

# **Early Minor Alterations to the London Plan 2011**

## **Cycle Parking Standards: Supporting Evidence Report**

**February 2012**



## **1. Purpose**

- 1.1 This report accompanies the revised Table 6.3 Cycle Parking Standards, and changes to the accompanying text (paras 6.35, 6.36, 6A.3A, 6A.11 and 6A.12) within the London Plan Early Minor Alterations, November 2011.
- 1.2 The report summarises the evidence used to support the following revisions to the London Plan 2011:
- Revision of cycle parking standards for B1 Business Offices from a requirement of 1 parking space for every 250m<sup>2</sup> Gross Floor Area (GFA), to 1 space for every 150m<sup>2</sup>.
  - Revision of cycle parking standards for health centres from a requirement of 1 parking space for every 50 staff, to 1 space for every 10 staff.
  - Inclusion of a cycle parking standard for student accommodation of 1 space for every 2 beds.
  - Reference to the requirement of an additional provision of cycle parking for staff and visitors for each development type.

## **2. Background**

- 2.1 The Mayor's Transport Strategy 2010 (MTS) details the Mayor's aim to achieve a five per cent modal share for cycling by 2026 (currently two per cent), which equates to an approximate increase in cycling levels of 400 per cent compared to the 2000/01 baseline.
- 2.2 Cycle parking is an essential part of a package of measures required to achieve this aim. The MTS makes reference to cycle parking improvements in policies 54 e), 9 b) and 57 which specifically mention working via the planning and development control process to ensure provision of cycle parking to an adequate standard. In addition, the MTS references the Mayor's aim to secure the delivery of an additional 66,000 cycle parking spaces across London. Cycle parking spaces at new developments form an important part of this additional cycle parking provision.
- 2.3 Failure to provide adequate levels of cycle parking can deter people who already cycle from making more cycle trips, and those considering cycling to take it up as a mode of transport, limiting the potential to increase cycling's

mode share in London<sup>1</sup>. Cycling and planning policy should therefore aim to remove this barrier for existing cyclists, and to offer enough additional capacity to encourage and provide for future increases in cycling.

- 2.4 A lack of safe and convenient places to leave bicycles is specifically cited as a reason for not commuting by bike in London. These findings suggest that additional parking at 'work end' and 'home end' could positively impact on the cycling levels of those considering cycling, but held back by a current lack of cycle parking facilities<sup>2</sup>. Of those considering cycling in London, 45% cite lack of cycle parking at home as a barrier and 52% lack of cycle parking at the destination<sup>3</sup>. Research carried out by TfL has found that 42% of cyclists report being dissatisfied with cycle parking facilities in London<sup>4</sup> and that dissatisfaction with facilities relates not only to the number of spaces, but the type of facility provided. Results from cycle parking occupancy surveys at office developments, demonstrate that the existing cycle parking standard does not provide adequate spaces to meet demand (see section 3.4).
- 2.5 The existing minimum cycle parking standards for new developments can be found within the July 2011 London Plan (Table 6.3. pg 207). These standards are based on those originally published by TfL in 2004. Since their publication, London's roads have seen an average increase in cycling trips of 5% per annum<sup>5</sup>, with a 150% increase in cycle trips on the Transport for London Road Network since 2001.
- 2.6 In summary, it is therefore important that the current cycle parking standards are reviewed in order to check they are representative of the current demand for cycle parking at different land uses in London, and provide enough capacity for encouraging further growth in cycling.

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<sup>1</sup> TfL is also tackling other barriers to cycling including improving cycle safety through delivery of the Cycle Safety Action Plan to reduce the number of collisions on London's roads (<http://www.tfl.gov.uk/corporate/projectsandschemes/15480.aspx>); providing additional cycling infrastructure; and working in partnership with London's policing agencies to tackle cycle theft and security concerns through the delivery of the Cycle Security Plan (<http://www.tfl.gov.uk/corporate/projectsandschemes/15704.aspx>). A summary of TfL's cycling activity can be found in the Mayor's Cycling Revolution documents (<http://www.tfl.gov.uk/roadusers/cycling/15459.aspx>)

<sup>2</sup> Exploring perceptions of the Cycle Highways proposition - Qualitative research report, February 2009

<sup>3</sup> TfL Cycling Behaviour Survey, October 2010

<sup>4</sup> TfL: Street Management Customer Satisfaction Survey 2009. Sample all Cyclists (n = 258) and Powered two wheeler riders (n=62)

<sup>5</sup> Travel in London report 3, p.55 cycle journey stages in London grew by 61% between 2001 and 2009

### **3. Revision of the cycle parking standard for B1 Business Offices**

3.1 The revision of the cycle parking standard for B1 Business Offices, from 1 parking space for every 250m<sup>2</sup> gross floor area to 1 space for every 150m<sup>2</sup>, is supported by the following pieces of evidence which are examined in more detail in following sections:

- Evidence from TfL cycle parking occupancy surveys (summer 2010).
- Evidence from the London Travel Demand Survey (LTDS<sup>6</sup>) on the proportion of cycling trips for work purposes.
- Benchmarking of standards against those of the London boroughs and other UK cities.

#### 3.2 Cycle parking occupancy surveys

3.2.1 In order to understand the current levels of demand for cycle parking at existing office developments in London, TfL conducted a series of cycle parking occupancy surveys. These surveys were carried out in June and July 2010 at 21 office developments of different sizes and a spread of locations across central, inner and outer London. The surveys captured:

- The number of cycle parking spaces provided.
- The number of bicycles parked, having been attached to the cycle parking provided.
- The number of bicycles 'informally parked' i.e. those bicycles parked within the immediate vicinity of the cycle parking but not attached to the formal stands e.g. cycles attached to a railing/other structure
- Qualitative issues including location of the parking, security arrangements, accessibility and condition of the parking.

3.2.2 The surveys were undertaken at the assumed peak times for cycle parking occupancy for office developments; on weekdays during mid morning or afternoon. Factors that might have affected the level of cycle parking occupancy (including weather conditions) were noted.

3.2.3 Information on the size of the development, or unit size, was collected. This information was required in order to assess the cycle parking occupancy

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<sup>6</sup> The LTDSs survey captures comprehensive information relating to how Londoners travel and includes approximately 19,000 households and 42,000 residents.

levels against the cycle parking standard and the area of the office development surveyed.

3.2.4 Analysis of parking provision and occupancy was carried out in two stages:

- **Provision:** Using the information collected on units and the number of formal cycle parking spaces provided, developments were assessed as to whether they met the current cycle parking standard (TfL 2004 Cycle parking standards/London Plan July 2011).
- **Occupancy:** A combined figure for the number of cycles parked in the spaces provided, and the number of cycles parked informally (i.e. not using the 'formal' racks) was calculated to determine total demand for cycle parking. Occupancy was then calculated against the *actual* cycle parking spaces provided and the level of cycle parking if it was provided to the *existing standard*.

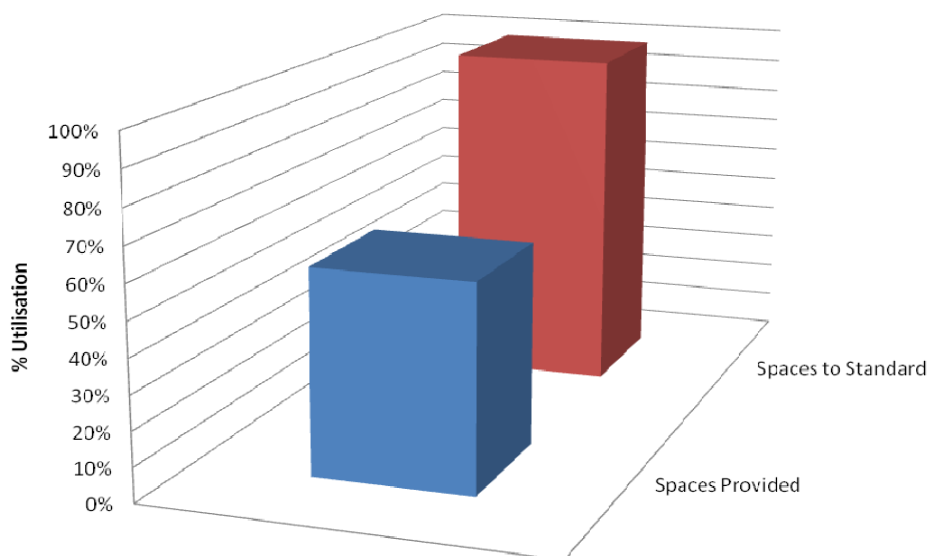
3.2.5 The analysis found that 70% of offices surveyed had provided cycle parking at or above the minimum number required by the cycle parking standards. One example was an office with a GFA of 37,886m<sup>2</sup> which was found to provide 210 spaces in the basement of the building. At a standard of 1/250m<sup>2</sup> the building was only required to provide 152 spaces. Had the offices surveyed provided parking to the minimum standards only, there would have been an occupancy rate of 99% based on all the cycles observed on the day of the surveys. The 16 offices with a cycle parking provision above the minimum standard had on average provided 40% more spaces than required.

Table 1: Summary of Office Cycle Parking Occupancy Surveys Results

No. of Surveys	Actual Spaces Provided		Spaces as per Standard*	
	% utilisation (formal parking)	% utilisation (+informal parking)	% utilisation (formal parking)	% utilisation (+informal parking)
21	51%	59%	89%	99%

\*TfL 2004 Cycle Parking Standards/London Plan July 2011

Figure 1: Summary of Office Cycle Parking Occupancy Survey Results – cycle parking spaces provided and cycle parking spaces per 1/250m2 standard.



■ Spaces Provided	59%
■ Spaces to Standard	99%

3.2.6 It is recommended by professional standards that cycle parking provision be reviewed once occupancy levels reach in excess of 80%. This is to allow room for future growth and to prevent overcrowded cycle parking acting as a barrier to people cycling.

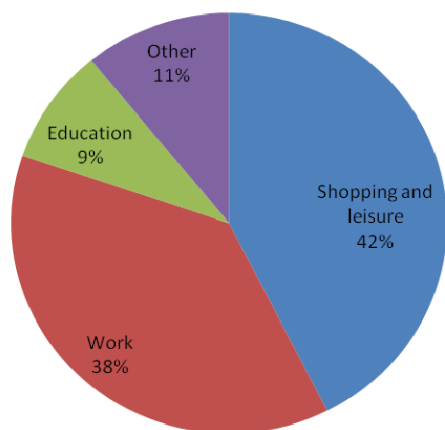
3.2.7 The surveys found that the level of office cycle parking offered by the current standard for offices of 1 space per 250m<sup>2</sup> to be insufficient for existing demand, or close to capacity. The analysis has therefore found that higher cycle parking standards are required for offices in order to meet existing demand and provide for future growth in the number of cyclists.

### 3.3 London Travel Demand Survey Data - Current cycle trips

3.3.1 Data from the LTDS demonstrates that travel for some trip purposes are more likely to be cycled than others. Of all cycle trips currently made in London, 38% are for work purposes. In 2010, 5.1% of all journeys to work within the Greater London Authority area were made by bike. As the population in London continues to grow, and as cycling in London continues to become

more popular, further growth in cycling to work, and for other journey purposes is expected

Figure 2: Current cycle trips by journey purpose



### 3.4 London Travel Demand Survey Data - potential and future cycling trips

3.4.1 As part of work to plan provision for making progress towards achieving the Mayor's aim of a 5% mode share for cycling by 2026, TfL conducted research into what the potential for cycling is across London. Trips currently made by mechanised modes were identified from LTDS and assessed as to whether they could potentially be cycled, based on a set of criteria about both the person and the trip. Certain trips were excluded, such as those over 8km in distance, travelers above or below a certain age/with a disability, people carrying loads, and trips that would take over 20% longer by bike.

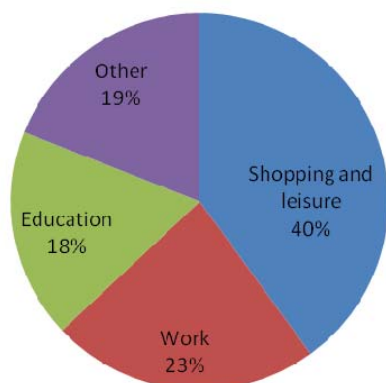
3.4.2 TfL also used its 'Cycle Market Segmentation' tool which provides a sophisticated method of understanding who cycles at present, and who is most amenable to cycling in future, as part of this research. More information can be found in the full report – please see footnote 8.

3.4.3 The analysis found that of all potentially cyclable trips which are currently made by mechanised modes, nearly a quarter are for work purposes<sup>7</sup>. This equates to over 900,000 work trips currently made by mechanised modes that *could* be cycled in the future

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<sup>7</sup> Analysis of Cycling Potential, TfL, December 2011  
[<http://www.tfl.gov.uk/assets/downloads/roadusers/Cycling/analysis-of-cycling-potential.pdf.pdf>]

Figure 3: Potentially cyclable trips by journey purpose



### 3.5 Barclay's Cycle Superhighways

3.5.1 TfL's cycling programme is providing infrastructure to provide for growth in cycling through Barclays Cycle Hire and Barclays Cycle Superhighways. Ninety five per cent of those travelling on Cycle Superhighways routes 2 and 8 stated they did so to travel to or from work<sup>8</sup>.

### 3.6 Conclusion

3.6.1 It is considered appropriate to revise the cycle parking standard for B1 business offices to a level of 1/150m<sup>2</sup>. This represents a 60% increase in the minimum number of cycle parking spaces at an office development in comparison to the standard of 1/250m<sup>2</sup>. Applying this revised standard to the total cycle parking demand at the 21 offices surveyed, would equate to an average occupancy rate of 59%.

3.6.2 The new standard has therefore been shown to be acceptable, as (a) it allows for continued growth in cycling, and (b) it is achievable in that a number of offices already provide cycle parking at or around the levels of the revised standards.

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<sup>8</sup> Barclays Cycle Superhighways Scheme User Survey: Routes 2 and 8, TfL, 2011



#### **4. Revision of cycle parking standards for health centres**

- 4.1 TfL has analysed LTDS data relating to journeys to work categorised by occupation. The requirement for health centres was previously 1 space per 50 staff; ten times lower than the requirement for hospitals. The TfL analysis found that those people working in occupations under the heading of 'Health Professionals' have a mode share for cycling to work of 11%<sup>9</sup>.
- 4.2 This evidence supports the revision of cycle parking standards for health centres from 1 space for every 50 staff to 1 space for every 10 staff. It has been changed in order to bring it in line with workplaces with similar occupational classes, such as hospitals, and to reflect the high mode share of cycling to work amongst these professionals.

#### **5. Inclusion of cycle parking standards for student accommodation**

- 5.1 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.
- 5.2 A survey of cycle parking provision and occupancy rates at student accommodation was undertaken by TfL in January 2012<sup>10</sup>. The main findings were:
- 85% of the sites surveyed provided cycle parking for use exclusively by student residents.
  - Levels of cycle parking provision were found to be highly variable from 1 space for each student to 1 per 29 students. The type and quality of cycle parking was also found to be highly variable from open air ground fixings, to secure cycle sheds with individual key access for the students.
  - Nearly a quarter (23%) of the sample had cycle parking at, over, or close to capacity (80%+ occupancy levels).

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<sup>9</sup> LTDS data output for mode of travel to work for London residents of working age in employment

<sup>10</sup> Sample of 35 student halls both university and privately owned and managed, distributed across London.

- It should be noted that it was not possible to ascertain the total demand for cycle parking at student accommodation. This was due to 17% of the sample having occupancy rates of over 90%, which may suggest some suppressed demand for parking. Furthermore, variation in the quality and security of the cycle parking provided may affect the demand/willingness to store cycles.

5.3 The cycle parking standard for student accommodation has therefore been included to bring in line with existing residential standards, to ensure that demand is not suppressed, and to provide for the untapped potential for cycling amongst this age group and demographic.

## 6. Benchmarking

6.1 A benchmarking exercise was undertaken to review cycle parking standards from boroughs across different areas of London and other major UK cities. The borough examples were chosen in order to compare a range of current cycle parking standards across inner and outer London, with differing mode shares for cycling. Not all of the boroughs were able to be compared as they either hadn't produced their own cycle parking standards, or the way the standards were presented were not directly comparable to the cycle parking standards within the London Plan. For example, their minimum standards only apply after a threshold of a certain number of square meters. Large UK cities were chosen to provide a city wide comparison to London

6.2 The comparison reveals some variability across the standards, with some boroughs having adopted higher cycle parking standards than those within the July 2011 London plan and those proposed within the early minor alterations. There is also variation with regards to the strength of the standards and the mode share for the borough, for example both LB Hammersmith and Fulham and LB Hillingdon have adopted high cycle parking standards despite having differing mode shares of 4% and 1% respectively.

6.3 The revised standards of 1/150m<sup>2</sup> for business offices, 1/10 for members of staff, and 1 per two beds for student accommodation are generally in line with those standards set by different London boroughs located in different areas of London and other UK cities, when considering London's current mode share for cycling of 2%, and aim to reach a 5% mode share.

Table 2: Summary of London and UK city cycle parking standards

City / Borough	Mode Share	Business Offices	Health Centres	Student accommodation
City of Westminster (inner)	2%	1/125m <sup>2</sup> (min of 2 spaces)	1 space per 5 staff plus 1 space per 5 staff for visitors	1 space per 20 students
LB Islington (inner)	3%	1/250m <sup>2</sup>	1 space per 50 staff and 1 space per 5 staff for visitors	1 space per 2 students
LB Hammersmith and Fulham (inner)	4%	1/125m <sup>2</sup> (min of 2 spaces)	1 space per 5 staff plus 1 space per 5 staff for visitors	1 space per 2 students
Wandsworth (inner)	3%	1/250m <sup>2</sup>	1 space per 20 staff plus 1 space per 5 seats for visitors	1 space per 2 students
LB Lewisham (inner)	2%	1/125m <sup>2</sup>	1 space per 5 staff	1 space per 2 students
LB Haringey (outer)	2%	2/500m <sup>2</sup>	1 space per practitioner	N/A
LB Barnet (outer)	1%	1/300m <sup>2</sup>	N/A	To be assessed individually
LB Bromley (outer)	1%	1/10 employees	N/A	N/A
RB Kensington of Chelsea (inner)	3%	1/250m <sup>2</sup>	1 space per 50 staff	1 space per 2 students
RB Kingston upon Thames (outer)	2%	1/125m <sup>2</sup>	1 space per 5 staff plus 1 space per 5 staff for visitors	1 space per 2 students
LB Croydon (outer)	1%	1/125m <sup>2</sup>	N/A	N/A
LB Bexley (outer)	1%	1/150m <sup>2</sup>	1/500m <sup>2</sup>	N/A
LB Enfield (outer)	1%	1/450m <sup>2</sup>	1/300m <sup>2</sup>	1 space per 20 beds
LB Hounslow (outer)	3%	1/700m <sup>2</sup>	1/350m <sup>2</sup>	1/300m <sup>2</sup>
LB Hillingdon (outer)	1%	1/75m <sup>2</sup>	2 spaces per consulting room	1 space for each student

Greater Manchester	2%	1/400m <sup>2</sup> (min of 2 spaces)	1 space per 10 staff	N/A
Liverpool	1%	1/500m <sup>2</sup>	1 space per 8 staff and 1 space per consulting room	1 space per 3 beds
Birmingham	1.7%	1/250m <sup>2</sup> for developments under 1000m <sup>2</sup> 1/400 for those over	1 space per consulting room	1 space per 4 beds

## 7. Reference to the needs of both staff and visitors for each development

7.1 Nearly all land uses will experience travel demand from a variety of different users of the development, including staff, residents and visitors (visitors should be considered to also include retail customers and recipients of any services being offered). Different users will have differing requirements. For example, staff and residents will most likely require cycle parking suitable for longer stay i.e. a shelter and a greater level of security. Sheffield stands close to the destination entrance may provide for a shorter stay, and more convenient parking for the visitor.

7.2 London Plan July 2011 Policy 6.9 Cycling states that:

*‘Developments should: provide secure, integrated and accessible cycle parking facilities in line with the minimum standards set out in Table 6.3.’*

In addition, The Early Amendments to the London Plan July 2011 propose the following amendments to paragraph 6.35 and addition of paragraph 6.11A:

*6.35: ‘New developments should provide cycling parking and cycle changing facilities to encourage more cycling. Planning briefs and masterplans should include principles to encourage a high quality, connected environment for cyclists. Developments will need to address the needs of both long stay (staff, residents) and short stay (visitor) cyclists’*

*6.11A Cycle parking provided for staff should be suitable for long stay parking, particularly in terms of location, security and protection from the elements (see The London Cycle Design Standards (TfL 2005).*

7.4 A number of quality related issues including location, security and facilities such as lockers, showers and changing facilities are also crucial elements in supporting the continued increase in levels of cycling. It is important to provide for short and long stay parking to reflect the importance of quality aspects of

cycle parking, and the needs of different users, TfL has produced Workplace Cycle Parking Guidance<sup>11</sup> to inform the type of cycle parking and facilities appropriate for workplaces to serve employees and office land uses. TfL intend to provide an update to the London Cycle Design Standards<sup>12</sup> in 2012, which will include further detail on cycle parking issues including type of parking, design, location, access provision, and provision of complementary facilities such as lockers and showers for different users and land use types.

- 7.5 In summary, it is important that cycle parking provision is adequate in terms of design, quantity, and quality for different users of the development. The addition of references to the need for cycle parking for both staff and visitors (within the minimum cycle parking standards Table 6.3) also supports the London Plan Policy 6.9, and associated policy statements.

## **8. Catering for continued growth in cycling**

- 8.1 As progress continues towards the Mayor's aim for 5% of all trips in London to be undertaken by bicycle by 2026, further alterations to cycle parking standards may be necessary to ensure that a lack of parking does not inhibit future cycling growth. TfL is currently undertaking research to assess the case for potential revised standards at land-use classes not covered in the London Plan Early Minor Alterations, published in November 2011. Should there be a strong case for alterations to other land-use classes, it is proposed that these are consulted upon in future alterations to the London Plan.

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<sup>11</sup> <http://www.tfl.gov.uk/assets/downloads/businessandpartners/Workplace-Cycle-Parking-Guide.pdf>

<sup>12</sup> <http://www.tfl.gov.uk/businessandpartners/publications/2766.aspx>