
Rail Freight

Working for Britain



Rail Delivery Group



Rail Delivery Group



National Rail



BRITAIN
RUNS
ON RAIL



COLAS RAIL



GB Railfreight



Freightliner
A General & Wharfedale Company

Foreword

Rail freight delivers great benefits to our country. As our newly published figures reveal, rail freight in 2016 secured over £1.7bn of economic benefits for Britain. Benefits that are being felt right across the country, with the North West of England, Yorkshire and the Humber and the Midlands as the highest benefitting regions.

Rail freight is providing solutions for some of our country's biggest challenges - from decarbonisation and road congestion, to national infrastructure priorities and imbalances in the economy. As an industry, working together, the railway is setting out how we can advance even further to unlock the potential of rail freight, to deliver logistics solutions our customers want, and as a partner to government.

This report summarises the impact that rail freight is making and the potential that exists.

The prospects that rail freight holds for Britain are exciting. Together, we are committed to playing our part in a better future for Britain.

Paul Plummer

Chief Executive
Rail Delivery Group (RDG)

Hans-Georg Werner

Chair
RDG Freight Group



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of economic benefits
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Introduction

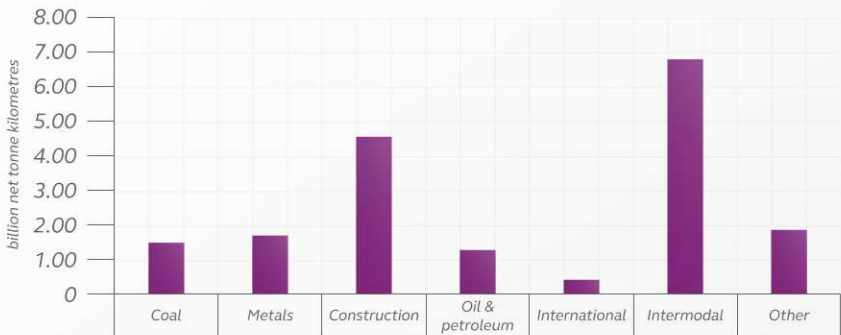
Rail is fundamental to Britain's prosperity. It connects businesses to markets, workers to jobs and people to their families and friends.

As Britain prepares to leave the EU and develops new trading relationships, our ability to move freight efficiently by rail matters more than it ever has before. For our country to succeed in the future, British businesses will need strong, reliable and cost-effective links to and from our ports.

Each year the rail freight industry carries goods worth over £30 billion – from whiskies, cars and clothing to cement, stone and oil. We transport more than one in four of the containers that enter and exit the UK via deep sea ports.¹

The mix of goods carried has shifted over time as output from some of the traditional industrial sectors, such as coal and steel, have declined to be replaced by fast moving consumer goods and construction materials. The sector has worked hard to develop new markets, and container and construction volumes are now at near record high levels, accounting for two-thirds of total rail freight traffic in the UK.

Freight moved by commodity (2016-17)



Source: ORR Data Portal

Rail plays a critical role in the efficient and productive movement of bulk materials, including construction materials from quarries and ports to sites in towns and cities around the country. Rail also plays a critical role in the movement of containers from ports to distribution centres and factories across Britain.

One freight train can carry enough material to build 30 houses,² and in London, over 40% of construction materials are delivered by rail.³ The sector also continues to play a major role in the efficient delivery of major infrastructure projects.



***One freight train can carry enough
material to build 30 houses***

New analysis of aggregate rail freight industry data by KPMG,⁴ on behalf of a number of rail freight operators, highlights the economic contribution made by rail freight. By applying productivity inputs produced by Freight Transport Association and Department for Transport, this analysis provides a high-level estimate that in 2016, rail freight generated economic benefits for the UK of over £1.7 billion. That figure comprises nearly £1.2 billion of productivity gains for British businesses that choose to use rail freight ahead of road, helping to improve their competitiveness. In addition, rail freight contributes more than £0.5 billion of externality* benefits by reducing congestion on our roads, improving air quality and reducing carbon emissions and reducing the number of road accidents.

What has rail freight achieved in the UK and what more can it offer?

Rail freight has achieved much since privatisation in terms of attracting investment, improved service quality, efficiency and growth, but still has far more to offer. It has the potential to unlock so many of the challenges facing Britain's economy and our country; from barriers to productivity by offering direct, efficient and reliable routes to connect UK businesses with major conurbations in Britain and through ports to the rest of the world.

Investment has helped transform the sector

Significant investment from rail freight operators and government as well as ports, terminals and customers, has helped to improve the productivity, efficiency and performance of rail freight over the last two decades.

*externality = unpaid cost of road

The freight operators have made £2.8bn of investment since privatisation to enhance capacity and improve performance and reliability.⁵ Working with the supply sector they have developed innovative wagon designs and more powerful locomotives to support increased payload per train.



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Ports, terminals and other users of rail freight have also invested in infrastructure and other capital equipment. The ports of Felixstowe, Southampton, London Gateway and Liverpool have all made significant contributions to the network to improve the capacity and capability of the routes into the ports.

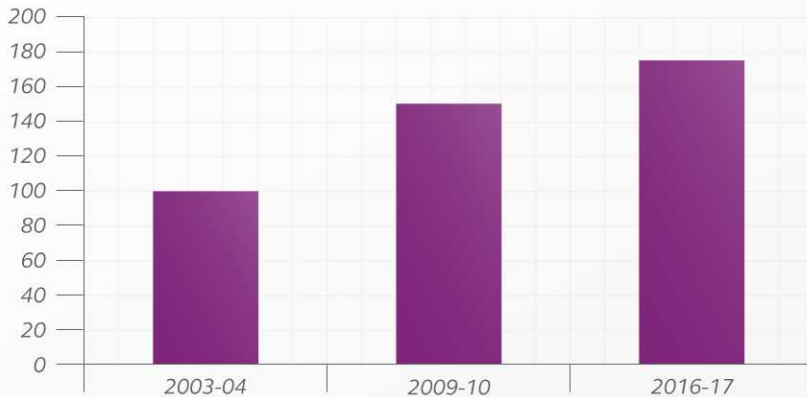
A further £700m has been invested by government directly in the rail freight network removing some of the previous restrictions on both gauge and length on core routes. Investments through the Strategic Freight Network fund to unlock capacity and enhance the capability of the network have delivered excellent value for money, typically at a benefit-cost ratio (BCR) of between 4:1 and 8:1.⁶

The growth in rail freight volumes and the improvements in efficiency and performance since privatisation have been facilitated by public and private investments.

Demonstrable rail freight efficiency improvements have been achieved

These investments collectively have helped to drive radically improved efficiency in the sector, by moving more on each train and this has made the rail freight offer more attractive and competitive for our customers.

Indexed net tonne kms per freight train



Source: ORR Data Portal

Rail freight operators and Network Rail continue to work together to enable longer trains to operate. Further improvements to efficiency are planned and these will make rail freight more competitive and help make Britain's businesses even more productive.

Running longer trains allows freight operators to run fewer trains, thereby reducing the footprint on the network. Over the last three years, freight operators have relinquished over 50% of their freight paths, freeing up capacity for passenger services and other freight services to run.⁷

There has also been substantial investment in people in all disciplines, as well as IT systems to further unlock more efficient work practices and optimise the use of locomotive and wagon fleets.

Intense competition between the operators has meant that resulting savings have largely been passed to customers, generating productivity gains for UK plc.

Productivity gains created for UK plc

Rail freight continues to make a substantial contribution to the productivity of UK plc by reducing the cost of transporting goods for Britain's businesses. These productivity gains help make Britain more competitive, which will be increasingly important after Brexit as we seek to build new trading relationships with countries around the world.

Rail freight already plays a vital role helping businesses to export goods efficiently to and from trading partners outside the EU, providing a direct bridge for UK companies to access overseas markets. More than one in four of the containers that enter and exit the UK's deep-sea container ports in the South East are moved by rail to and from the major cities and conurbations in the UK.⁸

Rebalancing the UK economy

The geographic pattern of rail freight benefits is supporting a more balanced economy for Britain. More than 60% of its activity is focussed in former industrial heartlands in Yorkshire and Humber, the North West, Scotland and the Midlands and overall, more than 87% is outside of London and the South East.

Heat map showing regional economic benefits



Source: Illustration based on KPMG data - Jan 2018

As the table below illustrates, the rail freight sector is bringing economic benefits and increased productivity to parts of the country that have seen less progress in improving productivity, employment generation and economic growth.

Working together, freight operating companies and Network Rail are committed to backing British-based business and boosting local communities.

Regional rail freight: aggregate productivity and economic benefits

Nations and regions	High-level estimate of direct productivity benefits	High-level estimate of externality benefits	High level estimate of total economic benefits
1. North West	£224m	£106m	£331m (19% of total)
2. Yorkshire & Humber	£220m	£104m	£324m (19% of total)
3. Scotland	£130m	£62m	£192m (11% of total)
4. West Midlands	£123m	£58m	£181m (10% of total)
5. London	£88m	£42m	£130m (8% of total)
6. South West	£82m	£39m	£120m (7% of total)
7. Wales	£76m	£36m	£112m (7% of total)
8. East Midlands	£65m	£31m	£96m (6% of total)
9. South East	£59m	£28m	£87m (5% of total)
10. North East	£55m	£26m	£82m (5% of total)
11. East of England	£50m	£24m	£74m (4% of total)
Total	£1,173m	£556m	£1,729m

Source: “Rail freight in GB: Productivity and other economic benefits” report by KPMG, 12 January 2018



Rail freight reduces congestion on our roads

Supporting rail freight growth will tackle rising levels of congestion on the UK's roads, particularly important in areas of acute congestion like the Midlands. Each freight train removes up to 76 heavy goods vehicles (HGVs) from Britain's roads.⁹

The rail freight operators transport goods that would otherwise require 7.79 million HGV journeys each year, resulting in 1.66 billion fewer HGV kilometres every year.¹⁰ The accruing externality benefits, largely through lower road congestion, were worth over £0.5bn in 2016. Rail freight could play a greater part in tackling congestion across many of the key road corridors, helping to boost local economies and improve quality of life.

Research by consultants from MTRU on behalf of the Campaign for Better Transport and the Department for Transport, identifies opportunities for targeted upgrades of existing rail lines to enable large numbers of lorry loads to be transferred to rail.¹¹ The resulting modal shift would have a considerable, positive impact on congestion on these key road corridors. The study highlights the need to holistically consider cross-modal interventions on a corridor-by-corridor basis when evaluating options to reduce congestion.



***fewer HGV
journeys per year***

Reducing emissions

The important role in reducing the environmental impact of freight transport is demonstrated by the fact that every tonne of freight transported by rail reduces carbon emissions by 76% compared to road haulage.¹² Rail freight can be part of the solution to decarbonising our country.



Helping deliver national infrastructure priorities

Rail freight has strong credentials for moving large quantities of construction materials safely and efficiently, whilst minimising the impact on local communities, meaning that it is well-suited to support the delivery of large infrastructure projects. Already projects such as Heathrow Terminal 5, HS1, the Olympic Park and the construction of Crossrail have benefitted from the reliability, competitiveness and capability of rail freight.

Rail freight's national presence means that it is well-placed to support the delivery of projects to modernise the UK's infrastructure from HS2 and Crossrail 2 to the delivery of the third runway at Heathrow Airport.

Improving reliability for businesses

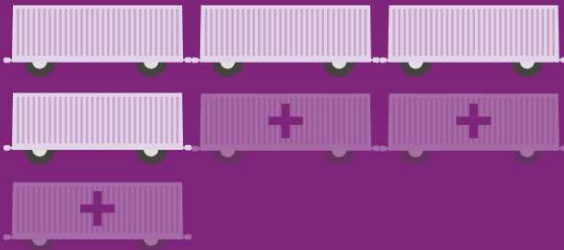
Rail freight continues to be a high-performing mode of freight transport, enabling customers to plan their logistics chain with greater efficiency and predictability. Unlike road, rail is planned and timetabled with the assumption of no delay.

Delays to road and rail freight



Source: ORR, DfT

In terms of its impact on the wider rail network, rail freight has radically improved its use of capacity on the rail network by running fewer, longer trains. Since 2003, the number of freight trains on the network has fallen by 46%, yet the amount of freight moved on each train has increased by over 75%.¹³ Rail freight only accounts for 2.5% of delays to passenger services – a 40% improvement since privatisation.¹⁴ Freight performance continues to improve, with over 94% of freight trains experiencing less than 15 minutes of network caused delay.¹⁵



The amount of freight moved on each train has increased by

75%

Rail freight: We stand ready to do more

The combined benefits of public and private investment in rail freight have secured significant economic gains for Britain and created the foundations for a step-change in rail freight in the future.

The rail freight sector stands ready to do more and by building on its success, we can continue to support the productivity of UK plc and improve the competitiveness of Britain's businesses as well as reducing the impact of transport on the environment.

References

- ¹ *Freight Britain: Continuity and Certainty for Rail Freight*, RDG, 2015.
- ² Mineral Products Association.
- ³ Freight National Passenger Operator Route Strategic Plan, Network Rail, February 2018.
- ⁴ "Rail freight in GB: Productivity and other economic benefits" report by KPMG, 12 January 2018.
- ⁵ *Keeping the lights on and the traffic moving*, RDG, 2014.
- ⁶ FNPO RSP, Network Rail, 2018.
- ⁷ Network Rail.
- ⁸ *Freight Britain*, RDG, 2015.
- ⁹ *Freight Britain*, RDG, 2015.
- ¹⁰ Impact on road haulage, ORR, 2016.
- ¹¹ www.bettertransport.org.uk/sites/default/files/research-files/cross-modal-freight-study.pdf
- ¹² *Freight Britain*, RDG, 2015.
- ¹³ Freight moved and number of freight train movements, ORR, 2017.
- ¹⁴ Freight and Passenger Rail Performance, ORR.
- ¹⁵ Freight Delivery Metric, ORR, 2017.



