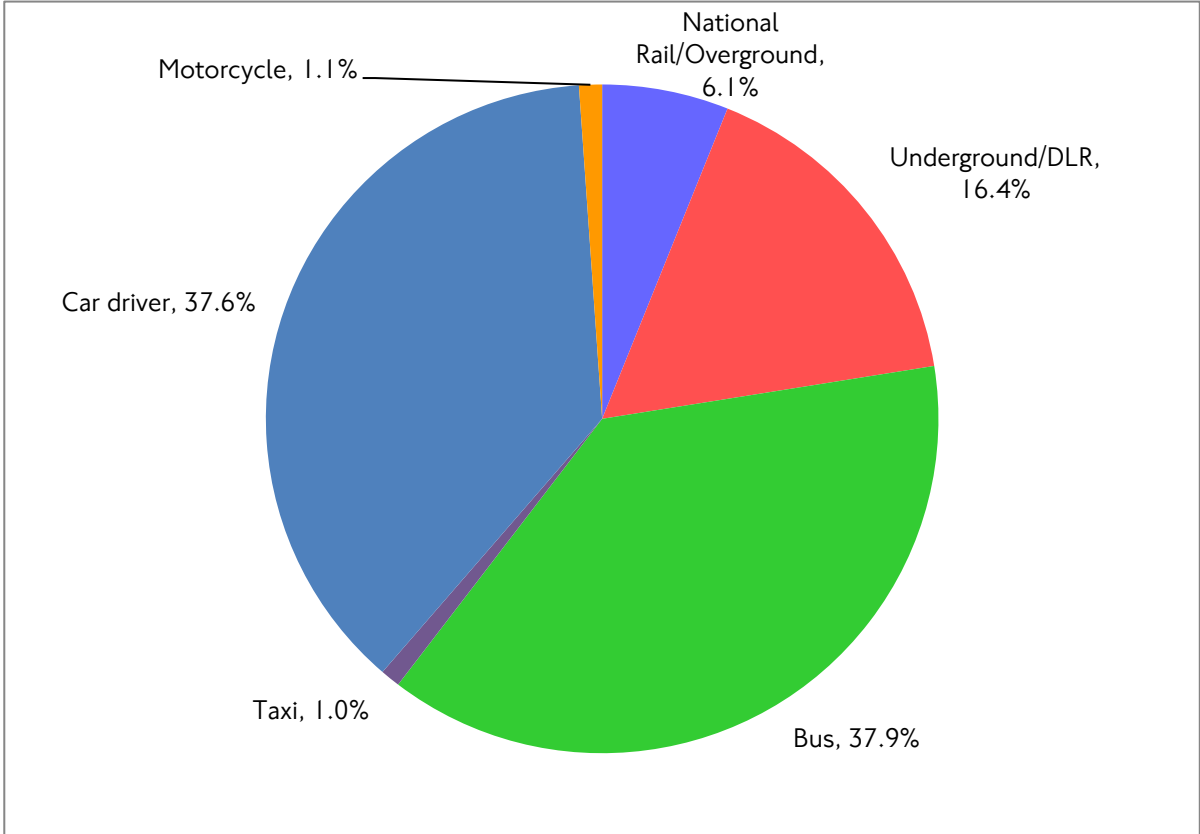


Source: LTDS 2012/13 – 2014/15

Potentially cyclable trips like current cycling behaviour have a significantly different profile, particularly in terms of the profile of current mode, and of journey purpose.

Any trips as a car passenger cannot be considered as potentially cyclable under the current behaviour criteria, as they must have to be travelling with one other person. In a similar vein, a large proportion of car driver trips also involve travel with at least one other person. Consequently, the public transport mode share of the cycling potential like current behaviour is much higher than the overall potential – 60 per cent compared to 40 per cent.

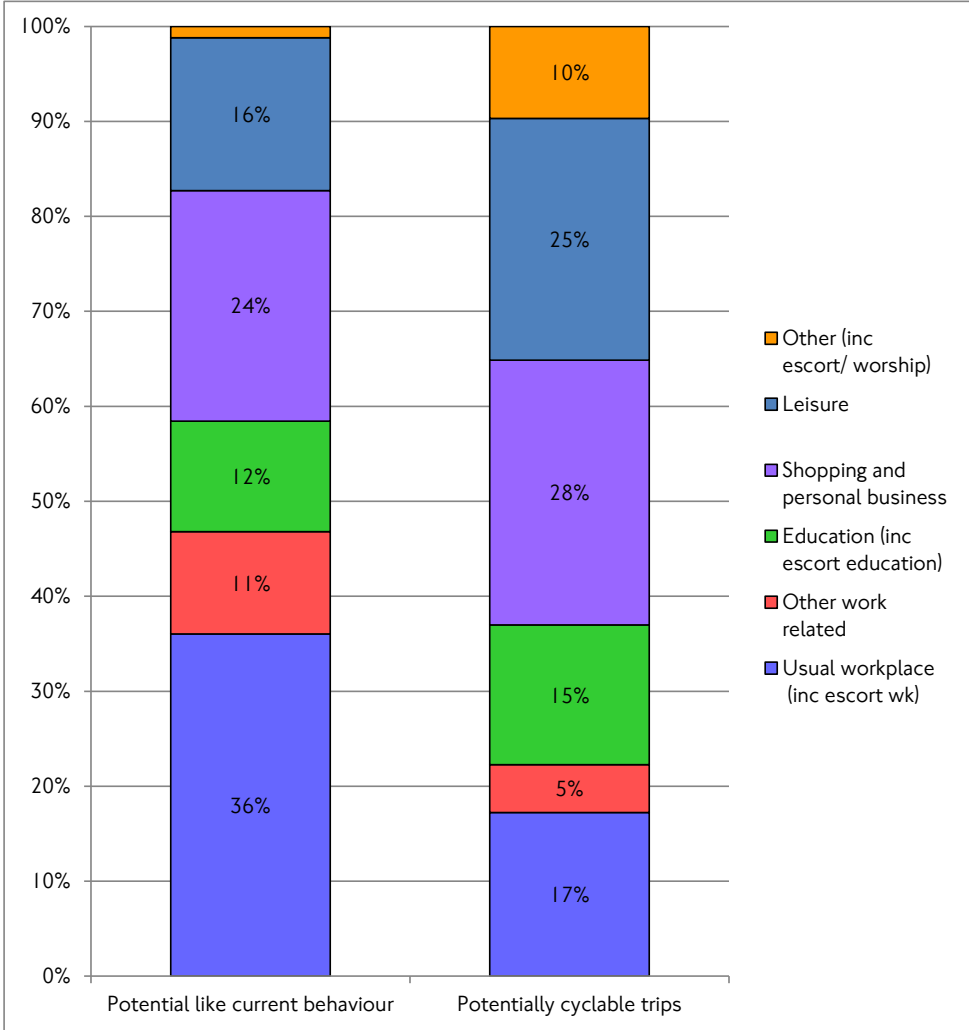
Figure 7.2: cycling potential like current behaviour – trips by current mode



Source: LTDS 2012/13 – 2014/15

The trip purpose profile is more heavily skewed towards commuting trips, with 36 per cent of trips like current behaviour potential made for commuting purposes (more than double the proportion of the total potential). Overall, there are fewer leisure trips and escort-based trips. The change in the trip purpose profile is most pronounced for car drivers, with the share of commuting trips at 33 per cent for potential trips like current cycling behaviour, compared to 15 per cent of all potentially cyclable trips by car drivers. This is mostly due to the presence of escort trips, which account for around 27 per cent of the total potential currently driven.

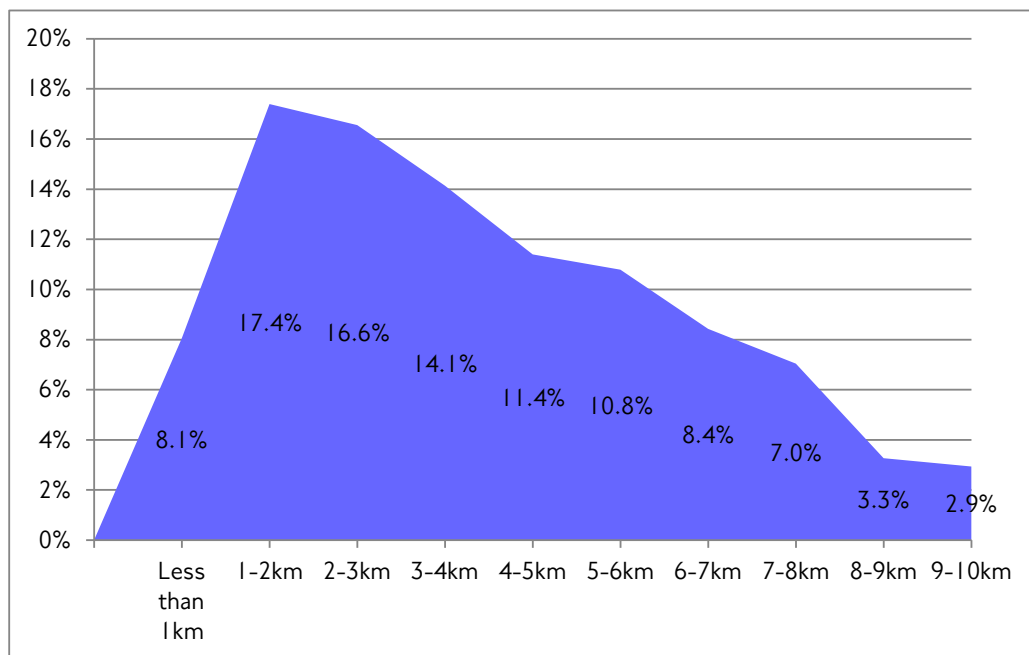
Figure 7.3: cycling potential like current behaviour – trips by purpose



Source: LTDS 2012/13 – 2014/15

The trip distance profile for the potential like current behaviour is also somewhat different, and is skewed more towards longer trips (though more than half of the potential is still less than 4km).

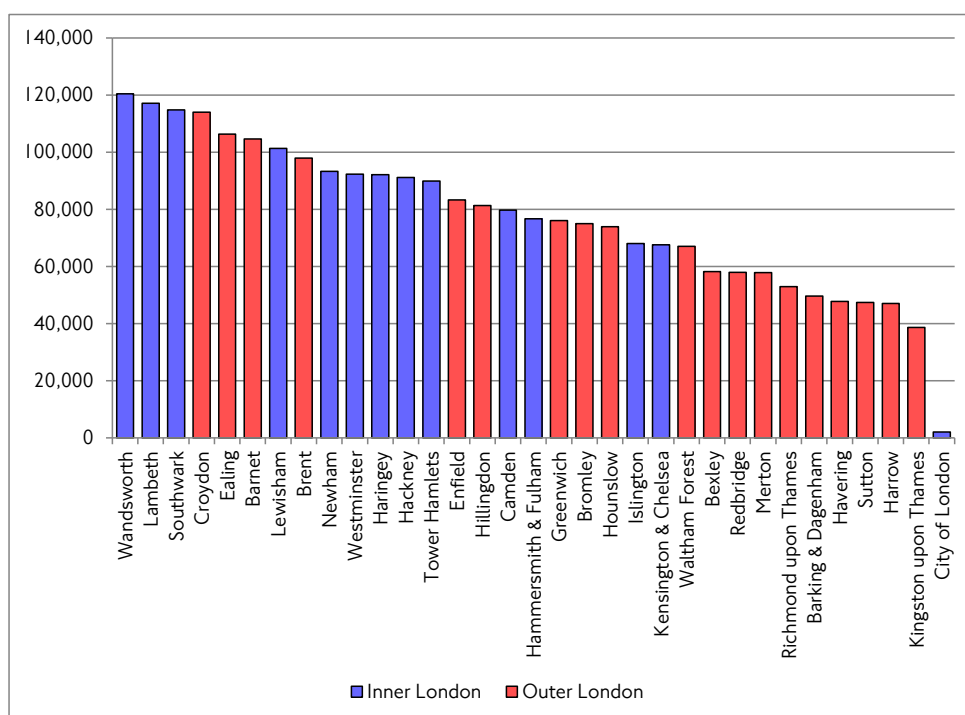
Figure 7.4: potential cycle trips like current behaviour by distance (crow-fly)



Source: LTDS 2012/13 – 2014/15

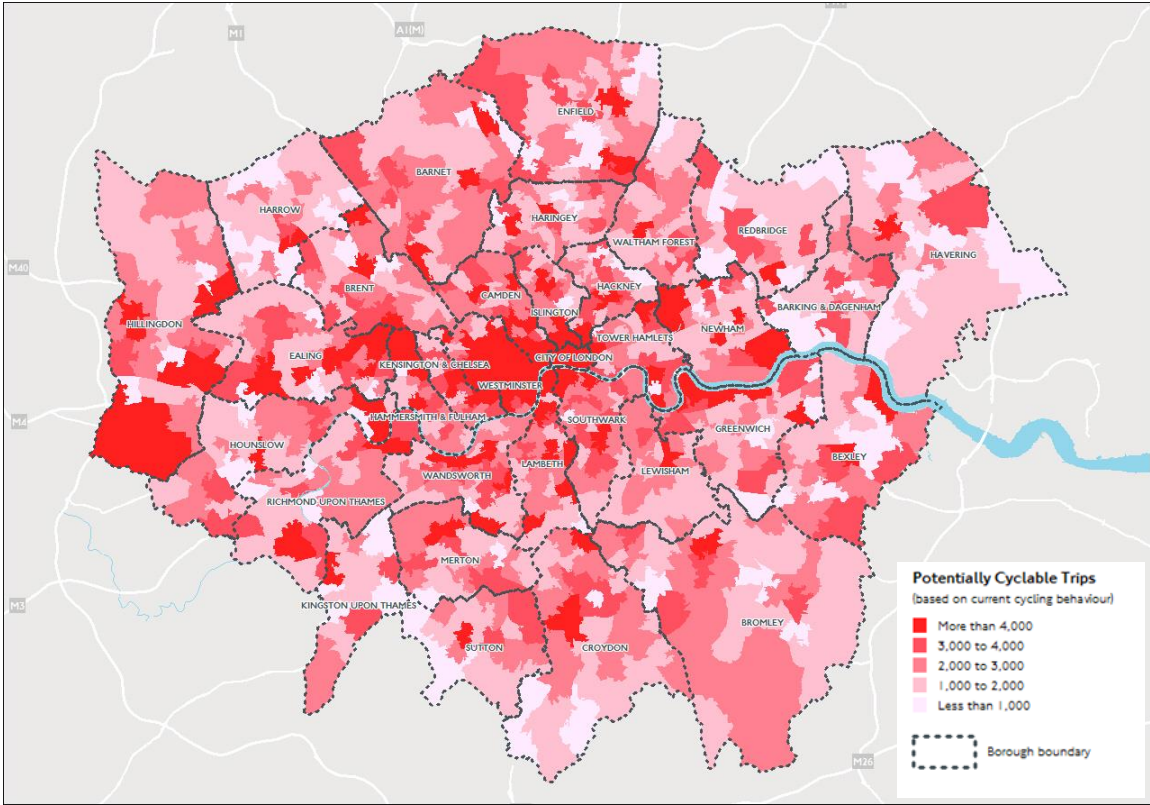
In contrast to all potentially cyclable trips where growth is much higher among people living in outer London boroughs, the cycling potential like current behaviour is highest in Wandsworth (120,000 daily trips), Lambeth (117,000 daily trips) and Southwark (115,000 daily trips) which are all central and inner London boroughs.

Figure 7.5: potentially cyclable trips like current behaviour by borough of residence



Source: LTDS 2012/13 – 2014/15

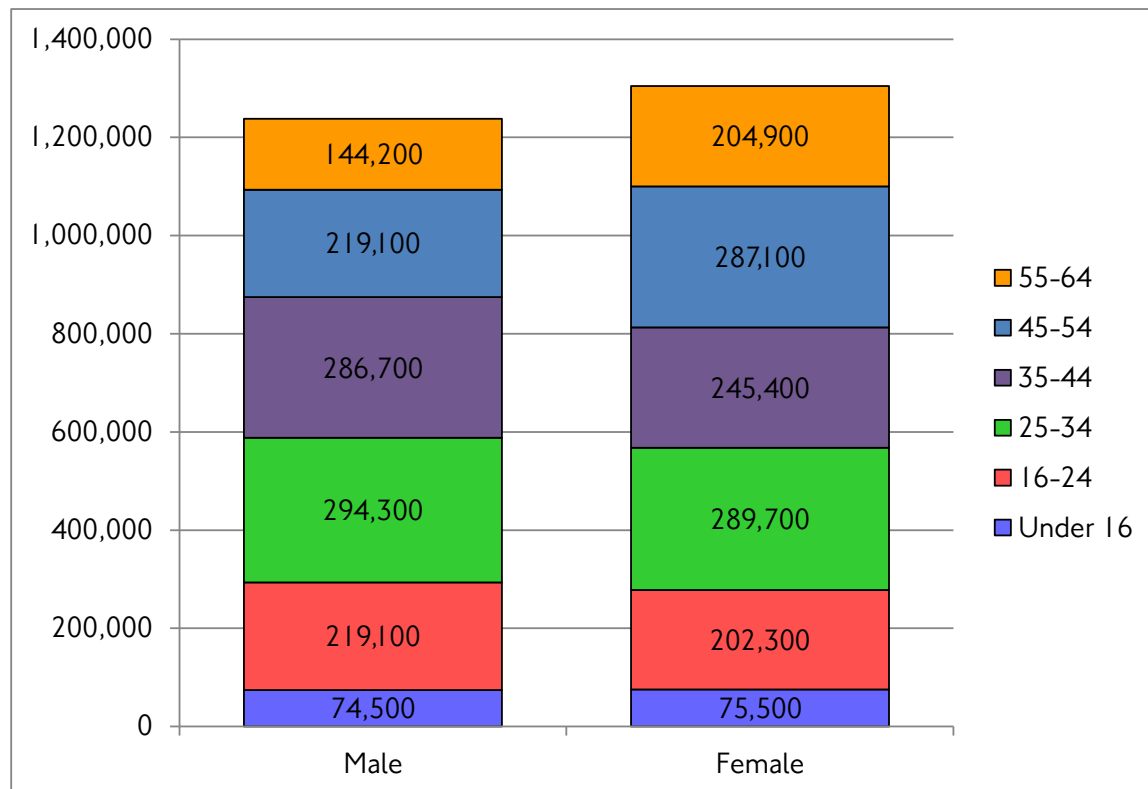
Figure 7.6: cycling potential like current behaviour – trip origins



Source: LTDS 2012/13 – 2014/15

The potential like current cycling behaviour is spread more evenly among men and women. Women made 1.3 million daily trips, compared to 1.2 million for men. The number of potential cycle trips is greater in men than women for those aged 16-44. Aged over 45, the number of potential trips like current behaviour is much greater for women than men by more than 100,000 trips.

Figure 7.7: potential cycle trips like current cycling behaviour by age and gender



Source: LTDS 2012/13 – 2014/15

Impact on potentially cyclable stages

The impact of applying the current behaviour criteria to potentially cyclable stages is lower than that for potentially cyclable trips. The total number of potentially cyclable stages like current behaviour criteria is 1.07 million, compared to the overall total of 1.55 million.

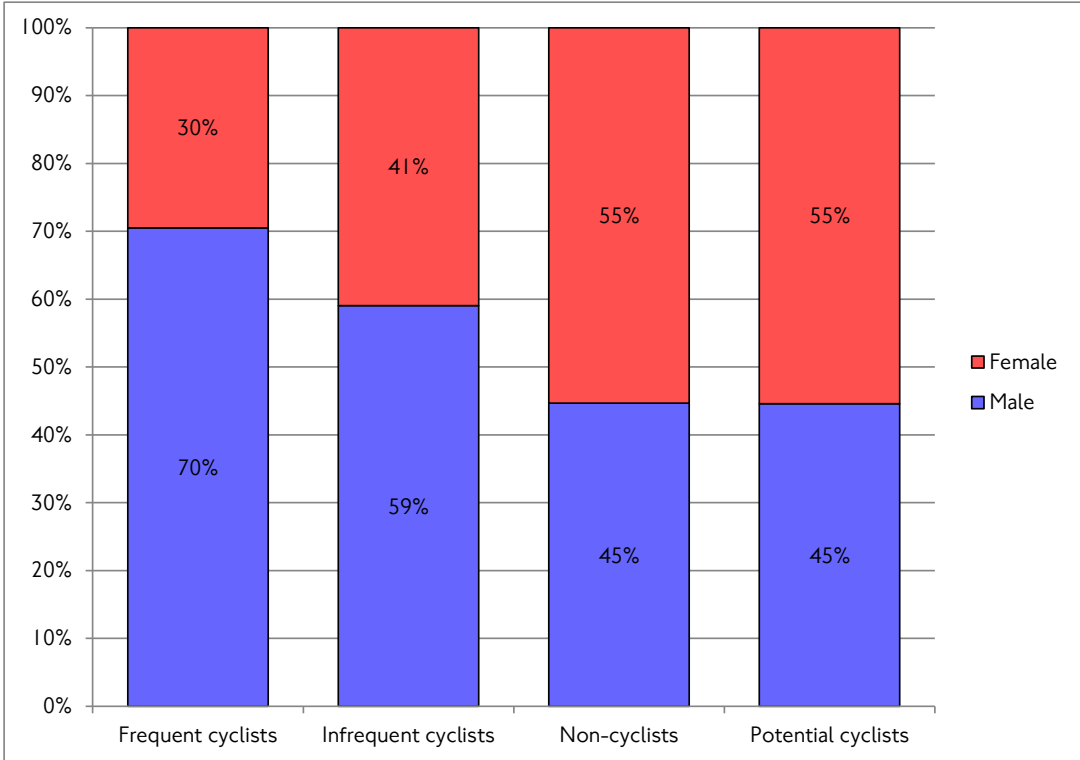
Because the number of potentially cyclable stages like current behaviour criteria is close to the overall total, the profile is more similar than for potentially cyclable trips. Under the current behaviour criteria, potentially cyclable stages are still largely concentrated on Underground and bus stages in central and inner London.

How do current cyclists compare to those making potentially cyclable trips?

The gender profile of people making potentially cyclable trips is in marked contrast to that of people that currently cycle. At present, 70 per cent of frequent cyclists (ie, those that cycle at least once a week) are men, along with 59 per cent of infrequent cyclists (those who cycle at least once a year). However, 45 per cent of people making potentially cyclable trips are women.

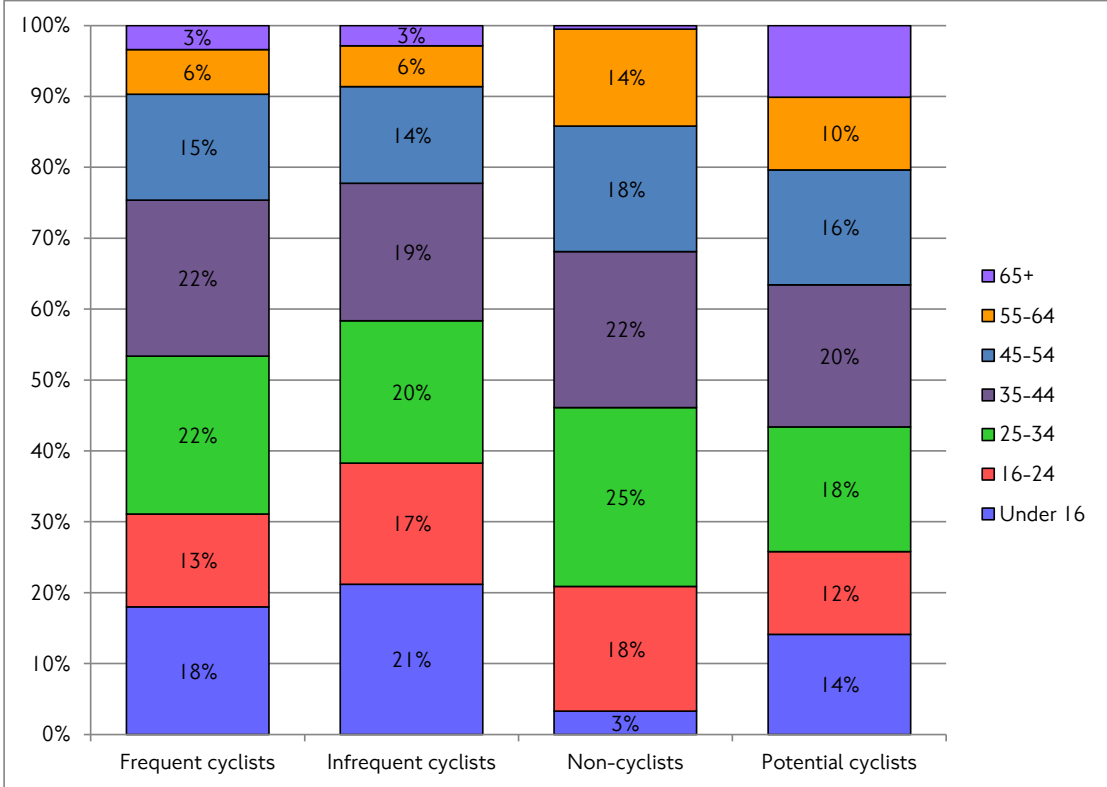
The age profile of people making potentially cyclable trips is broadly consistent with the profile of existing cyclists, but with greater proportions of those aged 55 and over (nine per cent of existing cyclists over 55, but 20 per cent of people making potentially cyclable trips).

Figure 7.8: gender profile – cyclists and people making potentially cyclable trips



Source: LTDS 2012/13 – 2014/15

Figure 7.9: age profile – cyclists and people making potentially cyclable trips

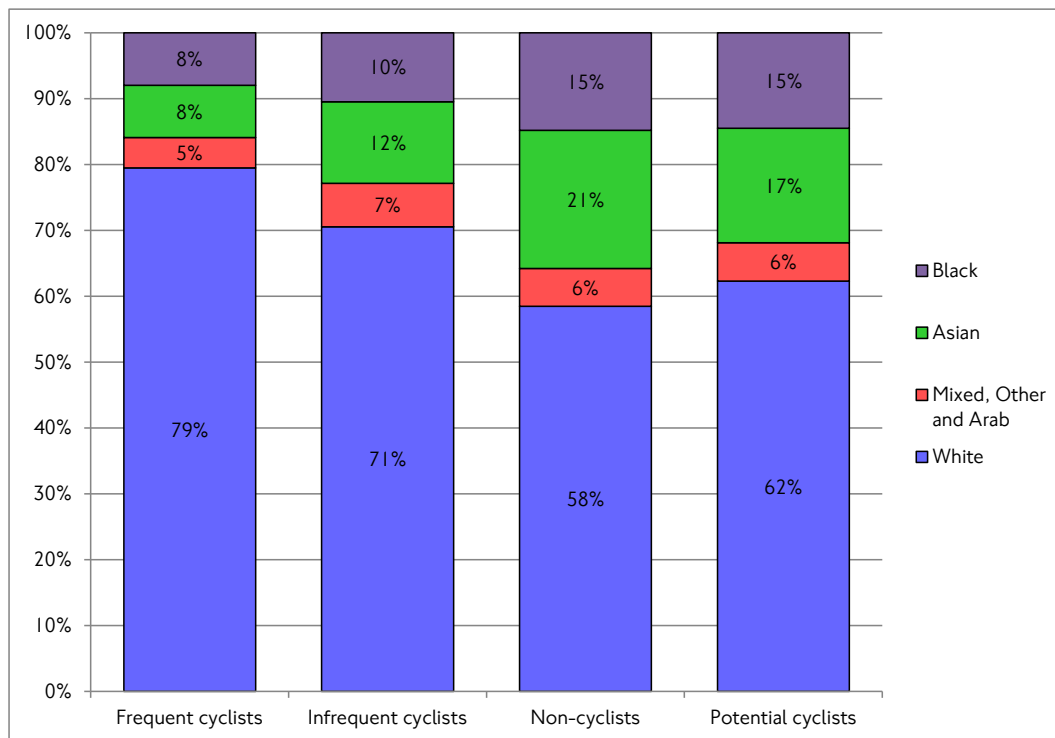


Source: LTDS 2012/13 – 2014/15

As highlighted in Figure 4.5, the ethnic profile of potentially cyclable trips reflects the ethnic mix of London’s population. By contrast, the profile of existing cyclists is skewed: 79 per cent of frequent cyclists and 71 per cent of infrequent cyclists are white.

The share of people who make potentially cyclable trips that belong to BAME groups is 38 per cent – far higher than the 21 per cent of frequent cyclists – which suggests there is a significant opportunity to increase cycling among those from a BAME background.

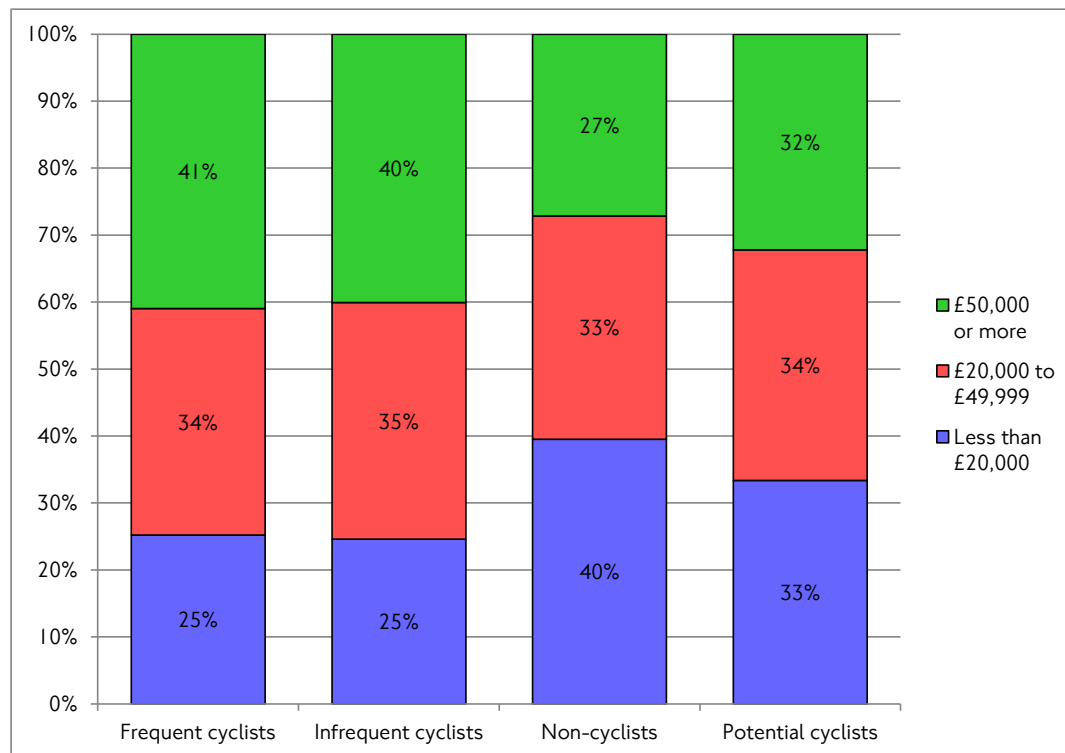
Figure 7.10: ethnicity profile – cyclists and people making potentially cyclable trips



Source: LTDS 2012/13 – 2014/15

The profile of existing and potential cyclists is broadly consistent across income groups, though the share of high income existing cyclists is slightly higher than the potential (41 per cent compared to 32 per cent), with the opposite true of low income households (25 per cent compared to 33 per cent).

Figure 7.11: household income profile – cyclists and people making potentially cyclable trips



Source: LTDS 2012/13 – 2014/15

Potentially cyclable trips by those currently cycling

While the most significant cycling potential lies among those that do not cycle, there is some potential for growth among those who already cycle. Nearly 0.75 million potentially cyclable trips are made by those who cycle at least once a week; 1.5 million potentially cyclable trips are made by those who cycle infrequently; and 23 per cent of those who cycle frequently and are in employment cycle to work.

While there is plenty of potential in those groups where there is currently less cycling (women, those aged 55 and over, those in low income households and BAME groups), there is equally potential among the groups that currently cycle more than any other group: white men aged between 25 and 44 account for 1.5 million of the total cycling potential.

Although 75 per cent of the potentially cyclable trips identified are made by those who currently do not cycle at all, around a third of these are made by people with access to a bicycle in their household. Furthermore, most non-cyclists say they can ride a bicycle, although they may not have done so since they were a child or feel confident doing so.

8. Conclusions

This chapter presents a summary of the key results and findings of the Analysis of Cycling Potential.

This report identifies more than eight million potentially cyclable trips made by Londoners every day in the city. There are also more than 1.5 million stages of trips that could be cycled, as well as further trips made within the city by the many non-London residents that travel in to the Capital every day to work, shop and use London's services.

Most potentially cyclable trips are different to trips currently cycled

The total number of potentially cyclable trips and stages made by London residents every day is close to 10 million. However, if we look at trips that have similar characteristics to trips that are currently cycled, this figure falls to less than four million. Much of this is down to people travelling with others. The analysis shows that a large number of trips and stages are potentially cyclable, but are done so with at least one other person. This is in contrast to the profile of current cycling trips, where only one in eight trips are made by people travelling with at least one other person. Therefore, any efforts to realise the true potential will depend on the successful promotion of group and family cycling across London.

There is a high density of cycling potential in central London

While the overall number of potentially cyclable trips across central London and parts of inner London is lower than in outer London, there is an extremely high density of trips due to the smaller area the potential is contained in. One in five potentially cyclable trips made for work purposes had an origin or destination in the Central Activity Zone, around 200,000 trips.

There is also significant potential for stages of trips (largely public transport trips) in central London to be cycled.

A significant proportion of the cycling potential involves travel to or from a town centre

There are clusters of high potential across a range of locations across outer London, with one in three potentially cyclable trips having either an origin or a destination in one of the town centres defined in the London Plan.

The importance of local streets

While there is a high density of cycling potential in inner and central London, it is in outer London areas that most of the cycling potential lies. For every potentially cyclable trip in central London, there are more than five in outer London. In these areas, much of the cycling potential comprises people making short car trips to and from their home.

Targeting new cyclists is key to realising the cycling potential

While there remains some potential for cycling among those that already cycle, the Analysis of Cycling Potential shows that most of the potential (three out of every four

potentially cyclable trips) is among non-cyclists – more than 6.8 million daily potentially cyclable trips (currently made by a motorised mode) are made by people that do not cycle.

Although 75 per cent of the potentially cyclable trips identified are made by those who currently do not cycle at all, around a third of these are made by people with access to a bicycle in their household.

Changing cycling demographics is a crucial element to realising the potential for cycling

Analysis of those that already cycle frequently shows that 70 per cent of them are male, 79 per cent are white, and over half of them are aged 44 or under. By contrast, the trips and stages that are potentially cyclable are much closer to the profile of the general London population, with nearly 40 per cent of cyclable trips and stages made by BAME groups, and more than half made by women.

More of the same: encouraging cyclists to cycle more often

Nearly 0.75 million potentially cyclable trips are made by those who cycle at least once a week. In particular, only 23 per cent of those who cycle frequently and are in employment cycle to work. There are also a number of people who cycle, but do so infrequently – this group makes up 1.5 million potentially cyclable trips everyday.

There is equally plenty of potential among the groups that are currently most likely to cycle: white men aged 25-44 account for 1.5 million of the total cycling potential.

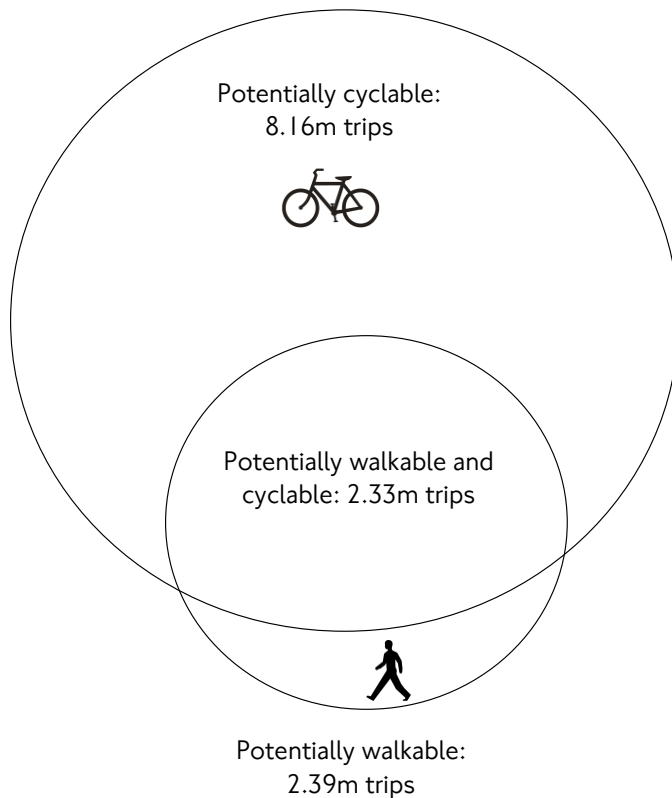
Other considerations

Any consideration of cycling potential must be made with walking also in mind

This report focuses solely on those trips and stages currently made by a motorised mode with the potential to be cycled. There is a separate report – the Analysis of Walking Potential – documenting a similar exercise carried out to identify trips and stages which could be walked. Together, the two pieces of analysis look at the potential for active travel as a whole in London.

The Analysis of Walking Potential identified approximately 2.39 million trips that could be walked. Of this 2.39 million, 2.33 million (98 per cent) could also be potentially cycled, suggesting that most potentially walkable trips are also potentially cyclable (and that conversely, a number of potentially cyclable trips could be walked).

Figure 8.1: potential walk and cycle trips



Source: LTDS 2012/13 – 2014/15

An increase in cycling may come, at least in part, from people switching from walking – analysis of the 2014 Strategic Cycle Monitoring surveys showed that 20 per cent of people cycling had switched from walking. Any switching from walking to cycling would, therefore, have no change on overall numbers of active travel trips.

London's expected future growth

The potential for cycling could go well beyond the trips and trip stages identified in this report.

For example, more cycling could be generated by new public transport schemes. Some of the potential for cycling identified in this report is for cycling to and from rail and Underground stations. Any new schemes (such as the Elizabeth Line or the Northern Line Extension) that adopt measures to encourage cycling to stations could, therefore, have an impact on both cycling and public transport.

London's population is expected to increase significantly in the next 25 years. New policies around densification are needed to accommodate this population growth (and consequent travel demand), while reducing congestion, crowding and emissions on the transport network. More emphasis on new housing closer to employment centres, town centres and stations will change the travel behaviour of people moving to those areas, with greater emphasis on walking and cycling and reducing the need for car use.

The opportunities to realise cycling potential will greatly depend on willingness to change behaviour

This report shows that the potential for more cycling in London is not constrained to a particular part of the city, to a certain type of trip, or to any individual demographic group. Realising the potential is, however, down to finding a way to encourage the person making that trip to change their travel behaviour.

How amenable (and able) a person is to make a change will vary significantly. However, small geographic areas are highly homogenised in terms of the people that live there and their typical travel behaviour. It is therefore possible to characterise these areas in terms of the typical behaviour, characteristics or attitudes of the people living in them. The segments can be used to understand the choices people make.

To do this, TfL has recently developed a new multi-modal customer segmentation tool, the Transport Classification of Londoners (TCoL). This classifies the London population into nine segments (consisting of 32 sub-segments), and evaluates the influences over travel behaviour to identify households most amenable to cycling now and in future. The segmentation is a geo-demographic classification derived from the London Output Area Classification.

In combination with the Analysis of Cycling Potential, we can identify those segments of the population where there is greatest potential for growth in cycle travel. The details of this can be found in the Segmentation report.