## What is required to keep Santander Cycles on the road?

In 2007, Paris introduced the Vélib to the streets of Paris. It's a grey bicycle.

The name was a fusion of the French words vélo and liberté – meaning bicycle and freedom. For an annual fee of less than €30, users could make use of these bikes: collecting them from a docking station and returning them to another within a certain time period. The scheme quickly became popular, and also led to other people buying their own bikes and cycling once they realised that this might be a cheaper, healthier and even quicker way of travelling to work.

The scheme is everywhere in the city, with over 20,000 bicycles obtained from over 1200 stations around the city, meaning that few people are more than a quarter of a mile from one. Each bike has three gears, and a lighting system.

Cities around the world have introduced similar schemes as a result of the success of the Paris scheme. They include:

- New York
- Lyon
- Montreal
- Melbourne
- Boston
- Washington
- Chicago

In 2010, similar bikes arrived in London. They were sponsored by Barclays and they were available from a number of docking stations, whose number grew over the next few years. The scheme has over 12,000 bikes and 800 docking stations now.

In 2015, the sponsorship has moved to Santander bank, with the Barclays blue being replaced by a more vivid red.

 How are these schemes operated so that they are reliable for the user?

- What logistical decisions are made to prioritise the maintenance of the stations, and the efficient running of the network?
- Why are the docking stations located in particular places in the city?
- Which stations are the busiest?

Oliver O'Brien: a geographer at UCL has produced a range of maps which show the usage of these cycles in a number of cities, particularly in London. These can be accessed <u>here</u>.

## **Activity before the lesson starts**

Students should come prepared with this information. This is a technique called 'flipping the classroom': where students do prior reading, so that the lesson can be used to interrogate this information rather than teach it.

- 1. Identify and map the cities which have a cycle hire scheme on the blank world map provided.
- 2. Find out about the Santander sponsored Cycle scheme in London visit the <u>website for the scheme here</u> how does the scheme work and how much does it cost?

**Useful website:** Docking Station Map

**Download:** Blank World Map (PDF)

## Main activity - A day in the life of a Santander cycle

The busiest docking station in London is at Waterloo station (2022 information). Railway stations like this have lots of potential customers as people leave their train and make their onwards journey by bike.

Visit the station <u>here</u>.

- Why do you think this is such a busy station?
- How many bikes are there at the station in the image?
- How many empty stands are there?

A fleet of vans spends the day redistributing the bikes to the docking stations from several depots at strategic points through the day, adding bikes to busy stations which empty out first. There are also the 'medics' who mend broken components, although the bikes are designed to be as robust as possible.

There can also often be empty docking stations at the tops of hilly areas, where people can travel easier downhill, or outside railway stations and at popular tourist sites.

### **Downloads:**

- Santander cycle image (PDF)
- Bicycle wheel note sheet (PDF)

If a real bike, perhaps one belonging to a student, could be made available and brought in, this could be used as a real life prop, and you could ask students to produce a brief role-play to explain how the system works, or to explore the possible problems that might happen during a typical day in the life of one of the bikes.

Students will investigate usage patterns, as these are used by those in charge of coordinating the operation to make sure that they are operating efficiently.

Visit the bike share website and choose London.

Use the <u>London cycle investigation sheet</u> to explore the current situation with the docking stations and make some decisions relating to the operation of the scheme. The results will vary depending on when you teach this lesson. The availability of bikes at particular stations will depend on factors such as: the time of day, the day of the week, whether there are particular events taking place at that time, the weather etc. Can students identify how these might affect the operation of the hire network?

**Download:** London cycle investigation sheet (PDF)

Complete the activities on the sheet. Further discussions can be had regarding some of the questions in Section 2. This is designed to be printed as a 4 page booklet for students to complete.

Decision making activity - extension 1

Imagine that a similar scheme to that in London has been approved for your own home city (assuming you aren't teaching in London)

In February 2023, £200 million of government funding for cycling and walking schemes was made available, helping to promote healthy travel, reduce emissions and grow the economy. <u>Using this link, funding for each local authority can be explored.</u>

This could form the basis for some ideas around developing where in the city the bicycles should be located.

# Extension activity 2 – Safety for lorry drivers

Another logistical implication for some companies relates to those who may have drivers at the wheel of large HGVs in the city streets. Sadly, cyclists are killed and injured each year in London, and stories like this can influence people's decisions as to whether to make use of cycle hire schemes.

## **Plenary**

A cycle-hire scheme has additional benefits over other costly infrastructure developments, as they potentially offer more opportunities than simply moving people around the city.

These could include:

- Health benefits exercise gained when cycling
- A better way to see the city rather than being cooped up in a subway train
- Lower cost of the scheme compared to other methods of moving people around the city

Perceived safety risks can prevent people taking up cycling. Students could explore aspects of cycle safety – how could cycle safety be improved in your hometown or city?

Students could also be asked to find out more about the <u>ReCycle</u> charity and their work.

#### References

British Cycling's "Let's Ride" website: https://www.letsride.co.uk/?intcmp=60690

A useful page for planning cycling developments: <u>Cycling – Transport for London (tfl.gov.uk)</u>

## Bike share map

A story relating to bikes allegedly being stolen by a former employee revealed details about the 'medics' who mend the bikes, and that each bike is worth up to

£900: <a href="http://www.telegraph.co.uk/news/uknews/crime/11405649/Serco-employee-stole-54-Boris-bikes-worth-50k.html">http://www.telegraph.co.uk/news/uknews/crime/11405649/Serco-employee-stole-54-Boris-bikes-worth-50k.html</a>

\*This unit could be combined with a cycling safety week at school, or perhaps a week when students are encouraged to cycle to school rather than their usual method of travelling. Safe cycling and don't forget to wear your helmet!