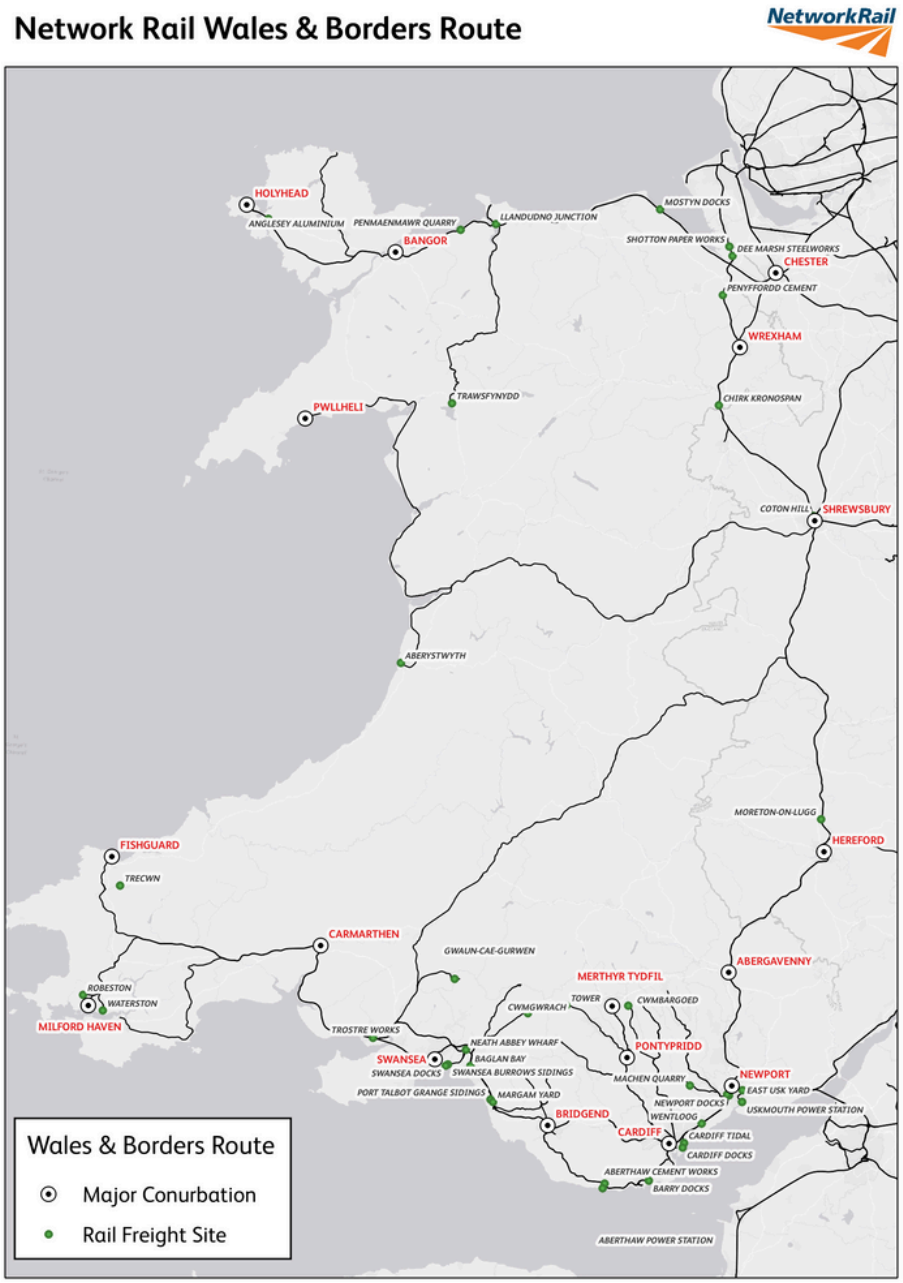
RAIL FREIGHT IN WALES

The rail network in Wales comprises three east-west routes and associated branches:

· the North Wales main line linking Cheshire with the port of Holyhead
· the Cambrian Lines linking Shropshire and the communities on Cardigan Bay
· and the South Wales main line linking the Severn Tunnel with the ports of Fishguard and Milford Haven.

These are connected by the Marches route from Newport to Chester, which crosses the England–Wales border several times along its route. Network Rail has brought all these lines into a single unified management structure, the Wales Route, headquartered in Cardiff.

There are significant rail freight movements in South Wales and new flows are being developed in North Wales. While some flows are internal to the Wales Route, many operate between Wales and other parts of the United Kingdom, including services to industrial customers, distribution centres and ports.



WHY RAIL FREIGHT?

- Rail freight produces 76% less CO_2 than the equivalent diesel HGV road journey. Compared to an HGV, electric locomotives will typically move between 3-4 times the payload per kWh consumed.
- Intermodal freight, both maritime and domestic, has doubled in the last 20 years. Today, over 25% of containers transported to or from the major ports are moved by rail and in 2024-25 intermodal was the largest share (38%) of all freight moved by rail.
- Domestic intermodal, including for supermarkets and retailers, has been the fastest-growing sector, rising by 40% during 2023-24, and continuing to grow by a further 13% in 2024-25, driven by companies switching their trunk haulage from road to rail.
- A train carries sufficient material for the building of 30 houses.
- Rail freight already contributes £2.45bn to the UK economy every year.
- UK Government has recognised the case for increased rail freight and has set a long-term target of 75% growth by 2050, supported by regulated five-year targets in England and Wales.
- Private sector businesses are aspiring to significant growth of up to by 2050, investing in terminal locations, locomotive and rolling stock assets, digitalisation and new business models to attract freight from road to rail.
- Modal switch of freight from road to rail reduces road congestion, improves road safety and improves road surface wear, leading to fewer potholes.

CASE STUDY

An overview from Network Rail

“Rail freight is a vital component of the Welsh economy, offering a sustainable, efficient, and reliable method of transporting goods. Although coal was once the dominant commodity moved by rail across Wales, the decline of the coal industry has highlighted the need to focus on both emerging and established markets to unlock the sector’s full growth potential.

“Key industries, including steel, construction, and energy, continue to rely heavily on rail freight for transporting essential commodities. Prominent freight flows include the movement of steel from Port Talbot, aggregates from quarries in both North and South Wales, and petroleum from Milford Haven.

“The rail freight sector plays a significant role in reducing carbon emissions, easing road congestion, and supporting broader economic development throughout the region.

“Network Rail is committed to promoting the growth of rail freight in Wales through strategic planning, infrastructure investment, and close collaboration with freight customers. These initiatives are focused on enhancing the resilience, capacity, and efficiency of the rail freight network, ensuring its ongoing success and its contribution to Wales’ economic prosperity.

“Through our partnerships with freight customers, we can target infrastructure investments that will accommodate volume increases, ensuring a robust and sustainable network. Our ambitious goal is to grow rail freight by nearly 7% across the region over the next five years.”

Jess Lippett
Senior Regional Freight Manager, Wales & Western, Network Rail

Delivering economic and environmental benefits for Wales

Rail freight plays a key role in the provision of effective supply chains for a range of commodities and customers in Wales and the Borders.

Aggregates

There are several significant flows of aggregates, many of which support the house-building and construction industries. Loading points include Newport Docks, Machen Quarry, Moreton-on-Lugg (in England, but handling stone quarried in Wales), Llandudno Junction (slate waste) and Penmaenmawr (quarried stone). Services operate to a range of receiving terminals, and many of the flows are supported by Freight Facilities Grants awarded by the Welsh Government.

Cement

The Heidelberg Cement Works at Padeswood in North Wales currently dispatches block trains to Bristol Docks for delivery to the Hinckley Point site in Somerset. Planned investment in the rail network at the site will allow other flows to be developed to support other infrastructure schemes in future.

Containers

Intermodal traffic is handled at the Wentloog terminal alongside the South Wales Main Line between Newport and Cardiff. This receives full trains from the deep-sea container ports of Felixstowe and Southampton and also handles Tesco trains, which bring supermarket goods from Daventry for consumers throughout South Wales.

Metals

Operations at the Celsa works in Cardiff use electric arc furnace technology with UK-generated scrap as its principal raw material. This is delivered to the plant by both rail and road freight.

The TATA steel works at Port Talbot is currently undergoing a complete reconfiguration and the installation of electric arc furnaces. The work is planned to take three years, and during this period, alternative supplies of steel are being imported in slab format and being moved by rail into the plant for onward processing. Rail freight will also be a key part of future developments at these sites.

Port Talbot currently dispatches semi-finished steel products by rail to other TATA works in Wales at Trostre, Llanwern and Shotton, and in England. All the Welsh plants also despatch finished products by rail to various ports and to warehouses in the West Midlands and the North East.

Timber

The Kronospan facility at Chirk receives timber by rail from a wide range of loading points around the UK – sources changing as different forests are recovered. A recent new flow, after successful trials, is from Aberystwyth.

Petroleum

There is a daily train from Milford Haven serving a number of terminals in England.

CASE STUDY

TATA Steel and the reconfiguration of Port Talbot Works

Building a Sustainable Supply Chain: Tata Steel UK's Transition to Green Steel

"Tata Steel UK is undergoing a major transformation towards 'green' low CO_2 steel manufacturing, marking a pivotal shift in its operations. The cessation of traditional iron and steel-making at Port Talbot in 2024 set the stage for this transition, with a £1.25 billion investment in Electric Arc Furnace (EAF) based steelmaking scheduled for commissioning in late 2027.

"To maintain supply continuity for customers during this period, Tata Steel is importing slab and coil feedstock for further processing in the UK. This has added approximately 3 million tonnes of traffic to the rail network, primarily from South Wales ports to Port Talbot, and from North East ports to Corby and Hartlepool.

"Despite having just six months to design and implement this complex import network, Tata Steel and its partners have successfully expanded port capacities to handle increased volumes, secured additional rail paths and converted over 120 wagons for imported feedstock transport.

"This rapid deployment was achieved on schedule, thanks to the strong collaboration between Tata Steel, port partners, primary freight operators, and Network Rail, whose flexibility in generating and granting sufficient rail paths was instrumental. The original network has since been further strengthened with the addition of another South West England port, 28 more wagon conversions, and the introduction of a second freight operator.

"Looking ahead, Tata Steel UK is preparing for the movement of over 2 million tonnes of steel scrap feedstock, sourced from the UK, to support the Electric Arc Furnace. This will predominantly be transported by rail, replacing almost all of the imported slab and coil movements.

"Close engagement with freight operators, wagon leasing companies, and Network Rail is ongoing to ensure this change will be seamless.

"The successful transition to imported feedstock and the design of the new scrap supply network underscore the importance of a fully integrated supply chain approach. Early collaboration with stakeholders has proved that significant new rail flows can be delivered at pace. The commitment, innovation, and determination of Tata Steel's port and rail partners have been, and will continue to be, critical in securing the long-term sustainability of the steel industry in South Wales and beyond."

Mark Abramo,
Director of Supply Chain, Tata Steel UK

CASE STUDY

Associated British Ports (ABP)

South Wales Upgrades – Keeping Britain Trading

*“*Once again, in the face of adversity, the rail sector has stood tall and adapted to facilitate a nationally significant project.

“In 2024, Tata Steel announced its intention to transition from blast furnaces to an Electric Arc Furnace (EAF) at Port Talbot. Associated British Ports (ABP) and Tata Steel agreed a deal that will see steel products continue to be processed in South Wales during the redevelopment period.

“To bridge the supply gap, millions of tonnes of steel slabs and coil are being imported through ABP’s Ports of Newport and Cardiff. These materials are then transported via rail to Tata Steel’s South Wales facilities.

“This rail link has been described as the “lifeblood” of Tata’s Port Talbot operations, enabling continued steel processing in the UK, allowing many sections of the plant to remain in operation. The project underscores the vital role of rail freight in sustaining and supporting both local industry and the national economy.

“The collaboration between ABP and Tata Steel has ensured that South Wales continues to have a presence in steel processing and is proof yet again of the importance and versatility of UK rail freight.”

Lee Armstrong
Head of Commercial (Rail)
Associated British Ports

Lewis Smith
Commercial Graduate
Associated British Ports

How the UK and Welsh Governments can help rail freight achieve its full potential and deliver benefits

1. Setting stretching targets for both Transport for Wales and Network Rail's Wales Route to support the growth of rail freight in Wales.
2. Ensuring rail freight is fully considered and integrated in the development of transport strategies, policies and investments in Wales.
3. Delivering investment to provide W10/W12 gauge clearance on routes where tangible benefits for rail freight can be achieved such as the tunnels west of Newport station on the South Wales main line.
4. Protecting network capacity for both existing and potential freight flows when enhanced passenger services are evaluated
5. Ensuring that the implementation of Great British Railways, and new partnerships in Wales, supports rail freight investment and growth in Wales.
6. Ensuring spatial and land-use policies recognise the need for additional freight terminals to support new/enhanced levels of rail freight traffic and prioritising the protection of potential sites when considering alternative uses.
7. Continuing to provide FFG and MSRS funding to encourage increased freight modal switch.

Future opportunities

Over the next decade, there are significant opportunities for rail freight growth in Wales. As well as modal shift in existing markets, rail freight can support the transition to green energy, helping to build new infrastructure and moving new fuels and commodities, including hydrogen and liquid carbon. Scrap metal flows will support new electric arc furnaces, and there are significant opportunities to grow the retail and intermodal flows into Wales as businesses look to decarbonise their supply chains.

About RFG

Rail Freight Group (RFG) is the representative body for rail freight in the UK. Our members include rail freight operators, logistics companies, ports, equipment suppliers, property developers and support services, as well as retailers, construction companies and other customers. Our aim is to increase the volume of goods moved by rail.

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