



Freight Rail Usage

2014-15 Quarter 4

Statistical Release

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1. Introduction



This release contains information on rail freight in Great Britain covering the period from 1999-00 with the latest data in this release referring to 2014-15 Q4 (1st January 2015 to 31st March 2015). The data covered within the release are:

- Freight moved - the amount of freight, taking into account weight and distance, moved on the rail network in Great Britain;
- Freight lifted - the mass of freight carried on the rail network in Great Britain;
- Freight delays per 100 train kilometres - the number of delay minutes to freight operators in Great Britain, normalised by the distance travelled; and
- Freight market indicators.

Measures of freight are key indicators of the rail freight industry in Great Britain. Freight usage statistics provide a useful barometer of economic activity and is closely linked to other industries such as manufacturing and imports/exports. In Control Period 5, covering 1 April 2014 to 31 March 2019, freight delay minutes data changed from being a regulated target to an indicator¹. It remains based on the Network Rail caused delay minutes. There are no regulatory targets for freight moved, freight lifted and freight market indicators.

Statistics contained within this release are sourced from:

- Network Rail for freight moved, freight delay minutes and the number of freight train movements;
- Freight operating companies for freight lifted;
- Department for Transport's (DfT) continuing survey of road goods vehicles (road freight) and maritime statistics (water freight); and
- Department for Energy and Climate Change (DECC) for pipeline data.

¹ An indicator is a measure of whether Network Rail is likely to miss a regulated target

Data are supplied based on the following timescales:

- Freight moved is provided periodically within 21 days of the end of each of the 13 railway reporting periods;
- Freight lifted is provided quarterly within 21 days of the end of each financial quarter; and
- Number of freight train movements and freight traffic from other modes of transport are provided annually, within 2 months of the year end.

For more detail on railway reporting periods, data collection and the methodology used to calculate the data within this release, please see the accompanying quality report which can be found at: [Quality Report](#).

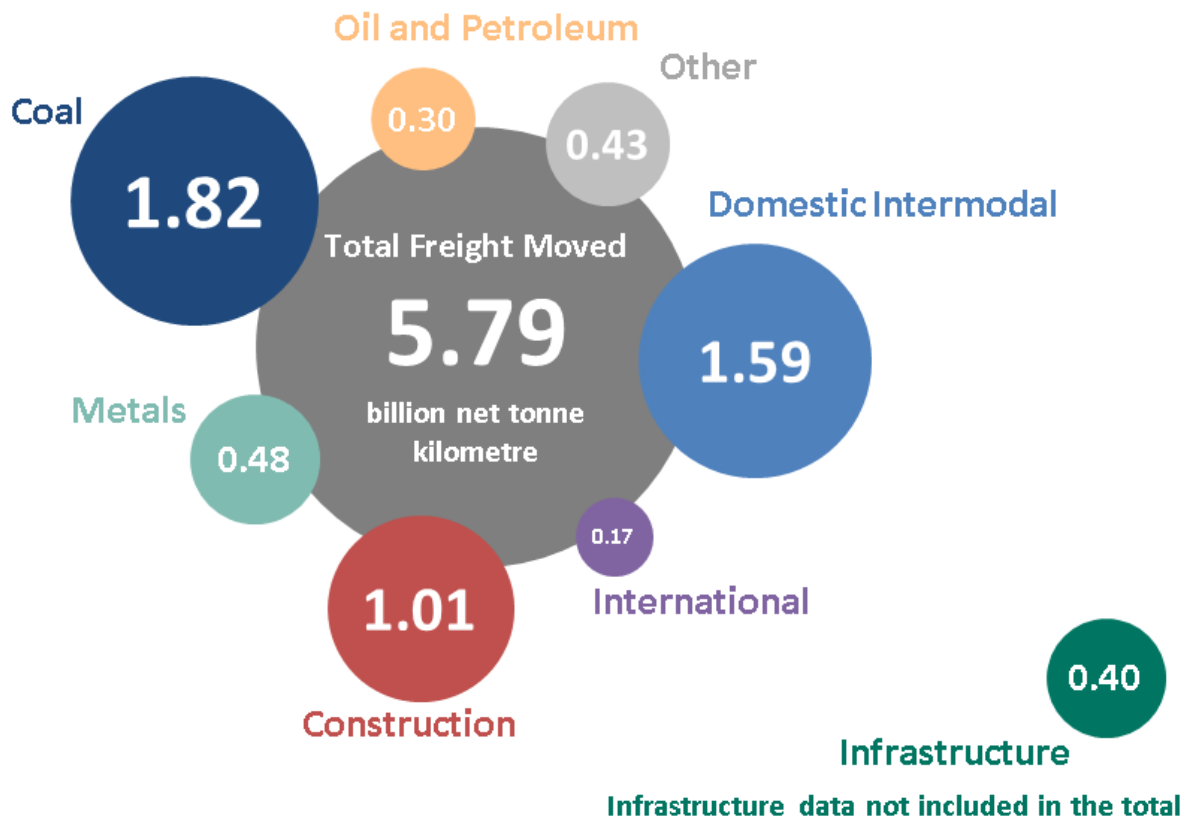
All the data contained and referred to within this release can be accessed via the [ORR Data Portal](#).

Annexes

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. For information on how to access the data referenced in this report and details of future publications and other statistical releases produced by the ORR, please refer to the annexes at the end of this report.

2. Summary of key results

Freight moved by commodity, Great Britain 2014-15 Q4 (billion net tonne kilometres)

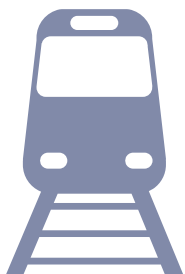


- The total amount of freight moved in 2014-15 Q4 recorded an increase of 1.1% to 5.8 billion net tonne kilometres, compared with Q4 in the previous year.
- Four of the seven commodities (international, other, construction and domestic intermodal) recorded an increase, of which two had increases of more than 10%. The international category had the biggest increase (31.2%), followed by construction (12.5%), other (8.8%) and domestic international (4.8%) compared with 2013-14 Q4.
- Three of the seven commodities (coal, oil and petroleum, and metals) showed a reduction compared with the same quarter last year.
- The total annual freight moved in 2014-15 is the second highest at 22.2 billion net tonne kilometres; the highest recorded being the year before with 22.7 billion net tonne kilometres. The amount of coal moved in 2014-15 fell to 6.5 net tonne kilometres, a drop of 19.5% on 2013-14.

- The total freight lifted in 2014-15 Q4 was 29.9 million tonnes, and is the highest level in a single quarter since the start of the time series.
- The annual total freight lifted in 2014-15 dropped to 110.1 million tonnes from 116.6 million tonnes in 2013-14, a decrease of 5.5%. The amount of coal lifted in 2014-15 was 43.5 million tonnes, a decrease of 15.5% since last year. The amount of other freight lifted recorded a new peak in 2014-15 with 66.6 million tonnes.
- Freight delay per 100 train kilometres in 2014-15 Q4 fell by 16.0% compared to the same quarter last year.
- The annual number of freight movements decreased by 2.1% to stand at 282,304 in 2014-15 compared to the year before.
- In 2013-14, the latest year data is available, the number of lorry kilometres required to be undertaken to equal the amount of freight moved by rail was 1.78 billion kilometres, a 6.9% decrease on 2012-13. The number of avoided lorry journeys through the use of rail freight was 8.20 million in 2013-14, an 11.4% reduction on 2012-13.
- In 2011, 4.9% of all freight lifted was on the rail network, with 100.4 million tonnes while freight lifted by road was 82.7% with 1693.8 million tonnes over the same period.
- In 2011 9.1% of all freight moved was carried out on the rail network, with 21.0 billion net kilometres with 68.0% freight moved by road, at 157 billion net kilometres in the same year.

3. Freight moved

About Freight Moved



Freight moved data, measured in net tonne kilometres, shows the amount of freight which is moved on the railway network, taking into account the weight of the load and the distance carried.

Freight moved is disaggregated by seven commodities which are also summed to provide an overall total freight moved. The seven commodities by which freight moved is disaggregated are coal, metals, construction, oil and petroleum, international, domestic intermodal and other.

In addition to the seven commodities listed above the amount of goods used for railway engineering work is also reported, under the category infrastructure. This is not included in the total category in the freight moved tables and charts. For more information on the methodology, please see the [Quality Report](#).

Freight moved by commodity

Annual 2014-15

The collection of freight moved data is based on data since privatisation in the mid-1990s. For the latest year (2014-15), the total freight moved in Great Britain is the second highest at 22.2 billion net tonne kilometres; the highest recorded being the year before with 22.7 billion net tonne kilometres. The lowest freight moved in the time series was in 2002-03 at 18.5 billion net tonne kilometres moved.

The biggest increase in total freight moved was between 2010-11 and 2011-12 with a rise of 9.5%, and the biggest decrease from 2008-09 to 2009-10 of 7.6%, coinciding with the recession. The total freight moved grew steadily since then and peaked in 2013-14.

The amount of coal moved experienced the largest drop during the recession, falling by over 30% between 2008-09 and 2010-11. It recovered with 2013-14 recording the highest amount of coal moved since 2006-07 with 8.1 billion net tonne kilometres before falling to 6.5 billion net kilometres in 2014-15. The drop in coal contributed 19.5% to the overall drop in freight moved in 2014-15. The amount of coal moved has reduced during the course of this year because of the mild winter and the shift to using biomass. As a result, less coal is restocked and moved by rail to coal-fired power plants.

Metals and Construction recovered more quickly following initial declines between 2007-08 and 2008-09 with the amount of construction freight moved at a new peak 3.9 billion net tonne kilometres in 2014-15.

Domestic intermodal was the only commodity that showed steady growth during the time-series. It increased from 3.4 billion net tonne kilometres in 2002-03 to a peak of 6.5 billion net tonne kilometres in 2014-15, although there were small annual decreases in 2011-12 and 2013-14.

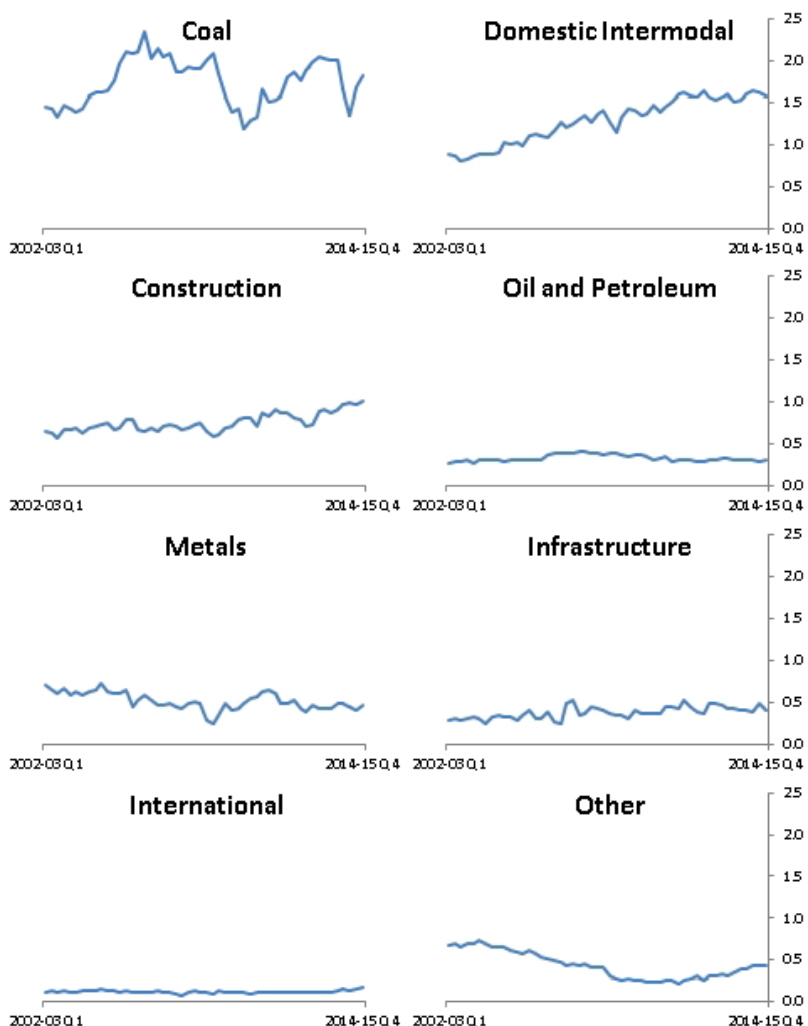
2014-15 Quarter 4 Results

Freight moved by quarter – chart

Great Britain data 2002-03 Q1 to 2014-15 Q4 (billion net tonne kilometres)

■ The total amount of freight moved in 2014-15 Q4 recorded an increase of 1.1% to 5.8 billion net tonne kilometres, compared with Q4 in the previous year.

■ Coal accounted for the largest proportion, 31.3%, of total freight moved in 2014-15 Q4, with 1.8 billion net tonne kilometres, followed closely by domestic intermodal with 1.6 billion net tonne kilometres moved.



■ During 2014-15 Q4, four of the seven commodities showed an increase compared with the same quarter last year, with two of these recording double-digit increases. The international category led with the biggest increase (31.2%), followed by construction (12.5%), other (8.8%) and domestic international (4.8%).

■ In 2014-15 Q4, three of the seven commodities experienced a decrease compared with the same quarter the previous year; coal (9.1%), metals (2.3%), oil and petroleum (1.2%).

Possible reasons for change

- The arrival of the world's largest container ship at Felixstowe² could account for some of the increase in the international category.
- Construction³ continues to grow apace and continues to mirror the economic recovery recording an increase this quarter when compared with the same quarter last year.
- With more biomass (included in the 'other' category) being converted and used in place of coal; more biomass is being converted and used in power plants, part explaining the increase in 'other' this quarter compared with 2013-14 Q4.
- The W10 loading gauge enhancement which allows for carrying bigger containers contributed to domestic intermodal freights continued upward trajectory this quarter, with more containers carried more efficiently for the same length of train, compared to last year. More domestic intermodal freight is also being moved out of London Gateway⁴.
- The closure of parts of Ferrybridge⁵ power station due to fire damage last year remains in place. The reduced capability at this plant could also part explain the reduction in coal this quarter compared with the same quarter last year where less coal is required due to the reduced capability, with less moved by rail.
- The planned closure of Ironbridge at the end of 2015 could further impact the use of coal at this plant where the remaining capability continues to be used for converting biomass.
- The amount of coal moved has reduced because of the mild winter where less energy is required to warm households, resulting in less coal moved to coal powered plants. The increased investment in wind powered energy⁶ to encourage low-carbon emissions with less oil and petroleum used could also partly explain the reduction in this category.
- With the reduction in freight charges in Eurotunnel since the start of this financial year⁷, there has been a gradual rise in channel tunnel traffic and international this quarter compared with same quarter last year.

Full quarterly freight moved data are available on the data portal: [Table 13.7](#)

Freight moved disaggregated by commodity type: [ORR Data Portal Wizard](#)

² <http://www.bbc.co.uk/news/uk-england-suffolk-30700269>

³ <http://www.bbc.co.uk/news/business-31708778>

⁴ <http://www.railmagazine.com/news/2015/03/18/more-db-schenker-trains-from-london-gateway>

⁵ <http://www.bbc.co.uk/news/uk-england-leeds-28588714>

⁶ <http://uk.reuters.com/article/2015/04/01/uk-funds-britain-idUKKBN0MS3R520150401>

⁷ <http://www.eurotunnelgroup.com/uploadedFiles/assets-uk/Media/Press-Releases/2014-Press-Releases/20140428-ETICA-Europe-UK.pdf>

4. Freight lifted

About Freight Lifted



Freight lifted is the mass of goods carried on the rail network measured in tonnes, excluding the weight of the locomotives and wagons. Unlike freight moved it takes no account of the distance travelled. Freight lifted data, which are provided by the four major freight operating companies, DB Schenker Rail (formerly EWS), Freightliner Ltd (formerly the BR container business), Direct Rail Services (DRS) and GB Railfreight, is disaggregated into two types, coal and other.

Freight lifted

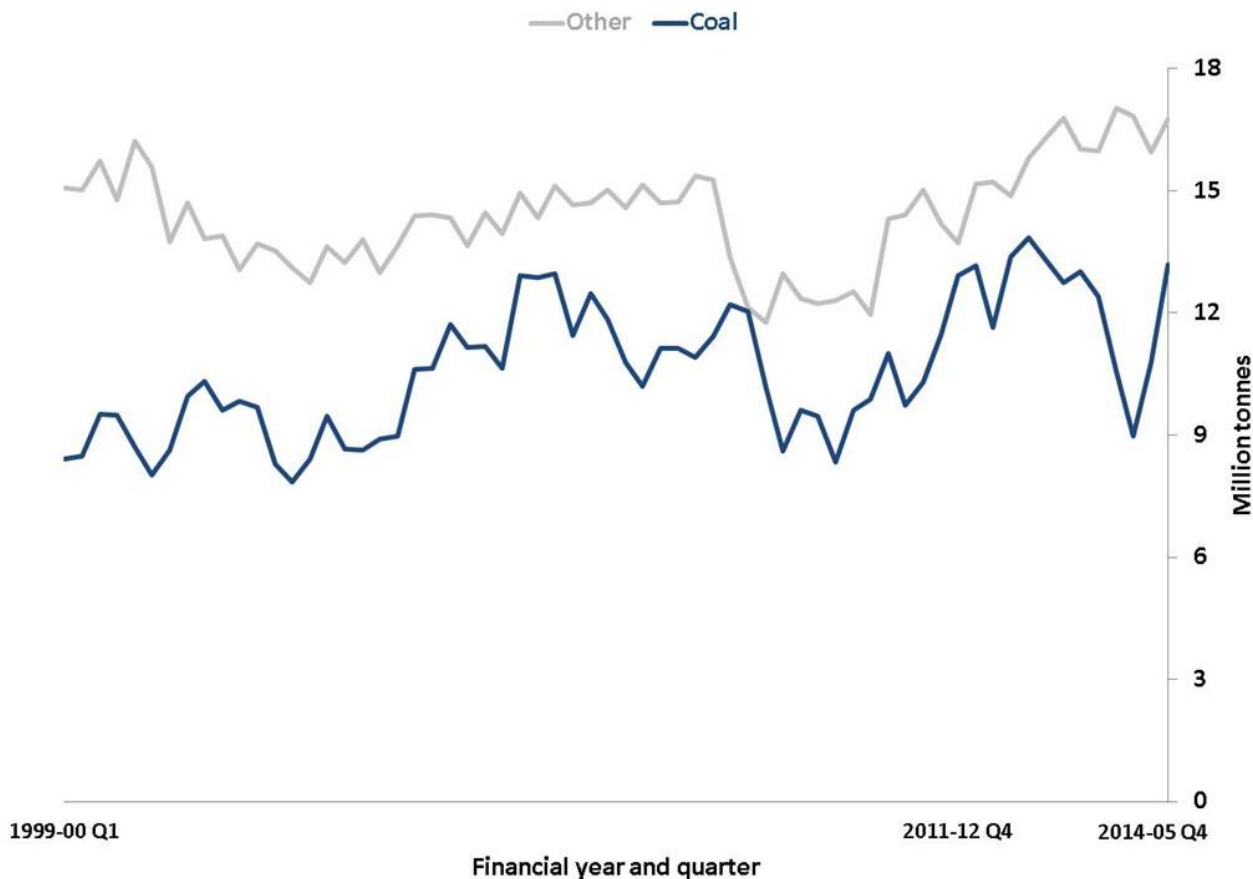
Annual 2014-15

The annual freight lifted in Great Britain dropped to 110.1 million tonnes in 2014-15, after reaching its highest annual amount of 116.6 million tonnes a year earlier in 2013-14. The amount of coal lifted in 2014-15 was 43.5 million tonnes, a decrease of 15.5% since last year. The amount of other freight lifted recorded a new peak in 2014-15 with 66.6 million tonnes. The amount of freight lifted annually first peaked in 2006-07 at 108.2 million tonnes. It then fell to a low of 87.2 million tonnes in 2009-10 before increasing over the next four years to the new peak, then falling by 5.5% to the latest year.

2014-15 Quarter 4 Results

Freight lifted by quarter – chart

Great Britain data 1999-00 Q1 to 2014-15 Q4



- The total freight lifted in 2014-15 Q4 was 29.9 million tonnes, and is the highest since the start of the time series.
- The total freight lifted in 2014-15 Q4 showed an increase of 5.5% compared with 2013-14 Q4.
- During 2014-15 Q4, both coal (6.2%) and other (5.0%) category recorded an increase when compared to the same quarter last year.

Full quarterly freight lifted data are available on the data portal: [Table 13.6](#)

5. Freight delay per 100 train kilometres

About Freight Delay per 100 train kilometres



Freight delay is a measure of delay experienced by freight operating companies normalised by the distance run by freight trains. The measure is calculated by dividing the total delay experienced by all freight operators in Great Britain by the distance run by all freight operators in Great Britain. Normalising freight delay provides a measure which is comparable between different periods of time regardless of changing levels of freight traffic on the network.

Freight delays per 100 train kilometres tends to peak in Q3 and Q4 each year, coinciding with the expected periods of adverse weather, during autumn and winter. This is consistent with performance measures which tend to show that freight trains are less punctual during these quarters.

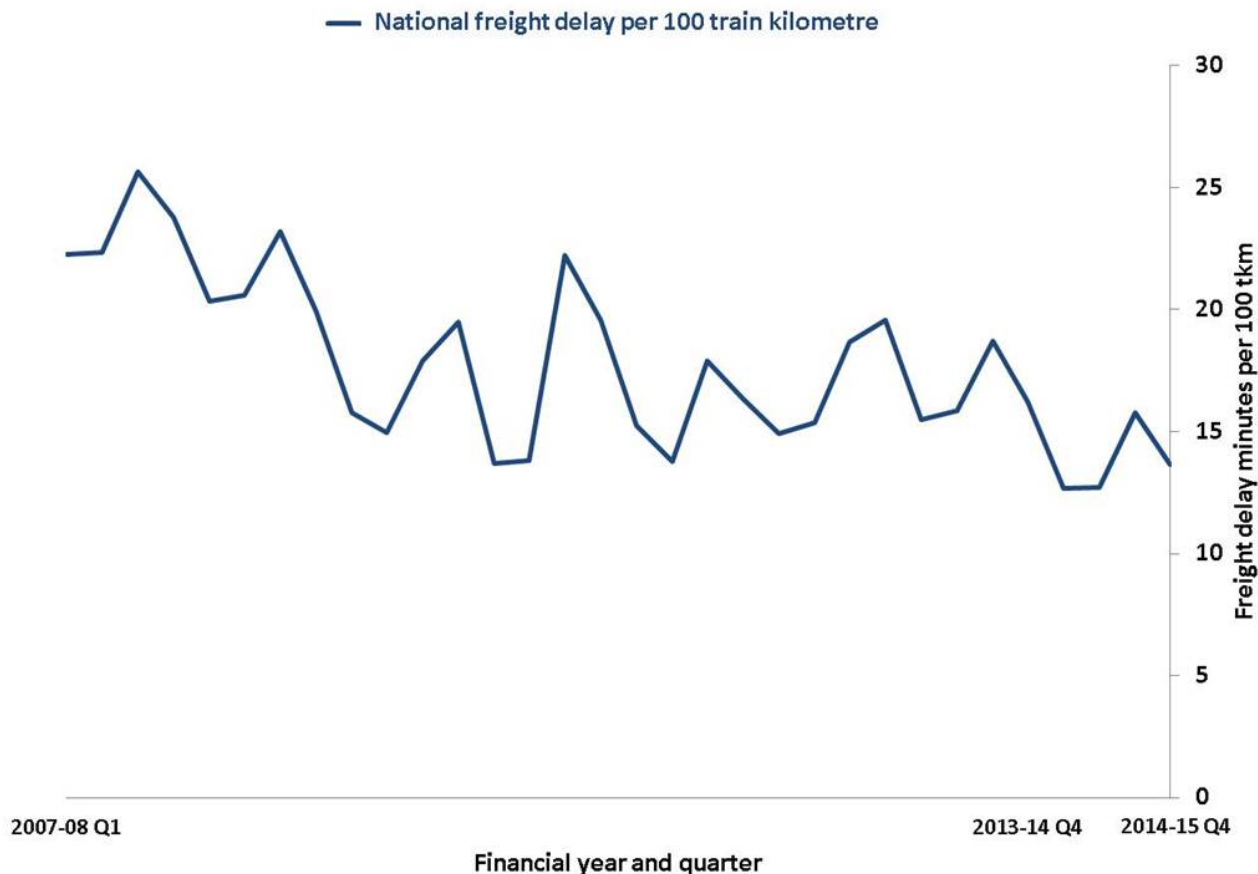
National freight delay per 100 train kilometres

Annual 2014-15

There has been a gradual improvement in the normalised freight delay measure since the start of the time series in 2007-08, with a low of 13.7 minutes per 100 train kilometres recorded in 2014-15, a reduction of 41.7% over the period. The accompanying [freight rail usage quality report](#) provides a description of freight delay per 100 train kilometres whilst [passenger and freight rail performance quality report](#) provides details of the freight performance measure (FPM) and freight delivery metric (FDM).

2014-15 Quarter 4 Results

National freight delay per 100 train kilometres – chart (P)
Great Britain data 2007-08 Q1 to 2014-15 Q4



- Freight delay in 2014-15 Q4 fell to 13.7 minutes per 100 train kilometres, a decrease of 15.7% compared to the same quarter last year. The trend in freight delay minutes reduction could be due to the ability to revise a freight train schedule at a much shorter notice and thereby minimise the impact of delays. The [passenger and freight rail performance statistical release](#) has details on other freight measures such as FDM and FPM

Quarterly normalised freight delay minutes data are available on the data portal: [Table 13.5](#)

(P) This dataset is provisional as delay data is often revised as part of the delay attribution process (please see the Freight Rail Usage [quality report](#) for further details). The data presented on the data portal is the most recent available quality assured data and therefore may differ to the figures presented in this statistical release, which are correct at the time of publication.

6. Freight market indicators



Freight market indicators comprise three measures: number of freight train movements on the network, impact on road haulage, and rail market share. Data for the three measures are from different suppliers, as a result the date for the latest data for each are not aligned. Freight movement data is available to 2014-15, impact on road haulage to 2013-14, and rail market share to 2011.

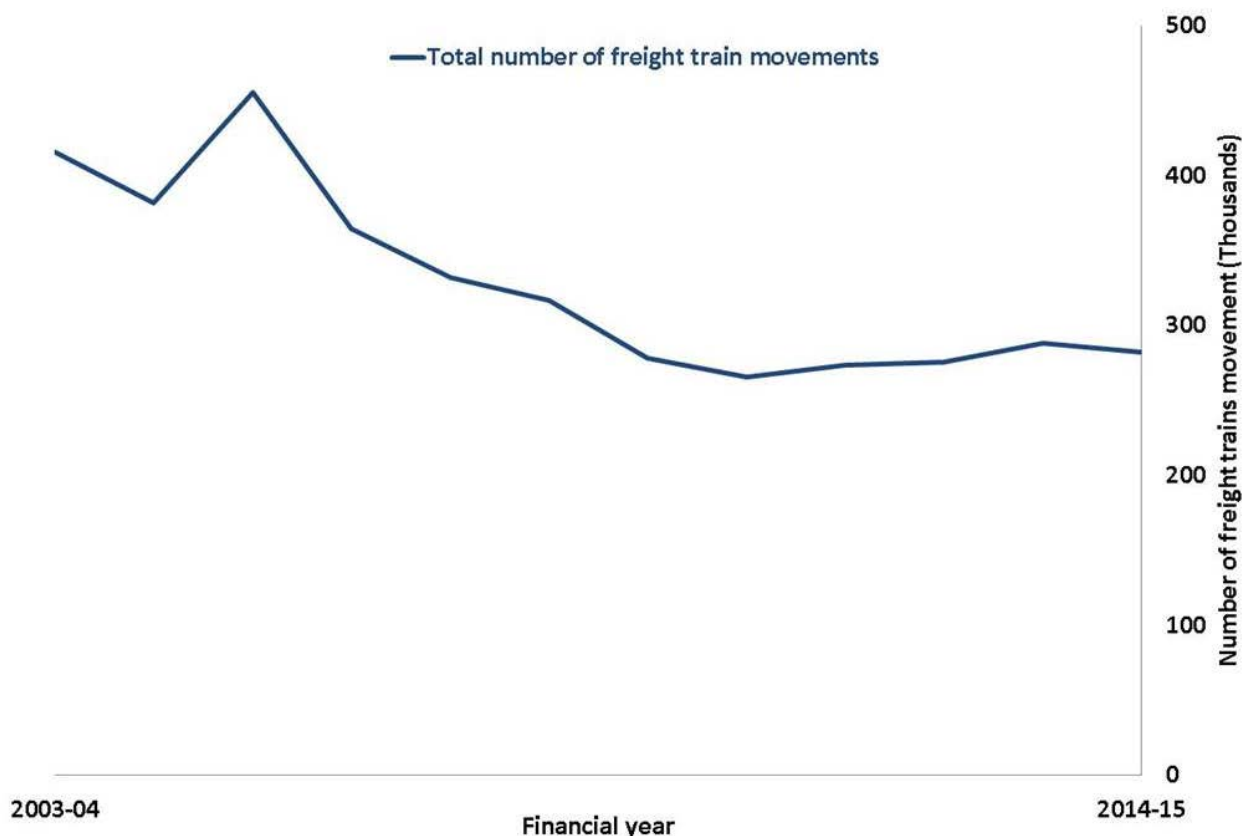
Annual 2014-15

Number of freight train movements

The number freight train movements are based on the chargeable train movements designated by Network Rail for freight train movements.

There has been a decrease in freight train movements over time. A maximum of 455,561 movements was recorded in 2005-06 and a minimum of 265,559 in 2010-11. The decrease could be part explained by the fall in the use of coal in coal powered plants therefore less coal is required to be carried by rail. In 2014-15, the number of freight movements decreased by 2.1% compared to 2013-14.

Number of freight train movements – chart
Great Britain data 2003-04 to 2014-15



Annual freight train movement data are available on the data portal: [Table 13.10](#)

Impact on road haulage

This indicator consists of two measures. The first is the rail freight lorry kilometres equivalent, which measures an equivalent distance that road vehicles (HGVs) would need to have travelled to move the amounts of freight carried on rail, and which is affected more by volume than by weight. The second is avoided lorry journeys, the equivalent number of road vehicle trips necessary to move the freight.

Rail freight lorry kilometres have averaged 1.97 billion kilometres equivalent between 2004-05 and 2013-14. The number of lorry kilometres required to be undertaken to equal the amount of freight moved by rail was 1.78 billion kilometres in 2013-14 (the latest year which data is available), a 6.9% decrease on 2012-13. The highest recorded was in 2011-12 at 2.08 billion kilometres.

There were 8.20 million lorry journeys avoided in 2013-14 through the use of rail freight, 11.4% lower than the previous year. The highest number of avoided lorry journeys recorded was at the start of the time series in 2004-05 at 9.61 million, which fell to a low of 7.85 million in 2010-11.

Annual impact on road haulage data are available on the data portal: [Table 13.8](#)

Rail market share

This indicator is based on the annual volumes of freight lifted and moved by different modes of transport: rail, road, pipeline and water. It gives the market share for rail freight in terms of tonnes lifted and tonne kilometres moved, and illustrates the relative importance of rail.

In 2011, 4.9% of all freight lifted was on the rail network, with 100.4 million tonnes. The proportion of freight lifted on the rail network has increased by 0.5 percentage points when compared to 2010. Freight lifted by road increased by 4.5% over the same period, accounting for 82.7% of all freight lifted in 2011.

In 2011, 9.1% of all freight moved was carried out on the rail network, with 21.0 billion net kilometres. The proportion of freight moved increased by 0.7 percentage points when compared to the previous year. In 2011, 68.0% of all freight was moved by road, at 157 billion net kilometres; the amount moved on road increased by 4.3% on the previous year.

Annual rail market share data are available on the data portal: [Table 13.12](#)

Annex 1 – Statistical release themes and publication timetable

Statistical release	Data	Publication schedule
Passenger and Freight Rail Performance - Quarterly	Public performance measure Freight performance measure Cancellations and significant lateness	2014-15: Q4: 14 th May 2015 2015-16: Q1: 3 rd September 2015 Q2: 12 th November 2015
Freight Rail Usage - Quarterly	Freight moved Freight lifted Freight delay minutes per 100 train kilometres Freight market indicators (Q4 only)	2014-15: Q4: 21 st May 2015 2015-16: Q1: 24 th September 2015 Q2: 26 th November 2015
Passenger Rail Usage – Quarterly 2014-15	Passenger kilometres Passenger journeys Passenger revenue Timetabled train kilometres	2014-15: Q4: 4 th June 2015 2015-16: Q1: 1 st October 2015 Q2: 10 th December 2015
Passenger Rail Service Satisfaction - Quarterly	Complaints Appeals received by London TravelWatch and Passenger Focus National rail enquiries	2014-15: Q4: 18 th June 2015 2015-16: Q1: 8 th October 2015

		Q2: 17 th December 2015
Regional Rail Usage - Annual 2014-15	Regional journeys	January 2016 TBC
Rail Finance – Rail fares index – January 2015	Rail fares index	14 th May 2015
Rail Finance – Annual 2014-15	Government support to the rail industry Private investment	27 th August 2015
Rail Infrastructure, Assets and Environmental – Annual 2014-15	Infrastructure on the railways Average age of rolling stock Sustainable development	22 nd October 2015
Key Safety Statistics – Annual 2014-15	Key safety facts Passenger key safety facts Public key safety facts Workforce key safety facts Train accidents key facts	17 th September 2015

Annex 2 – List of pre-created freight rail usage reports available on ORR NRT Data Portal

All data tables can be accessed on the data portal free of charge. The ORR data portal provides on screen data reports, as well as the facility to download data in Excel format and print the report. We can provide data in csv format on request.

Freight Moved

- Freight moved – [Table 13.7](#)

Freight Lifted

- Freight lifted – [Table 13.6](#)

Freight delay minutes per 100 train kilometres

- Normalised freight delay – [Table 13.5](#)

Freight Market Indicators (annual publications)

- Number of freight train movements – [Table 13.10](#)
- Impact on rail haulage – [Table 13.8](#)
- Rail market share – [Table 13.12](#)

Further user created freight usage tables can be created through the [Data Portal Wizard](#).

Revisions: There have been some minor revisions to the previously published dataset. Further details on historic revisions to the data set can be found at: [Revisions Log](#).

Annex 3

Statistical Releases

This publication is part of the statistical releases which cover the majority of reports that were previously released on a quarterly basis through the NRT Data Portal. The statistical releases combine the previous quarterly reports into 4 quarterly and 4 annual themed releases. The four quarterly statistical releases in the series are:

- Passenger and Freight Rail Performance;
- Passenger Rail Usage;
- Freight Rail Usage; and
- Passenger Rail Service Satisfaction.

A full list of the themed releases, their data and publication schedule can be found in Annex 1.

This is a quarterly release and the data in this release refer to 2014-15 Q4, 1st January 2015 to 31st March 2015. All the data contained and referred to within this release can be accessed via the Data Portal.

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.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods; and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

For more details please contact the Statistics Head of Profession Lyndsey Melbourne on 020 7282 3978 or e-mail rail.stats@orr.gsi.gov.uk.

The Department for Transport (DfT) also publish a rail statistics overview on Great Britain which can be found at [DfT Rail Statistics](#).



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