

Freight rail usage



Background:

This quarterly statistical release contains information on the usage and performance of rail freight in Great Britain.

The statistics cover **freight** moved and freight lifted (by commodity), freight cancellations and lateness, freight delays, freight train kilometres (by operator) and freight vehicle kilometres (by operator).

Sources: Network Rail, freight operators, Department for Transport

Latest quarter:

1 April to 30 June 2024

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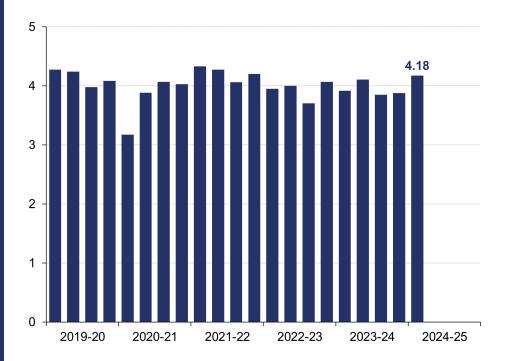
and performance April to June 2024

19 September 2024

Total freight moved was 4.18 billion net tonne kilometres in the latest quarter (1 April to 30 June 2024), up 7% compared with the same quarter the previous year. Biomass and intermodal non-maritime had the largest percentage increases in freight moved.

Freight moved was higher than any guarter since Figure 1 January to March 2022

Freight moved (billion net tonne kilometres), Great Britain, quarterly data, April 2019 to June 2024 (Table 1310)



Total freight lifted was 18.5 million tonnes in the latest quarter, an increase of 7% compared with the same quarter the previous year.

The proportion of freight trains cancelled or arriving after 15 minutes, as measured by Freight cancellations and lateness (FCaL), was 7.6%. This is the best level of freight reliability between April and June for three years.

All data tables, a quality and methodology report and an interactive dashboard associated with this release are published on the Freight rail usage and performance page on the data portal. Key definitions are in Annex 1 of this release.

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1. Freight moved

The total volume of freight moved was 4.18 billion net tonne kilometres in the latest quarter. This was a 7% increase on the same quarter the previous year. Six of the commodity groups saw a rise in freight moved volumes compared with the same quarter the previous year.

Figure 1.1 Biomass and intermodal non-maritime had the largest increases in freight moved

Freight moved (billion net tonne kilometres) by commodity, Great Britain, April to June 2024 and change compared with April to June 2023 (Table 1310)

(bil	ight moved lion net tonne km), [.] to Jun 2024	Percentage change on Apr to Jun 2023	
Other	0.02		-37%
Domestic waste	0.09		-22%
International	0.06		-10%
Metals	0.28		-3%
Intermodal maritime	1.41]	-1%
Coal	0.02		0%
Construction	1.40		2%
Industrial minerals	0.08		2%
Oil and petroleum	0.20		3%
Intermodal non-maritime	0.34		89%
Biomass	0.28		94%

Intermodal maritime decreased by 1% on the same quarter the previous year. It recorded 1.41 billion net tonne kilometres in the latest quarter. As the commodity with the largest share of freight moved, it accounted for over a third of all freight moved between April and June 2024.

Construction also made up just over a third of all freight moved in the quarter, representing the second largest share of all freight moved. Freight volumes in this sector increased by 2%, reaching 1.40 billion net tonne kilometres, the highest April to June value since the time series began in April 1998.

Intermodal non-maritime saw an increase of 89%. This was the second largest percentage increase of all the commodities. It recorded 0.34 billion net tonne kilometres, which is the highest value of any quarter since the start of the time series in April 2010. There have

been progressive increases in the <u>use of rail by retailers such as Tesco</u> and <u>by</u> <u>manufacturers like Coca Cola</u>.

Biomass volumes increased by 94%, which was the largest percentage increase of all commodities. It accounted for 0.28 billion net tonne kilometres, which was the largest value of any quarter since October to December 2021. <u>Increasing use of biomass at Drax</u> is driving substantially higher rail volumes from Immingham and Liverpool.

Volumes of metals fell by 3% compared with the previous year, in the context of <u>weaker</u> <u>trading conditions affecting UK steelworks</u>. There continues to be <u>reduced demand for iron</u> <u>ore at Scunthorpe</u>. Metals recorded 0.28 billion net tonne kilometres, making it the lowest April to June value since the start of the time series in April 1998.

Domestic waste saw a decrease of 22% compared with the previous year. It was the lowest volume of freight moved between April and June for seven years.

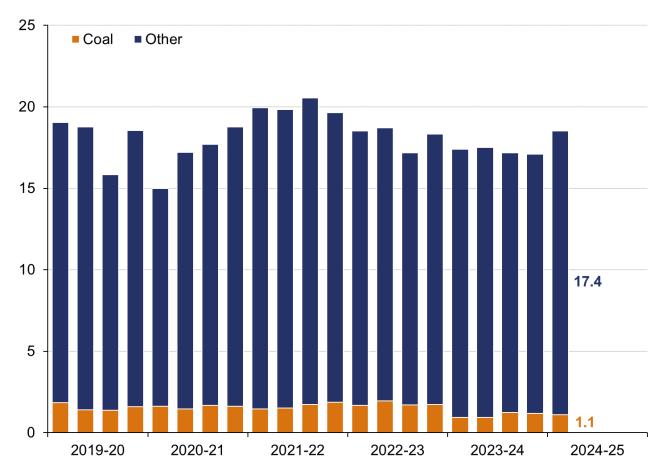
Data for freight moved by commodity by railway period is available on the data portal in <u>Table 1314</u>. Data for freight moved by Network Rail region by railway period is available in <u>Table 1311</u>.

2. Freight lifted

The total amount of freight lifted in the latest quarter was 18.5 million tonnes. It increased by 7% compared with the same quarter the previous year.

Figure 2.1 Total freight lifted was higher than any quarter since July to September 2022

Freight lifted (million tonnes) by commodity (coal and other), Great Britain, quarterly data, April 2019 to June 2024 (Table 1315)



Other freight lifted was 17.4 million tonnes, which was 6% higher compared with the previous year.

The amount of coal lifted was 1.1 million tonnes. It rose by 17% compared with the same quarter the previous year.

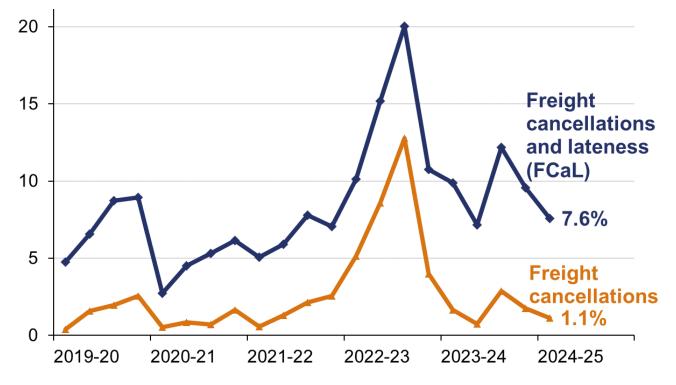
3. Freight cancellations and lateness

Freight reliability, as measured by Freight cancellations and lateness (FCaL), was 7.6% between April and June 2024. It was 2.3 percentage points lower (i.e. better) compared with the same quarter the previous year. The moving annual average (MAA) stood at 9.1% at the end of June 2024.

Freight cancellations were 1.1% in the latest quarter. It was 0.5 percentage points lower (i.e. better) compared with the same quarter the previous year. The MAA for the twelve months to end of June 2024 was 1.6%.

Figure 3.1 FCaL recorded its best level of freight reliability between April and June since 2021

Freight cancellations (percentage) and FCaL (percentage), Great Britain, quarterly data, April 2019 to June 2024 (Table 1355 and Table 1365)



Data by railway period is available on the data portal:

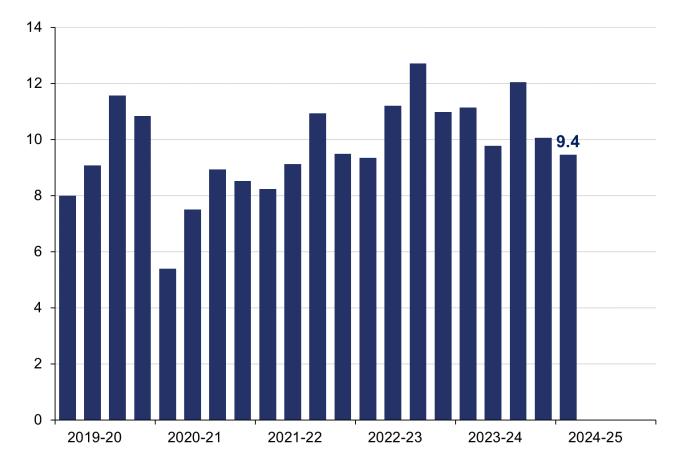
- Table 1351 Freight cancellations by Network Rail region
- Table 1352 Freight cancellations by Network Rail route
- Table 1361 Freight cancellations and lateness by Network Rail region
- Table 1362 Freight cancellations and lateness by Network Rail route

4. Freight delay per 100 train kilometres

Freight operators experienced 9.4 minutes of delay per 100 train kilometres in the latest quarter. This was 15% lower (i.e. better) than the same quarter the previous year; and an absolute decrease of 1.7 minutes per 100 train kilometres.

Figure 4.1 Freight delay in the latest quarter was lower than in any quarter since April to June 2022

Freight delay per 100 train kilometres, Great Britain, quarterly data, April 2019 to June 2024 (Table 1325)

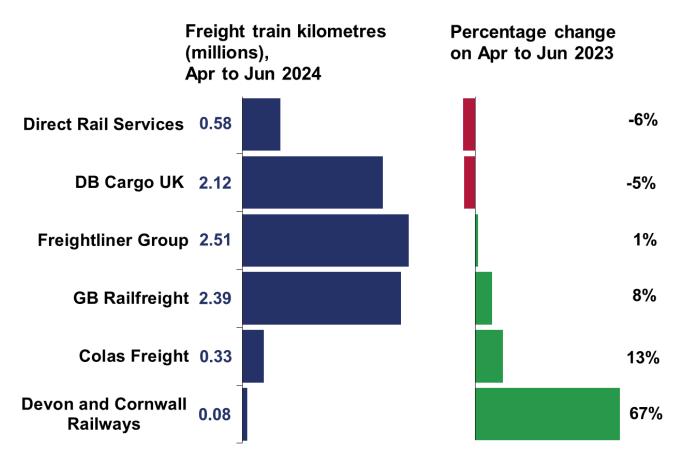


5. Freight train kilometres

Freight operators recorded 8.01 million freight train kilometres in the latest quarter. It was 1% higher compared with the same quarter the previous year.

Figure 5.1 The two operators with the largest market share both saw an increase in their train kilometres

Freight train kilometres (millions) by operator, Great Britain, April to June 2024 and change compared with April to June 2023 (Table 1333)



Four operators saw an increase in freight train kilometres. GB Railfreight and Colas Freight both recorded their highest value since the start of the time series in 2010. Devon and Cornwall Railways saw its highest April to June quarter since the time series began.

Freight train kilometres fell for two operators with Direct Rail Services having the largest percentage decrease compared with a year ago; a drop of 6%.

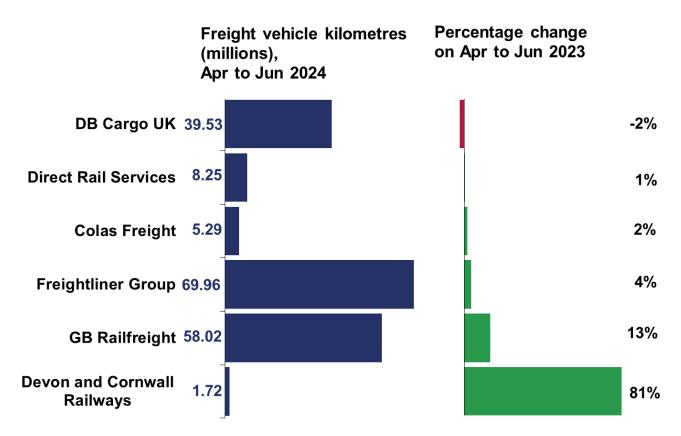
Data on the breakdown of freight train kilometres by traction type (electric or diesel) is available on the data portal in <u>Table 1333</u>.

6. Freight vehicle kilometres

Freight operators recorded 182.78 million freight vehicle kilometres in the latest quarter. It increased by 5% compared with the same quarter the previous year.

Figure 6.1 The two operators with the largest market share both saw an increase in their vehicle kilometres

Freight vehicle kilometres (millions) by operator, Great Britain, April to June 2024 and change compared with April to June 2023 (Table 1343)



All operators except one saw freight vehicle kilometres increase compared with the same quarter last year. As with freight train kilometres, GB Railfreight and Colas Freight had their highest value since the start of the time series. Devon and Cornwall Railways also recorded its highest April to June value since the time series began in 2010.

Only DB Cargo UK saw a fall in freight vehicle kilometres, recording its lowest April to June value since the start of the time series.

Data on the breakdown of freight vehicle kilometres by traction type (electric or diesel) is available on the data portal in <u>Table 1343</u>.

7. Annexes

Annex 1 – Definitions

- **Freight moved** measures the amount of freight moved on the railway network, taking into account the weight of the load and the distance carried. It is measured in net tonne kilometres.
- **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 cancellations** measures the percentage of commercial freight services that are cancelled by the infrastructure manager or another operator that is not a commercial freight operator. *A lower score indicates better performance.* **Moving annual average (MAA)** reflects the proportion of freight cancellations in the past 12 months. In the final quarter of the year (January to March), the MAA also represents the freight cancellations for the financial year.
- Freight cancellations and lateness (FCaL) is the percentage of commercial freight services that are <u>either</u>: cancelled by the infrastructure manager or another operator that is not a commercial freight operator; <u>or</u> arrive at their planned destination 15 minutes or more after their booked arrival time with 15 minutes or more delay caused by the infrastructure manager or another operator that is not a commercial freight operator. *A lower score indicates better performance*. Moving annual average (MAA) reflects the FCaL performance in the past 12 months. In the final quarter of the year (January to March), the MAA also represents the FCaL percentage for the financial year.
- Freight delay per 100 train kilometres is a normalised measure of delay experienced by freight operators. It is calculated from the total delay experienced by all GB freight operators divided by their train mileage. Freight train mileage can fluctuate depending on demand so a normalised measure allows for comparison over time regardless of changing levels of freight traffic on the network. A lower score indicates better performance.
- **Freight train kilometres** is the actual kilometres travelled by freight operators on all mainline infrastructure, terminals and yards. The data is sourced from Network Rail's Track Access Billing System (TABS). The data in the table covers electric, diesel and all traction. Competition between freight operators means we would expect a greater level of variation in mileage from year to year than in the passenger market.

- **Freight vehicle kilometres** is the actual vehicle kilometres travelled by freight operators on all mainline infrastructure, terminals and yards. This is calculated by multiplying the number of rail vehicles (e.g. coaches) by the distance travelled. A train with a locomotive and four carriages travelling one kilometre will generate one **train kilometre** and five **vehicle kilometres**. The data is sourced from Network Rail's Track Access Billing System (TABS). The data in the table covers electric, diesel and all traction. Competition between freight operators means we would expect a greater level of variation in mileage from year to year than in the passenger market.
- **Freight train movements** measures the number of freight trains run on the mainline rail network. The data is sourced from Network Rail annually and covers only trains that are chargeable. Each freight train is designated into a chargeable or non-chargeable category. Non-chargeable categories include empty trains to/from depots, operators moving equipment to/from site for Network Rail engineering work and unplanned train schedules (i.e. last minute).
- Rail freight impact on road haulage is measured using two metrics:
 - Rail freight lorry kilometres equivalent measures the distance that road vehicles (HGVs) would need to travel to move the volumes of freight carried on rail.
 - Avoided lorry journeys measures the number of road vehicle trips that would need to be made to move freight carried on rail.
- Rail freight market share compares the volumes of freight lifted (tonnes) and freight moved (net tonne kilometres) on road (HGVs), waterways and rail. These shares are calculated using Department for Transport's annual figures published in <u>Transport</u> <u>Statistics Great Britain</u>.

Further information on each of these measures and other definitions can be found in the <u>Freight quality and methodology report</u>.

Annex 2 – Quality and methodology

Data sources and methodology

Most of the quarterly data, and annual data on freight train movements, is sourced from Network Rail, with the exception of freight lifted data. This data is sourced directly from the seven largest freight operators (DB Cargo UK, Freightliner Intermodal, Freightliner Heavy Haul, GB Railfreight, Direct Rail Services, Colas Freight, and Devon and Cornwall Railways).

Annual data used to calculate rail freight impact on road haulage and rail freight market share is sourced from Department for Transport. This is included in the final quarter of the financial year (January to March) releases only.

Due to a methodology change, data calculated using Department for Transport's domestic road freight statistics pre-2021 and post-2021 should not be compared. We have continued to present the full time series within our supporting data tables (tables 1340 and 1350) but have marked the relevant years with a series break to indicate that data pre and post series break should not be compared. For more details on the change, please see Department for Transport's methodology note.

To provide more comprehensive coverage of the freight market, estimates of freight lifted have been calculated for Devon and Cornwall Railways (April 2011 onwards) and Colas Freight (April 2010 to March 2020). From April 2020, Colas Freight are providing actual freight lifted data, but Devon and Cornwall Railways will continue to be estimated in future releases. These estimates are based on calculating the number of freight train movements in a quarter for each operator (estimated from their actual train mileage data) and multiplying that by the average tonnes lifted per train for the latest full year, at a national level.

Network Rail provides data to ORR within 21 days of the end of each of the 13 railway reporting periods (each period lasts four weeks). The quarterly data in this release sourced from Network Rail are derived by splitting the periodic data according to the number of days of the period that fall within each quarter.

The latest freight train kilometres data, freight vehicle kilometres data and freight delay per 100 train kilometres data should be treated as provisional. Freight operators can provide Network Rail with additional data (e.g. cancellations) and Network Rail may re-attribute delays over time.

Further development of these statistics

Our freight lifted statistics are currently disaggregated between Coal and Other. Following the slowdown in Coal traffic, this split has limited value. We are investigating the possibility of providing a more disaggregated set of commodities in future.

Revisions

There have been revisions to previously published data:

• Table 1315: We received revised data for January 2023 onwards for one operator which affected our estimation methodology for the financial year April 2022 to March 2023, and April 2023 to March 2024. Consequently, quarterly figures between April 2022 and March 2024 and the annual figures between April 2022 and March 2024 have been revised.

Details of previous revisions can be found in the revisions log.

Further information on data sources, quality, and the methodology used to calculate the data within the release can be found in the <u>Freight quality and methodology report</u>.

How these statistics can be used

- Measuring rail freight volumes and market share by commodity over time
- Comparing distances run by freight operators over time
- Monitoring the impact of Network Rail and passenger operator caused delay on freight reliability
- Comparing the size of the rail freight market relative to other modes

How these statistics cannot be used



- Using freight trains ran as an indication of freight volumes due to <u>train lengthening schemes</u> and more efficient use of the network
- Using freight train kilometres by operator as a proxy for market share of volumes due to the variation in freight train distances
- Identifying origin and destination of freight flows
- Estimating freight revenues (refer to rail industry finance)
- Estimating freight emissions (refer to rail emissions)

Annex 3 – List of data tables associated with this release and other related statistics

Data tables

All data tables can be accessed on the <u>data portal</u> free of charge in OpenDocument Spreadsheet (.ods) format. We can also provide data in csv format on request.

All tables associated with this release can be found under the Data tables heading at the bottom of the <u>Freight rail usage and performance</u> page.

Freight usage

- Freight moved by commodity (quarterly) Table 1310
- Freight moved by Network Rail region (periodic) Table 1311
- Freight moved by commodity (periodic) Table 1314
- Freight lifted (quarterly) Table 1315
- Rail freight impact on road haulage (annual) Table 1340
- Rail freight market share (annual) Table 1350

Freight performance

- Freight delays per 100 train kilometres (quarterly) Table 1325
- Freight cancellations by Network Rail region (periodic) Table 1351
- Freight cancellations by Network Rail route (periodic) Table 1352
- Freight cancellations (quarterly) Table 1355
- Freight cancellations and lateness by Network Rail region (periodic) Table 1361
- Freight cancellations and lateness by Network Rail route (periodic) Table 1362
- Freight cancellations and lateness (quarterly) Table 1365

Freight traffic

- Freight trains run (annual) Table 1330
- Freight train kilometres by operator (quarterly) Table 1333
- Freight vehicle kilometres by operator (quarterly) Table 1343

Other related statistics

Passenger rail usage statistics are published on the <u>Passenger rail usage page</u> on the data portal.

Passenger rail performance statistics are published on the <u>Passenger rail performance</u> page on the data portal.

Estimates of passenger and freight energy consumption and carbon dioxide equivalent (CO2e) emissions are published on the <u>Rail emissions page</u> on the data portal.

The Department for Transport (DfT) also publishes some <u>multimodal freight statistics</u> as part of the <u>Transport Statistics Great Britain publication</u>.

European comparisons

Due to differences in how freight punctuality is measured in other countries, opportunities to make direct comparisons with statistics in this release are limited. Data from other European countries is published in the <u>IRG-Rail Twelfth Annual Market Monitoring Report</u>, including comparable traffic volume data based on freight train kilometres.

Annex 4 – ORR's statistical publications

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the <u>Code of Practice for</u> <u>Statistics</u> that all producers of official statistics should adhere to. You are welcome to contact us directly with any comments about how we meet these standards by emailing <u>rail.stats@orr.gov.uk</u>. Alternatively, you can contact OSR by emailing <u>regulation@statistics.gov.uk</u> or via the OSR website.

Statistical Releases

This publication is part of ORR's 'accredited official statistics', 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.

ORR also publishes a number of other 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 <u>data portal</u> along with a list of <u>publication</u> <u>dates</u> for the next 12 months.

Accredited official statistics

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007. They are official statistics that have been independently reviewed by the Office for Statistics Regulation and found to comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics.

The majority of our <u>statistical releases were independently reviewed by the OSR in June</u> <u>2012</u>. They comply with the standards of trustworthiness, quality and value in the <u>Code</u> <u>of Practice for Statistics</u> and are labelled accredited official statistics.

Since our review 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 OSR to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, <u>OSR published a</u> <u>letter</u> confirming that ORR's statistics should continue to be accredited official 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 <u>independently reviewed by OSR</u> in November 2020 and <u>their accreditation was confirmed</u> on 1 December 2020.

For more information on how we adhere to the Code please see our <u>compliance</u> <u>statements</u>.

If you have any feedback or questions please email <u>rail.stats@orr.gov.uk</u>.



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