

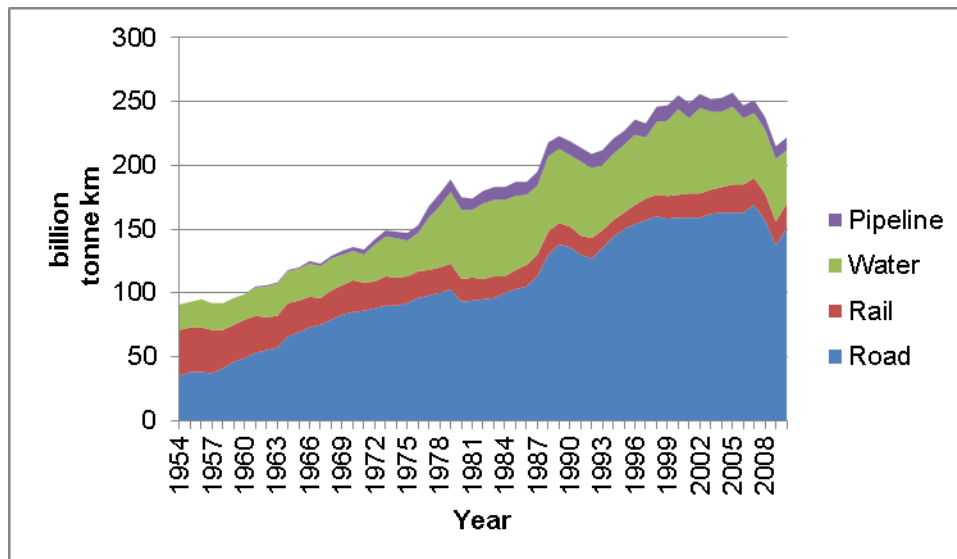
FREIGHT TRENDS AND FORECASTS

Past trends

Over the past 60 years the movement of freight in Great Britain has grown considerably and there has been a shift away from rail to road. This is illustrated in Figure 1 below which shows the annual domestic freight movement in the Great Britain, billion tonnes kilometres (kms), from 1954 to 2010. The overall growth in freight billion tonne kilometres over this time period was from 91 billion tonnes km in 1954 to 222 billion tonnes km in 2010. It also shows the levelling of the rate of growth in freight transport in the last decade and the increasing dominance of road transport at the expense of rail.

There was a sharp drop in freight traffic in 2008 and 2009 when the economy was in recession but by 2010, which is the latest date for which road freight statistics are available, freight tonne kilometres by both rail and road were rising again.

Figure 1: GB domestic freight transport by mode, 1954 – 2010, billion tonne km



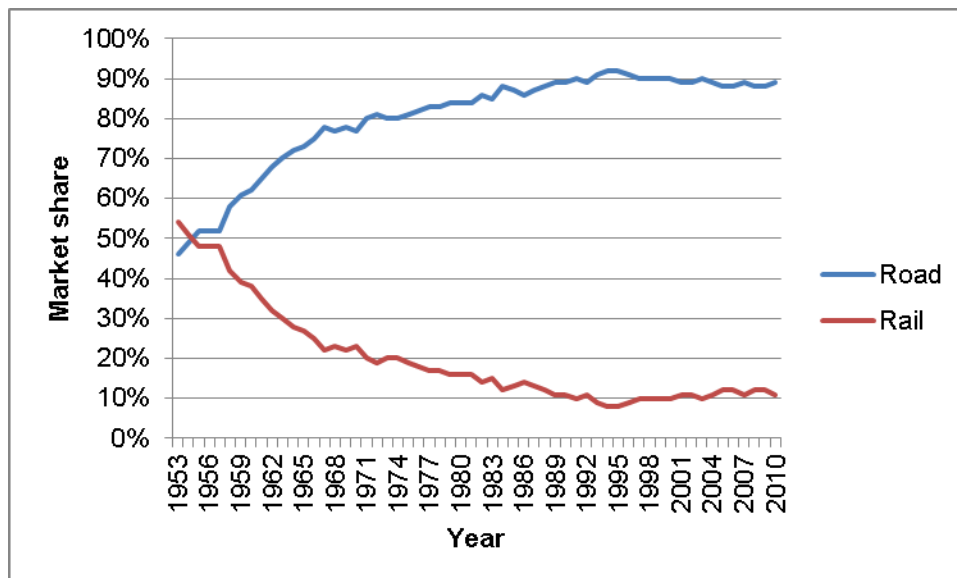
Source: DfT Transport Statistics, table TSGB0401

The decline in the use of rail in favour of road is shown in Figure 2 below which shows the relative market share of road and rail between 1954 and 2010. In 1954 rail had 54% of the market which was greater than road's 46% based on the total billion tonne km transported by road and rail modes. By 2010 the rail share had fallen to 11%. The rail mode share declined until the mid 1990s and has recovered slightly since.

The decline in rail mode share in the freight market is attributed to factors which increased the cost effectiveness of using road, such as the completion of the motorway network and the linerisation of the road haulage industry in the 1970s. Land use changes have resulted in new developments alongside motorways rather than railways, and traditional manufacturing industries, which were better suited to using rail than many other industrial activities, declined. The Clean Air Act led to the

decline of the domestic coal market which had been transported by rail. There has been a rise in the volume of imports into the UK and many of these goods come in from places such as China by ship on containers. These are transported mainly by road around the country (PTEG: Freight in the City Regions, MDS Transmodal, 2013). These drivers away from rail have largely run their course and rail share is no longer declining.

Figure 2: Road and rail freight, billion tonne km, 1954 - 2010



Source: DfT Transport Statistics, table TSGB0401

Forecasts

Road

The latest forecasts for growth in road freight traffic produced by the DfT in 2013 are given in table 1 below. This shows the forecast percentage change in traffic kms from 2010 by vehicle type. Whereas car traffic is forecast to grow by over 33% by 2040, heavy goods vehicles (rigid and artic combined will grow less rapidly) but light goods vehicles show a considerable increase in all the forecast years.

The rise in light goods vehicles is connected in part with the move towards internet shopping and the increased delivery of goods to people's homes. These 'last mile' deliveries contribute to traffic congestion in the urban area but there is potential for the greater use of lower emission vehicles.

Table 1: Forecast % change in traffic kms, from 2010

Vehicle Type	Year					
	2015	2020	2025	2030	2035	2040
Car	2.5%	11.6%	18.3%	24.1%	29.2%	33.5%
LGV	6.3%	22.0%	38.0%	53.5%	67.5%	81.1%
Rigid	-3.2%	-0.6%	1.2%	3.9%	5.5%	7.1%
Artic	-7.0%	0.2%	7.8%	15.0%	23.9%	33.4%

Source: DfT National Transport Model, 2013

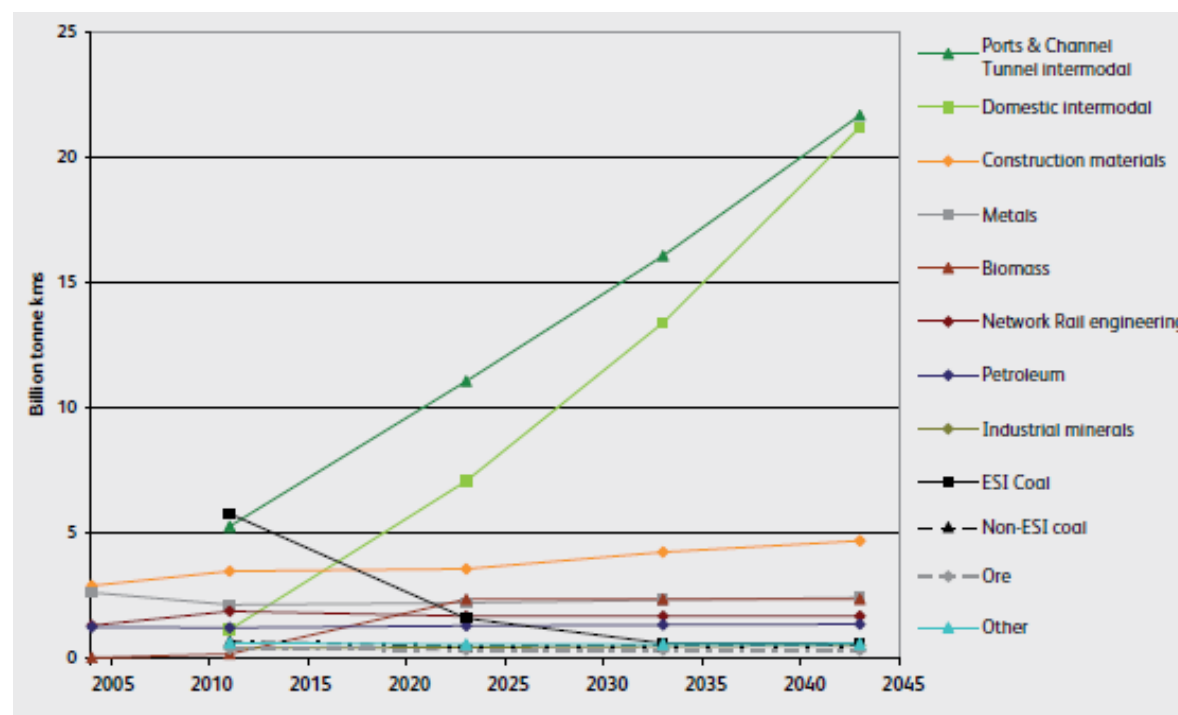
The diesel engines used in heavy goods vehicles are becoming more fuel efficient but the sector remains a major source of greenhouse gas emissions in Great Britain. There are no plans to increase the weight limit for goods vehicles from the current 44 tonnes limit but there is a trail in the UK for longer vehicles. This might lead to a slight decrease in the number of vehicles needed to transport goods by road, but generally an increase in population is matched by a corresponding increase in road freight.

Rail

Network Rail have recently issued forecasts for the growth in rail freight up to 2045. This shows that the sectors with the most significant growth will be intermodal traffic, predominately related to goods in containers coming in by sea. The growth in domestic intermodal traffic is dependent upon the provision of additional rail located warehouses. The decline in the movement of coal will not be fully compensated for by an increase in the transport of bio-mass fuel.

The recent ability of rail to maintain its share of the UK freight market has been the result of increased productivity in the rail sector which has reduced costs and the availability of grants for new facilities. Network Rail is also investing in the network to increase capacity at key pinchpoints on the network and to provide adequate clearance for rail wagons carrying containers on more parts of the rail network.

Figure 3: Rail freight forecasts by sector 2015 to 2045 (tonnes km), (with 2004 and 2011 actual data)



Source: Network Rail Freight Market Study 2013

Ports

The latest available forecasts for port traffic were produced by MDS Transmodal in 2007 before the current recession took place. These are shown in table 2 below.

Table 2: Forecasts of growth in containerised traffic, Twenty-foot equivalent units and Roll on – Roll off units, 2004 – 2030

		Thousand TEUs						
Area	Type	2004	2010	2015	2020	2025	2030	Annual growth %
Wales	Containerised traffic	105	155	197	217	239	367	4.95%
GB	Containerised traffic	7086	10001	12135	14138	16602	19702	4.01%
Wales	Roll on – roll off units	456	600	718	797	869	988	3.02%
GB	Roll on – roll off units	7637	9390	10911	12640	14460	16159	2.92%

Source: UK Port Demand Forecasts to 2030, MDS Transmodal 2006

These forecasts predict a steady increase in port freight traffic in Wales up to 2025, although it increases at a lower rate each year, followed by a substantial increase between 2025 and 2030. As these forecasts were made before the latest recession, both the rate of increase in port freight may be lower than predicted here and the upturn in 2025 may be arrive later than predicted here or not at all.