

Railways

Back on track – can the train take the strain?

Introduction and geographical context

Every weekday morning, millions of people start their day by catching a train (or two) to work. The image of the city commuter with bowler hat, newspaper and umbrella become associated with the idea of the typical English businessman. When train fares rise each year, there are news reports featuring interviews with customers who are dissatisfied with the service they get for the large sums of money they have to pay: thousands of pounds a year for a season ticket on some lines.

Train operating companies are often in the news also, particularly when there are problems with the service they are providing. Large sums of money have to be spent periodically to improve infrastructure, which in some cases is decades old. Tracks have often been upgraded in a piecemeal fashion, and key junctions are often struggling to cope with the increased volume of rail traffic using them.

There have also been changes since the train operating companies (TOCs) were created when services were privatised, and there was competition for the most lucrative services and lines.

It can sometimes be difficult to work out the cheapest way to make a journey. In late 2014, there was a high profile case of a commuter who exploited a loophole and paid out over £43k when he was caught. When you buy your ticket, a contract is made between you and the train company. The expectation is that your train will run to time, or compensation can be claimed. This has been in the form of travel vouchers, but from mid 2015, this was in the form of cash.

One challenge for network operators is to ensure that there are sufficient carriages available at each station that lies at the 'ends' of the line, so that the next service can run. A driver and other staff such as a guard are also required, as well as platform staff, ticket inspectors and British Transport Police. Disruption to the network can result in problems as rolling stock is in the 'wrong' place.

There are some routes that are more profitable than others, and commuters are often the people who 'pay the most' for their seat. Ticketing arrangements can be confusing, although websites provide guidance on locating discounted fares.

The expectation is that passenger numbers will continue to rise. Some popular routes will have extra stations built to serve new clusters of housing. New towns and areas where large numbers of houses are being built may also require new stations, such as in the area around Cambridge.

Starter

Leaves on the line?

The first thing that many passengers will know about changes to their timetabled service will be an announcement over the railway station public address system, although smartphone apps are increasingly being used to keep people up to date.

Use the [Train excuses](#) PPT with excuses that were announced on the PA – read the excuses, which were all reported as being true.

What were the types of factors that might have led to the delay in each case?

They could be classified as follows:

- Meteorological
- Personnel
- Mechanical
- Electrical
- Acts of God
- Other...

Which of these are easier to predict, or to mitigate the impact of? What problems will these incidents create (sometimes there are knock-on effects)

Download: [Train excuses](#) (PPT)

Can students uncover other excuses that have been used – have they heard any themselves?

Main activity

This is split into two parts: a discussion task and a research task

1. Discussion Task

Look at the figures below:

Census 2021 – Method of travelling to work:

- Car or Van: 12.5 million (45.1%)
- Passenger in Car or Van: 1.1 million (3.9%)
- Walked: 2.1 million (7.6%)
- Bus, Minibus or Coach: 1.2 million (4.2%)
- Worked at home: 8.7 million (31.2%)
- Cycled: 0.57 million (2.0%)
- Train: 0.53 million (1.9%)
- Light rail (incl. underground and tram): 0.51 million (1.8%)
- Motorcycle moped or scooter: 0.13 million (0.5%)
- Taxis: 0.20 million (0.7%)
- Other methods e.g. Ferry: 0.29 (1.0%)

Please note that people who were furloughed in 2021 were advised to answer the transport to work question based on their previous travel patterns before or during the pandemic (see [Nomis](#) for more details)

Travel to work – what percentages?

Produce a diagram that illustrates these statistics:

- How does rail sit within these figures?
- Discuss the relative importance of rail as a method of travelling to work?

Think about the importance of logistical decisions in the smooth running of rail services.

Students are going to imagine that they are working in logistics operations for the Rail Delivery Group. They have been asked to look at the current rail network and suggest how customers might be tempted to make use of the train as a method of travelling to work (or school), or to look at the

possible re-opening of some of the lines that were closed by the Beeching Axe in the 1960s.

What are the next few years going to be mean for your local railway lines?

This is in the context of Britain having, in the words of Network Rail, “the fastest growing railway in Europe”.

Choose an appropriate enquiry for your location. There could be a particular link to one of these issues.

Information

In the early 1960s, Dr. Richard Beeching was asked to look at the future economics of the railway network. He was an engineer, who became Chairman of British Railways, and despite investment in the railways, they were losing lots of money. This was a time of growing car ownership, and freight being carried by road rather than rail.

Beeching published two reports, which resulted in the closure of thousands of miles of tracks, and prioritised future investment into a few main routes, although not all of his suggestions were implemented. The consequences of the reports included the loss of branch lines, and many smaller communities lost their station.

Map source:

<https://www.railwaysarchive.co.uk/docsummary.php?docID=35>

There is nostalgia for these old railway lines, and an unrealistic ambition that they might be reinstated in some places, although new developments have often blocked the previous routes.

2. Group research task

Areas to explore:

- Revitalising branch lines – what are the options for reinstating tracks – OS mapping or Digimap for Schools could be used to retrace the routes of disused railway lines.
- Shifting freight from the roads on to the railways – what are the local industries which might be able to do this? – look at the

location of factories which back onto areas of railway lines or sidings.

- Building a new station to cater for demand in new population growth areas – what are the new areas where population is growing quickly, where are the main areas of new housing currently being constructed?
- Improving the facilities offered to passengers on trains e.g. free wifi (which is available on ScotRail services) – what else would tempt passengers onto trains.

Groups of students should be asked to produce a brief report in a format of your choice.

Plenary

'We regret to announce...'

What are the plans for your local railway line?

Research the plans for the line. Is anything going to change in the next few years?

Details of engineering work on the network can be discovered using [this web page](#).

Look for your local rail users' association e.g. Fen Line Users Association (FLUA) (and similar organisations) – these provide feedback on how the network is running and preferred improvements – this line needs investment at a key junction in Ely to allow services to be upgraded, but there have been delays to getting the money: <http://www.flua.org.uk/>

Produce a business-card sized (or slightly larger) guide to hand to commuters travelling on local rail services to provide them with information on the state of their current rail line and what may be planned for the next few years. You can [download card templates here](#) (PDF).

Reading and further references

Rail Delivery Group: <http://www.raildeliverygroup.com/>

Network Rail: <http://www.networkrail.co.uk/>

The story of the commuter who was caught dodging fares: <http://www.theguardian.com/uk-news/2014/apr/13/man-avoids-prosecution-pay-back-43000-train-fares>

ONS document on travelling to work (Census 2021): <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/traveltoworkenglandandwales/census2021>