



Cycle Parking

Part of the London Plan evidence base

December 2017

MAYOR OF LONDON



**TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS

©Transport for London 2017

All rights reserved. Reproduction permitted for research, private study and internal circulation within an organisation. Extracts may be reproduced provided the source is acknowledged.

Disclaimer

This publication is intended to provide accurate information. However, Transport for London (TfL) and the authors accept no liability or responsibility for any errors or omissions or for any damage or loss arising from use of the information provided.

Contents

Introduction.....	2
Background	3
1. Areas of higher cycle parking standards	5
2. B1 office long-stay Cycle parking.....	10
3. Residential Long-stay Cycle Parking.....	12
4. Student Accommodation Cycle Parking.....	13

Introduction

The draft Mayor's Transport Strategy (MTS) sets an aim for 80 per cent of trips in London to be made by foot, cycle or public transport by 2041. Encouraging greater levels of cycling is key to delivering this vision and the MTS sets out a series of measures to do this, including:

- Adopting 'Healthy Streets' as the underpinning approach to London's road network, public transport and design of new development, encouraging people to choose to cycle (as well as walk and use public transport)
- Delivering a London-wide network of cycle routes, including new routes and improved infrastructure
- Creating 'Liveable Neighbourhoods' to improve the public's experience of walking, cycling and public transport use
- Adopting a series of measures with the aim of ensuring no one is killed or seriously injured on London's streets by 2041
- Encouraging people to choose to cycle by applying the principles of 'Good Growth' to new development

Sufficient cycle parking is essential to enable people to make more trips by cycle – without confidence that there will be safe, secure parking at their destination, people may choose not to cycle. Without adequate cycle parking at home, they may not be able to own a cycle in the first place.

Given that developments are likely to remain in use for many decades and the challenges of retrofitting cycle parking, provision must be sufficient from the outset in order to meet future need as well as current demand across all land uses. Provision that is of insufficient quality is more likely to go unused even where demand exists, so it is vital that guidance set out in the London Cycle Design Standards (or subsequent TfL guidance) is followed.

Many of the standards for particular land uses have already been designed to cater for an ambitious cycling mode share, and an extensive review of evidence was carried out during this process in 2013 for the Further Alterations to the London Plan (FALP). However, there are some areas where the standards need to be refined and updated to fully reflect the vision set out in the new MTS.

The subsequent sections of this paper explain the rationale and evidence behind the more significant changes proposed:

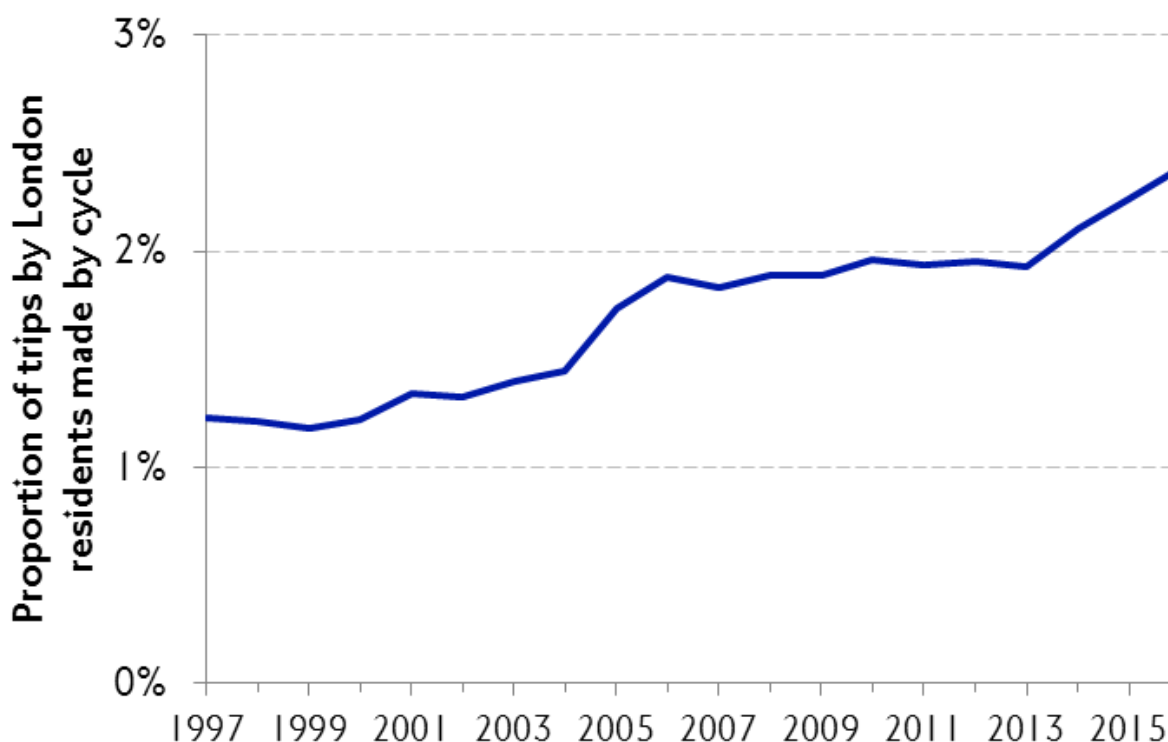
1. **Areas of higher cycle parking standards:** explains the proposed geographical variance in the short-stay standards for A class land uses and long-stay standards for B1 office land uses
2. **B1 office long-stay:** outlines the proposed increase to this standard from 1 space per 90 sqm in the area where higher standards apply to 1 space per 75 sqm
3. **Residential long-stay:** explains the proposed increase to the standard for 1 bed units from 1 space per unit to 1.5 spaces per unit, to cater for dwellings occupied by more than one resident
4. **Student accommodation long-stay:** explains how cycle parking for student accommodation has been brought into conformity with the residential standard, as intended when the standard was first introduced

Background

In 2016, there were 730,000 cycle journey stages in London on an average day, which is an 8.8 per cent increase from 2015, a 75 per cent increase since 2005 and a 154 per cent increase since 2000¹. This rate of growth is considered to be strong and reflects growth at a much faster rate than population growth.

Increased investment in cycling in London is expected to continue to generate significant growth in cycling, which requires increased provision of cycle parking across the city.

Figure 1: Cycle mode share by year



Source: *Travel in London Report 10*, table 2.1

TfL analysis shows that Londoners currently make 8.2 million daily trips by mechanised modes which could potentially be made by cycle ('cyclable' trips), equating to around 62 per cent of all daily trips.² This is based on the known characteristics of these trips (such as distance, purpose or whether the trip is part of a chain) and the people making them (such as age or whether they are carrying heavy equipment).

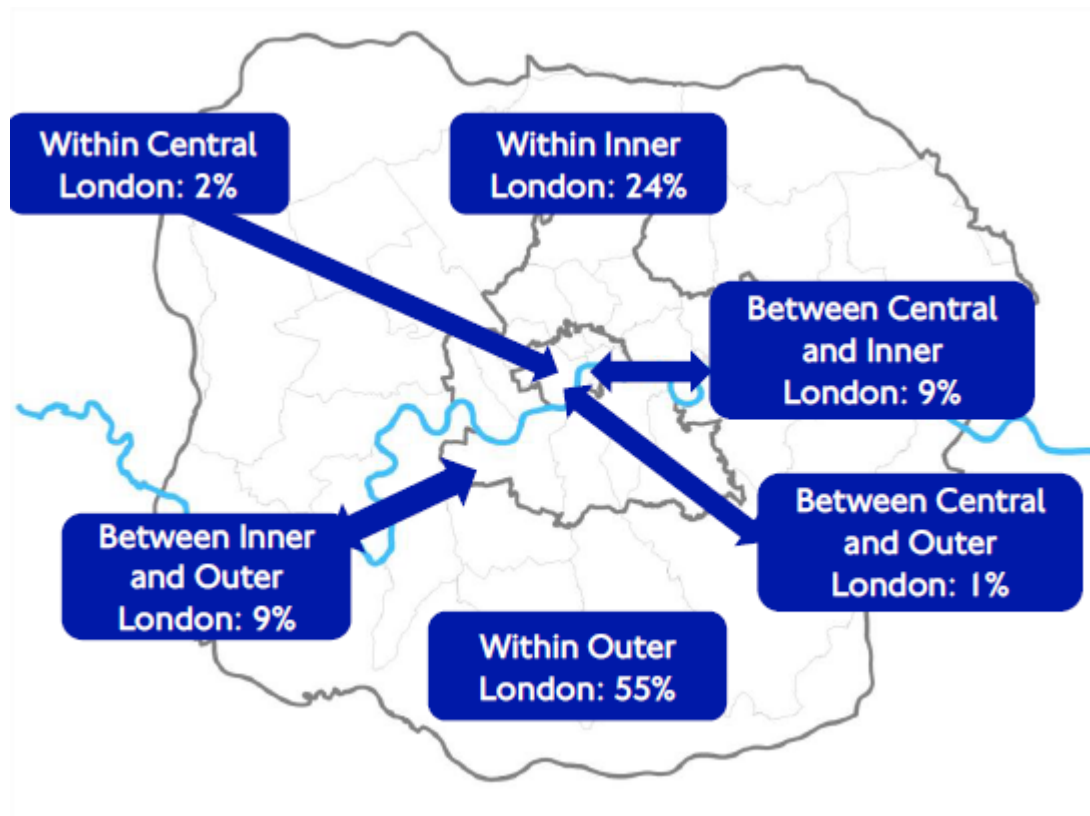
At present, only around six per cent of cyclable trips are actually being cycled, and more than half of the potentially cyclable trips are currently made by car. Of the 8.2 million potentially cyclable trips made every day, 6.5 million would take less than 20 minutes for most people to cycle.

¹ Travel in London Report 10 (2017) TfL <http://content.tfl.gov.uk/travel-in-london-report-10.pdf>

² Analysis of Cycling Potential 2016, TfL <http://content.tfl.gov.uk/analysis-of-cycling-potential-2016.pdf>

Together, the investment in cycling and adoption of the Healthy Streets Approach, along with the potential for cycling in London, demonstrate a clear need to increase the provision of cycle parking. This is required not only to enable mode shift, but also to support London's growth within the constraints presented by competition for space on the road network, as well as the need to better manage congestion to support London's economy. Figure 2 below shows the proportion of cyclable trips in each part of London.

Figure 2: Distribution of cyclable trips across London



Source: London Travel Demand Survey 2012/13-2014/15

1. Areas of higher cycle parking standards

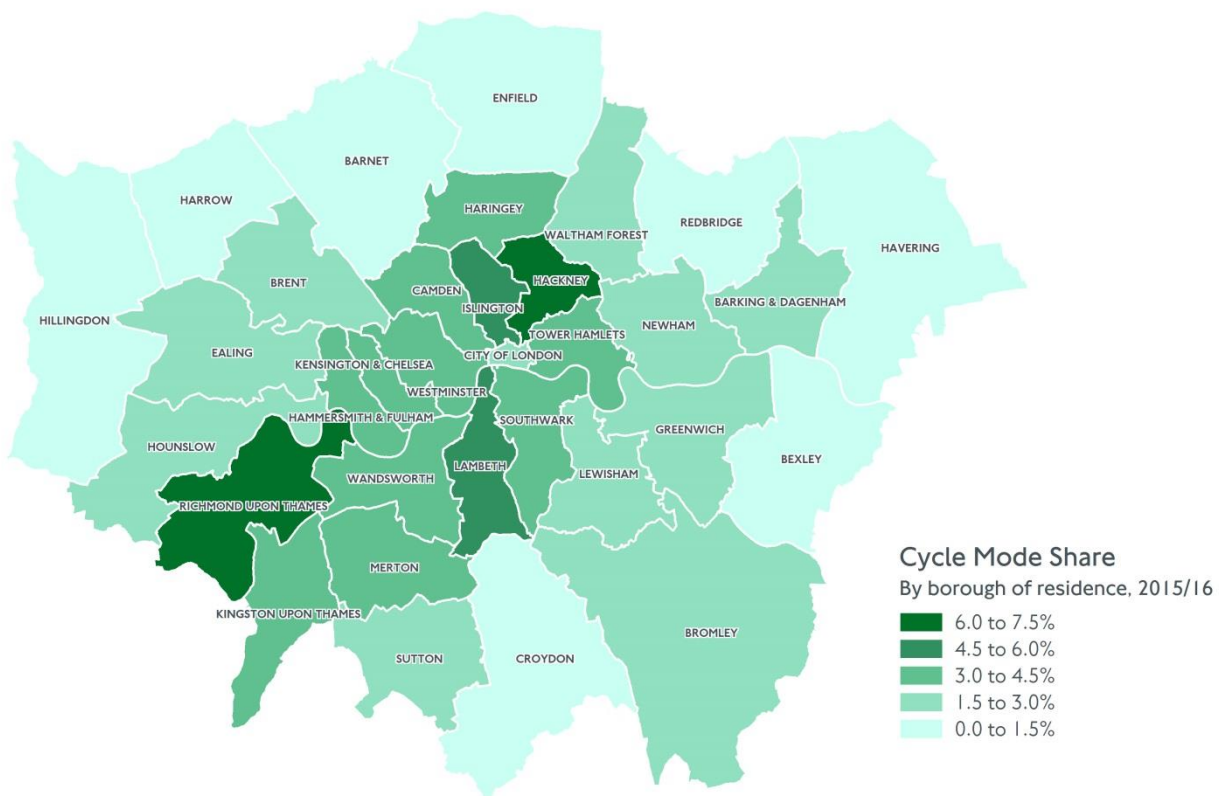
The current London Plan cycle parking standards have little geographical variation, the sole exception being the standards for B1 office parking.

For many land uses this is a sensible approach, as a large proportion of Londoners' trips, including trips made by those living in outer London, are over shorter distances and could potentially be cycled. It is important that the benefits of cycling are experienced across London.

However, variation in existing levels of cycling mean that in some areas, the existing standards no longer cater adequately for future growth – this is likely to become increasingly problematic as greater steps are taken to achieve the Mayor's ambitious mode share target, which requires a significant increase to the current levels of cycling.

Unlike many other spatial patterns in London, such as public transport use, which tends to increase nearer central London, cycling follows a pattern of being higher in both inner London and specific parts of outer London, especially the south west.

Figure 3: Cycle mode share by borough of residence



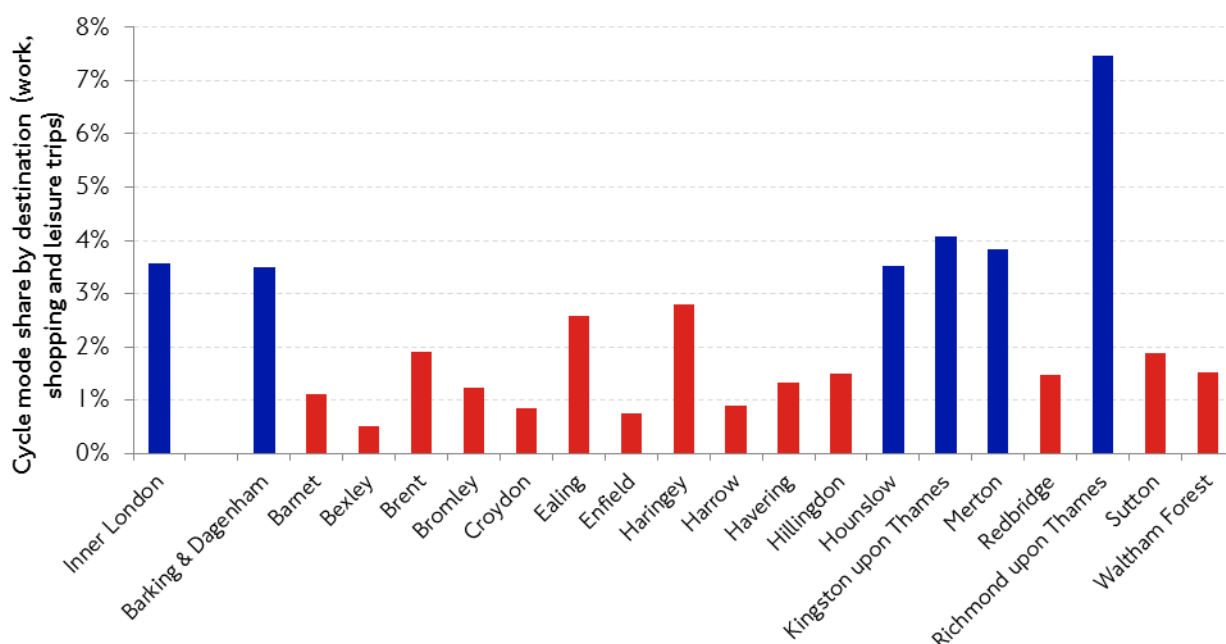
Source: London Travel Demand Survey, 2015/16

In particular, a lack of spatial variation means that in some areas, shopping and leisure trips – around half³ of Londoners’ trips – could be particularly poorly catered for in the future. Around three quarters of shopping trips and over half of leisure trips are cyclable⁴, and the attractiveness of cycling to these destinations depends in part on the short-stay standards for A-land uses.

While the standard for B1 offices already varies spatially, the pattern of cycling in outer London (particularly in the south west) raises the question of whether inner London is the best boundary for applying higher standards.

Given that the standards in question are for parking at destinations, it is important to estimate demand using the proportion of people arriving by cycle at destinations in an area, rather than just the proportion of trips of residents from that area that are made by cycle. Examined from this perspective, several outer London boroughs have cycle mode shares that are comparable to or higher than inner London mode shares (indeed, Richmond has a higher cycle mode share to destinations than anywhere else in London).

Figure 4: Cycle mode share by destination for commute, shopping and leisure trips only, outer London boroughs compared to inner London



Source: London Travel Demand Survey, 2012/13 to 2014/15

Taken as a whole, around 3.7 per cent of trips to workplaces and shopping and leisure destinations within inner London and the boroughs of Richmond upon Thames, Kingston upon Thames, Hounslow, Merton and Barking & Dagenham are cycled, compared to around 1.4 per cent for the rest of London⁵.

This means that for some areas of London the current standards, which are based on site surveys done in 2013, provide little room for further growth in cycling to be accommodated

³ London Travel Demand Survey, 2016/17

⁴ Analysis of Cycling Potential 2016, TfL <http://content.tfl.gov.uk/analysis-of-cycling-potential-2016.pdf>

⁵ London Travel Demand Survey, 2012/13-2014/15

(although still allowing for growth in other parts of London). For example, 1.5 per cent of trips to shopping destinations were made by cycle in the years immediately following these site surveys. The existing standards cater for this, plus an additional 50 per cent growth, meaning they can provide for a mode share of up to 2.3 per cent.

However, in inner London and the boroughs named above, the shopping mode share is already 2.1 per cent, almost at the level the existing standards can provide, leaving little room for further growth of cycling. In contrast, the mode share to shopping destinations in the rest of London is 0.8 per cent. The high existing mode share for trips to boroughs (shown in figure 4) means the existing standards do not sufficiently cater for growth in these boroughs.

Cycle mode share	Shopping	Leisure
Boroughs with higher cycle parking standards	2.1%	3.8%
Rest of London	0.8%	1.8%
All London	1.5%	3.1%
Mode share assuming 50% growth, catered for in existing standards	2.3%	4.6%
Additional mode share that could be catered for without areas of higher cycle parking standards	0.2%	0.8%

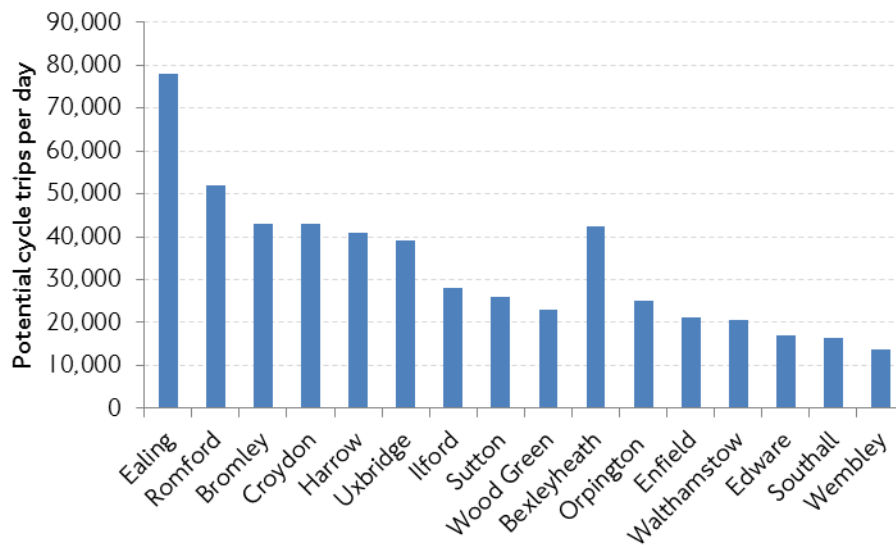
Given the higher existing mode share to workplaces, shopping and leisure destinations in the aforementioned boroughs, it is proposed that:

- The short-stay parking standards at A land uses should be twice as high in these areas
- The higher long-stay parking standard for B1 offices should also be twice as high the lower standard (for more detail see section 2)
- The standards for long-stay B1 offices are spatially consistent with the proposed approach to A-land uses

There are also specific areas with particularly high potential for increased cycling, where it is proposed that the higher standards should also apply. TfL's analysis of cycling potential⁶ identifies outer London metropolitan and major town centres as places with particular potential for trips – especially those made by car – to be made by cycle instead:

⁶ <http://content.tfl.gov.uk/analysis-of-cycling-potential-2016.pdf>

Figure 5: Potential cycle trips to select metropolitan and major town centres per day

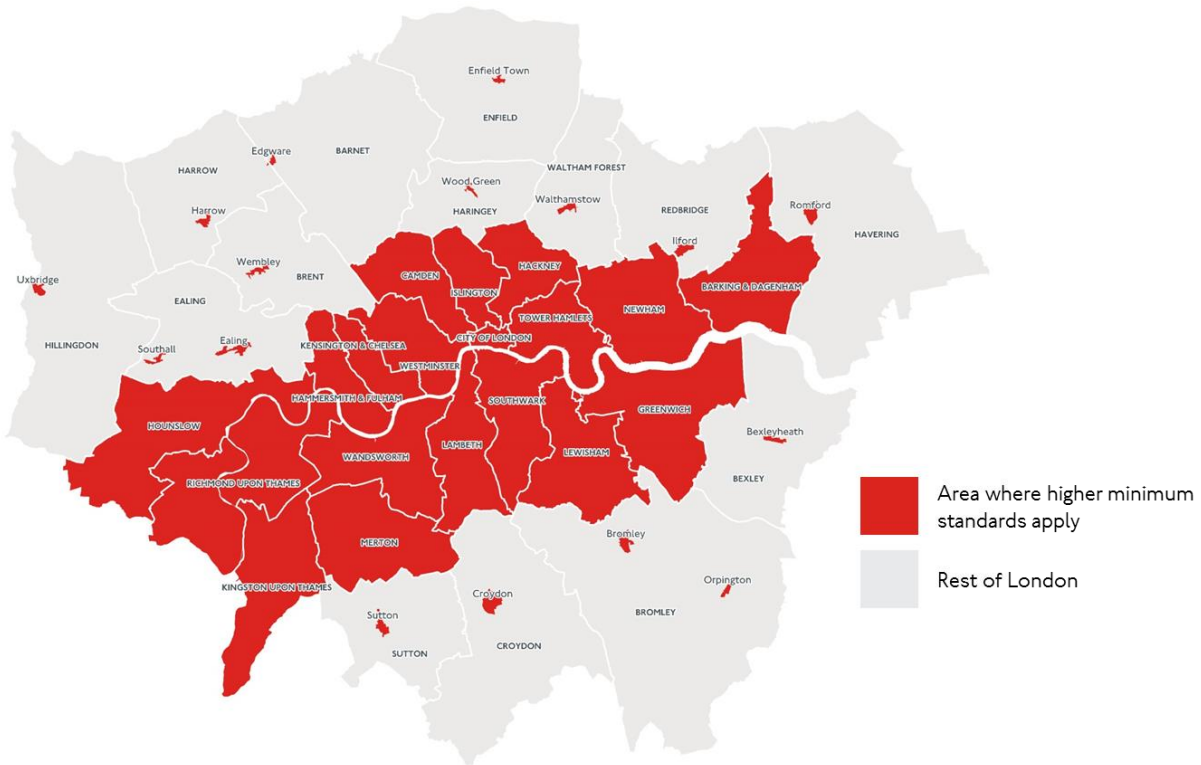


Source: TfL analysis of cycling potential, 2016

It is therefore proposed that the higher cycle parking standards also apply to these town centres to support greater levels of cycling and the Mayor’s sustainable mode share aim. This is seen as a necessary complementary measure to support wider London Plan and MTS goals including the redevelopment of town centres into higher density, mixed use places which are less car dominated and where space is reallocated to people walking and cycling.

Taken together, these boroughs and town centres form the area where it is proposed that higher minimum cycle parking standards will apply, as shown in Figure 6, although the Mayor strongly supports boroughs throughout London that wish to adopt higher standards through local plans, including in mini-Hollands and Liveable Neighbourhoods, and Opportunity Areas.

Figure 6: Area of higher minimum cycle parking standards



Source: TfL City Planning

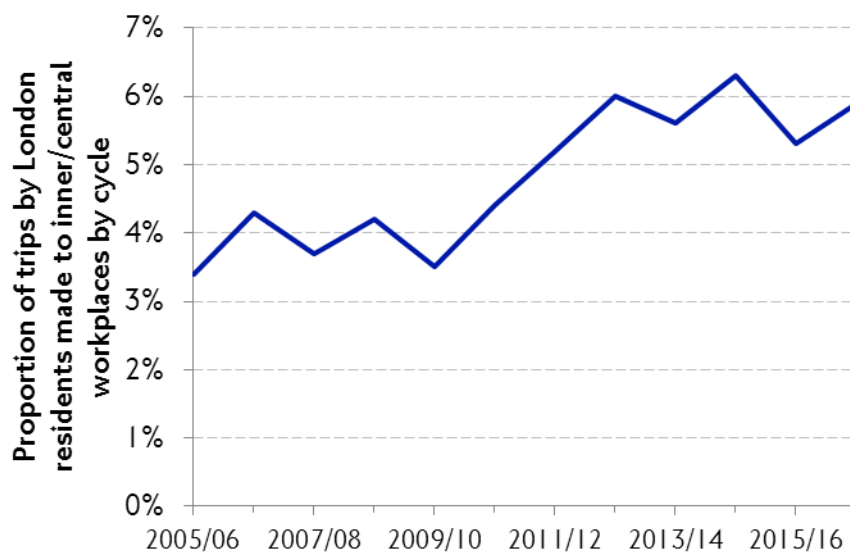
2. B1 office long-stay Cycle parking

A greater proportion of commuting trips in London are cycled than for other journey purposes and people are willing to cycle longer distances if they are travelling to work. Cycling to work also has particular advantages for both the individual and London as a whole – the repeated journeys mean those partaking in it enjoy the health benefits of regular active travel^{7 8}, while congestion on the road network and crowding on the public transport networks at the busiest times of day can be eased by people switching to cycling.

In particular, growth in outer London, especially around rail and Underground stations, will mean more people travelling into central London by rail in the morning peak. In inner London, the draft London Plan proposes to support higher densities partly through improved active travel facilities, including those for cycling. If more people who live within cyclable distances of central London can be encouraged to travel by bike, then the capacity of the rail and bus networks can be more effectively used, and crowding better managed.

Over the last decade or so, there has been significant growth in the number of Londoners working in central and inner London who cycle to work, particularly between 2009 and 2012.

Figure 7: Cycle mode share for trips by London residents to workplaces within inner/central London



Source: London Travel Demand Survey

The level of cycle parking needed at offices also depends on the employment density of the building, as well as the employees' cycle mode share. While it is not proposed that the assumption on employee density should change from that which underpins the current standards, in areas of high value offices, such as in central London, employers may have

⁷ Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers (2011) Department of Health

⁸ Draft Mayor's Transport Strategy challenges and opportunities report. (2017) Transport for London <http://content.tfl.gov.uk/mts-challenges-and-opportunities-report.pdf>

an incentive to increase densities (for instance, by adopting new working practices such as 'hot-desking'). This would require greater levels of cycle parking provision.

To help support the Mayor's mode share ambition, and to achieve the benefits set out above, it is proposed that the long-stay standard for B1 offices is increased in the areas set out in section 1.

This would require one long-stay space per 75 square metres of floor space, as was recommended by the 2013 review of evidence as part of the Further Alterations to the London Plan (FALP), but not fully implemented at the time. This is up from one per 90 square metres in central and inner London, and one per 150 square metres in the relevant parts of outer London. This equates to catering for a cycling mode share to offices of up to 19 per cent, compared to 16 per cent in the current standards, assuming an employee density of one employee per 12 square metres.

This reflects:

- The increasing trend of cycling to work
- The benefits to London from increasing cycling to work
- The Mayor's overall ambitions for cycling, including commitments to improve strategic cycle routes
- The need to improve the efficiency of London's streets for moving people
- Potentially changing work patterns/ increasing employment densities
- The long lifespan of office development and difficulty of retrofitting cycle parking meaning standards need to accommodate future growth

3. Residential Long-stay Cycle Parking

Owning a bike (or another type of cycle) allows people to make trips by cycle on a frequent, regular basis and to enjoy the health benefits this brings, in contrast to cycle hire schemes which cater more for impromptu, irregular cycle trips. Having the ability to securely park cycles at home is essential to enabling ownership and thus more Londoners cycling.

Currently, cycling levels tend to be higher in some places; however, shorter trips that could be easily cycled are part of Londoners' lives across nearly every part of the city: two thirds of Londoners' trips are less than 5 kilometres in length⁹. For this reason, as well as to ensure every Londoner can experience the health benefits of cycling, the cycle parking standards for residential development vary by unit size, rather than location, to allow every Londoner living in new developments to be able to own, and safely and conveniently store a cycle. This also supports the aims set out in the draft Mayor's Transport Strategy of 80 per cent of trips in London being made by foot, cycle or public transport, and for every Londoner to get 20 minutes of active travel every day.

The existing standards do this by requiring two long-stay spaces for each unit with two or more bedrooms, and one per studio or one bedroom unit. However, many one bedroom units have two people living in them. While some two person households will live in homes with more bedrooms (or fewer, in the case of a studio apartment), this is also true of one person households, and in London there are broadly similar numbers of one and two person households: around 30 per cent of each, with the remaining 40 per cent of households having 3 or more people¹⁰ (a household being defined as having shared facilities such as a kitchen).

To ensure that everyone living in new developments is able to own a bike, it is proposed that the standard for one bedroom residential dwellings is increased to 1.5 spaces per unit (i.e. three spaces for every two one-bedroom dwellings), reflecting the similar proportions of one and two person households in London. At aggregate level, this should lead to provision that is balanced rather than overprovision for dwellings with single occupants.

⁹ London Travel Demand Survey 2016/17

¹⁰ London Travel Demand Survey 2016/17

4. Student Accommodation Cycle Parking

Cycle parking standards for student accommodation were introduced in 2013, as part of the Early Minor Alterations to the London Plan (EMA). The original standard was justified on the basis of providing the same level of long stay parking as residential developments:

*'A minimum cycle parking standard for student accommodation has been included at a rate of 1 cycle parking space per 2 beds. Student accommodation is essentially a residential land use, for which minimum cycle parking standards exist in order to provide for residents bicycle storage requirements. The standard has been included in order to bring it more in line with other residential standards or 1 space per 1 or 2 bedroom dwellings.'*¹¹

However, when the residential standards were updated in 2013 as part of the Further Alterations to the London Plan (FALP), the standard for student accommodation was not kept in line with the residential standard. This also means that not every student living in new dedicated accommodation would be able to own a cycle, despite the fact that many students do not own a car, have a limited budget and live in inner London – meaning cycling could potentially bring them particular benefits and be suitable for the distances they are likely to travel.

It is therefore proposed that student accommodation is required to provide one long stay space per bedroom.

11 EMA Cycle Parking Standards Evidence Report, 2012:
<https://www.london.gov.uk/file/11295/download?token=0tD-BeBs>