



# Cycling and the housing market

Summary Report



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## The relationship between transport and housing

The draft London Plan sets out that, to accommodate a growing population, 66,000 new homes will be needed every year between now and 2041. The Mayor's Transport Strategy highlights the crucial role the transport network has to play in achieving this, both by shaping the type of growth in London and shaping where growth happens, including by unlocking new homes in less developed parts of the city.

Planning new developments around active, efficient and sustainable modes of transport can help create attractive, accessible areas where people are able to lead healthy lives and get around without having to depend on a car. Extending new transport connections to new parts of the city can unlock new development by improving access and transport capacity for new and existing residents.

Both the Mayor's Transport Strategy and the draft London Plan set out a strategic, holistic approach to new development. By investing in walking, cycling and public transport improvements, we will not only unlock more home-building across the Capital but ensure that this growth is Good Growth, meaning growth that is sustainable and works for all Londoners.

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## The research question

Investment in walking and cycling infrastructure by TfL and boroughs has many benefits: less congestion, cleaner air and a healthier population. However, as London's cycle network has grown in recent years we have seen an unexpected outcome: our new cycle routes popping up in the property pages. Articles in prominent London newspapers have highlighted houses and flats for sale and rent close to new segregated routes<sup>1</sup>, Quietways<sup>2</sup> and Santander Cycles docking stations<sup>3</sup>.

This phenomenon raises a number of relevant transport planning questions. What impact are new, high-quality cycle routes having on where people choose to live in London? Could expanding the cycle network help unlock more of the homes that London sorely needs? Is there commercial value in creating new developments that enhance local provision for cycling?

Similar questions have been widely studied in the context of public transport. There is clear evidence, for instance, that connecting new areas to the public transport network can help bring forward development and unlock new homes for London<sup>4</sup>. The 'New Homes and Jobs' chapter of the Mayor's Transport Strategy sets out how transport will be used to unlock growth potential in underdeveloped parts of London, and this is a key part of the case for investment in schemes such as Crossrail 2 and the Bakerloo Line Extension.

We wanted to undertake a similar study for cycling to help understand the substance behind the headlines, and explore the potential for cycling and walking infrastructure to contribute to unlocking new housing in less developed parts of London. In 2016, we commissioned Steer (formerly Steer Davies Gleave) to explore the impact of cycling infrastructure on London's housing market. We set a simple, yet broad, brief: what impacts, if any, does the provision of high-quality cycling infrastructure have on the housing market in London?

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1. Metro, January 19 2016.

2. London Evening Standard, September 7 2016.

3. London Evening Standard, April 8 2016.

4. Travel in London 7, December 2014.

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## The study

Steer took a three-pronged approach to answering this question. They begin with an extensive review of existing international research and studies, brought together in Chapter 2 of the full report. This review identified a number of studies that found a positive link between cycling infrastructure and the housing market, although several studies found that cycling infrastructure had no, or even a small negative, effect.

Informed by these findings, Steer conducted a series of discussions with key stakeholders in London's housing market, including boroughs, developers, estate agents, social landlords, professional bodies and industry pundits. The findings from these discussions are summarised in Chapter 4 of the full report.

There was a general consensus amongst stakeholders that creating good places for walking and cycling can have a positive impact on London's housing supply and market more widely. As well as the role good active travel infrastructure can play to help deliver more new homes, the interviews made clear that there is increasing demand for high-quality cycling infrastructure among both renters and home-buyers. Two estate agents, Ludlowthompson and Stirling Ackroyd, described how people will often look for homes within a 'cycle time circumference' of their workplace, and a number of boroughs and developers reflected on the increasing demand for cycle parking.

Some developers felt that improving cycling provision in and around new developments can be commercially advantageous. However, others

highlighted concerns around of some opportunity costs, especially in relation to a loss of developable space due to providing cycle parking.

For the final part of the study, a series of case studies was developed to highlight examples of the impact that cycling provision has had on the London housing market. This includes several examples of major developers who have prioritised walking and cycling in developments. It also highlights the trend of references to cycle routes in property advertisements, showing that the cycle network is viewed as a key part of London's transport network (alongside local bus routes and Underground/rail stations) by many prospective renters and buyers.

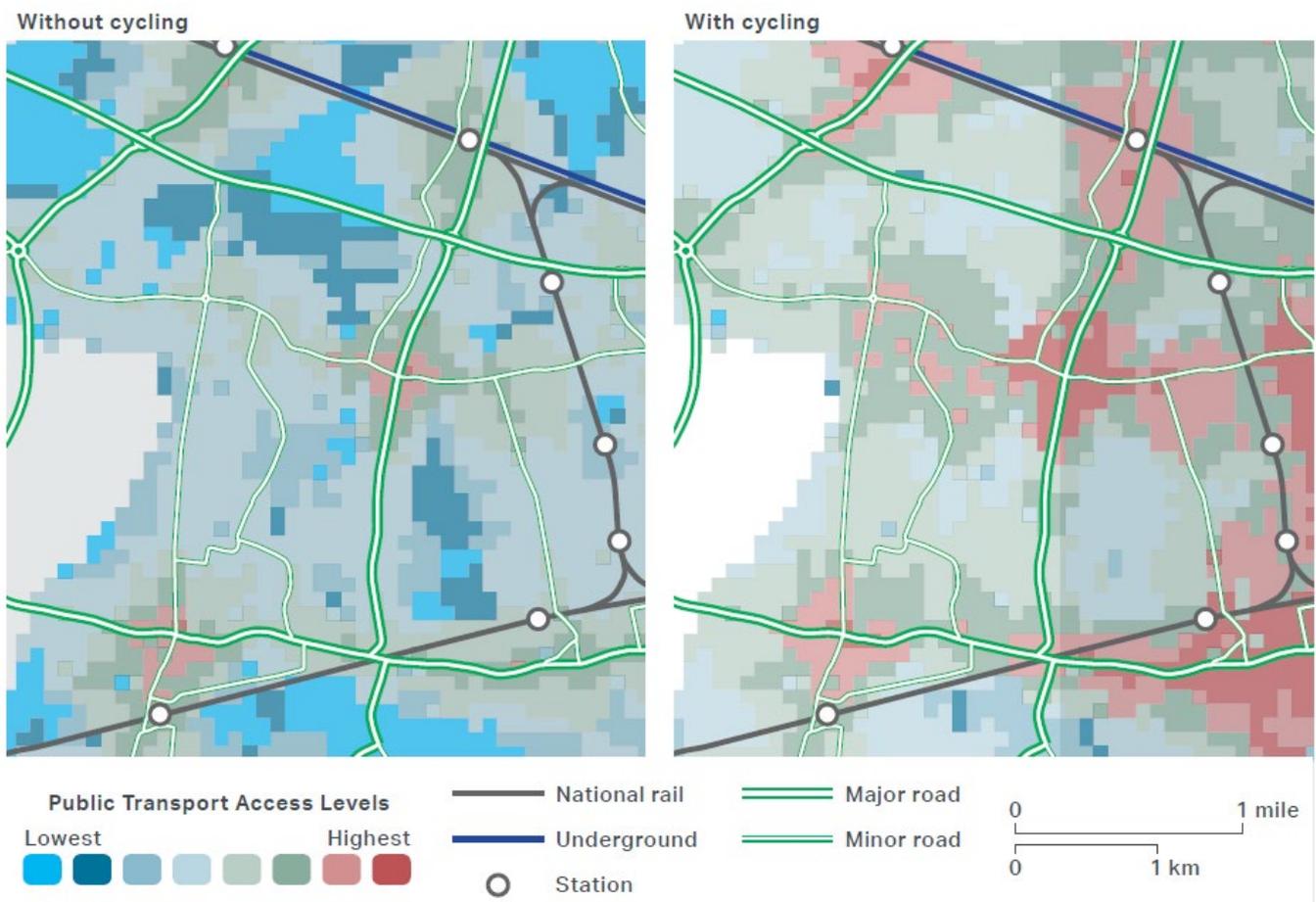
## Key findings

Both the literature review and the stakeholder discussions suggested that investment in high-quality cycling infrastructure can have a positive impact on the housing market. In particular, it was felt that the greatest impact is realised at a neighbourhood level: creating pleasant, attractive streets that encourage walking and cycling will improve local connectivity and liveability to an extent that additional new development may be unlocked.

Stakeholders also felt that the provision of good quality cycle infrastructure can:

### Improve the accessibility of housing in areas with lower access to public transport.

TfL use Public Transport Access Levels, or PTALs, to measure the overall accessibility of different parts of London, based on a short walk to the station or bus stop. Stakeholders felt that cycling infrastructure can increase people's access to public transport, creating more accessible areas across London. The diagram below, taken from the Mayor's Transport Strategy, shows how access to public transport could be increased by taking cycling into account.



Increase in public transport access levels associated with cycling  
Source: Mayor's Transport Strategy

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### **Play a role in providing transport provision required to unlock new areas for housing development.**

Stakeholders felt that cycling improvements increase access to public transport, local amenities and services and, where cycling improvements contribute to reduced levels of traffic, can also increase an area's liveability. Some stakeholders felt that increased connectivity and liveability can help bring forward new development proposals by increasing demand for the area, particularly in locations with lower access to public transport.

### **Help meet the expectations of people moving into new developments.**

There was general consensus that there is increasing demand for cycle parking and other cycle provision in new developments. Stakeholders also felt that people seek to live in quiet, low-car or car-free streets, which cycling infrastructure can help achieve.

### **Improve the liveability of areas, both for current and new residents.**

Many of the stakeholders identified how cycling improvements at neighbourhood and network level can help create attractive new developments. These improvements, including quieter streets and connections to the wider cycle network, will also benefit existing residents as well as those moving to new developments.

Stakeholders were also asked if they thought that cycling infrastructure could be considered a catalyst for the gentrification of areas. This was rejected by all interviewees, including borough and social landlord stakeholders. It was felt that cycling has the potential to improve accessibility for everyone living in an area, but it was acknowledged that more needs to be done to make cycling an appealing choice for all Londoners.

The most significant threat discussed by stakeholders was a potential loss of total developable space within new developments to accommodate cycle parking. However, many stakeholders also identified an increasing demand and expectation of cycle parking within new developments.

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## Using this evidence in practice

The research shows that the provision of high-quality cycling infrastructure can play a small, but significant, role in shaping London's housing market. It provides evidence to support the proposals in the Mayor's Transport Strategy and draft London Plan to embed active travel in new developments, including providing secure cycle parking and creating streets and places where people choose to walk and cycle.

It also underlines the importance of delivering a London-wide cycle network, not only to help people travel around the city sustainably, but to ensure that new developments and wider growth areas are well connected to the rest of the city.

While in general there may be less scope for cycling infrastructure to contribute to unlocking large scale development opportunities in the same way that Crossrail 2 and the Bakerloo line extension could, cycling can clearly play a part in creating the conditions for Good Growth across the Capital.

The report highlights a consensus that expanding the cycle network to neighbourhoods across London does not cause social exclusion or gentrification. These are symptoms of wider issues across London and the UK which the draft London Plan seeks to address through increasing housing supply, securing more affordable housing and building strong, inclusive communities. This is further supported by the approach set out in the Mayor's Transport Strategy.

Finally, it highlights that there is more potential for TfL and boroughs to work with developers to

improve local areas for walking and cycling. The developers interviewed as part of the study were largely positive about the benefits of cycling, and the report highlights case studies of ambitious developments that put cycling at their heart. However, stakeholders highlighted that not all developers have been convinced of the benefits of walking and cycling, and there is more work to do to support the housing and development sector in prioritising Active Travel.

We would like to see more developers follow in the footsteps of these positive case studies, and we hope that this report will mark the start of a conversation between planners, developers and communities about how cycling can help contribute to creating healthy, accessible and attractive places to live across London.

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## Executive Summary

### Overview

In 2016, Steer Davies Gleave was commissioned by Transport for London (TfL) to gather qualitative evidence relating to the impact of good quality cycling infrastructure on the housing market.

Though there is a growing body of qualitative and quantitative evidence which demonstrates that cycling has a positive impact on public health, air quality, congestion and social inclusion, cycling's interaction with and impact on the built environment is an area where there is comparatively less evidence.

The purpose of this study was to investigate the nature of the link between the provision of good quality cycling infrastructure and the housing market, and to identify the range of benefits and disbenefits accruing from a link.

The latter stage of this study focused on investigating how the benefits and disbenefits that accrue from the provision of cycling infrastructure could be quantified through further research.

The initial study was completed in July 2016, and this executive summary updated in July 2017 to reflect the latest policy context.

### Policy context

At 8.8 million residents, London's population is now larger than it has ever been. It is set to reach 10.5 million by 2041, with an average increase of almost 44,000 households each year. To meet the demands of the growing population, experts say we will need to identify land in the capital to build at least 50,000 homes every year between now and 2041.

In October 2016, the Mayor set out his vision for London in 'A City for All Londoners'. This document outlines the capital's biggest challenges and opportunities across priority policy areas, including growth, housing, transport and the economy. On housing, the Mayor sets out a number of specific strategies for how he will help London to grow and meet its house building requirements. These include:

- Intensifying development across London in areas with high public transport provision, including the use of well-designed higher-density development.
- More house building on TfL and other public-sector land.
- Attracting finance into new 'build-to-rent' developments.
- Planning housing developments in areas where new transport links are going to open in the future, such as Crossrail 2.
- Encouraging smaller-scale housing developments in appropriate suburban locations.
- Working towards a strategic, London-wide target for 50 per cent of new homes to be affordable.

As set out in the draft Mayor's Transport Strategy, published in June 2017, sustainable transport provision is vital to achieving 'good growth' and providing Londoners with housing which is accessible, sustainable and desirable. Traditionally, this means developing around public transport hubs, and the relationship between public transport and the housing market is well established.

## Public transport and the housing market

Public transport, walking and cycling provision are essential to the quality of life for all Londoners: providing transport choice; connecting people to jobs and services; improving safety and security; stimulating economic growth; increasing health and wellbeing, and helping to protect the environment.

As described in the literature review of this report, the local benefits of public transport infrastructure have been shown to translate directly into increased land values and house prices. This same relationship has been shown for improvements to the urban realm and green space. These relationships are now well established in the context of justifying investment and commonly used to make the case for large scale infrastructure projects.

It is important to note that an increase in house prices is not a 'benefit' of investment. Measuring the impact of investment on the liveability of an area is difficult to determine in a quantified way and it is common practice to use land values and house prices as a proxy – the more an area is improved, the more liveable that area becomes and the more people are willing to pay to live there.

In this way, transport can also bring about new investment in housing both by improving the viability of developments and creating new markets.

This study looks for qualitative evidence of high quality cycling infrastructure having a similar impact on the housing market as an indicator of the benefits provided to current and future residents.

## The impact of cycling investment on the housing market

Both the literature review and discussions with stakeholders suggested that investment in high quality cycling infrastructure can have an impact on the housing market in the area, particularly at a neighbourhood level. Stakeholders identified the following qualitative benefits and disbenefits of cycling investment on the housing market;

### *Benefits accruing from the provision of good quality cycling infrastructure*

Stakeholders suggested that the provision of good quality cycling infrastructure:

- Improved access in areas with low public transport access (and improved transport choice);
- Played a role in providing the transport provision required to unlock new areas for housing development;
- Improved the liveability of an area for current and prospective residents (with property values being an indicator for this);
- Is not seen to accelerate or encourage the gentrification of areas;
- Could contribute to improving personal safety and reducing the fear of crime;
- Supported new patterns of travel (i.e. travel associated with flexi-working practices and more polycentric forms of movement);

- Helped to meet residents' expectations of transport infrastructure provided as part of new developments; and
- Could help to develop a greater sense of community in areas – specifically those with social disparities.

*Disbenefits accruing from the provision of good quality cycling infrastructure*

Stakeholders suggested that the provision of good quality cycling infrastructure:

- Resulted in a loss of total developable space within new developments as a result of requirements to accommodate cycle parking (meaning potential returns on developments were less);
- Could have a negative impact on the aesthetics of a streetscape; and
- Could lead to resident opposition (detracting from a sense of community).

# 1 Introduction

## Context

- 1.1 In June 2017, the Mayor of London published his draft Mayor's Transport Strategy, which sets out a bold new approach to transport in London over the next 25 years, with an ambitious aim for 80 per cent of all Londoners' trips to be made by walking, cycling and public transport by 2041.
- 1.2 The draft Strategy seeks 'to make London a city where people choose to walk and cycle more often by improving street environments, making it easier for everyone to get around on foot and by bike, and promoting the benefits of active travel'. Additionally, the draft Strategy includes the aim for 70 per cent of Londoners to live within 400m of a high-quality, safe cycle route by 2041.
- 1.3 To support these ambitions, the Transport for London Business Plan (December 2016) set out a total of £770 million to be spent on infrastructure and initiatives to promote cycling between 2017 and 2022. This represents nearly double the amount spent by previous Mayor.
- 1.4 The draft Mayor's Transport Strategy also highlights the important role transport will play in enabling London's sustainable growth, both in shaping the type of growth that takes place and shaping where this growth will take place, using transport to support and direct 'good growth'.
- 1.5 Though there is a growing body of qualitative and quantitative evidence which demonstrates that cycling has a positive impact on public health, air quality, congestion and social inclusion, cycling's interaction with and impact on planning and land use is an area where there is comparatively less evidence.
- 1.6 It has been possible to identify and investigate the impact of other forms of transport infrastructure on land uses and values (showing, for example, a positive correlation between the existence of a rail line or tram and the adjacent land values or property prices), but this has not been widely investigated in the context of cycling investment.
- 1.7 The impacts of public realm improvements (as measured by TfL's Pedestrian Environment Review System) on residential sale prices, retail rateable values and pedestrian ambience have been evidenced via TfL's 'Valuing the Urban Realm' (VUR) research. It can therefore be assumed that similar benefits may accrue from investment in cycling infrastructure, where this is delivered alongside improvements to the pedestrian environment.
- 1.8 In order to support the Mayor's ambitious plans for transport and housing in London, and to understand the extent to which cycling investment can bring about investment in

housing by improving the viability of development, or by creating new markets, it is necessary to investigate further the emerging impact of cycling on the housing market.

## This study

1.9 Steer Davies Gleave was commissioned by TfL to gather qualitative evidence relating to the impact of good quality cycling infrastructure on the housing market. The aims of this study were to:

- Identify, qualitatively, the different ways in which the provision of cycling infrastructure may have an impact on the housing market (benefits and disbenefits);
- Identify what the expectations are around ‘good quality cycling infrastructure’ – what ‘good quality’ means to different parties; and
- Review the existing evidence base relating to the identified benefits and disbenefits, including quantitative studies.

### Contributors to this study

1.10 Steer Davies Gleave gratefully acknowledge the expert advice and input received from Professor Neil Dunse of Heriot Watt University (Real Estate Director of Studies, School of the Built Environment) and Jim Ward, Head of Residential Research, Savills throughout the course of this study.

#### Definition: ‘cycling infrastructure’

‘Cycling infrastructure’ is referred to throughout this report. There is detailed discussion of what is meant by ‘good quality’ cycling infrastructure in section 4, but, for the avoidance of doubt, ‘cycling infrastructure’ means physical measures to support cyclists and journeys by bike, such as mandatory cycle lanes, segregated lanes, Cycle Superhighways and cycle parking. When the cycling infrastructure referred to is infrastructure other than cycle parking (i.e. road space and lanes), ‘cycling infrastructure’ means road space or other routes that are marked for cyclists’ use and which excludes use by one or more other modes of motorised transport.

## Structure of this report

1.11 This report presents the findings of the qualitative study into the effects of cycling on the housing market. The remainder of the report is structured as follows:

- Section 2 presents a summary of existing research on the topic of cycling and the housing market (and comparable topics);
- Section 3 provides an overview of the method used to identify and engage with relevant stakeholders;
- Section 4 presents the results of the stakeholder engagement discussions, including the perceived benefits and disbenefits that the provision of good quality cycling infrastructure can have on the housing market;
- Section 5 includes case study examples that show area and developer-specific examples of the ways in which good quality cycling infrastructure influences and effects the housing market, and the ways in which developers and housing market professionals recognise and build-upon those effects; and
- Section 6 offers some concluding remarks about the relationship between good quality cycling infrastructure and the housing market.

## 2 Summary of existing research

2.1 This section provides a summary of the existing literature relating to the effect of provision of cycling infrastructure on the housing market. The summary is structured as follows:

- **Summary of existing literature:** this section provides an overview of the quantity and scope of existing literature relating to the impact of cycling on the housing market or comparable interactions.
- **Methodologies and data used in previous research:** this section identifies the different methodologies used by different study authors to investigate the provision of cycling infrastructure on the housing market (or the specific interaction explored by the author), and includes a summary of the advantages and disadvantages of different approaches;
- **Impact on the housing market:** this section summarises the different impacts that the articles and reports reviewed identified – both in terms of type of impacts and scale recorded.

2.2 Table 2.1 on the following page provides a summary of the literature reviewed and the summary findings of each study. The numbers in brackets correspond to the paragraphs in which those studies are discussed in this section. References for each of the identified articles and studies are included in Appendix A.

**Table 2.1: Summary of literature reviewed and study findings**

Study	Focus	Method	Findings
Chung et al. (2013)	Effect of cycling infrastructure on housing market (2.4)	Case studies, regression	One case study site (with on-street cycle lane) associated with increase in house price, the other (with segregated cycle track) saw a decrease (2.30).
Krizek (2006)	Effect of cycling infrastructure on housing market (2.4)	Hedonic pricing method; stated preference	Off-street cycle tracks associated with increased house prices but on-street lanes associated with lower prices (2.31); stated preference showed that commuters prefer on-street cycle lanes to off-street cycle track (2.32).
Lindsey et al. (2004)	Effect of cycling infrastructure on housing market (2.4)	Hedonic pricing method	Off-street cycle track associated with increased house prices in the vicinity (2.33).
Racca and Dhanju (2006)	Effect of cycling infrastructure on housing market (2.4)	Hedonic pricing method	Off-street cycle track associated with increased house prices in the vicinity (2.33).
Urban Land Institute (ULI, 2016)	Effect of cycling infrastructure on housing market (2.6)	Case studies; commercial data	Some developers are now 'over-providing' cycle parking to cater for future demand (2.34); greenway cycle track associated with higher turnover of properties (2.36).
BR Lets (2014)	Effect of cycling infrastructure on housing market (2.6)	Commercial data	Introduction of London cycle hire in areas with poor public transport accessibility has increased rental prices (2.35).
Rowe (2013)	Effect of cycling infrastructure on commercial land value (2.7)	Retail sales tax filings in two case study sites	Introduction of on-street cycle lanes had a positive impact on commercial land value in one case study, with a neutral impact in the other (2.37).
NYCDOT (2013)	Effect of urban realm on the housing market and commercial land value (2.8)	Retail sales tax filings in seven case study sites	Improved urban realm has a positive impact on commercial land value, with the case study including on-street cycle lanes increasing by a greater amount (2.39).
CABE (2007)	Effect of urban realm on the housing market and commercial land value (2.10)	Regression, case studies	Improved urban realm is linked to higher rental and sale value of houses in London (2.40).
MVA (2008)	Effect of urban realm on the housing market and commercial land value (2.10)	Regression, case studies	Improved urban realm is linked to higher house prices - this difference is less pronounced in London (2.41).
Cortright (2009)	Effect of urban realm on the housing market and commercial land value (2.10)	Hedonic pricing method	Positive correlation between the quality of the walking environment and house prices (2.42).
RICS (2016)	Effect of urban realm on the housing market and commercial land value (2.11)	Case studies	High quality placemaking in new housing developments is linked to higher house prices (2.43).
Smith (2010)	Effect of green space on the housing market (2.12)	Hedonic pricing method	Gardens adjoining detached properties most positively correlated to house prices in London, total green space within 1km also positively correlated (2.45).
Gibbons et al. (2011)	Effect of green space on the housing market (2.12)	Hedonic pricing method	Proximity to a National Park, location in Green Belt, having a garden and being located near green space all positively linked to house prices across the UK (2.46).
Dunse (2007)	Effect of green space on the housing market (2.12)	Hedonic pricing method	Larger parks with more amenities have a greater positive effect on house prices (2.47).

Study	Focus	Method	Findings
CABE (2005)	Effect of green space on the housing market (2.12)	Case studies	Proximity to green space is associated with increased house prices (2.48).
Waltert and Schläpfer (2010)	Effect of green space on the housing market (2.13)	Review of studies employing hedonic pricing method	Proximity to nature reserves is associated with increased house prices (2.48).
Donovan and Butry (2011)	Effect of green space on the housing market (2.13)	Hedonic pricing method	Proximity to trees is associated with increased house prices (2.48).
Thompson (2015)	Effect of transport infrastructure on the housing market (2.14)	Hedonic pricing method	Increases in house prices were greatest for houses quite near, but not the nearest, to new metro stations (2.50).
ITS (2016)	Effect of transport infrastructure on the housing market (2.14)	Review of existing studies	Commercial property prices drop off more sharply as a function of distance from a station, compared to residential property, which shows a more gradual fall in price with distance (2.51).
Steer Davies Gleave (2011)	Effect of transport infrastructure on the housing market (2.14)	Rateable value within catchment	Commercial property within close proximity to redeveloped main train station saw greater increase in value (2.52).

## Summary of existing literature

2.3 This section summarises the volume of existing literature on the topic of cycling infrastructure and its links to and impacts on the housing market. It outlines research that examines the effect of cycling infrastructure on the housing market before looking at studies where focus is similar or comparable – for example, the effect of cycling infrastructure on commercial land value or the effect of green space or improved urban realm on the housing market.

### Effect of cycling infrastructure on the housing market

2.4 Several studies have examined the effect of cycling infrastructure on house prices. All of these studies were conducted either in the USA or in Canada. In general, these studies examine the effect on the price of houses located near to a cycle route or a public transport corridor with an improved cycle lane. Chung et al. (2013) focussed on two corridors in Vancouver with improved cycle facilities. Krizek (2006) studied the effect of different kinds of cycle lane across the city of Minneapolis-St Paul. Lindsey et al. (2004) examined the effect of the Monon Trail greenway in Indianapolis and Racca and Dhanju (2006) studied the effect of cycle routes in the state of Delaware.

2.5 These studies show that cycling infrastructure can, in some cases, contribute to increased residential property prices in the vicinity, although their findings were not unanimous; i.e. not all case studies showed increased house prices near cycling infrastructure.

2.6 In addition to these studies, a recent paper by the Urban Land Institute (ULI, 2016) examined ten developments (including one in London) in which cycle routes or cycle parking were significant factors; they referred to this as ‘trail-oriented development’. Finally, two non-academic sources highlight interesting trends; an article by a London letting agent refers to the effect of the London cycle hire scheme on rental prices in areas with poor public transport accessibility (BR Lets, 2014); while ULI’s (2016) report cites a real estate agent who had identified an increased turnover of housing near a new cycle route in Atlanta, USA.



### **Effect of cycling infrastructure on commercial land value**

- 2.7 There is a study which looked at the effect of cycling infrastructure on commercial land value (rather than residential) in two corridors in Seattle (Rowe, 2013).

### **Effect of urban realm on the housing market and commercial land value**

- 2.8 Rowe's study employed the same method as a larger New York City (NYC) Department of Transportation (DOT) study (2013), which looked at the effect of improving the street environment (including cycling infrastructure in some sites) and its accessibility on the commercial value of the seven case study areas.
- 2.9 Other studies have looked at the effect of improved urban realm or pedestrian environment on property prices, both residential and commercial. Some of these studies were conducted in the UK and in London.
- 2.10 Two studies used Transport for London's Pedestrian Environment Review System (PERS) street quality assessment tool to examine the differences in residential and commercial land values at different sites across London (CABE, 2007; MVA, 2008). In a similar study conducted with data from 15 US cities, the effect on property prices of a neighbourhood's walkability was examined (Cortright, 2009).
- 2.11 The Royal Institution of Chartered Surveyors (RICS) recently published a study assessing the impact of placemaking on land value in five residential developments in the UK (2016).

### **Effect of green space on the housing market**

- 2.12 There are several studies which have examined the effect of proximity to green space on the housing market. Smith (2010) employed a hedonic pricing approach (see paragraph 2.18) looking at the effect of different types of green space on London house price data. Gibbons et al. (2011) employed a very similar approach; only their dataset covered the whole of the UK, while a study in 2005 by the Commission for Architecture and the Built Environment (CABE) focussed on the effect on property prices near green space in eight case study sites. Dunse (2007) also examined the effect of green space using data from the city of Aberdeen.
- 2.13 Further studies employing the hedonic method to examine the effect of different types of green space on house prices were reviewed by Waltert and Schläpfer (2010) while Donovan and Butry's (2011) research examined the effect of trees on house prices.

### **Effect of transport infrastructure on the housing market**

- 2.14 Finally, many studies have examined the link between public transport infrastructure and property prices. For example, Thompson (2015) examined catchments around two extended metro lines in London – the Jubilee line and East London Overground line – to ascertain the effect on house prices using the hedonic pricing method. Similarly, Steer Davies Gleave (2011) examined several case study commercial sites in the vicinity of Sheffield station to ascertain the effect of the station's redevelopment on commercial land value. The Institute for Transport Studies' (2016) paper summarises much of this research (see paragraph 2.51).

## Summary

- 2.15 In summary, there is already a good amount of literature which could be used to inform subsequent phases of this study in terms of methodology or the nature of the effect on the property prices. However, the amount of existing research which specifically looks at cycling infrastructure's effect on the housing market is very limited generally, and extremely limited in the UK context.

## Methodologies and data used in previous research

- 2.16 The following section describes the main methodologies employed by previous research studies as well as the types of data sources used. It starts by explaining the hedonic pricing method before looking at the types of data used to analyse residential and commercial property prices. Finally, it considers stated preference approaches, including discrete choice, conjoint analysis and willingness to pay approaches.
- 2.17 Many of the studies introduced in the previous section examined chosen case studies so they could compare them to an equivalent area (for example, Lindsey et al., 2004, RICS, 2016) or to the case study area as it was before a change was made, e.g. cycle lane installed (Rowe, 2013) or urban realm improved (NYCDOT, 2013). Some studies, such as Gibbons et al. (2011) or Smith (2010), did have a complete dataset for a large area – in their cases the UK and London respectively.

### Hedonic pricing method

- 2.18 Most of the previous research examined the effect of proximity to a certain feature, such as cycle lanes, green space, improved urban realm or public transport hub on nearby residential or commercial property prices. Many studies employed the hedonic pricing method (HPM), which reveals the preference of house-buyers for particular characteristics by observing differences in the values of property between locations, and isolating the effect of the particular environmental quality being studied on those values (Donovan and Butry, 2011). Gibbons et al. (2011) explain that:

“HPM – also known as hedonic regression – assumes that we can look at house transactions to infer the implicit value of the house's underlying characteristics (structural, locational / accessibility, neighbourhood and environmental).” (p. 5).

- 2.19 For HPM studies, the dependent variable is property price. Various characteristics of the stock housing itself are then included as attributes in the model to control for their effect; these characteristics may typically include:
- Housing type: terraced / detached / flat etc.
  - Housing size: floorspace or number of bedrooms or bathrooms
  - Presence of a garden
  - Presence of a garage
  - Heating type
- 2.20 Neighbourhood characteristics are then included to isolate their effect, such as:
- Proximity to city centre
  - Proximity to certain schools
  - Level of deprivation of the area
  - Public transport access level (if this is not the target of the study)

- 2.21 Accounting for these characteristics of the housing stock and neighbourhood in the modelling allow the marginal effect of the studied feature to become clear.
- 2.22 The benefit of HPM is outlined by Gibbons et al. (2011): “From a policy perspective this method is desirable as it is based on clear theoretical foundations and on observable market behaviour rather than on stated preference surveys.” (p. 5), i.e. HPM analyses actual empirical data rather than respondents’ hypothetical decisions.

#### **Data sources for property prices**

- 2.23 Previous studies used several different sources of data on property prices in their study area. The following list summarises them and provides an example study which used each data source:
- Land Registry data for housing transactions (Smith, 2010, MVA, 2008, or equivalent, e.g. Chung et al. (2013) used the equivalent in Vancouver)
  - Nationwide building society mortgage data (Gibbons et al., 2011)
  - Valuation Office Agency (VOA) data for rateable value on commercial property (MVA, 2008, SDG, 2011)
  - Data for asking prices of property from Rightmove, Zoopla or Craigslist in the USA (Donovan and Butry, 2011)
  - Retail sales tax filings (USA, equivalent to value added tax (VAT) in the UK) to act as an indicator of commercial value or vitality (Rowe, 2013, NYCDOT, 2013)

#### **Stated preference approaches**

- 2.24 Previous research has approached this area of study using stated preference surveys to identify how respondents value different characteristics. Discrete choice surveys are one form of stated preference survey whereby respondents are asked to identify their preferred option. Krizek (2006) employed this approach in his research examining cycle infrastructure in Minneapolis-St. Paul. There were five different scenarios in total which featured different types of cycling facility (off-street cycle track, on-street cycle lane, no facility) and a different level of parking for the two on-street options. Respondents were presented with two scenarios for their commute to work with set journey times and asked to identify their preferred route choice. Through this method, Krizek was able to identify the preferred type of cycle facility.
- 2.25 Conjoint analysis is another form of stated preference approach. It involves respondents being presented with different housing scenarios which contain various characteristics in different combinations. Previous research has employed this method to identify the importance given to certain characteristics of housing (Iman et al., 2012, Terlaak-Poot, 2011, Hoang, 2011, Gibson, 2012). However, as far as we are aware, it has not previously been used to investigate the role of cycling infrastructure, green space, urban realm or public transport infrastructure in property prices. Terlaak-Poot (2011) summarised conjoint analysis and the value it can bring to analysing property prices as follows:
- “Conjoint analysis is based on the assumption that purchase decisions are not influenced by just one single dominant factor, but by a number of attributes, considered conjointly by the consumer, related to the price he or she has to pay for the product.” (p. 6)

2.26 Gibson (2012) outlined how conjoint analysis isolates the value given to each characteristic (referred to as attributes) within each hypothetical housing scenario:

“During a conjoint analysis experiment, the respondent is presented with hypothetical scenarios and either rank or rate each of the scenarios. Analysis of this data [...] results in a utility score called a part-worth for each attribute level, where a larger score corresponds to greater preference. Part-worths are expressed as a common unit, therefore they can be added together to give the total utility (preference) for any combination of attribute levels.” (p. 16)

2.27 Finally, some previous research employed willingness to pay (WTP) surveys of businesses. MVA’s (2008) research for TfL did this to assess businesses’ WTP for urban realm improvements in their local area. Participating businesses were presented with combinations of possible improvements to their streets. The businesses were then asked to identify which package of improvements they preferred and to what extent they were willing to make a one-off payment for the improvements.

### **Impact on the housing market**

2.28 This section outlines the type of impacts found in the reviewed studies. Many cases studies focus on the changes in house prices as a function of proximity to a certain feature, for example increasing property value as a function of nearby bike lanes or green space.

#### **Effect of cycling infrastructure on the housing market**

2.29 The reviewed studies show that cycling infrastructure can, in some cases, contribute to increased residential property prices in the vicinity. However, prices did not increase in all cases studied and the effect depends on the type of infrastructure.

2.30 Chung et al. (2013) found that one of their case study corridors in Vancouver saw an increase in sales value of 8.8% within a 500 metre catchment, while the other saw a fall of 5.8%. The results were not statistically significant, however, probably due to a small sample size. In addition, the types of cycle lane were not directly comparable – one was an on-street cycle lane (the one that showed an increase in sales value) while the other was a segregated cycle track (although this was shorter and was implemented more recently). Finally, the regression was quite simplistic in that it controlled for general rises in house prices across Vancouver but included no other control variables. The authors themselves said that a hedonic study would provide a more thorough analysis.

2.31 Krizek’s (2006) study in Minneapolis-St Paul found different relationships between cycling infrastructure and house prices in the suburbs and the city, and between different types of cycling facility. His revealed preference results found that off-street cycle tracks in the city were associated with higher house prices; his model showed a \$510 increase in house prices if it was moved 400m closer to the cycle track. However, on-street cycle lanes in Minneapolis-St Paul were associated with lower property prices, even when the effect of busy main roads had been controlled for. He also found that all types of cycle lanes were negatively associated with house prices in the suburbs.

2.32 Krizek’s stated preference survey results showed a different pattern in Minneapolis-St Paul, although the survey focused on journeys by bike for the purpose of commuting,

comparing five types of infrastructure / “travel environments” associated with commuting: off-street cycle lane; on-street cycle lane (no roadside parking permitted); on-street cycle lane (roadside parking permitted); no cycling-specific infrastructure (roadside parking not permitted); and no cycling-specific infrastructure (roadside parking permitted) . It showed that an on-street cycle lane was the preferred facility for commuters; they valued it more highly than a lack of roadside parking or an off-street cycle track.

- 2.33 Houses near the Monon Trail in Indianapolis sold for on average 11% more than the average price (Lindsey et al. 2004). House prices were also higher near other ‘conservation corridors’ although no higher than average when near other multiuse greenway trails. Racca and Dhanju (2006) found that, in the state of Delaware, property within 50 metres of off-street cycle tracks sell for \$8,800 more than other similar homes. The average sale price was \$197,000. Both of these studies, as well as the revealed preference component of Krizek’s (2006) study, employed the hedonic pricing method, so they controlled for other factors which influence house prices.
- 2.34 The ULI’s (2016) paper illustrated what they call ‘transit-oriented development’ whereby large developments include high quality cycle parking or are built nearby high quality cycling infrastructure. They cite ten case studies, of which one – 250 City Road – is in London. This scheme has ‘overprovided’ in terms of the quantum of cycle parking spaces required by planning standards at the time of the application: “To accommodate local cyclists, 250 City Road will have dedicated storage space for 1,486 bicycles—a ratio of almost 1.6 spaces per residential unit. In contrast, the project has only 200 car parking spaces” (p. 33).
- 2.35 London neighbourhoods such as Haggerston, Sand’s End or Walworth have relatively poor levels of public transport access – i.e. more than 10 minutes’ walk to the nearest station. According to BR Lets (2014), these areas have seen higher than average levels of growth in their rental prices since the implementation of the London cycle hire scheme; the London average in the same period was 5%, compared to between 12-25% increases in these areas. The cycle hire scheme has effectively increased the accessibility of these areas.
- 2.36 A real estate agent, REMAX, cited in ULI (2016) said that they had experienced much greater uptake of houses in a corridor surrounding a newly-implemented greenway cycle trail in Atlanta, USA. Before the ‘Beltline’ project began, houses were typically on the market for up to 90 days. Afterwards, however, many were selling within 24 hours.

#### **Effect of cycling infrastructure on commercial land value**

- 2.37 Rowe’s (2013) study used retail sales tax filings from local businesses to act as an indicator for commercial vitality. He showed that the commercial vitality of two case study areas was not negatively impacted by the installation of on-street cycle lanes and the loss of car parking spaces. Indeed, in one of the two sites, retail sales tax filings increased by 400%, while comparator neighbourhoods remained at similar levels.

#### **Effect of urban realm on the housing market and commercial land value**

- 2.38 Several research studies document the effect of improved urban realm on residential and commercial property prices. In general, higher quality urban realm is linked to

increases in property prices as a result of liveability benefits to residents of the local area.

- 2.39 Employing a similar approach to Rowe (2013), NYCDOT (2013) examined seven case study sites where various different urban realm improvements had been implemented. They compared the retail sales tax filings of these case study sites against comparator sites and the surrounding borough. The urban realm improvements varied in that some included pavement widening, public transport access or the creation of new public space, while some included the installation of on-street cycle lanes. All case study sites saw increases in commercial value, with some sites only performing at similar levels to the borough average or their comparators. The Vanderbilt Avenue case study, which included new dedicated on-street cycle lanes, was one of the case studies to see the greatest increase in value: 102% increase in retail sales tax filings by the third year, compared to a 64% increase among its neighbourhood comparators in the same time period.
- 2.40 CABE's (2007) study showed that an increase in the PERS score, i.e. an improvement to the pedestrian environment, was associated with an increase in rental and sale value of houses using data from 10 case study sites across London: "raising the street design quality by one PERS score would add around £13,600 or 5 per cent to the value of a high street flat" (p.22). Their research showed a similar 5% increase in retail values too.
- 2.41 MVA's (2008) research also used PERS to assess the effect of improved urban realm in London and the UK; their research produced several interesting findings. Firstly, from longitudinal analysis comparing the effect of urban realm improvement schemes across the UK, MVA's study found that increases in property value were less significant in London: "It may indicate that residential property in London has been at the limit of affordability and therefore people are not able to pay significantly higher prices for residential property, regardless of the nature of improvements" (p.4.1). Secondly, they found property prices are higher where street quality is better. Thirdly, businesses' willingness to pay for urban realm improvements was quite variable but they found that many businesses stated they are willing to pay more than they currently are.
- 2.42 Cortright's (2009) examined the role of Walk Score<sup>1</sup> - which is essentially an indicator of the quality of the pedestrian environment – on house prices in 15 different US cities. With the exception of Las Vegas and Bakersfield, they found a positive correlation between Walk Score and house prices: "an additional one point increase in Walk Score was associated with between a \$500 and \$3,000 increase in home values" (p.2).
- 2.43 RICS (2016) looked at the role of urban realm and placemaking in five case study housing developments in the UK. They compared the sale price of houses on these developments with comparable sales in the nearby area. They, however, used quite subjective assessments of urban realm for each scheme, rather than the more systematic approach of PERS or Walk Score. The study found that in three of the five

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<sup>1</sup> <https://www.walkscore.com/how-it-works/>

case studies, property prices in these developments exceeded the local average; and in all five case studies, prices exceeded local comparator new-build developments.

### **Effect of green space on the housing market**

- 2.44 Several studies show a positive correlation between green space and house prices; this effect varies by different types of green space.
- 2.45 In his hedonic study of the effect of different types of green space on London house prices, Smith (2010) found that gardens joined to detached houses were most strongly linked to house prices. Total green space within 1 kilometre was also found to boost house prices, but to a lesser extent. Smith didn't find a uniform effect of green space in London, i.e. some prestigious parks had a strong effect, while some less attractive green spaces only had a marginal effect on house prices.
- 2.46 Gibbons et al. (2011) undertook a similar study to Smith's examining UK-wide data. Their study showed that being located in a National Park had the biggest positive effect on house prices, followed by being in the Green Belt. Domestic gardens and green space were also positively linked to house prices, but to a lesser extent.
- 2.47 Dunse (2007) also conducted a hedonic analysis of the link between house prices and open green space in the city of Aberdeen. His study similarly found a positive correlation between proximity to a park or green space and house prices. He found that larger parks with a larger array of facilities and amenities are more highly valued than amenity green space, and that owners of different types of property (i.e. detached, flats etc.) value green space differently: "Occupiers of flats, for example attach a positive premium on being located on the park edge, whereas occupiers of houses value this negatively" (p. 26).
- 2.48 Further studies demonstrated the positive correlation between green space and house prices. These include CABI (2005) which looked at eight green spaces in the UK; Walter and Schläpfer (2010) found that nature reserves were linked with increased house prices; and Donovan and Butry (2011) studied the positive effect of trees on house prices in Portland, Oregon.

### **Effect of transport infrastructure on the housing market**

- 2.49 The literature on the relationship between property prices and public transport infrastructure is quite extensive.
- 2.50 A recent hedonic pricing study focusing on the extensions to the Jubilee and East London Overground line (Thompson, 2015) showed that house prices in the vicinity of these new stations increased when other factors were controlled for. The analysis was broken down into three concentric rings moving away from the station; interestingly, the second ring showed the greatest increase in house prices even when the negative effects of being located on a busy high street had been accounted for in the model. Thompson's work also revealed an 'anticipatory' effect whereby house prices increased during the construction phase of the two extensions.
- 2.51 The Institute for Transport Studies' (2016) paper provides an overview of recent material linking public transport infrastructure and property prices. One of the key findings they highlight is the difference in the relationship of commercial and residential property to commuter rail stations. The research indicates that commercial prices drop

off more sharply as a function of distance from a station, compared to residential property, which shows a more gradual fall in price with distance.

- 2.52 Steer Davies Gleave (2011) studied the effect on commercial property value of the redevelopment of Sheffield station. The study found that commercial properties within a 400 metre radius of the station saw an increase three times greater than the citywide average over the course of the station's redevelopment.

## 3 Stakeholder engagement research method

### Purpose of the stakeholder engagement

- 3.1 The purpose of the stakeholder engagement exercise was to explore, with stakeholders from across London's housing and development sector, the extent to which cycling infrastructure impacts on the housing market, and the way in which it does.
- 3.2 It was anticipated that discussions with stakeholders with a commercial interest in London's housing market, or those with a professional overview of London's housing market, would be able to provide qualitative evidence of the different impacts of investment in cycling infrastructure on the housing market – or could identify where they were not aware of any impacts or associated evidence.

### Stakeholder identification

- 3.3 To ensure that all of the different ways in which investment in cycling infrastructure could have an impact on the housing market (both positive and negative effects) could be explored, four stakeholder groups were identified, with the expectation that views would be sought from one or more stakeholders from each group. The groups were:
  - **Group A:** organisations with a commercial interest in London's housing market (for example, residential agents, housing associations, residential developers and landowners).
  - **Group B:** organisations with a wider, more societally-based interest in London's housing market and the potential relationship between good quality cycling infrastructure and property and land values, i.e. organisations that may have some oversight of and interest in regeneration or improved social inclusion (for example, London boroughs).
  - **Group C:** organisations with a more strategic view on topics such as regeneration, wider economic impacts and the relative impact of investment in cycling infrastructure as compared to other modes of transport.
  - **Group D:** individuals and organisations who have a professional interest in cycling and / or property, and the interaction between the two (for example, cycling campaign groups, industry commentators).
- 3.4 Taking each stakeholder group in turn, potential contacts and contributors were identified. It was recognised that 'warm' contacts (i.e. contacts who were already known to the study team or to Transport for London) would be most likely to be in a position to want to offer their help and contribution, and so initial efforts to identify

stakeholders were based around who was known to have an interest in this topic, and who the study team had worked with previously.

3.5 The initial list generated was refined and added to in an effort to ensure that the stakeholders to be approached would be able to make some contribution – in other words, that those approached would have an informed view on the impact of good quality cycling infrastructure on London’s housing market, whether positive or negative. The additional factors borne in mind in generating potential contacts included:

- Whether the organisation had a track-record in delivering (or helping others to deliver) good quality cycling infrastructure (or the opposite);
- Whether the organisation was proximate to / had development sites that were proximate to examples of good quality cycling infrastructure (e.g. Cycle Superhighways, Mini-Holland schemes or planned Quietways);
- Where the organisation was based (with a view to investigating whether there was a difference in experiences between central, inner and outer London developers / organisations);
- Who the organisation usually developed and marketed their properties for (with a view to seeking views from organisations who developed sites for low income and higher income residents and renters); and
- Whether the organisation had previously expressed particularly positive or negative views towards cycling.

3.6 Between five and twenty potential contacts were identified for each stakeholder group, with more potential contacts identified for Group A (those with a commercial interest in London’s housing market), as it was agreed that this group should be highest priority for engagement and soliciting views.

3.7 This process generated the list as shown in Table 3.1.

**Table 3.1: Prioritised stakeholder list**

Group A	Group B	Group C	Group D
Commercial view	Wider, societal view	Strategic view	Interested observers and industry commentators
Almacantar Argent Barratt East London Barratt North London Battersea Power Station Bidwells British Land Canary Wharf Group Carter Jonas Crosstree Foxtons, Walthamstow Gerald Eve Hyde Housing JC Francis and Partners Ltd. Laing O'Rourke Lend Lease Linden Homes London and Quadrant Housing Iudlowthompson PeabodyPoplar HARCA Shepherds Bush Housing Group Stirling Ackroyd Westminster Property Association	LB Waltham Forest LB Southwark LB Hackney LB Newham WestTrans Royal Borough of Kingston upon Thames Greater London Authority	British Property Federation Department for Transport Department for Communities and Local Government House Builders Federation National Housing Federation Royal Institution of British Architects Royal Institution of Chartered Surveyors (RICS) Royal Town Planning Institute	CTC Estates Gazette Living Streets London Cycling Campaign Sustrans

### Stakeholder engagement

- 3.8 Named contacts at each of the prioritised stakeholder organisations were approached to ask if they would consider contributing to the study. The initial contact was usually made by email, with a short briefing note about the purpose of the study and the process provided.
- 3.9 A stakeholder contact database was developed so that details of contact attempts could be logged and tracked.
- 3.10 Face-to-face meetings or telephone calls were scheduled with stakeholders who responded positively to the invitation to contribute.

## 3.11 Discussions took place with the organisations and individuals shown in Table 3.2.

**Table 3.2: Stakeholders contributing to the study**

Stakeholder group	Organisation / individual	Description of organisation
<b>Group A Commercial view</b>	Argent LLP	Property development company which focuses on mixed-use schemes. The majority of their work within the last 15 years has been on the King's Cross development.
	British Land	Real estate company which owns, manages and develops primarily commercial property, and some mixed-use property (estimated 50% residential on mixed-use).
	Canary Wharf Group	Property owner and developer. Own and manage the 100 acre site at Canary Wharf, London. 3,500 residential units are planned for the Wood Wharf Estate and a major residential development is in progress at Southbank Place (former Shell Centre).
	Crosstree	Property development and investment company. Crosstree own, or are investors in, seven sites across London, covering retail, commercial, residential and hospitality spaces.
	Lend Lease	Property group specialising in project management and construction, real estate investment and development. Currently developing the 'Elephant Park' site (3,000 homes planned) at Elephant & Castle, on the site of the former Heygate Estate.
	Linden Homes South East	National house building organisation. The South East region group of Linden Homes deliver approximately 500 residential units per year.
	Iudlowthompson (Stephen Ludlow, Executive Chairman)	London real estate and lettings agency.
	Poplar HARCA (Housing and Regeneration Community Association)	Social landlord organisation with 9,000 properties in the south-east of the London Borough of Tower Hamlets. Partner with commercial developers to deliver new homes in the Poplar area.
	Stirling Ackroyd	London estate agents, commercial property experts and chartered surveyors.
<b>Group B Wider, societal view</b>	Walthamstow Village Estate Agents:	Bairstow Eves, Central Estate Agents, Foxtons, Strettons, Wonderlease, Lifestyle Property and one other organisation which declined to be named. The London Borough of Waltham Forest has funding to deliver a Mini-Holland programme of cycling and public realm improvements, and some schemes have been delivered in Walthamstow Village.
	Hackney Council	East London borough.
	Kingston Council	Outer London borough in south west London. Has funding to deliver a Mini-Holland programme of cycling improvements.
	Newham Council	East London borough.
	Southwark Council	South London borough.
<b>Group C Strategic view</b>	WestTrans	Partnership of six west London boroughs (Brent, Ealing, Hammersmith and Fulham, Harrow, Hillingdon and Hounslow) that works with TfL to identify, develop and deliver sustainable travel projects to the benefit of the west London sub-region.
	British Property Federation	Membership organisation for the UK real estate industry. Represents the interests of all those with a stake in real estate in the UK – owners, developers, funders, agents and advisers.

Stakeholder group	Organisation / individual	Description of organisation
<b>Group D Interested observers and industry commentators</b>	National Housing Federation	Membership organisation for housing associations in the UK.
	Royal Institution of Chartered Surveyors	Membership organisation for professionals involved in land, real estate, infrastructure and construction.
	Royal Town Planning Institute	Membership organisation and Chartered Institute responsible for maintaining professional standards in planning. Aims to advance the science and art of planning (including town and country and spatial planning) for the benefit of the public.
	Estates Gazette	Property data provider with a weekly magazine on the property industry.
	John Forbes	Independent consultant with expertise in the real estate industry.
	Living Streets	A national charity which campaigns for a 'walking nation'. Their goal is to create places that encourage walking so that the benefits of walking are realised.
	Peter Murray, Chairman of New London Architecture (NLA)	Chairman of New London Architecture (NLA), with specific expertise in planning and design for cycling. The NLA is an independent forum for discussion, debate and information about architecture, planning, development and construction in London.
Sustrans	UK sustainable travel charity working with families, communities, policy-makers and partner organisations to encourage people to travel by foot, bike or public transport for more of their journeys.	

### Discussion guide

- 3.12 Discussions with stakeholders took the form of semi-structured interviews so that all discussions covered the key topics under investigation, with the opportunity to focus on specific areas of interest as appropriate.
- 3.13 To support the semi-structured interview format, a discussion guide was developed and agreed with TfL prior to use. A copy of the discussion guide is provided in Appendix B, and a summary of the main topic areas is as follows:
- Introduction: the stakeholder's role in the housing market and / or delivering good quality cycling infrastructure.
  - Good quality cycling infrastructure:
    - What the stakeholder understood by the term 'good quality' cycling infrastructure, or what their ideal standard is, if this standard is beyond the standard required for compliance.
    - Whether the stakeholder thought it was important to deliver good quality cycling infrastructure, and why (and if not, why not).
    - The benefits of delivering good quality cycling infrastructure.
  - Residents / buyers:
    - Which groups of residents / buyers are most likely to want good quality cycling infrastructure to be delivered in their street or as part of their development.
    - Locations where good quality cycling infrastructure may be more or less important to residents / buyers.
  - Recommendations for TfL: exploration of how TfL could help to make delivering good quality cycling infrastructure more attractive (financially or otherwise) to an organisation.
  - Compliance and standards: investigation of the industry's tolerance for increasing quality or quantity standards for cycling infrastructure, and the associated benefits and disbenefits.
- 3.14 Discussions took between 45 minutes and one hour and 30 minutes, with most discussions taking one hour to complete.

### Discussion notes

- 3.15 Following every engagement, notes of the discussion were made and sent back to the stakeholder for approval. Each stakeholder was invited to identify any comments which they would prefer not to be attributed to them individually or their organisation (for example, if something discussed reflected their own personal view and not that of their organisation).

## 4 Stakeholder engagement findings

### Introduction

4.1 This section of the report presents the findings of the discussions with stakeholders on the topic of the relationship between the provision of good quality cycling infrastructure and the housing market. It is structured according to the key topic areas that were investigated during the discussions:

- **Understanding what ‘good quality cycling infrastructure’ means:** what different stakeholders mean by ‘good quality’, and what they perceive to be the ‘ideal’ standard for cycle parking and storage within a property or development; what the ideal standard of provision is at the local neighbourhood level; and at a wider network level.
- **Motivations for delivering good quality cycling infrastructure:** why it is important for different stakeholders, with different interests and priorities, to deliver good quality cycling infrastructure.
- **What kind of cycling infrastructure do current and prospective residents want?** An exploration of how different stakeholders identify resident needs and expectations with regards to cycling infrastructure, and whether any particular demographic believes access to cycling infrastructure is more or less important.
- **The impacts of delivering good quality cycling infrastructure in relation to the housing market:** a discussion of the identified benefits and disbenefits in providing good quality cycling infrastructure, in the context of the housing market.
- **Realising the benefits of good quality cycling infrastructure: recommendations:** stakeholder suggestions and recommendations for TfL on the topic of supporting stakeholders in the realisation of benefits that could be accrued from the delivery of good quality cycling infrastructure.

4.2 Case studies showing area and developer-specific examples of the ways in which good quality cycling infrastructure influences and effects the housing market, and the ways in which developers and housing market professionals recognise and build-upon those effects are provided in section 5.

## Understanding what ‘good quality cycling infrastructure’ means

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“To me, good quality cycling infrastructure is infrastructure that does not discourage you from using a bike. It means easy and secure access to your bicycle, and a fast route to your destination.” (Linden Homes)

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- 4.3 Stakeholders were asked to consider what ‘good quality’ cycling infrastructure meant to them personally, or to their organisation, at three spatial levels: within the footprint of a house or development complex, or immediately outside; at a local neighbourhood level – within a street or within a development; and at a wider network level – the infrastructure provided to enable access between neighbourhoods.
- 4.4 Overall, across all the discussions with stakeholders, this part of the conversation tended to focus on what was understood by good quality cycling infrastructure within the footprint of a house or complex; the first of the spatial scales. Cycling infrastructure in this context meant the cycle parking provided for residents or visitors.
- 4.5 This focus may simply have been indicative of the fact that the quality and quantity of cycle parking provided as part of a development is the aspect of cycling infrastructure provision that developers and planning authorities have greatest control over, and it is therefore better understood.

### **Good quality cycling infrastructure within the footprint of a house or complex**

- 4.6 All those who discussed cycle parking and their understanding of what ‘good quality’ meant mentioned that cycle parking provided within the footprint of a house or residential complex had to be secure. The contributors from Canary Wharf Group explained that in the context of their residential developments, ‘secure’ meant CCTV monitoring and key fob access to cycle parking areas. Other contributors stated that aspects of the design of the cycle parking provided could contribute to security, or the perception of security; Hackney Council’s preference is for a number of clusters of cycle parking stands to be provided, instead of all of the stands being provided in one concentrated area, because a large area of cycle parking looks less secure. This view was also held by the contributor from the Estates Gazette, who said that individual storage of bicycles is preferable.

- 4.7 Stephen Ludlow, Executive Chairman of ludlowthompson, said that security is important, but having a ‘defined area’ for cycle storage is also particularly important in the context of the rental market.

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“[Landlords] need to provide a defined area for the bike to be stored. We tell landlords that they need to offer this as a product to the market, in the same way that washing machines, showers, gas central heating all came in as a minimum standard in the past – now you must consider provision for the bike. Many bikes can be very expensive and it is not sufficient to have these out-on-street due to safety issues. It is also not good enough just to prop them up against a wall in a shared part of the building. This can lead to damage / marks to the walls, and potential issues in renting in terms of your deposit.” (Stephen Ludlow, ludlowthompson)

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- 4.8 The planning authorities who discussed cycle parking identified Sheffield-style stands as their preference, as these were considered the most secure types of stand.

- 4.9 Most stakeholders suggested that ease of access to the cycle parking provided within the footprint of a house or complex was a key indicator of quality, and stakeholders representing London boroughs / planning authorities identified several examples of where poor access arrangements for cycle parking arrangements contributed, in their opinion, to very low usage of the infrastructure. Good quality access arrangements are those which do not require residents to carry bicycles up and down stairs, or take a convoluted route within the development to access the storage area. Ideal access arrangements are those where direct access to the cycle storage area is provided from the street.

- 4.10 There was some recognition among those in stakeholder Group A (those with a commercial view of the housing market) that some residents or prospective buyers, especially those with higher-value cycles, would ideally have space to store their bicycle within their house or within an individual storage unit.

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““On street secure parking’ is not really seen as being secure by our Tenant customers. The preference is for something within the property / development ideally, with many of our applicants looking to bring bikes right into their flats.” (Stephen Ludlow, ludlowthompson)

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- 4.11 The contributors from British Land stated that there was currently no incentive for them to create in-house storage units because they are relatively expensive to build; there is a reduction in the usable space within flats; and it can require larger lifts so that bicycles can be accommodated (see case studies F, L and M for examples of developments where bicycle lifts have been provided). The contributors from Canary Wharf Group said: “Residents with expensive bikes expect individual storage lockers.” WestTrans suggested that in a perfect world ‘good quality’ cycle parking would mean a “stylish locker outside every front door”, and Sustrans said that they would prefer “mini-garages” for individual storage of bicycles.
- 4.12 In Hackney, quality provision of cycling infrastructure within the footprint of a development must mean provision for different kinds of bicycles: Hackney Council’s quantity requirements for cycle parking provided as part of a residential development go beyond the quantity requirements in the London Plan, and there is now specific mention made of the requirement to provide for larger bicycles (for example, bicycles with trailers, Dutch-style bicycles, adapted bicycles and tricycles). In addition, and again, under ideal circumstances, the Council would advise developers not to provide two-tiered cycle parking in order to meet the quantity requirements for cycle parking, because two-tiered cycle parking is less accessible, can be difficult for some people to use, and not suitable for all types of bicycles.
- 4.13 Some authorities took a reasonably pragmatic view of what they considered to be ‘good quality’ provision; Southwark and Newham Councils said that good quality cycle parking provision was about having “good facilities that people want to use” and “the right quality, in the right place”, suggesting that good quality meant different things in different contexts, and that some flexibility in requirements was appropriate.

#### **Good quality cycling infrastructure within a street or within a development**

- 4.14 Among the stakeholders who spoke on the subject of what good quality cycling infrastructure means in the context of a street, or within a development, there was a unanimous view that that good quality cycling infrastructure meant quiet streets (low or no car environments), with speed restrictions (20mph), or a street design which encouraged drivers to reduce their speed. The personal view of the contributor from RTPi was that streets which “look safe” are indicative of good quality cycling infrastructure at this spatial scale.
- 4.15 The contributor from Stirling Ackroyd said that quiet backstreets helped to ease new London residents into cycling.

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“Lots of people are buying in our areas having never lived in London before – they are attracted to the prospect of cycling on backstreets and the less busy an area the better (in terms of traffic).” (Stirling Ackroyd)

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- 4.16 Two planning authorities discussed the merits of ‘shared space’ infrastructure – environments which have been designed to be used by pedestrians and cyclists, or pedestrians, cyclists and drivers. Southwark Council suggests that dedicated infrastructure for cyclists is preferable within a street or within a development, rather

than shared space (“ideally, cycling infrastructure delivered as part of new developments would be dedicated cycling facilities (i.e. not shared space), well lit, and safe.”).

- 4.17 WestTrans suggested that the potential for conflict between different road users should be considered on a case by case basis, meaning that segregated facilities should be seen as the ‘ideal’ in busier boroughs, while shared space might be appropriate in quieter locations. The view that shared space is appropriate when pedestrian and / or cyclist movement volumes are relatively low was shared by Peter Murray, Chairman of New London Architecture (NLA):

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“People should be able to cycle round a development. I’m perfectly relaxed about the concept of pedestrians and cyclists sharing space when the volume of either is not too great.” (Peter Murray, NLA)

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- 4.18 The contributor from Living Streets said that quality cycling infrastructure should design out the potential for conflict and fear for pedestrians, suggesting that good quality cycling infrastructure should be segregated, rather than shared space.

**Good quality cycling infrastructure enabling inter-neighbourhood trips**

- 4.19 Good quality cycling infrastructure between neighbourhoods was considered by the contributors speaking on this subject to mean a safe (which often meant segregated), direct route. The contributors from Argent said that the “availability of a safe cycling route is important and is often mentioned by prospective buyers”. The contributor from Poplar HARCA said that “Cycle Superhighways are very good, especially for encouraging people who are less confident to cycle.”

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“The Cycle Superhighway 1 along Pitfield Street is good, but can mix with traffic in some parts. Customers would prefer to see greater levels of segregation, separating them from traffic. Amsterdam has entirely cycle-only routes and roads and that’s what we need to get to.” (Stirling Ackroyd)

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- 4.20 The contributors from RTPI and Canary Wharf Group stated that the quality of the surface of the cycling infrastructure is important; the surface should be well maintained and free of potholes.

- 4.21 Both Canary Wharf Group and Argent stated that good quality cycling infrastructure that enabled cycling between neighbourhoods included the provision of good quality cycle parking at transport hubs and shops. The contributors from Argent said, for example, “At a network level...the provision of cycle parking (especially short-term, publically available parking) near shops is important to the quality of the network.”

**At what spatial scale is good quality cycling infrastructure most important?**

- 4.22 Some stakeholders offered an insight into at which of the three spatial scales (4.3) quality cycle provision was most important.

- 4.23 There was little consensus among the wider stakeholder group about where quality provision was most important. Some stakeholders (Argent and Canary Wharf) stated that whether or not cycle parking was provided within their developments could be seen as a “deal breaker” for some prospective residents or buyers. The contributors from Kingston Council thought that the provision and quality of cycle parking as part of a new development does not feature in prospective residents’ decision-making because “people will always find a way of parking their bike.” The use of ad-hoc facilities for residential cycle parking was a view echoed by the contributor from RTP1, who said, in his personal experience, “there’s always somewhere to park a bike.”
- 4.24 Hackney Council provides on-street cycle hangers in response to requests from residents and has received over 3,000 requests for on-street hangers to date. Poplar HARCA and Tower Hamlets Council provide cycle lockers for residents who request them, with a small but noticeable increase in the number of requests made in the past few years. These examples suggest that people tend to make a decision about where to live, and then address their cycle parking requirements retrospectively.

#### **How planning authorities communicate their quality requirements**

- 4.25 Some planning authorities (London boroughs) have quality or quantity requirements for cycle infrastructure which goes beyond what is set out in the London Plan. This can be because their borough has a very clear vision for cycling and increasing cycling levels; because they have specific aspirations for Opportunity Areas or major development sites; or because they have seen examples of provision which is considered poor quality, but is technically compliant.
- Hackney Council and Kingston Council have Supplementary Planning Documents (SPDs) which refer to the required quality standards for cycle parking delivered as part of new developments.
  - Southwark Council has a Cycling Strategy which sets out the overall vision and priorities for cycling and cycling investment in the borough, and masterplan documents (e.g. the Old Kent Road Opportunity Area Planning Framework) set out the “ideal” levels of provision within specific areas.
  - WestTrans is producing a Cycle Parking Guidance document so that good and poor practice examples of cycle parking provision can be shared with those responsible for delivery of cycle parking.
- 4.26 The planning authorities engaged with described, almost unanimously, how it falls to the planning authority to push developers to deliver good quality cycling infrastructure. They described how cycling infrastructure, particularly links and paths, were intensely negotiated with developers.
- “Retro-fitting [of better quality cycle parking] only took place because the planning authority leaned very heavily on the developer. Negotiations included drawing attention to the fact that the quality of parking provided was not compliant, and the development could be considered in breach of its planning permission.” (WestTrans)
  - “The Council recently negotiated with [an applicant] for some land for one of the Mini-Hollands schemes. The [applicant] had to provide one metre of land for a Mini-Holland scheme route as part of the deal for planning application.” (Kingston Council)

- “Negotiations [on cycle infrastructure improvements] between the Council and the developer were probably helped by the fact that Cycle Superhighway 3 is to the north of the site, and the developer could see some advantage in providing a link to connect with CS3. There was a lot of bargaining between parties to get to this point, however.” (Newham Council)

4.27 The contributors from Southwark Council had a slightly more positive perspective on negotiating with developers on the quality of cycling infrastructure provided, recognising that developers with a longer-term interest in a site (often very large development sites that are developed in phases, over a long period of time) see their role as “curators” of the site, and therefore have a greater level of buy-in to the design and the functioning of the development as a whole. Such developers are more likely to work more closely with the planning authority on plans and infrastructure provision.

## Motivations for delivering good quality cycling infrastructure

- 4.28 Stakeholders were asked to consider their organisation’s motivations for delivering good quality cycling infrastructure, or, if they were not directly responsible for the delivery of cycling infrastructure, what they thought the motivations of developers were.
- 4.29 The motivations identified by developers as to their organisation’s motivations for delivering good quality cycling infrastructure were considerably different to those considering what developers’ motivations were, so the motivations and perceived motivations are reported separately.

### The developer view

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“Argent believes that creating desirable public places helps to differentiate our offer from our competitors and adds value to each of our properties.” (Argent)

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- 4.30 Developers have an obligation to provide cycling infrastructure as part of a new development. The quality and quantity of infrastructure required will have been negotiated with the planning authority as part of the pre-application stage of the development. All contributors with a commercial interest in the housing market stated that there were additional motivating factors which encouraged them to provide cycling infrastructure as part of their new developments, or to deliver cycling infrastructure which goes beyond the minimum quality and quantity standards negotiated with the planning authority.
- 4.31 Most contributors cited customer expectations as one of their primary motivating factors for delivering good quality cycling infrastructure. The contributor from Linden Homes said that the organisation wanted to meet buyers’ expectations, but that the organisation did not perceive there to be clear value in going beyond expectations where cycling infrastructure was concerned. The contributors from Canary Wharf Group stated that they provided good quality cycling infrastructure in response to customer demand, and agreed that customers’ expectations about provision for cyclists have increased in recent years.

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“Canary Wharf Group recognise that our customers, both residential and commercial tenants, expect to have cycle storage. Provision of good quality cycling infrastructure that goes beyond compliance is driven by tenant demand – and we will provide what is desired by tenants.” (Canary Wharf Group)

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- 4.32 The contributors from Argent also said that the provision of good quality cycling infrastructure is important to their target market (students and professionals), but, overall, the personal values of Argent’s partners’ help to drive quality provision: “creating developments which encourage cycling and create pleasant environments is a key part of Argent’s ethos. Creating desirable public places in developments helps to differentiate our offer from our competitors and adds value to each of our properties.”

- 4.33 The contributor from Lend Lease described how the delivery of good quality cycling infrastructure at the Elephant Park development (formerly the Heygate Estate) was an important part of their wider sustainability agenda. Elephant Park is one of only 18 global projects in a flagship programme of the C40 Cities Climate Leadership Group (C40) that is taking action to reduce greenhouse gas emissions across the world's cities.

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“Elephant Park should be ‘Climate Positive’ by the year 2020. The requirements as part of the [sustainability project] include commitments to sustainable travel and transport – and cycling is an important part of this.” (Lend Lease)

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- 4.34 Crosstree recognise that providing good quality cycling infrastructure is the “right thing” to do, but that doing the “right thing” from a societal perspective can lead to a commercially advantageous situation for the developer.

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“There always has to be a commercial reason to do it [provide good quality cycling infrastructure]...but doing the ‘right thing’ with cycling provision often does have the right commercial implication.” (Crosstree)

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#### **Other views on developer motivations**

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“The main motivation for developers in providing cycling infrastructure is probably compliance...but if it is compliance, they are missing a trick.” (Kingston Council)

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- 4.35 Overall, those involved with setting the standards for cycling infrastructure or negotiating with developers about the cycling infrastructure delivered as part of a new development, had a differing view of developers' motivations for providing good quality cycling infrastructure. Most contributors in this sub-group felt that the primary (and sometimes only) motivating factor for delivering cycling infrastructure was compliance. The contributors from Kingston Council said: “The main motivation for developers in providing cycling infrastructure is probably compliance...but if it is compliance, they are missing a trick. Developers often get the quantity of cycle parking required [as part of a new development] right, but the quality can be poor – there is no benefit to developers in seeing the provided infrastructure used or not used.”
- 4.36 Some contributors in this sub-group thought that developers did see some value in providing good quality cycling infrastructure as part of new developments, but only where delivering cycling infrastructure allowed the developer to negotiate on other, potentially more costly, infrastructure requirements. The contributors from Kingston and Southwark Councils suggested that developers would see the value of providing fewer car parking spaces and more cycle parking spaces within a development, because the space requirement for cycle parking is considerably lower than that for car

parking, allowing the developer to maximise the space available for units / accommodation.

- 4.37 One contributor from an inner London borough described how estimating that a high proportion of residents would travel by bike to a new development may mean, subject to negotiation with the planning authority, that the planning authority sought contributions to local cycling infrastructure in addition to contributions for local public transport improvements. Overall, the level of contributions would be reduced because the sums involved in cycling infrastructure are often less than those required to make significant improvements to public transport provision. There would therefore be value to the developer in identifying where developments could be ‘cycle friendly’ developments.
- 4.38 The contributor from Lend Lease countered this idea, however, stating that in his experience delivering the Elephant Park development there had been no ‘trade-off’ between cycling and public transport investment.

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“The bulk of the s106 contributions for transport were for public transport (Tube) improvements. There was not a ‘trade-off’ between cycling and public transport investment – the extensive investment in cycling infrastructure did not reduce the level of contributions required for public transport improvement.” (Lend Lease)

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- 4.39 Some contributors had a more positive view of developer motivations for delivering good quality cycling infrastructure. The contributor from Hackney Council identified that some developers (for example, some developers leading developments in the north of the borough, in the wetlands area; and developers in the Green Lanes area) “bought into” the Council’s vision for increasing levels of cycling in Hackney, usually where demand for cycling is already proven and high.
- 4.40 The view that developers had to be convinced of the need for and value of providing good quality cycling infrastructure before they felt sufficiently motivated to think about how they could deliver quality infrastructure beyond compliance levels was a view shared by WestTrans and by Newham Council, who provided examples of where developers had reneged on the initial terms of the planning permission and delivered a poor quality solution because, the contributors suggested, the developers did not understand the value of the original requirement. The contributor from WestTrans added, “Until cycling numbers increase in outer London and the suburbs then developers are unlikely to be proactive and go beyond basic compliance.”

- 4.41 Peter Murray, Chairman of NLA, had a similar view – that some developers (and planners) are simply less convinced about the value of and the need to deliver good quality cycling infrastructure.

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“There seems to be a lack of imagination among developers and planners in outer London with regards to the potential for cycling and the role of cycling in creating liveable environments. Some less progressive developers and planners think that everyone wants to park their car outside their front door, and a lot of developers feel that it is an imposition to create space for cycling. Part of the problem is that people think that you are either a cyclist or a motorist (and want environments geared to one of those modes), but actually, people are usually both.” (Peter Murray, NLA)

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#### **Motivations of other groups**

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“There are some residents in Poplar who have never seen Buckingham Palace – or even Tower Bridge. The Superhighways increase connections to the rest of London and will help residents travel beyond the area.” (Poplar HARCA)

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- 4.42 Poplar HARCA were founded with a vision to transform the Poplar area and provide opportunity to all residents: both social tenants and tenants of mixed-tenure properties. Attracting new residents to the area is an important goal for Poplar HARCA, as is maintaining the existing community and ensuring community cohesion. Poplar HARCA see cycling as important part of making Poplar a great place to live and attracting people to the area, but also as a mechanism for social cohesion and increasing transport opportunity.
- 4.43 Southwark Council have a Cycling Strategy and recognise, at a strategic level, the importance of cycling in promoting and delivering active lifestyles, improved public health, better public realm and reduced levels of congestion.

#### **What kind of cycling infrastructure do current and prospective residents want?**

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“People are very supportive of anything that makes their road quieter.” (Kingston Council)

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## Identifying resident requirements and expectations

- 4.44 Though most developers contributing to this study stated that customer expectations and / or a desire to differentiate their offer with their target market was a motivation for providing good quality cycling infrastructure (see earlier paragraphs 4.30 to 4.32), the view from other stakeholder groups was that in the context of the housing market, it is more difficult for residents' expectations with regards to cycling infrastructure to be adequately represented and considered. This is in contrast to commercial developments, where, in general, the eventual occupiers will work very closely to define their exact requirements with the developer during the design and build phases. The Southwark Council contributors and John Forbes, an industry expert and commentator, talked about the differing levels of engagement between occupiers and commercial developers, and occupiers and residential developers:

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“Developers and managing agents are more tuned in to the requirements of the end occupier. There is not really a way for residents to drive the delivery of good quality cycling infrastructure in the same way that commercial occupants can. It is usually cycling campaign groups who push the Council for the delivery of good quality cycling provision [in the context of residential developments].” (Southwark Council)

“With commercial developments, the developer will be talking to the occupier and finding out what they want [in terms of cycling infrastructure]. With residential developments, the developer just takes a punt that what they are building is more attractive than what someone else is.” (John Forbes, John Forbes Consulting)

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- 4.45 The contributor from Lend Lease described how the ‘gap’ in representation for residents was addressed during the Elephant Park project by cycling campaign groups.

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“Cycling lobby groups are instrumental in driving through improvements for cyclists – they know how to manoeuvre themselves to achieve change with developers (which is a positive thing).” (Lend Lease)

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- 4.46 The Newham Council and WestTrans contributors suggested that it was less important for developers to be ‘tuned in’ to the specific requirements of residential buyers because residential units in London sell very quickly, and the units are small. In other words, it is a more significant problem for commercial developers if they fail to differentiate their offer sufficiently, because the cost of unlet commercial accommodation is much greater than the cost of residential units which take marginally longer to sell or rent.

- 4.47 The contributor from RTPI also queried how much choice prospective buyers and tenants in London really have about what kind of home they choose to live in. His personal view was that decisions about where to live are primarily driven by where is affordable, without much consideration for the “nice to have” aspects of a home, such as proximity to cycling infrastructure.

**Who good quality cycling infrastructure is important to, and why**

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“The inclusion of cycling facilities means the exclusion of motor vehicles, and people want to live in nice, quiet streets with fewer motor vehicles.” (Newham Council)

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- 4.48 Among the stakeholders with a commercial perspective of the housing market, there was some definition of who good quality cycling infrastructure was more important to. For example:
- Argent said that students and professionals valued access to cycling facilities more highly than others, and that parents valued the presence of a safe space for children to cycle.
  - The contributor from the Estates Gazette suggested that young professionals living within 10 miles of the city centre valued access to cycling facilities more highly than others.
  - The contributor from Stirling Ackroyd said that young professionals, and those moving to London placed more value on the provision of cycling infrastructure: “[Cycling infrastructure is important to those aged] 18-35, especially those that have just left uni and are starting out in London. This can be young creatives, but also people entering the graduate jobs market – especially in lettings. This then moves on to people in their 20s and 30s who are still attracted by cycling infrastructure as they start to buy.”
  - Linden Homes stated that students and young professionals were more likely to be interested in the provision of quality cycling infrastructure.
- 4.49 Both Canary Wharf Group and Crosstree stated that they did not consider there to be a clear trend for a particular demographic to be more or less interested in the provision of quality cycling infrastructure; interest in cycling infrastructure is increasingly common and increasingly universal.

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“All groups value cycling facilities... There is a greater expectation for better cycling storage than previously.” (Canary Wharf Group)

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- 4.50 The contributor from Lend Lease described their target market in terms of buyer types, drawing a distinction between those who buy and then live in the property, and those who buy the property as an investment. He argued that the provision and availability of good quality cycling infrastructure is equally important to both groups. He emphasised that amongst both groups, cycle infrastructure is important even to those who do not cycle, with cycle infrastructure portraying an image of London as a modern world city. He suggested that amongst those investing in properties, good cycling infrastructure can be seen as a commercial benefit: “People who purchase property as an investment need to be conscious of who their own target demographic is – so cycling might not be important to them personally, but it might be important to one or more of their potential renters. Investors value the fact that [having access to] lots of different types of transport provision (including for cyclists) means that they can appeal to as wide a group as possible.”

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“A lot of Lend Lease’s potential customers don’t and won’t own bikes, but that doesn’t mean that cycling infrastructure or cycleable neighbourhoods are not important to them – it’s about having and enjoying a ‘London lifestyle’. If you live within the development you can walk or cycle everywhere relatively easily...you don’t even need to use public transport. (Lend Lease)

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- 4.51 The contributor from Poplar HARCA also drew a distinction between different types of occupier and described how mixed-tenure tenants were more likely to see good quality cycling infrastructure as a benefit than social tenants: “Amongst the social tenants, car parking is valued (and can be seen as a right). It is a higher priority for these tenants than cycle parking. Tenants in mixed-tenure properties are generally drawn to the area because of the proximity of Canary Wharf but see the cycle hire system as an added benefit.”

- 4.52 Among the other stakeholder groups, there was some consensus that residents were more likely to identify a quiet, low car or car-free street as an attractive place to live (and a factor in their decision about where to live and what to buy), rather than wanting to live in a street with good quality ‘cycling infrastructure’, even though the infrastructure required in both scenarios would be the same or similar. Crucially, contributors thought that the most appealing aspect of good quality cycling infrastructure for residents was that it meant the exclusion or removal of cars from a street, creating a more peaceful, liveable environment. The contributor from Living Streets said: “people value calm public realm.”

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“A street environment which is crowded with motor vehicles can be quite stressful. I believe people value the more pleasant environment which is created by the widespread use of bikes.”  
(Estates Gazette)

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“Quieter, less car-centric environments are attractive, even to non-cyclists. The Vauban neighbourhood in Freiburg is a good example of making cars less welcome – cars can be driven down some streets, but only to drop off shopping and so on...and the cars are parked in car parks some distance from the house.” (Peter Murray, NLA)

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- 4.53 One contributor from Kingston Council identified the similarities between the provision of cycling infrastructure in residential streets and traffic calming schemes to explain why residents might ultimately be in favour of (or want) good quality cycling infrastructure:

“[With traffic calming schemes] there was a general pattern of support in every area that was targeted for improvements: approximately two thirds of residents would be in support, and approximately one third against. Everyone wants fewer cars or slower cars in their street. They do not want to encounter traffic calming and road closures elsewhere, but they want the pleasant car-free or reduced car environment that traffic calming provides in their own street. People are very supportive of anything that makes their road quieter.”

### **The impacts of delivering good quality cycling infrastructure in relation to the housing market**

- 4.54 All stakeholders were asked to consider what they thought were the main impacts (benefits and disbenefits) of delivering good quality cycling infrastructure in relation to the housing market.
- 4.55 The impacts identified are summarised in the sections that follow, organised into benefits and disbenefits.

#### **Benefits**

##### *Improving access in areas with low public transport access*

- 4.56 One identified benefit of delivering good quality cycling infrastructure was that cycling infrastructure improves access to an area, and improves the range of transport choices that residents and prospective residents have. Both Stirling Ackroyd and Stephen Ludlow of ludlowthompson described people drawing ‘cycle time circumferences’ around their workplaces, with good cycle access to work being described by Stephen Ludlow as “not the only factor in their thinking...but it is an important factor”.

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“People are drawing a 30-40 minute cycling circumference from their workplace and choosing places to live. Their ability to commute by bike is a major factor in their choice.” (Stirling Ackroyd)

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- 4.57 Improving the range of transport choice available was considered particularly important in areas with low public transport access, or in areas with high levels of deprivation (which may be the same), where there may be few viable transport options. The contributors from British Land said this impact would be most important, and easiest to

observe, in developments outside central London, in zones 3, 4 and 5. The contributor from Crosstree suggested that there was a role for good quality cycling infrastructure in addressing gaps in public transport provision by saying “Less connected areas need better cycling facilities.”

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“There are some areas in London which are in the process of being substantially redeveloped where there is a great opportunity to provide good quality cycling infrastructure. Thamesmead, for example, is flat, has no decent public transport and the demographic composition that would suggest cycling is a good solution” (Peter Murray, NLA)

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- 4.58 Stephen Ludlow, Executive Chairman of ludlowthompson, suggested that prospective residents valued the choice that cycling, and cycle hire specifically afforded them; in some cases cycle hire represents a better travel choice than public transport.

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“We saw rent increases around the [cycle hire] docking stations from when they first came in and much interest in terms of buy to let opportunities around them, and developers choosing their sites in the vicinity. This was especially noticeable in Elephant and Castle – long before the regeneration that we are seeing there now. With the docking stations you could now cycle into the City in minutes, compared to a slow and hard to reach service on the Bakerloo line, or bus services which weren’t always reliable or safe.” (Stephen Ludlow, ludlowthompson)

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- 4.59 The contributors from Newham Council also recognised the role of good quality cycling infrastructure in providing links to the existing public transport network:

“The role of cycling infrastructure in providing capacity for movement is probably more important where stations are approaching capacity. There is a role for cycling infrastructure in providing an enhanced, and sometimes cheaper, end-to-end journey – if there is good quality cycling infrastructure provided, people could be encouraged to cycle to a station that is in a different zone to take advantage of lower journey costs.”

- 4.60 The contributor from Stirling Ackroyd offered anecdotal evidence that the provision of good quality cycling infrastructure (Santander Cycles) had changed how prospective residents considered the connectivity of an area, with areas further from the centre increasingly attractive to prospective residents because of good quality cycling infrastructure.

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“People are considering living slightly further out than 5-10 years ago, and are considering living further from stations, as a result of better cycling provision. This can often increase the attractiveness

of the suburbs and inner areas of London which are lacking other transport connectivity.” (Stirling Ackroyd)

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- 4.61 The contributor from Poplar HARCA said that while the proximity to Canary Wharf was a key attraction for those moving into the area, the Cycle Hire system was seen as an “added benefit” and that the presence of Cycle Superhighway 3 gave a feeling that the area was well-connected and helped attract people to the area.

*Unlocking new areas for housing development*

- 4.62 Similarly, the contributors from Newham Council thought that good quality cycling infrastructure was important in ‘unlocking’ new areas for housing development within the borough, because new links provide capacity for new trips, meaning that limited capacity on the existing public transport network can be managed despite a growing population and an increasing number of trips. In other words, areas with low public transport access can be developed, and developed to reasonably high densities, without having to invest very heavily in increased public transport capacity.

- 4.63 In addition to unlocking new areas for housing development by improving the connectivity of an area, the viability of developing in an area can be increased by improving the perceived liveability of an area. The impacts of providing good quality cycling infrastructure on the liveability of an area is explored in the next section.

*Increasing the liveability of an area*

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“The better the provision for cycling in the area the more attractive it is, and the demand and price of that area can go up.” (Stephen Ludlow, ludlowthompson)

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- 4.64 There was some qualitative evidence to suggest that delivering good quality cycling infrastructure could increase the perceived liveability of a residential area, as measured through property values, but it is important to note that most of this evidence related to the impact of cycling infrastructure that contributed to quieter, less trafficked streets.

- 4.65 Stephen Ludlow, Executive Chairman of ludlowthompson, stated that “Superhighways or improved cycle lanes, as a form of capital investment, are linked to an increase in capital prices, an increase in rental returns for the investor and an increase in the accessible housing stock.”

4.66 In Walthamstow Village, where the London Borough of Waltham Forest has delivered a programme of Mini-Holland-funded measures to create quieter, more pedestrian and cycle-friendly streets, estate agents suggested that prospective residents perceived there to be a value in the quieter streetscapes. The agents noted that the quiet streets now had a “quiet, community feel.” Comments made by agents include:

- “Some people are attracted by the quiet streets.”
- “Clients have mentioned the quiet streets that some properties are located on.”
- “Nice community feel, less traffic.”
- There used to be hundreds of cars going past all day, and people flying past at 3am. Now it’s quiet.”

4.67 One of the Kingston Council contributors, who had experience of delivering traffic-calming measures in another London borough, thought that residents saw some value in infrastructure measures which contributed to quieter streets.

“Once [traffic-calming measures] are implemented, residents will ‘guard’ their own road closures or modal filters very closely. They didn’t mention house prices when doing so, possibly because that would seem like a selfish motivation – they mention things like safety, the environment and so on.”

4.68 The contributor from Stirling Ackroyd offered some insight from Hackney, suggesting that ‘cycling provision’ was a factor in the house prices observed: “We’ve seen massive increases in house prices in Hackney and cycle provision is certainly one of the many factors.”

*Improving safety and reducing the fear of crime*

4.69 The Newham Council contributors suggested that good quality cycling infrastructure could help to improve safety and reduce the fear of crime among residents. They cited the example of the Newham Greenway (a walking and cycling route from the Royal Docks in Beckton to West Ham, Stratford and Bow), which is being upgraded. The pilot upgrade works have included lighting a section of the Greenway and installing CCTV.

4.70 Residents with properties backing onto the Greenway have been supportive of the scheme so far, as they perceive there to be a security benefit to them and/or their properties as a result of the lighting, CCTV and the anticipated increase in the number of users (pedestrians and cyclists) of the Greenway in the evening and at night.

*Supporting new patterns of travel*

4.71 The contributor from RTP1 suggested that the delivery of good quality cycling infrastructure had a relatively strategic benefit, in that it would support new patterns of travel.

4.72 He suggested that traditional commuting patterns are becoming fractured (or may become more fractured in the future), with fewer people having to commute from home into the centre of a city or town for work. People are increasingly working from home, choosing to work more locally, or ‘working from home’ but leaving the house to work in a local coffee shop or short term leased office accommodation. London is becoming increasingly poly-centric and cycling (and good quality cycling infrastructure) has a role to play in supporting local employment zones and different patterns of travel: “Cycling infrastructure has the potential to help local geographies function better.”

- 4.73 Stephen Ludlow, Executive Chairman of ludlowthompson, talked about cycling's role in supporting current trends for more flexible working, and how ludlowthompson encourage landlords to respond to this trend.

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“Cycling is incredibly flexible and individual and fits especially well with flexible working. We talk to our landlords and explain to them that most people are working from home in some way at least once a week. The same way they need Wi-Fi to communicate, they also need to have provision for cycling so that they can jump into work at a minute's notice if required [without having to wait for scheduled public transport].” (Stephen Ludlow, ludlowthompson)

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- 4.74 The contributor from Poplar HARCA described the transport opportunity created by the Cycle Superhighway running through the area. It was suggested that by improving the area for cycling, those residents who currently shop and spend time outside the area may be encouraged to shop and spend time more locally and better engage in the community.

*Meeting residents' expectations*

- 4.75 As discussed previously, one of the identified motivations for developers providing good quality cycling infrastructure is to meet residents' expectations, and to address customer demand for cycling infrastructure. Relatedly, one of the benefits in providing good quality cycling infrastructure for developers, is that residents' expectations are met, and residents feel positively about the level of provision and about the development as a whole. Argent said that they have received positive feedback about the cycling infrastructure delivered at King's Cross from a number of residents at regular development forums.

*Delivering cohesive communities / delivering a 'community feel'*

- 4.76 A number of contributors suggested that the delivery of good quality cycling infrastructure, and the increase in cycling that the provision of that infrastructure can facilitate, can help to foster a community feel in an area. A sense of community can come from choosing to travel in the same way, along the same routes; choosing to access local amenities by bike instead of travelling further afield by public transport or car; and in being on a bicycle, rather than in a “tin box”, as Peter Murray, Chairman of NLA, described a car.

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“Cycling can be a point of cohesion. Cycling can build camaraderie and a sense of community – people automatically have something in common. This is important for [us] as we aim to create a harmonised community.” (Poplar HARCA)

“Developers...should be more attuned to the possibility that cycleable environments are what people want as part of a more 'old fashioned' environment – where people can cycle themselves, with

their children, and cycle safely. The idea of living in an ‘isolated box’ where you get into a ‘tin box’ and drive children to school is not appealing – the sense of a community, which cycling can help to facilitate, is appealing. Berkeley Homes seem to be selling the ‘community’ idea as part of their packages.” (Peter Murray, NLA)

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- 4.77 The contributor from Stirling Ackroyd suggested that the creation of a “cycling culture” in east London was contributing to the “vibrancy and life” of certain areas.

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“Hackney is one of the major residential hubs for people cycling into work. People tend to cycle together along similar routes and can feel part of a community. This is supported by the provision of good cycling routes and then developed further by the addition of facilities such as cycling shops, cycle cafes, cycle surgeries, on-street bike pumps, good cycle signage and mapping. These facilities are all part of fostering a cycling culture in the neighbourhood to make cycling more attractive and more like cycle cities on the continent such as Amsterdam. This in turn can improve the vibrancy and life of an area, such as Broadway Market and London Fields. (Stirling Ackroyd)

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## **Disbenefits**

### *Loss of developable space*

- 4.78 The main disbenefit, or the disbenefit which was most commonly identified by stakeholders, of providing good quality cycling infrastructure was the loss of developable space associated with the provision of cycle parking at the quantities required, or the provision of a new link or lane within the development. There was a unanimous view among stakeholders from groups with no commercial interest in the housing market that developers do everything they can to maximise the developable space.
- 4.79 Argent, Lend Lease and Linden Homes recognised that cycle parking, and cycling infrastructure more generally, results in a loss of developable space, or reduces the amount of space available for other, more profitable uses:
- The contributor from Linden Homes said “As with any development, space is money, and cycle parking uses space. Linden Homes therefore has to use parking space as efficiently as possible. Often, this results in bicycle stackers [two-tiered stands] being the preferred style of rack as they are the most space efficient. If a local authority prohibits the use of stackers in new developments, then more space is required for bikes, which means less space is available for residential units or car parking.”
  - The contributor from Lend Lease said “The space required for cycle parking could be used more profitably for other things – for example, space at ground level is most profitably used for retail, and not cycle parking. In general, I’d prefer to use

the space for cycle parking for more residential units, retail or office...but that's not to say it is not important to deliver cycle parking.”

- The contributors from Argent recognised that space given to cycling infrastructure meant space taken away from something else, however indicated that there was always a balance to strike, and that some people would be happier than others about the balance struck: “The cycling infrastructure implemented meant a loss of space that could have been used for other things – road transport and car parking. Some members of the public and residents have complained about the lack of car parking, but it is not an issue for most people.”

4.80 The contributors from Newham Council cited one example from the former Olympic Village (now East Village) to demonstrate this point. The cycle lanes planned as part of the East Village development were three metres wide, but the actual lanes delivered were only 1.2 metres wide. The contributors suggested that the developer simply did not see the value of the planned three metre width, suggesting that the land was much more valuable to the developer as residential property than as infrastructure.

4.81 There was a sense that a loss of developable space became more of an issue for developers when the provision went beyond the standard or quantity required to achieve compliance. Linden Homes suggested that providing good quality cycle parking is a relatively simple commercial decision to make, because the standards are universally applied and that there is an acceptance that there is a ‘level playing field’ for all developers. Though it was not said, the suggestion was that any level of provision beyond the standard required for compliance was a more difficult commercial decision to make, because there would be an understanding that not all competitors would be making a decision to sacrifice developable space.

#### *Aesthetics / impact on the streetscape or design*

4.82 Some contributors suggested that a disbenefit associated with the provision of cycling infrastructure was that the cycling infrastructure provided could negatively impact on the aesthetics of the streetscape or development.

4.83 For example, the contributors from Southwark Council offered the view that the residential cycle hangers that could be installed in the borough did not make a positive contribution to the streetscape as a whole. Hackney Council have delivered more than 160 residential cycle hangers throughout the borough, and have received some negative feedback from residents on the aesthetics of the hanger, with one resident suggesting that the poor aesthetics would negatively impact on the value of their home:

“Please can you move the pod to a location that is more suitable as it is most distressing having to look at this ugly monstrosity every day. Additionally it is not aesthetically pleasing to the eye and will hinder the value of my property.”

4.84 Stephen Ludlow, Executive Chairman of ludlowthompson, also reported some complaints from resident associations about the “unattractive nature” of on-street cycle parking.

4.85 Southwark Council also suggested that concern about aesthetics, and the overall value of the design of a development, could mean some developers were reluctant to deliver cycling infrastructure at the quality or quantity first planned or envisaged: “The practicalities of servicing, changing building lines and the idea of compromising the

architectural design of the development can mean developers can become reluctant to deliver on the planned level of provision.”

*Resident opposition / lack of public support*

- 4.86 Almost all stakeholders representing planning authorities and London boroughs described some difficulty in gaining public support for the delivery of good quality cycling infrastructure, with the Southwark Council contributors explaining “there does not tend to be buy-in to cycling improvements from the wider community. Cycling is seen as something that other people do, not something that everyone does.”
- 4.87 In Kingston, in the context of the Mini-Holland programme, the Council has received comments from the public that accused the Council of “pandering to cyclists”. The Mini-Holland programme has been rebranded as the ‘Go’ programme to make the wider user benefits clearer to the public. Similarly, Waltham Forest’s Mini-Holland programme has been branded as ‘Walk, Cycle, Enjoy Waltham Forest’.
- 4.88 Resident opposition or lack of public support for the delivery of good quality cycling infrastructure could therefore be described as a disbenefit in the context of cycling and the housing market. Local authorities may be reluctant to risk resident opposition to cycling schemes, and view potential resident opposition as a disbenefit to the provision of good quality cycling infrastructure.

*Accelerating gentrification?*

- 4.89 Though almost all stakeholders were asked specifically whether they thought that provision for cyclists could be considered as a catalyst for gentrification of an area, none of the stakeholders agreed with the concept, or suggested that there was any evidence to support this idea.
- 4.90 The contributor from Hackney Council said that they did not see any evidence that the creation of a cycling environment accelerates or encourages gentrification: “Hackney, and east London more generally, was a creative area anyway and it is unlikely that creative people were encouraged to set up here because of cycling – and it’s not necessarily the ‘hipster crowd’ who are leading the trend for increasing levels of cycling in Hackney.”
- 4.91 The contributor from Poplar HARCA rejected the idea that cycling can cause gentrification. He emphasised that rather than having a gentrifying effect, cycling instead has the potential to be an important tool for increasing community cohesion. “Music and cycling and [public] art are for everyone in the community – but we need to make them accessible.”
- 4.92 The contributor from RTPi suggested that the ‘gentrification argument’ could be successfully countered through better communication of the benefits and value of cycling – for example, highlighting that cycling is a very low cost form of transport, and not just for a certain demographic.

## Realising the benefits of good quality cycling infrastructure: recommendations

4.93 Stakeholders were asked if they had any suggestions or recommendations as to how they could be better supported by TfL in order to realise more of the benefits of good quality cycling infrastructure in the context of the housing market, or how they could be better supported in mitigating against some of the disbenefits. The recommendations, including the feedback on the ‘PTAL equivalent for cycling’ idea are provided in summary as follows.

### ‘PTAL for cycling’

4.94 The possibility of TfL developing a Public Transport Accessibility Level (PTAL) equivalent measure for cycling, or adding a measure of cycling connectivity to the existing PTAL measure was discussed with stakeholders. This measure would help to recognise the level of cycling access to public transport, and could be used to inform discussions around the location, density and cycle provision of new developments. Where appropriate, this could mean allowing higher density developments in areas with poor PTAL but good cycle connectivity.

4.95 Peter Murray, Chairman of NLA, was very much in favour of a change to PTAL in order to include cycling connectivity:

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“Changing or augmenting PTAL in this way would mean that areas with low PTAL ratings could be developed to a greater extent than the existing PTAL would allow. This could help to deliver more cycling orientated communities, and inexpensive housing for younger people, in particular.” (Peter Murray, NLA)

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4.96 Argent, Crosstree, Linden Homes and Hackney Council also supported the concept of PTAL for cycling.

4.97 Some other contributors found the premise interesting, or recognised that it would have value to certain groups, but had reservations about how it would be developed and used:

- RTPI suggested that developers would be interested in the concept of a measure of cycling connectivity to the public transport network (‘CTAL’), as they often want to be able to build at the highest possible density. Before the concept was progressed any further, the contributor suggested it was important to establish a link between proximity to good quality cycling infrastructure and usage: “Does providing the infrastructure mean people use it?”
- British Land suggested that the concept of CTAL was interesting, but thought that it could be difficult to identify quality provision in a meaningful way. They suggested that an indexing system such as the Copenhagen Index could be a more workable concept, with some potential “marketing payback” for developers if they published their score.
- Newham Council supported the idea of CTAL but echoed British Land’s caution about deciding what kind of provision is considered to represent quality. The

quality of cycling infrastructure is evolving quickly, and what was considered to be good quality 10 years previous may not be considered to be good quality now.

### Revisions to standards

- 4.98 Some contributors cited the minimum quantity requirements for cycle parking as set out in the London Plan as a positive way in which different parties were supported by TfL in delivering good quality cycling provision. The contributors from Newham Council said that “TfL’s requirements on cycle parking are understood by developers, and TfL is understood to be the authority on this issue. We very rarely have to check the quantity of cycle parking that is proposed as part of a new development now because the standards are widely known and understood.”
- 4.99 Hackney Council suggested that the minimum requirements expressed in the London Plan should be revisited so that areas where cycling high mode shares are already high, or higher than average, continue to secure the level of provision required.
- 4.100 Three contributors, from different stakeholder groups, suggested that some flexibility in the minimum quantity requirements (for cycle parking) should be introduced to drive up the quality of provision:
- WestTrans suggested “Sensible concessions over quantity could be made to achieve an uplift in quality.”
  - Canary Wharf Group suggested that funding allocated to deliver cycle parking could be better directed if there was some flexibility in allocation: “Sometimes funds could be better spent fixing other things (e.g. routes) rather than simply supplying more cycle parking. Residential cycle stores are rarely used to capacity and this space could also be better utilised.”
  - Crosstree also suggested a more flexible approach: “There is no ‘right solution’ for all developments. Perhaps TfL could provide a choice of options that cost similar amounts of money, and let developers choose the most suitable solution.”

### Quality guidance

- 4.101 The contributor from Sustrans suggested that it would be useful for TfL to lead the development of clear planning guidance which outlined minimum quality standards for cycling infrastructure provision. He proposed the idea of a scoring system, with developers rated on the quality of the cycling infrastructure provided at each development. There would be a benchmark score which all developments were required to achieve, and if developers exceeded that score then this could be used to help market their properties and differentiate their offer.

## 5 Case studies

5.1 This section contains a selection of case studies that show area and developer-specific examples of the ways in which good quality cycling infrastructure influences and effects the housing market, and the ways in which developers and housing market professionals recognise and build-upon those effects.

5.2 The case studies are organised into three broad-categories, with each category of case studies covering one theme:

- **Area** case studies (see Table 5.1 for overview): examples of where the provision of good quality cycling infrastructure has contributed to area-wide benefits such as improved access to transport / greater travel choice; increased property values and so on.
- **Industry** case studies (see Table 5.2) for overview): examples of how the property industry responds to (and capitalises on) interest in, or demand for, good quality cycling infrastructure.
- **New residential developments** (see Table 5.3 for overview): examples of how developers are responding to resident / tenant demand for good quality cycling infrastructure in new developments.

**Table 5.1: Summary of area case studies**

Case study title	Ref.	Focus area	Summary
Improving the Newham Greenway walking and cycling route	A	Outer London	An example of how improvements to an existing walking and cycling route in the London Borough of Newham are anticipated to deliver benefits in the context of the housing market.
Meath Bridge, delivered as part of the Sustrans Connect2 Programme	B	Inner London	An example of new cycling infrastructure delivering benefits to local residents, including improved access in areas of low transport access, and enabling more cohesive communities.
Delivering good quality cycling infrastructure as part of the King's Cross area	C	Central London	Good quality cycling infrastructure is a core part of the redevelopment of the King's Cross area.
The effect of cycle hire on London's housing 'backwaters'	D	Various Inner and Outer London areas	Evidence from a survey conducted by Benham and Reeves Residential Lettings that shows that London cycle hire delivered connectivity benefits in areas with low public transport access, leading to increased demand for rental properties in 'backwater' areas.



**Table 5.2: Summary of industry case studies**

Case study title	Ref.	Focus area	Summary
Delivering the Mini-Holland programme in Walthamstow Village	E	Outer London	The response from estate agents in Walthamstow Village to the Mini-Holland programme of improvements, and anecdotal evidence of the impacts of the programme of improvements on the local housing market.
Delivering good quality cycling facilities for residents at Canary Wharf	F	Inner London	Canary Wharf Group's response to buyer and / or tenant expectations for good quality cycling infrastructure.
Retro-fitting good quality cycle parking at Grand Union Village	G	Outer London	An example of a collaborative response to poor quality provision in order to better serve resident demand / expectations for cycling infrastructure within the development.
References to Cycle Superhighways in property adverts	H	Various areas	Various examples of references to Cycle Superhighways in adverts for property – examples of where the industry use cycling infrastructure to sell or rent properties.
References to cycle hire in property adverts	I	Various areas	Various examples of references to cycle hire in adverts for property – examples of where the industry use cycling infrastructure to sell or rent properties.
Counter example: few references to nearby cycling infrastructure (Oval Quarter)	J	Inner London	An example of where high quality cycling infrastructure has not featured prominently in marketing materials for a new development.

**Table 5.3: Summary of new residential developments case studies**

Case study title	Ref.	Focus area	Summary
Delivering good quality cycle parking at the Old Battersea Police Station development	K	Inner London	An example of how Linden Homes is responding to resident demand for good quality cycling infrastructure within their residential developments.
250 City Road: "the most bike friendly development in the UK"	L	Inner London	An example of how Berkeley Homes is trying to exceed resident expectations and 'over-provide' for residents / tenants who cycle.
Two Fifty One, 251 Southwark Bridge Road	M	Inner London	An example of how Oakmayne is trying to exceed resident expectations and promote car-free living to prospective residents.
A cycle-centric community at Elephant Park	N	Inner London	An example of how Lend Lease developers are promoting sustainable, car-free living at Elephant Park, the former Heygate Estate.
Making use of the North-South Cycle Superhighway – Blackfriars Circus	O	Inner London	An example of how Barratt London are responding to a high-quality cycling facility directly outside the development.
Delivering high-quality cycling infrastructure in low-cost developments – Pocket Living	P	Various areas	A summary of the Pocket Living approach to residential developments, and how cycling and provision for cycling fits with their approach and ethos.



**Table 5.4: Case Study A, Improving the Newham Greenway walking and cycling route**

Improving the Newham Greenway walking and cycling route	
<p>“I believe that if the Greenway is safer, cleaner and busier I would cycle along to the health centre [and] walk home from West Ham station to Plaistow .... I would love to feel safer and have a better environment to cycle down to the Olympic Park and Balaam Pool with my daughter on the back.” (Newham resident)</p>	
Context	
<p>The Newham Greenway is an existing off-road walking and cycling route in the London Borough of Newham. The Greenway runs from the Royal Docks Road in the south of the borough through Plaistow, West Ham and Stratford, to Wick Lane in Bow. It connects with Cycle Superhighway 2 in Stratford, and provides a direct route to the Queen Elizabeth Olympic Park. Cycle Superhighway 2 runs from Stratford to Aldgate, central London, and is a mixture of segregated and unsegregated cycle lanes and shared roads.</p> <p>The route currently provides a completely segregated, pleasant, cross-borough route that is ideal for journeys for leisure or for commuting.</p> <p>The Royal Docks and Beckton Riverside Opportunity Area is an area earmarked for significant regeneration and accelerated housing delivery in the south of Newham borough. There is potential to deliver 25,500 new homes in this Opportunity Area. The Newham Greenway connects the Royal Docks and Beckton Riverside Opportunity Area with areas to the north of the borough, including Stratford station (which will be served by the Elizabeth Line from 2019), the Queen Elizabeth Olympic Park, and Cycle Superhighway 2.</p>	
What has been delivered?	
<p>Newham Council secured funding from Transport for London to upgrade the Newham Greenway walking and cycling route.</p> <p>The planned improvements include the installation of lighting and CCTV along the entirety of the Greenway, and the provision of new and improved access ramped access points and gateways in certain locations. A pilot installation of lighting and CCTV on a section of the Greenway route took place earlier in 2016, and the remaining works are due to take place in 2016/17.</p>	
	
<p>The Newham Greenway before pilot lighting trial © Newham Council</p>	<p>The Newham Greenway during pilot lighting trial © Newham Council</p>

### What are the impacts / anticipated benefits?

Newham Council believe that the planned improvements will mean that the Greenway can be used more intensively by walkers and cyclists, meaning that the Greenway becomes a high-capacity walking and cycling route. This is important in the context of housing delivery, and accommodating the travel and transport needs of a rapidly growing population within Newham.

It is anticipated that improvements to the Greenway will:

- Provide sustainable travel capacity for new and in-progress residential developments in the south of the borough – facilitating the delivery of the 25,000 units planned in the Royal Docks and Beckton Riverside Opportunity Area. New residents in the south of the borough will have a direct and safe cycling route to the north, allowing them to access the transport connections and amenities in the north (including Stratford station, Cycle Superhighway 3, the Westfield shopping centre and the Queen Elizabeth Olympic Park).
- Improve the quality and security of the route for existing users.
- Improve access to stations, allowing residents to walk or cycle to a station instead of having to use public transport (with the potential to reduce their travel costs).

Encourage residents with properties adjacent to the Greenway to see the Greenway as an asset. Residents have been supportive of the pilot phase of the improvements: “I am writing to comment on the lighting experiment on the Greenway between Prince Regent Lane and Barking Road. I think it is an excellent scheme, and the results of this first installation are impressive. It scores on the visual front, as well as the security of walkers. I am a pedestrian, but support the increase of cycling facilities to improve the quality of air and the fitness of riders. I can imagine the lighting of the Greenway is quite expensive, but when set against the environmental and health issues mentioned above, I believe it to be money very well spent.”

**Table 5.5: Case Study B, Meath Bridge, delivered as part of the Sustrans Connect2 Programme**

**Meath Bridge, delivered as part of the Sustrans Connect2 Programme**

“When pushing a wheelchair] we’d have had to have gone along the main road right back through the park, so this probably cuts fifteen minutes off our journey.” (Local resident speaking on ‘Happy First Birthday Meath Bridge’ video produced by Sustrans)

**Context**

The Connect2 programme by Sustrans aims to overcome “barriers which prevent people cycling and walking – trafficked roads, railway lines, rivers, and difficult terrain.” Sustrans identify areas where accessibility is limited by the lack of a connecting cycle or pedestrian path, and aim to fix this by providing a new connection.

The Meath Bridge, completed in 2009, links the east and west side of Regent’s canal on the border of Bethnal Green and Mile End. Before the bridge was built, it was difficult for pedestrians and cyclists to cross the canal, and the route was very circuitous.

**What has been delivered?**

A new bridge has been delivered, providing a traffic-free route through to Victoria Park and south towards the Thames.

After receiving £300,000 of funds from the Big Lottery Fund, Sustrans worked alongside London Borough of Tower Hamlets, Canal & River Trust, Transport for London, Department for Communities and Local Government to develop the bridge.



Installation of the Meath Bridge in 2009. © Sustrans

#### What are the impacts / anticipated benefits?

Delivery of the bridge has meant that the canal no longer represents a severance issue, meaning that communities on either side of the bridge are better connected.

- Over 428,000 trips estimated to have been made on the route in 2012.
- It is estimated that six times as many children are making trips in the area compared to before the bridge's opening.
- 46% of people using the bridge do so everyday.
- Almost 70% of people use the route because it saves them money.

These figures indicate the social and economic success of the bridge and it is clear that the bridge has opened up the communities on either side of the canal. The bridge has provided a safer route to three nearby schools; National Cycle Route 1, Cycle Superhighway 2 (Aldgate to Bow) and Mile End Underground station.

**Table 5.6: Case Study C, Delivering good quality cycling infrastructure as part of the redevelopment of the King’s Cross area**

**Delivering good quality cycling infrastructure as part of the redevelopment of the King’s Cross area**

“Argent LLP developers believe that creating desirable public places (through encouraging cycling) in their developments helps to differentiate their developments from their competitors and adds value to each of their properties.” (Argent)

**Context**

King’s Cross Central is a 67 acre redevelopment site located in the London borough of Camden, in the north-east of central London. The site consists of 50 new buildings, 1,900 new homes, 26 acres of open space, 20 new streets and 10 new public parks and squares. The site comprises 50% affordable housing and also houses the University of the Arts.

The site has been developed with an extensive mixed-use network which prioritises cyclists and pedestrians. The network provides significant improvement of pedestrian and cycling accessibility in and around the King’s Cross area. The site is integrated into cycle paths along Regent’s Canal and provides an easy, safe route from Euston Road northwards – previously an area which was difficult for cyclists to access. The North-South Cycle Superhighway will also connect to the King’s Cross development.

**What has been delivered?**

**Good quality cycle parking**

- Cycle parking within each residential block
- 1,500 cycle parking spaces provided across the site (for occupiers and residents)
- 500 cycle spaces for visitors / the public
- A further 227 secure overnight spaces provided by Evans Cycles
- Maintenance areas – bike pumps have been installed for residents and visitors

**Shared paths**

- Cyclists and pedestrians have priority over motor vehicles
- 5mph limit for motor vehicles
- Cyclists are free to use all public access areas (no restrictions for cyclists).



Shared path and cycle parking at King’s Cross Central

**What are the impacts / anticipated benefits?**

Residents commuting via bicycle increased from 4% to 6% from 2013 to 2014, and 12% (up from 11% in 2013) of workers in the area are now commuting via bicycle. Both of these figures are expected to continue growing as the site opens up. The mixed-use path network is expected to provide residents with safe and easy cycling and walking, and provide members of the public with improved access to King’s Cross and surrounding areas. It is hoped that improved connectivity will also reduce reliance on public transport and encourage more people to walk or cycle to King’s Cross and surrounding areas. This is also expected to provide considerable commercial benefit to the businesses around the area.

There are limited amounts of motor vehicles, and if they do enter the area they are limited to 5mph. The site is only partially complete, and more benefits should be realised as the site nears completion.

**Table 5.7: Case Study D, The effect of cycle hire on London’s housing ‘backwaters’**

<b>The effect of cycle hire on London’s housing ‘backwaters’</b>
<p>“As the Cycle Hire scheme has expanded outside of central London and into areas that are a lengthy walk from the Tube, we have seen a dramatic increase in tenant enquiries for those areas. Tenants realise that they can simply ride Cycle Hire down to the station for little or no money at all and do not have to worry about whether their bike is secure.”</p> <p>(Marc von Grundherr, Director, Benham &amp; Reeves Residential Lettings)</p>
<b>Context</b>
<p>The Santander Cycles scheme is a self-service bike-sharing scheme for short journeys. Users can pick up a bike from a local docking station, use it for a short hop journey, then return it to another docking station. The London cycle hire scheme began in July 2010 in central London.</p> <p>In 2014 Benham &amp; Reeves, a London residential lettings agent commissioned a survey to investigate whether the introduction of cycle hire docking stations in certain areas had a quantifiable effect on rental returns.</p>
<b>What has been delivered?</b>
<p>Cycle hire docking stations had been introduced in each of the locations that were included in the rental returns survey conducted by Benham &amp; Reeves and approved by Transport for London, meaning local residents can pick up a bike from a docking station nearby, and either make an entire journey by bike, or cycle to a station. The areas in which the most “dramatic” increases in rental returns and / or enquiries have been evidence are highlighted in the chart in the following section – the docking stations located in these areas were more than a 10 minute walk from the nearest Underground or Overground station.</p>
<b>What are the impacts / anticipated benefits?</b>
<p>The study found that there had been above-average rent increases in areas which had a London cycle hire docking station, most notably in areas with low transport accessibility (i.e. those not well served by the Underground or Overground network). The chart in the article linked below shows the most substantial rent increases recorded through the study. It shows that in Sand’s End, rental returns grew by 25% following the introduction of a cycle hire docking station, against an average London increase in rents of 5%.</p>
<p>Source: Benham &amp; Reeves Residential Lettings (<a href="http://www.brlets.co.uk/blog/lettings-in-london/boris-bikes-transform-urban-backwaters-rental-hotspots/">http://www.brlets.co.uk/blog/lettings-in-london/boris-bikes-transform-urban-backwaters-rental-hotspots/</a>)</p>

**Table 5.8: Case Study E, Delivering the Mini-Holland programme in Walthamstow Village**

**Delivering the Mini-Holland programme in Walthamstow Village**

The London Borough of Waltham Forest received £27m of funding from Transport for London as part of the Mini-Hollands scheme. Thirteen schemes were developed across the borough to create places that are great to live, work and travel. The improvements aimed to bring a wide range of benefits to residents and businesses such as better conditions for pedestrians and cyclists, improved air quality and less congestion on local roads.

One of the schemes, based in Walthamstow Village, aimed to reduce the amount of motor traffic using residential streets; when the funding was awarded in 2013 over 25,000 vehicles were travelling through key roads in the Village every day. The Council also sought to improve the look, feel and safety of Walthamstow Village for all road users

A two week trial of the proposals and a public consultation were held in 2014, along with engagement workshops with local residents. Results from these engagement activities were used to help shape the final designs for Walthamstow Village.

**What has been delivered?**

- **Road closures and traffic flow changes:** to address issues surrounding non-local traffic, road closures were put into effect for motorised vehicles only, allowing pedestrians and cyclists to move freely through the area;
  - **Shared space:** shared space created for buses, cyclists and pedestrians on Orford Road by closing the road to motorised traffic between 10am and 10pm Monday to Sunday;
  - **Creating a safe environment:** pavements widened and crossing distances reduced, crossings and junctions raised to slow traffic, and improvements to street lighting levels on popular pedestrian routes;
  - **New and improved public spaces:** tree planting, improvements to street lighting and footpaths, and public spaces such as Eden Village Square;
- Area upkeep:** ongoing maintenance of the improvements and to the local area including road resurfacing, de-cluttering and removal of redundant street signs, and replacing speed cushions with speed humps.



Traffic calming scheme on West Avenue, Walthamstow



Traffic calming scheme (shared space) on Orford Road, Walthamstow

**What are the impacts / anticipated benefits?**

Four out of seven local estate agents questioned recognised some positive impacts of the scheme on housing. The agents did note, however, that the positive impacts on the housing market were largely limited to properties in the streets where traffic had been restricted. The agents noted the desirability of the quiet streets, and the creation of a “quiet community feel” in those streets.

Engagement with local residents and businesses at all stages of the scheme has been a driver in creating the final designs of the scheme. Changes were made to the original consulted design based on feedback from residents and businesses, and a review of the changes will be conducted from six months after full implementation to ensure they have improved the area as anticipated.

**Table 5.9: Case Study F, Delivering good quality cycling facilities for residents at Canary Wharf****Delivering good quality cycling facilities for residents at Canary Wharf**

“Canary Wharf Group recognise that our customers, both residential and commercial tenants, expect to have cycle storage. Provision of good quality cycling infrastructure that goes beyond compliance is driven by tenant demand – and we will provide what is desired by tenants.” (Canary Wharf Group)

**Context**

Canary Wharf Group (CWG) is a property owner and developer. They own and are responsible for developing and managing the 100 acre site at Canary Wharf, London. Along with commercial and retail space, 3,500 apartments are being built at Canary Wharf, with the first phase due for completion in 2019. As owners, developers, and managers of the site, CWG organise and maintain all cycling infrastructure on site. This includes implementing all Section 106 provisions, working with TfL on Santander Cycles, cycle parking plans, and arranging cycle training days. CWG have full control over all paths and routes available to cyclists on site.



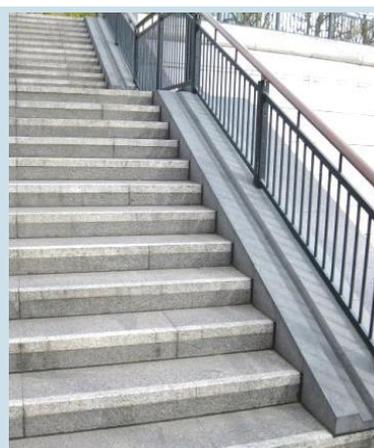
Visualisation of Canary Wharf Group’s Wood Wharf development © Canary Wharf Group

**What has been delivered?**

- New residential buildings have **secure cycle parking** at basement level, protected by CCTV and requiring fob access to enter. Cycle parking is accessed by service lifts which are adequately sized for carrying bicycles in and out of the building.
- **Cycle ramps** implemented along paths and on staircases on the existing estate to assist in bike access.
- **Permanent bicycle pump** installed for use by residents and visitors.
- Implementation of 262 Santander **cycle hire** docking stations across the estate.
- **Driver training** for freight drivers to recognise risks to cyclists.
- **Cycle training days** (in conjunction with Tower Hamlets).



Permanent bicycle pump installed for use by residents and visitors © Canary Wharf Group



Cycle ramp on staircase on Canary Wharf estate © Canary Wharf Group

**What are the impacts / anticipated benefits?**

CWG believe all residents value cycle facilities, with a greater expectancy to have better cycle storage facilities than 10 years ago. Residents expect cycle parking and storage lockers, hire schemes for bicycles and community cycling events. Most residents want to store their bike close to their residential property, in secure racks monitored by CCTV, and residents owning expensive bikes expect individual storage lockers.

Whilst important to be linked to the wider cycle network, research shows cycling infrastructure is not a driving factor behind choosing to purchase an apartment in a specific block – this tends to be based on location and long term investment strategy. They believe that short term tenants are more likely to consider cycle facilities than those purchasing a property.

**Table 5.10: Case Study G, Retro-fitting good quality cycle parking at Grand Union Village**

**Retro-fitting good quality cycle parking in west London**

“WestTrans can prove that getting [cycle parking] right does encourage cycling.”

(WestTrans, West London Cycle Parking Guidance, 2016)

**Context**

WestTrans is a partnership of the six west London boroughs of Ealing, Brent, Hammersmith and Fulham, Harrow, Hillingdon and Hounslow. WestTrans works with Transport for London and other west London stakeholders to identify, develop and implement transport projects to the benefit of the west London sub-region. These include sustainable transport schemes and initiatives to address the sub-regions key transport challenges.

WestTrans is producing Supplementary Planning Guidance to provide guidance on the acceptable standards for cycle parking to be delivered in west London; partly in response to poor implementation observed at a number of developments.

WestTrans recently worked with one residential developer to improve the quality of the cycle parking provided within the development, because WestTrans had concerns that cycle parking access problems were resulting in a suppression of cycling demand among residents.

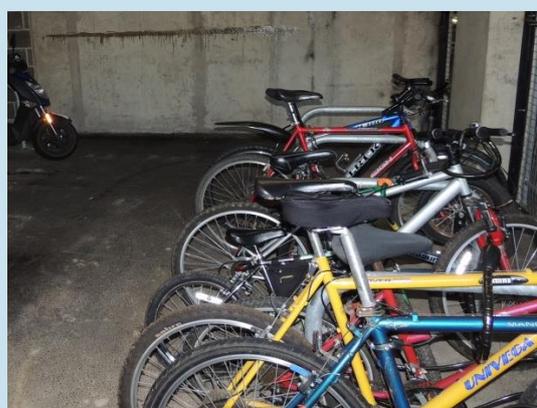
**What has been delivered?**

The cycle parking provided originally, from original occupation of the building, was very difficult to access. Residents were required to go round the back of the building onto a canal path to access the entrance to the cycle parking – the door of which was up one flight of steps, and opened outwards, making it very difficult for residents to gain access. As a result, the cycle parking provided was not used.

Working with the developer, WestTrans identified the changes required to make the cycle parking provided better quality and easier to use. The canal-side access was removed, meaning that residents were able to access the cycle parking from an entrance beside the normal residential entrance – without having to negotiate stairs and doors, and the ramped stands were replaced with Sheffield stands.



Cycle parking before retro-fit (unoccupied)  
© WestTrans



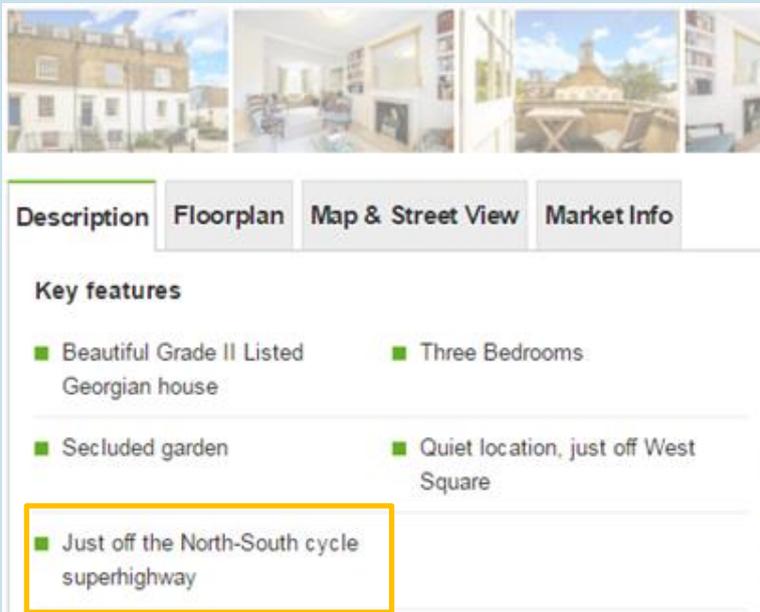
Cycle parking after retro-fit (occupied, with canal-side access removed) © WestTrans

**What are the impacts / anticipated benefits?**

WestTrans hope that through working with the developer to retro-fit better quality provision, the developer will be more aware of what constitutes ‘good quality’ infrastructure in the future, and will see the value in providing good quality cycling infrastructure.

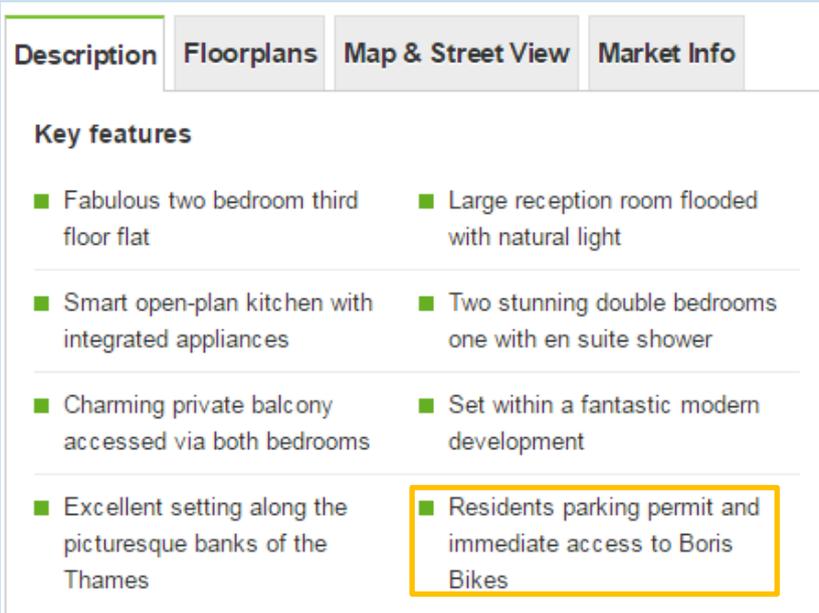
The cycle parking at this particular residential development is, after retro-fitting, often fully used.

**Table 5.11: Case Study H, References to Cycle Superhighways in property adverts**

References to Cycle Superhighways in property adverts		
<p>“The location of a tucked-away cycle path can be a stronger selling point to a cyclist than a tube stop around the corner.” (Stephen Ludlow, Executive Chairman of Ludlowthompson)</p>		
<p><b>Context</b></p> <p>Adverts for property (rental and sales) regularly include information about the local transport infrastructure, such as connections to the rail and Underground network, the frequency of local bus services and proximity to main roads. Some adverts, particularly those detailing properties proximate to Cycle Superhighways, make reference to local cycling infrastructure and connections that can be made by bicycle.</p>		
<p><b>Examples</b></p>		
<p>The adjacent picture is an example of an online property advert which makes reference to proximate cycling infrastructure – in this instance, the cycling infrastructure is the North-South Cycle Superhighway, and the property is located in Elephant and Castle.</p> <p>Proximity to the North-South Cycle Superhighway is listed as one of the ‘key features’ of the property in this example – and proximity to other transport connections such as Underground or bus stops is not referenced.</p> <p>The text that follows present some further examples of where an online property advert has made reference to a proximate Cycle Superhighway.</p>		<p>Example of a reference to a Cycle Superhighway (property located in Elephant and Castle) © Rightmove. Agent: Daniel Cobb</p>
Area	Reference to Cycle Superhighway in property advert	Agent
Elephant and Castle	“The house is well situated within 50 metres of the North South Cycle Superhighway, and close to both Elephant and Castle tube station (Northern and Bakerloo Line) and National Rail station and the wealth of restaurants, shops and markets in London Bridge and Borough.”	Purple Bricks
Southwark	“The north south cycle super highway runs past the apartment, and a Cycle Hire stand is on an adjoining street.”	Smoor
Oval	“Furthermore, the Cycle Super Highway will reach Oval, bringing even more demand to the area.”	Ludlowthompson
Battersea	“Major bus routes can be obtained at bus stops within 100 metres and London’s “Cycle Superhighway” runs from outside the property into the city centre.”	Hamways
Stoke Newington	“The new cycle superhighway into the city square mile runs through the street behind this one.”	The Online Lettings Company

Poplar	“Within walking distance to Cineworld Cinema (8 minutes), bus stops towards City (2 minutes), Lidl Supermarket (10 minutes), Tesco Express (10 minutes), cycling distance on the cycling super highway to Cannon Street (20 minutes).”	Visum
<b>What these examples suggest</b>		
<p>These examples do not suggest that proximity to good quality cycling infrastructure is a deciding factor in a tenant’s decision to buy or rent a particular property, but they do suggest that proximity to good quality cycling infrastructure is something which features in the decision-making process. The fact that estate agents choose to include information about local cycling infrastructure in adverts for properties suggests that certain prospective tenants or buyers ask about cycling infrastructure, and that estate agents see value in providing information about local cycling infrastructure at the earliest possible opportunity.</p>		

**Table 5.12: Case Study I, References to cycle hire in property adverts**

References to cycle hire in property adverts		
<p>“There’s been a big shift [in tenants looking for properties with cycling facilities] in the last six or seven years – really noticeable from the introduction of Cycle Hire. We saw rent increases around the docking stations from when [cycle hire] first came in, and a lot of interest in terms of buy to let opportunities around [docking stations] and developers choosing their sites in the vicinity.” (Stephen Ludlow, Executive Chairman of ludlowthompson)</p>		
Context		
<p>The Santander Cycles scheme is a self-service bike-sharing scheme for short journeys. Users can pick up a bike from a local docking station, use it for a short hop journey, then return it to another docking station. The London cycle hire scheme began in July 2010 in central London. Since then there have been progressive enhancements, including the opening up of the scheme to casual members in December 2010, an expansion to the east in 2012 and an expansion to the south west in late 2013 (Travel in London Report 8, TfL, 2015). Some developers and estate agents make reference to Santander Cycles docking stations outside or very proximate to the property in development brochures or property adverts.</p>		
Examples		
<p>The picture opposite is an example of where proximity / access to Santander Cycles (here referenced as ‘Boris Bikes’) has been noted as a ‘key feature’ of a property – this particular example is for a property that was for sale in the London Bridge area. The lines below show some further examples of property adverts that have referenced cycle hire in the description of the property.</p>	<p>Example of a reference to cycle hire (property located in London Bridge) © Rightmove. Agent: Foxtons</p> 	
Area	Reference to cycle hire in property advert	Agent / developer
Isle of Dogs	“About 0.1 miles from Cycle Hire stand.”	Hatched.co.uk
Elephant and Castle	“There are Cycle Hire stands nearby and you are just moments from one of the Cycle Superhighways heading straight to the City.”	Templeton Flagg
Nine Elms	“The Cycle Hire Scheme has been expanded across the regeneration area.”	Nine Elms Vauxhall Partnership

#### **What these examples suggest**

Similarly to the examples shown in the previous case study on references to Cycle Superhighways, the examples where reference is made to cycle hire suggest that some prospective tenants and residents are interested in proximity to cycle hire docking stations when considering where to move to. Those areas / properties which have access to cycle hire may be more attractive to certain prospective residents.

**Table 5.13: Case Study J, Counter example: few references to nearby cycling infrastructure (Oval Quarter)**

**Counter example: few references to nearby cycling infrastructure (Oval Quarter)**

Situated 1km south of Oval Station, Oval Quarter is a new 12.5 hectare development comprising over 800 new apartments, as well as public parks and buildings.

**Example**

Despite being just over three miles from the City of London via Cycle Superhighway 7 at Oval there are virtually no references to cycling or cycling infrastructure in the development brochure for the Paxton and Hamilton Buildings, the latest buildings within the Oval Quarter complex to be taken to market. In the 30 page brochure, there is just one reference to cycling: “Dedicated ground-floor cycle stores”.

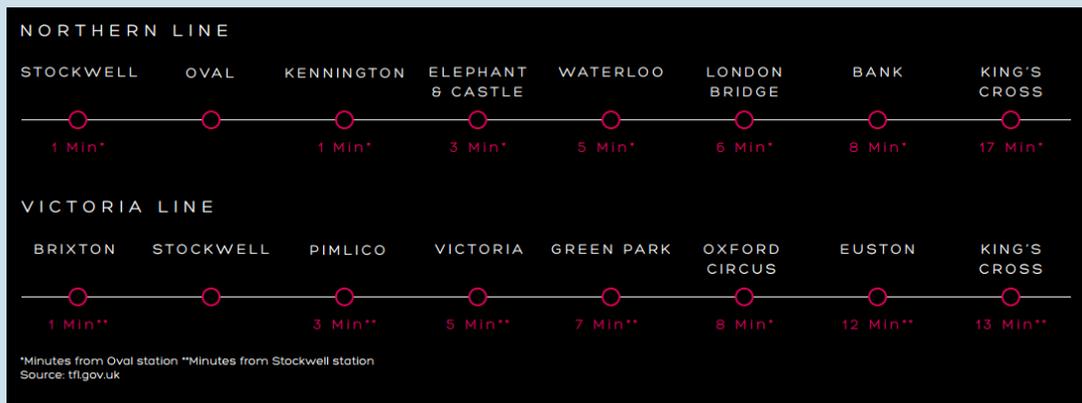
There are very brief mentions of cycle hire docking stations in the ‘Movie Tour of Oval Quarter’ video – the images below show consecutive screenshots from the video (Source: [https://www.youtube.com/watch?time\\_continue=45&v=b10cVCAY3zl](https://www.youtube.com/watch?time_continue=45&v=b10cVCAY3zl)).



On one of the other promotional videos, the presenter mentions the fact that Oval Quarter is “just a 20 minute cycle from the city”. However, considering how much promotional material is available, and the continued references to the development’s central location (“it’s easy to forget just how close to the action you really are...”), these three references to cycling and cycling infrastructure seem relatively minor. The brochure’s narrative on transport and connectivity is focused on Underground and bus connections:

“Moments from your front door, take your pick from the area’s fast, effortless transport links. Just a walk or short bus ride away, Oval Underground station offers direct links into the City and King’s Cross St Pancras via Bank and Waterloo. And make just a quick change from the Northern to Victoria line at Stockwell and you’ve even more connections and destinations to choose from.

Prefer to take in the journey over ground? Make the most of the 15 bus routes serving the area, including two 24-hour services and five night bus services, whisking you home from drinks in Covent Garden, dinner on the South Bank – or wherever else you might find yourself after hours.”



Reference to Underground connections and journey times by Underground from Oval Quarter in the Paxton Building development brochure © Oval Quarter

**What this example suggests**

This example suggests that interest in cycling, and interest in access to cycling infrastructure such as Cycle Superhighways or Santander Cycles docking stations is not universal within London and within all buyer / tenant groups; or it suggests that this particular developer has not recognised that access to cycling infrastructure is important to some prospective tenants / buyers (i.e. the importance of cycling is not universally recognised by all developers in London).

**Table 5.14: Case Study K, Delivering good quality cycle parking at the Old Battersea Police Station development**

**Delivering good quality cycle parking at the Old Battersea Police Station development**

“The fact that buyers expect bicycle storage in new developments still affects saleability and desirability of the property. That is, if we did not provide cycle parking, desirability of the properties would be negatively affected.” (Linden Homes)

**Context**

The Old Battersea Police Station (now referred to as The Metropolitan) is a recently completed residential redevelopment completed by Linden Homes. Located on Battersea Bridge Road in Wandsworth, the development of an old police station into 49 residential units is located approximately 500m away from the Wandsworth to Westminster (CS8) Cycle Superhighway. The development is also near the Battersea Power Station development site which is undergoing a period of major development. A pedestrian and cycle bridge from Nine Elms to Pimlico is also planned for the near future.



Visualisation of the Old Battersea Police Station development © Linden Homes

### What has been delivered?

Being a relatively small development, the provision of cycling infrastructure was limited to the delivery of good quality, on-site cycle parking. However, as identified through several of the stakeholder discussions, ease-of-access to cycle parking is an important factor for high quality cycle parking. Linden Homes designed the cycle parking to allow for direct access via the Hyde Lane service road which runs next to the development. This allows for easy and convenient parking of bicycles when leaving and entering the development.

Linden Homes make reference to the local cycling infrastructure in their marketing material for the development (an excerpt from their marketing brochure is shown below). The brochure includes reference to the cycling journey times from the development to nearby locations, and explicitly mention the proximity of the Wandsworth to Westminster Cycle Superhighway.



Image: Linden Homes 'The Metropolitan' development brochure

© Linden Homes

<http://www.lindenhomes.co.uk/brochure/the-metropolitan/>

### What this example suggests

Linden Homes believe that easy access to safe and secure cycle parking allows them to meet residents' expectations, making their properties more desirable overall. Featuring cycle journey time information in their development brochure indicates that Linden Homes believe that prospective buyers value access to good quality cycling infrastructure.

**Table 5.15: Case Study L, 250 City Road: “the most bike friendly development in the UK<sup>2</sup>”**

**250 City Road: “the most bike friendly development in the UK”**

“The demand for secure cycle parking will only increase in the coming years, so ‘overprovision’ seems sensible and will futureproof the development.”

(Christopher Abel, Development Director, Berkeley Group)

**Context**

Situated between Old Street and Angel Underground stations, 250 City Road is a new development containing 930 apartments across nine buildings.

**What has been delivered?**

250 City Road has received some media attention as the “most bike-friendly<sup>2</sup>” development in the UK. The development has one cycle parking space per bedroom across the site, totalling 1,486 resident cycle parking spaces. In addition, it has a dedicated lift for bikes, and a bike maintenance workshop for residents’ use. Its proximity to the North-South Cycle Superhighway has also been mentioned as a key feature of the development.

## Residents to enjoy a bike space per bedroom at new London development

*Foster + Partners' new high-rise will have enough on-site bike parking to go around and then some.*

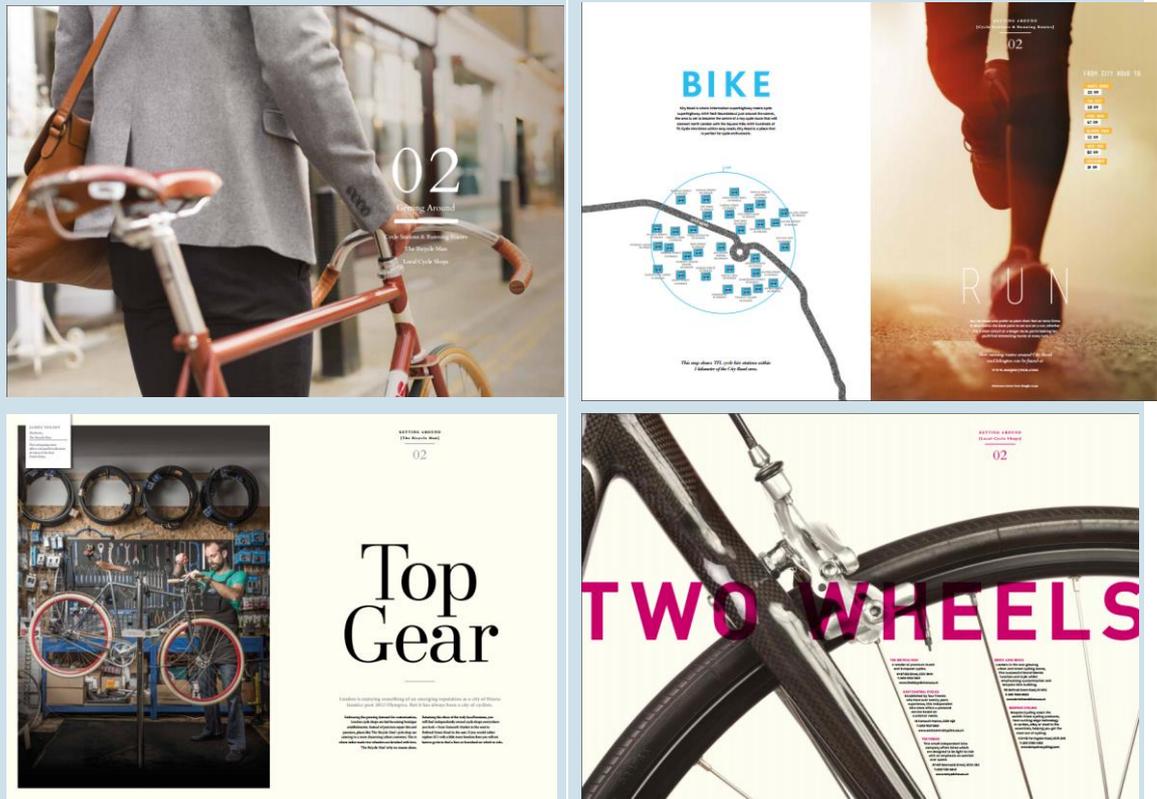


250 City Road has all the usual luxury amenities geared for the well-heeled Londoner — and a whole lot of bike parking. (Renderings: Foster + Partners)

Headline referring to 250 City Road's cycle parking. Source: <http://www.mnn.com/your-home/remodeling-design/blogs/residents-to-enjoy-a-bike-space-per-bedroom-at-new-london>

<sup>2</sup> <http://inhabitat.com/foster-partners-250-city-road-towers-are-uks-most-bike-friendly-high-rises/>

In addition, cycling and cycling infrastructure features very prominently in one of the development brochures for the site, with four of the brochure's 25 pages dedicated to cycling and running routes, and direction to local cycle retailers and workshops.



Excerpts from the 250 City Road Alternative Living Guide © Berkeley Group

Connections by bike are also promoted within the main development brochure – the text that refers to transport connections starts with a description of the cycle parking available on site for residents, and mentions that the development is located at a “pivotal point in London’s cycle network”. The paragraph that follows the description of cycling connections makes reference to public transport connectivity.



Excerpt from the 250 City Road Brochure © Berkeley Group

**What this example suggests**

In this instance, the developer (Berkeley Group) clearly believes that there is an advantage to providing good quality cycle infrastructure for residents, and in promoting the good quality cycle infrastructure within the footprint of the development and that which enables connections to neighbouring areas. It is likely that Berkeley Group consider cycling and cycling infrastructure to be important to their target market, and they have made a concerted effort to meet and exceed residents' expectations in this respect.

**Table 5.16: Case Study M, Two Fifty One, 251 Southwark Bridge Road**

**Two Fifty One, 251 Southwark Bridge Road**

Situated on the north side of Elephant and Castle Underground station, 251 Southwark Bridge Road ('Two Fifty One') is a 41-storey residential tower containing 270 apartments, developed by Oakmayne. It is currently under construction.

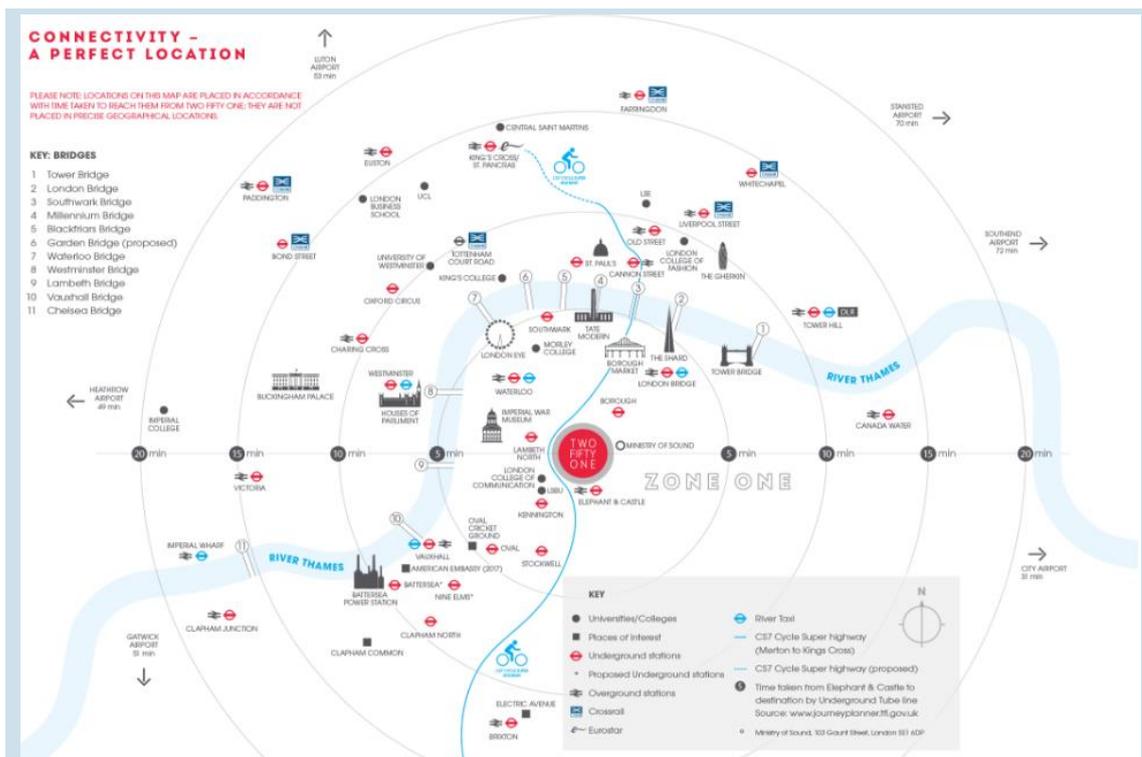


Visualisation of exterior of Two Fifty One development © Oakmayne

**What has been delivered?**

The Two Fifty One development includes a dedicated bicycle lift (to facilitate access to the secure basement bicycle storage from ground level) and a “dedicated bicycle bay” within the basement (secure cycle parking for residents).

Two Fifty One’s location is being heavily promoted as the “perfect location”. Two Fifty One’s website mentions its proximity to the “Underground, Thameslink, National Rail, 29 bus routes and the new CS7 Cycle Superhighway to King’s Cross” (note: Cycle Superhighway 7 runs from Merton to the City, not Merton to King’s Cross as suggested on the Two Fifty One website and map. Cycle Superhighway 7 launched in 2010). 251 Southwark Bridge Road is located 100m from the North-South Cycle Superhighway. The image below, taken from Two Fifty One’s website, shows the prominence (and therefore perceived importance to customers) of the Cycle Superhighway. Cycling connectivity appears to be on par with other forms of transport.



Two Fifty One's transport connectivity map (Source: <http://www.twofiftyonelondon.com/connections/>)

**What this example suggests**

This is another example of where the developer perceives cycling and cycling infrastructure to be important to its target market, and has therefore made a focused effort to meet and exceed residents' expectations through the provision of beyond-compliance infrastructure within the footprint of the development (for example, the "bicycle lift"), and has shown local cycling infrastructure as prominently (if not more prominently) as local public transport connections on the local transport map.

**Table 5.17: Case Study N, A cycle-centric community at Elephant Park****A cycle-centric community at Elephant Park**

“Elephant Park will be a cycle-centric community, with emphasis on more sustainable means of transport across the development. With over 3,000 secure bicycle parking spaces, cycle workstations and cycle clinics for residents, as well as up to 90 new cycle hire docking points, the development is designed around making cycling easy and accessible.”

(Elephant Park blog: ‘Celebrate cycling in Elephant & Castle’, July 2015)

**Context**

Elephant Park is a new development on the site of the former Heygate Estate in Elephant and Castle. Made up of a series of buildings being built in phases, the development will comprise 3,000 new homes. All phases of the development are planned for completion in 2025. The development is described as the new ‘Green Heart’ of London, with marketing for Elephant Park promoting green and healthy living, with cycling an important part of that narrative.

Elephant Park is one of only 18 global projects in a flagship programme of the C40 Cities Climate Leadership Group that is taking action to reduce greenhouse gas emissions across the world’s cities. Requirements of the C40 project include commitments to sustainable travel and transport.



Promoting cycling on the Elephant Park website (Source: [www.elephantpark.co.uk/brochures/local-areas](http://www.elephantpark.co.uk/brochures/local-areas))

**What has been delivered?**

The developer, Land Lease, has worked extensively with local cycling advocacy groups, such as Southwark Cyclists, to identify the best cycling routes through the development. The aim is to make the development as permeable as possible, in as safe a way as possible, for pedestrians and cyclists. Some routes through the development will be pedestrian only, but cyclists will be permitted to use the majority of routes provided.

New provision for cyclists is required as part of the s106 agreement, including numerous planning obligations which mandate the delivery of a minimum number of cycle parking spaces. 3,000 secure cycle parking spaces will be available within the developments in the form of Sheffield stands and two-tier cycle parking. Cycle hire docking stations (Santander Cycles) will also be delivered as part of the development, with up to 90 new docking stands planned.

The developers have done a lot of work on promoting cycle safety. The police visited the site and invited cyclists to sit in HGVs so that cyclists gain a better understanding of their visibility, and driver blind spots. This is a low cost initiative but regarded as valuable to residents. Land Lease are looking to deliver more cycling infrastructure and additional innovations for cyclists in future phases of the development, including bike maintenance areas within developments, and offering free Dr Bike maintenance and repair sessions to residents on a quarterly basis.

**What this example suggests**

Giving people the choice to be able to walk and cycle everywhere is part of the 'London lifestyle' the developers are looking to promote.

Whilst it is not expected that all potential residents of Elephant Park will own a bike, cycling infrastructure and cycleable neighbourhoods are seen as an important element of the development's design. As well as appealing to those who intend to buy and live in the development, there is a large appeal to those who purchase property as an investment. Investors value lots of different types of transport provision as it allows them to appeal to as wide a rental market as possible.

**Table 5.18: Case Study O, Making use of the North-South Cycle Superhighway – Blackfriars Circus**

**Blackfriars Circus**

“The Superhighway will...transform Blackfriars Road into a beautiful tree-lined urban boulevard, with more than 20,000 square feet of new space for pedestrians as well as shops, cafes, restaurants and bars.”

(Barratt London)

**Context**

Situated between Elephant and Castle and Southwark stations, Blackfriars Circus is a new residential development containing 336 apartments, as well as office and retail space, developed by Barratt London. The new North-South cycle superhighway runs directly past the Blackfriars Circus development.

The above quote demonstrates the importance that Barratt London places on the Cycle Superhighway. Barratt London seem to see the Cycle Superhighway (and the associated redevelopment of the Blackfriars Road area) as a potential selling point for their customers.

In the news article referencing the Cycle Superhighway that features on the news area of their website, Barratt London continue to quote the then Mayor, Boris Johnson: “Getting more people on their bikes will reduce pressure on the road, bus and rail networks, cut pollution, and improve life for everyone, whether or not they cycle themselves.”

**What will be delivered?**

As part of the Blackfriars Circus development, 700 cycle spaces will be provided for residents in order to allow them to “make full use of the new cycle lanes being constructed in the area.”



Images: artists' impression of North-South Cycle Superhighway on Blackfriars Road, and exterior image of Blackfriars Circus development. Source (both): [www.barratthomes.co.uk](http://www.barratthomes.co.uk)

**What this example suggests**

The early mention of the new North-South Cycle Superhighway in the development of Blackfriars Circus suggests that Barratt London saw value in promoting the new segregated infrastructure to prospective residents at the earliest possible opportunity, because cycling was likely to be important to their target market.

**Table 5.19: Case Study P, Delivering high-quality cycling infrastructure in low-cost developments – Pocket Living**

**Pocket Developers**

“Pocket are very thoughtful in terms of the cycling infrastructure delivered for their residents.”

(Peter Murray, Chairman, New London Architecture)

**Context**

Pocket Living (Pocket) is a private developer which builds affordable homes for first-time buyers, with all Pocket homes sold at least 20% cheaper than the surrounding market rate. Pocket homes are aimed at young, middle-earning London residents who want to buy a home in a central London location, and who are happy to economise on space in order to take advantage of cheaper sales prices. The CEO, Marc Vlessing, states that Pocket are trying to cater for Millennials:

“The Millennials...are no longer buying cars like their parents did, and they are choosing to live in small, city centre apartments – which, by nature of their size and location, offer less room for stuff and more for the possibility of experience.”

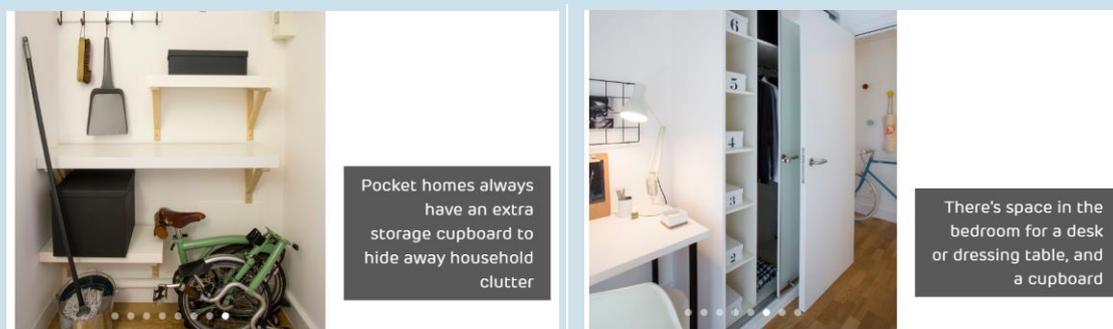
Pocket have an award-winning design for their apartments that makes the best possible use of space – “including things you need, and leaving out things you don’t”. All of the Pocket developments are car-free, with parking spaces not required by the target market.



Promotional image from Pocket website

**What has been delivered?**

All Pocket homes have secure cycle storage provided for residents (no car parking), and visitor cycle parking (Sheffield stands) is provided directly in front of the buildings. Promotional material frequently references sustainable and car-free living, and several of the interior photographs show bicycles being stored within a flat – including a Brompton bicycle being stored within a cupboard.



Interior photographs of typical Pocket developments. Source: <https://www.pocketliving.com/homes/gallery>

### What this example suggests

The cycling infrastructure provided as part of Pocket developments may technically go no further than simple compliance, but the images of bicycles being stored within homes suggests that the developer genuinely understands the needs and wants of cyclists as residents, in that many residents would rather store their bike within their home than leave it in a communal storage area.

Pocket's main selling-point is that it provides small but cleverly designed homes in order to offer them at least 20% less than the area's market rate. Such "thoughtful" (Peter Murray, NLA) provision for cyclists within Pocket developments is part of the design that allows Pocket development to capture a part of the Millennial market.

## 6 Conclusions

- 6.1 This section summarises the key findings from this study, which sought to investigate, in a qualitative way, the extent to which the provision of good quality cycling infrastructure impacted on the housing market in London, as an indicator of the improved connectivity and liveability afforded to current and future residents.
- 6.2 The literature review identified a number of studies which investigated whether cycling infrastructure (or similar types of local-area improvements) had an impact on the housing market – purchase values, rental values and other indicators. There was some evidence found as part of the literature review of the provision of cycling infrastructure on property values, but the level of impact reported was inconsistent, and a positive impact was not always evidenced. There is currently no quantified UK-evidence that has been collected to demonstrate a positive correlation between good quality cycling infrastructure and property price increases, or similar indicators.
- 6.3 The views expressed through stakeholder interviews were reasonably consistent, if not entirely unanimous, on a number of points:
- Most stakeholders identified benefits to the housing market coming from the increased connectivity and new patterns of travel supported by the provision of high quality cycling infrastructure. There was also some qualitative evidence that the provision of high quality cycling infrastructure can play a part in making an area more liveable. Additionally, cycling infrastructure was seen by some stakeholders to help increase a sense of community cohesion. It was felt that the provision of cycling infrastructure does not play a significant part in the gentrification of areas.
  - There was some qualitative evidence of the infrastructure associated with ‘cycle friendly streets’ (e.g. traffic calmed streets, filtered permeability, exclusion of motor vehicles, 20mph zones) having a positive impact on the liveability of the area as a whole, with associated impacts on property values.
  - Residents are increasingly likely to ask about (and want) cycling storage and infrastructure, and estate agents report that the existence of / quality of cycling infrastructure provided is likely to influence a decision about where to live - not a ‘deal breaker’, but it is an increasingly important consideration.
  - In general, developers’ main motivation for providing good quality cycle parking as part of a new residential development is to be compliant with the terms of their negotiated planning permission. Some developers suggested that if they did not provide cycle parking as part of their development then the desirability of the property for certain demographic groups would be negatively affected; but this theory has not been tested, because cycle parking is required as part of all new residential developments.

- Stakeholders without a commercial interest in the housing market suggested that developers needed to be pushed to provide good quality cycling infrastructure, and would not provide the infrastructure if it was not a condition of their planning permission, or negotiated as part of an s106 agreement. This suggests that residential developers do not believe there to be significant value attached to the provision of good quality cycling infrastructure (e.g. the value of providing good quality cycling infrastructure is substantially less than the value of the space that could be developed and sold as retail, commercial or further residential units).



# A Literature review references

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## B Stakeholder discussion guide

### Introduction – 5 mins

- Confirm name, job title, description of role.
- What does your organisation do? Brief overview of operational sites / personnel in London?
- Does your organisation have any involvement in promoting / delivering cycling generally, and cycling infrastructure specifically in London? If so, what of each of the below does your organisation do, who (what organisations, campaign groups etc.) do you work with and in what capacity - collaboration / partnership/paid-for advice?
  - Design
  - Consultation
  - Implementation
  - Promotion
  - Campaigning

### Delivering good quality cycling infrastructure – 40 mins

- *(For all.)* What does ‘good quality cycling infrastructure’ look like / mean to you / your organisation? (In an ideal world, what level of provision would there be?)  
*Please try and probe at different spatial scales:*
  - At a home / residential / development level (e.g. facilities within the footprint and immediate vicinity of a residential area / development).
  - At a local neighbourhood level (e.g. routes and environment through a residential area / development and connecting into the local neighbourhood).
  - At a wider network level (e.g. the cycling routes and environment that connect to local destinations and the wider London network).
- *(For organisations that have actively been involved in improving cycle infrastructure in some way.)* What is your organisation’s motive for providing cycling infrastructure? (Do not read out list below initially – use it to prompt if necessary and probe answers given.)
  - Compliance [with LCDS / parking standards]. Is this the main reason? Why?
  - Important to target market. Why? How? Is cycling infrastructure more important to one market (demographic group) than others? Are there some facilities / features that are expected as standard by some buyers / renters – what are these? What are the ‘nice to haves’?

- Creates more pleasant environment / neighbourhood. How? Who is this important to?
- Aesthetics. How? Who is this important to?
- Improves connectivity to public transport and accessibility?
- Helps to differentiate their offer. What scale of intervention / commitment does it take to provide that differentiation?
- Properties more marketable / saleable / lettable. In what way?
- Is it trendy / cool / fashionable to be seen as a 'cycle friendly development'?
- *(If compliance is identified as main reason in previous question.)* Taking compliance out of the equation, is there any other motivation / reason for providing good quality cycling infrastructure?
- *(For organisations that have NOT actively been involved in improving cycle infrastructure.)* Are there particular reasons why your organisation has not previously provided cycling infrastructure? *(Do not read out list below initially – use it to prompt if necessary and probe answers given.)*
  - Not sufficiently important to target market. How do they keep track of whether it is important or not? Are they aware of cycling infrastructure being more important to one market (demographic group) than others? Do they see this changing in the future? If so, over what timescale? What are the 'nice to haves'?
  - Aesthetics. Do they think that cycle infrastructure detracts from the look/feel of a development
  - What scale of intervention / commitment does it take to provide a market differentiation? Generally does this vary by for example– location, type of development (flats v houses), price of property, other?
  - Any competing demands e.g. space or cost?
- Can you think about an example of a development that your organisation has delivered/been involved with where good quality cycling infrastructure was delivered by your organisation or someone else, e.g. TfL, borough / you contributed to? Can we discuss...
  - The details of the development – name of development, number of units, where it is, is it complete, occupied etc.?
  - What kind of cycling infrastructure was provided? Did the type / quality / number of facilities provided go beyond the provision required for compliance?
  - Who wanted it – implicitly (e.g. target market) or explicitly (planning authority)?
  - Was anyone opposed to it? Who? Why?
  - *(If they were going beyond the provision required for compliance)* Why did your organisation go ahead with this type / quality / number? Why was it important in this location?
  - Who did you have to convince and was it hard to implement?
  - Who helped?
  - How was the development promoted / marketed? Was cycling provision on / off site a specific marketing attribute?

- What was the impact on sales / lettings? *(Prompt for any feedback received, evidence etc. Can they send us any further details, including photos, for a case study?)*
- Were there any drawbacks / disbenefits? How did you / your organisation manage this?
- What were the lessons learned - would they make provisions like that again / will you / your organisation do it as standard now? (Why / why not?)
- Can you think of an example where you / your organisation did not go any further than basic compliance to provide cycling facilities as part of a new development? Can we discuss...
  - The details of the development – name of development, number of units, where it is, is it complete, occupied etc.?
  - What kind of cycling infrastructure was provided?
  - Why did you / your organisation choose this level of provision – why was ‘beyond compliance’ not required / not appropriate?
  - What were the advantages to the organisation of not going ‘beyond compliance’? *(Prompt for any feedback received, evidence etc. Can they send us any further details, including photos, for a case study?)*
  - Were there any disadvantages to the organisation of not going ‘beyond compliance’?
- *(If not already covered in discussion before this point.)* What are the main benefits to your organisation of providing / contributing to good quality cycling infrastructure as part of a new development? *(Do not read out list below initially – use it to prompt if necessary and probe answers given. Make sure points in red are investigated.)*
  - Fit with sustainability agenda – who is this important to?
  - Aesthetics – in what way? Who is this important to?
  - Creates slower, quieter, more attractive neighbourhood – who is this important to?
  - Accessibility benefits – e.g. improves access to public transport / other areas / central London
  - **In your experience are people prepared to pay more to be near quality cycling infrastructure or not?. If yes, do you have any evidence of that? How could that be quantified?**
  - **Are you finding that there is more immediate interest from potential buyers / renters? If yes, do you have any evidence of that? How could that be measured?**
  - **Is the decision to buy / rent easier to make – do sales speed up? If yes, do you have any evidence of that? How could that be measured?**
- *(If not already covered in discussion before this point.)* Are there any disbenefits to providing good quality cycling infrastructure? *(Do not read out list below initially – use it to prompt if necessary and probe answers given. Make sure points in red are investigated.)*
  - Takes up space – what is impact? Can this be evidenced / quantified?

- Limits car parking provided – what is impact? Can this be evidenced / quantified?
- Aesthetic issues – untidy – what is impact? Can this be evidenced / quantified?
- **Costs more. If yes, do you have any evidence of that? How could that be quantified?**
- **It accelerates / causes gentrification. If yes, do you have any evidence of that? How could that be measured?**
- Local residents opposed – why? In what way? What is impact? Can this be evidenced / quantified?

## Residents / buyers – 10 mins

- What means of transport are most important to residents – car, tube, bus...? *(Encourage ranking if possible.)* Where does cycling fit in?
- Are there any groups of residents who value access to cycling facilities higher than others? Which groups?
- Are residents / buyers more inclined to look for property with cycling facilities (cycle parking, segregated links etc.) now than 2, 5, 10 years ago? *(Do not need to ask about each of those timescales in turn – please ask if level of interest and / or need has increased in recent years.)*
- Who wants what? What do they expect development to provide – cycle parking? Anything else?
- For cycle parking is there a difference if this is provided (a) within the unit (b) within the building (c) within the development (d) on street (secure racks) (e) on street (secure storage)
- Does it matter how far away your home is from a local cycle path or dedicated route? Does it matter how far away your home is from a Cycle Superhighway?
- Have you found whether or not a particular level of provision is a nice to have / deal breaker for some?
- Can you think of any examples where residents / buyers have been more or less interested in a property because of the provision (or lack of) good quality cycling facilities? *(Please probe for examples and relevant information that could be used for a case study.)*
- Are there any locations in London where cycle facilities more or less important?

## Recommendations – 5-10 mins

- What kinds of things would make providing good quality cycling infrastructure more attractive to you as an organisation? How could TfL help you to realise more of these benefits through any supporting tools or policies? How could they help to mitigate the impact of any disbenefits?  
*For example (only explore once respondent has been given opportunity to make their own recommendations)...*
  - *PTAL equivalent for cycling – to allow higher density developments in areas with poor access to public transport / low PTAL ratings.*

## Compliance / standards – 5-10 mins *[only if time]*

- What would be the impact of rising quality standards (higher standards required to achieve compliance) for cycling infrastructure?

- For your organisation
- For residents / buyers – who in particular?

## CONTROL INFORMATION

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