

On the buses – why are London’s buses going green?

Imagine you are waiting for a bus at a bus stop. There are several factors that might cause you some annoyance as you wait. First is the very fact that you are waiting. Car ownership gives the impression of freedom to travel where and when you want (although the reality is often quite different), and quite a lot of traffic will pass you as you wait.

The second might be the weather, and the degree of shelter that is being provided at the stop where are you waiting. Cars are warm and dry, but a wet and windy bus stop will not be comfortable. Often the seats are deliberately made uncomfortable to discourage rough sleeping.

The third would be any delay or uncertainty about when the bus might be arriving. Is there a timetable visible at the bus stop? If not, are you sure that you didn’t arrive a few minutes late, or maybe the bus was early, or has it been delayed? Is it coming at all? These questions might run through your head.

[According to Government figures](#), in the year ending March 2023:

- There were an estimated 3.4 billion bus passenger journeys in England
- Passenger journeys in London accounted for 52.2% of all passenger journeys in England
- Bus passenger journeys in England increased by 19.3% compared to the previous financial year.
- There were around 1035 million older and disabled concessionary journeys in England

This lesson explores the decisions and actions that need to be taken for a bus company to stick to the published timetable and keep all their customers happy. Any company needs to run routes that are used by enough paying customers to keep it financially viable.

Any regular interruptions may cause passengers to find alternatives, if they can.

For this lesson, we are going to focus on Transport for London's Bus route number 9, which passes through Central London, and close to several iconic tourist sights.



All of TFL's bus routes can be followed on a Google map which adds other details for travellers: <http://www.tfl.gov.uk>.

Route 9 runs between Hammersmith Bus Station and Aldwych/Drury Lane in the West End of London, as shown on the map, right.

Contactless payments were introduced onto London buses in 2014. Prior to that, there was the introduction of the Oyster card, which provided a new way to pay for travel. This sped up the process of boarding the bus, reducing delays, and reduced the need for the driver to spend as much time dealing with money.

Starter activity

- Look at the image of a bus stop in the Suffolk town of Lowestoft.
What information does the sign give you about the bus stop?
- What other information would it be useful to have?



Main activity

Discuss the information on the bus stop sign. What suggestions did students have for the way that it may have been improved?

For example, bus companies can now be texted to find out where the bus is and how long until it arrives, [e-paper](#) is being used to display routes and [smart bus stops](#) are commonplace.

Compare this to the old bus stop signs, which had less information, perhaps just the numbers of those routes that stopped at that stop.

Timetabling is a complicated art. A crucial idea is that of 'elasticity'.

Timings can be disrupted for a number of reasons and passengers are unlikely to be sympathetic. Elasticity is the time built in to account for delays which can be anticipated e.g. for a busy road junction or during rush hour traffic.

Start by brainstorming the factors that might disrupt bus timetables and make the bus either late or early. Imagine a bus setting off on a pre-determined route of a fixed distance. Why might the duration for the same route be different day-to-day?

Fill in the [Elasticity – how far can you stretch?](#) sheet (PDF) with ideas.

London's red buses are an icon of London, and for many overseas visitors they rival Sherlock Holmes and Big Ben as representatives of London's culture and landscape. Transport for London's Bus route number 9 takes it through Central London, and past several iconic tourist sights.

[Route 9 – Stations and stops](#) (link)

Use Google Street View™ to follow a section of the route. Identify events and locations which might cause the ‘elasticity’ problems that you have previously identified.

Downloads:

Fill in the [View from the top deck sheet](#) (PDF)

Use the [Route 9 map](#) to follow the route (JPEG)

If you would like to do another route, perhaps one that goes closer to your school for example if you teach in London, then that is fine. The sheets are designed to be used with any chosen bus route (and it doesn’t have to be in London either).

Plenary

During the journey:

- How could passengers be made aware that a bus is delayed?
- How could people waiting at a bus stop be made aware that a bus is delayed?

Information can be transmitted to passengers in a number of ways.

Buses increasingly have WiFi and information boards, or drivers can be kept informed of potential problems along the route. Smartphone apps are also available.

While waiting for the bus, you may notice that the bus stop has an advertising space, which will be labelled with the name J.C Decaux.

J.C Decaux is an advertising company, which has a large number of hoardings and other billboards at locations such as bus stops. Roadside locations and waiting passengers give them a large number of people to view the advert.

The company often builds the bus stops for free so that they can be used for advertising opportunities – sometimes in areas where other advertising is not permitted, or where there currently aren’t many banner ads.

Keep an eye out for [J.C Decaux](#)

- Where would be best to place an advertising board along the route that you have been investigating?

It is worth pointing out to students that jobs are created in the field of logistics to deal with the issues that this session has tackled. E.g. Transport for London offer a range of apprenticeships.

References

Bus Statistics from: <https://www.gov.uk/government/collections/bus-statistics>

TFL website: <http://www.tfl.gov.uk/>

TFL apprenticeships: [Apprenticeships – Transport for London \(tfl.gov.uk\)](#)