Rail Statistics Compendium 2019-20 Annual

Publication Date: 8 December 2020

Next publication date: December 2021

Passenger journeys = 1.745 billion

Trains cancelled = 3.4%

Passenger kilometres = 66.7 billion

Fares increase = 2.4%

Freight moved = 16.6 billion net tonne kilometres

UK rail income = £20.1 bn

Busiest station = Waterloo (86.9m entries and exits)

Train accidents = 534

Complaints = 30.6 per 100,000 journeys

Route = 15,904km (38% electrified)

On time trains (early or less than 1 minute late) = 64.8%

Number of stations = 2,567

Background

This annual compendium publication contains a summary of the statistical releases published by ORR for 2019-20. Full copies of the individual releases and accompanying data tables can be found on ORR's data portal.
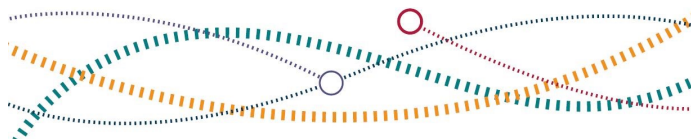
Sources: A range of industry bodies including Network Rail, passenger and freight operators and Department for Transport.

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

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Website: ORR data portal

COVID-19

This annual compendium covers statistics for the railway between 1 April 2019 and 31 March 2020. Therefore, they do not show the full impact of COVID-19 on the rail network.

On 16 March, the government advised against all unnecessary travel in order to limit the impact and transmission of COVID-19. On 23 March, the government issued further guidance on 'staying at home'.

Although this covered a small timeframe, there may have been some changes in passenger behaviour in the lead up to any formal announcements. The effect of COVID-19 can be seen within some of our statistics for 2019-20 but we expect a more noticeable impact in next year's release covering 2020-21, some of which we have seen already in our quarterly statistics.

Passenger rail usage

Up to the end of 2019-20 Q3 (April 2020 to December 2020), passenger journeys had increased by 2.8% compared to the same time period in 2019. By the end of March, passenger journeys for 2019-20 had fallen 0.8% compared to 2018-19. **Estimates of station usage** statistics have seen a similar effect in that the fall in usage at stations is mostly due to the impact of COVID-19.

From 2020-21 Q1, we applied a new methodology on certain ticket types to estimate passenger rail usage and usage is at historically low levels. Quarterly statistics for 2020-21 are published on our Passenger rail usage page of the ORR data portal.
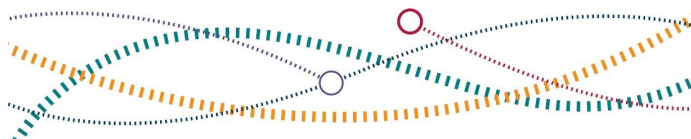
Freight rail usage and performance

The impact of COVID-19 on freight volumes in 2019-20 were not as pronounced as those seen in the passenger market. Between April 2020 and December 2020, freight moved had fallen by 3.9% compared to the same period in 2019 and ended the year 4.6% down on 2019-20.

During the first quarter of 2020-21 usage and performance was affected further. The lower number of passenger and freight train services in operation led to improvements in freight performance, whilst freight volumes declined. Quarterly statistics for 2020-21 are published on our Freight rail usage and performance page of the ORR data portal.

Passenger rail performance

The impact of COVID-19 on performance during 2019-20 was small. However, we have since seen a significant impact on Q1 and Q2 2020-21 with improvements in both punctuality and reliability due to reductions in train services and usage. Quarterly statistics for 2020-21 are published on our Passenger rail performance page of the ORR data portal.

COVID-19

Passenger rail service complaints

This release uses passenger journey information to calculate a complaints rate (complaints per 100,000 journeys). The complaints rate figures for 2019-20 Q4 should be treated with caution as a result of the drop in passenger journey numbers. Further details of the impact of COVID-19 on our complaint statistics can be found in our [Passenger rail service complaints release (2019-20 Q4)](#)

Due to the effect of the passenger journey number on the complaints rate, we have switched focus to complaint volumes from 2020-21 Q1. Nationally there were 40,659 complaints closed in 2020-21 Q1, this represents a decrease of 63.0% compared to 2019-20 Q1. Quarterly statistics for 2020-21 are published on our [Passenger rail service complaints page](#) of the ORR data portal.
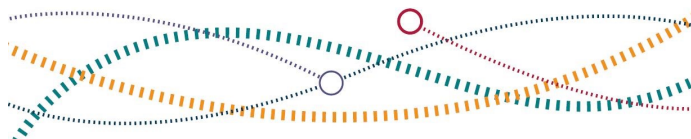
Passenger assistance

Between 1 March and 31 March 2020 (railway period 13) the number of assists declined by 44.8% compared to period 13 in 2019. This contributed to a 5.2% fall in the annual number of assists between 2019-20 and 2018-19.

Whilst the magnitude of the year-on-year fall has been increased by the effect of COVID-19 in period 13, data between 1 April 2019 and 29 February 2020 and the corresponding period in 2018-19 also showed a drop of 2.4%.

During 2020-21 rail periods 1 to 4 (1 April 2020 to 25 July 2020), there was a 95.1% decrease in booked passenger assists made compared to the same rail periods in 2019-20. The latest statistics for 2020-21 are published on our [Passenger assistance page](#) of the ORR data portal.

Rail industry finance

Total UK rail industry income in 2019-20 was £20.1bn, a 5.3% increase from 2018-19. However, fares income (£10.4bn) dropped by 1.1% which was largely due to the impact of COVID-19 at the end of the financial year. Rail usage levels have since dropped to historic lows, which has had a significant impact on rail industry finances. More information on the impact of COVID-19 on rail finance for 2020-21 so far can be found in chapter 2 of [Rail Industry Finance (UK) statistical release](#).

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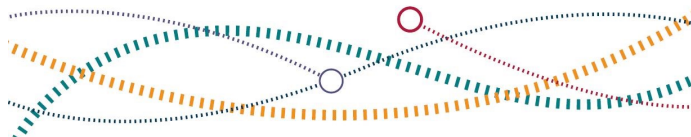
Passenger rail usage: 2019-20

Passenger journeys in Great Britain fell to **1.745** billion in 2019-20.

1.745bn

-0.8% ↓

Percentage change compared to 2018-19

Did you know?

The average length of a rail journey in Great Britain is 38.2 kilometres

Passenger journeys, Great Britain, 1950 to 2019-20

1.745
2019-20

Journeys almost doubled in the last 20 years

Steady decline coinciding with growth in car ownership

1.010
1950

0.630

0.735

1994-95
Rail industry privatised

1982

Annual **passenger revenue** fell for the first time since 2000-01.

£10.3 bn

-0.3% ↓

Percentage change compared to 2018-19

Passenger revenue by sector, Great Britain, 2019-20

Non-Franchised: £79 million

Regional: £1.6 bn

Long Distance: £3.4 bn

London & South East: £5.1 bn
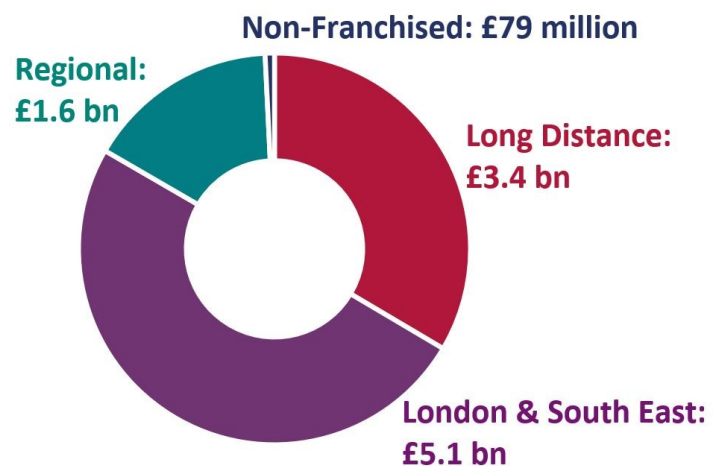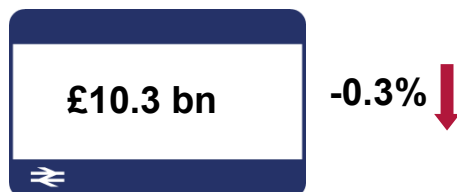
66.7 billion **passenger kilometres** travelled on Great Britain's rail network in 2019-20.

-1.3% ↓

Percentage change compared to 2018-19

550.8 million **passenger train kilometres** in 2019-20, up by more than 20 million compared to 2018-19.

**3.9%** ↑

Percentage change compared to 2018-19

Statistical releases, data tables, an interactive dashboard, methodology and quality information is available on the data portal's Passenger rail usage page
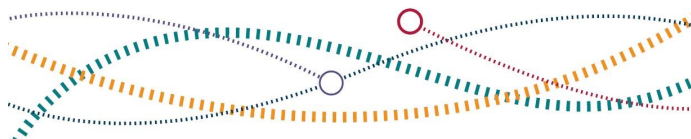
Regional rail usage: 2018-19*

1.520 billion **regional passenger journeys** on Great Britain's rail network in 2018-19, an increase of 3.0% compared to 2017-18.

Passenger journeys (millions) to/from and within Regions, Great Britain,1995-96 to 2018-19

Total journeys

1,520

Within Regions

1,023

To/from other Regions

497

589
380
209

1995-96
2018-19
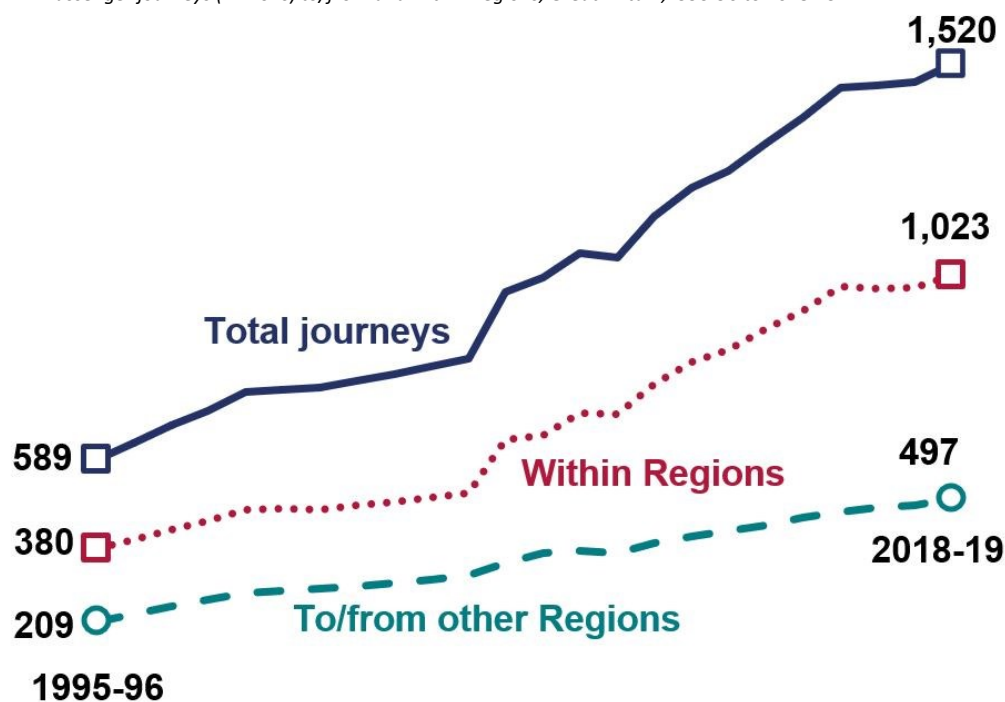
* 2019-20 Regional rail usage data will be published in January 2021.
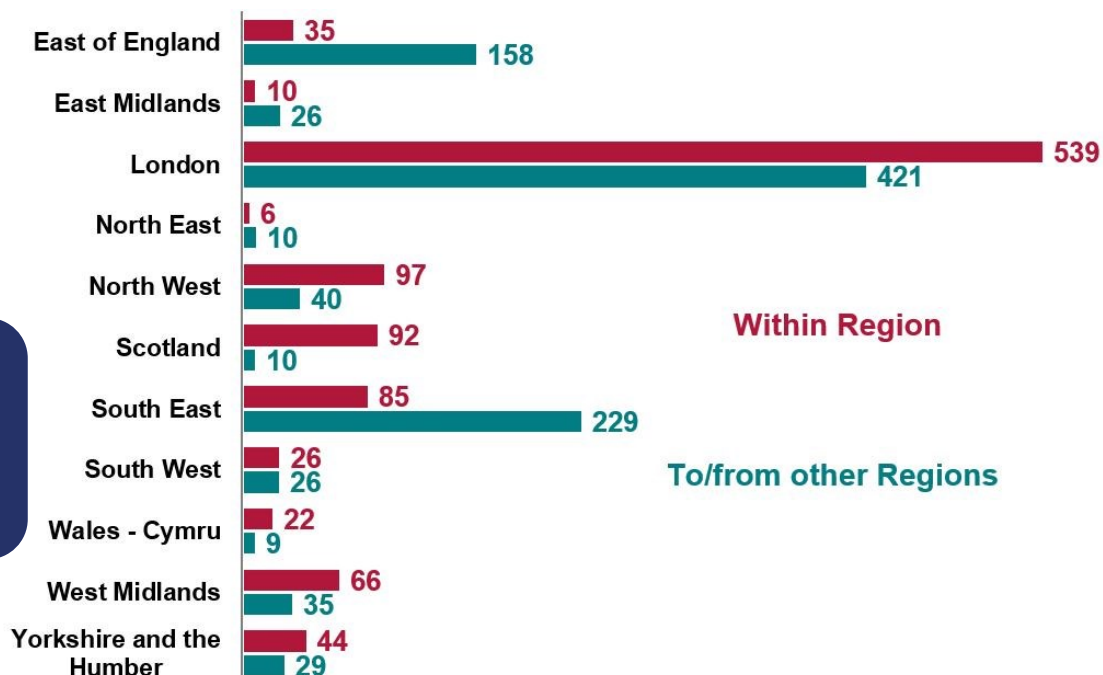
Notes:
Regional passenger journeys are based on the origin and destination named on a ticket and do not take into account any changes of train. It therefore produces slightly lower estimates than the total journeys published in the passenger rail usage statistical release.

Total **journeys** increased for all Regions except South West and Yorkshire and the Humber.

Did you know?
London is the start and/or end point for almost two thirds of rail journeys in GB.

Passenger journeys (millions) to/from and within Regions, Great Britain, 2018-19

Region	Within Region	To/from other Regions
East of England	35	158
East Midlands	10	26
London	539	421
North East	6	10
North West	97	40
Scotland	92	10
South East	85	229
South West	26	26
Wales - Cymru	22	9
West Midlands	66	35
Yorkshire and the Humber	44	29

Statistical releases, data tables, methodology and quality information is available on the data portal's Regional rail usage page
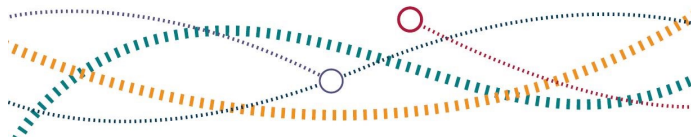
Freight rail usage and performance: 2019-20

16.6 billion net tonne kilometres of **freight moved** in 2019-20, the lowest total recorded since 1996-97
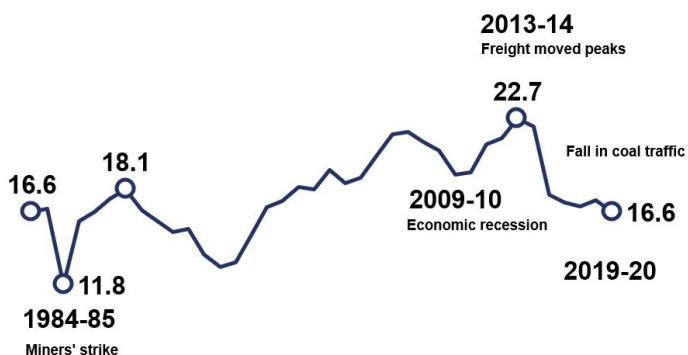
-4.6% ↓
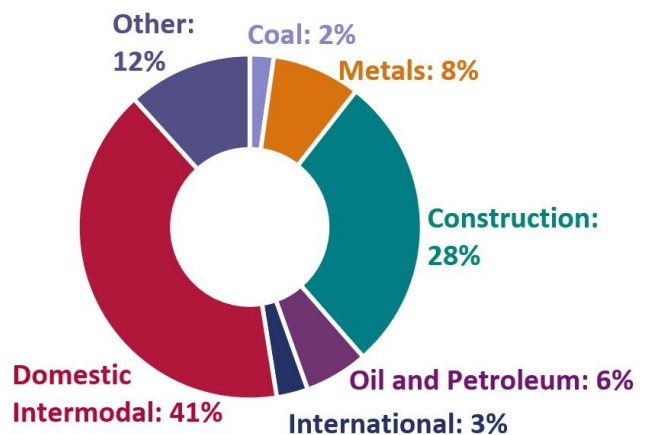
Percentage change compared to 2018-19

Did you know?

On average, a rail freight train transports 333 tonnes of freight.

Market share of freight moved commodities, Great Britain, 2019-20

Other: 12%
Coal: 2%
Metals: 8%
Construction: 28%
Oil and Petroleum: 6%
International: 3%
Domestic Intermodal: 41%

Freight moved (billion net tonne km), Great Britain, 1982-83 to 2019-20

16.6

18.1

2013-14
Freight moved peaks

22.7

Fall in coal traffic

2009-10
Economic recession

16.6
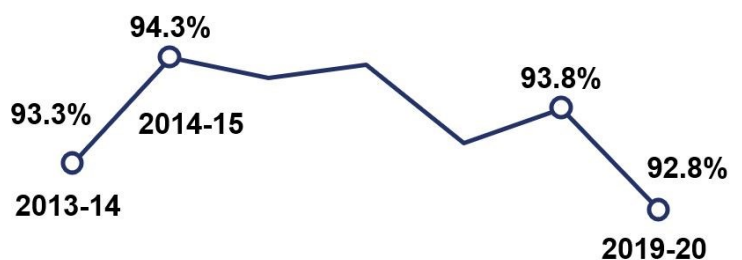
2019-20

11.8

1984-85
Miners' strike

There were **209,281 freight train movements** in 2019-20; the lowest number of annual freight trains on the network since the time series started in 2003-04.

*Number of freight train movements, Great Britain, 2003-04 to 2019-20*

416,053

455,561

2005-06
Freight train volumes peak before falling for five consecutive years

2013-14
Three years of growth coinciding with peak level of freight moved

265,559

288,371

2010-11

209,281
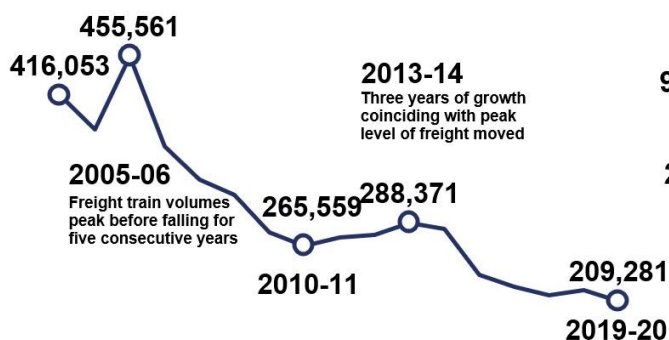
2019-20

92.8% of freight trains arrived within 15 minutes of their scheduled arrival time in 2019-20.

Freight Delivery Metric (FDM), Great Britain, 2013-14 to 2019-20

94.3%

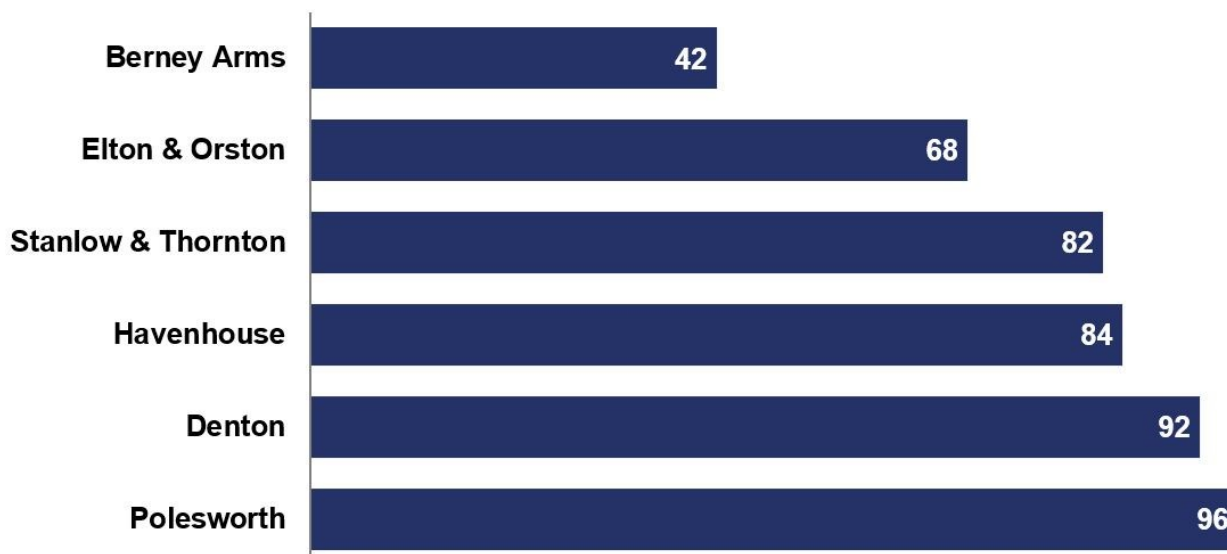**2014-15**

93.3%

2013-14

93.8%

92.8%

2019-20

Statistical releases, data tables, an interactive dashboard, methodology and quality information is available on the data portal's Freight rail usage and performance page
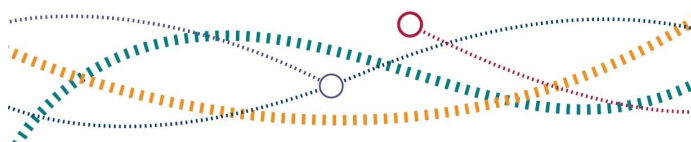
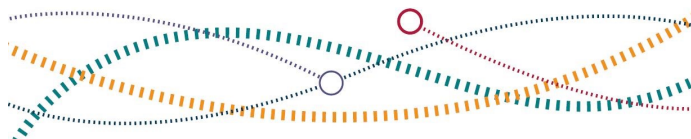# Estimates of station usage: 2019-20

Top 10 stations in Great Britain	Total entries & exits 19-20
London Waterloo	86,903,518
London Victoria	73,559,158
London Liverpool Street	65,984,786
London Bridge	63,095,300
Birmingham New Street	46,510,526
London Paddington	44,871,096
London Euston	44,776,804
Stratford (London)	41,912,114
London St Pancras Intl.	36,040,080
London Kings Cross	32,532,404

Stations with fewer than 100 entries and exits

Station	Entries and exits
Berney Arms	42
Elton & Orston	68
Stanlow & Thornton	82
Havenhouse	84
Denton	92
Polesworth	96

Statistical releases, data tables, infographics, videos, FAQs, quality and methodology report and an interactive dashboard can be found on the data portal's Estimates of Station Usage page

Passenger rail service complaints: 2019-20

There were **30.5 complaints per 100,000 journeys** in 2019-20 for franchised operators.
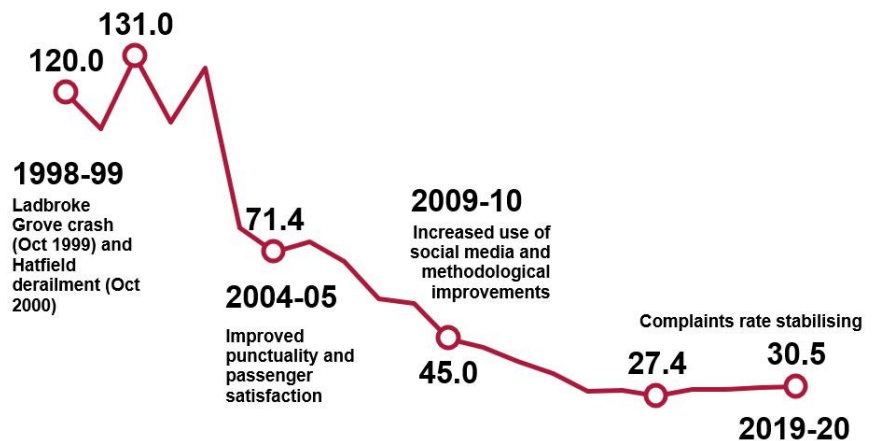
1.0% ⬆

Percentage change compared to 2018-19

Did you know?

There were more than half a million complaints made to train operators in 2019-20.

*Complaints per 100,000 journeys, Great Britain, 1998-99 to 2019-20*

120.0

131.0

1998-99
Ladbroke Grove crash (Oct 1999) and Hatfield derailment (Oct 2000)

71.4

2004-05
Improved punctuality and passenger satisfaction

2009-10
Increased use of social media and methodological improvements

45.0

Complaints rate stabilising

27.4

30.5

2019-20

Type of complaint	% of all complaints	Percentage point change compared to 2018-19
Punctuality/reliability	24%	1.8
Facilities on board	10%	0.9
Sufficient room for all passengers to sit/stand	8%	-0.5
Ticketing & refunds policy	6%	0.3
Other ticket buying facilities – online ticket sales	6%	1.6

Almost a quarter of all complaints made to train operators in 2019-20 were about punctuality or reliability of trains.
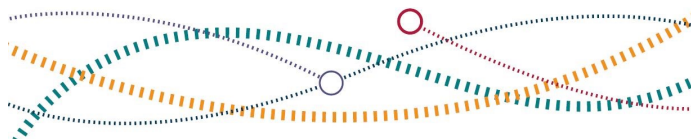
94.7% of complaints were **responded to within 20 working days** in 2019-20.

16 out of 23 train operators achieved the industry standard of **95%**.

Percentage of complaints responded to within 20 working days, 2015-16 to 2019-20
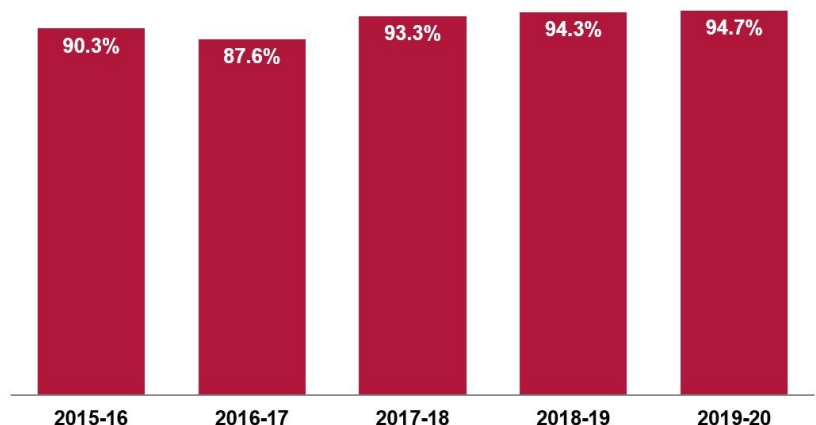
2015-16	2016-17	2017-18	2018-19	2019-20
90.3%	87.6%	93.3%	94.3%	94.7%

Statistical releases, data tables, an interactive dashboard, methodology and quality information is available on the [data portal's Passenger rail service complaints page](#)

Disabled Persons Railcards and Passenger assistance: 2019-20

There were **246,336**

Disabled Persons Railcards (DPRCs) in circulation at the end of 2019-20.

3.1% ⬆

Percentage change compared to 2018-19

Disabled Persons Railcards in circulation at end of year, Great Britain, 2012-13 to 2019-20

246,336

2019-20

Lowest growth rate since time series began in 2012-13

Annual increase each year since 2012-13

144,829

2012-13

Booked passenger assists, Great Britain, 2012-13 to 2019-20

1,221,816

2019-20

First annual drop in number of passenger assists

948,019

2012-13

1.2 million booked **passenger assists** in 2019-20.

-5.2% ⬇

Percentage change compared to 2018-19

Delay compensation claims: 2019-20

6.3 million **delay compensation claims** were closed in 2019-20.

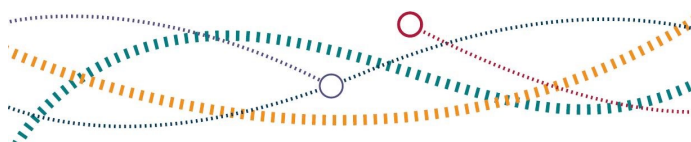**98.6%** of **claims** were closed within 20 working days.

Of those claims closed, **84.2%** 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](#)

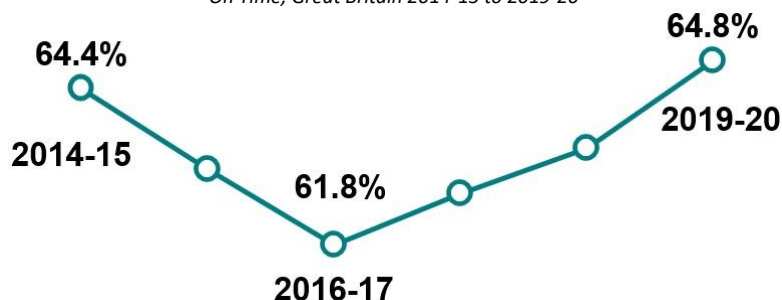# Passenger rail performance: 2019-20

64.8% of recorded station stops in Great Britain arrived at '**On time**' (early or less than one minute after the scheduled time) in 2019-20.

1.4pp ⬆

Percentage point change compared to 2018-19

On Time, Great Britain 2014-15 to 2019-20

64.4%
2014-15
61.8%
2016-17
64.8%
2019-20

Did you know?
There were 7.8 million scheduled passenger services in 2019-20

3.4% of trains classified as **Cancellations** in Great Britain in 2019-20.

0.5pp ⬆

Percentage point change compared to 2018-19

This measure is a weighted score which counts full cancellations as one and part cancellations as half, presented as a percentage of all planned trains.

Cancellations, Great Britain, 2014-15 to 2019-20

1.9%
2014-15
3.4%
2019-20

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41 severely disrupted days in Great Britain in 2019-20.
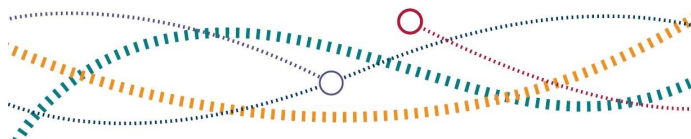
19 days ⬆
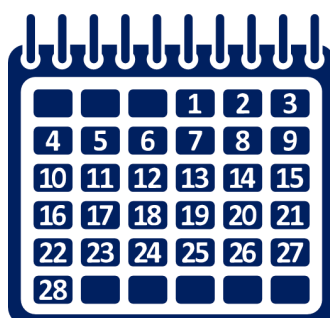
Number of days compared to 2018-19

*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, an interactive dashboard, methodology and quality information is available on the data portal's Passenger rail performance page
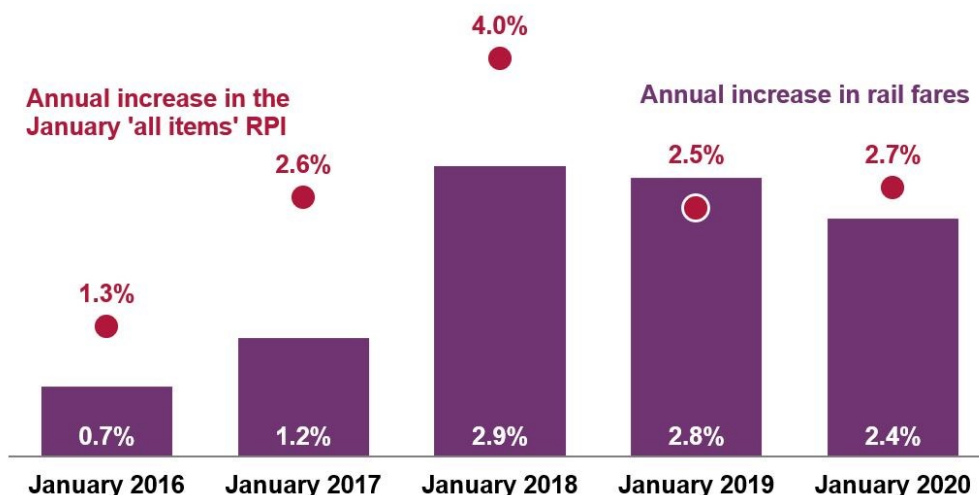
Rail fares index: January 2020

2.4% annual increase in **rail fares** in Great Britain in January 2020 compared with a 2.7% rise in the Retail Prices Index (RPI).

Fourth time in five years that fares have risen below the January RPI rate.

Percentage change in rail fares and 'all items' RPI, Great Britain, January 2020

Annual increase in the January 'all items' RPI

Annual increase in rail fares

	1.3%	2.6%	4.0%	2.5%	2.7%
	0.7%	1.2%	2.9%	2.8%	2.4%
	January 2016	January 2017	January 2018	January 2019	January 2020

Market share by ticket type (£) and percentage change compared to January 2019, Great Britain, 2019-20
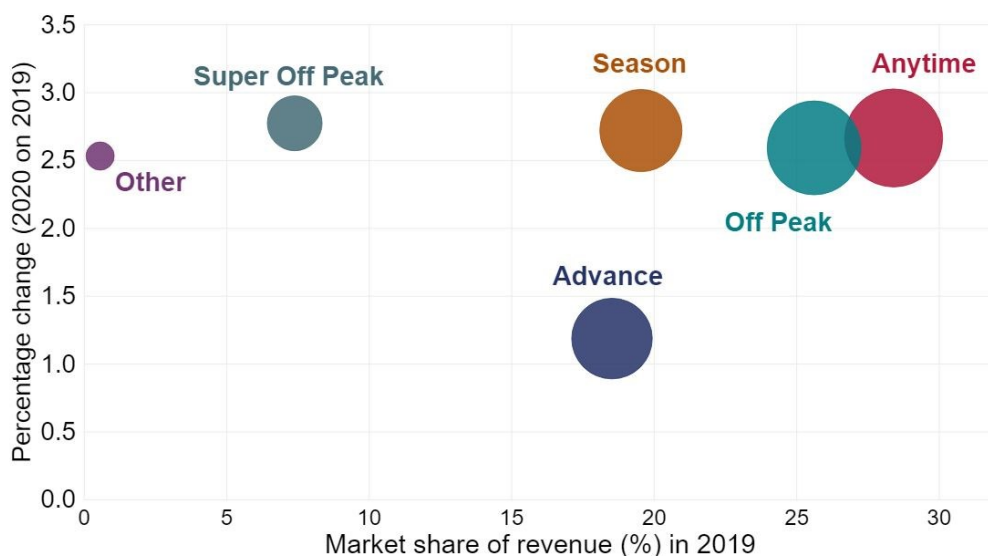

19.5% market share for season tickets in 2019.

Season ticket market share has fallen in each of the last four years.

Nominal and real terms change in regulated and unregulated fares, Great Britain, January 2020

Standard Class Regulated*

2.7% Compared to January 2019

0.0% Real term change on 2019

* Regulated increases were capped at 2.8% in January 2020.

First Class Unregulated

2.8% Compared to January 2019

0.1% Real term change on 2019

Standard Class Unregulated

2.1% Compared to January 2019

0.6% Real term change on 2019

Statistical releases, data tables, methodology and quality information is available on the data portal's Rail fares page
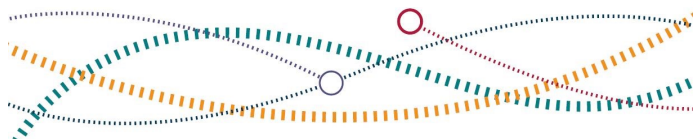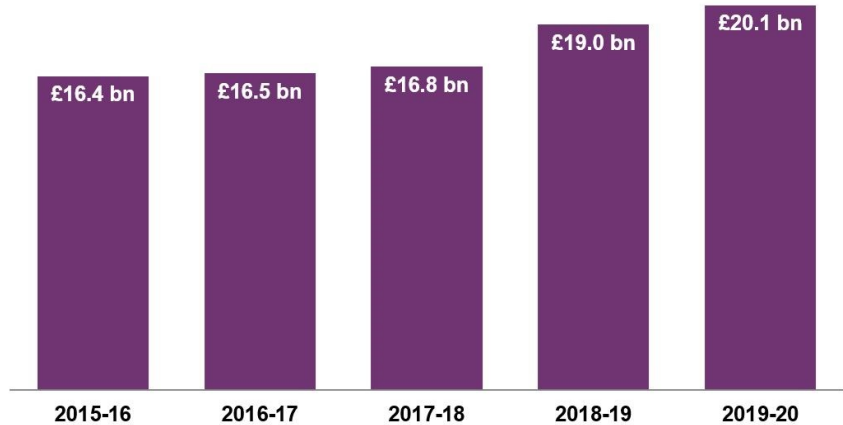
Rail industry finance (UK): 2019-20

£20.1 billion **total income** to the rail industry in the UK in 2019-20.
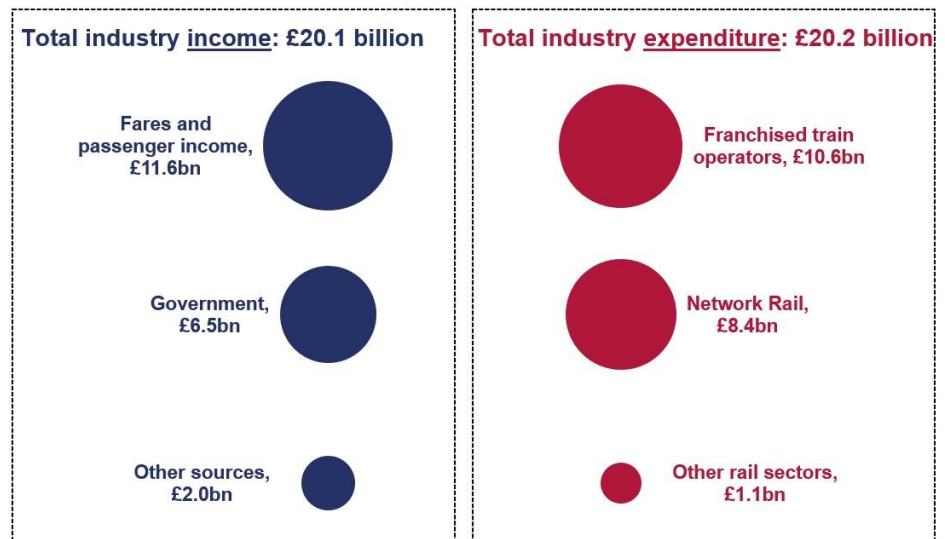
5.3% ⬆

Percentage change compared to 2018-19

Rail industry income (2019-20 prices), United Kingdom, 2015-16 to 2019-20

2015-16	2016-17	2017-18	2018-19	2019-20
£16.4 bn	£16.5 bn	£16.8 bn	£19.0 bn	£20.1 bn

58% of **total industry income** comes from fares and passenger income, with just under a third coming from Government.

Total industry expenditure was **£20.2** billion in 2019-20.
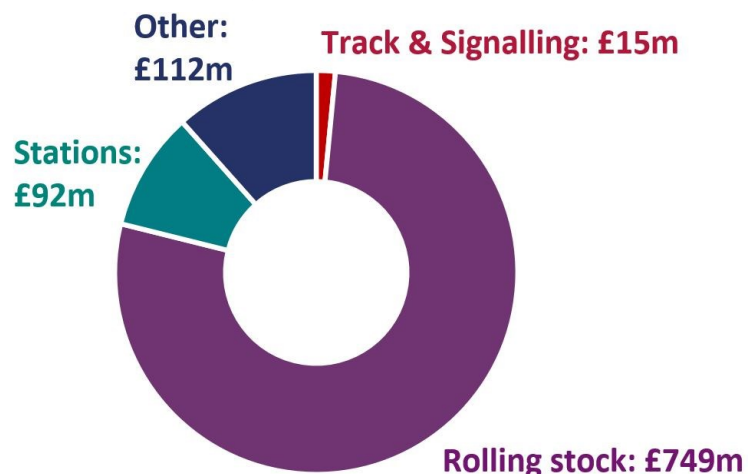
4.0% ⬆

Percentage change compared to 2018-19

Rail industry income and expenditure (2019-20 prices), United Kingdom, 2019-20

Total industry income: £20.1 billion

- Fares and passenger income, £11.6bn
- Government, £6.5bn
- Other sources, £2.0bn

Total industry expenditure: £20.2 billion

- Franchised train operators, £10.6bn
- Network Rail, £8.4bn
- Other rail sectors, £1.1bn

£1.0 billion invested by **Private companies** in the rail industry in 2019-20.

-9.3% ⬇

Percentage change compared to 2018-19

Private investment in the rail industry (excludes Network Rail investment), Great Britain, 2019-20

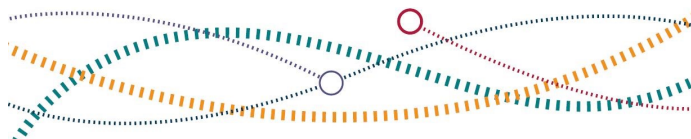- Other: £112m
- Track & Signalling: £15m
- Stations: £92m
- Rolling stock: £749m

Statistical releases, data tables, an interactive dashboard, methodology and quality information is available on the data portal's Rail industry finance (UK) page
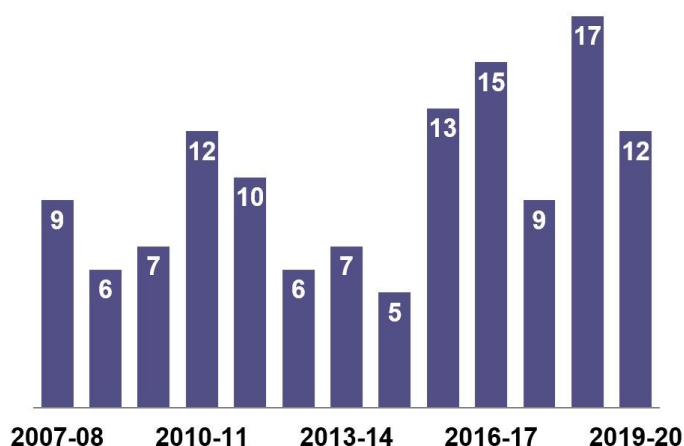
Rail safety: 2019-20

Passenger fatalities on Great Britain's railways decreased to **12** in 2019-20.

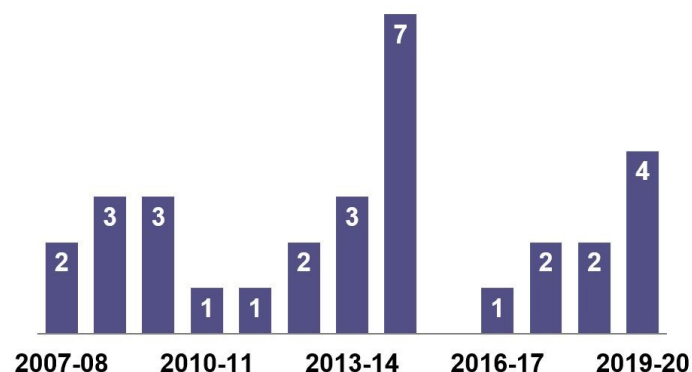**7** passenger fatalities on mainline network.

5 passenger fatalities on London Underground.

Rail passenger fatalities, Great Britain, 2007-08 to 2019-20

There were **4 workforce fatalities** in 2019-20.

Rail workforce fatalities, Great Britain, 2007-08 to 2019-20

There were **331 Public fatalities** in 2019-20.

304 public fatalities on mainline network.

25 public fatalities on London Underground.
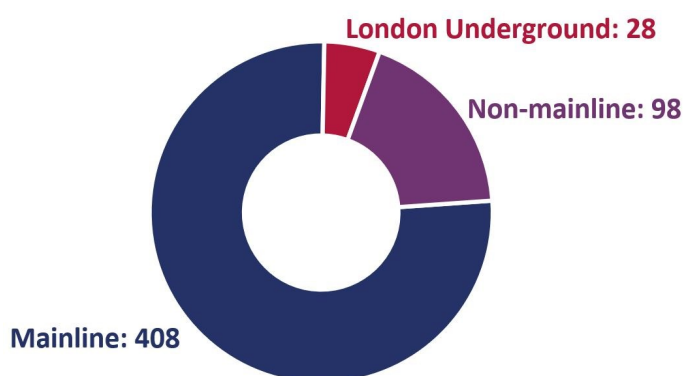
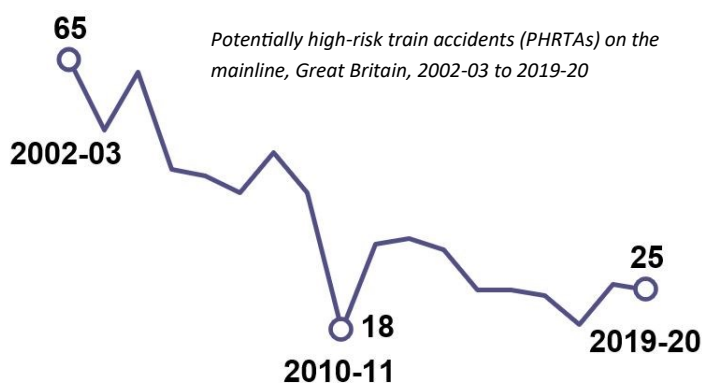**2** public fatalities on non-mainline networks.

534 train accidents in 2019-20.

2.3% ↑

Percentage change compared to 2018-19

Train accidents by network, Great Britain, 2019-20

London Underground: 28

Non-mainline: 98

Mainline: 408

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

Potentially high-risk train accidents (PHRTAs) on the mainline, Great Britain, 2002-03 to 2019-20

There were **25 PHRTAs** on the mainline railway in 2019-20:

- **5** train collisions;
- **10** derailments;
- **8** collisions with road vehicles; and
- **2** collisions with buffer stops

Statistical releases, data tables, an interactive dashboard, methodology and quality information is available on the **data portal's Rail Safety page**
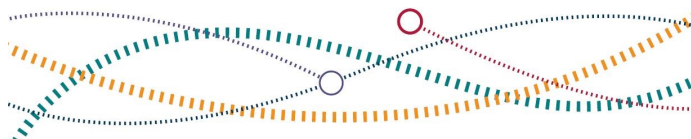
Signals passed at danger (SPADs): 2019-20

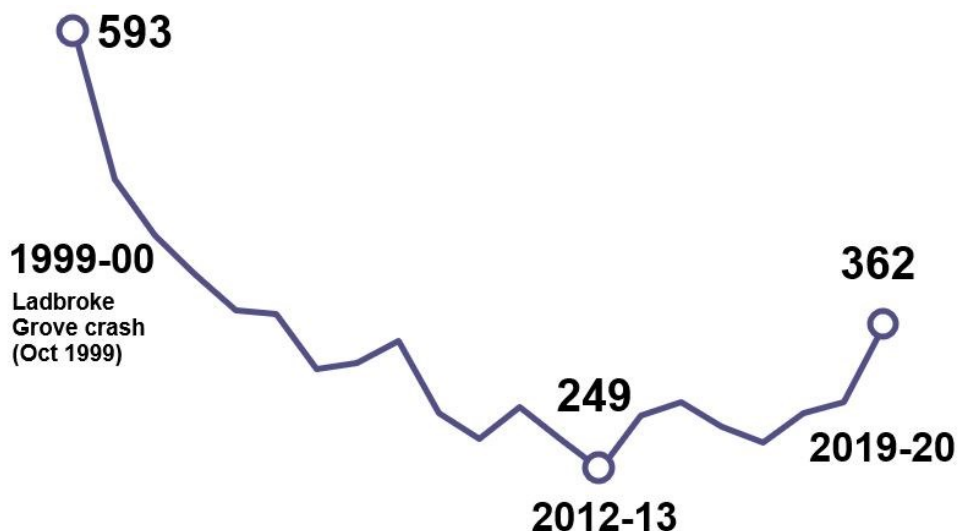There were **326 SPADs on the mainline railway** in 2019-20.

This is the highest number recorded since 2004-05.

19.9% ▲

Percentage change compared to 2018-19

SPADs on the mainline railway, Great Britain, 1999-00 to 2019-20

593

1999-00
Ladbroke
Grove crash
(Oct 1999)
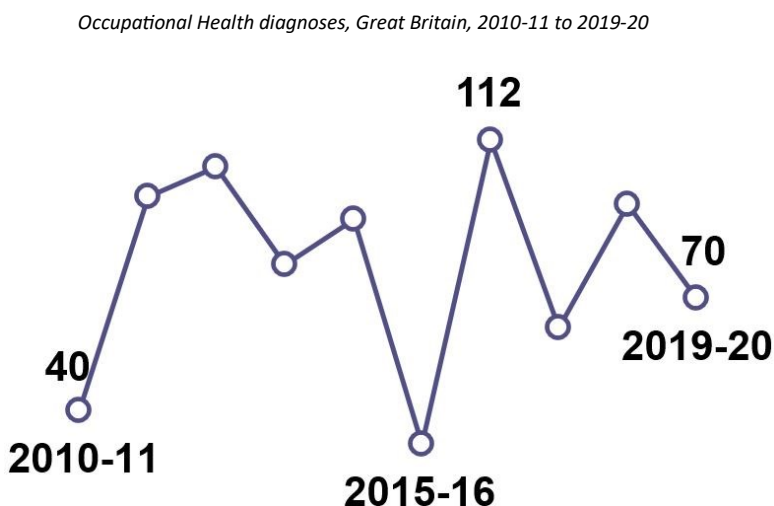
362

249

2019-20

2012-13

Occupational Health: 2019-20

70 cases of **Occupational Health diseases** reported in 2019-20.

Of the cases reported, over 90% are Hand Arm Vibration Syndrome (HAVS)

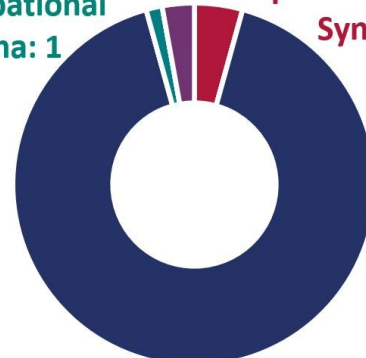*Occupational Health diagnoses by type, Great Britain, 2019-20*

Occupational Health diagnoses, Great Britain, 2010-11 to 2019-20

112

70

2019-20

40

2010-11

2015-16

Tendonitis or Tenosynivitis: 2

Occupational Asthma: 1

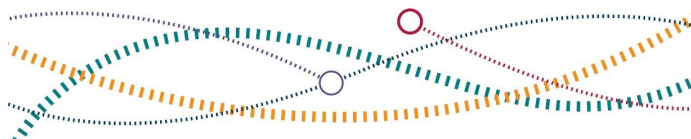**Carpal Tunnel Syndrome: 3**

Hand Arm Vibration Syndrome: 64

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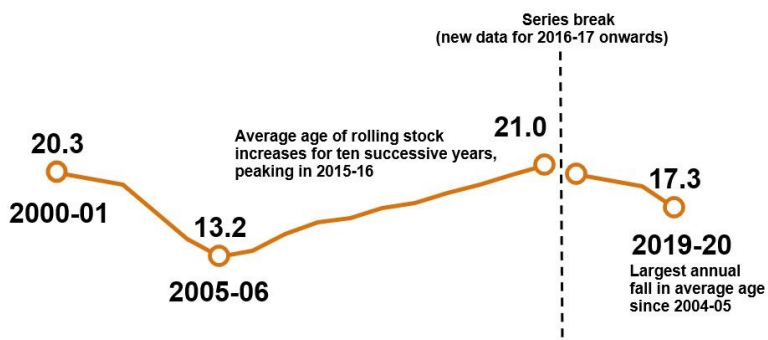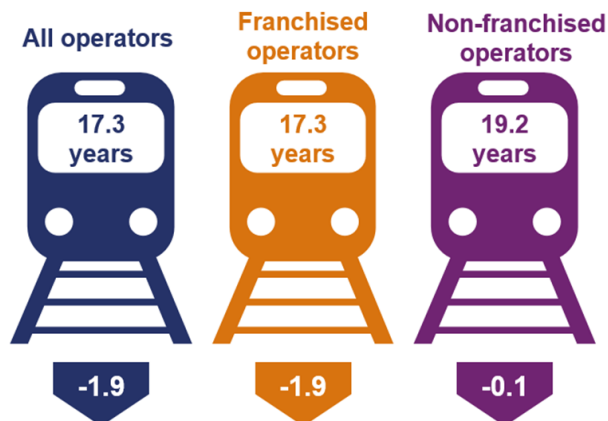
Rail safety

Occupational Health

Rail infrastructure and assets: 2019-20

Average age of rolling stock in Great Britain decreased by **1.9** years since 2018-19 to **17.3** years.

All operators
17.3 years
-1.9

Franchised operators
17.3 years
-1.9

Non-franchised operators
19.2 years
-0.1

Average age of rolling stock (franchised operators), Great Britain, 2000-01 to 2019-20

Series break (new data for 2016-17 onwards)

20.3
2000-01

Average age of rolling stock increases for ten successive years, peaking in 2015-16

21.0

13.2
2005-06

17.3
2019-20 Largest annual fall in average age since 2004-05

Did you know?
In 2019-20, there were almost 16,000 passenger vehicles in service

Electrification of the mainline rail network, Great Britain, 2019-20

Electrified: 6,049km
Not electrified: 9,855km

38%
15,904 route kilometres
62%
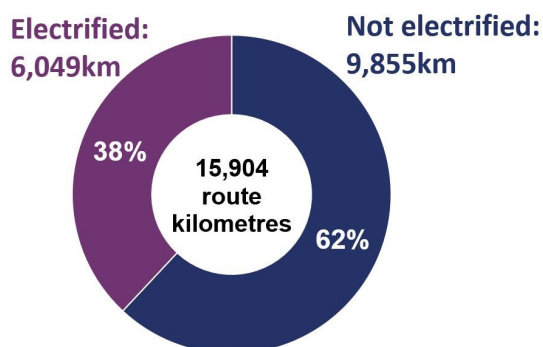
Four new mainline stations opened in 2019-20, taking the total to **2,567**:
- Meridian Water
- Robroyston
- Warrington West
- Worcestershire Parkway

Rail emissions: 2019-20
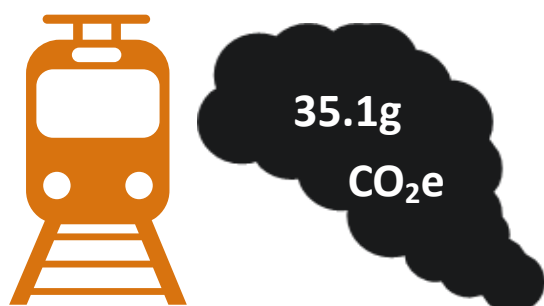
35.1g CO_2e

27.5g CO_2e

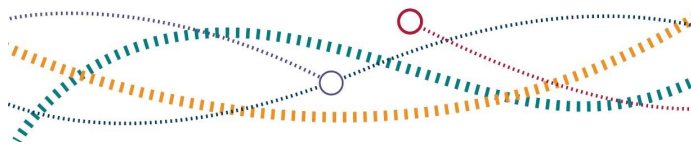**35.1g CO_2e emissions per passenger km**, a fall of 4.1% compared to 2018-19.

27.5g CO_2e emissions per net freight tonne km, an increase of 8.6% compared to 2018-19 due to a rise in diesel consumption.

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

Rail infrastructure and assets

Rail emissions

Annex: National Statistics

Most of the statistics in this publication are 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 three annual publications: **Train Operating Company Key Statistics; Rail Statistics Compendium; Occupational Health**; and four quarterly publications: **Signals passed at danger (SPADS); Delay Compensation Claims; Disabled Person's Railcard (DPRC); Passenger assistance.**
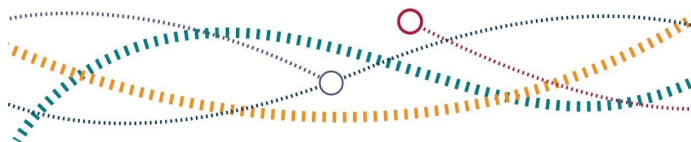
All the above publications are available on the ORR data portal along with a list of publication dates for the next 12 months.

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 these statistical releases were assessed in 2012 and also hold National Statistics status. Since our 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 compliance statements. For more details or to provide feedback, please contact the Statistics Head of Profession (Lyndsey Melbourne) at rail.stats@orr.gov.uk.