

Banking on hire bikes

Transport for London aims to boost cycling numbers with its hire bike scheme. **Sara Basterfield & Adam Coffman** look at how it works

This summer 6,000 new hire bikes appeared on the streets of London. Barclays Cycle Hire is a self-service public bicycle sharing scheme that gives people the chance to use bikes to replace trips on foot, bus, tube, taxi or car, taking the pressure off London's crowded public transport system.

Over 40 cities worldwide have a public bicycle sharing scheme in place – cities as diverse as Seville, Stockholm, Mexico City, Berlin, and of course, Paris. The concept aims to make it easy for people to travel by bike as they don't have to worry about finding somewhere to put the bike at home or work, getting it stolen or fixing punctures.

Collect your bike

Part of Transport for London's plan to help make London a cycle friendly city, the London scheme, with sponsorship from Barclays, launched with 6,000 bikes at 400 docking stations in London's central zone. Each docking station has several docking points (initially docking points outnumber bikes), so that you should always be able to park your bike easily. Covering a 40 square mile area, from Camden in the

North to Kennington in the South and from Kensington in the West to Whitechapel in the East, there's a docking station every 300 square metres, so usually you'll be no more than 150 metres from a pick up or drop off point. The bikes are available 24 hours a day, seven days a week.

It caters for two types of users: members, who can sign up online now and pay a one off £3 fee for a plastic key fob which they use to access the bikes via a docking point; and casual users who use a cycle release code from the terminal at the on street docking stations (but note that casual use had yet to be implemented as we went to press). It's a cashless system: you need a credit or debit card to pay the access fee (£1 for 24 hours, £5 for a week and £45 for a year), usage charges, and any fees, e.g. a £150 late return charge if you have the bike for over 24 hours, a damage charge (up to £300) and a non-return charge (£300).

You can take a bike from any of the 400 docking stations and return it to any docking station. You can ride all day for £1 (i.e. just the access fee) if you make journeys less than 30 minutes each. The first half hour is free and then charges are £1 for up to an hour, £4 for up to one and half



Main photo & left by Transport for London. Others by Adam Coffman

CTC & hire bikes

CTC is a partner in OBIS, Optimising Bike Sharing in European Cities, funded by Intelligent Energy Europe. An international consortium, OBIS is looking at what makes bike sharing schemes work, assessing best practice and developing a manual of best practice. Fifteen organizations are involved in the project including local and regional authorities, bike sharing and public transport operators, large employers, professional associations and NGOs. Partners are from Austria, Czech Republic, France, Germany, Italy, Poland, Spain, Sweden and the United Kingdom. <http://www.obisproject.com>



hours, £6 for up to two hours, £15 for up to four hours and £35 for up to six hours. The charges have been set to keep the bikes in circulation for as long as possible and deter long term use. The non-return charge is to deter theft.

Dumped in the Thames?

TfL have been working on the London scheme for over two years and looked at some of the successful cycle hire schemes around the world. They took those experiences into account when delivering London's scheme, which is based on Bixi – a Montreal-based system with schemes in Ottawa, Melbourne, Boston and Minneapolis.

The Paris Velib scheme, launched in 2007 with 20,000 bikes at 1,600 locations, has suffered from some vandalism and theft. Within the first two years, it has been reported that more than three-quarters of the bikes had to be replaced, including 8,000 that had been stolen and 100 fished out of the River Seine. London's scheme includes several measures to reduce loss and damage – including a higher no-return fee (£300) than the Paris Velib, which

is only 150 euros. TfL hope the high charge will be a deterrent and that the docking station design will make it almost impossible to steal a bike.

Some of the Paris docking points did not work properly, making it relatively easy to remove a bike without authentication. Paris's Velib bikes also come with their own lock, so users can lock the bike up if they want to stop briefly at a shop which also could have led to a higher than expected theft level. The London bikes do not have a lock so you either need to bring your own lock or find a docking station, drop your bike off and then pick up another bike when you are ready to continue your journey.

When Velib was introduced in Paris, a large programme of reallocation of road space to cyclists took place. Transport for London (TfL) is working to make it easier and safer to cycle in central London through a Complementary Measures programme of works. Participating London boroughs were invited to bid for money to fund cycling schemes that they believed would improve the cycling network around central London.

(Opposite) Docking spaces outnumber bikes so you can drop off a bike easily (Above) The scheme is meant to be 'get on and go' so that cycling journeys can replace trips by car, on foot or on public transport



“There’s a docking station every 300 square metres so you’ll never be far from a drop-off or pick-up point”

Schemes that TfL has funded include accommodating two-way cycling in one-way streets, widening and resurfacing cycle lanes and opening up through routes to cyclists. All schemes were designed to complement the introduction of the Barclays Cycle Hire Scheme.

Hire and higher

TfL aims to achieve a five per cent mode share for cycling by 2026, which requires a 400 per cent increase in cycle journeys compared with the year 2000’s mode share. Since TfL was created in 2000, cycle journeys made on London’s major roads have increased by 117 percent. The London Cycle Hire Scheme is expected to generate up to 40,000 additional cycle journeys a day.

Over in Ireland, the Dublin Bikes scheme has been very successful, with over 37,000 people signed up to the scheme. In operation since September 2009, only one of the 450 bikes has gone missing in the first eleven months. According to spokesperson Damien Ó Tuama, ‘The Dublin Bikes are helping to prompt a real change in the culture of the city and are helping to mainstream bicycle use. The profile of the typical cyclist is changing as the public bikes scheme has been accepted by Dubliners.’

It will be interesting to see how the London scheme fares – and how far it will help make cycling mainstream.



Barclays bikes close up

The bikes are built to withstand high levels of usage and deter vandalism and theft. Strong plastic covers for all cables and wires, an enclosed chain, and a strengthened frame and wheels increase durability. The dynamo lights are always on when the bike is being ridden and remain on for at least two minutes after the bike has stopped.

Designed to require minimum maintenance, the tyres are highly puncture resistant and it is also possible to ride with a flat tyre, so if you are unlucky enough to get a puncture you can ride to the next docking station. The bikes are designed to suit many different users who can adjust the saddle height catering for riders from around 5'0" to 6'6". The calibrated seat post enables regular users to remember their personal best saddle height.

The bikes have an aluminium alloy frame, weigh 23kg with a well-padded saddle, bell, kickstand, three-speed hub gears, hub brakes and mudguards. The basket at the front has an elastic cord so items can be securely fixed. The gear ratio is 38 x 23 with a Shimano Nexus three-speed hub (giving gears of, approximately 32, 43 and 57 inches). The hub brakes used on the bikes are standard Shimano nexus roller brake hubs.

(Clockwise from top left) Mayor of London Boris Johnson is the scheme’s public face; Hub dynamo powered lights are always on; Tamper-proof valves; The Shimano Nexus 3-speed hub is geared low; A front carrier and luggage elastic to hold your bag