

Rail statistics compendium

Annual: April 2021 to March 2022

Publication date: 6 December 2022

Next publication date: December 2023



Passenger journeys = 990.1 million



Trains cancelled = 3.3%



Passenger kilometres = 39.1 billion



Fares increase = 4.8%



Freight moved = 16.9 billion net tonne kilometres



UK rail income = £21.3 billion



Busiest station = London Waterloo
41,426,042 entries and exits



Train accidents = 476



Complaints closed = 282,537



Route = 15,874km (38.1% electrified)



On time trains (early or less than 1 minute late) = 73.1%



Number of stations = 2,570

Background

This annual compendium publication contains a summary of the statistical releases published by ORR covering April 2021 to March 2022. Full copies of the individual releases and accompanying data tables can be found on [ORR's data portal](#).

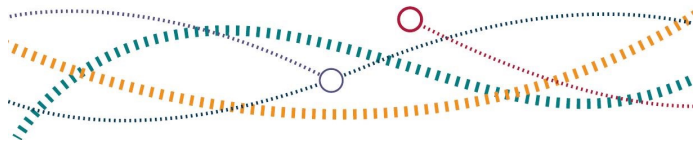
Sources: A range of industry bodies including Network Rail, passenger and freight operators and Department for Transport.

All statistics are correct at the time of publication, but may change due to subsequent revisions.

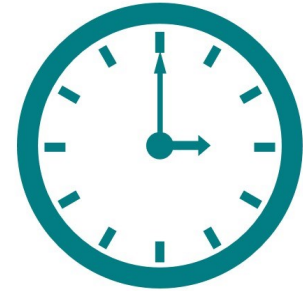
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Website: [ORR data portal](#)



Contents



Passenger rail usage p3

Passenger rail service complaints p8

Passenger rail performance p10

Regional rail usage p4

Disabled Persons Railcards and Passenger assistance p9

Estimates of station usage p5

Delay compensation claims p9

Freight rail usage and performance p7



Rail fares p11

Rail safety p13

Rail infrastructure and assets p15

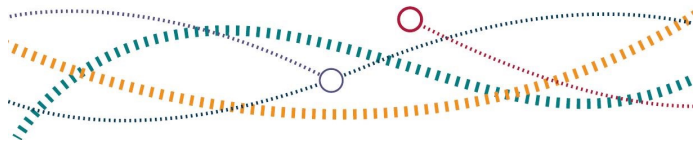
Rail industry finance (UK) p12

Signals passed at danger p14

Rail emissions p16

Occupational health p14

Annexes p17



Passenger rail usage

Passenger journeys in Great Britain increased to **990.1 million** in the year ending March 2022.

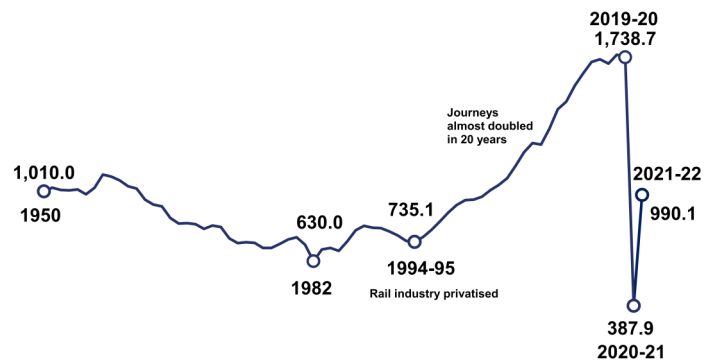


990.1m

Up 155%

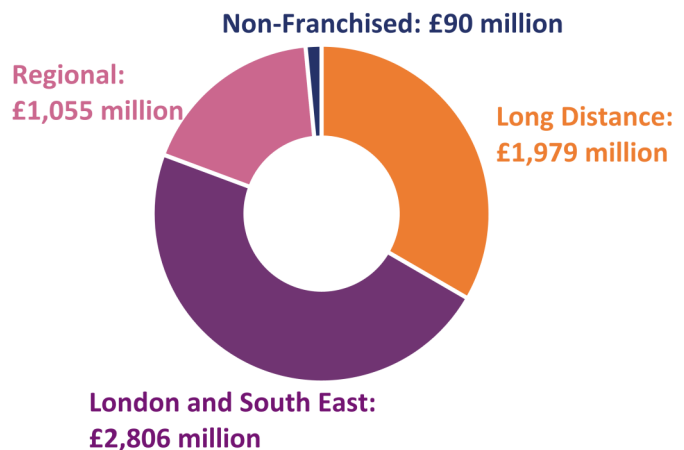
Did you know? The average journey length in Great Britain between April 2021 and March 2022 was 39.5 kilometres

Passenger journeys (millions), GB, Annual (Jan 1950 to Mar 2022)



Annual **passenger revenue** in the year ending March 2022 increased by **£4 billion** compared with the previous year.

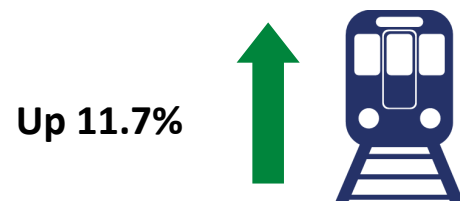
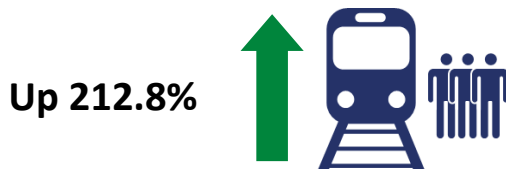
Passenger revenue by sector, GB, Latest financial year (Apr 2021 to Mar 2022)



Annual passenger revenue for the year ending 31 Mar 2022

39.1 billion passenger kilometres travelled on Great Britain's mainline network in the year ending March 2022.

474 million passenger train kilometres operated in the year ending March 2022.

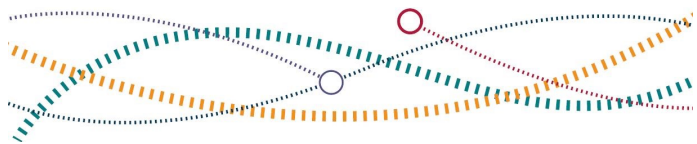


Percentage of kilometres travelled compared with the previous year

Percentage of kilometres operated compared with the previous year

Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

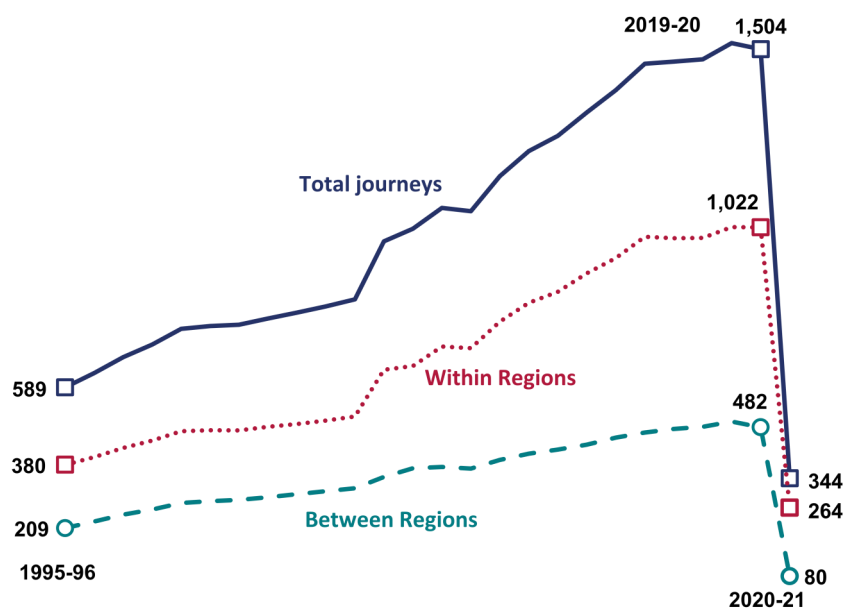
[Passenger rail usage](#)



Regional rail usage (April 2020 to March 2021)

Regional passenger journeys are based on the origin and destination named on a ticket and do not take into account any changes of train. It therefore produces slightly lower estimates than the total journeys published in the passenger rail usage statistical release. **Regional rail usage data for April 2021 to March 2022 will be published in February 2023.**

Passenger journeys (millions) to, from and within regions, GB, Annual (Apr 1995 to Mar 2021)



344 million regional passenger journeys on Great Britain's mainline in the year ending March 2021.

Down 77.1% ↓

Percentage change compared with previous year

Passenger journeys for April 2020 to March 2021 were affected by the coronavirus (COVID-19) pandemic.

There were 264 million journeys made **within regions** in the year ending March 2021.



Down 74.1% ↓

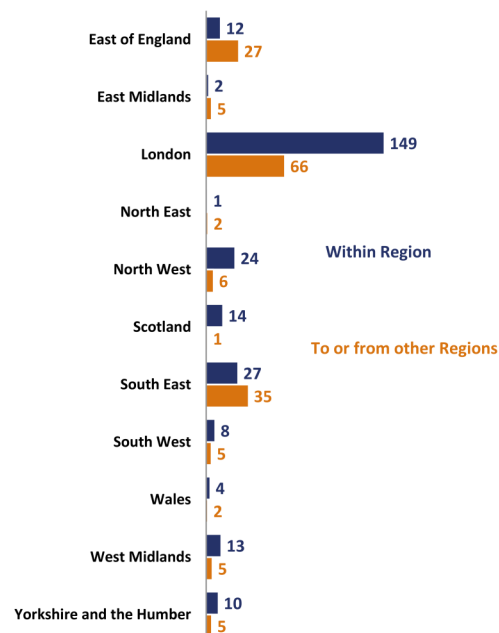
There were 80 million journeys made **between regions** in the year ending March 2021.



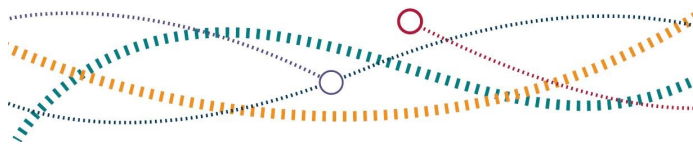
Down 83.5% ↓

This is the first year since the year ending March 2017 when there were more journeys between England and Wales (1.6 million) than between England and Scotland (1.4 million).

Passenger journeys (millions) within Regions and to or from other regions, GB, Financial year (Apr 2020 to Mar 2021)



Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal: [Regional rail usage](#)



Estimates of station usage

Top 10 stations in Great Britain

Total entries and exits
April 2021 to March 2022

London Waterloo	41,426,042
London Victoria	36,776,338
London Bridge	33,309,348
London Liverpool Street	32,165,310
Stratford (London)	28,182,238
London Paddington	23,870,510
London Euston	23,097,606
Birmingham New Street	22,682,526
London Kings Cross	20,476,492
Manchester Piccadilly	19,581,442

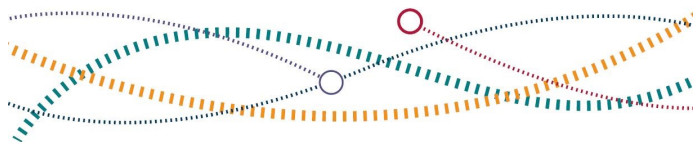
dataportal.orr.gov.uk/station-usage



Elton and Orston in Nottinghamshire was the least used open station with 40 recorded entries and exits.

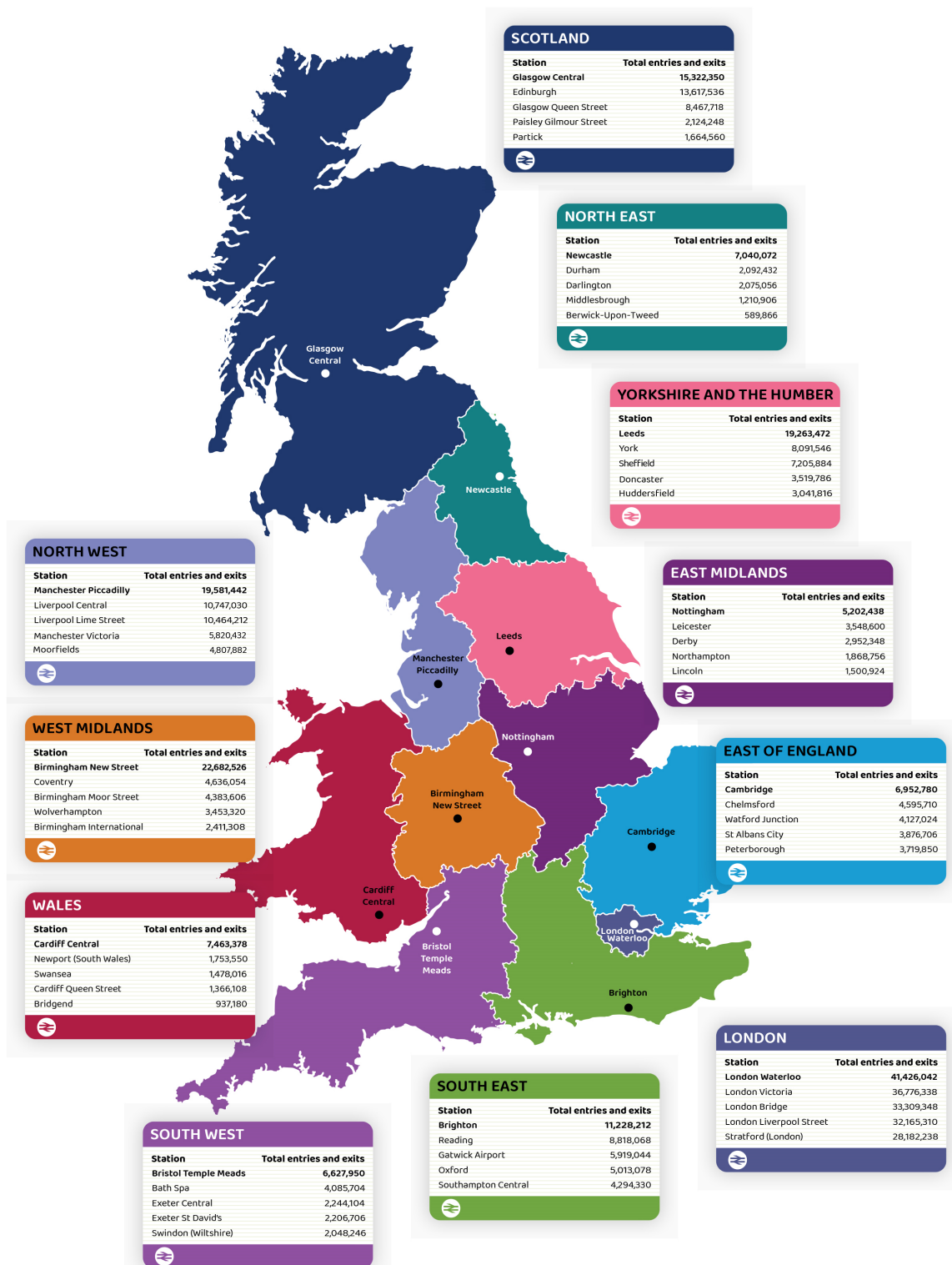
Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Estimates of station usage](https://dataportal.orr.gov.uk/station-usage)



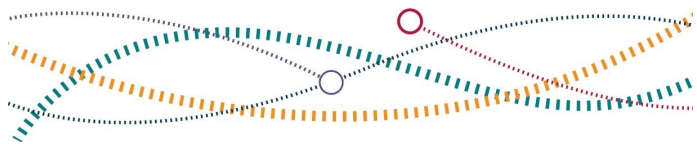
Estimates of station usage

Top five most used stations in each region in England, Wales and Scotland, 1 April 2021 to 31 March 2022.



Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Estimates of station usage](#)



Freight rail usage and performance

16.9 billion net tonne kilometres of freight moved in the year ending March 2022.



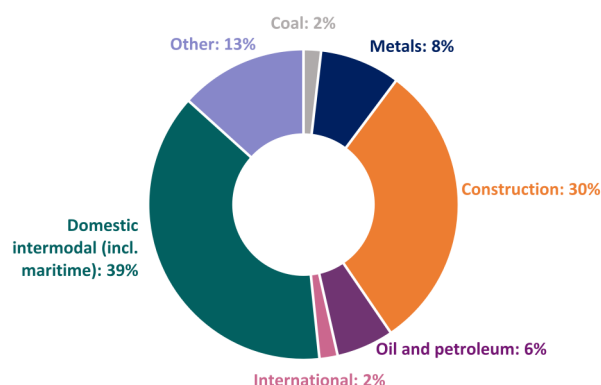
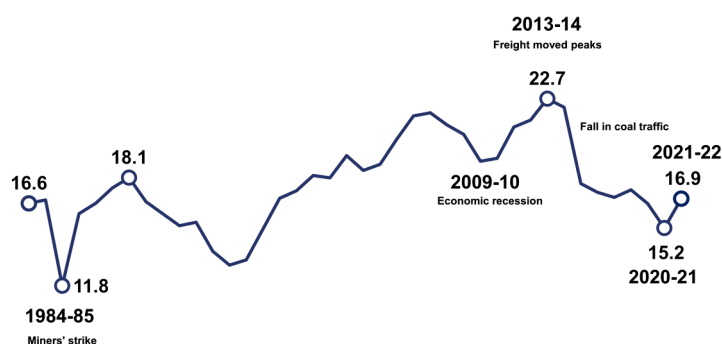
Up 11.3%

Percentage change compared with previous year

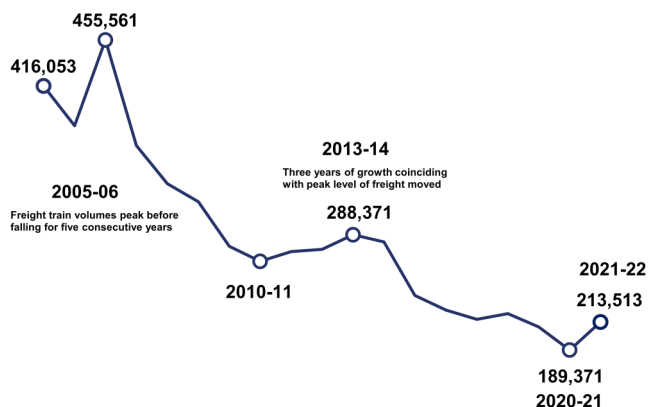
Did you know? International freight volumes have decreased by over a third compared with two years ago (pre-pandemic).

Market share of freight moved commodities, GB, Latest financial year (Apr 2021 to Mar 2022)

Freight moved (billion net tonne km), GB, Annual (Apr 1982 to Mar 2022)



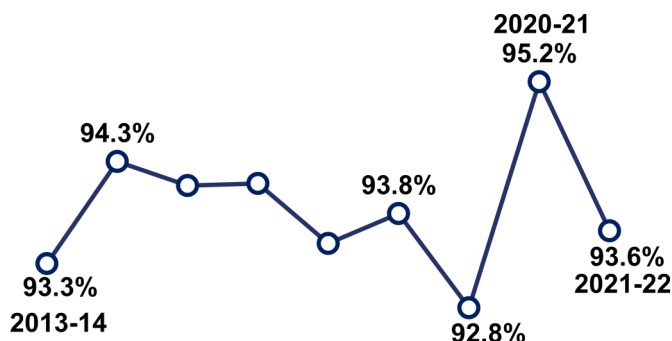
Number of freight train movements, GB, Annual (Apr 2003 to Mar 2022)



There were **213,513 freight train movements** in the year ending March 2022.

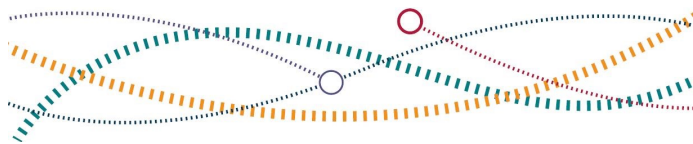
93.6% of freight trains arrived within 15 minutes of their scheduled arrival time in the year ending March 2022.

Freight Delivery Metric (FDM), GB, Annual (Apr 2013 to Mar 2022)



Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Freight rail usage and performance](#)



Passenger rail service complaints

There were **282,537 complaints closed** in the year ending March 2022.

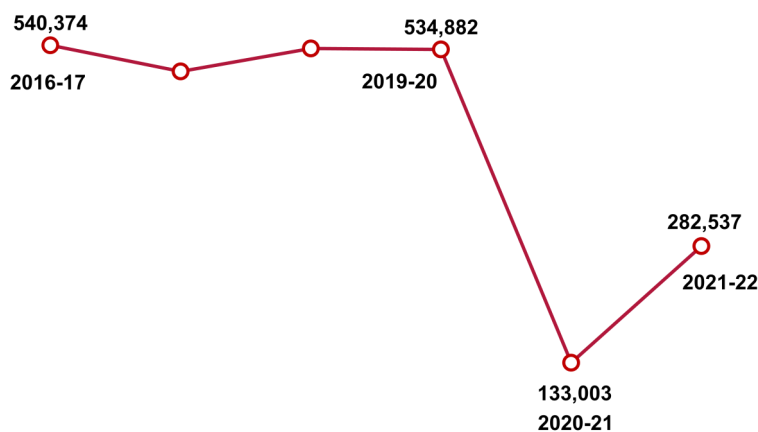


Up 112.4% ↑

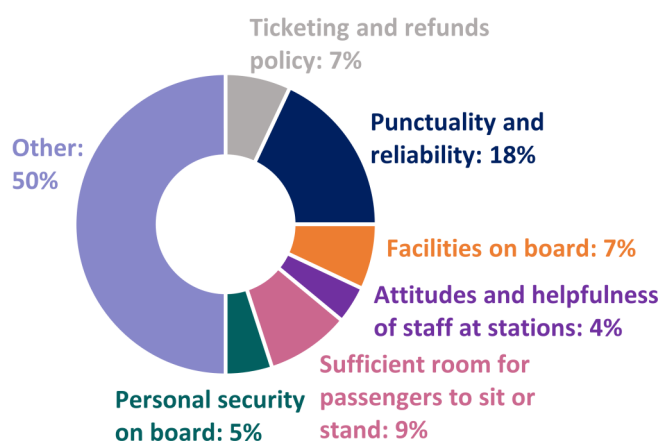
Percentage change compared with the previous year

Did you know? 81.9% of all complaints are made by email or webform, up from 75% the previous year.

Complaints closed, GB, Annual (Apr 2016 to Mar 2022)



Complaint categories, GB, Latest financial year (Apr 2021 to Mar 2022)



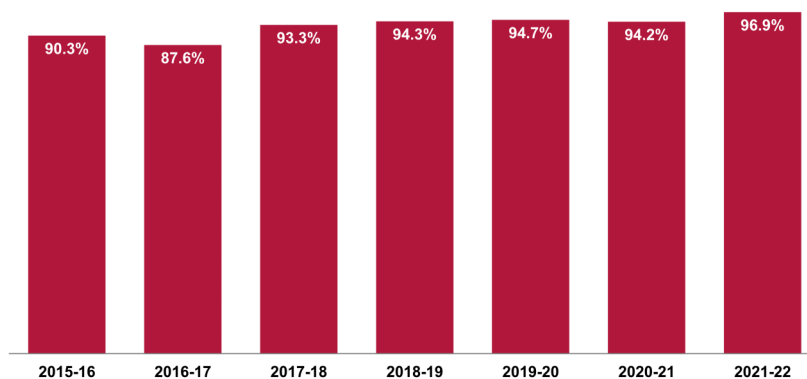
Punctuality and reliability is the most complained about category, up 4 percentage points from the year ending March 2021.

Ticketing and refund policy complaints are down 10 percentage points from the previous year.

96.9% of complaints were responded to within 20 working days in the year ending March 2022.

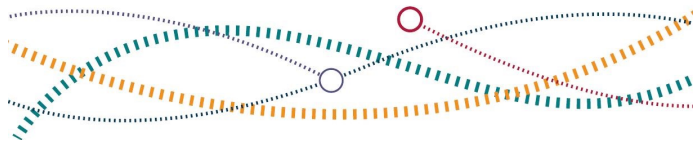
20 out of 23 train operators achieved the industry requirement of answering **95%** of complaints within 20 working days.

Percentage of complaints responded to within 20 working days, GB, Annual (Apr 2015 to Mar 2022)



Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

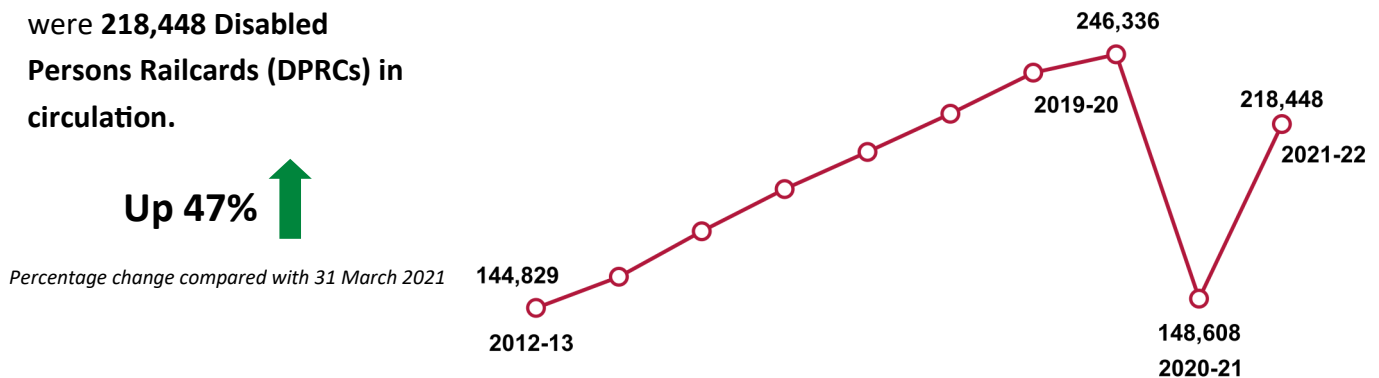
[Passenger rail service complaints](#)



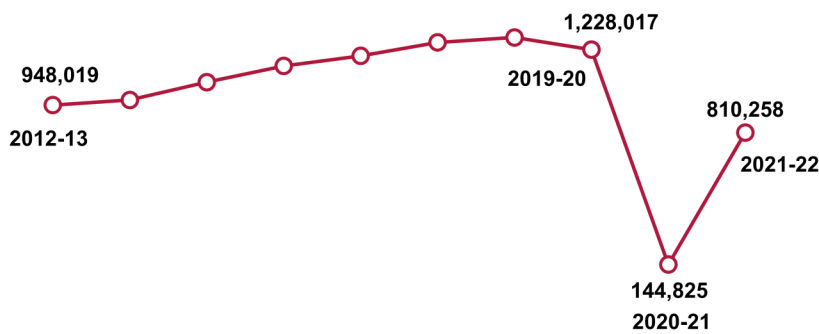
Disabled Persons Railcards and Passenger assistance

As of 31 March 2022, there were **218,448 Disabled Persons Railcards (DPRCs)** in circulation.

Disabled Persons Railcards in circulation, GB, as of financial year end (Mar 2013 to Mar 2022)



Booked passenger assists, GB, Annual (Apr 2012 to Mar 2022)



810,258 booked passenger assists in the year ending March 2022.

Up 459%

Percentage change compared with the previous year

Delay compensation claims



2,033,432 delay compensation claims were closed in the year ending March 2022.



98.9% of claims were closed within 20 working days.



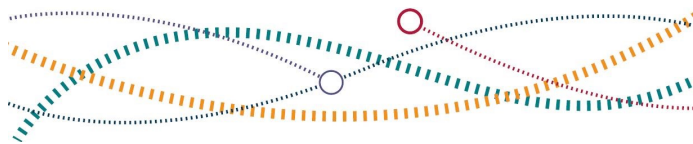
Of those claims closed, **77.4%** were approved by train operators.

Factsheets, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Disabled Persons Railcards](#)

[Passenger assistance](#)

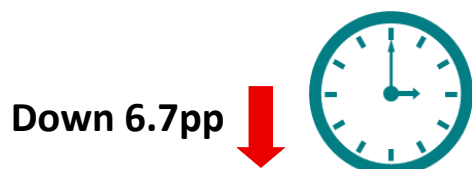
[Delay compensation claims](#)



Passenger rail performance

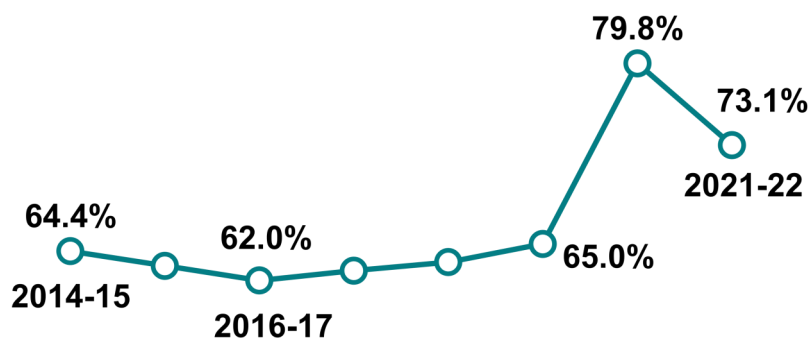
73.1% of recorded station stops in Great Britain arrived at 'On time' (early or less than one minute after the scheduled time) in the year ending March 2022.

On Time, GB, Annual (Apr 2014 to Mar 2022)



Down 6.7pp

Percentage point change compared with the previous year



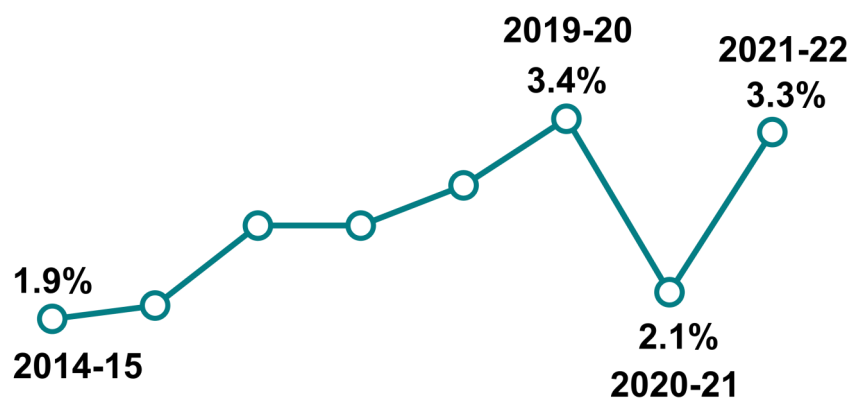
3.3% of trains classified as **Cancellations** in Great Britain in the year ending March 2022.

Cancellation score, GB, Annual (Apr 2014 to Mar 2022)



Up 1.2pp

Percentage point change compared with the previous year



The **cancellation measure** is a weighted score which counts full cancellations as one and part cancellations as half. This industry measure is an indicator of disruption on the day. It only includes trains cancelled after 22:00 the previous evening, and trains removed from the days' timetable before then may not be included.

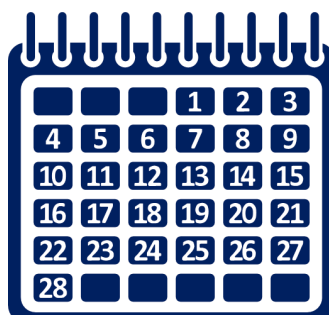
Did you know? There were 6.69 million scheduled passenger services in the year ending March 2022.

40 severely disrupted days in Great Britain in the year ending March 2022.



Up 27 days

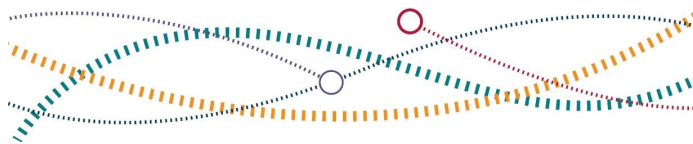
Number of days compared with the previous year



For a day to be counted as severely disrupted at the **national** level, **5%** or more of the planned services must be cancelled.

Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Passenger rail performance](#)



Rail fares index (2022)

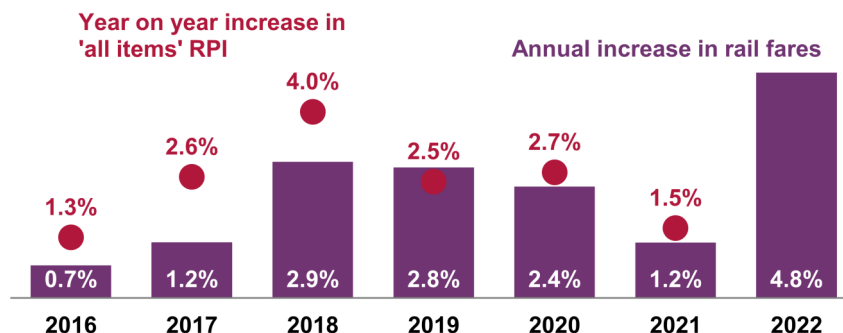
4.8% increase in rail fares across Great Britain in March 2022 compared with a 9.0% rise in the Retail Prices Index (RPI).

Percentage change in rail fares and 'all items' RPI, GB, Annual (2016 to 2022)

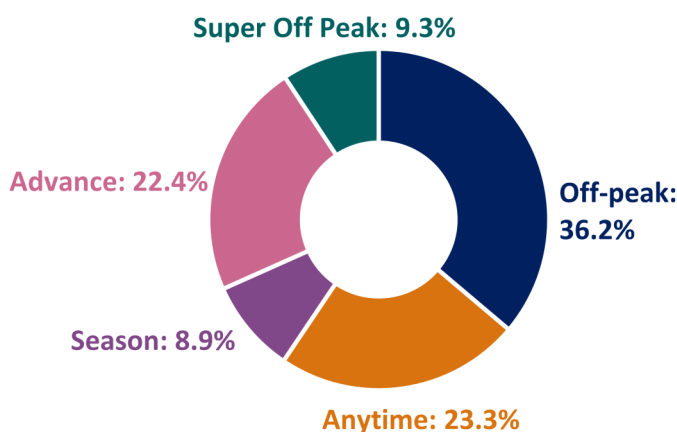
9.0%

New fares were again introduced in March 2022 rather than January.

Long distance rail fares saw the largest increase of 6.1%.



Market share of revenue by ticket type, GB, Twelve months between Mar 2021 and Feb 2022



Market share for season tickets fell to **8.9%** compared with 17.7% in the previous year.

Advanced tickets recovered to 22.4% in the year ending 31 March 2022, up from 11.8% in the previous year.

An easing of restrictions gave passengers more flexibility to amend or change their tickets may have increased confidence.

Revenue data was calculated between March 2021 and February 2022 as the rail fares index weightings are based on revenue in the twelve months preceding the implementation of new fares (March 2022).

Nominal and real terms change in regulated and unregulated fares, GB, Latest fare change (Mar 2022)

Unregulated First Class Fares



Up 11.1%



All Standard Class Fares

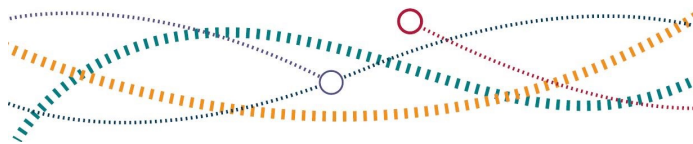


Up 4.4%



Statistical releases, data tables, methodology and quality information are available on ORR's data portal:

[Rail fares](#)



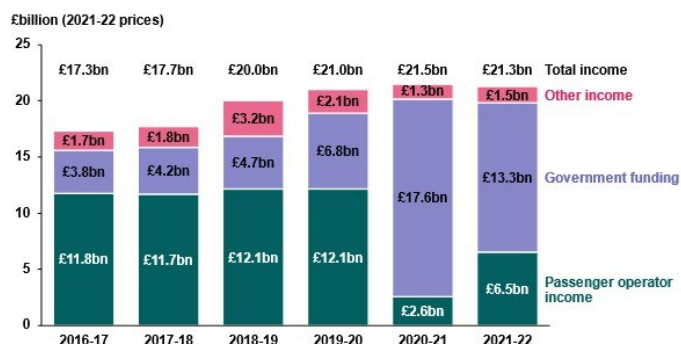
Rail industry finance (UK)

£21.3 billion total income to the rail industry in the UK in the year ending March 2022.

£ 0.9% ↓

Percentage change compared with the previous year adjusted for inflation

Rail industry income, UK, Annual (Apr 2016 to Mar 2022)



NOTE: The data are compiled from many different industry accounts. There are variations and timing differences in the basis of these accounts along with increases in inflation affecting Network Rail's finance costs, which results in the £1.5 billion difference between total income and total expenditure.

Only **27.4%** of total industry income came from fares, with **62.5%** coming from Government.

Rail industry income and expenditure by Network Rail region normalised by passenger kilometres, GB, Latest financial year (Apr 2021 to Mar 2022)

Total industry expenditure was **£22.8 billion** in the year ending March 2022, driven by an increase in Network Rail's finance costs.

3.9% ↑

Percentage change compared with the previous year adjusted for inflation



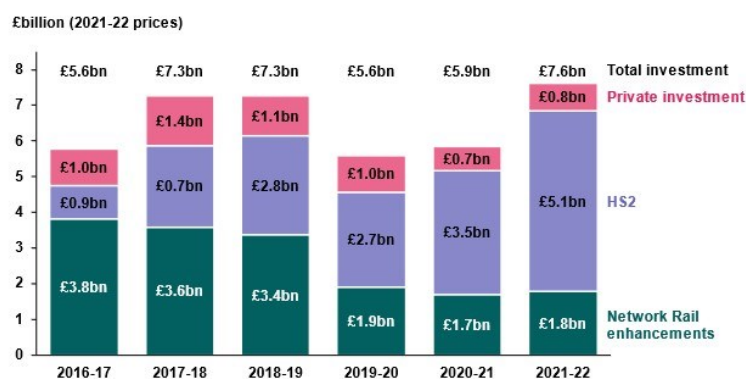
Investment in new and enhanced rail infrastructure and rolling stock **increased by £1.8 billion**.

The HS2 project account for the majority of the rise (£1.6 billion).

£ Up 30.1% ↑

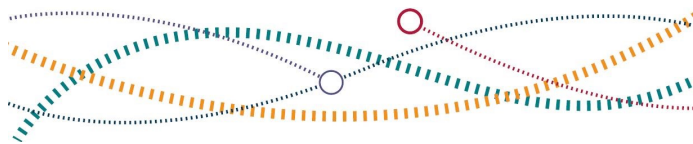
Percentage change in total investment compared with the previous year

Investment in the rail industry, GB, Annual (Apr 2016 to Mar 2022)



Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

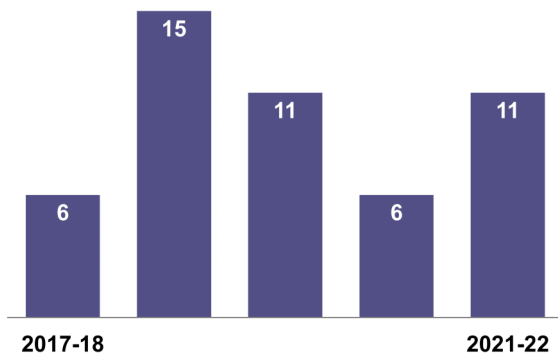
[Rail industry finance \(UK\)](#)



Rail safety

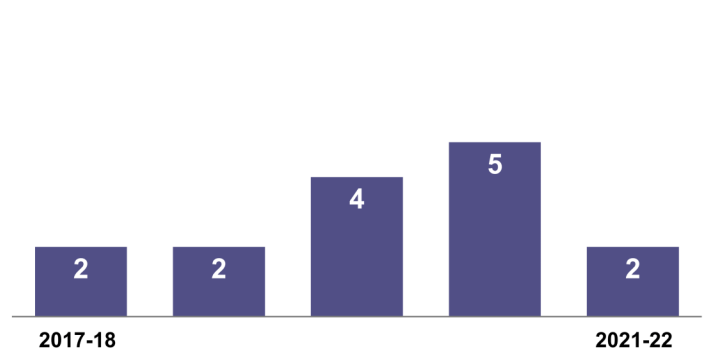
Non-workforce fatalities (passenger or public) on Great Britain’s railways, all rail networks increased to **11** in the year ending March 2022.

Rail passenger fatalities, GB, Annual (Apr 2017 to Mar 2022)



Two workforce fatalities on Great Britain’s railways, all rail networks in the year ending March 2022.

Rail workforce fatalities, GB, Annual (Apr 2017 to Mar 2022)



15 trespassing fatalities on the mainline in the year ending March 2022.

Eight fatalities at mainline level crossings in the year ending March 2022.

One fatality at a level crossing on the non-mainline network in the year ending March 2022.

261 suicide or suspected suicide attempts on the mainline and **68 suicide or suspected attempts** on the London Underground in the year ending March 2022.

476 train accidents in the year ending March 2022.

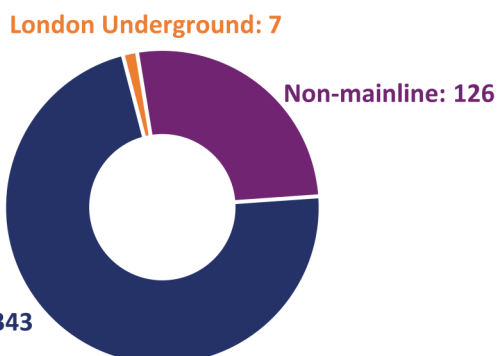


Up 31.1%



Percentage change compared with the previous year

Non-mainline includes trams, metros and other non-Network Rail networks.



Potentially high-risk train accidents (PHRTAs) on the mainline, GB, Annual (Apr 2002 to Mar 2022)

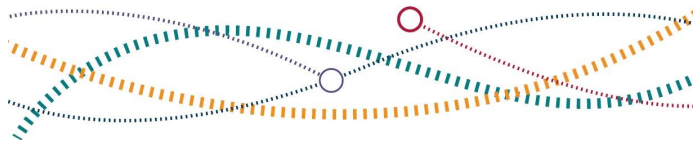


There were **14 PHRTAs** on the mainline in the year ending March 2022.

- **Five** derailments;
- **Three** collisions with road vehicles at level crossings;
- **Two** collisions between trains;
- **Two** collisions with road vehicles at other locations;
- **Two** collisions with a buffer stop.

Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR’s data portal:

[Rail safety](#)



Signals passed at danger (SPADs)

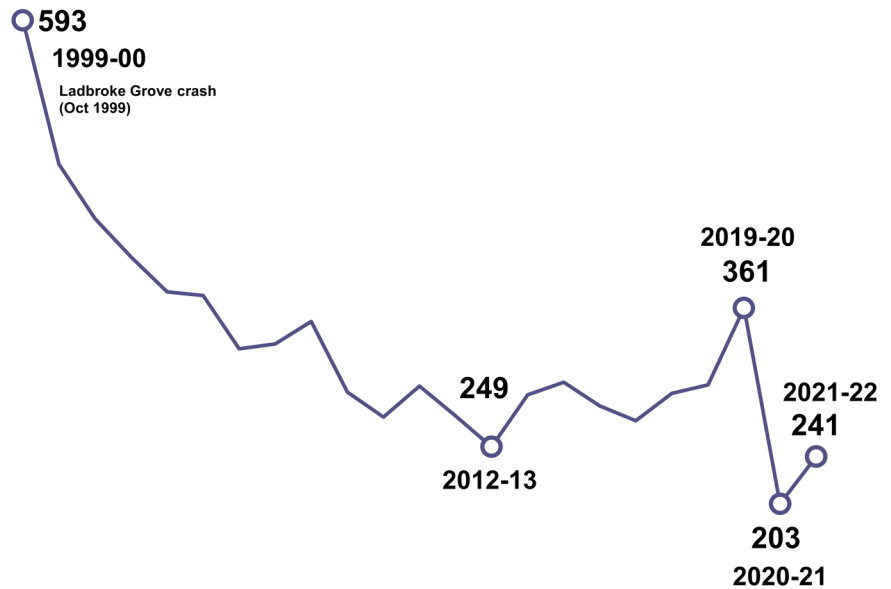
There were **241 SPADs on the mainline** in the year ending March 2022.

SPADs on the mainline, GB, Annual (Apr 1999 to Mar 2022)



Up 18.7% ↑

Percentage change compared with the previous year



Occupational health

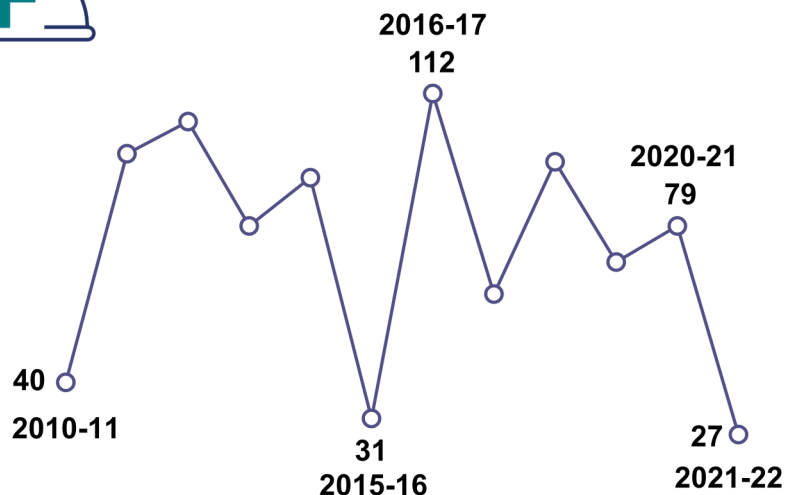
27 cases of Occupational health diseases reported in the year ending March 2022.

Occupational health diagnoses, GB, Annual (Apr 2010 to Mar 2022)



- 1 occupational asthma
- 26 hand arm vibration syndrome

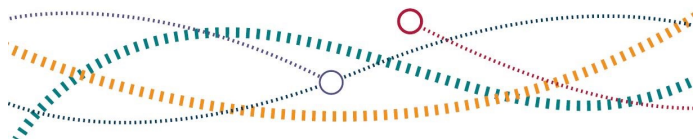
Hand arm vibration syndrome has increased by 73.3% compared with the previous year, but it is 59.4% lower than two years ago (April 2019 to March 2020).



Statistical releases, factsheets, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

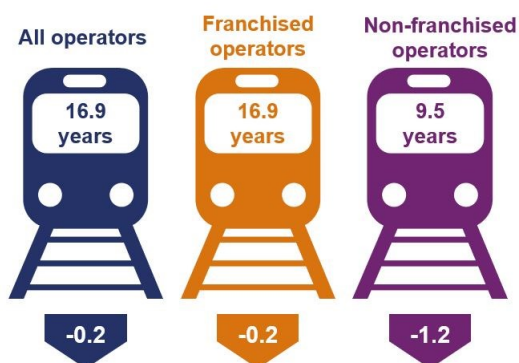
[Rail safety](#)

[Occupational health](#)

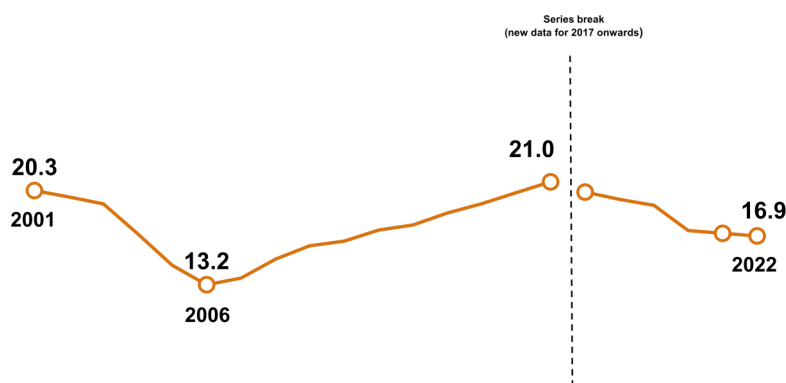


Rail infrastructure and assets

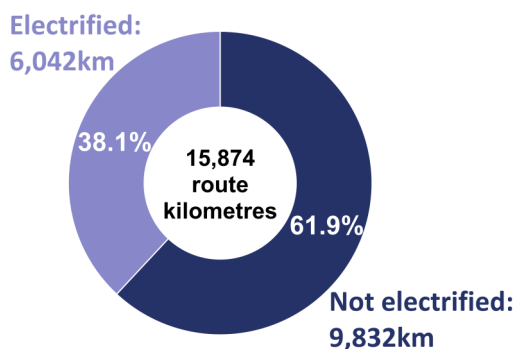
As of 31 March 2022, the **average age of passenger train operators rolling stock** in Great Britain decreased by **0.2 years** compared with 31 March 2021.



Average age of rolling stock (franchised operators), GB, as of 31 Mar each year (Mar 2001 to Mar 2022)



Electrification of the mainline, GB, as of 31 Mar 2022



One new mainline station opened between April 2021 and March 2022, **Soham**, taking the total to **2,570**.

Proportion of passenger rolling stock by traction type, Great Britain, as of 31 March 2022



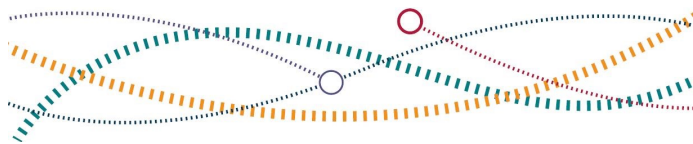
Out of the 24 passenger operators, **seven** have 100% electric fleets.



Bi-mode trains are electric trains that can be powered either by electric power from overhead lines or third rail, or by using diesel engines.

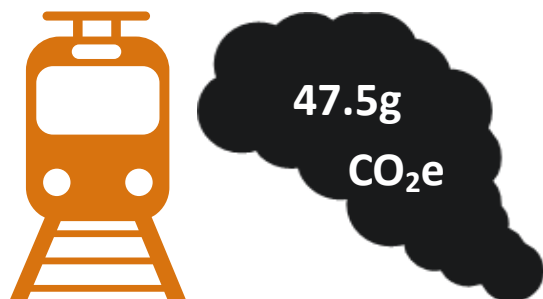
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[Rail infrastructure and assets](#)



Rail emissions

Passenger train traction emissions for year ending 31 Mar 2022



47.5g CO₂e emissions per passenger km in the year ending 31 March 2022, down 67.6% compared with the previous year.

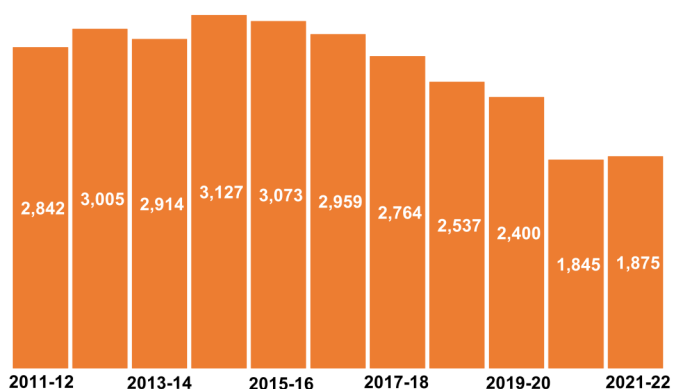
Freight train traction emissions for year ending 31 Mar 2022



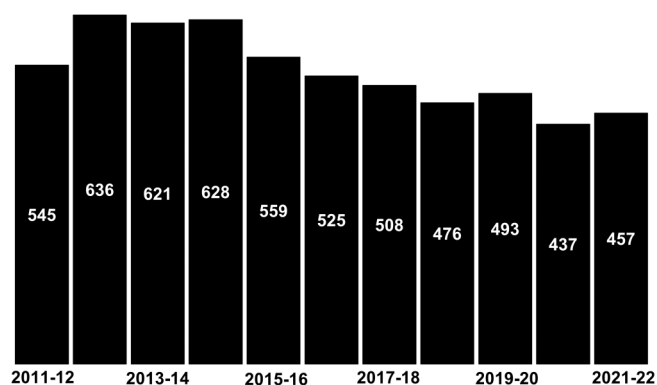
25.2g CO₂e emissions per net freight tonne km in the year ending 31 March 2022, down 5.1% compared with the previous year.

Total traction carbon dioxide equivalent (CO₂e) emissions for electricity and diesel (passenger and freight rail services combined) were 2,332 kilotonnes for the year ending March 2022. This is still 19% below the 2,893 kilotonnes recorded in the pre-pandemic year April 2019 to March 2020 and the second lowest emissions level since the start of the comparable time series in April 2011.

Carbon dioxide equivalent emissions for passenger rail services (kilotonnes), GB, Apr 2011 to Mar 2022



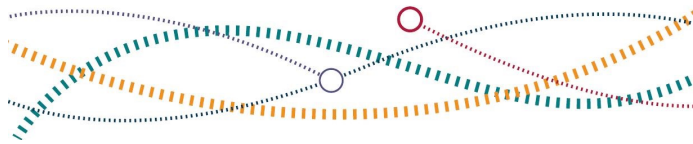
Carbon dioxide equivalent emissions for freight rail services (kilotonnes), GB, Apr 2011 to Mar 2022



Did you know? The average CO₂e per diesel vehicle km is **1400g** for passenger rail services and **598g** for freight. The average CO₂e per electric vehicle km is **358g** for passenger rail services and **211g** for freight.

Statistical releases, data tables, interactive dashboards, methodology and quality information are available on ORR's data portal:

[Rail emissions](#)



Annex 1: ORR's statistical publications

Statistical Releases

This publication is part of ORR's [National Statistics](#) accredited releases, which consist of seven annual publications: **Estimates of station usage; Rail industry finance (UK); Rail fares index; Rail safety statistics; Rail infrastructure and assets; Rail emissions; Regional rail usage;** and four quarterly publications: **Passenger rail performance; Freight rail usage and performance; Passenger rail usage; Passenger rail service complaints.**

In addition, ORR also publishes a number of Official Statistics, which consist of five annual publications: **Common Safety Indicators; Passenger satisfaction with complaints handling; Train operating company key statistics; Occupational health; Rail statistics compendium;** and four quarterly publications: **Signals passed at danger (SPADS); Delay compensation claims; Disabled Persons Railcards (DPRC); Passenger assistance.**

All the above publications are available on the [data portal](#) along with a list of [publication dates](#) for the next 12 months.

National Statistics

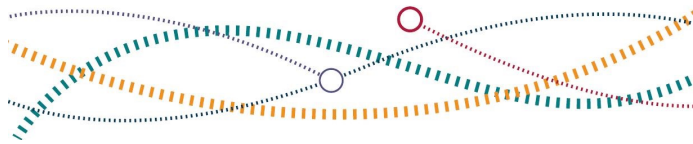
The United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. National Statistics status means that official statistics meet the highest standards of **trustworthiness, quality** and public **value**.

The majority of our [statistical releases were assessed in 2012](#) and hold National Statistics status. Since this assessment we have improved the content, presentation and quality of our statistical releases. In addition, in July 2019 we launched our new data portal.

Therefore, in late 2019, we worked with the [Office for Statistics Regulation](#) (OSR) to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, [OSR published a letter](#) confirming that ORR's statistics should continue to be designated as National Statistics. OSR found many positive aspects in the way that we produce and present our statistics and welcomed the range of improvements made since the statistics were last assessed.

[Estimates of Station Usage statistics were assessed in 2020](#) .

For more information on how we adhere to the Code please see our [compliance statements](#) . For more details or to provide feedback, please contact the Statistics Head of Profession (Lyndsey Melbourne) at rail.stats@orr.gov.uk.



Annex 2: Related statistics by other organisations

Department for Transport:

- [Rail passenger numbers and crowding statistics](#)
- [Rail delays and compensation](#)
- [Rail passenger compensation paid](#)
- [Daily estimates of transport use by mode](#)
- [National Travel Survey](#)
- [Public transport statistics](#)
- [Multimodal freight statistics](#)

Network Rail:

- [Network Rail information and data our stations](#)
- [Annual Return](#)
- [Regulatory financial statements](#)

Transport Focus:

- [National Rail Passenger Survey](#)

Rail Ombudsman:

- [Statistical reports on complaint referrals](#)

Rail Safety and Standards Board:

- [Annual Health and Safety Report](#)

HM Treasury:

- [Country and regional analysis](#)

European:

- [IRG-Rail - Annual market Monitoring Report](#)
- [UNECE – Rail Traffic Census](#)
- [Eurostat – Transport Statistics](#)



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