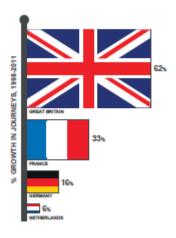
## GB rail: dataset on financial and operational performance 1997-98 – 2012-13

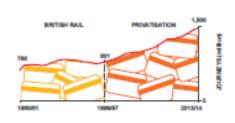
GB LEADS RAILWAY GROWTH ACROSS EUROPE



RAIL'S 'VIRTUOUS CIRCLE'



RAIL JOURNEY GROWTH SINCE 1980s



#### PERCENTAGE OF REVENUE SPENT ON DISCOUNTED TICKETS



#### GENERATING MORE MONEY FOR GOVERNMENT



## **Summary**

- A combination of highly competitive freight and franchising markets, a huge increase in passenger journeys and freight carried, and increasing industry efficiency is transforming the finances of the railway.
- The passenger network now generates enough income (£9bn) to cover its day-to-day operating costs, while government support (£4bn) is helping to build a bigger, better railway through Network Rail.
- The amount of money returning to government from passenger operations has risen by £1.56bn since 1997-98, showing how franchising is effective in capturing value for the taxpayer.
- Average train operating company (TOC) operating margins as a share of revenue were 2.9% in 2011-12 20% lower than in 1997-98. In absolute terms, TOC profits have remained stable.
- Across a range of indicators including safety, customer satisfaction, performance, number of services and size of fleet, the railway has improved significantly since 1997-98.
- Passenger and freight growth in the UK has outstripped major European comparators.
- Nearly half of all passenger revenue now comes from discounted tickets compared with 36% 10 years ago.

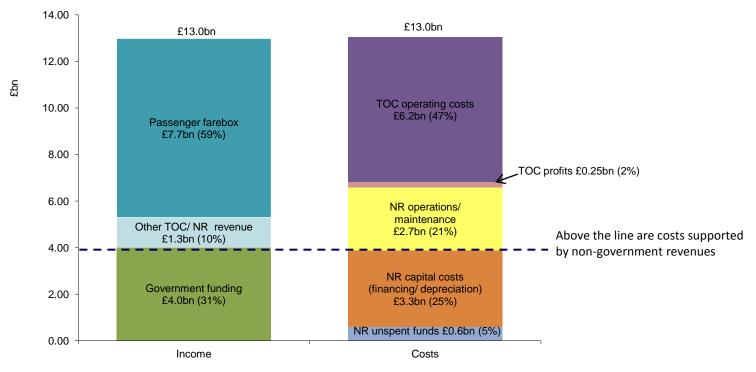
## **Background**

- In January 2013, the Association of Train Operating Companies commissioned KPMG to collate publicly-available industry data on passenger rail operations and analyse the key aspects of performance in the period since the introduction of franchising.
- ATOC published its report, *Growth and prosperity: how franchising helped transform the railway into a British success story*, in July 2013, which was based upon that dataset.
- In May 2014, the Rail Delivery Group (RDG) commissioned KPMG to update its work for 2012-13 data and extend the analysis to incorporate infrastructure and freight. The RDG has based this report on that updated dataset.
- Retrospective annualised data is provided back to 1997-98 (the first full year of privatised rail operations), or as otherwise stated. Each graph and table is clearly labelled with its source. Some of the new data provided by Network Rail is not publicly available.
- All prices are 2013 prices (ending March 2013) unless stated otherwise.
- The GB railway is specified and funded by the Department for Transport, Scottish and Welsh Ministers, Transport for London and Merseytravel. 'Government support' refers to funding from all GB rail funders.

# **Industry financials**

## Passenger services and infrastructure

#### Industry financials £bn financial year ending March 2013



Source: ORR GB Rail Financial Information 2012-13, Rail Industry Monitor and analysis of TOC accounts

Notes: NR revenue includes income from track access charges, traction electricity and stations, less charges paid to NR by TOCs

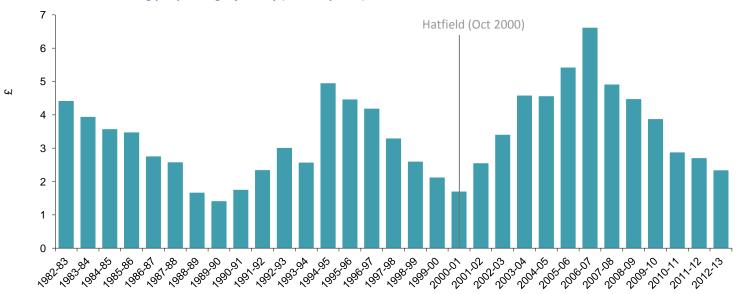
Network Rail unspent funds is money allocated to NR but not yet spent. All income and costs are pre tax.

£9bn of income from passenger fares, TOCs and NR covers the day-to-day running of the railway. Government funding of £4.0bn to Network Rail supports its capital programme to enhance the railway's infrastructure, the same level of government support for the railway as in 1994-95 in real terms.

Net direct government support to TOCs has been transformed. In 2001-02, this support was £1.4bn. In 2012-13 net government support was £40m.

## Government funding per passenger journey





Source: National Rail Trends

Note: This chart excludes government expenditure on and receipts from major projects (e.g. Crossrail); a grant to British Rail to finance its residual activities; proceeds from the sales of ROSCOs and British Rail non-passenger business in 1995-96 and 1996-97.

Government support per journey fell between 1994-95 and 2000-01. Support increased post-Hatfield, peaking in 2006-07 at £6.62 per journey. Support has since declined to £2.35 per journey in 2012-13, 29% lower than in 1997-98 (£3.30). The 2012-13 subsidy per journey figure is lower or the same as that for nine of the 12 years leading up to privatisation.

## Train operating companies

Since 1997-98, the surplus generated from train operations has risen from £0.7bn to £2.2bn.

Aggregate TOC-controlled costs and revenue – 2013 prices				
£bn	1997-98	2012-13	Change	% Change
Passenger revenue	4.2	7.7	+3.5	+82%
Other TOC revenue	0.6	0.7	+0.1	+27%
Total TOC revenue	4.8	8.4	+3.6	+75%
Staff costs <sup>1</sup>	1.3	2.3	+1.0	+71%
Rolling stock leasing	1.3	1.5	+0.2	+16%
Other operating costs <sup>2</sup>	1.6	2.5	+0.9	+58%
Total TOC-owned costs	4.2	6.2	+2.1	+50%
Surplus generated by train operations	0.66	2.21	+1.55	+233%

<sup>&</sup>lt;sup>1</sup> Since 1997-98, the aggregate number of staff employed by train operating companies has increased by 28% from 39,721 to 50,782. This is in response to passenger growth and the increase in services operated.

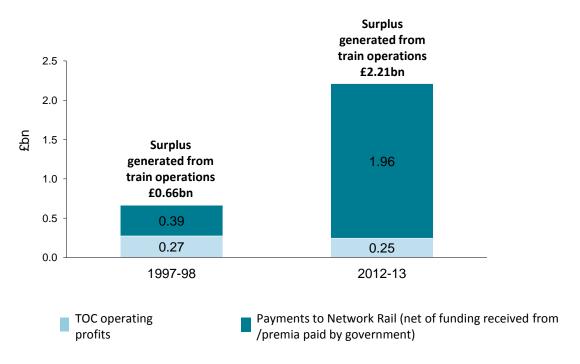
Surplus generated by train operations comprises revenues generated by the train operators less those cost lines they can control (staff, rolling stock and other operating costs). It has been calculated to show the value generated by the TOCs before payments are made either towards the network's infrastructure costs, their own shareholders or to/from Government. The slide on the next page splits the "surplus generated by train operations" between the operating margins of TOCs and the payments either to Network Rail or Government. The analysis covers all TOCs and concessions, including those managed by DfT, Merseytravel, Scottish Ministers, the Mayor of London and the Welsh Government.

Source: RDG analysis of TOC accounts (1997-8), ORR and GB Rail Financial Information 2012-13, TOC accounts Note: These figures are before access charges are taken into account

The surplus generated by train operators has increased by £1.55bn since 1997-98. 94% of the growth in revenue over this period has come from more passenger journeys, with just 6% the result of increased yield (i.e. increased revenue per journey).

<sup>&</sup>lt;sup>2</sup> These include fuel, train maintenance, HQ costs among others.

## Train operating companies



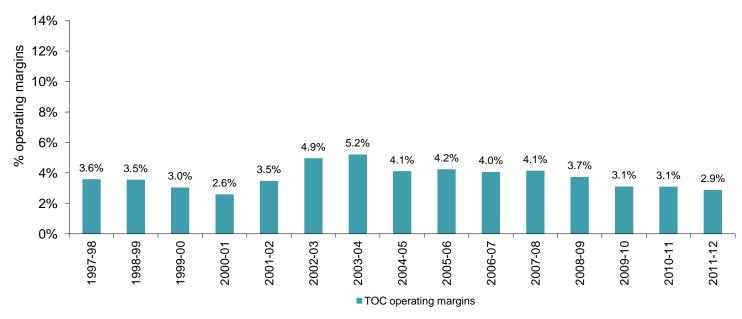
Source: RDG analysis of TOC accounts, ORR and GB Rail Financial Information 2012-13

The amount of money from train operations that goes back to government, which successive governments have chosen to reinvest in the industry via Network Rail, has risen from £390m in 1997-98 to £1.96bn in 2012-13 (+403%).

The access charging framework changed in this period, with government choosing to pay some of NR's revenue through grant rather than via TOCs. However, as provided for in franchise contracts, the £1.3bn decrease in access charges paid by TOCs was revenue neutral because there was a corresponding change in franchise payment lines to neutralise any potential benefit.

## **TOC** operating margins

#### **Average TOC operating margins**



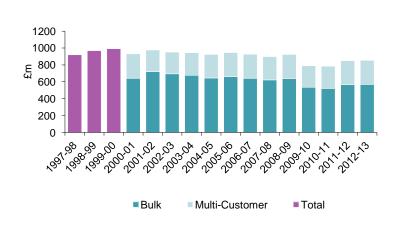
Note: Margins quoted are per statutory accounts. Where necessary reported results are pro-rata to meet a 31 March y/e. Due to different year ends 2011-12 is the latest year where accounts are available for all TOCs

Source: Rail Industry Monitor and analysis of TOC accounts

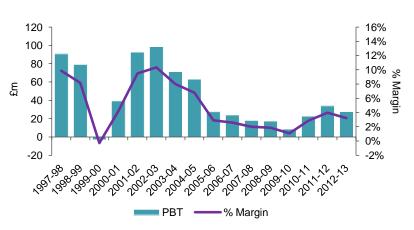
The combination of competitive bidding and the prolonged impact of the recession meant that operating margins as a share of revenue are 20% lower now than there were in 1997-98.

## Freight operating companies

Rail freight revenue by market segment (2013 prices)



Rail freight profit (2013 prices)

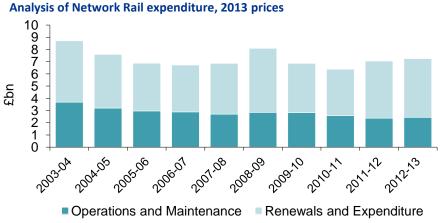


Source: RDG report "Keeping the lights on and the traffic moving" May 2014

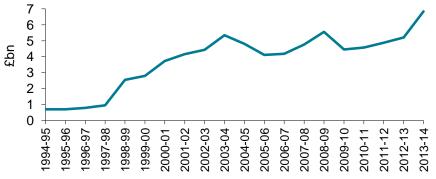
Rail freight operators have an annual turnover of over £850m. Intense internal and external competition and the recession has squeezed profits over recent years. The industry recorded profits before tax of £27m in 2012-13.

## Infrastructure expenditure

The cost of running the railway's infrastructure (the amount Network Rail spends on operations and maintenance) has, over the past ten years, been reduced by 34% through innovation, the introduction of new technology and in-sourcing some key activities.



Network Rail capital expenditure, 2013-14 prices



Source: Network Rail

Note: 2013-14 unavailable at the time of compiling this dataset

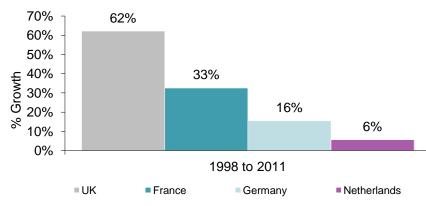
Source: Network Rail

Investment in the network has increased enormously to respond to growth and demand. Since 1994-95 investment has increased almost nine-fold (£698m in 1994-95 to £6.84bn in 2013-14).

## **Performance indicators**

## Passenger journey and freight growth

#### Comparative journey growth, UK and European networks



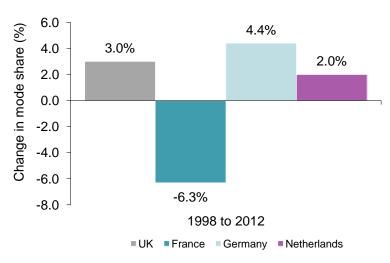
Source: UIC Rail ISA database

Rail journeys per head of population				
	1998	2011	% Change	
UK	15.4	23.5	+53%	
France	14.1	17.3	+22%	
Germany	20.2	23.5	+16%	
Netherlands	18.8	18.6	(1%)	

Source: UIC Rail ISA and Eurostat databases

Note: 2011 is the latest data available for European comparators

#### Comparative freight growth, UK and European networks

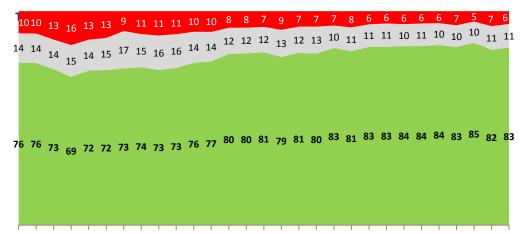


Source: Eurostat database

Passenger growth has outstripped state-operated European comparators since 1997-98. In terms of journeys per head of population, the UK has grown at more than twice the rate seen in France.

Freight has also outperformed comparators, except in Germany where the regulatory environment is more favourable (e.g. lorries are not permitted on roads on Sundays). 13

## Passenger satisfaction



A '99 A '00 A '01 A '02 A '03 A '04 A '05 A '06 A '07 A '08 A '09 A '10 A '11 A '12 A '13

Key: Passenger ratings per journey in %: Green - 'satisfied or good'; Grey - 'neither satisfied nor dissatisfied; Red -'dissatisfied or poor'

Source: Graph produced by RDG based on National Rail Passenger Survey conducted by Passenger Focus (started in Autumn 1999)

Passenger satisfaction with ticket price value for money is greater outside the London commuter area where a smaller proportion of rail users are annual season ticket holders.

Autumn 2013 NRPS scores for Value for Money were 56% for Regional and 57% for Long Distance TOCs, compared to 41% for LSE operators.

Annual-equivalent journeys rated 'satisfied' or 'good'		
	1999-2000	2012-13
Overall	708m	1,276m

Source: Analysis of National Rail Trends and National Rail Passenger Survey

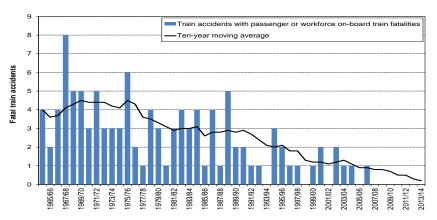
Comparing passenger satisfaction across Europe, 2012				
	UK	Germany	France	Italy
Punctuality/reliability	87%	53%	55%	63%
Train frequency	84%	74%	73%	73%
Information provision	80%	50%	48%	69%

Source: EU Commission, 2013

Nearly 600 million more journeys taken rated as 'satisfied' or 'good' in 2012-13 compared to 1999-2000 on a network that has hardly changed in size. The percentage of dissatisfied passengers has more than halved from a 16% peak in 2001 to 6% in 2013. Compared to passengers in Germany, France and Italy, passengers in the UK are more satisfied with their rail journeys.

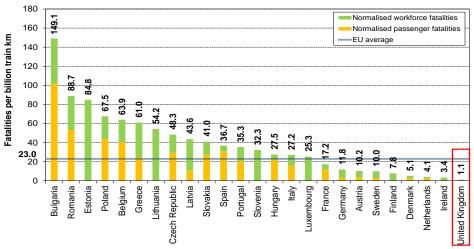
## **Safety**

#### Train accidents with passenger or workforce on-board fatalities since 1965-65



Source: ORR for historical data and RSSB Safety Management Information System (SMIS) for recent statistics

#### European comparison - workforce and passenger fatalities

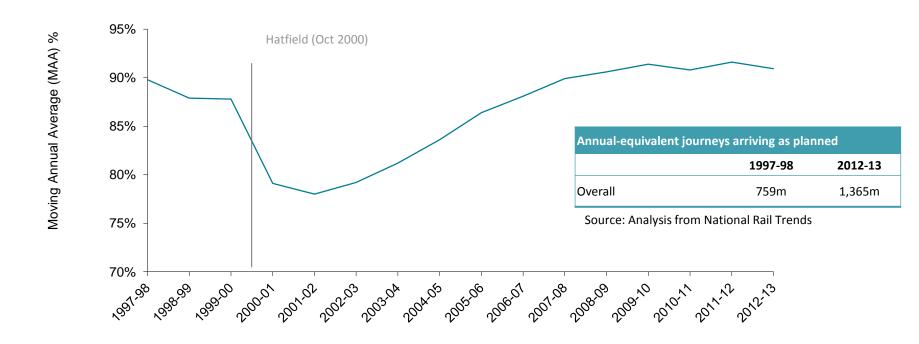


Source: Eurostat. The data covers the five-year period 2007-2012. Figures are normalised by train kilometres. Only accidents relating to railway vehicles in motion are included. The chart covers 25 members of the EU; the other two member states, Malta and Cyprus, no longer have railways.

Safety has continued to improve. The UK now has the safest railway in Europe.

## Performance of passenger services

Public Performance Measure (PPM, y/e March)



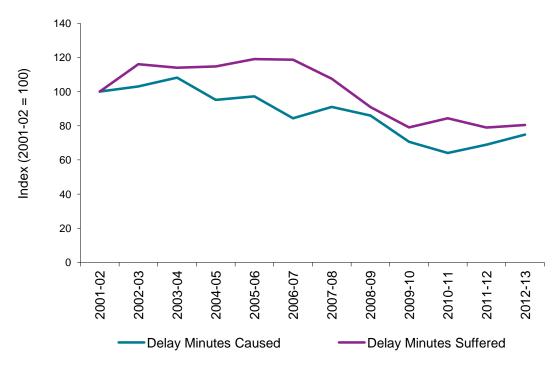
Source: National Rail Trends (PPM was first published in June 2000, but was calculated back to 1997-98)

90.9% of trains arrived as planned in 2012-13, (short distance services within 5 minutes of scheduled arrival time; long distances within 10 minutes). Over 600m more journeys arrived as planned in 2012-13 compared to 1997-98.

## Performance of freight services

Investment by FOCs, Network Rail, Government and TOCs has improved the performance of the rail network.

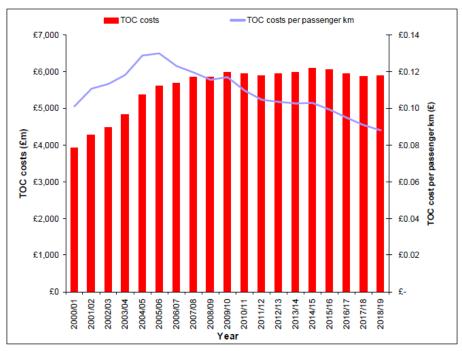
#### Delay minutes caused and suffered



Source: Network Rail

Delay minutes suffered by FOCs has reduced by 20% since 2001-02 against a backdrop of a busier network (driven by the increase in passenger services). Similarly, delay caused by FOCs has reduced by 25%, in turn contributing to the improved performance by TOCs.

### **TOC** unit costs



Improved productivity on passenger services

Ratio of employees to passenger journeys				
	1997-98	2012-13	% Change	
Ratio	1: 21,290	1: 29,572	+39%	

Source: Journeys from National Rail Trends, staff from TOC accounts

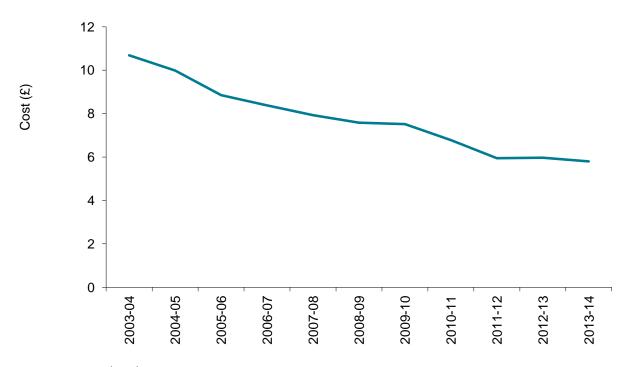
Source: Initial Industry Plan England and Wales, 2011 Note: Data from 2011/12 onwards were industry projections

The railway's *Initial Industry Plan* found that train operator costs per passenger kilometre (excluding access charges) have overall fallen slightly since privatisation, and have declined in real terms since 2005/06.

While the number of staff employed by TOCs has increased by 28% since 1997-98 (from 39,721 to 50,782), the number of passenger journeys made per TOC employee has increased by 39%.

## **Network Rail unit costs**

Network Rail controllable operating costs per train mile (2013-14 prices)



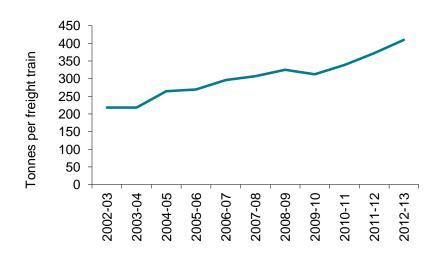
Source: Network Rail

Unit costs have fallen by 46% since 2003-04. The biggest drivers of this reduction have been the introduction of new technology, innovation and in-sourcing some key activities.

## Freight operator efficiency

#### Privatisation has also helped drive improvements in efficiency.

#### Improved productivity of freight services



Source: RDG report "Keeping the lights on and the traffic moving" May 2014 based on data from Department for Transport and ORR

Freight efficiency has improved due to a move towards longer and heavier trains. The number of freight trains run has fallen by a third since 2002-3 but tonne miles have increased by 16% over the same period, a net increase of 88% in tonnes per train.

# Passenger and freight services

## Passenger journey growth



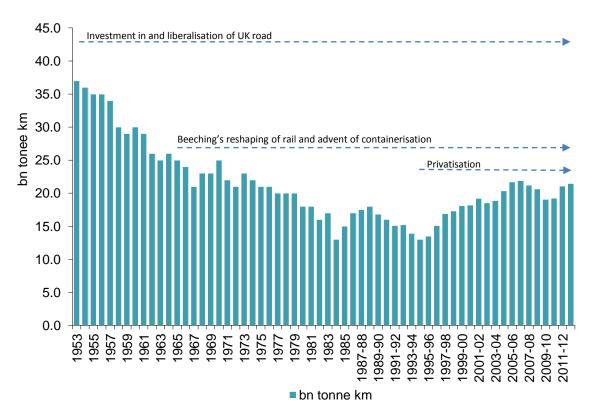
Source: National Rail Trends

Note: 2013-14 is the latest data available

Since 1997-98, annual growth in journeys has grown on average by c.4%, compared to 0.3% in the previous 16 year period, a more than tenfold increase in the growth rate.

## Freight sector growth

#### Before privatisation the rail freight industry was in steady decline

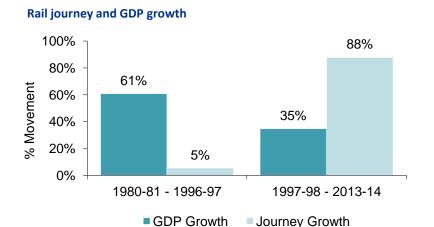


Source: RDG report "Keeping the lights on and the traffic moving" May 2014 based on data from Department for Transport and ORR

Privatisation and open market forces have helped reverse this trend and driven growth of over 70% in freight volumes since the mid-nineties.

## Passenger services - analysis of demand drivers

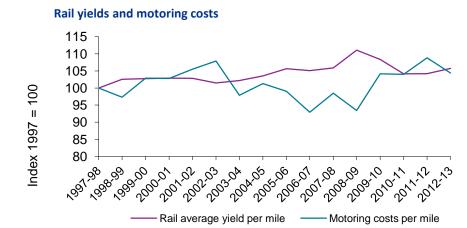
#### The growth in journeys has out-performed key external demand drivers



Source: National Rail Trends; ONS - GDP, Q4 2012 Dataset

Rail journeys per head of population		
Year	Annual journeys per capita	
1981-82	13.12	
1997-98	14.93	
2012-13	24.27	

Source: National Rail Trends; ONS Mid-year population estimates



Source: National Rail Trends; AA motoring annual motoring cost reports (data represents a petrol car of 1,101-1,401cc price of £13-£17k)

Rail market share		
Year	Rail journeys (billion passenger miles)	Market share
1981-82	18.5	6.0%
1997-98	21.5	4.7%
2011-12	36.2	7.5%

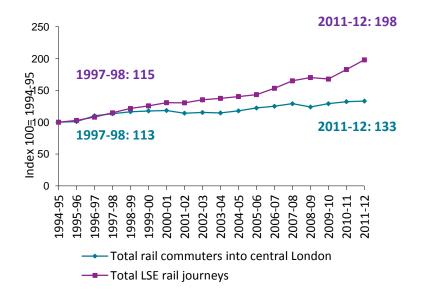
Sources: RDG analysis, based on TSGB, NRT and BRB Annual Reports

Since privatisation journey growth has been more than double GDP growth and rail use per head of population has increased by 50%. At the same time, the change in price paid for rail travel and motoring costs comparing the end and start of the period is broadly the same, notwithstanding divergences in the two trends at times over the course of the period.

## Passenger growth in London and the South East

Rail usage in London and the South East has increased at a quicker rate than both the general growth in commuter numbers and the rate of journey growth on the publicly operated London Underground.

#### Growth in rail journeys versus growth in commuter numbers



Source: TfL, Travel in London Report 5 – Central London Peak Count (CAPC) Supplementary Report, Supporting Workbook

#### **Rail versus London Underground**

Journey growth	
1997-98 to 2011-12	Journey growth
London Underground	41%
London and South East rail	73%

Source: National Rail Trends; LUL Statutory Accounts

## Passenger service frequency and crowding

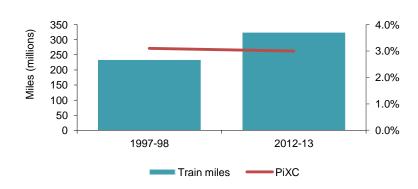
Inter-city frequencies				
		·		peak hour
	Trains	per day	•	frequency
	1994	2013	1994	2013
Manchester to London	17	47	1	3
Leeds to Edinburgh	2	15	0	1
London to Norwich	19	37	1	2
Leeds to London	17	32	1	2
Birmingham New St. to London	31	49	2	3
London to Sheffield	15	30	1	2
Bristol to London	23	33	1	2
Glasgow Queen Street to Edinburgh	37	61	2	4
Leeds to Huddersfield to Manchester	48	63	3	4
Cardiff to London	22	31	1	2

Source: RDG analysis

Number of planned services per year			
	1997-98	2013-14	% Change
Services	5.69m	7.27m	+28%

Source: Network Rail

Train miles up 39% since privatisation, PiXC maintained at 1997-98 levels



Source: National Rail Trends, Department for Transport statistics

Note: Passengers in excess of capacity (PiXC) is the difference between the planned capacity of each national rail service arriving in London against the actual number of passengers (excluding first class) on the service at its most crowded point on the journey. PiXC applies to all London and South East operators' weekday train services arriving at a London terminus during the 3-hour AM peak (07:00 and 09:59), and those departing during the 3-hour PM peak (16:00 and 18:59). The overall PiXC is derived by combining both peaks.

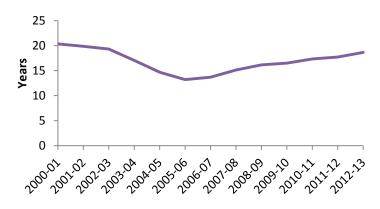
The rail network is being used much more intensively. This means significant journey growth has been delivered without an increase in the official measure of crowding.

## Passenger rolling stock

Change in total fleet size			
	1996-97	2013-14	Growth
Total vehicles in passenger use	10,400	12,691	22%

Source: OPRAF Passenger Rail Industry Overview; NR/ ROSCO/ ATOC Long Term Passenger Rolling Stock Strategy for the Rail Industry

#### Average rolling stock age



Source: National Rail Trends; RDG analysis

Note: Data series only available from the year 2000-01

Rolling stock procurements have significantly increased fleet size and reduced rolling stock age. While the average age of rolling stock has increased since 2005-06, this trend will reverse during CP5 because of the c.3,000 new electric vehicles due to be delivered including 2,250 by the Intercity Express, Thameslink and Crossrail programmes. This will both increase fleet size and decrease average rolling stock age.

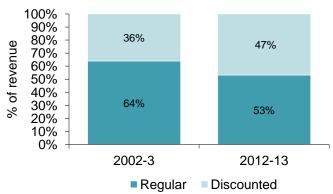
## Passenger fares

#### Average price per passenger mile

Average price paid per	passenger mile		
2013 prices	1997-98	2012-13	% Change
Pence per mile	20.3p	21.4p	5.7%

Source: National Rail Trends

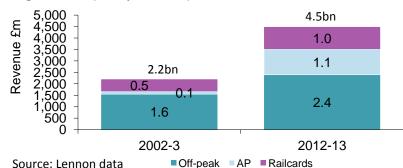
#### Passenger revenue split by Regular and Discounted fares



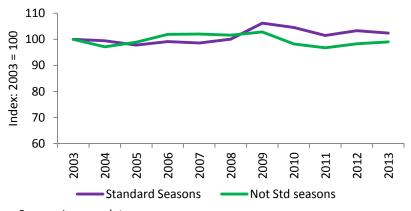
Source: Lennon

Note: Regular defined as Anytime and Seasons. Other revenue, e.g. car parking and railcards, together with refunds, have been excluded

Sales from Advance Purchase and Off-peak tickets and from journeys using a Railcard (2013 prices, £bn)



Average price paid per passenger mile , Standard Seasons & other tickets (y/e Dec 2013, March 2013 prices)

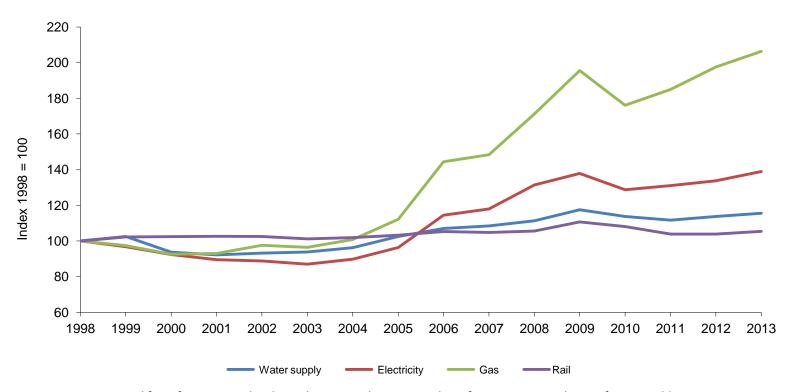


Source: Lennon data

The average price paid per passenger mile has increased 6% since 1997-98 in real terms. Nearly half of all income from passenger fares comes from customers purchasing discounted tickets, up from 36% 10 years ago. Sales of Advance Purchase and Off-peak tickets have increased significantly. Whilst standard season yield has increased slightly in real terms over the period, yields from other tickets have fallen slightly.

## Passenger services - price comparisons

Comparison of trends in rail fares and utility prices (2013 prices)



Source: Rail fares from National Rail Trends; Water, Electricity, and Gas from ONS, CPI and RPI Reference Tables

Electricity and gas prices have increased by 39% and 106% respectively since 1998 in real terms. Average price paid per passenger mile only increased by 6% over the same period, despite a 78% increase in rail travel in that period.