

ABOUT THE BCO

The BCO is the UK's leading forum for the discussion and debate of issues affecting the office sector. Established in 1990, its membership base comprises organisations involved in creating, acquiring or occupying office space, including architects, lawyers, surveyors, financial institutions and public agencies.

The BCO recognises that offices don't just house companies, they hold people and so what goes on inside them is paramount to workplace wellbeing.

ABOUT THE AUTHORS

Remit Consulting is an independent, European management consultancy specialising in real estate, providing in-depth knowledge since 2003. Across Europe, many of the largest property teams rely on its expertise and benchmarking in the real estate and finance markets to improve efficiency and profitability. It helps clients with innovation through business process, strategies, compliance, real-estate finance, system selection and implementation, delivering solutions that are practical, cost-effective and efficient.

It has offices in the UK, The Netherlands and Germany, its people come from across Europe, and between them speak English, Dutch, German, French and Italian. Its languages, skills and experience across borders mean it can get the best for its clients, wherever they are.

It undertakes sponsored and publicly available research with several organisations in addition to its own research initiatives to support its work in the industry.

Further information on the company, the team, and case studies of projects and clients it has worked with can be found on its website: https://www.remitconsulting.com/short-guide/

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EXECUTIVE SUMMARY

Current trends

Cycling is a success story in the UK. There is now a national Cycling and Walking Investment Strategy and many new buildings are advertised with cycling as a key feature/benefit ...

... however, infrastructure is starting to buckle as in many buildings there is insufficient capacity (particulary lockers and showers) ...

... and the UK has not been as successful in increasing cycling participation as it could be – 2.0% growth in the past decade versus 8% current target for the next 10 years

If key barriers are overcome (e.g. safety concerns) then 8% over the next 10 years is feasible

Then infrastructure will come under increasing pressure, leaving queues of smelly people outside every major office building across the UK (not a happy thought!)

Challenges

Design teams will have to confront the increasing ressure on space

Buildings will compete more on quality than quantity of provision; quality in the form of drying rooms, locker solutions and shower provision will have to match the quantity of cycle parking

While metrics are difficult to determine, 100:10:10⁺:1 is a good rule of thumb. For 100 employees, provide around 10 bike spaces, at least 10 lockers (remember runners!) and one shower

More post-occupancy evaluation needs to be undertaken to monitor utilisation and seasonal variations in demand

Embracing technology will be crucial in developing the cycling facilities of the future

So something must be done and someone must do it!

Opportunities

Developers/investors may be able to commercialise cycling facilities as the market matures Developing a sense of community around cycle users will add value to buildings and their customer base



INTRODUCTION

The benefits of encouraging commuters to get on their bikes have been understood for many years. Since the late 1990s, the UK Government has launched a variety of measures, including the Cycle to Work Scheme, to encourage a healthier lifestyle, reduce congestion and encourage a move away from fossil-fuel-driven vehicles towards more sustainable transportation. In addition, there have been many pro-cycling campaigns and research by various organisations. Only recently, a study by the University of Glasgow concluded that cycling to work can halve the incidence of cancer and heart disease in those who regularly use their bikes to commute.

In 2012, the British Council for Offices (BCO) commissioned a report to investigate the cycling habits of office users and to raise awareness of the benefits of cycling for both the owners and occupiers of office buildings. As cycling and cycling facilities have continued to evolve over the last 5 years, the BCO commissioned Remit Consulting LLP (Remit) to update this research.

While cycling, as a mode of commuting in the UK, continues to expand, its popularity varies greatly around the country. This inequality is reflected in the provision of cycling facilities, such as dedicated cycle routes and parking for bikes. While some cities have much improved provision, it does not compare with what is provided in other countries, such as Denmark and The Netherlands. What can we learn from these countries?

This report also explores the drivers of demand for cycling – central Government initiatives, city infrastructure investment, company initiatives and employee demand. To better understand employee demand, two surveys were

undertaken. The first was a large-scale independent YouGov survey, commissioned by the BCO (BCO YouGov survey) to comprehend the cycling patterns of the UK workers in general, to better understand the role of cycling as part of the daily commute and to examine what place office cycling facilities have in encouraging participation. The survey focused on people working in office buildings. In this report, 'an office' is defined as an office block or purpose-built office and does not include ancillary offices within another establishment, such as a hospital or school. Importantly, this survey was done to ensure that we incorporated an independent approach with no cycling bias.

The second survey was carried out by Remit (Remit survey) to understand the current state of office cycling facilities. This was a more tailored survey, targeting individuals who generally have a keen interest in cycling, are involved in the real-estate industry, or both. Data were collected from a total of 396 responses. Many of those questioned are involved in the design or management of office buildings, which adds increased insight in terms of what is currently provided in workplaces around the country.

More information about both surveys can be found in Appendix 2.

Existing research was sourced and is referenced throughout this report. In addition, following the surveys, interviews were carried out with representatives from various disciplines of the office and cycling industries to understand the current issues around cycling to work in more depth.

The report concludes by highlighting the issues that are relevant to members of the BCO. The office industry needs to adapt to, and try to anticipate, resultant requirements of the increasing use of cycling as a method of commuting and the implications this has on workplaces in terms of occupier demand, specification and value. •



THE GROWTH IN CYCLING: BACKGROUND

THE RISE OF CYCLING

The popularity of cycling in the UK has been growing since the early 1990s. However, we should remember that the current activity is only a quarter of the peak of the early 1950s, and some of our European neighbours are streets ahead of us. As shown below, the trend since 1949 is characterised by a severe decline through to the early 1970s. The 1970s and 1980s saw a mild recovery and only since 1993 have we seen a gradual return to the last peak of the early 1980s.

Use of bicycles in America and Britain fell off a cliff in the 1950s and 1960s thanks to the rapid rise in car ownership. Urban planners and politicians predicted that cycling would soon wither to nothing, and they did their level best to bring about this extinction by catering only for motorists. And then something strange happened - bicycling bounced back, first in America and then in Britain. Today's global bicycling boom – even the one in The Netherlands – has its roots in the early 1970s.

Carlton Reid, Bike Boom 2017

Growth period	Bicycles (%)	Cars and taxis (%)
1949-2016	-77	1905
1993-2016	39	20
2006–2016 (10 years)	23	2
2011–2016 (5 years)	12	5
2013–2016 (3 years)	10	5
2015–2016 (1 year)	6	2

Table 1 Cycle versus car/taxi miles travelled in Great Britain, 1993–2016 Source: Department for Transport National Road Traffic Survey, April 2017

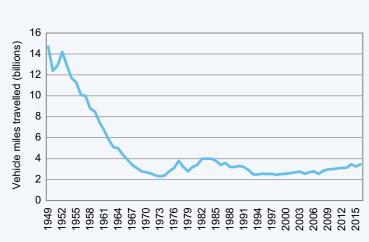


Figure 1
Cycle traffic in Great Britain, 1949–2014
Source: Department for Transport National Road Traffic Survey, April 2017



Bicycle traffic in Great Britain, 1993–2016
Source: Department for Transport National Road Traffic Survey, April 2017



Figure 3
Car and taxi traffic in Great Britain, 1993–2016
Source: Department for Transport National Road Traffic Survey, April 2017

According to a European Commission survey, only 4% of people in the UK cycle daily, compared with 43% in The Netherlands, 30% in Denmark and 28% in Finland. Thus the UK is starting from a low base. However, since 1993, UK cycle miles travelled has grown at a far greater rate than car/taxi miles travelled. The growth in cycling miles from 1993 to 2016 was, at 39%, nearly double that for car/taxi miles (20%).

The Department for Transport data reflects all cyclists across the UK. Our study aims to focus on cyclists who specifically impact property, and offices in particular.

In Cambridge, 29% of working residents cycle to work – more than anywhere else in the UK.

The latest Census shows that between 2001 and 2011 the average number of working residents who cycled to work in England and Wales increased by 90,000 to 741,000 (14% growth). However, these data hide significant regional variations. In London, the number of people cycling to work more than doubled, increasing from 77,000 (2001) to 155,000 (2011).

Aside from the obvious university—dominated cities of Cambridge and Oxford, London boroughs also have high rates of cycling activity as well as other major conurbations including York, Norwich, Portsmouth, Bristol, Exeter and Peterborough.

The BCO YouGov survey found that, unsurprisingly, the use of a car was the most popular method of commuting to work, with 58% of those surveyed getting behind the wheel to travel to work. Other common modes of transport were walking (25%), bus (14%) and overground (13%) and underground (9%) train. Cycling was the sixth most popular commuting method, used by 7% of respondents as their main mode of transport to work. On top of this, a further 4% said they use a bike for work purposes, although not as a main method of transport. This indicates that approximately 11% of the UK are 'cycling office workers'.

The figure of 11% equates reasonably with Sport England's Active Lives survey 2015–2016, which showed that 7% of those surveyed cycled to work. The slight increase probably reflects the points made by UK Cycling that office workers have a higher propensity to cycle than the broader definition of 'workers'.

Commuting by bike was found to be much more popular among men, with over double the number of men cycling to work compared with women.

The gender imbalance found in the BCO YouGov survey tallies with other research findings. The 2011 Census showed that twice as many men as women cycle as part of their commute to work in England and Wales. In Scotland, more than three times as many men (2.1%) use cycling as a mode of commuter transport to work, compared with women (0.6%).

	Local authority	% of adults cycling at least three times a week
1	Cambridge	39.0
2	Isles of Scilly*	19.0
3	Oxford	18.8
4	Wandsworth	15.0
5	Norwich	14.9
6	York	14.8
7	Cambridgeshire	13.5
8	Gosport	13.4
9	Hackney	12.3
10	Islington	11.5
11	South Cambridgeshire	11.4
12	Portsmouth	10.9
13	Richmond upon Thames	9.9
14	City of London*	9.4
15	Bristol, City of	9.2
16	Exeter	9.0
17	Oxfordshire	8.9
18	Newark and Sherwood	8.9
19	Peterborough	8.6
20	Woking	8.5
	Average for England	4.4

^{*}Sample sizes for these authorities are very small, and caution is needed in interpreting these results.

Table 2 Cycle activity in England, 2014–2015: top 20 local authorities Source: Cycling UK, www.cyclinguk.org.uk, 2015

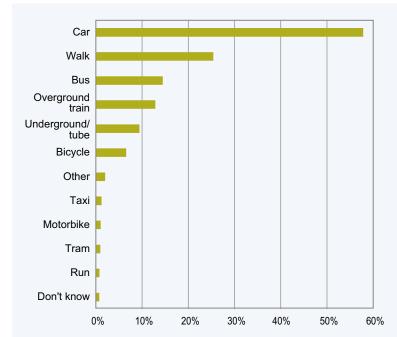


Figure 4
Primary mode of travel to work
Source: BCO YouGov survey

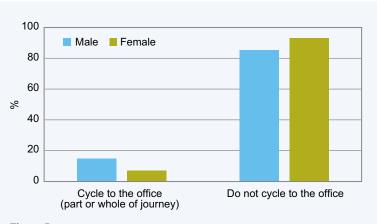


Figure 5
Gender differences in commuter cycling in the UK
Source: BCO YouGov survey, 2017

Transport for London (TfL) stated in a 2014 report that '20% of men report being "regular" cyclists compared with 8% of women'.

Similarly, benchmarking data from the USA show that just 29% of all commuters who cycle to work are women within the biggest cities, averaging 19% lower than the overall women commuter population (47%).

In the last few years, there has been more focus on increasing women cycling numbers including women—specific bikes and cycle attire. TfL found that 79% of women in London have access to a bike compared to 91% of men.

In terms of age, there was little discernible difference between the age groups in the BCO YouGov survey, apart from a tailing off in the 55+ group. Also from the survey, there was found to be some regional variation in terms of the popularity of cycling. Commuting by bike was found to be more prevalent in the South West, London and the South East, and considerably less popular in Scotland and the West Midlands.

LONDON

According to TfL's latest travel report, cycling as a (modal) share of all London transport activity stood at 1% in 2000. This had doubled to 2% by 2015, which equated to 670,000 cycle journey stages on an average day (a 133% increase in cycle journey stages since 2000 – a stage being a part of a trip made on a specific mode of transport); TfL's aspiration is for the modal share to be 6% by 2041. Given the continual increasing population, this is a more than threefold increase in volume in total commuter cyclists and could equate to around 2.5 million cycle journey stages per day by 2041. Furthermore, a daily average of 485,159 km was cycled within the congestion charging zone in the period 2015–2016, 4% up on the 2014–2015 period.

Since the beginning of the Santander Cycle Hire scheme (previously Barclays) in 2010, there have been several developments, including an expansion of the number of locations where bicycles are available, an increase in dedicated cycling routes, widening membership and a change of sponsor. July 2016 saw the highest number of cycle hires since the scheme began.

London's key interventions have been new west-east and north-south superhighways and the gifting by the three

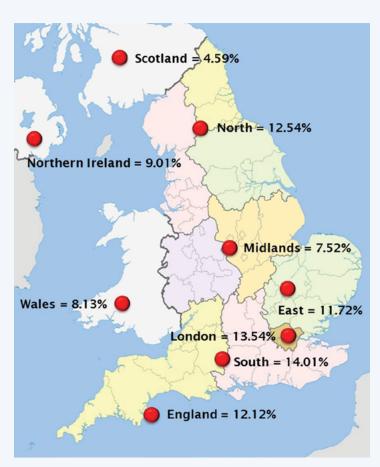


Figure 6
Location differences in commuter cycling in the UK
Source: BCO YouGov survey, 2017



Figure 7
Trend in monthly Santander Cycle Hire
Source: TfL Surface Transport Report 9, Outcomes, Insight and Analysis

boroughs (Kingston, Enfield and Waltham Forest) of £30 million each for cycling infrastructure, nicknamed the 'mini-Hollands'. In addition, TfL, alongside many inner London boroughs, has raised the bar in terms of cycle parking demands within new office buildings (see Deloitte Crane Survey 2016 on p. 21).

Quorum Business Park, Newcastle



Building/address: Quorum Business Park, Benton Lane, Newcastle

Owner/occupier:

- · Owned by Quorum Business Park.
- Occupiers include Tesco Bank, Balfour Beatty, British Engines, Convergys, Insurethebox, Greggs, Home Group and Engie.

Number of people on site:

- Buildings total over 1,000,000 ft².
- 6000 people are employed by the various business on site.

Number of bike spaces, showers and lockers provided:

- 688 cycle parking spaces across the site, equating to 1 rack per 8 member of staff.
- 105 showers, 500+ lockers and a numerous drying rooms.

Growth in % of cycle commuters:

- Typically around 150 (spring/autumn) to 200 (summer) people cycle in on a daily basis.
- 2.7–3.6% of people cycle to work on any given day.
- Annual travel surveys show that 10% of people working on the park cycle to work at least 1 day per week.

	Staff cycle parking	Visitor racks	Total spaces
Q1	_	_	-
Q2	Covered toast racks	-	30
Q3	Covered shelters	2	34
Q4	Covered racks	-	10
Q5 and Q6	24 uncovered racks	85 (915)	51 (549)
20 cycle bins	-	44	5.1
Q8	Covered racks	-	40
Q9	PIN access shelter	2	44
Q10	Covered shelters	2	124
Q11	Covered shelters	2	94
Q12	Covered shelters	2	104
Q13	Covered shelters	2	64
Q14	Covered shelters	2	54
Q15	Covered shelters	2	34
Q16	Uncovered racks	-	12
Total			688
Q14 Q15 Q16	Covered shelters Covered shelters	2	54 34 12

Facilities provided:

- Range of parking includes toast racks, covered shelters, covered racks, cycle bins and a PIN-access shelter.
- Commuter centre and monthly cycle hub.
- Bike week breakfast.
- 10 free-to-use pool bikes, including a folding bike.
- Free-to-use bike maintenance station installed in May 2017.
- · Roadshows and travel information.

Issues dealt with: Cycle storage is not currently fully utilised so the management promotes cycling as a sustainable form of transport. For example, cycling is being suggested to employees as an alternative form of transport during the local roadworks and works to the Metro system during summer 2017.

Cycle parking varies across the park but each building has access to some sort of cycle parking. Active travel is promoted, and park and ride is also encouraged.

THE REST OF THE UK

In 2015, Sustrans collaborated with seven UK cycling cities to report on progress towards making cycling an attractive and everyday means of travel. Known as the Bike Life reports, this was the biggest survey conducted into attitudes to cycling in the UK. The cities were Belfast, Birmingham, Bristol, Cardiff, Edinburgh, Greater Manchester and Newcastle. Unfortunately, London was not included in this cohort, so no direct comparison is possible.

The data not only show changes over time but also the cities' future aspirations for cycling growth and commuter cycling in particular. Sustrans will update this research in late 2017.

While not all the Bike Life report data relate to commuter cycling, a number of the cities have data on journey to work trends.

	% of total transport journeys			
	2010–2011 2015 2020 ta			
Journeys to work	4.8	7.3	15.0	
All trips	2.0	3.5	10.0	

Table 4

Proportion of cycling as part of total journey, Edinburgh

Source: Bike Life reports

In the 2015 report, Edinburgh was below the national average in terms of commuter journeys but did rank above the Scotland average in the BCO YouGov survey. However, the city's 2020 target seeks to double the modal share and this will have a significant impact on workplaces. If we take Manchester's

City	Commuting trips (% of all cycle trips)	Increase in cycle trips, 2013–2014 (%)	Future aspiration	
Belfast	40.1	n/a	Transform (Northern Ireland) into a 'cycling society' where 40% of all journeys under a mile would be cycled by 2040 $$	
Birmingham	33.1	n/a	5% of all trips in the city to be made by bike by 2023	
Bristol	47.1	n/a	To see the number of Bristol bike users double again over the next 10 years	
Cardiff	46.0	28	Local Development Plan target for at least 50% of journeys to be made by sustainable modes of transport by 2026	
Edinburgh	47.3	11	15% of journeys to work by Edinburgh residents to be made by bike by 2020	
Greater Manchester	36.3	n/a	10% of all journeys will be by bike by 2025	
Newcastle	35.2	12	To achieve a 12% cycle modal share for trips under 5 miles by 2020	

Table 3

UK cycling cities commuting and future aspirations

Source: Bike Life reports

aspiration for 10% of all journeys to be made by bike by 2025, and assume the same ratio as for Edinburgh for commuter cycling, this would see work journeys double, although by a later target year (2025). Nottingham's ambition also backs up this approach to doubling cycling activity, seeking a commuter cycling modal share of 15% (by 2030).

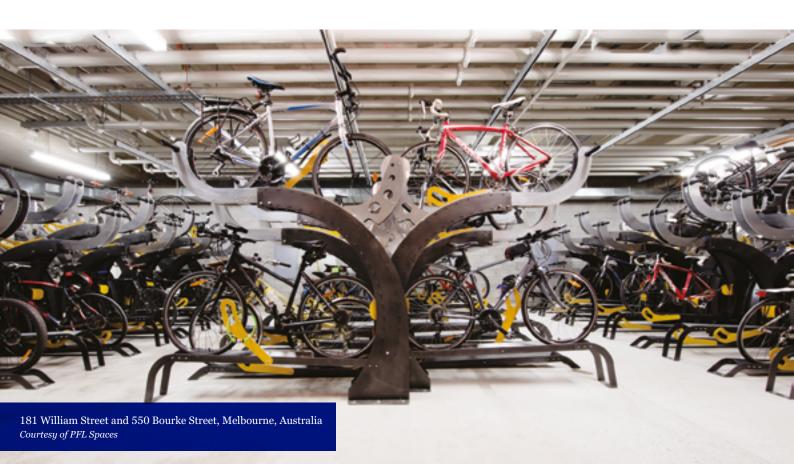
As to future growth, we can take a steer from the Government and the above-mentioned aspirations of major UK cities. 'Doubling' cycling activity seems to be a popular target, albeit over different time frames and against slightly different measures. The Government is looking to double cycle journey stage trips between 2013 and 2025. London is seeking a 6% modal share by 2041, which, on linear growth, would see a doubling by 2028. Edinburgh is looking to double cycling to work by 2020 and Bristol the same but by 2025. As the average timeframe being used is 10 years, this would approximate to

8% compound growth per annum; this is significantly more than the 2% per annum growth witnessed over the last 10 years in the UK.

Nottingham's ambition

"We stated in our 2015 Cycle City Vision that we want 10% of journeys to work be made by bike by 2025. This was also the outcome we stated in our successful bid to fund our first cycle ambition programme. Achieving this by 2025 would mean that we will have more than doubled the number of journeys to work by bike recorded by the 2011 Census. Beyond 2025 we want to continue to see these levels rise to 12% of journeys to work by 2027 and 15% of journeys to work by 2030."

Nottingham Cycle City Strategy & Action Plan 2016/17–2020/21



OVERSEAS

While this study has been focused on the UK, we have also looked at a selection of global cities.

The Copenhagenize Index provides a simple overview of the cycle-friendly nature of major global cities. It ranks cities with regional populations of over 600,000 using the following criteria: advocacy, bicycle culture, bicycle facilities, bicycle infrastructure, bike share programme, gender split, modal share for bicycles, modal share increase since 2006, perception of safety, politics, social acceptance, urban planning and traffic calming, and cargo bikes/logistics (added to 2017 Index).

It is by no means a perfect objective approach, but it does give a flavour of which cities actively encourage cycling. Interestingly, no UK cities appear in the list.

We also found data for cities in the USA and Australia to use as a cross-reference. In 2015, Portland (Oregon) found that 7% of its commuters chose to cycle to work; this is the highest of any large US city, and almost 10 times the national average. If Portland was a UK city it would rank 12th just behind Bristol and above Richmond on Thames. Australia's total 2011 modal share for commuting by bike was just over 1%. So while the UK is behind key European cities, it is at least ahead of most US and Australian counterparts, for now.

Country	City	Commuter cycling travel share (%)	Notes
USA	Portland, Oregon	7.0	Bike commuters increased by 27% in the period 2013–2014, while car commuting fell
USA	San Francisco, California	4.3	A 16% increase in the period 2012–2014, 800 public bike racks installed in 2015
Australia	Darwin	3.1	Highest modal share of Australia's main cities
USA	Chicago, Illinois	1.8	12,000 public bike racks in total
Australia	Melbourne	1.7	Over half of all bicycle trips were made into the city of Melbourne in 2011
Australia	Sydney	0.9	Female riders increased by over 60% in the period 2006–2011

Table 5
Overseas commuter cycling

Sources: 2016 Benchmarking Report, Alliance for Biking; Best Bike City ranking in 2016, Bicycling magazine; US Census Bureau, American Community Survey, 2015; Australian National Statistics, Census 2011.

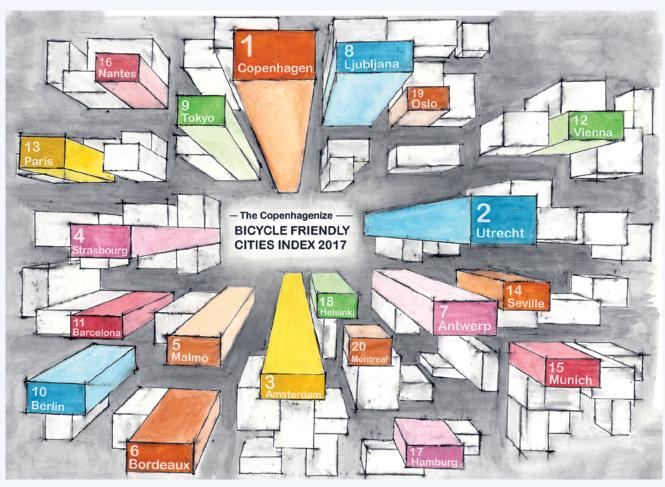


Figure 8
The Copenhagenize Index of Bicycle-Friendly Cities, 2017
Source: The 2017 Copenhagenize Index of Bicycle-Friendly Cities

According to the Alliance Benchmarking Report (2016), commuting by bike has shown stable growth in almost all of the biggest US cities in the period 2007–2013, and it is fast becoming a bigger focus for the US Government, partly due to the rise in awareness of public health issues, such as obesity.

Similarly, Australia has seen gradual increases in cycling despite being far behind other transport modes; all but one of the mainland capitals saw growth of some kind at the 2011 census; the average number grew by 36% (average of 7% per annum). The Australian Government and local councils are all aiming to encourage more individuals to choose to cycle to work through infrastructure investment, such as bicycle lanes and higher quality facilities, but also social initiatives focusing on behavioural changes. \blacksquare

Summary

- > Cycling traffic is growing at a significantly faster rate than car traffic in the UK.
- > Cambridge has the highest proportion of commuter cyclists (29%) in the UK.
- > Men are still more likely to cycle to work, but the gender gap is narrowing.
- > Those in the South of England cycle to work more than those in the North.
- > UK cyclists are behind key European cities, but ahead of US and Australian counterparts, for now.

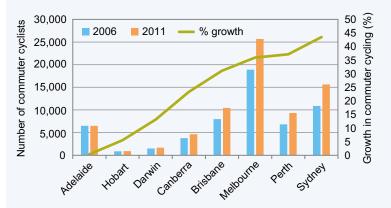
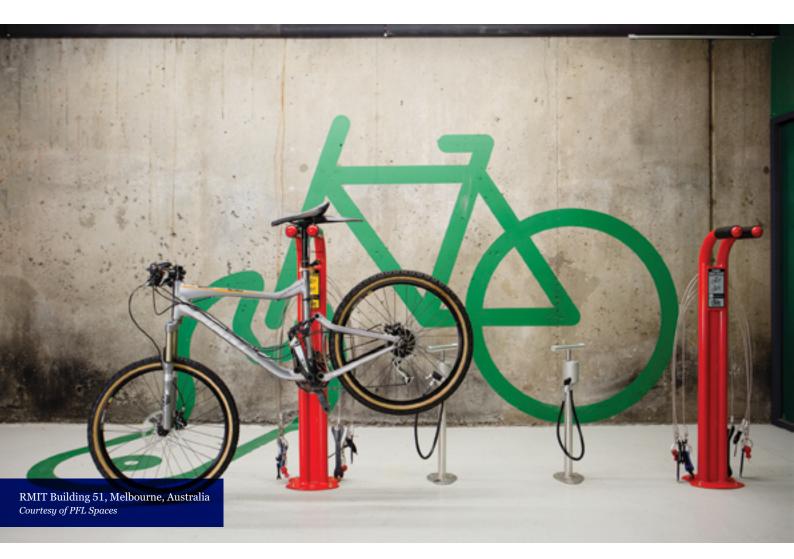


Figure 9 Growth in cycling to work, Australia, 2006–2011 Source: Australian National Statistics, Census 2011



THE GROWTH IN CYCLING: DRIVERS OF DEMAND

Demand is being driven by four main sources:

- · central and local government
- · city infrastructure investment
- employer initiatives
- · individuals' decisions.

CENTRAL AND LOCAL GOVERNMENT

The UK Government's Cycle to Work programme has been running since 2007. This is a tax-based incentive for employees to purchase bikes and associated equipment in order to stimulate an increase in commuter cycling. Employees can save up to 40% of the cost of a new bicycle. Employers also save on Class 1 National Insurance contributions (usually around 13.8%) as the amount they are paying in wages is also lower. According to the Cycle to Work Alliance, over 1.1 million successful applications have been made to the scheme since its inception.

A recent assessment of the programme concluded that:

- There is evidence from a survey of 13,000 scheme users that participating in the scheme is associated with increased cycling to work.
- Many previous non-cyclists took up cycling and others cycled more as a result of their involvement.
- The social benefit from reduced absence and increased physical fitness is estimated to be £72 million a year – that

- is more than twice the estimated cost to the Treasury in lost tax and National Insurance.
- On this basis, the scheme has been economically and socially beneficial and, if combined with infrastructure improvements, will continue to play a positive role in a comprehensive and cost-effective strategy to increase the number of cyclists and the volume of cycling in the UK.

The Bike Life report, mentioned in the preceding section, shows that the seven cities are striving for more sustainable transport solutions in urban areas, and are therefore trying to stimulate a modal shift towards walking and cycling.

For example, Cardiff aspires to achieve its target of 'at least 50% of journeys to be made by sustainable modes of transport by 2026'.

Planning guidelines are also being adjusted by local authorities to encourage developers to provide more cycle parking within new office buildings. The levels being set by authorities vary across the country, and to include them all in this report would immediately date the findings. However, at the time of publication, standards ranged from 1 cycle space per $30\ m^2\ (1:30\ m^2)$ in Cambridge to $1:400\ m^2$ in Manchester and Birmingham. Out of those who provide metric guidance, $1:400\ m^2$ was the lowest; however there may also be others with lower guidance that have not disclosed these figures.



CITY INFRASTRUCTURE INVESTMENT

The package of investment in cycling across the country comes from various funding sources. The Government's Cycling and Walking Investment Strategy, published in April 2017, sets out a package of investment totalling just under £1.2 billion over the period 2016/17-2020/21. Newcastle's Cycle Ambition Cities bid is an example of this. A £10.6 million grant was secured for the period 2015/16-2017/18. The Cycle Ambition fund, totalling £191 million over 5 years, included investment in Birmingham, Bristol, Cambridge, Leeds, Manchester, Norwich and Oxford.

An example of the investment being made by Manchester is the introduction of cycle hubs around the city. The hubs provide secure and sheltered bicycle parking, protected by CCTV and swipe-card entry. This member-based platform allows cyclists to park their bikes at any of the secure cycle hubs around the city, currently from as little as £10 per annum. There are additional facilities at some sites, including shower facilities and lockers. Across the 21 hubs in Manchester there are currently around 1,200 cycle parking spaces.

EMPLOYER INITIATIVES

Employer and landlord incentives have also played their part in encouraging cycling to the office. Both the BCO YouGov and Remit surveys showed that approximately 9% of employees are encouraged to cycle to work due to employer initiatives. In our research, we discovered the following initiatives:

- · free cycle maintenance
- · discounts on bikes and cycle parts
- · advice on travel routes and guides
- · bicycle user groups
- · free towel provision at shower facilities.

Examples of some of the above can be found at GSK at Brentford, Sky at Osterley, RBS at their Headquarters at Gogarburn, Edinburgh and Quorum Business Park in Newcastle.

INDIVIDUALS' DECISIONS

Individual employees have taken it upon themselves to migrate towards cycling as a means of getting to the office. The BCO YouGov and Remit surveys showed that the most popular reasons cited were health and fitness, enjoyment and cost saving. Getting fresh air and being a more convenient transport option were also popular answers. Cycling initiatives run by companies and having access to a bike pool only inspired a small percentage of commuters to get on their bikes. These results also reflect the outcome of the Remit survey, as shown in Figure 10.

Health was often cited as a reason for cycling rather than driving. However, we found that this was more of an individual choice rather than being influenced by a company's policy per se.

An extensive study carried by the University of Glasgow in 2017 supports the health benefits of commuting by bike. The Glasgow study concluded that cycling to work can almost halve the incidence of cancer and heart disease.

The 5-year study of 250,000 commuters compared the health of commuters who were 'active' during their commute to work with those who were predominantly stationary. It was found that regular cycling reduces the risk of death from any cause by 41%, from cancer by 45% and from heart disease by 46%. Cyclists, in the survey, averaged 30 miles a week, and it was established that the further they cycled the greater the health benefits.

Until the publication of this survey, the oft quoted evidence for cycling and wellbeing was the analysis done by Hendriksen *et al.* (2010) analysis. They discovered that regular Dutch cyclists had 1.3 fewer sick days per annum than non-cyclists.

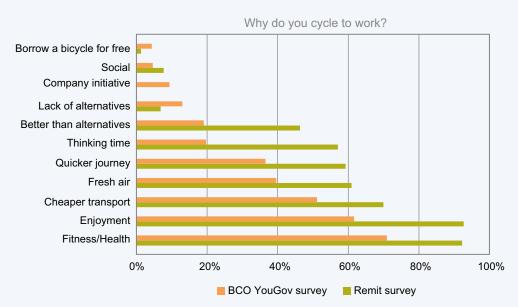


Figure 10 Drivers for cycling

Source: BCO YouGov and Remit surveys, 2017

Compared with people who cycle a short distance three times a week, people who cycle more often and longer distances are absent on fewer days.

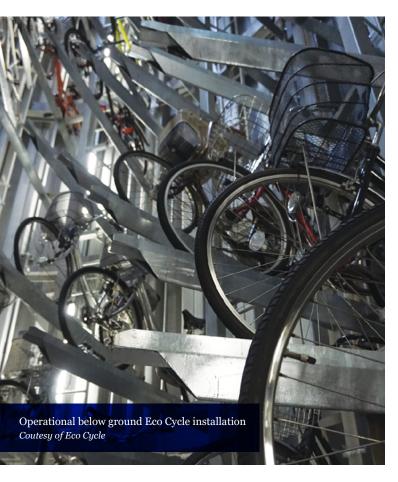
Hendriksen et al. (2010)

The London School of Economics used this data to conclude that the UK's frequent cyclists would be saving the economy £193 million in absentee costs in 2011, rising to £215 million in 2017.

As organisations potentially embrace the wellbeing agenda more fully, cycling to work may become more of an organisational policy rather than just an individual's choice.

Summary

- > Reduced absence and improved physical fitness due to the Government's Cycle to Work scheme has saved the UK approximately £72 million a year in social benefits.
- > The UK Government has committed £1.2 billion for investment in cycling and walking until 2021.
- > Research has shown that cycling to work can almost halve the likelihood of cancer and heart disease.



CASE STUDY

Sky HQ, Osterley



Building/address: Sky HQ, Osterley

Owner/occupier: Sky

Number of people on site: Daily population averages 6,500 but the campus has the capacity to cater for 7,500.

Number of bike spaces, showers and lockers provided:

- 700 racks, which equates to 1 rack per 9.3 campus staff
- 90 showers, 800 lockers
- 100 employees = 10.77 racks = 12.3 lockers = 1.38 showers.

Growth in % of cycle commuters:

- 2006 2.5% of workforce
- 2014 7%
- 2017 (summer) 8%
- At Sky Leeds office 7% cycle.

Facilities provided:

- Facilities are distributed across the site and range from secure internal parking to secure external racks.
- Showers and lockers are also distributed across the site.

Issues dealt with: Higher quality showers and drying rooms are now provided.

Sky has a distributed approach across its various buildings on site rather than a single cycle parking location. Employees have a choice of places to park, shower and change. Support for cycling includes an on-site cycle shop, free cycle maintenance and discounts on bikes and parts.

THE GROWTH IN CYCLING: BARRIERS TO CYCLING

There has evidently been an increase in the popularity of cycling as a commuting method, but how long have people been commuting by bicycle and how frequently? The BCO YouGov survey found that over a third (35%) of cycling office workers had taken up cycling in the past 2 years. Another 31% of cycling office workers took up cycling to the office 2–5 years ago, with 30% cycling to work at the date of the last survey 5 years ago or longer.

However, despite half of the cycling office workers using their main office location 5 days a week, only 31% cycle to work every day, according to the BCO YouGov survey. Cycling to work once a week (23%) was found to be the most popular option, ahead of 3 days a week (18%) of all Brits who cycle in their commute.

This therefore places a pressure on both cycle spaces and lockers because if these are allocated to individuals they are not being utilised 100%. We are aware of one employer who has a 'three strikes and out' policy if lockers are not being used frequently.

Cycling has clear benefits to both employer and employee, but if only 11% of office workers travel by bike in the UK (BCO YouGov survey) what is preventing the other 89% from cycling as part of their daily commute?

When the office workers who chose not to cycle to work were asked what prevented them from getting on their bikes, the most popular reasons were that the journey to work was 'too far to cycle' (40%) or 'too dangerous for cyclists' (35%). A 'lack of bike' was cited by almost a third of respondents (31%).





Figure 11 Uptake of cycling to work

 $Source: BCO\ YouGov\ survey\ of\ 211\ respondents\ who\ cycle\ in\ their\ commute,\ 2017$

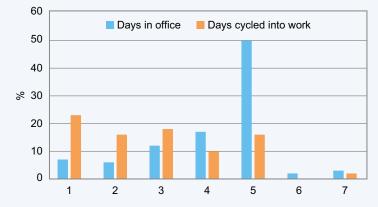


Figure 12
Days worked in the office versus days cycled to the office
Source: BCO YouGov survey, 2017

Why do you NOT cycle as part of your commute to or from work?

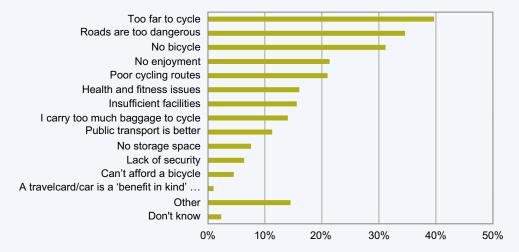


Figure 13
Barriers to cycling to work

Source: BCO YouGov survey of 1,655 GB office workers who do not cycle in their commute, 2017



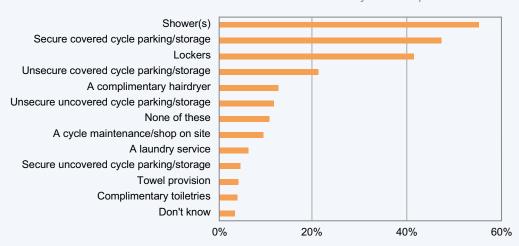


Figure 14
Office facilities provided
Source: BCO YouGov survey, 2017

SAFETY

Cycling commentators often quote safety as the key barrier to a greater uptake of commuter cycling. It is also one of the reasons why city cycling is less appealing to females compared to males and to 18–24 year olds (34%) and 55+ year olds (34%). It was, therefore, not a surprise to us that providing safer cycling routes would encourage nearly a third (29%) of non-cycling British office workers to consider cycling as a commuting option in the future (BCO YouGov survey).

OFFICE FACILITIES

The BCO YouGov survey respondents were asked about the facilities provided at their main office to accommodate cycling



to work. Most British office workers who cycle said their workplaces offered facilities for cycling to work (87%), although only 47% offered facilities that were both covered and secure. Just over half (55%) of the respondents said their workplaces had showers and under half (41%) had storage for personal possessions such as bags and clothes. Other facilities offered were, for example, such as 'complimentary hairdryer' (12%), 'complimentary toiletries' (4%), 'cycle maintenance shop' (9%) and 'free towel provision' (4%). One in ten workplaces offered none of the facilities listed (see Figure 14). This shows that, while bike parking (quantity) seems to be reasonable, the complimentary facilities (quality) are lagging behind and are becoming a marketing differentiator.

Insufficient facilities at work were cited by 16% of respondents as preventing them from considering commuting by bike, the same percentage who felt they were 'not fit enough'. A 'lack of storage' was mentioned by 8% of respondents and 6% complained about a 'lack of security'. Several of the responses could be related. For example, 'carrying too much baggage' could equate with 'no storage space'. Similarly, 'no bicycle' could relate to 'can't afford a bicycle'.

Just under a quarter of the BCO YouGov survey respondents said they would consider cycling if there were showers at work. Storage for personal possessions (16%) and better cycle parking/storage (16%) were among the most popular improvement requests.

Summary

- > Pressure on cycle spaces and lockers is increasing due to underutilisation by those with allocated storage.
- > Under half (47%) of those who cycle said their office had cycling facilities that are both covered and secure.
- > One in ten respondents said their workplace offered none of the cycling facilities listed.
- > Increased provision and better quality facilities at the office would encourage 38% to cycle to work.
- Safer and more segregated cycling lanes could improve cycling safety.

CYCLING FACILITIES: CURRENT STATE

OFFICE PROVISION AND FACILITIES

Results from the Remit survey indicate that office cycling provision, both in terms of quantity and quality, has improved over the 5 years since the last report. One-fifth of respondents to the current survey thought the facilities provided by their office were excellent, while a further 29% felt the facilities were good. Only 14% said the facilities offered were poor and 9% complained that they had no facilities at all.

There was a small variation between multi-let and single-occupancy buildings. Single-occupancy buildings tended to have better facilities and multi-let buildings were more likely not to have any cycling provision. This is not surprising, as it is easier to implement successful cycling facilities when only one company is involved in the decision-making process.

Does the number of occupants in the building determine the quality of cycling provision? There was a very clear trend showing that buildings with a larger number of occupants offered better facilities. Two-thirds of workplaces with over 1,000 occupants had excellent or good cycling provision, compared to just over a quarter of workplaces with 50 or less occupants. At the other end of the spectrum, only 7% of buildings with over 1,000 occupants had poor or non-existent facilities, compared with 47% of buildings with 50 or less occupants. Clearly, more needs to be done to encourage the owners of smaller properties to upgrade their cycling provision.

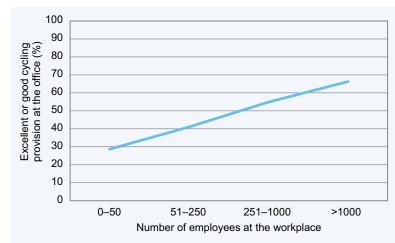
The research team also had access to recent reports on the London market produced by Evans Randall and Cycling Score. While the team did not have sight of their detailed data sets, the findings of the study reported here broadly concur with their conclusions.

Of those surveyed by Remit, 52% had retrofitted facilities in their office and 25% were part of the original development. Whether a building was multi-let or single occupancy made no difference in terms of having cycling facilities as part of the original development. Having retrofitted facilities was marginally more common among single-occupancy buildings than multi-let properties.

In terms of the type of facilities provided, 80% of workplaces covered in the Remit survey offered showers, while 57% had storage/lockers for personal possessions. Secure cycle parking was provided in 68% of workplaces, the majority being covered facilities. Unsecure parking was provided by 31% of workplaces. The provision of personal grooming equipment (hairdryers, complimentary towels) appeared to be more common than 5 years ago.

The requirement for more parking spaces was a common complaint but providing the appropriate number of bike stands is not sufficient. Users from the BCO YouGov survey want Sheffield stands, which are secure and covered. In addition, more thought needs to be given to providing easy access to the parking spaces.

Other popular appeals were for better drying and changing facilities. There were individual requests for complemintary towels, hairdryers, laundry facilities, a water machine and arranged cycling social events. However, an easy win is offering access to a bike pump!



 $\label{eq:Figure 15} \emph{Good cycling quality versus number of employees}$

Source: Remit survey, 2017

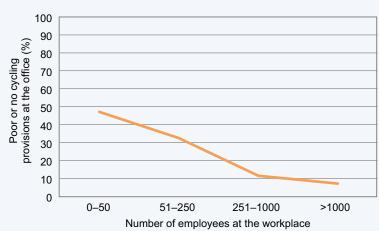


Figure 16
Poor cycling quality versus number of employees
Source: Remit survey, 2017

Don't know, 4% Laundry service, Other, 1% Showers. Cycle maintenance 23% on site, 6% Free hairdryer, Lockers. Free toiletries. 16% 10% Free towels, 11% Better cycle parking, 16%

Figure 17
Facilities that would encourage cycling in workers' commutes
Source: BCO YouGov survey, 2017

The BCO YouGov survey participants were also asked what improvements could be made to their office in terms of cycling provision. Despite the advances in cycling facilities, it is obvious from the responses that there is still plenty to be done. Enhancement in the quantity and/or quality of showers was the top recommendation (23%) amongst workers who do not currently cycle in their commute, followed by better storage for personal possessions (16%) and better cycle parking/storage at their office (16%).

INFRASTRUCTURE AND PLANNING

Cycle parking guidelines were not generally thought to be too onerous for provision. Only 9% of the survey respondents thought guidelines were too onerous, whereas 34% felt they were not. The rest of the survey respondents did not know.

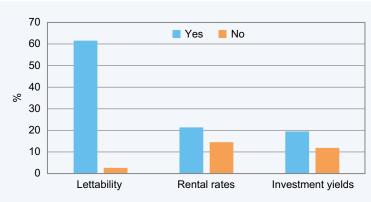
What can authorities do to improve cycling safety? The overwhelming answer from the Remit survey was more safe, segregated cycling lanes. These lanes need to be properly cleaned and maintained. They need to be fully integrated into the urban landscape to provide useful routes to work, for shopping and other leisure activities.

Other suggested improvements include the provision of safer junctions for cyclists to reduce the likelihood of left-turning accidents, the introduction of more 20 mph zones and the restriction of heavy goods vehicles in city centres during rush hour.

A final popular proposal to improve cycling safety was increased education, not just the education of car users but also of pedestrians and cyclists themselves to improve cycling behaviour.

CYCLING MAY BE GOOD FOR YOUR BUILDING TOO!

The benefit to employees of good cycling facilities in the office is obvious. However, does this have a direct benefit for the owners of these buildings? Evidence from the survey suggests that it does. The Remit survey participants were asked if the provision of good cycling would improve the lettability of a building.



 $\label{eq:Figure 18} Figure~18 \\ \mbox{What does good cycling provision influence?}$

 $Source: Remit \, survey, 2017$

Almost two-thirds of respondents felt that lettability would be enhanced by the provision of good cycling facilities, against only 3% who felt it would have no impact.

There is universal agreement that good-quality cycling provision significantly assists in the letting of modern office buildings. Remit survey respondents referenced reduced letting and rent-free periods as evidence. Other examples were cited of buildings being chosen because of their superior cycling amenities. This ties in with the other observation from this study that marketing materials are increasingly highlighting a building's cycling credentials as a unique selling point.

The survey responses indicated that there is a perception that good cycling provision improves rental rates and yields. Just over



a fifth of the survey respondents felt that good cycling facilities would increase rental levels and 18% felt it would improve investment yields, against an answer of 'no impact' of 15% and 12% of the survey, respectively. The remaining respondents were unsure of the influence. However, during the face-to-face interviews it was apparent that while some people agreed with this they were hard pressed to provide hard financial evidence.

The most tangible evidence of a positive financial impact has been found in circumstances where a tenant has paid for additional cycle spaces to be provided. This might be in the form of renting car spaces where the tenant then installs bike racks, or by way of a capital payment. In most cases, the figures reflect comparable values associated either with car parking or storage so it cannot be shown that there is any rental uplift. So rentalising (additional) bike spaces beyond a set threshold seems possible. Where a landlord provided the cycle parking as a service rather than allocating spaces, this has been re-charged through the service charge. Again, this does not demonstrate any significant rental uplift.

Anecdotally, there was some evidence that the London cycling superhighways have had an impact on provision. We found three examples of buildings on the north—south superhighway, where cycle parking take-up had exceeded expectations.

APPRAISALS

As part of the research study, we considered developing an indicative appraisal for development. However, there are so many permutations that it would not provide much assistance or value. Instead, we comment below on the variables in a development appraisal that are impacted, which include:

- cost the additional cost of providing the cycling facilities
- capital contribution a capital sum that may be paid by a tenant who wishes to have cycling provision at a higher level than the norm
- tenant incentives a potential reduction in incentives (e.g. a rent-free period provided to a tenant to encourage a letting)
- letting period a potential reduction in the period of time assumed for the letting
- lettable area the cycling facilities and their access may take up lettable areas, which will need to be accounted for.

A KEY COMPONENT TO GRADE A OFFICES

One of the key findings, compared to the 2012 study is that cycling provision is becoming a universally accepted, integral component of a Grade A office specification. In 2012, it was more of an afterthought or a 'bolt-on', but cycling provision is now as important as superstructure, lifts, flooring and mechanical and electrical services. Not one of the interviewees dissented on this issue. This is also reflected in marketing materials used by developers and investors.

Many brochures now feature a picture of bicycles, and we have seen online materials using the terms 'cycle friendly' and 'love cycling'. We are also aware of one developer in London that has used the BCO's previous report in its marketing materials.

In what has been a relatively short space of time, the quantity and quality of cycling facilities provided in the workplace has vastly improved and they are now an important part of the standard office specification.

Neil Pennell, Head of Engineering and Design at Land Securities and Chair of the BCO Technical Affairs Committee

MARKET SEGMENTS

As a reflection of the multi-tenanted and small and mediumsized enterprises market, The Office Group was kind enough to share data on its portfolio of shared workplace buildings. While we are unable to publish the data in full, it shows that there is a general increase in the cycle space ratio from 3 per 100 desks (1:33) in January 2006 to over 10 per 100 desks (1:10) now. More recently, the shower and locker provision has increased, and this has been helped by the addition of gyms on site since September 2015. The CEO of The Office Group said that the choice of its latest acquisition, Tintagel House, was heavily influenced by the quantity and quality of cycling facilities.

Summary

- > Buildings with more occupants offer better facilities.
- > Lettability of buildings is believed to be enhanced by good cycling facilities.
- > Good cycling provision is thought to improve rental rates and yields, but there is a lack of financial evidence.
- > Cycling provision is now as important as superstructure, lifts, flooring and mechanical and electrical services.

CYCLING FACILITIES: KEY ISSUES

PRESSURE ON SPACE

Probably the overriding issue, which is no surprise, is the simple pressure on space. This factor, particularly relevant in London, was raised time after time. Just finding the room for bikes, lockers and storage is tricky, particularly in high-value locations, and the issue is as applicable to new build as for refurbishments.

While the UK average may be one cyclist in every nine office workers, there are significant regional and occupier type variations. The amount of provision has increased over the last 5 years and this is probably best illustrated by the data from more detailed information behind Deloitte Real Estate's London Office Crane Survey. This survey looks at the development activity in London by submarket. In the winter 2016 publication, Deloitte reported that 11,415 cycle spaces were being delivered in 71 schemes under construction in central London.

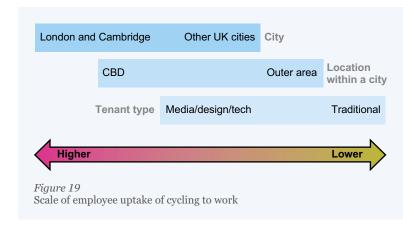
In addition to those under construction, 20 schemes were completed in the 6 months to the end of Q3 2016, which contributed a further 2,053 cycle spaces. In total, the 91 buildings provided cycling facilities totalling nearly 13,500 spaces. The volume of these buildings comprised 13,762,589 ft² (1,278,586 m²). The ratio of office area per cycle space was 1,022 ft² (95 m²) per space. By comparison, in winter 2014 only 57 buildings were delivering comparable cycling infrastructure. These totalled 8,983,000 ft² (834,548 m²) and included 6,401 spaces. This equates to 1,403 ft² (130 m²) per space.

While the development pipeline was undoubtedly greater in 2016, the important change was the increasing number of cycle spaces per square foot.

In more simple terms, for every 10,000 ft² (929 m²) the 2014 figure of 7.1 spaces increased to 9.8 spaces by 2016 – a significant 37% uplift.

This reflects our complementary research, which shows that developers are keen to provide more cycle parking and that planning authorities are demanding it.

Many individuals have shown great interest in cycling provision, asking 'How many spaces do I have to provide?' We wish it were that simple, but sadly it is not. In this study



three key factors have stood out that determine the demand for cycling facilities:

- The place we have seen that Cambridge has a higher uptake than most other places. While not in the same category as Cambridge, London has a higher demand than most other regional cities. This partly reflects the local culture but also how much a city does to promote cycling as a form of sustainable travel.
- The location within that place inner London certainly has more demand than outer London.
- The tenant type the rule of thumb is that the design and media communities have higher demand than, say, the financial services community, but there is no exact hard and fast rule.

The case studies in this report are examples of how demand and supply has changed over time. We have witnessed examples of 70% and 100% of employees cycling, but these are the exceptions. Cambridge Science Park states that 22% of its employee commuters cycle to work; nationally, the more common range is 5-15%.

PLANNING GUIDANCE

In our initial scoping of this study, the issue of planning standards (cycle storage spaces per square metre), as well as sustainability certification, was raised as an issue. However, what emerged from the interviews is that the majority of developers and investors are now comfortable in 'meeting and beating' the planning standards. In 2012, this may have not been the case, but they now feel that demand has caught up with standards. In many cases, the only way to future-proof buildings is to set standards above most local authority guidelines.

Office submarket	City	West End	Midtown	Docklands	King's Cross	Southbank	Paddington
No. of spaces being built	6,704	1,819	977	864	600	343	108
Total under construction (ft²)	8.8 million	1.7 million	1.7 million	1 million	0.5 million	0.8 million	0.4 million
Cycle spaces per 10,000 ft ²	7.6	10.7	5.7	8.6	12	4.3	2.7

Table 6

London office cycling provision

Source: Deloitte Real Estate's London Office Crane Survey, winter 2016.

QUANTITY VERSUS QUALITY

The issue is now less about quantity (i.e. number of cycle spaces, showers and lockers), as demonstrated in the 2012 report, but more one of quality. If, as shown earlier, cycling provision is now in the Grade A office DNA, then the differentiator now and in the future will be the quality of provision and its operational management.

We have also observed considerable regional variation. To quote one developer 'there is London then there are the regions'. From pure land economics, it follows that London facilities need to take up as little land and building volume as possible. Consequently, it is only outside of central London that ground-floor parking solutions, either under or adjacent to the offices, occur. We also found examples where mixed solutions were provided on the same site – some parking inside a building and some in covered external areas, albeit still secure.

If quantity was the focus in the first decade of the 2000s, then quality is now coming to the fore.

The shower and locker facilities being provided today resemble high-quality gym operations rather than the old-fashioned sports centre facilities provided in the past.

There was a universal view that the improvement of service provision is becoming an important differentiator. The provision of cycle maintenance and free towels in changing areas were cited as examples.

RETROFIT VERSUS NEW BUILD

If squeezing facilities into new builds is difficult, then what happens when the space constraints are already fixed due to having to work within an existing building? Again, there is a no one size fits all solution, as we found examples of relatively easy and more difficult constructions.

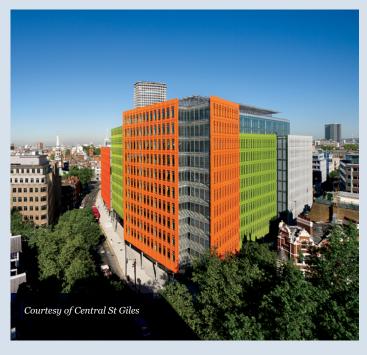
At 43–45 Portman Square, London, the building managers have been dealing with an increasing demand from cyclists. The building accommodates around 1,000 employees over nine floors. As the building has an atrium, the plant space on the roof and basement is limited, which in turn restricts the amount of space available in the basement for cycle parking, showers and lockers. By 2011, a waiting list had developed for the 30 cycle spaces available, so an additional 24 cycle bays were added, utilising every available space in the car park. At the same time, showers were upgraded from four showers in total to four female and seven male showers, and an additional 30 new lockers installed for cyclists' use.

After tenant consultation, it was decided to provide gym-style showers in the male changing area and individual cubicles for the women. Now, 6 years on, the demand for cycle spaces is double the current capacity, so applications are carefully managed across the various tenants in the building. This would suggest that the demand is at a ratio of 1 cycle space per 11 people (1:11) whereas the capacity is 1:22.



CASE STUDY

Central St Giles, London



Building/address: Central St Giles, 1 St Giles High Street, London WC2

Owner/occupier:

- · Owned by Legal & General and Mitsubishi Estates.
- Tenants include NBC Universal, Google, Mindshare and Burson–Marsteller.

Number of people on site: Daily population averages 3,500 permanent employees and 1,500 visitors

Number of bike spaces, showers and lockers provided:

- Originally 200 cycle spaces for the 400,000 ft² building (37,161 m²); a ratio of 5 spaces per 10,000 ft²
- Number has now increased this to 400–450 due to occupier demand (10–11 spaces per 10,000 ft²), but there has been no increase in the number of showers
- · 12 showers, 210 lockers

Growth in % of cycle commuters: see Issues dealt with, below.

Facilities provided: Cycle parking is all at basement level. The original design provided for access via stairs. This has had to be supplemented by a goods lift as demand has increased

Issues dealt with:

- Growth in demand the original ratio of 1 cycle space per 2,000 ft² (185.8 m²) was increased to 1:1,000 ft² (1:93 m²), and now on a new scheme the ratio is 1:625 ft² (1:58 m²).
- Given the nature of the tenants, the client considers the demand a higher level than the London average.
- Brompton bikes were originally taken onto the office floor.

 As these were causing some damage to the finishes, a separate Brompton parking area has been added.

The contrast to this is the upgrade by Derwent London at 1–2 Stephen Street, London. The 265,000 ft² (24,619.31 m²) building was recently refurbished and had the benefit of two levels of car parking in the basement. Derwent decided to dispense with 60 of the car spaces and replace them with 102 secure covered bicycle spaces, 10 showers and an integral changing area. To quote their brochure, it provides a 'gymquality shower block'. This was an easy decision for the owner, as the space was available and it decided that cycle provision is a key component of its office projects. Intuitively, cycle parking was a better value proposition than car spaces.

STORAGE AVAILABILITY

While folding bikes are more efficient in terms of space, they can be disruptive. The attitudes to folding bikes among building managers vary. We are aware of one building where folding bikes need to be carried through the loading bay while suitcases can be taken through the main reception. There is evidence that such bikes cause wear and tear to buildings and should not therefore be taken to desks.

A trend to watch for in the future is the growth of eBikes, albeit there are currently very few data on electric bike commuting habits. Offices are already coping with a range of bike types (road, mountain, hybrid and folding). Now there is a new kid on the block. Electric bikes are slightly bulkier than the standard bike and we have already heard of demands for battery charging points for such bikes — another issue for building managers to factor into the overall management!

We appear to have developed a special cycling culture in the UK compared to overseas, and therefore our own way of dealing with storage solutions. Observations from developers with continental European experience indicate that storage in office buildings is less of an issue there as there are more city-wide inclusive parking solutions and that parking on the street or in large hubs was more common.

ACCESSIBILITY

Designers struggle to provide the perfect solution for bike access in buildings. The tendency is for parking to be in basements, particularly in London. Therefore, access tends to be by way of a ramp, (goods) lifts or stairs. Developers veer away from ramps where possible as they take up valuable developable space, while cyclists find the carrying of bikes down stairs to be cumbersome. Therefore, lifts are often the compromise solution. \blacksquare

Summary

- > The number of cycle spaces per 10,000 ft² has increased by 37% as part of the planning approval process.
- > Planning authorities are demanding more cycle parking and developers are keen to provide it.
- > The issue is now less about quantity and more one of quality.

THE FUTURE OF THE CYCLE-FRIENDLY OFFICE

BEST LOCATIONS

General consensus from the cycling community is that there is a huge variation in terms of UK cycling provision and that, even in the best locations, there is still much to be achieved. A strong sense of cycling awareness is crucial to encourage local planning authorities (LPAs) to invest in appropriate cycling infrastructure and facilities. LPAs are also more likely to respond where there is a requirement to tackle issues such as traffic congestion and pollution.

The Remit survey viewed London as having the best cycling provision in the UK, although this was borough dependent and not consistent across the capital. Cambridge, well known for its strong cycling culture, and Bristol, described as the 'UK's first Cycling City', were also mentioned. Cycling provision in regional cities was felt to lag behind that in London but there are signs that it is beginning to catch up. It is very much dependent on the proactivity of the relevant LPA.

Survey evidence clearly indicates that the UK trails behind other countries in terms of cycling provision. When asked 'Which cities have the most cycle-friendly planning policy?', over 60% of Remit survey respondents mentioned one or more cities in The Netherlands. Pressure from the general public, as far back as the 1970s, has persuaded the Dutch Government to put in place a vast network of safe cycling routes and parking facilities. Cycling is an integral part of the Dutch way of life.

Copenhagen was also a popular candidate, with 40% of respondents naming it as a cycling-friendly city. Considerable political pressure has encouraged the implementation of an extensive cycling network. Other cities worthy of mention are Seville, Portland and Melbourne.

Given the predominately UK-based survey population, only 18% named a UK city as being particularly friendly towards cycling. London was most commonly mentioned; Cambridge and Bristol were also cited.

GOOD PRACTICE

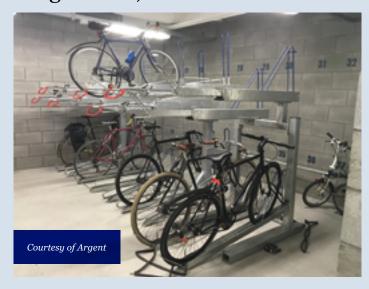
In our survey we asked for suggestions on good practice. Several projects were commented on numerous times, and therefore deserve special mention.

Cycle provision has evolved with the development of King's Cross. As a developer, Argent feels there is a bigger focus required on the arrival process for cyclists. Just providing facilities such as showers and cycle spaces is not enough anymore, and work should be done on making the journey into the building, via the shower and changing rooms to the office floors, flow, look and feel better for cyclists.

A lot of time has been put into making sure the changing areas have sufficient counter space with access to mirrors with convenient plug

CASE STUDY

King's Cross, London



Building/address: King's Cross, London

Owner/occupier:

Developed by King's Cross Central Limited Partnership.

Owned by Argent LLP with London & Continental Railways and DHL; the latter two have now been bought by AustralianSuper.

Tenants include Google, YouTube, Camden Council, LVMH, HAVAS, PRS for Music and The Office Group.

Number of bike spaces, showers and lockers provided: see the table below.

	Building				
	1PS	4PS	11–21 Canal Reach		
Practical completion (date)	2013	2017	c. 2019		
Area (m² (ft²))	5,695 (61,300)	15,793 (169,994)	37,625 (404,992)		
Cycle spaces needed for BREEAM	55	113	222		
Cycle spaces delivered	64	186	738		
Area per cycle space (m² (ft²))	89 (958)	85 (915)	51 (549)		
No. of building users per cycle space	8.9	8.5	5.1		

Growth in % of cycle commuters: see table above.

Facilities provided: Cycle parking is provided building by building. Spaces are allocated but are actively managed by the on-site management team.

Issues dealt with:

- Growth in demand; have responded to tenant needs.
- The interface between cyclists and pedestrians on the estate is evolving.

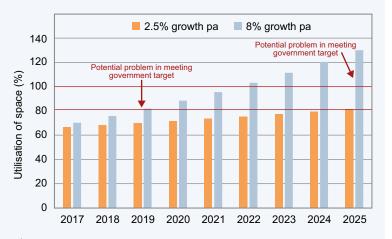
sockets, for example. The small things make a big difference to the users of the space. Post PC, our teams engage with the tenants to assist with green travel plans, providing information on the safest cycle route, and so on.

Helen Causer, Senior Projects Director, Argent

FROM ALLOCATION TO MANAGEMENT

There is a trend that, as existing facilities become more congested, owners and tenants need to work out how to get more from the same space. There were many examples where spaces and lockers had been allocated on a first come first serve basis only to find that the individual only used the space one day per week. Utilisation of cycle parking may, therefore, be low and best use is not being made of the space. In some cases, the utilisation rates are not known as they are not being or cannot be monitored.

We have come up with a simple way of demonstrating the need to manage existing spaces more effectively. Let us assume that the current average utilisation of cycle parking rates is around 65% and that the optimal average is 80% (need to allow for winter and summer variation). Figure 20 shows that we will have a problem in only 2 years' time if the higher growth rate (government target) is to be achieved. Even assuming lower growth rates (last 5-year average), the problem is still only 7 years away.



Growth forecast of utilisation of cycle parking in the UK Source: Remit Consulting LLP

Royal Bank of Scotland, Edinburgh



Building/address: RBS HQ, Gogarburn, Edinburgh Owner/occupier: Royal Bank of Scotland (RBS)

Number of people on site: 6,000 people are employed from the building but with an agile working policy the number of desks provided is 4,500. The daily population averages at 4,000.

Number of bike spaces, showers and lockers provided: For the average daily population, the facilities provided are:

- 155 racks, which equates to 1 rack per 25 staff (desks)
- 35 showers (1:114 desks)
- 638 lockers (1:6 desks)
- 2 drying areas (1:2,000 desks).

Growth in % of cycle commuters: RBS monitors the number of bikes parked. The winter low has steadily increased from around 50 (2015) to about 70 (2016) and the summer high from 115 to 150. 150 equates to 3.3% of daily staff max.

Facilities provided: Since 2012–2013, a bicycle user group has been in place to support RBS cyclists.

Active members of the group have increased from less than 100 in early 2013 to nearly 700 in the first quarter of 2017.

Issues dealt with:

- The building opened in 2004 and immediately there was a need for more cycle spaces and changing facilities, which were added in 2005.
- In 2012–2013 new lockers were added. In 2017, new lockers, bike racks, additional changing rooms and a second drying room were added.
- Staff would like to see the drying room cleared out more often and locker allocation more visibly managed.
- When asked what prevented staff from cycling every day the two main reasons given were bad weather and childcare commitments.

The CEO of RBS is a cyclist and this has helped the company to promote cycling as a means of sustainable travel. As part of the overall offer, Next Bike (bike hire scheme) also operates from the Gogarburn site. In recognition of its commitment to cycling, RBS won the Cycling Scotland Cycle Friendly Employer Award in 2015.

We found cases where building managers are now no longer allocating spaces to tenants or users but managing the demand on a day-to-day basis.

It may be that technological solutions can be found where users can book their space when they leave home in the same way that staff book meeting rooms or desks in agile working environments. New market entrants such as Eco Cycle and PFL Spaces are designing in capacity with more sophisticated stacking solutions.

DESIGNING OUT CONFLICTS

As facilities get bigger and more congested, potential conflicts between user movements (car, public transport and cycling/walking) become more common. This is particularly true in tall London buildings where the ground-floor footprint is a smaller proportion of the building volume in than, say, a business park. Consequently, at rush hour, how tenants enter the building will need to be managed carefully.

A recent trend that draws on this is for buildings to use the cycle entrance point as a visual enhancement for the building rather than it being seen as the 'tradesman's entrance'.

CYCLING INFRASTRUCTURE

We earlier referenced the Manchester Cycle Hubs. Similar businesses have been springing up around the country, including Cambridge's 3,000 space Cycle Point at the main station and Russell's Bicycle Shed at Sheffield and Nottingham stations. We pick these out as they provide additional capacity as inclusive public cycle parking in cities that may be seen as complementary to office-based facilities exclusively for tenants' use.

The hub attracts a range of user activity. The main users cycle to Sheffield station and then commute by train elsewhere. A smaller group of users come by train then cycle from the Hub into Sheffield. The main user motivation is either as an alternative to the car or cycling as a sport. The concept is also in operation in Derby, Lincoln, Kettering, Leicester and Nottingham (opened April 2016).

In addition, a recent development was the launch of the first H2 club in Soho, in 2010. This concept comprises a membership club providing secure cycle storage, bike service, click and collect retail, ride studio, gym, laundry and changing facilities. Cycle racks total 350 and the club has around 1,100 members, of whom 50% are cyclists. Of these 500, a core of 200−250 cycle most days. H2 is opening a new club at the Verde building in Victoria in June 2017, with 440 bike parking spaces and associated services. ■

CASE STUDY

Russell's Bicycle Shed, Sheffield



Building/address: Russell's Bicycle Shed, Sheffield station

Owner/occupier: East Midlands Rail and Russell's Bicycle Shed.

Number of people on site: n/a

Number of bike spaces, showers and lockers provided:

- Sheffield 525 cycle spaces.
- · No showers available as these are rarely required.
- No lockers provided due to security issues.

Growth in % of cycle commuters:

- Now has 1,600 members.
- August 2014 average of 220 users.
- Summer 2016 average of 450 users.

Facilities provided:

- £10 buys a fob for life.
- · Cycle maintenance on site.
- Male and female changing rooms with toilets and hand wash basins.

Issues dealt with:

• Not sure how many are 'leaving' the system.

Summary

- > Increased cycling awareness is crucial in encouraging local planning authorities to invest in appropriate cycling infrastructure and facilities.
- Some building managers are no longer allocating spaces to tenants or users but managing the demand on a daily basis.
- > Just simply providing facilities is not enough anymore; instead we should concentrate on enhancing the cyclists' journey into the building.

NEXT STEPS

HOW TO FUTURE-PROOF YOUR OFFICE BUILDING

We have proven that there is growth in cycling to work, albeit the growth varies from place to place. So how should the office market respond?

We have taken four key steps along the building life cycle from the design stage through to the review. We have then highlighted seven areas which we believe the market should focus on to adjust the product offer in the future:

- · design challenges
- · quality
- community
- · metric guidance
- · commercialisation
- · active management
- post-occupancy evaluation.

We have aligned both the life cycle and key areas in the form of a Boston matrix (Figure 21). As the diagram shows, few of the above factors fit neatly into one area alone. We have provided a more detailed commentary on how each area can be utilised going forward.

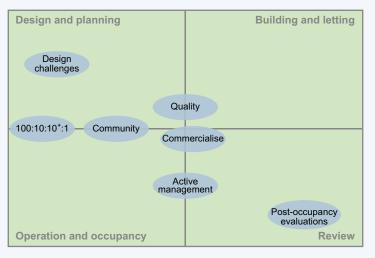


Figure 21
Boston matrix of life cycle and key areas for industry focus

DESIGN CHALLENGES

The pressure on space, the logistics of getting different user types into a building and whether cyclists should be neither seen nor heard all create design challenges. We have referenced some buildings where several challenges have been overcome successfully, but there will always be new obstacles to confront in the future.

The report indicates that we have reached a tipping point where cycle users are a forethought not an afterthought. Design teams

will always have to contend with the cost–benefit solutions, and cycle provision is now an intrinsic part of that challenge.

QUALITY

We witnessed comments that the finished product did not match the promises. Despite the compelling arguments for good facilities, some buildings did not meet user expectations. While there is always the risk that quality gets 'engineered out', interviewees were confident that quality would be the new differentiator, not quantity.

Secure and separate male and female drying areas, differentiated male and female changing facilities and towel provision may seem like details but they all add to the quality offer. Do not skimp on quality!

COMMUNITY

The principle of buildings or campuses having a community for users is established, but the way in which this manifests itself varies from place to place. With the advent of technology portals and platforms the opportunity for interaction between the building owner/manager, tenant organisation and individual customers and users increases.

The RBS, Sky and Quorum case studies show how individual cycle champions have helped increase cycling activity and the quality of the cycling offer to employees. These may not be the norm but they are good examples of where employee wellbeing (mental, physical and social) is being improved by a combination of building enhancement and softer communication initiatives.

Apps like Strava and Step Jockey can be used to create a sense of competition within the community and thus a sense of attachment to a building or the owner's brand.

INDICATIVE RATIOS

We cannot ignore the big quantitative question of how many spaces need to be provided. As we have shown, this is the \$64,000 question and is not universal across the UK, or even within one city.

The best metric we can come up with is 1,000 employees = upwards of 100 cycle spaces = a similar number of, if not slightly more, lockers and spaces = 1 shower per 10 lockers:

100:10:10+:1

However, this is only a best approximation. As we have shown there are outliers below this norm; locations hovering at 5% cycle space to employees (ratio of 1:20) and others at the higher end (e.g. 22%, 1:5). There is clearly room for the locations having 5% cycle space to increase this provision, and for other cities to catch up with the levels provided in Cambridge. Whether Cambridge could double to 40% activity will depend on many factors. Given the greater devolution across the UK it is likely that cities will increase provision at varying rates depending on the leadership ambition and funding, rather than at a set national average.

COMMERCIALISATION

While it is difficult to be specific, there do seem to be commercial propositions evolving in this market. These include a capital contribution to extra facilities by a tenant, cycle shops as part of the offer, on-site cycle maintenance, locker rental or even the complete outsourcing of the facility as per Eco Cycle and H2. These demonstrate that cycle facilities are not simply viewed as a capital cost. They are undoubtedly a non-financial benefit (to tenants and users). Whether they can be an additional financial benefit will be discovered over the next few years.

ACTIVE MANAGEMENT

Using data from post-occupancy evaluations, owners and managers will be better able to actively manage the cycling component of an office building. We are already seeing organisations move away from simply allocating spaces to tenants and then taking a passive role. They now make a commitment to a number of spaces for a tenant and then monitor the use and quality of provision, and balance out demand on a day-to-day basis.

Some technological solutions are evolving that allow the tracking of bicycles, locker use and the time of facility use. With these valuable data, incremental changes can be made to manage demand and ensure users have a quality experience.

Few buildings currently offer a satisfactory experience for visitors who are cyclists. The phrase 'hospitable buildings' is in vogue at the moment, which reflects the need to continually improve the visitor experience. Buildings where visitor cyclists are treated equally to tenants through active management will stand out from the crowd.

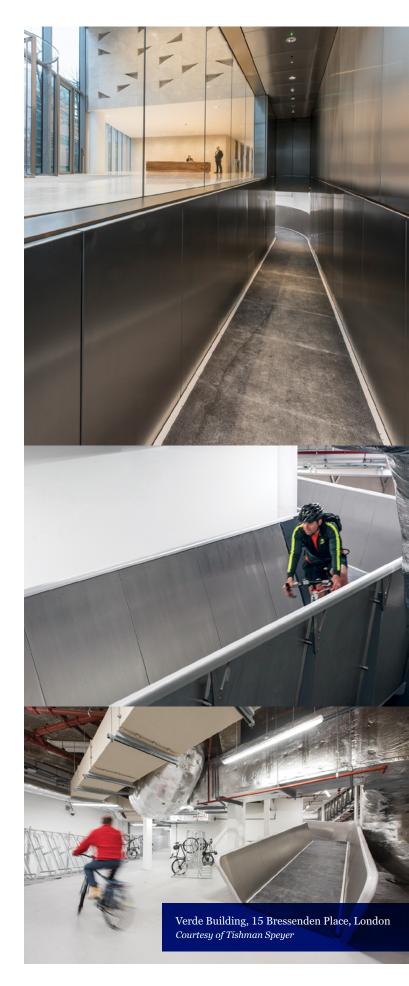
POST-OCCUPANCY EVALUATION

Last, but not least, is the perennial issue of monitoring, analysing and reviewing operational performance. From our evidence, the proportion of organisations carrying out regular and thorough reviews of utilisation and user satisfaction is low. As the pressure mounts and space becomes even tighter, the need to 'sweat the asset' to improve utilisation increases.

The BCO guide to post-occupancy evaluation emphasises this point, and the principle applies as much to cycle provision as any other facet of a building. Without this information it is difficult to decide what changes are required.

HOW DO WE RESPOND?

New innovative designs need to be added to the quality currently on offer. As cycling communities grow, the need for active management increases, as does the need for regular reviews. As the community enlarges, the prospect for commercial opportunities grows with it. ■



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APPENDIX 1

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APPENDIX 2

ABOUT THE SURVEYS

YOUGOV SURVEY

The research team commissioned an online survey from YouGov, an internet-based market research company specialising in online surveys of the YouGov Plc UK panel of over 800,000 individuals. Emails were sent to panellists selected at random from the base sample. Fieldwork was undertaken during 15–20 March 2017, and figures are representative of all GB adults (aged 18 and over).

There were a total of 3,597 respondents to the survey. There was an almost even split between male (49%) and female (51%) respondents. The most prevalent age group was 45–54 year olds (26%), with 55+ year olds (24%) and 35–44 year olds (24%) close behind. Eighteen percent of the survey was aged 25–34 and a further 8% was aged 18–24. In terms of social economic groups, 68% were ABC1 and 32% were C2DE.

The survey had a wide geographical coverage. London contributed the largest quantity of respondents with one-fifth of the total, while the South East and North West of England added another 14% and 11%, respectively. Other contributing regions included: the South West of England (9%); Scotland (8%), West Midlands (8%), Yorkshire and Humberside (8%), East Midlands (7%), East of England (5%), Wales (4%), North East of England (3%) and Northern Ireland (3%).

REMIT SURVEY

The research team carried out a second, more targeted, survey using the online survey system, Survey Monkey.

The survey invitation was issued via social media and emailed to Remit Consulting's database of individuals either in the property industry, or known cyclists (or both). A total of 396 responses were received. The respondents were predominately male (male/female 7:2) and aged mostly 35–44 years (37%) and 45–54 years (35%). Three-quarters of those surveyed cycle to work, with over 40% having cycled to work for over 10 years.

London dominated the geographical coverage, with 45% of respondents. Scotland and Yorkshire & Humberside contributed a further 13% each, while 7% come from the North East and 5% from the South East. Five percent of the survey came from outside the UK.

Of those surveyed, 28% work in real estate. Other industries represented included construction (11%), financial services (10%), IT and telecoms (10%), education (9%), media (8%), medical and health services (6%) and transport and distribution (5%).

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