

# Rail Factsheet

December 2019



Department  
for Transport

## About this factsheet

This factsheet provides an overview of key statistics on rail in Great Britain and the context of how rail fits in the wider transport system. The national rail statistics are for surface rail only, and do not include underground, light rail and tram systems.

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## Rail statistics overview



### In Great Britain in 2018/19:

Latest year compared to the previous year of available data

#### Rail usage



↑ 3.0%

Increase in passenger journeys and 2.2% increase in passenger distance<sup>1</sup>.

#### Safety incidents



↓ 3.0%

Decrease in safety incidents involving passengers. Although total fatalities increased<sup>2</sup>.

#### Peak standing



↑ 0.1pp

(percentage points)  
Increase in morning peak standing levels in 2018, but decreased in London and Manchester<sup>3</sup>.

#### Punctuality



↑ 0.7pp

Increase in 'on time' train punctuality<sup>4</sup>.

#### Finance



↑ 8.9%

Increase in total government support for the railways<sup>5</sup>.

#### Satisfaction



↑ 3pp

Increase in passenger satisfaction in Spring 2019 compared to Spring 2018<sup>6</sup>.

## Railway in Great Britain



### The mainline railway is comprised of:



2,566  
stations<sup>7</sup>



15,847 km  
of route<sup>7</sup>



23  
Train Operating  
Companies (TOCs)<sup>8</sup>



6,012 km (38%)  
of route electrified<sup>7</sup>



~240,000  
People employed<sup>9</sup>



19.2 years  
Average age of rolling stock<sup>7</sup>

### Rail emissions<sup>10</sup>



36.6g CO<sub>2</sub>e

Emissions per passenger km

↓ 10.3%

Compared to 2017/18

Three additional stations were added in 2018/19: Kenilworth, Maghull North and Corfe Castle<sup>7</sup>.

Electrification schemes were completed on the London North Western route, Western route and across Scotland<sup>7</sup>.

RESPONSIBLE STATISTICIAN: Kelly Edwards (rail.stats@dft.gov.uk)

FURTHER INFORMATION: Public: 020 7944 2419; Media: 020 7944 3021

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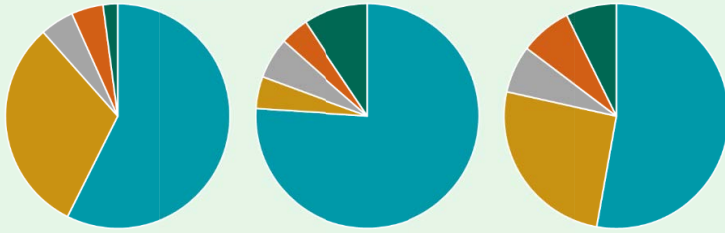
# Rail Travel



## Car was the most common mode of transport, but travel by rail has increased the fastest

Of all travel in England in 2018, rail accounted for:

2% of trips    9% of distance    8% of travel time



Key: Rail Bus Other Walk Cars

*This data covers England only and is sourced from the NTS<sup>11</sup>.*

Car or van travel either as a passenger or driver remained the most common mode of travel in England, followed by walking then bus trips. However, fewer trips were taken by car or van, buses and walking in 2018 than in 2002. Rail trips accounted for just 2% of all trips in 2018 (3% when walking is excluded)<sup>11</sup>, but rail trips have increased in England and more rail journeys were made in Great Britain than any other European country except for Germany<sup>12</sup>.

Rail travel tended to be used for longer journeys and so made up a larger proportion of total distance and time spent travelling<sup>11</sup>.

### Travel trends across modes: 2018



#### Trips per person per year

	<b>22</b>	<b>48</b>	<b>602</b>	<b>326</b>
since 2002:	↑ 64%	↓ 25%	↓ 11%	↓ 4%

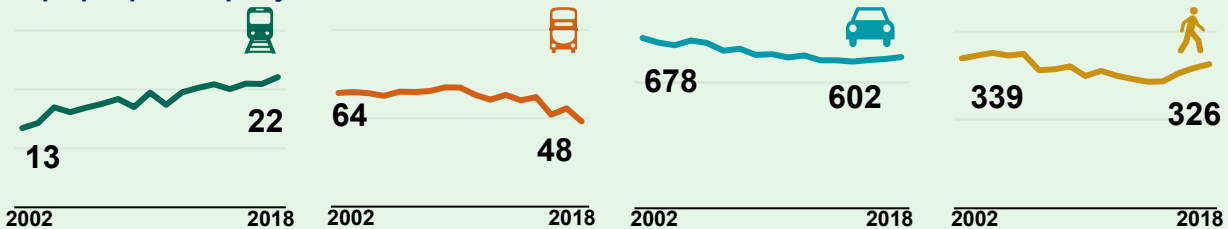
#### Miles per person per year

	<b>617</b>	<b>274</b>	<b>5,036</b>	<b>307</b>
since 2002:	↑ 41%	↓ 19%	↓ 13%	↓ 5%

#### Hours per person per year

	<b>30</b>	<b>30</b>	<b>217</b>	<b>105</b>
since 2002:	↑ 60%	↓ 20%	↓ 8%	↓ 4%

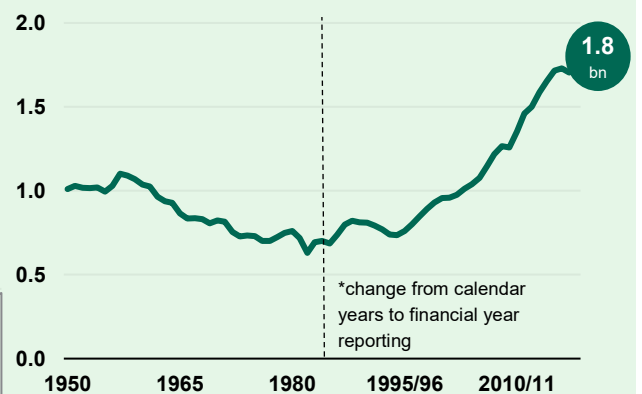
### Trips per person per year



## Rail demand has more than doubled since rail privatisation in 1994/95

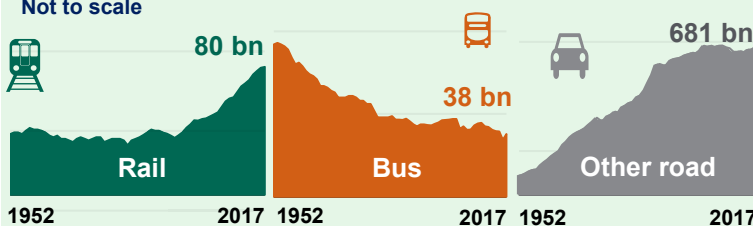
In Great Britain, rail usage over the last two decades has almost doubled following decades of decline<sup>13</sup>. In 20 years, rail journeys increased by 97% to reach a record 1.8 billion journeys<sup>1</sup> in 2018/19, and has increased faster than any other mode of transport. Bus use has declined and other road travel has increased marginally over a similar period<sup>13</sup>.

### Rail passenger journeys in Great Britain, billions



### Distance travelled by mode, 1952 to 2017 (km)

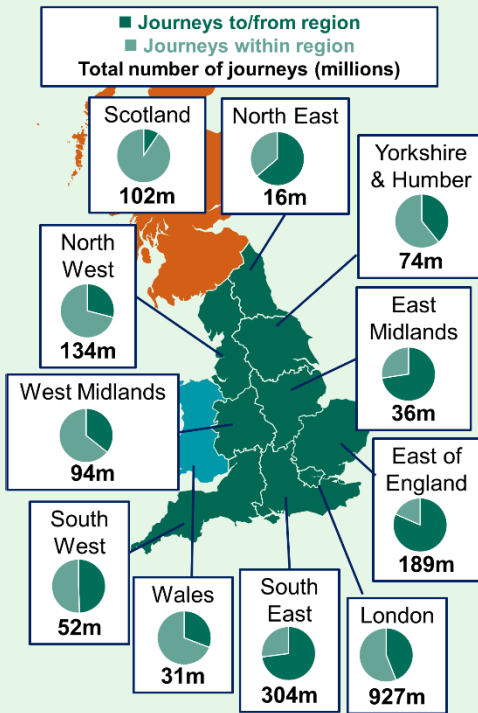
Not to scale



# Rail travel is highest in London and the South East



Almost two-thirds of rail journeys started or ended in London<sup>14</sup>



Rail travel is most prevalent in regions with large urban populations. Those in urban areas also tend to have lower levels of car ownership and make fewer car trips than those in rural areas<sup>11</sup>.

London has, by far, the highest levels of rail usage in Great Britain. In 2017/18, London residents made on average 59 rail trips per person per year, whereas the England average was 22.

Londoners also tend to make shorter trips by rail. In 2017/18, London residents' average rail trip length was 17 miles compared to an England average of 30 miles<sup>11</sup>.

## Average trips per year by type of residence in England, 2017/18

	Rail trips per year	Car trips per year
Urban Conurbation	34	469
Urban city/town	15	645
Rural town	10	738
Rural village	11	797

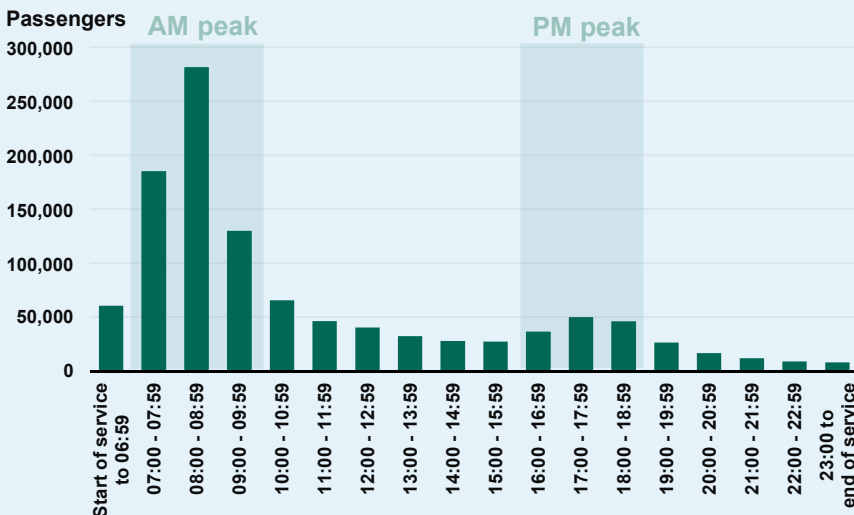
*This section refers to statistics from 2017/18*

# Rail Usage and Users



## Rail travel in major cities is dominated by peak travel

### Passengers arriving into London, Autumn weekday 2018

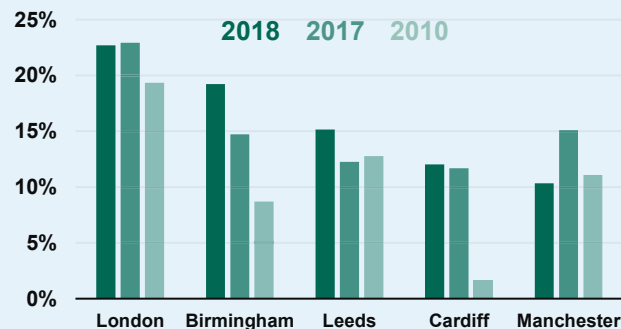


Over one million passengers travel to central London by train on a typical weekday; over half arrive in the AM peak (7-10am). In major cities outside London most travel still occurs in the peak, but more passengers travel in the PM peak (4-7pm; 27.7%) than the AM peak (24.9%)<sup>3</sup>.

The difference is likely influenced by London having the highest proportion of commuting trips compared to other regions<sup>13</sup>. Road traffic also peaks between 4pm and 6pm on weekdays<sup>15</sup>.

Rail crowding exists across many major cities and has been worsening over recent years. Across major cities, the percentage of standing passengers in the AM peak has increased from 15.7% in 2010 to 19.8% in 2018. Birmingham and Cardiff have seen the largest increases in the proportion of passengers standing in the AM peak since 2010. However, new trains are now designed to accommodate increased numbers of passengers standing<sup>3</sup>.

### Percentage of AM peak commuters standing



## Train punctuality has increased despite more services running

### Percentage of trains 'on time' by financial quarter

(Moving annual average)



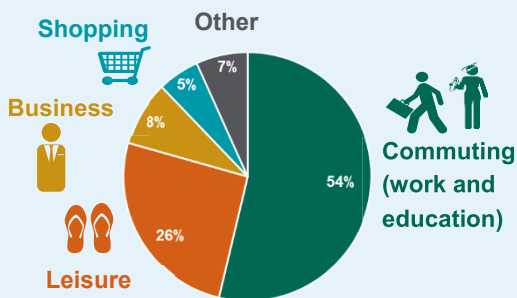
Along with an increase in the number of passengers, planned passenger train services have increased by 24% since 2009/10<sup>4</sup>. Increasing the number of services can reduce punctuality due to congestion. However, in 2018/19 there was a 3% increase in planned train services and a 1.2% improvement in punctuality compared with the previous year<sup>4</sup>. Since the decline in punctuality in 2018/19 due to timetabling difficulties, punctuality has since increased.

**i** 'on time' services are those that arrive at the station early or less than one minute after the scheduled time. This is different from the Public Performance Measure (PPM) used previously.

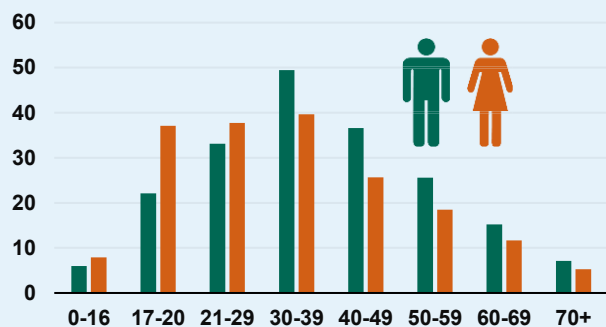
## Commuting is the most common journey purpose of rail passengers

Over half of all rail journeys in England in 2018 were for commuting and over a quarter for leisure<sup>11</sup>. This reflects the demographic make-up of users, as most rail trips were made by working age people. Males undertook slightly more rail trips on average than females (24 trips per person per year vs 21 trips per person per year).

### Rail journey purpose, England 2018



### Rail trips per person per year by age and sex



Rail travel was also affected by income level. Those earning the highest made over three times more rail trips than those earning the lowest. Most rail users were in managerial and professional occupations, whereas those who are unemployed were more likely to use buses<sup>11</sup>.



Users with mobility difficulties travelled less than those without and were particularly less likely to use rail. On average they made 5.0 times fewer rail trips, but 1.6 times fewer car trips and 1.4 times fewer bus trips in 2018 than those without mobility difficulties<sup>11</sup>.

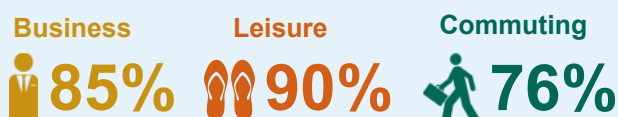
**i** This data is from the NTS and covers England only<sup>11</sup>

## Passenger satisfaction with train journeys was higher than car journeys

Passenger journeys rated as satisfactory overall across different modes for the latest years:



In Spring 2019, rail commuting journeys were rated less satisfactory overall than business or leisure journeys<sup>6</sup>.



In 2018/19, the three most frequent categories of rail passenger complaints were<sup>18</sup>:



Punctuality or reliability (22%)



Facilities on board (9%)

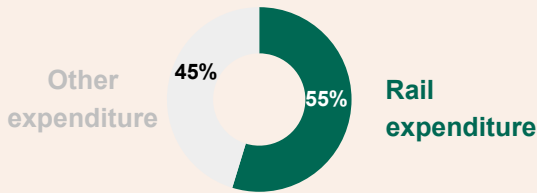


Sufficient room for all passengers to sit/stand (8%)

In 2017, 'tickets offering better value for money' was passengers' top priority for improving the railways<sup>19</sup>.

## Government funding of rail has increased

Across the public sector, the railways account for over half of total transport expenditure<sup>13</sup>



Government support increased in the last year. This is the second highest level on record (in real terms) and reflects investment in new projects, in particular High Speed 2 (HS2). Private investment was £1.1bn, the second highest value recorded since the time series began<sup>5</sup>. The income from passenger revenue has increased to £10.3 billion<sup>1</sup>.

### Projects: HS2

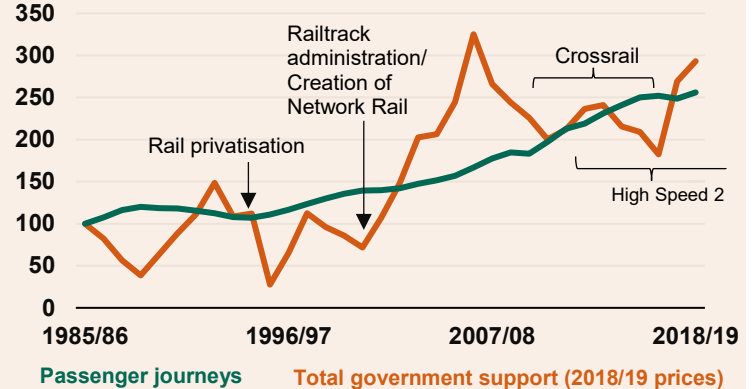
HS2 funding increased from £2.1 billion in 2017/18 to £2.6 billion in 2018/19; 37.0% of total government spend (£7.1 billion)<sup>5</sup>.

### Income by source, real terms

	Government support	Private investment	Passenger revenue
2017/18	6.5	1.3	9.8
2018/19	7.1	1.1	10.3
% change	↑ 8.9%	↓ 19.3%	↑ 5.0%

### Government support and passenger journeys

Index: 1985/86 = 100



Government support to rail has increased in line with passenger journeys since the mid-1980s and the recent increase in government support was driven by major rail projects and increased subsidy to TOCs<sup>5</sup>.

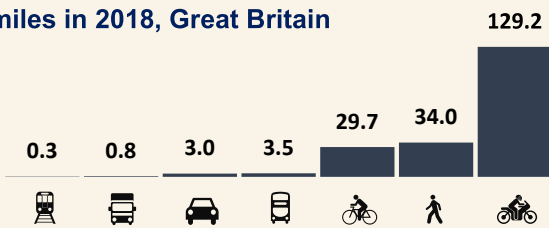
## Railway Safety



### Rail remains one of the safest modes of transport

Compared with other modes of transport, rail was the safest with 0.3 fatalities per billion passenger miles<sup>20,21</sup>.

#### Fatalities per billion passenger or vehicle miles in 2018, Great Britain

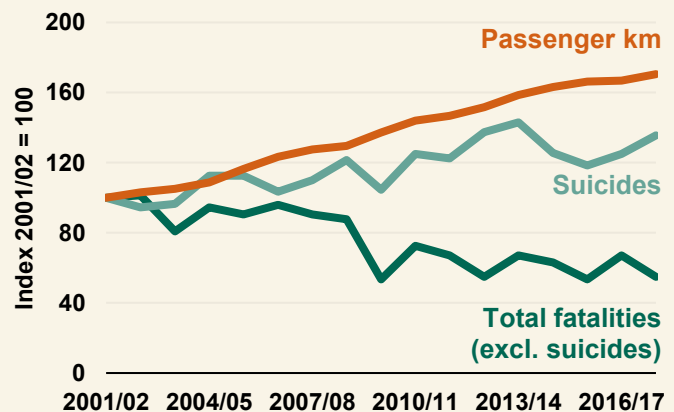


Over the twelve years to 2018/19, no passengers or workers have died from a mainline train accident.

There were 40 non-suicide rail fatalities in 2018/19, almost half the number from 2002/03. This is despite increases in passenger journeys and kilometres over this period.

Most rail fatalities are caused by trespass onto the railway by members of the public<sup>21</sup>.

#### Fatalities on the railway in Great Britain



# Rail Freight



## The proportion of freight moved by rail has increased

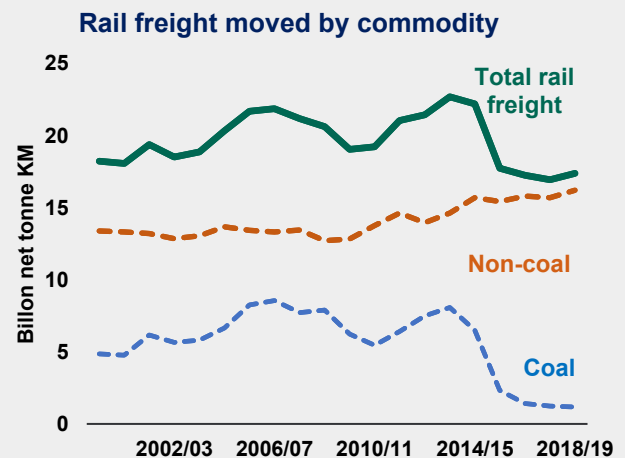
Passenger and freight trains share the rail network. In 2017, 9% of freight moved in Great Britain was by trains, a 0.4 percentage point increase compared with the previous year. In 2018/19, the total amount of rail freight transported increased to 17.4 billion net tonne kilometres, a 3% increase on 2017/18<sup>22</sup>.

This increase follows a recent decline in freight moved as the Department for Business, Energy and Industrial Strategy introduced a policy to phase out coal-based energy in 2015.

Meanwhile, construction and domestic intermodal freight moved have increased by 68% and 31% respectively over the last decade.

**Freight moved within GB (2017):**  **9%** rail  **13%** water  **78%** road

In 2017/18, 7.2 million lorry journeys were avoided as a result of rail freight movements, providing environmental benefits and reducing road congestion<sup>22</sup>.



## Sources

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