LONDON PLAN 2015 IMPLEMENTATION FRAMEWORK

MAYOR OF LONDON

MAY 2015

OUTER LONDON COMMISSION FOURTH REPORT (PART ONE)



COPYRIGHT

GREATER LONDON AUTHORITY May 2015

Published by Greater London Authority City Hall The Queen's Walk More London London SE1 2AA www.london.gov.uk enquiries 020 7983 4100 minicom 020 7983 4458

ISBN 978-1-84781-602-3

Crown Copyright All rights reserved. GLA 10032216 (2015)

All photos copyright GLA & TfL

Copies of this document are available from www.london.gov.uk/olc

The Commision would like to thank those who contributed to this document by attending the various meetings held in outer London as well as providing representations on the issues.

OUTER LONDON COMMISSION FOURTH REPORT (PART ONE)

MAY 2015

CONTENTS

INTRODUCTION	1
BACKGROUND	5
CURRENT POLICY AND CONTEXT	11
3.1 Current London Plan Policy 3.2 Role of Residential Parking Standards	12 14
3.3 Context	14
3.4 Typologies of places in outer London	15
EVIDENCE REVIEW	19
4.1 Car ownership and car use	20
4.2 Wider network issues	27
4.3 Parking and Viability	34
4.4 Parking and Land Implications	36
4.5 How is parking delivered	43
4.6 Other mechanisms to manage parking provision/impacts	44
CONCLUSIONS AND RECOMMENDATIONS	47
5.1 Conclusion	48
5.2 Recommendations	48
APPENDICES	53
Appendix 1	54
Appendix 2	55
Appendix 3	56

FOREWORD

Dear Mayor

Fourth Report of the Outer London Commission

At the end of last year, you asked the Outer London Commission to provide advice on residential parking policy in parts of outer London to address the concerns of government and others that the use of maximum standards there could lead to a 'vicious cycle of clogged up streets' leaving 'motorists to run a gauntlet of congestion, unfair fines and restrictions'.

Between February and March 2015, the Outer London Commission met in public in each of the four outer London sub regions to seek the views of outer London boroughs, businesses and stakeholders on how best to address the Mayor's request. Drawing on the discussion arising from these meetings, submissions from stakeholders and evidence from TfL and other research, the Commission have provided recommendations to the Mayor to consider as part of his Minor Alteration to the London Plan. The Commission's report and recommendations are the culmination of a process of engagement and debate over the past 6 months.

In submitting the report, the Commission would like to thank the boroughs, businesses, voluntary groups, and individuals who have made representations to it. Their contributions have been immensely important to the work of the Commission.

Yours faithfully,

William McKee CBE Chair of the Mayor's Outer London Commission





INTRODUCTION

- 1.1 Following concerns raised on a number of occasions by the Government that the use of maximum parking standards leads to a 'vicious cycle of clogged up streets' leaving 'motorists to run a gauntlet of congestion, unfair fines and restrictions', the Mayor made a commitment in his 2015 London Plan that he would bring forward an early review of residential parking standards in advance of changes to national policy. Whilst the Mayor considers there are sound reasons for retaining residential maximum parking standards in central and inner London, he recognises the opportunity of adopting a more flexible approach in parts of outer London where public transport accessibility levels are lower.
- 1.2 Therefore, as part of the evidence base to support a potential minor alteration to the plan, he asked the Outer London Commission to reconvene in order to provide advice on a range of issues associated with residential parking standards in these locations, particularly the use of maximum standards.
- 1.3 The Commission met in public over February and March 2015 to debate the extent to which the Government's concerns resonate with outer London boroughs and others and how the London Plan might therefore respond to these issues.
- 1.4 In order to inform the debate, the Commission set a series of questions for participants to consider. These were:
 - 1 The role of residential parking and what is 'the problem' that needs to be addressed.

- How maximum residential parking standards affect parking levels, car ownership and car use
- The impact on congestion and the demand for destination parking
- 2 Policy options ... What should the priorities be.
- 3 How car parking standards affect appetite for and economics of development.
- 4 Whether practical guidance is needed to improve residential parking implementation.
- What other mechanisms could be used to manage parking provision/impacts.
- 5 How far do parking levels affect issues such as density and acceptability of development/its impacts.
- 6 Whether it is it possible to develop a 'typology' of places.
- 1.5 A full list of the questions is set out in Appendix 2.
- 1.6 This report sets out the background to the debate, the current policy and context, and provides a review of the evidence and discussion of the issues debated, concluding with recommendations for the Mayor to consider as part of a Minor Alteration to the London Plan.

Overspill issues





BACKGROUND

2.1 Since 2011, the Coalition Government has repeatedly raised concerns about 'ending the war on the motorist'. It is particularly concerned over what it sees as 'a vicious cycle of clogged up streets' and argues that policy currently 'constrains the provision of sufficient parking spaces in new developments to meet market demand', resulting in more cars "overspilling" into surrounding streets, more municipal parking restrictions and more parking tickets¹.

"Whitehall's addiction to

micromanagement has created a parking nightmare with stressed out drivers running a gauntlet of unfair fines, soaring charges and a total lack of residential parking. The result is our pavements and verges crammed with cars on kerbs endangering drivers, cyclists and pedestrians, increased public resentment of over-zealous parking wardens and escalating charges and fines."

The Rt Hon Eric Pickles, MP January 2011²

"Limiting the number of drives and garages in new homes doesn't make cars disappear - it just clogs residential roads with parked cars and makes drivers cruise the streets hunting for a precious parking space. That's why I'm pleased today to get rid of another daft, interfering rule that has only succeeded in annoying people." The Rt Hon Greg Clark, MP January 2011³

2.2 Such concerns were taken up formally by the Housing Minister in January 2011:

"National planning policy requires local authorities to set limits for off street parking in residential development. However, evidence suggests that forcing local authorities to adopt parking limits has not led to housing developments which meet the pattern of car ownership in many communities. In new developments these restrictions can lead to significant levels of on-street parking causing congestion and danger to pedestrians.

I have today removed the requirement for local authorities to set maximum parking limits for residential development in their area, and instead have given them the freedom to decide what level of parking is right based on the needs of their local community. In doing so they should have regard to the need to promote sustainable transport outcomes."

The Rt Hon Greg Clark, MP January 2011

2.3 During the preparation of the Further Alterations to the London Plan (FALP), the Outer London Commission provided initial recommendations on residential car parking policy to reflect these concerns. A new table was introduced to Policy 6.13 which emphasised the flexibility which could be used in the application of the existing standards making more explicit reference to Public Transport Accessibility

¹ Ministerial Statement, 26th August 2014, The Rt Hon Eric Pickles MP

 $^{^{\}rm 2}$ Ministerial Statement, $3^{\rm rd}$ January 2011, The Rt Hon Eric Pickles MP

 $^{^{\}rm 3}$ Ministerial Statement, $3^{\rm rd}$ January 2011, The Rt Hon Greg Clark MP

Levels (PTALs). However, concerns were still raised by DCLG Ministers that the Draft FALP was not in conformity with National Planning Policy Framework (NPPF) and associated guidance, and in particular because of what was perceived as blanket application of maximum parking standards.

I am concerned that the approach . . . set out in the [FALP] at present does not reflect national policy. The government abolished national planning policy guidance that required councils to limit car parking provision for new residential developments in 2011...

The government believes that local authorities are best placed to ensure parking provision is appropriate to the needs of the proposed development. We would expect the London Plan to reflect this.⁴

2.4 Subsequently, Brandon Lewis MP further wrote to the FALP EiP Inspector.

Should [local authorities] wish to set their own standards, they should be having regards to advice in the [NPPF]. When Ministers abolished maximum parking standards in national policy it was with a clear view to encourage the provision of more parking spaces to meet local need⁵.

2.5 Shortly after the close of the FALP EiP, in September 2014, DCLG undertook a technical consultation on planning which included a question (Q2.16) on the role of Maximum Parking Standards, which the Mayor formally responded to:

Question 2.16: Do you agree that parking policy should be strengthened to tackle on-street parking problems by restricting powers to set maximum parking standards?⁶

2.6 In the Mayor's response to the Government's technical consultation (see link below) he argued that the ability to set maximum parking standards is a fundamental element of good integrated transport and land use planning both in the UK and internationally; however he recognised the importance of allowing flexibility to address locally specify circumstances, by ensuring that a reasonable level of parking can be provided in areas less well served by public transport and where there is a greater reliance on the use of a car.

> http://www.london.gov.uk/sites/ default/files/Mayor%27s%20 response%20form%20DCLG%20 Technical%20Consultation%20on%20 Planning%20250914.pdf

2.7 In fact, the Inspector's report of the Further Alterations to the London Plan found that the Mayor's approach to parking was 'flexible and strikes an appropriate balance' between restraint in areas of good public transport and local standards where appropriate⁷. Nevertheless, government remained particularly concerned over the application of parking policy, particularly in parts of outer London with low public transport

 ⁴ Nick Boles, Parliamentary Under Secretary of State (Planning), Letter to Mr Johnson, 11 April 2014
 ⁵ Brandon Lewis MP, Minister of State for Housing and Planning, Letter to Mr Thickett, 10 September 2014

⁶ DCLG, Technical Consultation on Planning, September 2014

⁷ Inspector Report, Further Alterations to the London Plan December 2014

accessibility⁸. The Mayor therefore undertook to address these concerns through an early review of the London Plan in advance of the full review of the London Plan⁹.

2.8 More recently, in a Ministerial Policy
 Statement, issued on the 25th March
 2015, the Rt Hon Eric Pickles MP further
 reiterated the Government's view that:

Following a consultation, we are now amending national planning policy to further support the provision of car parking spaces. Parking standards are covered in paragraph 39 of the National Planning Policy Framework. The following text now needs to be read alongside that paragraph: "Local planning authorities should only impose local parking standards for residential and non-residential development where there is clear and compelling justification that it is necessary to manage their local road network."

 ⁸ Brandon Lewis MP, Minister of State for Housing and Planning, Letter to Mr Johnson, 27th January 2015
 ⁹ The London Plan March 2015, para 0.16H



CHAPTER 3

CURRENT POLICY AND CONTEXT

3.1 CURRENT LONDON PLAN POLICY

- 3.1.1 As part of the preparations for the Further Alterations to the London Plan, the Outer London Commission provided advice and recommendations to the Mayor to provide greater flexibility in London Plan parking policy to enable boroughs to take account of local circumstances when seeking or determining appropriate parking standards for both new residential and commercial developments. The Commission's recommendations helped to inform changes to FALP. It was recommended that maximum standards were retained but a new table which emphasized the flexibility available in existing standards and their application with reflection to Public Transport Accessibility Levels (PTAL) was added.
- 3.1.2 During the recent Outer London sub regional meetings there has been considerable debate over how flexible the existing London Plan residential standards are and if and how they should be made more flexible. A number of outer London boroughs, especially those which also have 'inner characteristics', felt that it is important to retain the overall pan-London framework of parking standards and that the changes made to FALP provide sufficient flexibility to address different circumstances within outer London. Among these, the case was made that while most developments comply with the standards, if there is sufficient justification for the need for more parking in specific circumstances, it is possible to exceed those standards. One example of this is in the London Borough of

	PTAL 0 to 1		PTAL 2 to 4		PTAL 5 to 6	
Suburban	150–200 hr/ha	Parking provision	150-250 hr/ha	Parking provision	200-350 hr/ha	Parking provision
3.8-4.6 hr/unit	35-55 u/ha		35-65 u/ha		45-90 u/ha	
3.1-3.7 hr/unit	40-65 u/ha	Up to 2 spaces per unit	40-80 u/ha	Up to 1.5 spaces per unit	55-115 u/ha	Up to one space per unit
2.7-3.0 hr/unit	50-75 u/ha		50-95 u/ha		70-130 u/ha	
Urban	150–250 hr/ha		200-450 hr/ha		200–700 hr/ha	
3.8 –4.6 hr/unit	35-65 u/ha		45-120 u/ha	Up to 1.5 spaces per unit	45-185 u/ha	Up to one space per unit
3.1-3.7 hr/unit	40-80 u/ha	Up to 1.5 spaces per unit	55-145 u/ha		55-225 u/ha	
2.7-3.0 hr/unit	50-95 u/ha		70-170 u/ha	Up to one space per unit	70-260 u/ha	
Central	150–300 hr/ha		300–650 hr/ha		650–1100 hr/ha	
3.8-4.6 hr/unit	35-80 u/ha	Up to 1.5 spaces per unit	65-170 u/ha		140-290 u/ha	Up to one space per unit
3.1-3.7 hr/unit	40-100 u/ha		80-210 u/ha	Up to one space per unit	175-355 u/ha	
2.7-3.0 hr/unit	50-110 u/hr	Up to one space per unit	100-240 u/ha		215-405 u/ha	

Figure 1 London Plan Table 6.2 Parking for Residential Standard

Maximum residential parking standards						
Number of Beds	4 or more	3	1-2			
	Up to 2 - 1.5 per unit	Up to 1.5 - 1 per unit	Less than 0-1 per unit			

Notes:

All developments in areas of good public transport accessibility should aim for significantly less than 1 space per unit, **and towards zero / car-free in the areas of highest accessibility**

Adequate parking spaces for disabled people must be provided preferably on-site²¹⁷

20 per cent of all spaces must be for electric vehicles with an additional 20 per cent passive provision for electric vehicles in the future.

Source: The London Plan 2015

Croydon; the development at Cane Hill was approved to exceed London Plan standards to c2.5 spaces per unit (46% greater than the maximum standards). This was justified by the relative inaccessibility of the development to public transport and amenities¹⁰. In fact, in terms of compliance, 22% of schemes in outer London were not compliant with the current London Plan standards in that they exceeded the existing standards¹¹, highlighting the current flexibility. There is also currently some scope for boroughs to set their own standards if they so wish. For example the London Borough of Bromley, who have more lenient standards in their LDF and are about to experiment with a non-PTAL based system for understanding connectivity levels at a local level¹².

3.1.3 Another group of outer London boroughs, however, including Bromley, Kingston, Hillingdon and Bexley, felt that the current approach to the applications of the standards still does not allow the flexibility they desire to deal with local circumstances. In particular, one borough stressed that it can find itself in discussions with developers in areas of low PTAL where there is a difference of opinion with TfL on how that 'flexibility' should be applied. Perceptually, the general pan London restraint based approach can sometimes influence their negotiations in trying to address the distinct circumstances of some parts

of outer London¹³. Some boroughs therefore feel that it is important that the London Plan is more explicit in allowing boroughs, in certain clearly prescribed circumstances, to set their own standards in order for them to reflect the differences of circumstance.

¹³ OLC sub regional meeting Croydon 10.03.15

¹⁰ TfL 2015 Presentation for the OLC sub regional meetings

¹¹ London Development Database 2004/5-2013/14

 $^{^{\}rm 12}$ OLC sub regional meeting Croydon 10.03.15

3.2 ROLE OF RESIDENTIAL PARKING STANDARDS

- 3.2.1 The provision of reliable and efficient transport, with the capacity and connectivity to accommodate London's growth sustainably, is seen as a key factor to the continued success of London and its economy. Population growth will bring greater demand for travel by all modes, including by car, and some new residents will want to own and use cars. Consequently, new developments will need to provide appropriate levels of parking.
- 3.2.2 Parking policy has long been accepted as having a key role to play in traffic management. The Department for Transport 2008 Report stated that successful parking policy aims to reduce the use of the car and aims to encourage and support the use of other more sustainable and environmentally friendly forms of transport. This in turn will address congestion thereby reducing emissions of carbon and other pollutants¹⁴. Successful parking policy can also help to ensure that developments are built at higher more sustainable densities, reducing the pressure for urban sprawl, and in tandem make public transport easier to provide. In addition, effective parking policy can also lead to better, more inclusive urban design with more efficient use of space for other purposes such as amenity space¹⁵.
- 3.2.3 The NPPF highlights the importance of the provision of sufficient car parking

spaces to meet demand, identifying the accessibility of the development; the type, mix and use of development; the availability of and opportunities for public transport; local car ownership levels; and an overall need to reduce the use of high-emission vehicles as issues to be considered in setting local parking standards¹⁶. Ensuring the appropriate levels of parking will therefore help to manage issues of on street parking, such as overspill and inappropriate parking which may affect safety, accessibility and congestion.

3.2.4 Some developers said that clear parking standards are helpful for determining the viability and deliverability of development. For instance, explicit standards mean they can be taken into account when estimating the possible value of return on a piece of land when bidding for it. This can therefore also inform assumptions around density and layout rather than being used as a bargaining tool in negotiations later on¹⁷,¹⁸.

3.3 CONTEXT

3.3.1 By 2050 London's population is expected to exceed 11 million people, around 3 million more than today and with nearly 1.45 million additional jobs¹⁹. The growth of London will lead to more journeys being made in the Capital every day, with more than 27 million journeys expected to be made across the network on a daily

¹⁴ Department for Transport (2008) Research into the Use and Effectiveness of Maximum Parking Standards. Derby: Atkins.

¹⁵ TfL (2015) Desktop review of the role of parking and impacts of increasing residential parking provision

¹⁶ NPPF, paragraph 39, Ministerial Statement 25th March 2015

¹⁷ OLC sub regional meeting Croydon 10.03.15

¹⁸ Structure Interviews with Developers

¹⁹ London 2050 Infrastructure Plan

basis by 2031²⁰. Against this whilst uptake of, and demand for, public transport has increased over the past 15 years, road traffic levels have been falling in London, particularly in inner London²¹. Department for Transport data shows that road traffic in London has been falling over the last decade, with vehicle kilometres in the latest year (2013) 9.8 per cent lower than in 2003, and at their lowest level since 1993²². However, it should be noted that a reduction in traffic levels does not necessarily lead to a reduction in congestion as road space could be used for other purposes, for example bus and cycle lanes, loading bays and public realm improvements.

3.3.2 Average car ownership levels in London are much lower than the rest of the country, yet the importance of access by car varies within London. In particular, it is of much greater importance in outer London, for example, 38 per cent of residents in outer London travel to work by car (and 42 per cent by public transport), compared to 14 per cent travelling by car (and 57 per cent by public transport) in inner London and 62 per cent travelling by car (and 13 per cent by public transport) in the south east.²³ In outer London poorer access to public transport, often longer distances to travel and more complex trip combinations means car dependency is higher than elsewhere in London. Although investment in public transport improves connectivity, even in areas considered

²⁰ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

²³ 2011 Census

to have high levels of connectivity, for example around town centres and transport hubs, there is a need to consider people's preferred direction of travel. In particular, orbital routes in outer London are often less well served better by public transport than radial routes and public transport accessibility corridors may face in the wrong direction for local travel needs. Therefore commuting patterns in outer London are potentially more dependent on the car, even from places that are considered to have high levels of connectivity.

3.4 TYPOLOGIES OF PLACES IN OUTER LONDON

3.4.1 Within outer London itself there are significant variations both in terms of the character of places and their geography relative to the rest of the city. The varying character means that some places 'feel' much more like inner London due to the density of development, the nature of activities and their connectivity, whereas others places are much more akin to suburban areas outside London. These different characters are very evident within individual outer London boroughs themselves. One outer London borough suggested that what is considered 'inner London' is extending outwards and that, for it, the North Circular Road now provides a more realistic divider between inner and outer London than borough boundaries²⁴. Other boroughs concurred with this appraisal and suggested that even beyond the North Circular some areas have inner London characteristics. It is therefore very important to understand these differences and take them into

²¹ TfL (2014) Travel in London 7

²² DfT (2014) Road traffic estimates in Great Britain: 2013 Report

²⁴ OLC sub regional meeting Waltham Forest 24.02.15

account in identifying where more flexibility in standards is needed.

3.4.2 One of the most fundamental aspects of difference is the accessibility / connectivity of places which conditions the choices available to people in different ways, and also affects who chooses to live in certain places. Currently, car parking policy in the London Plan uses Public Transport Accessibility Levels (PTALs) to distinguish between different parts of London. PTALs provide a quick means of calculating the level of connectivity from a location to the public transport network. As Figure 2 shows the majority of outer London is covered by PTAL 0-2 with areas such as town centres showing higher levels of connectivity.

Access to public transport

3.4.3 It has been suggested by developers, boroughs and other stakeholders that PTALs have limitations which may not give the full picture when distinguishing different parking requirements. This is particularly the case if they are used mechanically as the only or main factor in applying parking policy - they may not reflect the reality on the ground or allow for the differentiation between typologies within different types of places. TfL acknowledge this and has noted that PTALs may be refined in the future. PTALs take a point and assess whether or not there is a bus service or other mode available within specific distances, and the frequency of those services – which may not fully reflect variations in public transport connectivity. In the future, it may be possible to supplement this

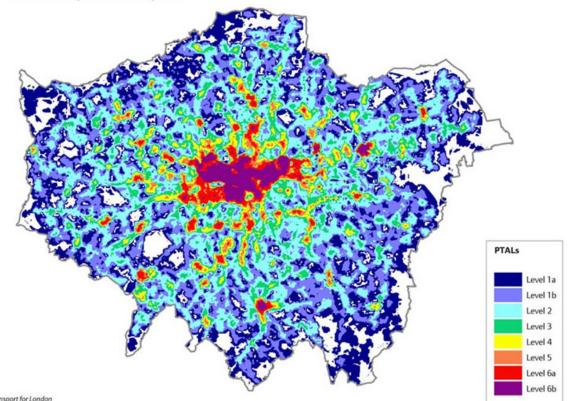


Figure 2 Public Transport Accessibility Levels across London

source Transport for London

© Crown copyright. All rights reserved. Greater London Authority 100032379 (2008)

Diagram: GLA, The London Plan - consolidated with alterations since 2004 (2008)

information with an assessment of the alternatives available and the time and orientation of trips by public transport. This would provide a more nuanced understanding of the quality and direction of public transport options available.

3.4.4 At all the sub regional meetings, boroughs discussed whether there were particular typologies that could be identified that would provide for a more nuanced approach to managing parking provision. All the outer London boroughs agreed that there are a variety of areas in their boroughs and it should be possible to identify a number of typologies to reflect those differences. Some boroughs suggested that there would be a case for setting out in guidance how different typologies might be identified highlighting particular circumstances where a difference in the application of parking standards would be appropriate.



CHAPTER 4

EVIDENCE REVIEW

4.1 CAR OWNERSHIP AND CAR USE

Ownership

- 4.1.1 It is important to understand how residential parking standards affect parking levels, car ownership and car use. The relationship between car ownership and car use however is a complex one. There have been a number of studies which have tried to investigate this. TfL's Residential Parking in New Development report (2012) highlights a number of factors that influence whether or not a household is likely to own a car; including tenure, housing type, household structure, nationality, working status, access to public transport, access to employment and services, level of parking provision and control, and car club membership.
- 4.1.2 It was emphasized by one borough during the sub regional meetings that car ownership rates in London have gone down and it was suggested that this could be due to public transport improvements, this was confirmed by TfL²⁵. One outer London borough particularly highlighted that many young people in their borough choose not to buy a car and fewer young people are getting licenses compared to previous generations²⁶. TfL research however shows that this is very different in different parts of London. Their research shows that almost half of households in inner London developments, built between 2004 and 2009, do not own a vehicle compared to 27 per cent of households in outer London.²⁷ Multiple car owning households

are also more common in outer London where 1 in 5 households have two or more cars compared with 1 in 10 in inner London²⁸.

- 4.1.3 As figure 3 shows car ownership is generally higher in outer London than inner London and is relatively higher in areas of low PTAL in both inner and outer London. In outer London for both low and medium PTALs, over two thirds of households own at least one car.²⁹ This seems to suggest that lower PTALs may influence whether or not people own a car due to the lack of alternative options available to them.
- 4.1.4 Car ownership is also higher amongst those living in new-build houses than flats, and higher amongst those living in purpose-built flats than converted flats. Home owners are somewhat more likely than those renting to own a car³⁰. As Figure 4 shows, the percentage of people owning a car in social renting accommodation is similar for both inner and outer London (42%), whereas for all other types of tenure there is a greater percentage of outer London residents owning cars than inner London residents. The most marked difference in tenure is for private rented where 63% of outer London residents own a car compared to 37% of inner London residents.

 $^{^{\}rm 25}$ OLC sub regional meeting Bexley 11.02.15

 $^{^{\}rm 26}$ OLC sub regional meeting Bexley 11.02.15

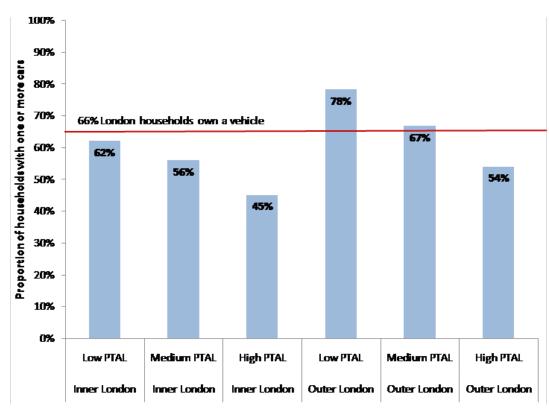
²⁷ TfL (2012) Residential Parking Provision in New

Developments: Travel in London Research Report. London: TfL

²⁸ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

²⁹ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

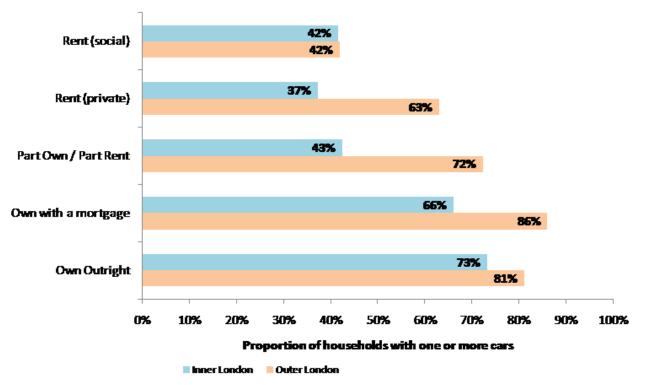
³⁰ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL





Source: Residential Parking Behavioural Survey 2011, TfL (2012) Residential Parking Provision in New Developments





Source: Residential Parking Behavioural Survey 2011, TfL (2012) Residential Parking Provision in New Developments

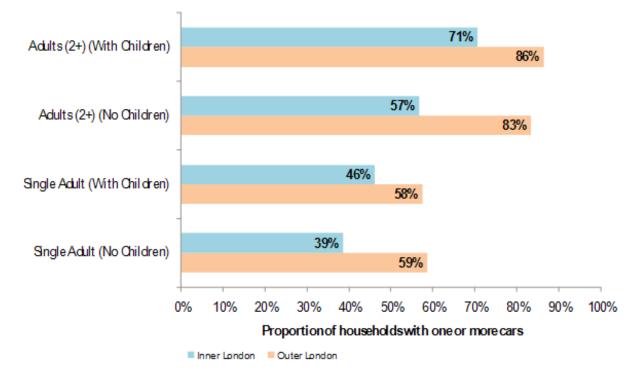


Figure 5: Car ownership by household structure

Source: TfL (2012) Residential Parking Provision in New Developments

- 4.1.5 Household type and structure also has an influence on car ownership and therefore is an important consideration in understanding parking requirements. This is particularly important in terms of how household composition is changing in different parts of outer London. One outer London boroughs said that anecdotally housing pressures which lead to over-occupation/HMO style living can lead to up to 4 or 5 cars per house in some places due to an increase in the number of adults in some households.³¹
- 4.1.6 Income is also seen as an important factor influencing car ownership. In general as household income rises, car ownership increases. Specifically having an income of £50,000 or above appears to have a significant impact on car ownership across London and especially in outer London

where around 90% of households earning over £50,000 own one or more cars. Even among households with an income of less than £10,000 over 50% of those in outer London own at least one car compared with only 28% inner London³². In outer London, households with more than one adult are also significantly more likely to have at least one car³³.

4.1.7 It was highlighted at the sub regional meetings; however that income is not always taken into account in understanding parking requirements. For example, a 3 bed house with people on benefits might have one car, whereas a 2 bed house with people on high incomes

³¹ OLC sub regional meeting Waltham Forest 24.02.15

³² TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

³³ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

might have 3 or more cars. The correlation between income and car ownership and local variations within it need to be understood in framing local parking policy.³⁴

- 4.1.8 In terms of the relationship between car ownership and parking provision, TfL's research found that households living in developments with up to 0.5 parking spaces per unit are significantly less likely to own a car than those living in developments with more than 0.5 spaces per unit³⁵. It has been suggested that this is because households who have a preference for owning a car locate to where parking is available. Restricting parking availability therefore may only generate a different type of household or car dependency at different location.³⁶
- 4.1.9 It may be that car ownership and other factors are jointly influenced by a similar set of personal characteristics, rather than affecting each other greatly. Further research into the causality of these relationships is needed to understand the importance of parking standards and the influence on car ownership. However overall, TfL's research indicates that car ownership rises where public transport accessibility decreases. Car ownership also rises where household incomes rise; where the number of adults in the household increases and, in outer London, where there are children in the household; or where there are more home owners than renters, particularly those living in social

housing rather than in private renting.³⁷

Car Use

- 4.1.10 The Commission heard varying views about whether car ownership influences car use. Berkeley Homes produced two case study based studies, one in 2011 and an update in 2014. These studies looked at a selection of both their own development schemes and a selection of other schemes to try to understand how the provision of parking affected car use. Although the 2011 study only looked at peak hour trips, the 2014 study looked at trip profiles throughout the day.³⁸ Both studies concluded that increasing parking provision would not necessarily lead to an increase in car usage (even if car ownership levels increased) as there is no simple relationship between car ownership and car use. The studies suggest that demographics and lifestyle are the main determinants of car usage, rather than parking provision. They suggested that many residents, who own cars, decide not to use them for peak hour travel and will instead walk, cycle or use public transport, supporting objectives of planning policy which seeks to ensure residents have access to a range of transport choices available in the places where they live.39
- 4.1.11 The Commission however heard from TfL that there may be limitations to the wider application of the Berkeley study results. In coming to conclusions on

³⁴ OLC sub regional meeting Bexley 11.02.15

³⁵ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

³⁶ OLC Final Meeting 25.03.15

³⁷ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

³⁸ The Berkeley Group (2014) Does car ownership increase car usage? London: The Berkeley Group

³⁹ The Berkeley Group (2011) Does car ownership increase car usage? London: The Berkeley Group.

the relationship between car ownership and car use, the first study divided the peak car trip rates by the recorded car ownership ratio for each development. This meant potentially a significant number of trips were not counted, for example those who worked part time hours, shift patterns or for social and other uses. It should also be noted that AM peak is generally three hours rather than one hour and therefore does not accurately reflect peak usage. Furthermore, a car could leave the premises before the peak hour but still be adding to traffic on the road network.

- 4.1.12 In other evidence, the Roads Task Force (RTF) Technical Report 14 found that only one in five car trips in London are actually for work purposes, with more trips on Saturdays and Sundays than during the week. The peak periods for car trips are the inter-peak (10am-4pm) and evening peak (4pm-7pm)⁴⁰. The 2014 Berkeley Homes report recognised this and looked at car usage compared to all modal trips throughout the day. It also concluded that that car owning residents in new London developments are less likely to use their car as their main mode of travel if they are provided with convenient alternatives and that even amongst those using their car for commuting, there are a range of alternative modes being used, indicating that a modal shift could be further enhanced with suitable incentives.
- 4.1.13 Data from TfL shows that cars owned by residents of outer London are more likely to be used five times a week or more than those owned by inner London

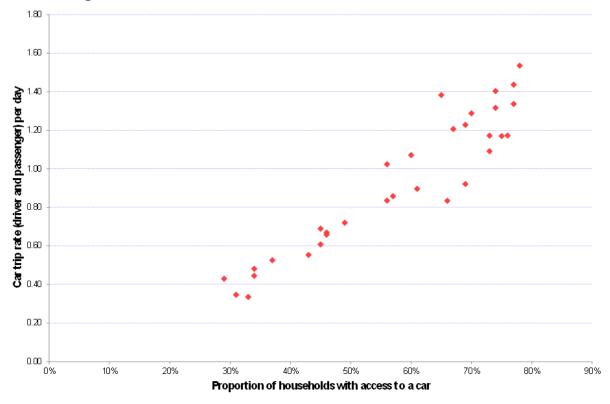
residents suggesting outer London residents use their car for commuting purposes compared to inner London. A third of outer London car owners use their cars five or more times a week during the weekday peak with two thirds of them using their cars during the weekday peak at least once a week⁴¹. These findings suggest that the higher level of car travel in outer London is caused in part by a higher proportion of car owners travelling by car every day or nearly every day, but also largely by the fact that a higher proportion of outer London residents have access to a car⁴². This may be due to more complex commuting patterns, or trip changing with drop-offs etc, both within outer London and between outer London and outside London and the lack of easily accessed public transport alternatives to meet these requirements. In particular, orbital routes in outer London tend to be less well served by public transport than radial routes, hence making it more likely that people who do not work in central London, or who access services in their local areas, use their cars for travelling.

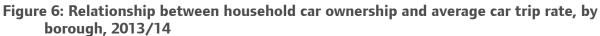
4.1.14 As illustrated in Figure 6, there is a strong positive relationship between the proportion of households with access to a car and the average trip rate, i.e if people have access to a car they are more likely to use it. The importance of this relationship is further reinforced by Figure 7 which examines the relationship between parking availability and car use. Figure 7 shows that the provision of more than 0.5 spaces per unit affects car use

⁴⁰ RTF (2013) Roads Task Force – Technical Note 14: Who travels by car in London and for what purpose? London: Transport for London.

⁴¹ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

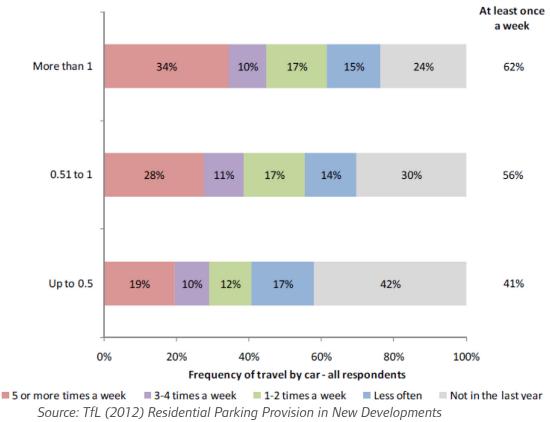
⁴² TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL





Source: TfL, Planning 2015





significantly, and particularly for those who use their car more than 5 times a week.⁴³

- 4.1.15 In general, developments with more parking provision have higher levels of car ownership and consequently more car journeys than in those with less parking; conclusions which are echoed in other research and literature⁴⁴, ⁴⁵. It is also thought that the amount of car parking spaces might also influence behaviour and choices in the future, this includes increasing the future habitual use of cars. However, it should be noted that for multi car households, the trip pattern and frequency of use is likely to be different for each car in those households.
- 4.1.16 It is also important to understand that there is an element of self selection of where people live depending on whether there is parking available; those for whom access to a car is essential or particularly important may only opt to live in a development with parking available. Understanding the difference between car ownership and car dependency is therefore very important.

4.2 WIDER NETWORK ISSUES

Congestion

- 4.2.1 TfL reports that congestion in London already costs c£4bn each year and is forecast to increase by 15% in outer London by 2031⁴⁶. Even though car ownership per capita has reduced. overall traffic levels have remained broadly the same because population and employment growth has contributed to the number of vehicles on the road. If population levels were to continue at current rates, there could be more than 300,000 additional cars on London's roads by 2031, TfL's 2012 report suggests that an increase in parking provision is likely to lead to more people owning a car which in turn increases the likeliness of car usage; as the supply of roads is generally fixed this will ultimately lead to an increase in congestion.
- 4.2.2 Conversely the Berkeley Homes reports argued there was no clear link between car ownership and peak hour car usage, and therefore even if increased parking provision leads to more car ownership this would not adversely impact congestion.

Overspill

4.2.3 The Berkeley Homes reports highlighted that an under-provision of residential parking often results in overspill parking pressures and an adverse impact on the surrounding community. This view was echoed by a number of outer London boroughs who said that where they do not provide sufficient residential car parking they find that they have to deal

⁴³ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

⁴⁴ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL;

⁴⁵ McDonnell, S., Madar, J. and Been, V. (2011) Minimum parking requirements and housing affordability in New York City. Housing Policy Debate, 21(1), 45-68.

⁴⁶ RTF (2013) Roads Task Force – *Technical Note 14: Who travels by car in London and for what purposes?* London: Transp ort for London

with issues such as cars over-spilling into surrounding streets and consequently complaints from existing residents. One borough highlighted that they do try to address this by implementing parking management schemes, but that just shifts the parking pressures to other places in the borough⁴⁷.

- 4.2.4 Some boroughs also felt that in many developments, proposals with low parking provision sometimes make it more difficult to gain local support for those developments due to potential issues of overspill. One borough suggested that people will not be put off buying a house without a parking space, they will 'sort it out later', hence exacerbating issues of overspill⁴⁸.
- 4.2.5 Figure 8 shows that parking was considered an 'important' or 'essential' requirement in 39% of households in outer London in choosing where to live compared to 25% in inner London. A further 21% in outer London said it was only one of a number of factors. As stated earlier, the restriction of parking provision may simply determine a different type of household at certain locations.
- 4.2.6 Another borough said they have particular concerns that car free developments are a 'house of cards' waiting to fall down if planning conditions are challenged⁴⁹. Others raised the concern that it is difficult to refuse a scheme on the basis of it not meeting demand for parking as there is not a lot of point or appetite either politically or in terms of resources in 'taking on' TfL/ inspectors over low provision of parking even though it causes significant problems such as overspill⁵⁰.

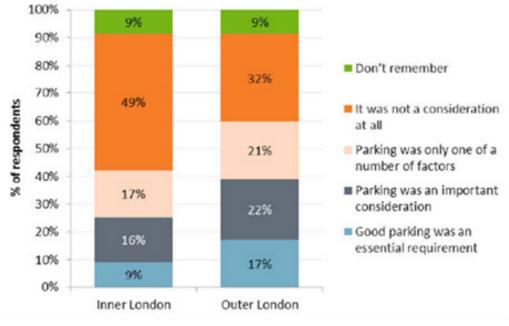


Figure 8: Importance of parking provision on where to live

Source: TfL Residential Parking Survey 2015 (Online sample only)

⁴⁷ London Borough of Hillingdon submission

⁴⁸ OLC sub regional meeting Bexley 11.03.15

⁴⁹ OLC sub regional meeting Croydon 10.03.15

⁵⁰ OLC sub regional meeting Croydon 10.03.15

- 4.2.7 Although issues of overspill were recognised by many outer London boroughs, some had a slightly different appreciation of the issue; stressing that increasing residential parking is not a solution as "you are simply storing up problems for destination parking further down the line"⁵¹. One of the boroughs explained how they are trying to get a real modal shift/behaviour change and that even in places of very low PTAL, there is still a desire to discourage car use as much as is practical, although there is a recognition of car dependency in some of these areas⁵². Another borough stated that it would be preferable to provide choice through improvements to public transport, stressing that TfL should be investing on day one of the development when there is much more influence on modal shift than trying to change behaviour once patterns are established - pump priming investment is therefore essential⁵³.
- 4.2.8 It was suggested by one outer London borough that current residents are the main cause of 'undesirable' parking and the problem won't be addressed by just making changes to new development; a range of measures are needed to address this issue⁵⁴. Controlled Parking Zones were identified as a useful implementation tool to help manage overspill. However many outer London boroughs highlighted problems associated with their implementation as well as the low political appetite associated with their application. The money for CPZs comes via S106 from developers as some

boroughs claim they do not have the resources to pay for them. The problem arises when existing residents are asked whether or not they want a CPZ; many say no as they can park for free on street. CPZs are then turned down and S106 monies go back to the developer. However, "12 – 18 months down the line, once the new development is implemented, parking on street becomes a problem". Residents then complain as they cannot park near their homes and ask for a CPZ to be implemented, but at that stage there is no funding to implement one⁵⁵.

4.2.9 Another borough noted that if residents already feel developments are being pushed on them and are told a development will only go ahead with a CPZ it causes even more opposition from residents⁵⁶. One borough said that they have one CPZ in their borough and have tried to implement a further three; all have failed. However, once a CPZ is in place residents tend to approve of it⁵⁷. It was emphasised that CPZs need to be resident led as they "happen by osmosis" with the trigger being overspill. Other boroughs stressed that Councillors do not always take a strategic view of CPZ; CPZs therefore need to be a justified political decision otherwise they are seen as a revenue stream by the Council⁵⁸.

Safety

4.2.10 Safety is an important consideration in setting appropriate levels of parking provision without impacting on the wider

⁵¹ OLC sub regional meeting Waltham Forest 24.02.15

⁵² OLC sub regional meeting Brent 03.03.15

⁵³ OLC sub regional meeting Brent 03.03.15

⁵⁴ OLC sub regional meeting Brent 03.03.15

⁵⁵ OLC sub regional meeting Brent 03.03.15

⁵⁶ OLC sub regional meeting Croydon 10.03.15

⁵⁷ OLC sub regional meeting Croydon 10.03.15

⁵⁸ OLC sub regional meeting Brent 03.03.15

road network. Issues of overspill into the surrounding streets can have severe and life threating consequences if emergency vehicles are unable to access certain roads as a result of inappropriate parking. In addition, inappropriate parking on pavements can also prevent people with wheelchairs or pushchairs from being able to use the pavement, who will often have to negotiate parked cars by going round them onto the road, putting themselves at risk, particularly on busy roads. Inappropriate parking can also seriously impede people with visual impairments or who have mental health issues such as dementia who use landmarks and other familiar markings to navigate their way around⁵⁹. It may also cause problems for people crossing the road, especially children whose sight lines may be severely restricted. One of the outer London boroughs stressed that it is the highways department who have to deal with the issues of overspill into the road because of limited parking provision. They may have to implement double yellow lines on un-adopted highways as soon as developments are complete to allow for emergency access, as "people will park anywhere they can" and the roads are often too narrow for parking⁶⁰.

Modal Shift

4.2.11 Increasing residential parking provision may have an effect on the use of "sustainable transport". TfL and others argue that an increase in parking provision potentially discourages the use of sustainable forms of transport, such as walking, cycling and public transport

⁵⁹ Inclusive Design for Getting Outdoors, www.idgo.ac.uk
 ⁶⁰ OLC sub regional meeting Croydon 10.03.15

⁶¹, ⁶², ⁶³. In particular, the Department for Transport (2008) report highlighted that more restrictive parking measures influence mode choice and can have a considerable influence, for example, on the take up of travel plans⁶⁴.

- 4.2.12 Conversely, it has also been argued by others that increasing parking provision in residential developments will not affect the use of sustainable transport, with many London residents who own cars deciding to not use them for peak hour travel, instead walking, cycling or using public transport (Berkeley Group 2011 and 2014).
- 4.2.13 In thinking about travel behaviour a TfL survey stated that the number of people agreeing with the statement 'I don't have time to think about my travel, I just get in my car and go' is higher amongst respondents in outer London car owning households compared with those in inner London⁶⁵. This implies that in inner London, the car is not necessarily the easy option, whereas the more "care-free" attitude to car travel in outer London is likely to be influenced by less congestion, the availability of destination parking, less public transport options and more car

⁶¹ Banfield, K. (1997) Should Planners Under-Provide Car Parking? NSW Royal Australian Planning Institute Conference, September 1997

⁶² Rye, T. and Ison, S. (2006) The Use and Impact of Maximum Parking Standards in Scotland. Paper presented at 11th European Conference on Mobility Management, Lund, Sweden.

 ⁶³ The Scottish Executive (2002) The Effect of Maximum Car Parking Standards including Inward Investment Implications. Scotland: The Scottish Government.
 ⁶⁴ Department for Transport (2008) Research into the Use and Effectiveness of Maximum Parking Standards. Derby: Atkins

⁶⁵ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

dependency.

4.2.14 Most of the outer London boroughs interviewed agree with the importance of promoting modal shift from the car, emphasising it as a Council priority. However many point out that due to the complex travel patterns in outer London and the lack of public transport options to support these travel patterns, often people do not have a choice and are therefore dependent on the car for many of their journeys⁶⁶. However, TfL has found that there are still significant opportunities for modal shift in outer London, especially for shorter journeys, with more than half of potentially cyclable trips located in outer London⁶⁷. In its view, where parking is provided can have a significant impact on whether people decide to use their car for shorter journeys. For instance, if their car is not parked directly outside their property, this may dissuade them from using it if in fact alternative options appear more attractive for the journey they are making. 68

Health and Active Travel

4.2.15 London's transport system has a significant influence on people's health. Offering a range of sustainable transport options, including opportunities for walking and cycling, can enable people to be physically active. Active travel is the main way that adults in London stay active. ⁶⁹ Adults need to achieve a minimum of 150 minutes of moderate intensity physical activity each week to stay healthy. Physical activity reduces the risk of developing chronic diseases, including heart disease, type 2 diabetes, stroke, some forms of cancer, dementia and depression, and it reduces the risk of dying prematurely⁷⁰. Walking and cycling is associated with reduced levels of people being overweight or obese. Each additional kilometre walked per day is associated with a 4.8% reduction in obesity risk. In contrast, each additional hour spent travelling in a car per day is associated with a 6% increase in the likelihood of someone becoming obese⁷¹. The relationship between car ownership and how much walking and cycling Londoners do is reflected in the latest Travel in London report⁷², with residents of households owning more cars less likely to meet the recommended level of physical activity (Figure 9). This report also shows people in outer London are less likely to meet their activity targets than inner I ondon residents.

4.2.16 National health experts suggest that the easiest way for most people to be physically active is by incorporating more walking or cycling into their daily routine⁷³. This suggests that overall an increasing parking provision may lead to a reduction in physical activity levels which in turn could be harmful to people's overall health. TfL consider the negative health impacts of car use are felt most

⁶⁶ OLC sub regional meeting Bexley 11.02.15

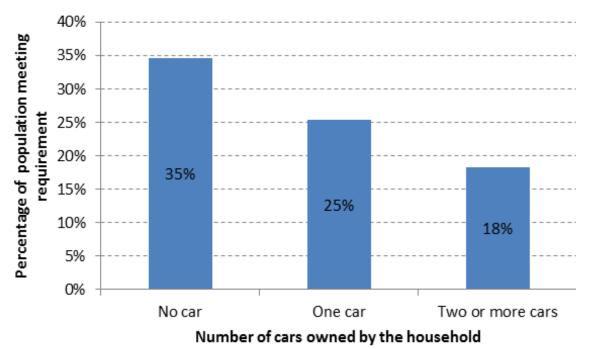
 $^{^{\}rm 67}$ TfL (2010), Analysis of cycling potential. London: TfL

 $^{^{\}rm 68}$ OLC sub regional meeting Brent 03.03.15

⁶⁹ Tfl (2014a) Improving the Health of Londoners. London: TfL

 ⁷⁰ Department of Health (2011) Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers. London: Department of Health.
 ⁷¹ Frank LD, Andresen MA, Schmid TL (2004) Obesity relationships with community design, physical activity, and time spent in cars. Am J Prev Med 27(2):87–96.
 ⁷² TfL (2014), Travel in London Report 7 (TIL 7). London: TfL.

⁷³ Department of Health (2011) Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers. London: Department of Health.





Source: TfL (2014b) Travel in London Report 7 (TIL 7). London: TfL

by the more vulnerable people in society leading to widening health inequalities⁷⁴. More disadvantaged areas tend to have a higher density of roads and traffic, leading to poorer air quality, increased severance, higher noise levels and higher collision rates. ⁷⁵

Environmental

4.2.17 In addition to the direct impacts on the health of individuals, increased parking provision also results in a range of environmental impacts from air quality, noise, visual intrusion, impacts on urban drainage and public realm. In terms of greenhouse gas emissions, there tends to be two schools of thought - increasing car use leading to higher emissions, and reduced emissions associated with less time spent circulating looking for parking spaces.

4.2.18 The first hypothesis associated with increase car usage, leads to a direct increase in emissions of carbon and other pollutants such as oxides of nitrogen (NOx) and particulate matter⁷⁶, ⁷⁷. The adverse health impacts of air pollution range from worsening respiratory symptoms and increased hospital admissions, to premature deaths from cardiovascular and respiratory diseases⁷⁸. It has been estimated that long-term exposure to fine particulate matter (PM2.5) is responsible for 4,300 deaths

 $^{^{74}}$ Tfl (2014) Improving the Health of Londoners. London: TfL

⁷⁵ UK Faculty of Public Health, 2013)

 ⁷⁶ McDonnell, S., Madar, J. and Been, V. (2011) Minimum parking requirements and housing affordability in New York City. Housing Policy Debate, 21(1), 45-68
 ⁷⁷ Shoup, D. (2005) The high cost of free parking. Chicago: Planners Press.

⁷⁸ TfL (2014) Improving the Health of Londoners. London: TfL

per year in London⁷⁹. One of the outer London boroughs highlighted that air quality is a major issue in their borough, with the whole borough designated as an air quality management area⁸⁰. The adverse impacts of air pollution disproportionately affect children, older people and people with long term illnesses including asthma, chronic obstructive pulmonary disease and heart disease. The busiest roads have the highest levels of air pollution and are used more by disadvantaged people as places where they live, work and shop⁸¹.

- 4.2.19 The second school of thought is that increasing parking provision may reduce greenhouse gas emissions, as people spend less time searching for a space, which uses unnecessary fuel and causes pollution. The extent of the reduction in emissions is unknown, as it has not been quantitatively measured. The reality is that there is a complex relationship which is driven by a combination of factors including available road space, volume of traffic and the associated congestion. Any one of these factors will impact air pollutant emissions and the resulting air quality.⁸²
- 4.2.20 Technology improvements have reduced the noise levels associated road traffic. However if the view is accepted that an increase in car ownership will lead to an increase likelihood of greater car use, then consequentially, overall there will be an increase in noise pollution. Noise

pollution has been associated with the impairment of intellectual development in children, increased blood pressure, sleep disturbance and reduced wellbeing.⁸³

4.2.21 Increasing parking provision is also likely to lead to an increase in impermeable surfaces (e.g. hard surfaces such as paving), which has various associated effects. Increased impermeable surfaces can lead to an increase in run-off into stormwater channels, increasing the risk of flooding and erosion⁸⁴. In areas with limited parking provision, many people pave over their front gardens with knock on impacts on drainage⁸⁵. However, the paving over of front gardens does not actually create additional spaces, as access to the driveway is required (through dropped kerb applications) which then limits the parking on the road.

Amenity and Design

4.2.22 The design of schemes is very important. Developers gave examples where well designed schemes can not only provide suitable levels of parking but also ensure that the amenity of the development is high quality and the development is well knitted into the surrounding area⁸⁶. This included Berkeley Homes with their use of undercroft or podium parking

 ⁷⁹ GLA (2010) Report on estimation of mortality impacts of particulate air pollution in London. London: GLA
 ⁸⁰ OLC sub regional meeting Waltham Forest 24.02.15
 ⁸¹ World Health Organization, 2005, Health effects of transport and air pollution.

⁸² TfL (2015) Desktop Review of the role of parking and impacts of increasing residential parking provision

 ⁸³ Health Protection Agency (2010) Environmental Noise and Health in the UK. A report by the Ad Hoc expert Group on Noise and Health. UK: Health Protection Agency
 ⁸⁴ United States Environmental Protection Agency (USEPA) (2006). Parking space/community places, finding the balance through smart growth solutions. Development, Community and Environmental Division (1807T). Washington, DC: US Environmental Protection Agency

⁸⁵ London Assembly Environment Committee (2005), Crazy Paving: The environmental importance of London's front gardens

⁸⁶ Structured interviews with developers

areas which do not impede on the site or require basement level parking. However, there are also many examples where although there are allocated spaces for parking around the scheme, undesignated space designed for other uses such as amenity spaces are compromised by people parking in them. This was raised by a number of outer London boroughs, who emphasised that the reality is that, if not enforced, people will park in every available place if there is not enough space for their needs or if there is a more convenient but 'wrong' place – this can ruin the overall design and amenity of the place. This was dubbed 'intraspill' as it is not necessarily a problem outside of a development, but rather within it⁸⁷.

4.2.23 It has been argued also that developments with high levels of parking provision are less easy and less pleasant to negotiate on foot. Not only do developments fragmented by car parking begin to lose their vitality, they also may become less secure with less passive surveillance⁸⁸. Street-level car parks beneath residential buildings can also diminish the heritage and visual value of the streetscape, and large areas for car parking can become venues for anti-social activities, such as car theft and fly tipping⁸⁹. The design of these developments is therefore very important in order to help to meet the demand of people dependant on the car and ensure schemes are visually attractive.

4.2.24 A number of outer London boroughs

emphasized the importance of their policy priorities, including amenity space, housing delivery and other land uses as opposed to parking. Their main concern was that more spaces for parking would lead to less space for other amenity assets⁹⁰. It was felt that the importance of amenity space was also "moving up the agenda" for developers as well, rather than space for car parking⁹¹.

4.2.25 In terms of design solutions for parking spaces, TfL referred to European examples where parking spaces are not located directly on development plots, e.g. Freiburg in Germany. This helps to reduce the "habitual" nature of car use for very short distances as people do not pass their cars as they leave their properties. This approach was supported by a number of outer London boroughs⁹². One borough noted however that "people are reluctant to walk any distance", therefore even if they have an allocated space, they will choose to park as close to their front door as possible.⁹³ A number of boroughs suggested that more practical guidance on design solutions for parking would be helpful, particularly in regard to quidance for road widths and streetscapes - as many complaints from residents are less about parking and more about satisfaction with the development itself⁹⁴.

4.3 PARKING AND VIABILITY

4.3.1 TfL's 2012 report highlights the relative importance of parking availability as a factor influencing people's choice of

⁸⁷ OLC sub regional meeting Bexley 11.02.15

⁸⁸ OLC sub regional meeting Brent 03.03.15

⁸⁹ Banfield, K. (1997) Should Planners Under-Provide Car Parking? NSW Royal Australian Planning Institute Conference, September 1997.

⁹⁰ OLC sub regional meeting Waltham Forest 24.02.15

⁹¹ OLC sub regional meeting Waltham Forest 24.02.15

⁹²OLC sub regional meeting Brent 03.03.15

⁹³ OLC sub regional meeting Brent 03.03.15

⁹⁴ OLC sub regional meeting Croydon 10.03.15

home. Two thirds of residents in outer London developments consider the availability of off-street parking for residents to have influenced their decision to live in their current home. Of those who own a car, three guarters consider off-street parking important with around half saying the availability of on-street parking had influenced their decision, irrespective of whether they own a car or not. Parking for visitors is also a factor for many, with more than 6 in 10 saying it was an influence when choosing their current home. However, compared with other factors such as access to public transport, parking availability appears to be less important overall.95

4.3.2 Some developers view the availability of parking as key for both the viability and marketability of their developments. The Berkeley Homes reports echo this view, stating that "parking provision should be agreed at a level which supports the viability of new developments"⁹⁶. Typically, developers are aware of the constraints and opportunities at a site, and generally target a car parking ratio that is appropriate to reflect that. In very general terms developers seek to provide enough parking to make their homes attractive to the market, but no more than is necessary so that the scheme is cost effective⁹⁷. Unit size and, correspondingly, the target market for a developer are also considered key influences in a developer's determination of parking provision for a scheme. It is recognised that many

families living in outer London (outside of the high accessibility/ high density areas) are likely to want to own a car, even if it is not intended for commuting purposes. Car parking provision for larger homes is also generally considered important for developers in order to provide for car ownership and to attract buyers.⁹⁸ Other reasons such as the ability to load the car are important for family housing and/or to ensure mixed communities. Those who are self-employed may also have a need for a car/van.

4.3.3 It was pointed out at one of the outer London sub regional meetings that in many cases developers do not provide the maximum parking standards allowed by the London Plan and in some cases parking spaces originally approved within developments are not being fully used99. There are also many examples of successful and popular developments delivered with low levels of parking, though these tend to be in places with higher levels of public transport provision. The development sector is very mindful of the link between car parking provision and development viability, particularly given the requirements for residential development to support a range of Section 106 items and CIL requirements¹⁰⁰. This view was also borne out in the structured interviews with developers undertaken by TfL. In outer London, it was stated that viability of schemes is much more sensitive than inner London to planning requirements due to the relative values that can be

⁹⁵ TfL (2012) Residential Parking Provision in New Developments: Travel in London Research Report. London: TfL

⁹⁶ The Berkeley Group (2014) Does car ownership increase car usage? London: The Berkeley Group

⁹⁷ Peter Brett Associates - Technical Note – OLC Submission

⁹⁸ Peter Brett Associates - Technical Note - OLC Submission

⁹⁹ OLC sub regional meeting Brent 03.03.15

¹⁰⁰ The Berkeley Group (2014) Does car ownership increase car usage? London: The Berkeley Group.

achieved. It is therefore important to understand the tipping point, especially in marginal locations in outer London, of the opportunity costs compared to the costs of provision – and this can really only be done on a case by case basis.

4.3.4 Whilst many agreed that that a certain flexibility of application of parking standards should allow for different circumstances, others stressed that certainty of planning requirements is fundamental to assessing the viability and deliverability of schemes. For example in Tower Hamlets where CPZ coverage is high, it was considered much easier to bid for land and feel comfortable about the viability of schemes as the policy/ standards have already been taken into account in the price of the land and bidders are all working on the same assumptions. Viability of schemes is affected if these types of issues are too open to negotiation. Maximum standards provide security for developers and boroughs to meet housing demand¹⁰¹. This view was strongly echoed by many of the developers in the TfL structured interviews.

4.4 PARKING AND LAND IMPLICATIONS

4.4.1 It is clear that increasing parking provision will have an impact on the density of development that can be achieved on site, which has implications for housing output, massing or height. However the significance of that impact, against other factors which affect housing development, is less clear. There is a distinct outer London dimension to this insofar as provision here is likely to be

¹⁰¹ OLC sub regional meeting Croydon 10.03.15

made through surface level rather than underground parking. The impact of this is likely to be proportionally greatest for smaller units as design solutions will be more limited.

- 4.4.2 More generally, lower density developments are less able to support public transport provision, provide less encouragement for walking and cycling, and are less able to support neighbourhood amenities such as small shops within walking distance that can substitute for driving. In addition, it has also been suggested that increased parking requirements could discourage urban infill development due to the potential reduction in profit for developers.¹⁰²
- 4.4.3 This section of the report sets out the scale of future development expected in outer London, and especially in those parts with low PTAL scores, and the amount of parking associated with it historically. It explores variations in this provision associated with different types of development and then sets out scenarios which illustrate the implications of varying the current parking standards, especially for land take.
- 4.4.4 The Strategic Housing Land Availability Assessment (SHLAA) which underpins the 2015 London Plan housing targets in aggregate provides a robust picture of minimum future residential potential at borough level. However, because the SHLAA contains borough wide assumptions for capacity on small sites rather than site specific information, it

¹⁰² Burby, R. (2000) Building Code Enforcement Burdens and Central City Decline. American Planning Association Journal, 66(2), 143-160. cannot be used to show overall capacity within particular PTAL ranges. Site specific information is available only for large sites a (over 0.25 ha) which are either approved, allocated or may have a theoretical possibility of being developed for housing.

- 4.4.5 This data indicates that between 2015 and 2025 such sites in parts of outer London which lie within PTAL 0-1 have capacity for 1629 dwellings pa, and that those within the whole of PTAL 2 have capacity for a further 2095 pa. Figure 10 shows that the distribution of this capacity varies widely between outer London boroughs, with potential for over 1,300 pa within PTAL 0-1 in Barnet but less than 40 pa in Sutton. The same two boroughs mark the poles of the distribution of capacity for PTAL 2 (figure 11).
- 4.4.6 Site specific data is available from the London Development Database (LDD) for all approvals (Figure 12) over the decade to 2013/14. This indicates that on average in outer London approximately some 6,100 dwellings pa were approved in the PTAL 0-1 and approximately 7,200 were approved across PTAL 2. Figure 12 and 13 again show wide variation in the level of approvals between boroughs.
- 4.4.7 It must be borne in mind that on average over the last decade, only half of London's approvals have resulted in completions and that, for the time being at least, completions probably provide a more realistic indication of the likely scale of growth in both dwellings and associated parking.
- 4.4.8 LDD data shows that on average some 2,400 dwellings were completed each

year over the last decade in outer London PTALs 0-1, representing a little under 10% of the London total, and a further 3,400 pa across PTAL 2. Figure 14 and 15 again show considerable variation between boroughs. For example, in PTAL 0-1 there were 41 units completed per year in Kingston to 307 units completed per year in Hillingdon.

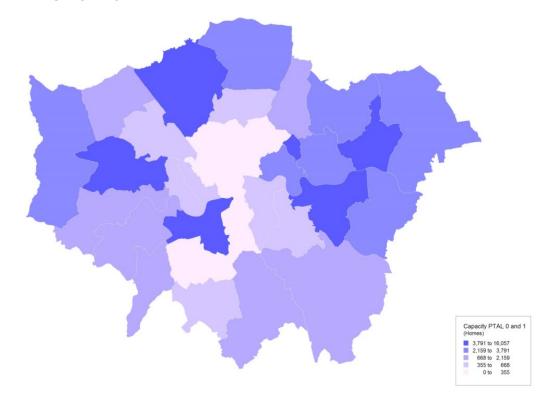
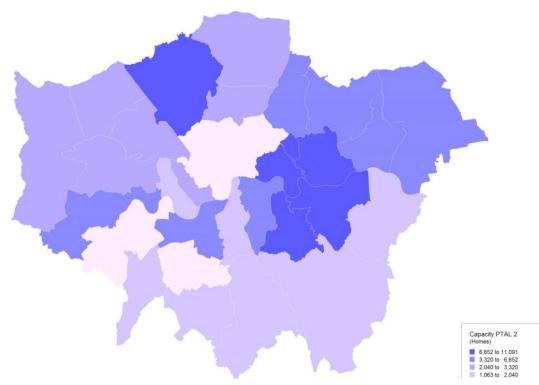


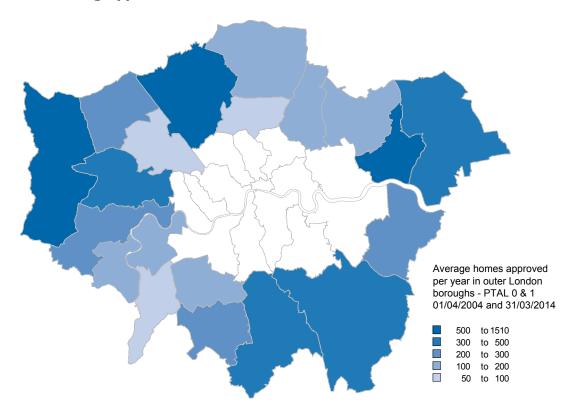
Figure 10 Housing capacity 2015 -2025 PTAL 0-1

Source: GLA Strategic Housing Land Availability Assessment Figure 11: Housing Capacity 2015 – 2025 PTAL 2



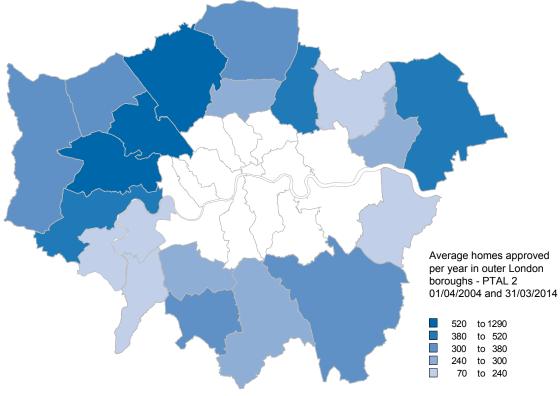
Source: GLA Strategic Housing Land Availability Assessment

Figure 12: Housing Approvals PTAL 0-1



Source: GLA London Development Database





Source: GLA London Development Database

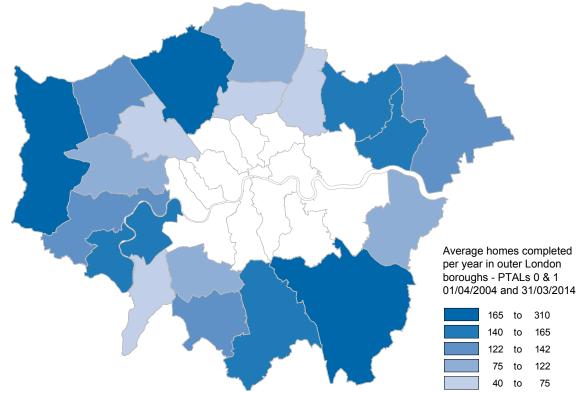
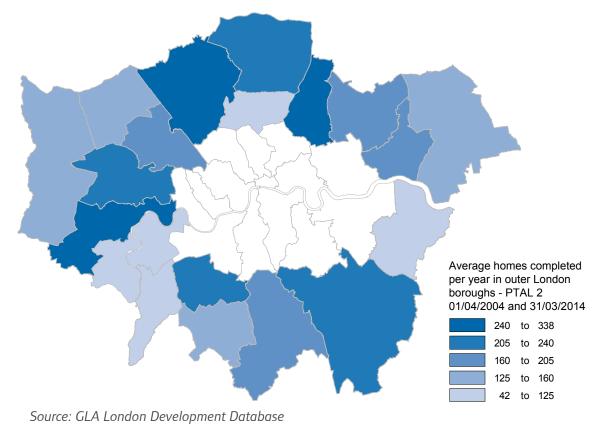


Figure 14: Housing Completions – Outer London PTAL 0-1

Source: GLA London Development Database

Figure 15: Housing Completions – Outer London PTAL 2



- 4.4.9 Parking provision clearly increases as public transport accessibility declines. In the whole of London there were 249,373 residential units completed between 2004/5 and 2013/15. This resulted in 194,163 spaces which is the equivalent of an average of 0.77 spaces per unit. For outer London, for the same period, there were 114,394 units completed resulting in 130,764 parking spaces; the equivalent of an average of 1.14 spaces per unit. If compared to PTALs 0-1 and 2 in outer London, the average number of spaces per unit is even higher at 1.74 spaces per unit and 1.28 spaces per unit respectively.¹⁰³
- 4.4.10 In terms of compliance with current policy, in outer London 22% of schemes were not compliant with the current London Plan standards, compared to 14% of schemes for London; meaning that they were approved at higher parking levels than the current standards. Breaking this down further, in PTAL 2 in outer London 22% of schemes were noncompliant and in PTALs 0-1 in outer London 23% of schemes were noncompliant.¹⁰⁴
- 4.4.11 In terms of types of development, outer London is close to the London average in having 79% of its output as 'new build'. Within that, in the PTAL 0 -1 parts of outer London, 35%, of the new build has 1.5 spaces per unit and only 6% has 2 or more spaces per unit. There is a similar pattern in the PTAL 2 parts of outer London with 31% of new build having between 1.5 spaces per unit and only 3% of units having 2 or more spaces.¹⁰⁵

- ¹⁰⁴ GLA London Development Database
- ¹⁰⁵ GLA London Development Database

- 4.4.12 The tenure profile for new development in outer London (68% market, 20% social/affordable rent and 14% intermediate) is broadly similar to that in London as a whole, and there is also little departure from this in PTALs 0-1 and 2. For all tenures in PTAL 0-1 and 2 in outer London, the majority of units have between 0.5 and 1.5 spaces per unit.¹⁰⁶
- 4.4.13 The size distribution of housing schemes in outer London is relatively polarised with 27% of output being on small sites (less than 10 units) and 31% on larges sites of over 150 units. In PTALs 0-1 a quarter of new development on small sites has no parking at all, a guarter has 2 or more spaces/unit and the majority 36% having 1.5 spaces per unit. In PTAL 2 in outer London, the majority 42% of small sites have no parking, 32% have 1.5 spaces per unit and only 10% have two or more spaces per unit. For the larger sites of 150 units or more, for PTALs 0-1 in outer London, the majority, 40%, have 1 space per unit with the second highest, 30%, having 1.5 spaces per unit. Only 7% of large sites in PTAL 0-1 in outer London have 2 or more spaces per unit. For large sites in PTAL 2 in outer London, it is a similar pattern as PTAL 0-1, with 46% of large sites having 1 space per unit and 30% having 1.5 spaces per unit. There are also no large sites in PTAL 2 in outer London that have more than 2 spaces per unit.107
- 4.4.14 The Commission was advised that the area required for a parking space taking into account reasonable access varied with developments but a reasonable 'rule of thumb' might be in the order

¹⁰³ GLA London Development Database

¹⁰⁶ GLA London Development Database

¹⁰⁷ GLA London Development Database

of 24 sq m. Desk study suggests that the absolute minimum might be in the order of 19 sq m. These figures have been used in developing scenarios to estimate the possible land take which might be associated with additional parking provision (0.5 spaces per unit and 1 space per unit). In PTALs 0 -1 in outer London 2,420 units per year are delivered with a further 3,419 units delivered in PTAL 2. Using the 24 sq m benchmark and assuming one additional space per dwelling is provided, this could, in aggregate, lead to a land take of around 5.8 ha across the whole of PTAL 0-1 in outer London. Theoretically this approximates to capacity for some 260 dwellings pa @ 45 dph. If provision was increased by only 0.5 spaces per unit, theoretical land-take would be halved. and a reduction of a further c20% should be made if the 19 sgm benchmark parking space requirement is applied.

- 4.4.15 If the same calculations are made for completions across the whole of PTAL 2 in outer London, the aggregate land take would approximate to a maximum of 140 ha with theoretical capacity for around 6,300 dwelling pa @45 dph. However, the majority of boroughs considered that there should be a very selective liberalisation of parking policy in PTAL 2 so the aggregate land take will be significantly less.
- 4.4.16 The impact of this aggregate land take would not be distributed evenly across the outer London boroughs. Most of the development in PTAL 0-1 is in Hillingdon, Bromley, Barnet, Croydon, Barking and Dagenham, and Richmond (where it respectively represents 12.7%, 8.4%, 6.9%, 6.5%, 6.4% and 6.3% of

average total completions). For these boroughs, the addition of an extra 24 sqm space per unit would in aggregate be the equivalent of 0.74 ha in Hillingdon, 0.49ha in Bromley, 0.4ha in Barnet, 0.38 ha inr Croydon, 0.37ha in Barking and Dagenham and 0.37ha in Richmond. This equates to aggregate theoretical capacity for between 16.5 units to 33 units per borough @ 45 dph. For the other outer London boroughs this will be significantly less eg the equivalent of 4.5 units for Kingston or 5.4 units for Haringey.¹⁰⁸

- 4.4.17 In summary, the LDD data show a complex picture of the relationships between parking and new housing across outer London and in particular in PTALs 0-1 and 2. In essence, they suggests that while there is considerable potential housing capacity there, the most reliable predictor of the future is probably provided by historic housing completions. In aggregate these make up a small but significant portion (2,400 pa) of London's total provision. However, the impact of this is very dispersed; it varies considerably between boroughs; and within boroughs the actual relationship between parking and housing is likely to vary locally with the form and size of the development. The implication is that at the local level the addition of an extra 0.5 space per dwelling or even an extra full sized space is not likely to lead to significant loss of housing capacity.
- 4.4.18 In discussions, some developers concurred with the findings of this LDD based research, saying that housing capacity may not actually be lost if there is a clear understanding from the outset of how many parking spaces were

¹⁰⁸ GLA London Development Database

required so provision for these could be incorporated in the initial design/viability process¹⁰⁹. In this view, the level of parking provided on site is not considered to be a major factor that affects development density. In many cases, it is possible to incorporate parking solutions that meet the requirements of residents, without reducing density standards, although it should be noted that developers in Newham (inner London) have reduced densities in response to the council's request for increased parking provision. There is also a shared concern among some outer London boroughs that housing delivery could be reduced due to increased costs for developers and/ or space being given over to parking, although the figures above suggest this to be minimal. Both density and parking standards should be quided by factors as such as local character and circumstances, the type of housing being provided and access to a range of public transport opportunities that meet the requirements of residents¹¹⁰.

4.5 HOW IS PARKING DELIVERED

4.5.1 With space at a premium, many of the outer London boroughs questioned whether there are different solutions as to how parking can be delivered. A number of issues have already been discussed such as how an over provision of parking can not only impact on the amenity of a development, but also potentially affect its viability as well as potentially compromising the number of homes which could be delivered; to the under provision of parking which sometimes causes issues of overspill on surrounding

¹⁰⁹ OLC sub regional meeting Croydon 10.03.15¹¹⁰ London Borough of Hillingdon submission

streets, affecting the character of area and causes problems for both existing and new residents.

- 4.5.2 This issue of access to parking not necessarily being distributed evenly to the residents within developments was also raised. This depends on how spaces are allocated, whether this is on a first come first served basis; selling them as part of the unit; or selling them separately after purchase of a property. This will have an impact of the uptake of parking spaces. The availability of parking in the surrounding area can also impact on the take up of parking spaces; people are unlikely to pay for a space if they can park on the street for free, especially if the on-street parking is closer to their front doors.
- 4.5.3 The cost of delivering parking underground is significantly higher than providing it on the surface; and the viability of schemes in outer London cannot generally support the provision of underground parking. In addition to on-site provision, there are a number of other ways parking can be delivered. TfL emphasised that separating parking from the development may help to provide a disincentive for unnecessary car use, for shorter trip such as 5-10 minute walking trips¹¹¹. Consolidated or shared parking off-site in town centres may help to enable this. Examples such as the Lewisham Gateway development shows how the availability of parking provision near the site allowed for a more flexible approach to its delivery¹¹². This approach is thought to be in common use on the continent; by locating parking provision

¹¹¹ OLC sub regional meeting Brent 03.03.15

¹¹² OLC sub regional meeting Bexley 11.02.15

at a distance from development helps to break habitual use of the car for very short journey trips as well as freeing up the street¹¹³. People are still able to park for short periods to 'drop off' at their front door but are not able to park there for significant periods of time. However, a number of boroughs pointed out that it is often people's perception of security which may work against this type of approach as they like to see their car from their own window and will therefore park as close as possible¹¹⁴. As such, on-street parking management is required for this approach to work.

4.6 OTHER MECHANISMS TO MANAGE PARKING PROVISION/ IMPACTS

Demand management

4.6.1 Demand management mechanisms were discussed at the sub regional meetings. A number of policy levers were identified as useful to complement parking standards - for example, restricting parking spaces at destinations eq shopping; reallocation of road space to "sustainable" modes; more "green time" for pedestrians to cross the road all discourage people from using the car¹¹⁵. In terms of managing behaviour, travel plans are also often seen as a useful tool. Travel plans may include information and support to help change behaviour such as travel information packs for all households, websites and notice boards with travel information and travel plan promotion; initial household visit from a site management team; cycle hire docking station; a voucher to each household towards cycle purchase,

secure cycle parking plus additional visitor cycle parking, cycle proficiency training, prepaid Oyster card to each household, car clubs, free car club membership to each household, concierge service to accept packages, monitoring surveys covering five and seven years¹¹⁶. The 2014 Berkeley Homes report also highlighted the importance of these in changing behaviour and encouraging a shift towards more sustainable modes of travel. Its evidence suggests that travel plans are most effective at changing behaviour of new rather than existing residents who have not developed habitual travel patterns.

4.6.2 Car clubs are also considered a mechanism for helping to manage the demand for parking. Research by TfL shows that members of car clubs reduce their car use by an average 36% and that almost a fifth of members sell a car either immediately before or after joining¹¹⁷. Economically they can help reduce congestion and parking pressures, particularly in new low car parking housing developments; socially, they complement the public transport system in providing accessibility to key services and facilities without the related costs of car ownership; and environmentally, they help reduce car usage and the associated pollution. By helping to reduce road congestion and parking pressures, car clubs can also create capacity and improve journey times for goods and services. ¹¹⁸

4.6.3 Car clubs are generally used for two

¹¹³ OLC First Meeting 16.12.15

¹¹⁴ OLC sub regional meeting Brent 03.03.15

¹¹⁵ OLC sub regional meeting Bexley 11.02.15

¹¹⁶ The Berkeley Group (2014) Does car ownership increase car usage? London: The Berkeley Group.

¹¹⁷ Transport for London (2008), Car Club Strategies. London, TfL

¹¹⁸ Transport for London (2008), Car Club Strategies. London, TfL

purposes: 60% of members use the cars for excursions or weekends away while half use them for shopping. The cars are generally not used for commuting, but outer Londoners use them more for business purposes and social activities. Car clubs are dependent on both on and off-street parking bays being available. Local authorities control a significant proportion of these within their borough. It is therefore essential that any development of policies, such as Controlled Parking Zone reviews, take car clubs into consideration. It is also necessary that Parking Enforcement Officers are aware of, understand and effectively enforce bays secured for car clubs.119

Visitor Parking

- 4.6.4 Visitor parking also potentially has an impact on the availability of parking for residents as well as contributing issues of overspill in the surrounding streets. CPZs can help to control visitors' spaces with visitor bays or paid parking on street, though this reduces the availability of spaces for residents. Some outer London boroughs thought they would like to cap the number of visitor permits for residents and said that management of this should be addressed at the local level¹²⁰.
- 4.6.5 NSL is one of the leading companies in on-street parking management in the UK and has developed an e-permits solution for controlling residents' permits, visitor permits or other controlled parking operations. Residents register online and are immediately 'permitted' a permit for

their visitors. Cars are then checked for eligibility on the street using automatic number plate recognition (ANPR) cameras and handheld computers linked to the permits database. This eliminates the need to distribute paper permits, and the problem of them falling off the windscreen or being forged¹²¹.

Garages

4.6.6 Garages are increasingly used for storage of other items besides cars, therefore reducing the availability of parking. There are many reasons for this including: modern cars tend to be larger and do not fit into the garages of older houses; modern cars are more reliable, with better corrosion protection, and can be stored in the open with the confidence that they will start; cars also have better theft protection now; and there has been a growth in multi-car households so that extra cars cannot be parked in the garage¹²². Due to these reasons, garages are not only used for additional storage but increasingly are being converted into extra rooms. One borough said that through a survey they had undertaken of 400 units, only 18% used the garage they had for parking; the remainder used garages for other purposes and therefore another space was used for the car¹²³. In areas with limited parking availability, use of garages for other purposes can further exacerbate issues of overspill in the surrounding area.

¹¹⁹ Transport for London (2008), Car Club Strategies. London, TfL

¹²⁰ OLC sub regional meeting Brent 03.03.5

¹²¹ Bates, J. and Leibling, D. (2012) Spaced Out:
Perspectives on parking policy. London: *RAC Foundation*.
¹²² Bates, J. and Leibling, D. (2012) Spaced Out:
Perspectives on parking policy. London: *RAC Foundation*.
¹²³ OLC sub regional meeting Croydon 10.03.15

Rent-a-drive

4.6.7 A scheme which provides a slightly different approach to the issues of parking availability is called rent-a-drive. A number of internet sites have been set up to match drivers with people who are willing to rent out their driveways during the day while they are at work. These include ParkatmyHouse (www. parkatmyhouse.com), which was set up by Anthony Eskinazi after he was inspired by a visit to a sports game in San Francisco during which he saw an empty driveway close to the stadium; ParkLet (www.parklet.co.uk) which allows car owners to rent private parking spaces and garages on a rolling monthly basis; and Parkonmydrive (www.parkonmydrive. com) which allows people to park for days or parts of days on advertised private driveways. Whilst this type of approach might provide limited solutions to parking availability, it also raises questions, not least whether planning permission may be needed because it such a use may be defined as business activity. ¹²⁴

¹²⁴ Bates, J. and Leibling, D. (2012) Spaced Out:Perspectives on parking policy. London: RAC Foundation.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSION

- 5.1.1 A number of outer London boroughs consider that, for the reasons outlined earlier, rigid adherence to maximum car parking standards creates difficulties of accessibility for communities, especially in low PTAL areas. In particular, car dependency in outer London is much higher than inner London; this is due to complex commuting patterns and a lack of accessible public transport options to meet both commuting and social trip requirements. Further, whilst there is some flexibility in the current policy it is not considered sufficient to address the problem.
- 5.1.2 The Commission agrees with this view and sets out below its recommendations on how more flexibility in parking policy might be achieved. Key to this consideration is whether the additional flexibility sufficient to address the concerns of boroughs can be met whilst still retaining the concept of maximum standards or whether it is necessary to set this concept aside.

5.2 RECOMMENDATIONS

Recommendation: Keep references to "Maximum"

5.2.1 There was a general acceptance that retaining the concept of maximum parking standards which underpins parking policy at a pan London level was beneficial both to boroughs and developers. Many of the boroughs felt that keeping a "maximum overview" is important in managing the network and helping to provide more opportunities for modal shifts. Maximum standards also give boroughs some comfort when negotiating with developers as they keep a downward pressure on traffic generation. For developers, having clear standards, particularly maximums, makes it much easier to bid for land and "feel comfortable" about the viability of schemes - the policy/standards have already been taken into account in the price of the land and bidders are all working on the same assumptions. Many stressed that the viability of schemes is affected if these types of issues are too open to negotiation.

Without prejudice to the recommendations for greater flexibility made below, the Commission believes it is important to keep the integrity of the restraint-based framework of maximum parking standards for general application for London as a whole in that it provides coherence and benefits for both boroughs and developers.

Recommendation: Include reference to minimum standards

- 5.2.2 There was a significant difference of opinion on incorporating minimum standards within the London Plan. Some boroughs believed that a minimum would lead to an over provision of spaces and would affect the delivery of housing, whereas others felt that there are circumstances where minimum standards could be applied locally, particularly in negotiations with developers where the pan London restraint based approach does not always allow boroughs and developers to fully reflect local issues.
- 5.2.3 The Commission considered that a workable and justifiable compromise would be that a reference to minimum standards should be included in the

supporting text to allow boroughs to set these locally in light of local need/ overspill pressures and recommends accordingly.

Recommendation: Application of greater flexibility to outer London PTALs 0-1

- 5.2.4 One of the most fundamental aspects of difference within outer London is the accessibility / connectivity of places which condition the choices available to people in different ways, and also affects who chooses to live there.
- 5.2.5 The Government has indicated its concerns in the use of maximum parking standards and many of the outer London boroughs expressed concerns with regard to overspill and that greater flexibility was still needed in the policy to address differences between areas and local circumstances. In particular, they highlighted that complex commuting patterns both within outer London and between outer London and outside I ondon mean there is often a lack of accessible public transport options to meet these and other travel requirements. Specifically, orbital routes in outer London are also significantly less well served by public transport than radial routes.
- 5.2.6 As discussed in section 4.4.14 the implication at the local level of the addition of an extra 0.5 space per dwelling or even an extra full sized space is not likely to lead to significantly loss of housing capacity. Based on this and the clear consensus from the sub regional meetings, the Commission recommends that greater flexibility should be encouraged in outer London PTALs 0-1, where public transport accessibility is

at its lowest and there is much more car dependency. Its recommendation is that in these areas, boroughs should be able to determine what car parking standards are appropriate to meet local needs.

5.2.7 Whilst it is clear that some but not all boroughs have been taking advantage of the existing flexibility in parking policy to allow provision outside the ranges specified in the London Plan, the Commission's recommendations will help to regularise this and provide greater certainty to developers while ensuring that proper account is taken of local circumstances, and in particular the potential impact of new development on on-street parking.

Recommendation: Application of greater flexibility for limited parts of PTAL 2 based on criteria

- 5.2.8 Some outer London boroughs believed that there is also a case for greater flexibility in some parts of PTAL 2 in outer London, in certain circumstances. However, to provide greater flexibility throughout the whole of PTAL 2 may adversely risk increasing traffic volumes as well as losing significant housing capacity; potentially 140ha with capacity for 6,300 dwellings pa.
- 5.2.9 Whilst PTALs are a good starting point in understanding variations of difference, and it is appropriate that they are used in policy, there are also other aspects of differentiation which are also relevant. The nature of the variables influencing car ownership (and hence car parking demand) cannot be forecast by considering a site location or its accessibility alone. The significance of other factors such as household structure,

type and other demographic variables means that different forms of residential development will generate different levels of car ownership / demand for parking.

- 5.2.10 The Commission agrees with boroughs that the circumstances in which further flexibility should be provided in parts PTAL 2 should be defined by a set of criteria and therefore recommends very selective liberalisation of parking policy in PTAL 2, justified on a case by case basis in line with a set of criteria.
- 5.2.11 In term of criteria, the Commission believes that it should build on the NPPF criteria and relate to London's specific circumstances such as:
 - overspill,
 - issues of on street parking,
 - references to family housing,
 - level and orientation of public transport accessibility,
 - impact on air quality and congestion,
 - car dependency levels.
- 5.2.12 It recommends that where these criteria are met either in full or in part, boroughs should be able to determine appropriate car parking standards to meet local needs.

Recommendation: Demand Management Measures

5.2.13 In order to address specific concerns around overspill, deliverability, and viability a number of boroughs thought that it was important that the policy references complementary demand management measures. In particular, discussions in the sub regional meetings focused on matters such as Controlled Parking Zones (CPZs) and car clubs and the benefits/ issues associated with them; the Commission therefore feel that reference to them by way of example in the London Plan supporting text would be more appropriate than specifically requiring them.

Recommendation: Prescriptive policy

5.2.14 There was considerable debate about whether the policy should be prescriptive or more permissive. Some thought it should be more prescriptive in order to better reflect the government's concerns; but others considered it should be a more permissive policy to allow flexibility where it was desired. Overall the Commission felt that the policy should be prescriptive and include the word 'should'.

Recommendation: Guidance

5.2.15 It was suggested throughout the discussions that more practical guidance on design solutions for parking would be helpful. This may include guidance on the internal layout of schemes and various options for locating or allocating parking spaces. In particular it could provide advice for road widths as well as streetscapes, including landscaping and screening ensuring appropriate balance between amenity and safety and security. TfL indicated that this is something that they may undertake in the future. This is something the Commission fully supports.

APPENDICES

APPENDIX 1 THE COMMISSION MEMBERSHIP

Will KcKee, Chair of Outer London Commission

Corrine Swain, Arup

Ian Gordon, London School of Economics

Peter Eversden, London Forum of Amenity & Civic Societies

Tony Pidgley, The Berkeley Group Holdings plc

Richard De Cani, Transport for London

Alex Williams, Transport for London

Sir Terry Farrell, Farrells

Colin Stanbridge, London Chamber of Commerce & Industry

Simon Keal, London Councils

Teresa O'Neill, Mayoral Adviser on Outer London and Leader LB Bexley

Stephen Alambritis, Leader London Borough of Merton

Ray Puddifoot, Leader London Borough of Hillingdon

Chris Robbins, Leader London Borough of Waltham Forest

Sue Wilcox, Quod

Alistair Parker, Cushman and Wakefield

Contributions from the following special interests were received:

Keith Mitchell, Peter Brett Associates

David Quarmby, Independent Transport Consultant

Stephen Locke, London Travelwatch

APPENDIX 2 MEETING DATES AND QUESTIONS

Meeting Dates 2015:

- Wed 11 February 2015, 6.30pm Bexley Council Chamber, Civic Offices, 2 Watling Street, Bexleyheath, Kent DA6 7AT
- Tues 24 February 2015, 6.30pm
 Waltham Forest Town Hall, Forest Road, London E17 4JF
- Tues 3 March 2015, 6.30pm Brent Civic Offices, Engineers Way, Wembley HA9 0FJ (Level 3 in Board Rooms 3 & 4)
- Tues 10 March 2015, 6.30pm Town Hall, Katharine Street, Croydon, CR0 1NX

Questions to inform sub regional meetings debates:

1 What is the role of residential parking standards and what is 'the problem' that needs to be addressed?

Are there car parking overspill issues? in which circumstances (type and geographical spread)? if so, how might these best be addressed?

How do maximum residential parking standards affect parking levels, car ownership and car use?

What impact do you think a change to residential parking standards will have on congestion and the demand for destination parking?

- 2 Inevitably there will be trade offs, with different winners and losers for different policy options ... what should the priorities be?
- 3 How do car parking standards affect appetite for and economics of development?

What impact would a change in standards have on local authority revenue streams from parking?

4 Would practical guidance for how to deliver parking in a way that minimises impacts be of value... what advice could be provided to improve residential parking implementation?

What are the issues associated with allocated versus unallocated development?

What other mechanisms could be used to manage parking provision/impacts, e.g. consolidated or shared parking, CPZs etc.

- 5 How far do parking levels affect issues such as density and acceptability of development/its impacts?
- 6 Is it possible to develop a 'typology' of places and if so, what factors should be considered in terms of parking requirements for different types of places?

APPENDIX 3 SUMMARIES OF DEVELOPER INTERVIEWS

THEME	PROS	CONS
Maximum standards	Provides clarity and establishes a framework within which developers can more confidently operate when making applications Prevents a 'free for all' / tool in encouraging use of sustainable modes and helping manage demand on the roads Valuable space is used for increased densities, amenity uses, etc. Maximums could be implemented as if they were minimums and so are inherently flexible	Could be seen as interfering with supply and demand Could be applied bluntly Could result in under provision of parking which might be essential to marketing new development Could impact attractiveness of some developments Without management strategies maximum standards could lead to poor amenity and chaotic parking Could be seen by some as undermining local planning
Minimum standards	Establishes a framework within which developers can more confidently operate within when making applications Under provision in areas of high dependency will be tackled Could bring more attention to parking and result in better/more thoughtful design Could deliver better quality streets	Could be seen as interfering with supply and demand Could be applied bluntly Could result in over provision of parking Could impact desirability of development at marginal sites Could impact small/infill development Could result in fewer small units being delivered Requiring parking could lead to pressures on affordable housing provision Could conflict with the need for other uses to be provided on site eg forecourts, waste collection, surface water drainage etc.

THEME	PROS	CONS
Flexibility (of standards)	Local character is respected and borough priorities can take precedence Parking can be determined on a case by case basis Parking provision can be responsive to local change Flexibility is highlighted in paragraph 2.36 of the London Plan: 'In neighbourhoods with low public transport accessibility (PTAL 0-1), residential parking standards should be applied flexibly.'	Traffic generation is a strategic issue and parking is related to this; local approaches might not take account of strategic need for restraining car ownership / other wider factors Reduces certainty for developers Flexibility is inherent in current maximum standards as they set only an upper limit; planning system provides further flexibility as each site is assessed using local knowledge and relevant evidence
Parking management	CPZs enable management of roads Residents tend to approve of CPZs once they are implemented CPZs ensure parking is for residents and short-term visitors only Applies to existing residents as well as new residents (so a more effective tool in managing streets) Parking can be consolidated/shared among different sites and/or land uses Public realm/amenity is protected by preventing parking in some areas Contributes to demand management and behaviour change (encouraging people to park in appropriate places) Reduces potential for parking to block roads or create safety hazards	CPZs are difficult to introduce (they are unpopular with politicians and the public and can fail during consultation) Lack of funding to implement CPZs Residents might perceive parking to be too distant /inconvenient /unsafe Could increase the number of Londoners who are concerned about parking (ie move it up the political scale) Politics around them can mean that they only take effect once significant problems arise CPZs along borough boundaries can be problematic

OUTER LONDON COMMISSION

THEME	PROS	CONS
Evidence based parking provision	Parking provision is justified through the use of PTAL, parking stress surveys and Census data (existing ownership levels) Parking can be determined on a case by case basis Parking provision can be responsive to change	Resource intensive and potentially time consuming for both developers and boroughs and lack of wider framework / certainty Could be perceived as lacking consistency when parking provision is different at every site Existing high levels of car ownership are embedded Undermines ability to manage issues eg pressures on road network strategically Aspirations might not match the status quo – could prevent change where it is desired
The influence of politics	Parking policy can be responsive to residents' concerns Boroughs are able to shape development to match the aspirations of local plans The sensitivity of using car parking management measures can reduce the range of measures available to manage parking stress.	Evidence based policy can be ignored Single issues may be given undue weight/ conclusions may not match reality Other issues eg health, air quality and open space need to be considered in an integrated way Potential for judicial review Even where planners and developers provide sufficient parking it is not necessarily used eg some people will not park away from their front door despite attempts to create parking-free streets for the purposes of improved urban realm and public amenity.
Cost of off-street provision	The delivery of parking is paid for by the user Cost of externalities is more closely matched to the cost to the user The value of land for parking is better reflected Some developments already doing this, including sharing capacity between different parts of a development	Residents will not pay more if they can park for free or more cheaply on-street, eg leaving garages empty Parking is allocated to some residents but not all Parking may be allocated to residents who do not need it

THEME	PROS	CONS
Car -free development	areas with good accessibility Encourages and embeds sustainable transport/lifestyles Valuable land is available for other uses / higher densities Costs are reduced for the developer	There is a perceived impact on the marketability of the development Residents have been known to purchase flats/houses and 'sort out' parking later, ie they will continue to own a car and find a workaround Need complementary measures to realise benefits of car-free sites eg CPZs, car clubs, cycling infrastructure etc

Other formats and languages

For a large print, Braille, disc, sign language video or audio-tape version of this document, please contact us at the address below:

Public Liaison Unit

Greater London Authority City Hall The Queen's Walk More London London SE1 2AA

Telephone**020 7983 4100** Minicom**020 7983 4458** www.london.gov.uk

You will need to supply your name, your postal address and state the format and title of the publication you require.

If you would like a summary of this document in your language, please phone the number or contact us at the address above.

Chinese

如果需要您母語版本的此文件, 請致電以下號碼或與下列地址聯絡

Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây.

Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

Turkish

Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Hindi

यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं, तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন্ নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Urdu

اگر آپ اِس دستاویز کی نقل اپنی زبان میں چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Arabic

```
إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى
الاتصال برقم الهاتف أو مر اسلة العنوان
أدناه
```

Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઇતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાઘો.

GREATER **LONDON** AUTHORITY