Rail Statistics Compendium
Great Britain
2016-17 Annual

Publication Date: 29 November 2017

Next release: November 2018

Background

This new annual compendium publication contains a summary of the statistical releases published by ORR for 2016-17. Full copies of the individual releases can be found on our website and are updated either quarterly or annually. All releases have accompanying data tables published on ORR's data portal. See the annex of this compendium publication for more information.

The data is sourced from a range of rail industry bodies, including Network Rail, Train/Freight Operating Companies, and the Department for Transport.

All statistics are correct at the time of the annual or quarter four publication, but may change due to subsequent revisions, for the latest data please visit our website or the data portal.

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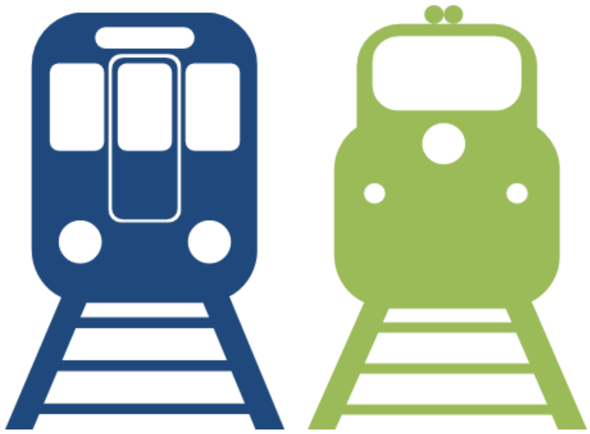

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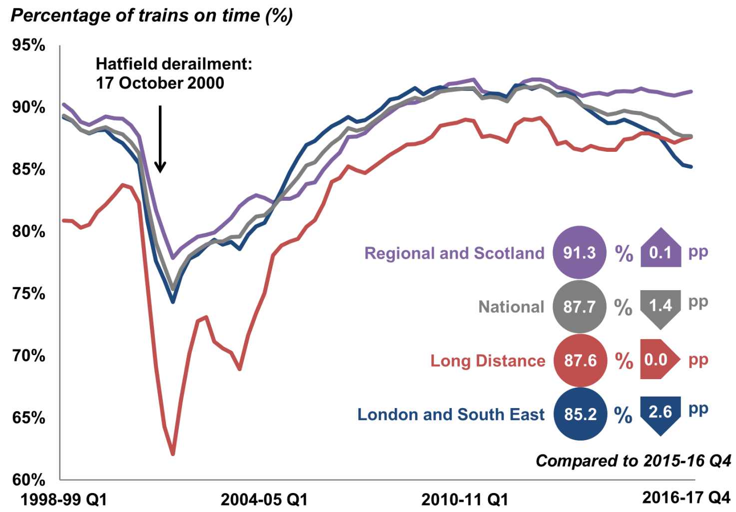
Website: http://orr.gov.uk/statistics/published-stats/statistical-releases

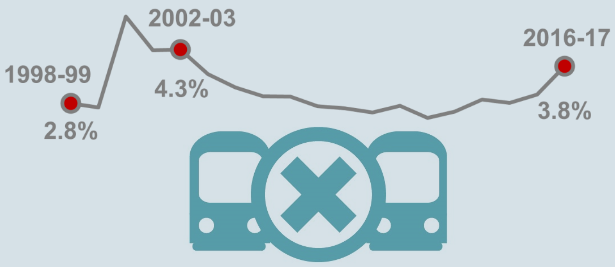
Passenger and Freight Rail Performance: 2016-17

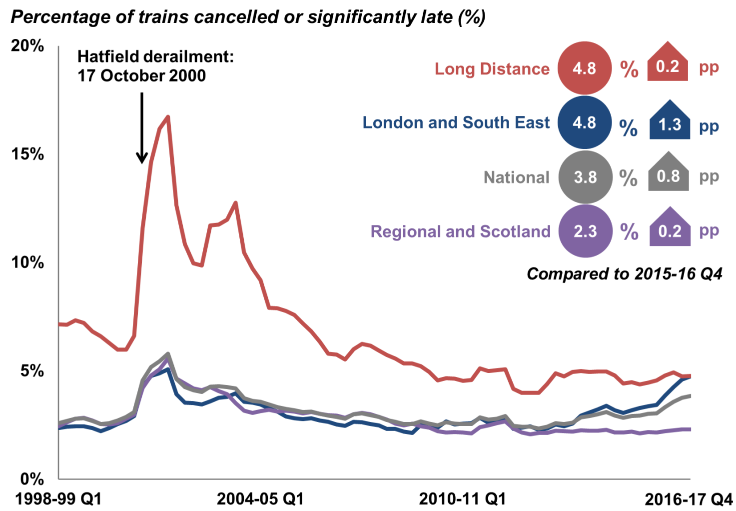
Rail passenger performance (**Public Performance Measure**) in 2016-17 (87.7%) was the lowest annual score recorded since 2005-06.

Performance on the **Thameslink**, **Southern** and **Great Northern (TSGN)** franchise continued to deteriorate. **Govia Thameslink Railway** recorded the franchise's lowest annual performance score since the time series began in 2004-05.

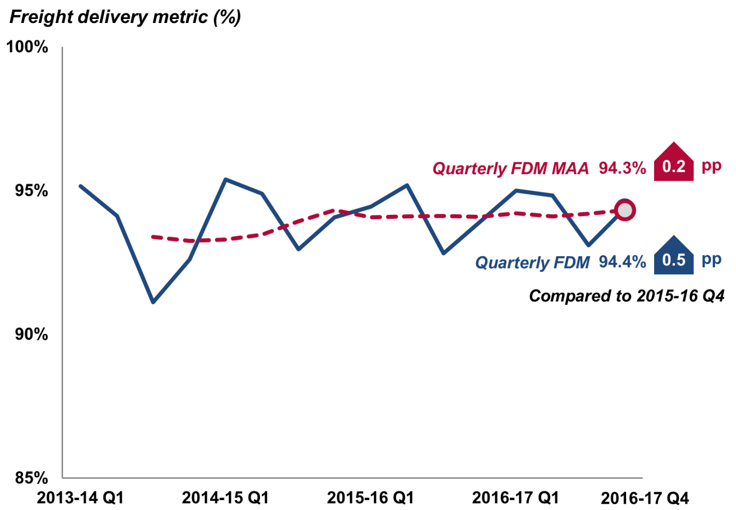


The proportion of trains **Cancelled and Significantly Late (CaSL) MAA** in 2016-17 was **3.8%**, up 0.8 pp compared with 2015-16. This is the highest (worst) annual CaSL score recorded since 2002 -03 (4.3%).





National **Freight Delivery Metric (FDM)** MAA was **94.3%** in 2016-17. This was 0.2 pp higher (better) compared with 2015-16.



The full statistical release can be found:

http://orr.gov.uk/__data/assets/pdf_file/0006/24756/passenger-freight-performance-2016-17-q4.pdf

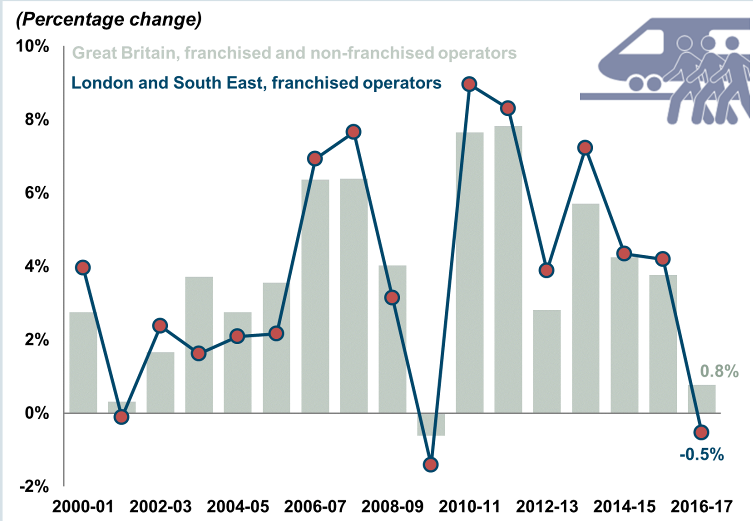
Further data on passenger and freight rail performance is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/3

Passenger Rail Usage: 2016-17

National rail passenger journey annual growth slowed to 0.8% in 2016-17, as the volume of passenger journeys on Great Britain's railways reached a record high of 1.7 billion.

Growth in passenger journeys (2000-01 to 2016-17)

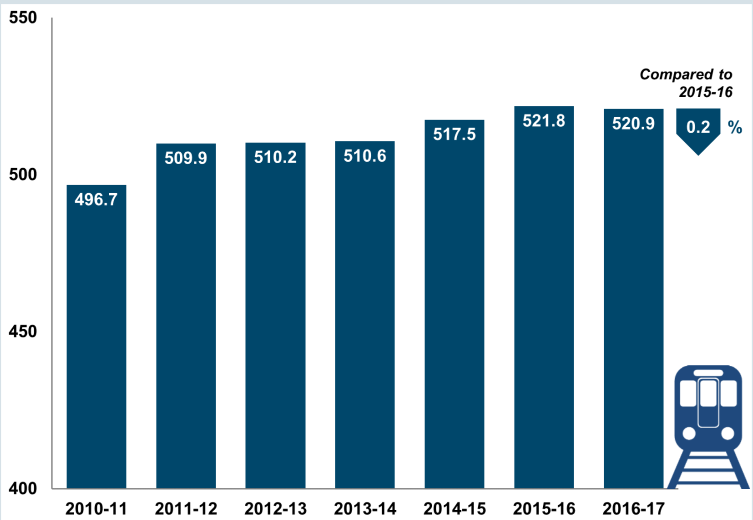


Although 2016-17 represented the highest number of passenger journeys recorded since the time series began in 1950, year-on-year growth was at its lowest level since 2009-10 when passenger journeys fell by 0.7%

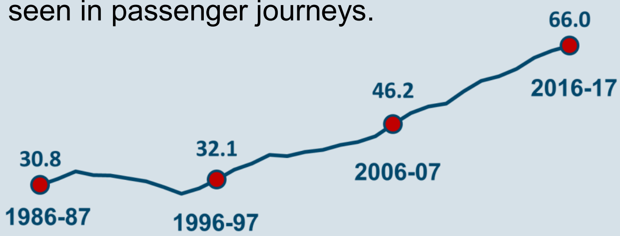
Passenger journeys billions (1950 to 2016-17)

Passenger train kilometres in Great Britain decreased for the first time since the time series began in 2010-11. Totalling 520.9 million, passenger train kilometres in 2016-17 decreased by 0.2% compared to 2015-16.

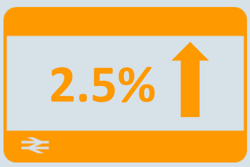
Passenger train kilometres (2010-11 to 2016-17)



66 billion **passenger kilometres** were record-ed on Great Britain's rail network in 2016-17, with the growth in passenger kilometres slow-ing to 2.0%, mirroring the slowdown in growth seen in passenger journeys.



Revenue growth from passenger journeys made in Great Britain slowed to **2.5%** with **£9.5** billion raised from all operators, com-pared to the £9.3 billion collected in 2015-16. This established the slowest year-on-year rate of growth in revenue since 2000-01.



The full statistical release can be found:

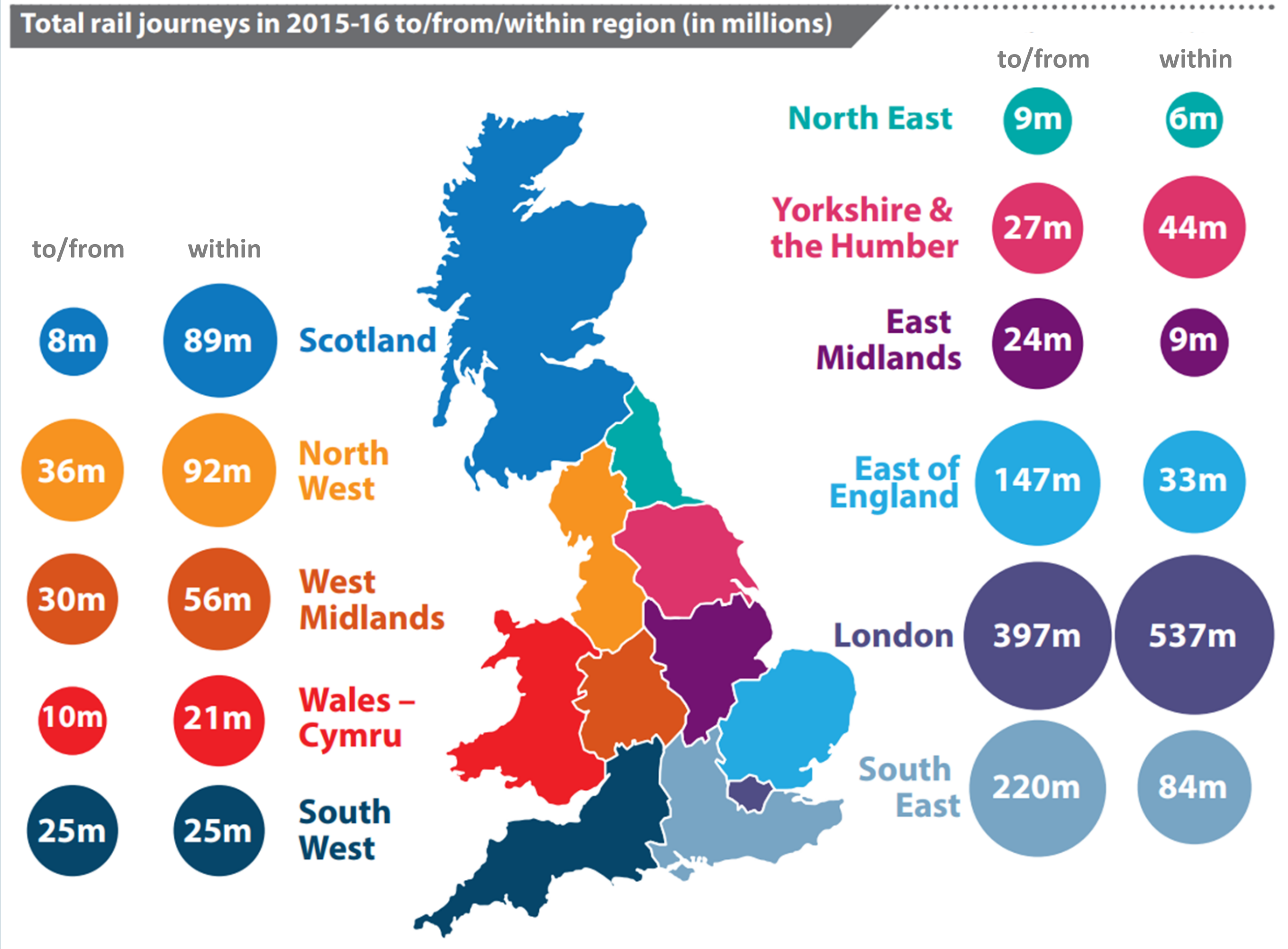
http://orr.gov.uk/__data/assets/pdf_file/0019/24832/passenger-rail-usage-2016-17-q4.pdf

Further data on passenger rail usage is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/12

Regional Rail Usage: 2015-16 (part 1)

The number of rail passenger journeys in Great Britain has more than doubled between 1995-96 and 2015-16.



All regions, except for Scotland, saw an annual increase in **journeys to/from other regions**, with an overall increase of 3.0% compared to 2014-15. The largest contribution to the overall change was journeys to/from London, with over 11 million more journeys made in 2015- 16. The highest growth rate was for journeys to/from the West Midlands, with an increase of 6.1%.

Journeys within regions increased by 6.1%. London, which accounts for more than half of all journeys within regions, recorded the highest growth rate of 9.2%.

Notes:

The journeys presented 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.

2016-17 statistical release will be January 2018.

The full statistical release can be found:

http://orr.gov.uk/__data/assets/pdf_file/0003/23952/regional-rail-usage-profiles-2015-16.pdf

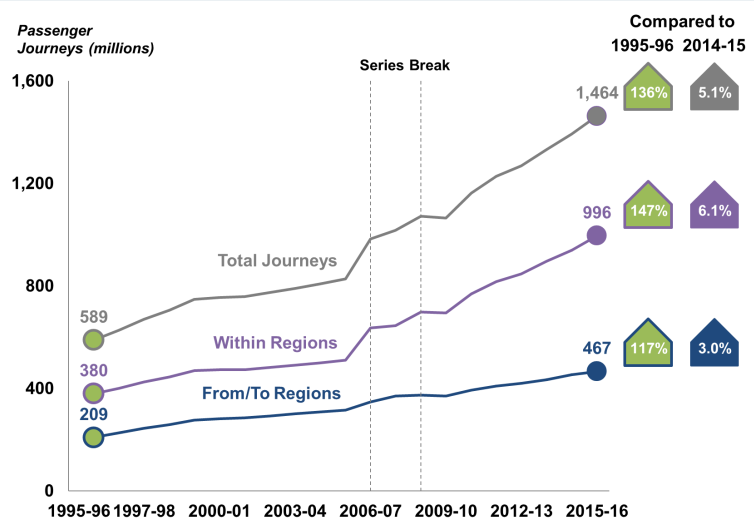
Further data on regional rail usage is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/15

Regional Rail Usage: 2015-16 (part 2)

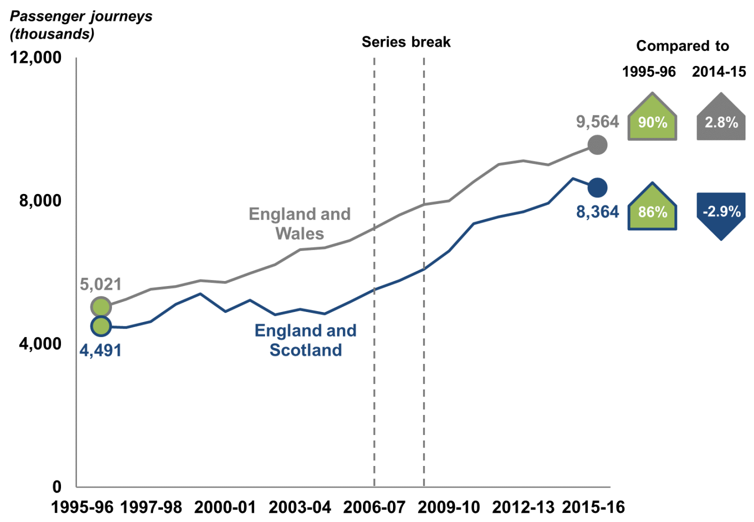
There were 1,464 million passenger journeys made in Great Britain in 2015-16. Compared to 2014-15, the number of passenger journeys increased by 5.1%, of which 0.5 percentage points are due to methodological improvements to the data.

The number of passenger rail journeys in 2015-16 has more than doubled compared to 1995-96. It has risen every year with the exception of 2009-10, which saw a small dip coinciding with the economic downturn

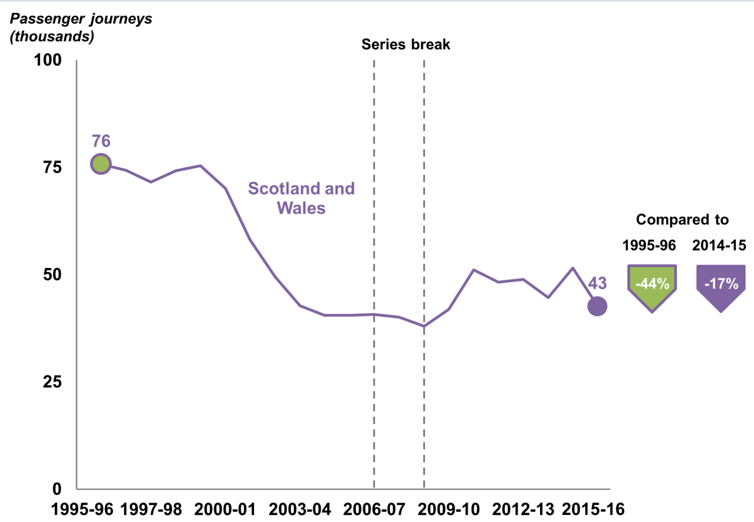


The number of rail **journeys between England and Wales** has maintained its steady long-term increase and grew by 2.8% to 9.6 million compared to 2014-15.

The number of **journeys between England and Scotland** had risen every year since 2004-05. After a steep growth of 8.6% in 2014-15 due to the Commonwealth Games in Glasgow, it has fallen by 2.9% to 8.4 million in 2015-16.



The number of **journeys made between Scotland and Wales** is small when compared to those between England and Scotland or Wales and Scotland. There were 43 thousand journeys made between Scotland and Wales in 2015-16, representing a 17.3% decrease from the previous year. The fluctuation in the last two years is most likely due to the modal shift between aviation and rail.



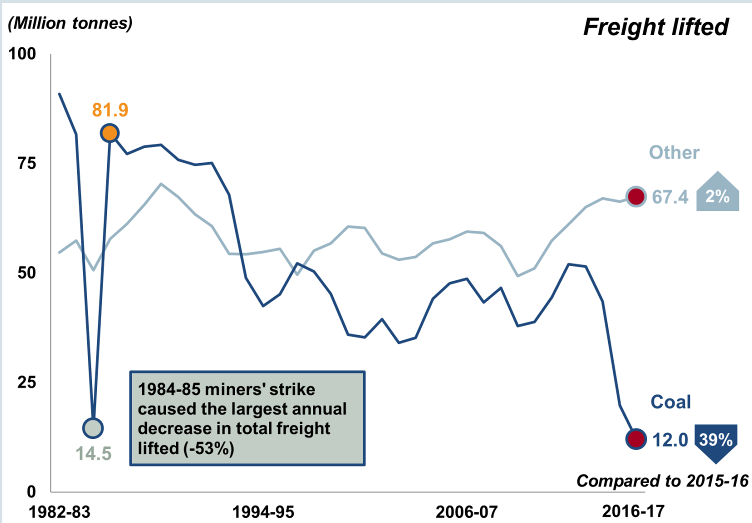
Series break:
In 2006-07, the methodology was improved by adding additional estimates for rail travel using TfL sold travelcards.
In 2008-09, new estimates of rail travel in passenger transport executives (PTEs) areas were included in the dataset.

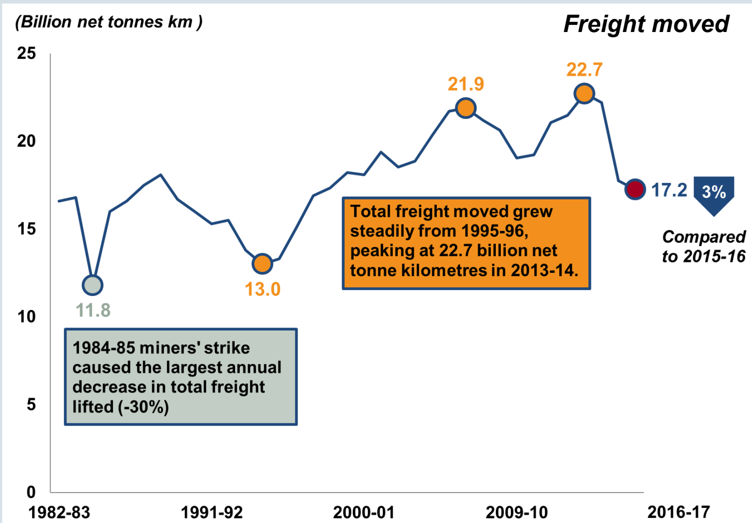
Freight Rail Usage: 2016-17

Rail freight is at a low on several measures in this release, largely attributable to a steep decline in the use of coal.

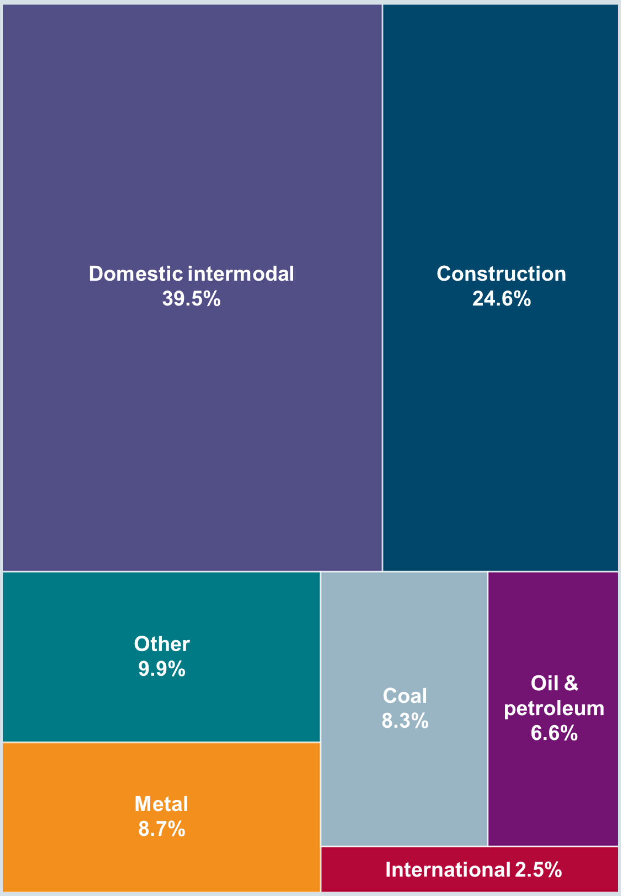
The total amount of **freight lifted** in Great Britain fell to **79.4 million tonnes** (the lowest since 1984-85), an 8% decrease on 2015-16. Coal freight lifted recorded 12.0 million tonnes in 2016-17, the lowest since the start of the series in 1982-83, a reduction of 39% on 2015-16.

The total volume of rail **freight moved** fell to **17.2 billion net tonne kilometres** in 2016-17, a 3% reduction on 2015-16. This total is the lowest since the late 90s.





Freight moved by commodity, Great Britain 2016-17



Two commodities experienced an increase in freight moved in 2016-17 compared to 2015-16: construction (up 7%) and domestic intermodal (up 6%). Increase in house building and construction activity could have increased the amount of construction materials moved by rail freight while increase in output of consumer focused industries such as retail might have increased the amount of domestic intermodal commodities moved by rail. Both construction and domestic intermodal recorded the highest freight moved since the start of their time series in 1998-99 with 4.2 and 6.8 billion net kilometres respectively.

The full statistical release can be found:

http://orr.gov.uk/__data/assets/pdf_file/0007/24892/freight-rail-usage-2016-17-quarter-4.pdf

Further data on freight rail usage is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/13

Passenger Rail Service Complaints: 2016-17

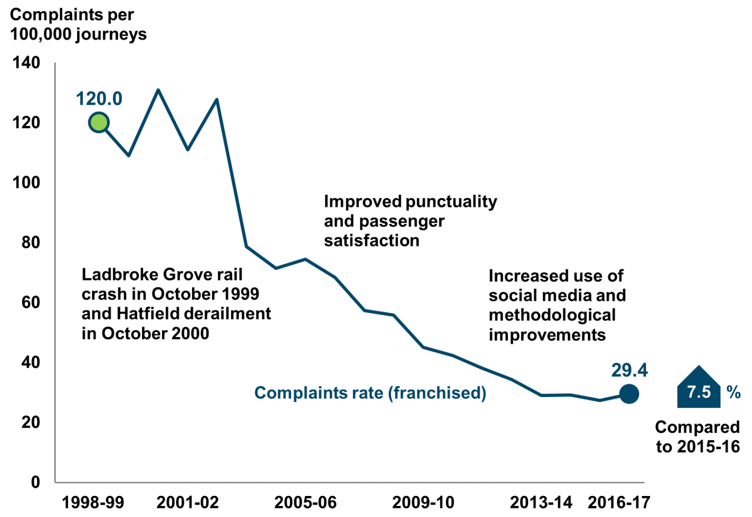
Percentage of all complaints

- 26.4% Punctuality/reliability
- 7.3% Ticket buying facilities - other
- 7.1% Facilities on board
- 7.0% Ticket buying facilities
- 6.9% Ticketing and refunds policy

Punctuality or reliability of services was the most complained about area with 26.4% of complaints in 2016-17.

Fares and retailing type complaints increased in 2016-17, and account for two of the top four most complained about complaint categories.

Complaints on **delay compensation schemes** accounted for 6.2% of complaints. This is a new category introduced in 2016-17.



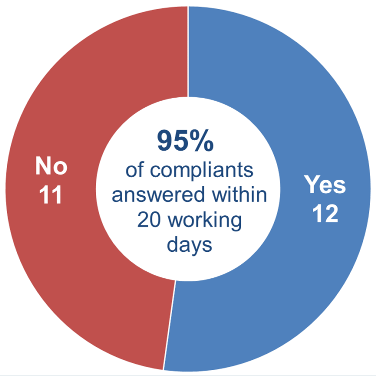
There were 29.4 **complaints per 100,000 journeys** in 2016-17 for franchised operators, an increase of 7.5% compared to the previous year. This trend was driven by train operating companies in London and the South East.

Punctuality and the reliability of services was the most common source for complaints.

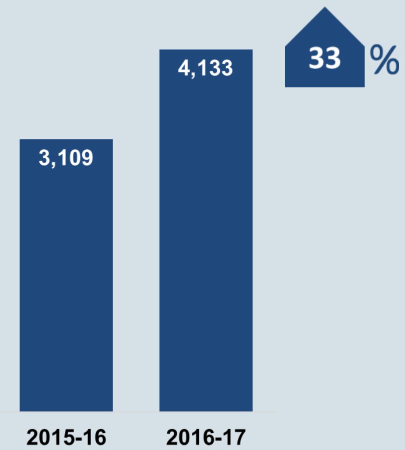
Overall this represents 540,000 rail passenger complaints in 2016-17 (both franchised and non-franchised).

12 out of 23 TOCs met the industry target to close 95% or more of their complaints within 20 working days.

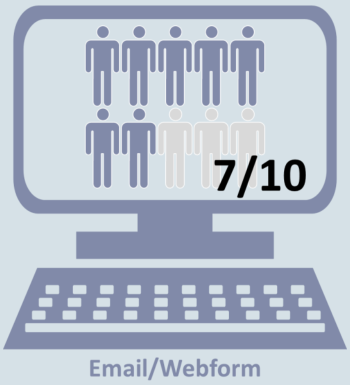
Number of train operating companies



4,133 appeals closed by independent passenger watchdogs, this was 33% higher than the year before.



How passengers complain:



The majority of complaints (69%) were made via email/ webform in 2016-17.

The full statistical release can be found:

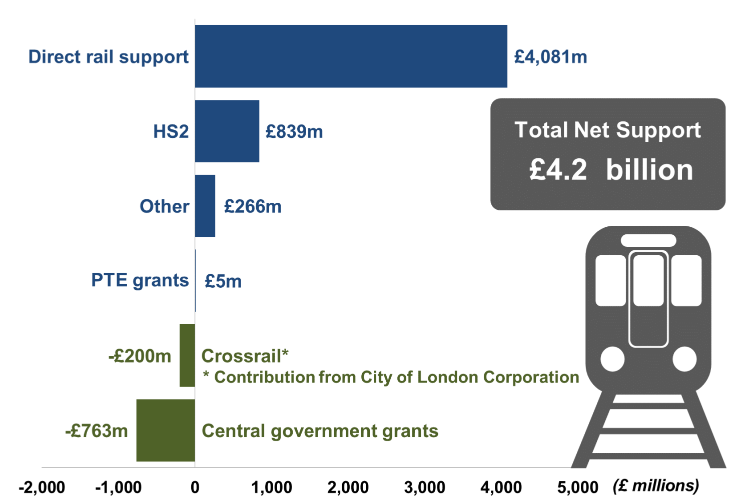
http://orr.gov.uk/__data/assets/pdf_file/0006/24927/passenger-rail-service-complaints-2016-17-q4.pdf

Further data on passenger rail service complaints is available on ORR's data portal:

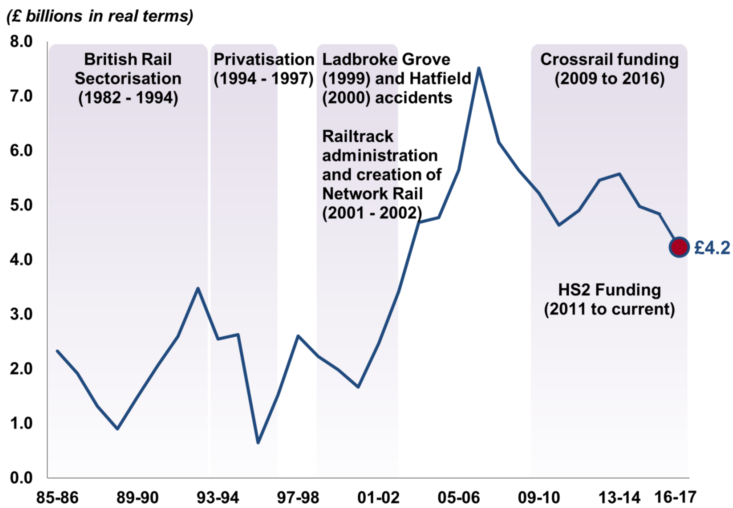
http://dataportal.orr.gov.uk/browsereports/14

Rail Finance: 2016-17

Net government support to the rail industry in Great Britain totalled £4.2 billion in 2016-17 (excluding Network Rail loans). Crossrail funding ended in 2015-16 but HS2 funding increased to £839 million in 2016-17. Direct rail support, PTE grants and central government grants totalled £3.3 billion in 2016-17. In real terms, this was the same as 2015-16. Including direct support for Network Rail, TOCs received 5.1p for every passenger kilometre travelled in Great Britain in subsidies in 2016-17. This was the same as the previous year.



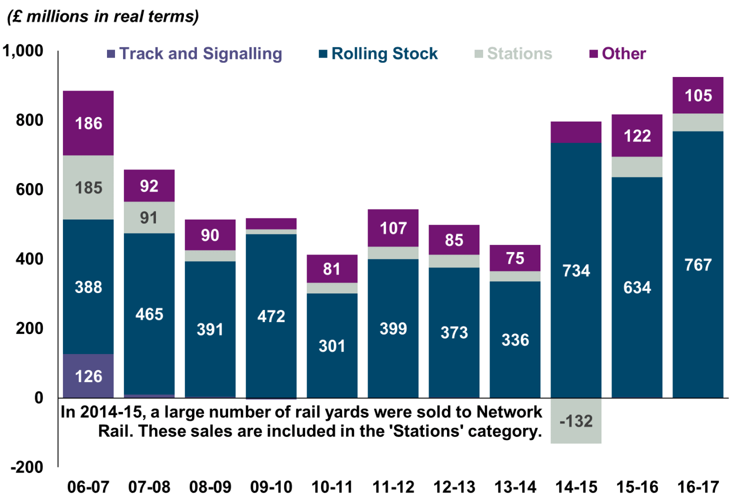
Government support in 2016-17 was £4.2 billion (£4,200 million). When adjusted for inflation this was down 12.6% compared with 2015-16. This was mostly due to Crossrail funding ending in 2015-16. Government support peaked in 2006-07 (£7.5 billion in real terms). It has since fallen by 43.7% in real terms.



Private investment

A net total of £925 million was invested by private companies during 2016-17. This is a real terms increase of 13.2% on the previous year and is the highest value recorded since the time series began in 2006-07. The £767 million invested in rolling stock was the highest value recorded since the time series began.

Further analysis of industry income and expenditure and more detailed train operator financial information can be found in the [UK rail industry financial information](#) publication.



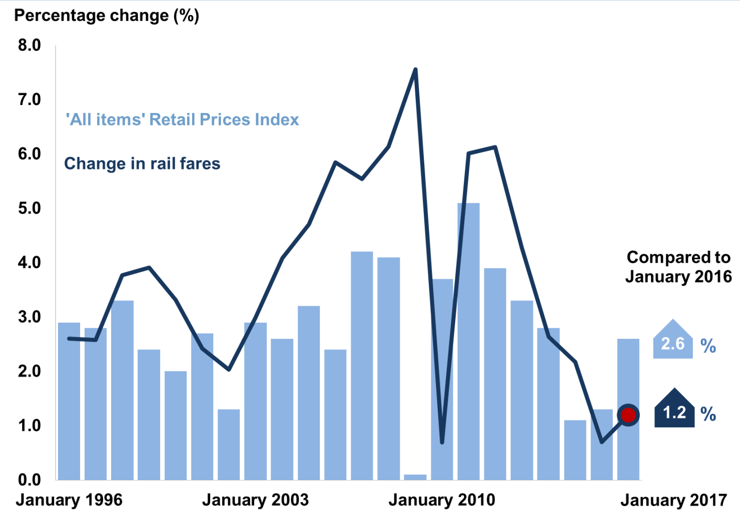
The full statistical release can be found:
http://orr.gov.uk/__data/assets/pdf_file/0008/25757/rail-finance-statistical-release-2016-17.pdf

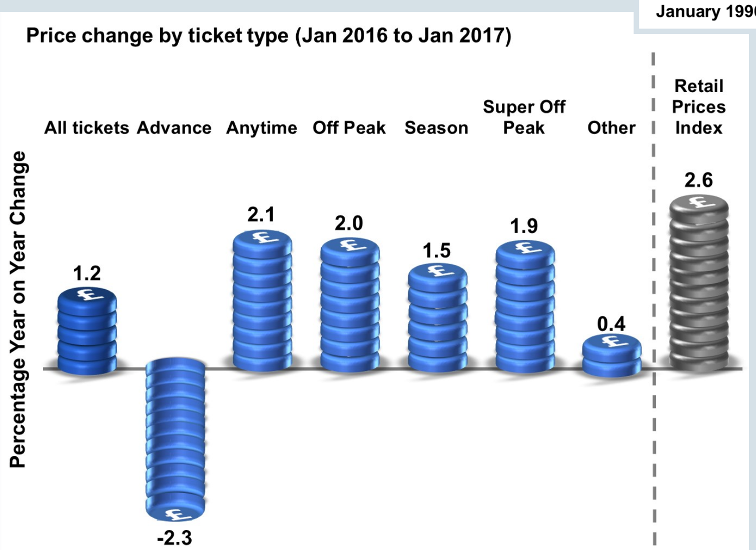
Further data on rail fares index is available on ORR's data portal:
http://dataportal.orr.gov.uk/browsereports/1

Rail Fares Index: January 2017

Rail Fares in Great Britain increased by 1.2% in January 2017 compared with a 2.6% rise in the Retail Prices Index (RPI), the second year in succession when fares have risen below inflation.

Anytime and off-peak tickets accounted for over 54% of revenue and recorded the highest increase in fares among all ticket types, increasing by 2.1% and 2.0% respectively.



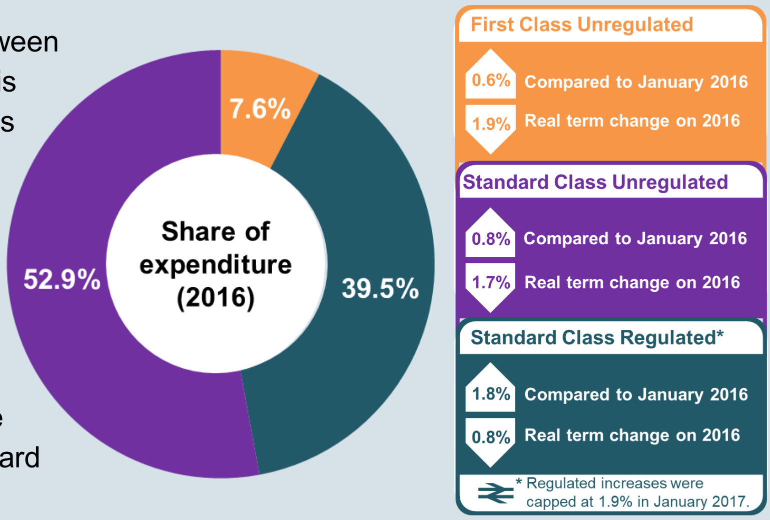


Season ticket fares represents the highest amount of expenditure in the London and South East sector, increasing by 1.5%.

Advance ticket fares recorded a drop in their average price by 2.3% between January 2016 and January 2017.

The **average change in regulated rail fares** between January 2016 and January 2017 was 1.8%. This represented a decrease in real terms of 0.8% as over the same time period the RPI increased by 2.6%. Price changes in regulated fares have been set by the Government to be capped at the July RPI, which was 1.9% in July 2016.

Unregulated rail fares increased between January 2016 and January 2017 by an average of 0.8%; 0.6% for first class and 0.8% for standard class.



The full statistical release can be found:

http://orr.gov.uk/__data/assets/pdf_file/0020/24518/rail-fares-index-january-2017.pdf

Further data on rail fares index is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/1

Rail Safety Statistics: 2016-17

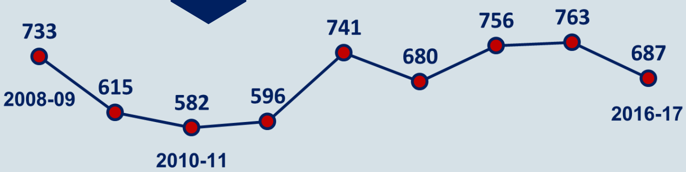
The number of passenger fatalities increased for the second year in a row.

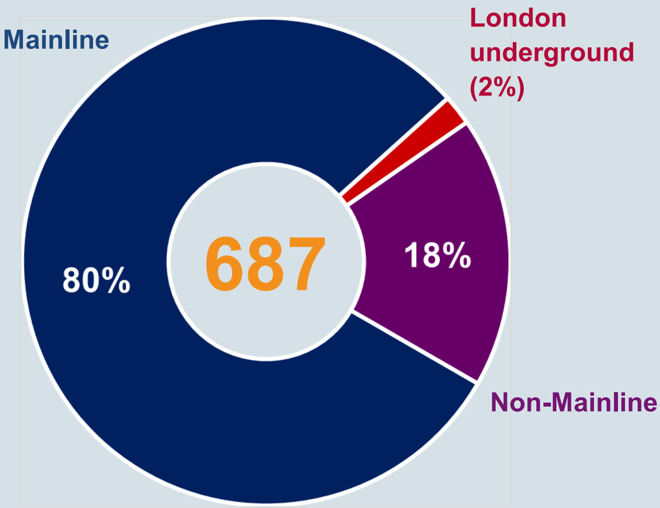
There were fifteen passenger fatalities in 2016-17. This was the highest number since 2010-11

Seven of these were a result of the Croydon tram derailment in November 2016. This was the first time there have been fatalities from an accident in ten years.

There was one workforce fatality in 2016-17 and public fatalities decreased for the second year in a row.

There were 76 fewer **train accidents** in 2016-17, a decrease of 10.0 % compared to 2015-16.





Passenger injuries

Mainline

6,866 injuries in 2016-17

5.2 % compared to 2015-17

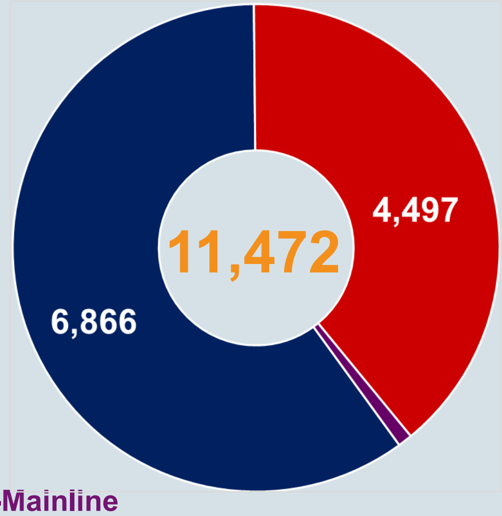
Of which 266 were major injuries

London underground

4,497 injuries in 2016-17

10.5 % compared to 2015-17

Of which 80 were major injuries



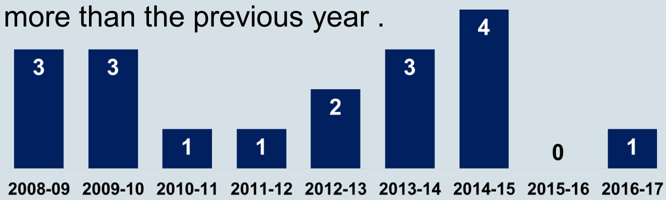
Non-Mainline

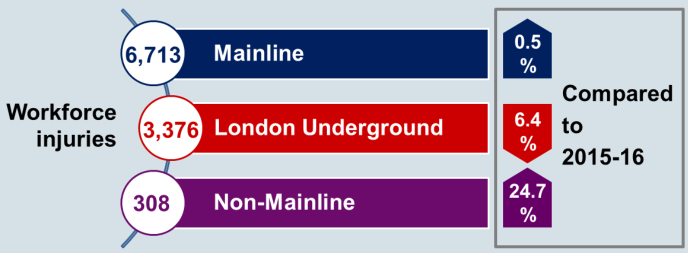
109 passenger injuries in 2016-17.

148 % More than double compared to 2015-16

49 injuries were a result of the Croydon tram derailment.

There was **one workforce fatality** in 2016-17 One more than the previous year .





The full statistical release can be found:

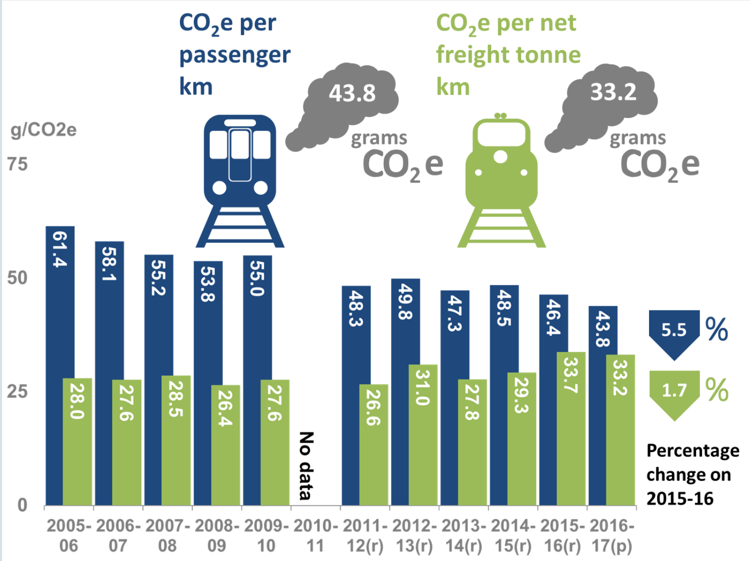
http://orr.gov.uk/__data/assets/pdf_file/0017/25622/rail-safety-statistics-2016-17.pdf

Further data on rail safety statistics is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/5

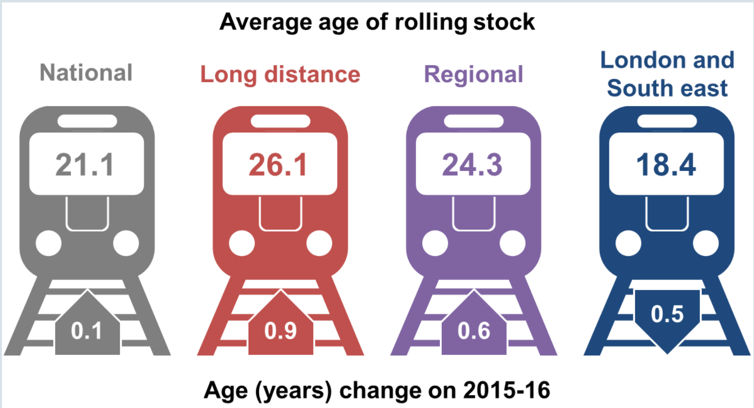
Rail Infrastructure, Assets and Environmental: 2016-17

Total route open for traffic in 2016-17 was 15,811 kilometres, an increase of 12 kilometres since last year.



The level of **CO2e emissions per passenger km** in 2016-17 was the lowest since the start of the time series in 2005-06.

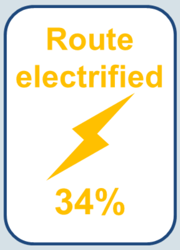
Despite a 1.7% reduction compared to the previous year, the level of **CO2e emissions per freight tonne km** in 2016-17 was the second highest on record since the start of the time series in 2005-06.



The national average age of rolling stock at the end of 2016-17 was 21.1 years, a 0.1 year rise over the course of the past year. This indicates the average age is being reduced by the introduction of new rolling stock.

London and South East: The decrease in average age of rolling stock indicates a substantial roll-out of newer rolling stock across the sector. This decrease is a result of new trains introduced by c2c and Govia Thameslink Railway. At 18.4 years, London and South East has the lowest average age of rolling stock across the three sectors.

The **total length of route** open for traffic in 2016-17 was 15,811 kilometres, 12km higher than in the previous year. The length of electrified route has increased by 43km over the course of 2016-17, and now totals 5,374km (34% of the total route).



2,560 mainline stations in Great Britain in 2016-17.

3 new mainline stations Lea Bridge, Kirkstall Forge and Edinburgh Gateway.

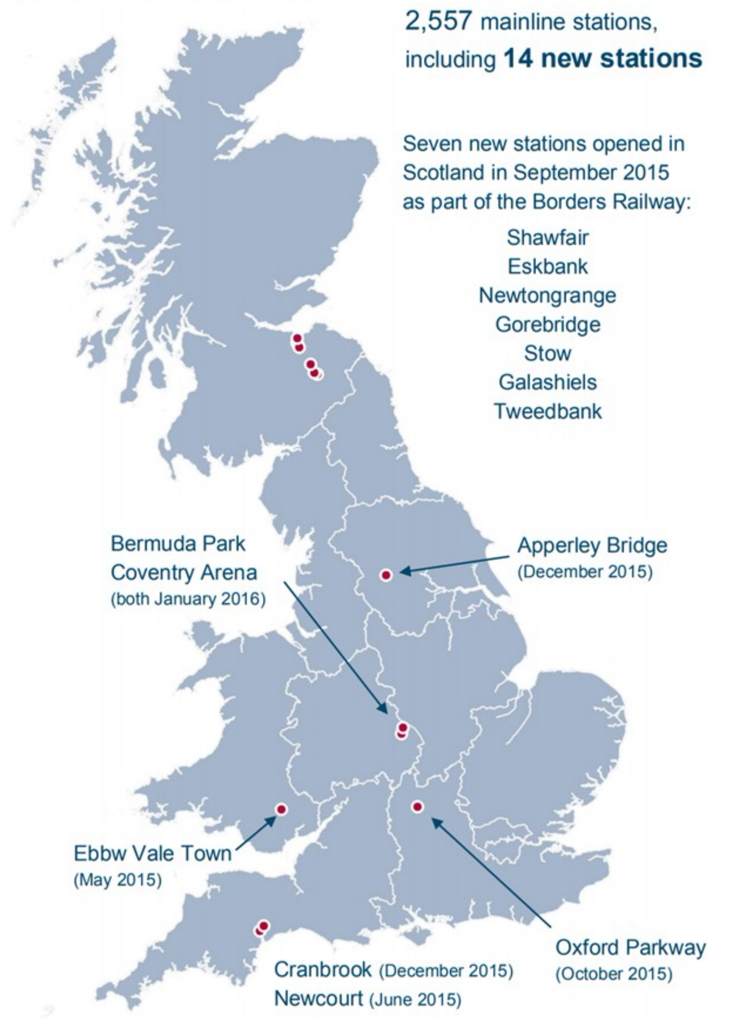
The full statistical release can be found:

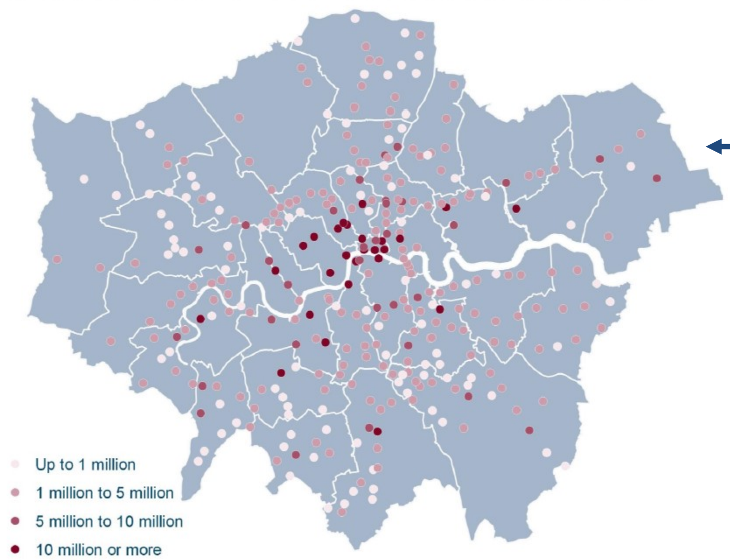
http://orr.gov.uk/__data/assets/pdf_file/0008/25838/rail-infrastructure-assets-environmental-2016-17.pdf

Further data on Rail infrastructure, assets and environmental performance is available on ORR's data portal:

http://dataportal.orr.gov.uk/browsereports/2

Estimates of Station Usage: 2015-16





Stations with the most entries and exits

Within London

Stations		Entries & Exits
1.	Waterloo	99,148,388
2.	Victoria	81,151,418
3.	Liverpool Street	66,556,690
4.	London Bridge	53,850,938
5.	Euston	41,677,870
6.	Stratford	41,113,260
7.	Paddington	36,536,074
8.	King's Cross	33,361,696
9.	Clapham Junction	32,282,220
10.	St. Pancras	31,723,686

Outside London

Stations		Entries & Exits
1.	Birmingham New Street	39,077,018
2.	Glasgow Central	30,000,582
3.	Leeds	29,723,734
4.	Manchester Piccadilly	25,792,700
5.	Edinburgh	21,723,960
6.	Gatwick Airport	18,028,846
7.	Brighton	17,333,326
8.	Reading	16,755,984
9.	Glasgow Queen Street	16,424,064
10.	Liverpool Central	15,638,894

Entries and exit at London Stations in 2015-16

London Stations Methodology Change

A significant change has been made to the way that usage at London stations has been estimated in 2015-16.

Oyster data has been included to give a more accurate distribution of usage across stations. As a result, direct comparisons to usage in 2014-15 are not valid.

The key facts leaflet, dataset and technical report can be found:

http://orr.gov.uk/statistics/published-stats/station-usage-estimates

2016-17 statistics will be published on 6 December 2017.

Annex

ORR's National Statistics accredited statistical releases consist of four annual and four quarterly themed releases:

Annual:

- Rail Finance & Rail Fares Index
- Key Safety Statistics
- Rail Infrastructure, Assets and Environmental
- Regional Rail Usage
- *Estimates of Station Usage (not National Statistics)*

Quarterly:

- Passenger and Freight Rail Performance
- Freight Rail Usage
- Passenger Rail Usage
- Passenger Rail Service Complaints

In addition to the above, ORR publishes the following Official Statistics on the data portal:

- Signals passed at danger (SPADS)
- Disabled Person's Railcard (DPRC) and assisted journeys data
- Network Rail Outputs and Indicators Key Statistics
- Occupational Health
- Train Operating Company Key Statistics

A full list of publication dates for the next twelve months can be found in the release schedule on the ORR website.

For more information on data collection and methodology used to calculate the statistics in these releases please see the accompanying Quality Reports on the website.

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at DfT Rail Statistics. For example, Rail passenger numbers and overcrowding on weekdays in major cities.

Transport Focus publish the National Rail Passenger Survey (NRPS).

This publication is available at orr.gov.uk

Any enquiries regarding this publication should be sent to us at orr.gov.uk