



Regional Rail Usage

2017-18 Statistical Release

Publication date: 28 February 2019

Next publication date: January 2020

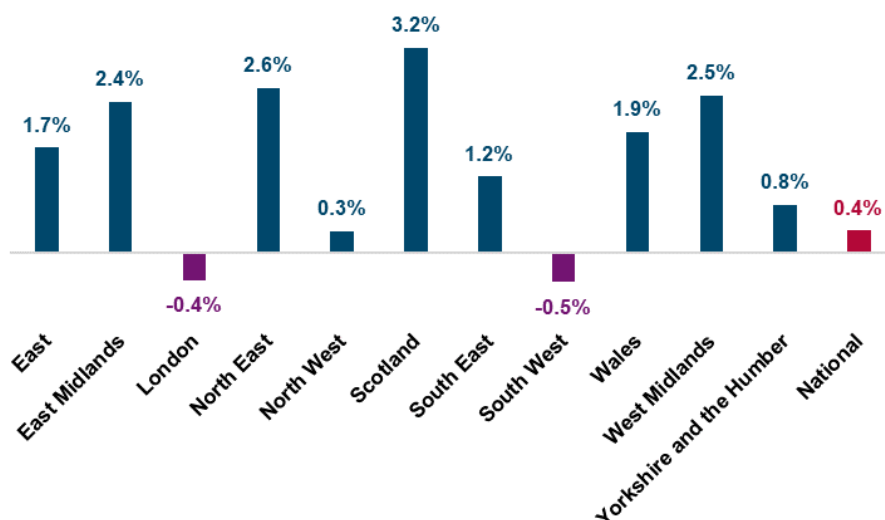
Background

This release contains information on regional passenger journeys by rail in Great Britain during the period 1995-96 to 2017-18 with the latest data referring to 1 April 2017 to 31 March 2018.

The journeys presented are based on the origin and destination stations named on a ticket and do not take into account any changes of train. As a result, estimates of total journeys in this release are *lower* than the total journeys published each quarter in the [Passenger Rail Usage](#) statistical release.

The Origin Destination Matrix (ODM) is the source of data for this release. For a brief overview of the ODM please see the [Methodology in Annex 3](#).

Change in Total Passenger Journeys
between 2016-17 and 2017-18



The number of **rail passenger journeys** in Great Britain has increased by 0.4% compared to 2016-17*. This was the smallest increase in passenger journeys in eight years.

Journeys to/from other regions increased by 1.2%. The number of journeys increased for all regions, except the South West. The largest contribution to the overall change was journeys to/from London, with over 3 million more journeys made in 2017-18. The highest growth rate was for journeys to/from Scotland, with an increase of 6.3%.

Journeys within regions remained at a similar level. Passenger journeys in London, which account for more than half of all journeys within regions, decreased by 1.4%. In contrast, there was high growth in journeys within the South East (3.5%) and Scotland (2.9%).

* Note: The 0.4% increase in passenger journeys is different to the 1.4% fall published in [Passenger rail usage statistical release 2017-18 Q4](#). Please see [Passenger journeys in Great Britain](#) for information on methodology differences.

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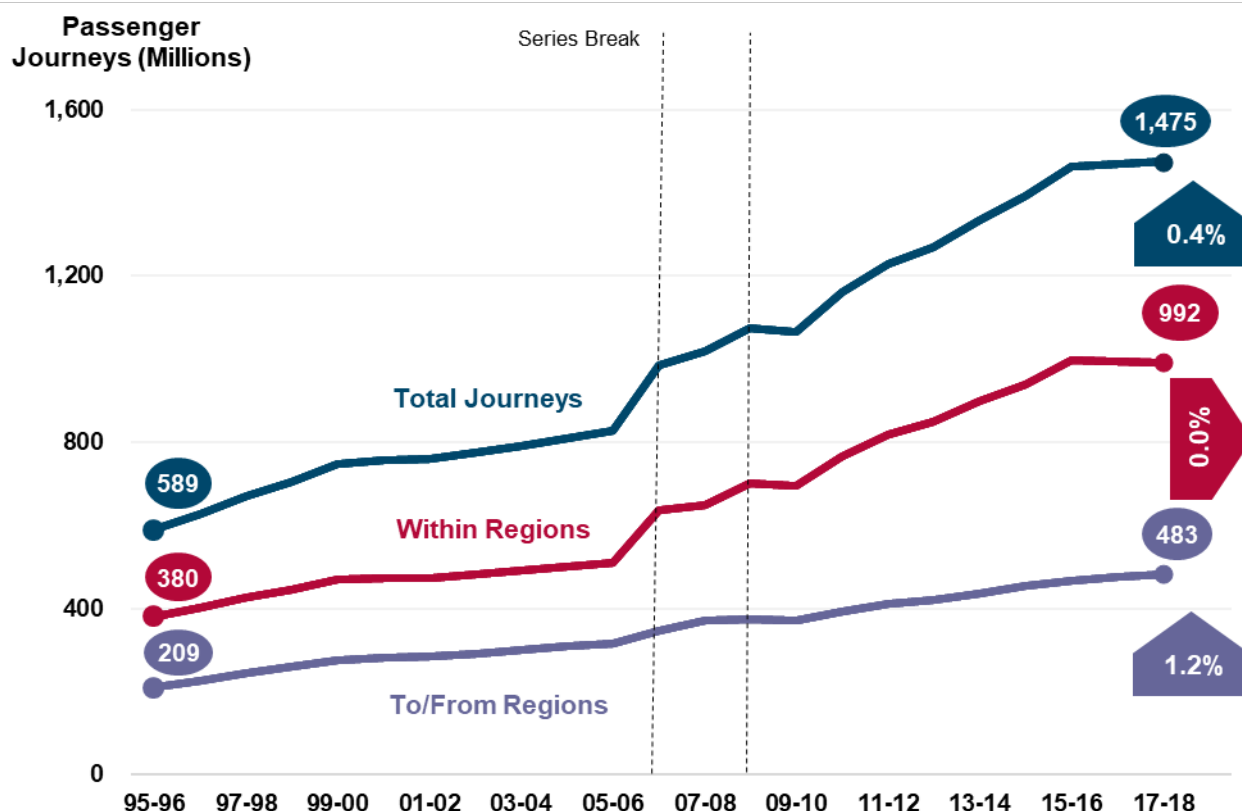
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Website: <https://dataportal.orr.gov.uk/>

1. Passenger journeys in Great Britain

1.1 Great Britain passenger journeys 2017-18

Figure 1.1: Passenger journeys (millions) to/from and within regions, Great Britain, 1995-96 to 2017-18 and percentage change from 2016-17 to 2017-18



There were 1,475 million passenger journeys made in Great Britain in 2017-18, an increase of 0.4% compared to 2016-17. This was the smallest increase since 2009-10, and is largely a result of the decrease in the number of passenger journeys in London. The main contributions to this decrease are the reduction in season ticket journeys and the fall in passenger journeys for Govia Thameslink Railway (GTR) and South Western Railway due to industrial disputes, planned cancellations and engineering works. In addition, the [adverse weather in late February and March 2018](#) caused significant train disruption and therefore affected the number of passenger journeys. Total journeys is lower than the journeys published in [passenger rail usage data](#) (1,708 million) which takes into account the number of legs in a journey. The percentage change is different to the 1.4% fall published in the Passenger Rail Usage.

The number of passenger journeys in 2017-18 has more than doubled since 1995-96. It has risen every year with the exception of 2009-10, which saw a small dip coinciding with the economic downturn. (Note again the difference in Passenger Rail Usage journey statistics which showed a fall in 2017-18 for the first time since 2009-10.)

The highest annual growth was in 2006-07, although this was largely due to an improvement to the methodology, which saw estimates of travel on Transport for London (TfL) sold travelcards included in the dataset for the first time. This affected the number of journeys within London, and between London, the East of England and the South East. A further significant methodological change was implemented for 2008-09. This affected Passenger Transport Executive (PTE) areas in a number of regions, most noticeably Yorkshire & the Humber, the North West, Scotland, and the West Midlands.

Where regions have series breaks caused by the above methodology changes, these are indicated on the charts for each region.

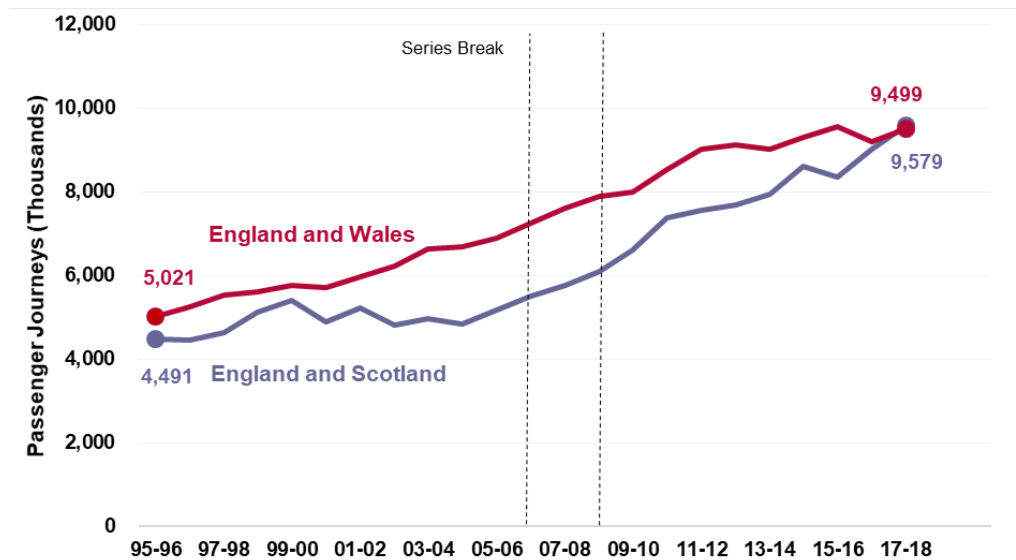
The sub-regions in this statistical release and data tables use the 2015 NUTS2 boundary definitions.

The **Origin Destination Matrix (ODM)** is the source of journey data for this statistical release. The ODM is mainly derived from the rail industry's ticketing and revenue database, LENNON. There are additional estimates of rail journeys made for TfL sold travelcards, airport flows, and in Passenger Transport Executive (PTE) areas (local government bodies which are responsible for public transport within large urban areas). Please see [Annex 3 for an overview of the limitations of the data](#).

For more detail on the data sources and the methodology used to calculate the statistics within this release please view the [Quality Report](#).

1.2 England, Scotland and Wales passenger journeys 2017-18

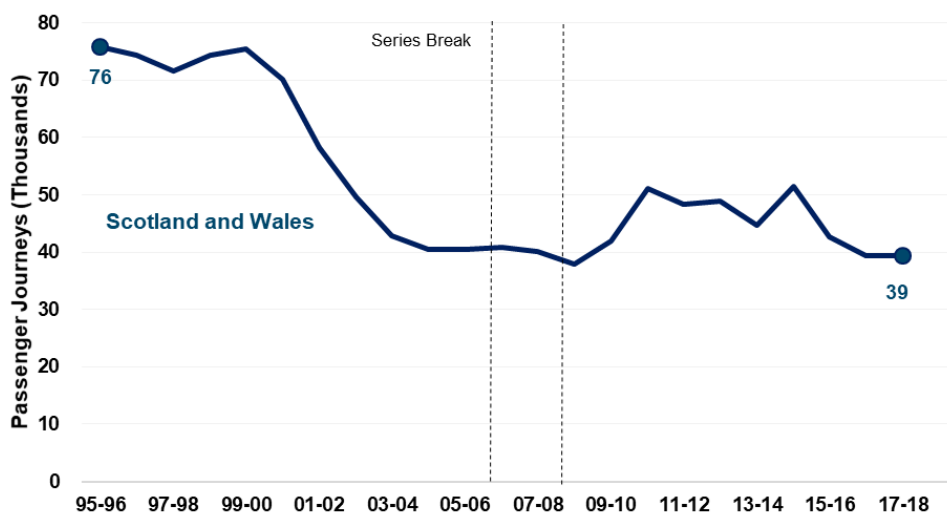
Figure 1.2: Passenger journeys (thousands) to/from England, Scotland, and Wales, 1995-96 to 2017-18



The number of passenger journeys between England and Wales has returned to the steady long-term growth trend, increasing by 3.3% to 9.5 million compared to 2016-17.

The number of journeys between England and Scotland has continued to increase and reached 9.6 million in 2017-18. This represents an increase of 6.3% compared to 2016-17.

The number of journeys made between Scotland and Wales is small when compared to those between England and Scotland, or between England and Wales. There were 39 thousand journeys made between Scotland and Wales in 2017-18, similar (down only 0.3%) to the previous year.





2. Regional rail usage profiles 2017-18

Regional rail usage profiles present the number of rail passenger journeys made on the network **between** each region of Great Britain and **within** each region. A more detailed breakdown by sub-region is also available on the [ORR Data Portal](#).

Summary

London had the highest number of total journeys of all the regions. There were 926.5 million passenger journeys in 2017-18, a decrease of 3.9 million since 2016-17. Of these 407.6 million were to/from other regions and 518.9 million were made within London.

The North East had the lowest number of total journeys. There were 16.0 million in 2017-18, an increase of 2.6%. Of these, 10.2 million were to/from other regions and 5.8 million were made within the North East.

There was an increase in total journeys for nine regions in 2017-18. The highest annual growth was in Scotland (up 3.2%) reaching a total of 102.0 million journeys. There was a decrease in the number of journeys in London (down 0.4%) and the South West (down 0.5%).

In 2017-18, there were four regions whose total number of journeys to/from other regions was greater than the journeys within that region – North East, East Midlands, East of England and the South East. The region with the largest difference between to/from and within journeys was the South East with 221.6 million and 82.2 million respectively.

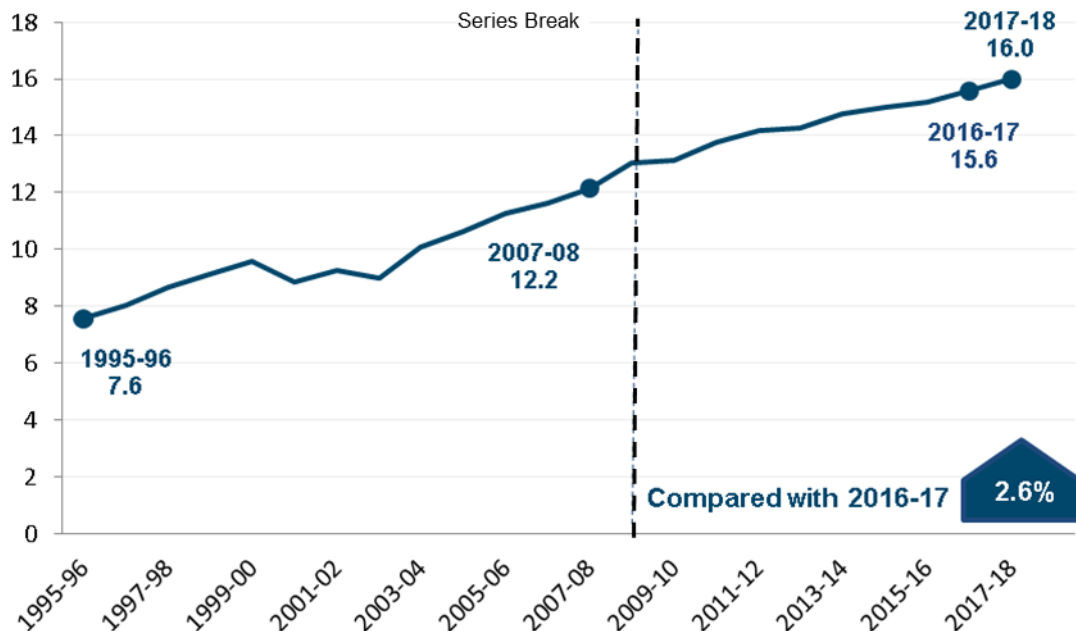
All regions, except for the South West, saw an annual increase in journeys to/from other regions, with a national increase of 1.2%. The largest contribution to the overall change was journeys to/from London, with over 3 million more journeys made in 2017-18 than in 2016-17. The region with the highest growth rate was for journeys to/from Scotland, with an increase of 6.3%.

Journeys within regions remained almost the same at 992 million in 2017-18, decreasing by only 350 thousand journeys since last year. However, this is the first decrease in the number of journeys within regions since 2009-10. Passenger journeys in London, which account for more than half of all journeys within regions, decreased by 1.4%. In contrast, there was high growth in journeys within the South East (3.5%) and Scotland (2.9%).



2.01 North East

Figure 2.01: Total passenger journeys (millions): North East, 1995-96 to 2017-18



The total number of journeys for the North East was 16.0 million in 2017-18, an increase of 2.6% compared to the previous year. The total number of journeys for the North East has increased every year since 2002-03.

Passenger journeys for the North East fell between 1999-00 and 2002-03. This fall was driven by a decrease in journeys within the region over that period, largely due to significant engineering work between Newcastle and Sunderland as the line was upgraded for the Tyne & Wear Metro extension to Sunderland, which was completed in 2002-03.

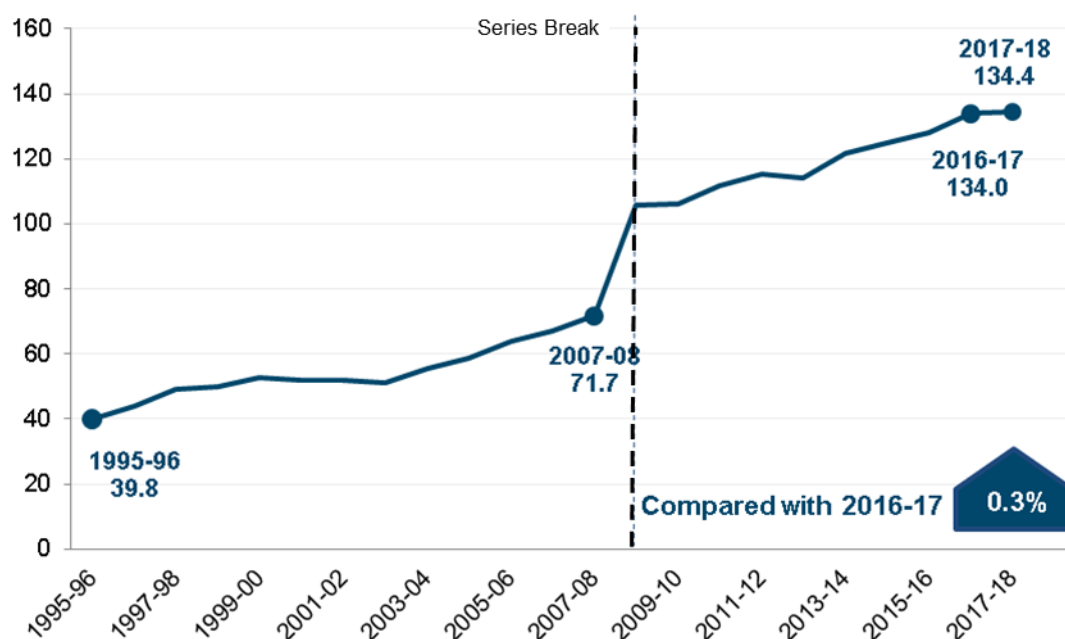
Journeys between the North East and other regions rose by 4.1% in 2017-18, to 10.2 million. Journeys to/from Yorkshire and the Humber, which accounted for more than 30% of all journeys to/from the North East, increased by 7.4%.

Journeys within the North East rose slightly by 0.1% in 2017-18, to 5.8 million. The largest contributions to this change came from within the Northumberland and Tyne and Wear area, which accounted for 48% of journeys within the North East, and had an increase in the number of journeys of 1.5% in 2017-18.



2.02 North West

Figure 2.02: Total passenger journeys (millions): North West, 1995-96 to 2017-18



The total number of journeys for the North West was 134.4 million in 2017-18, a small increase of 0.3% compared to the previous year. The growth has slowed because of [the rail strikes](#) and adverse weather conditions.

The sharp rise in 2008-09 was the result of inclusion of new estimates for rail travel in PTE areas, which impacted on both Merseyside and Greater Manchester journey numbers.

Journeys between the North West and other regions rose by 2.1% in 2017-18, to 38.9 million. Journeys to/from the West Midlands and to/from Yorkshire and the Humber, which together accounted for 40% of all journeys to/from the North West, increased by 4.3% and 4.1% respectively.

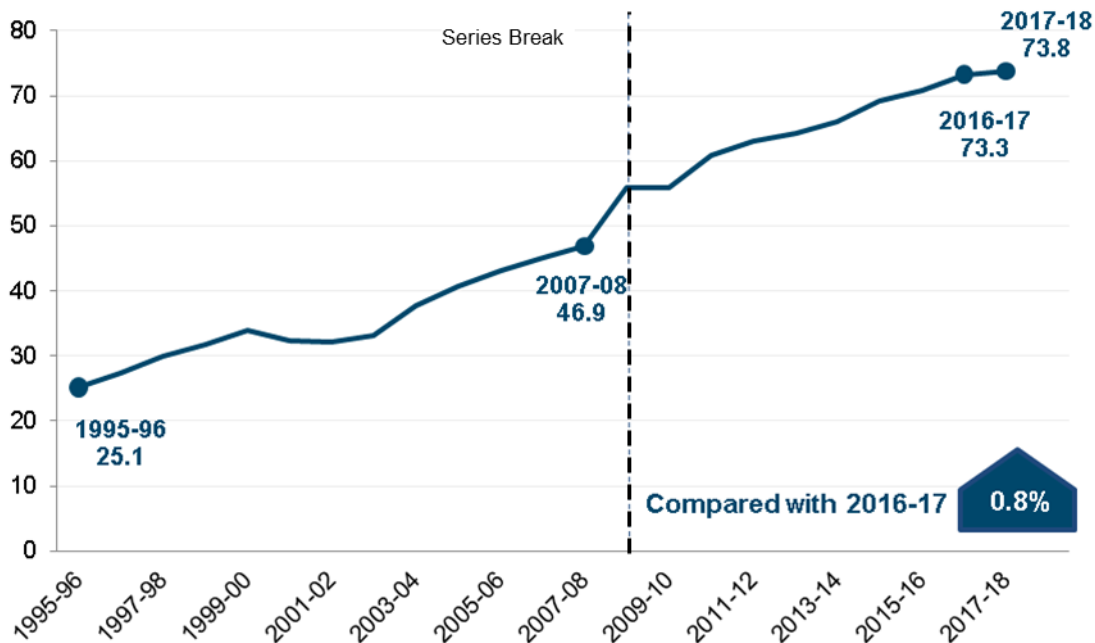
56% of journeys between the North West and other regions start or end in Greater Manchester. Journeys between Greater Manchester and other regions increased for the thirteenth year in succession, rising 2.9% in 2017-18.

Journeys within the North West fell by 0.4% in 2017-18, to 95.5 million. Journeys starting or ending in the Greater Manchester and Lancashire areas, which together account for 39% of journeys within the North West, showed a decrease of 2.0% and 6.5% respectively.



2.03 Yorkshire and the Humber

Figure 2.03: Total passenger journeys (millions): Yorkshire and the Humber, 1995-96 to 2017-18



The total number of journeys for Yorkshire and the Humber was 73.8 million in 2017-18, an increase of 0.8% compared to the previous year. The sharp increase in 2008-09 was due to the introduction of new estimates of rail travel in PTE areas, which impacted on journeys for South Yorkshire and West Yorkshire.

Journeys between Yorkshire and the Humber and other regions rose by 3.5% in 2017-18, to 29.0 million. Journeys to/from the North West, which accounted for 34% of journeys to/from Yorkshire and the Humber, increased by 4.1%.

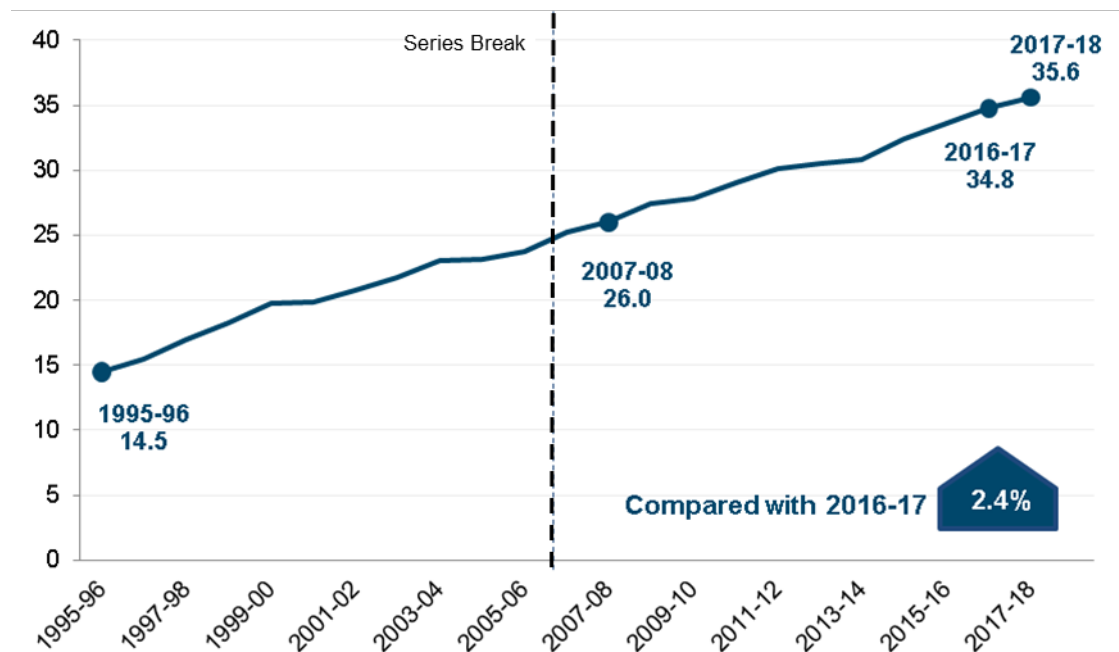
Journeys to/from West Yorkshire (which includes Leeds and Bradford) and to/from York, which accounted for 42% of journeys to/from Yorkshire and the Humber and other regions, increased by 2.7%.

Journeys within Yorkshire and the Humber fell by 0.9% in 2017-18, to 44.9 million. Journeys starting or ending in West Yorkshire, which accounted for 68% of journeys within Yorkshire and the Humber region, decreased by 1.7% in 2017-18.



2.04 East Midlands

Figure 2.04: Total passenger journeys (millions): East Midlands, 1995-96 to 2017-18



The total number of journeys for the East Midlands was 35.6 million in 2017-18, an increase of 2.4% compared to the previous year.

The number of journeys for the East Midlands has consistently increased each year since 1995-96. The only other region where this has happened is Wales.

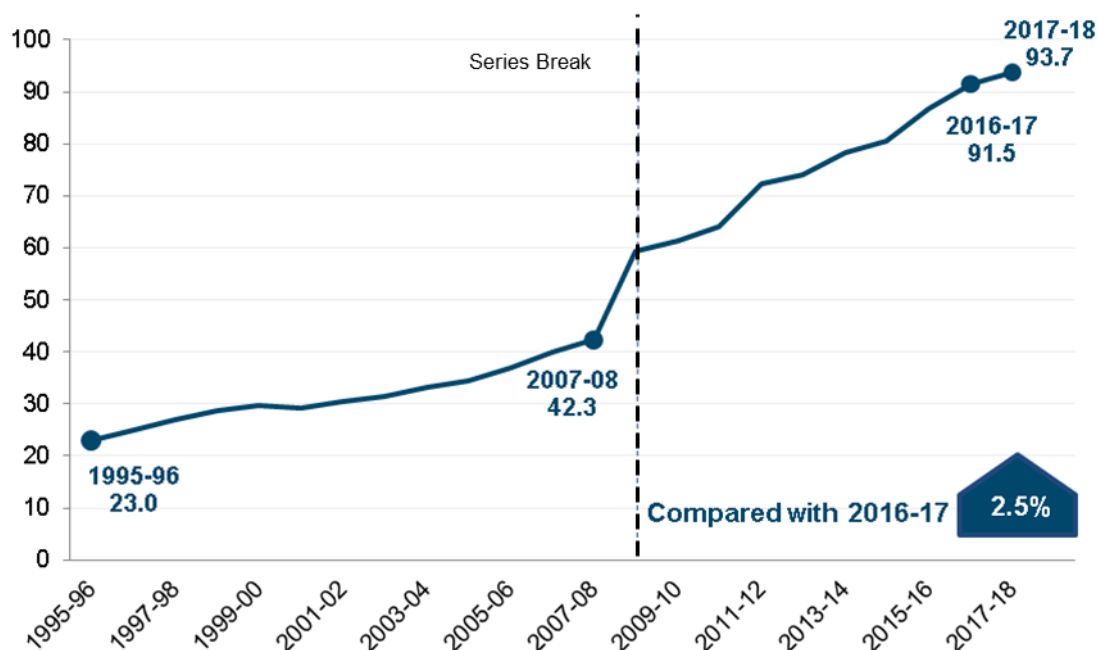
Journeys between the East Midlands and other regions rose by 1.8% in 2017-18, to 25.8 million. The largest contributions to this change were journeys to/from the West Midlands and Yorkshire and the Humber, which together accounted for 34% of journeys, and increased by 4.2% and 2.8% respectively.

Journeys within the East Midlands rose by 3.8% in 2017-18, to 9.8 million. Journeys starting or ending in the Derbyshire and Nottinghamshire area accounted for 57% of journeys within the East Midlands, and increased by 7.0% in 2017-18.



2.05 West Midlands

Figure 2.05: Total passenger journeys (millions): West Midlands, 1995-96 to 2017-18



The total number of journeys for the West Midlands was 93.7 million in 2017-18, an increase of 2.5% compared to the previous year.

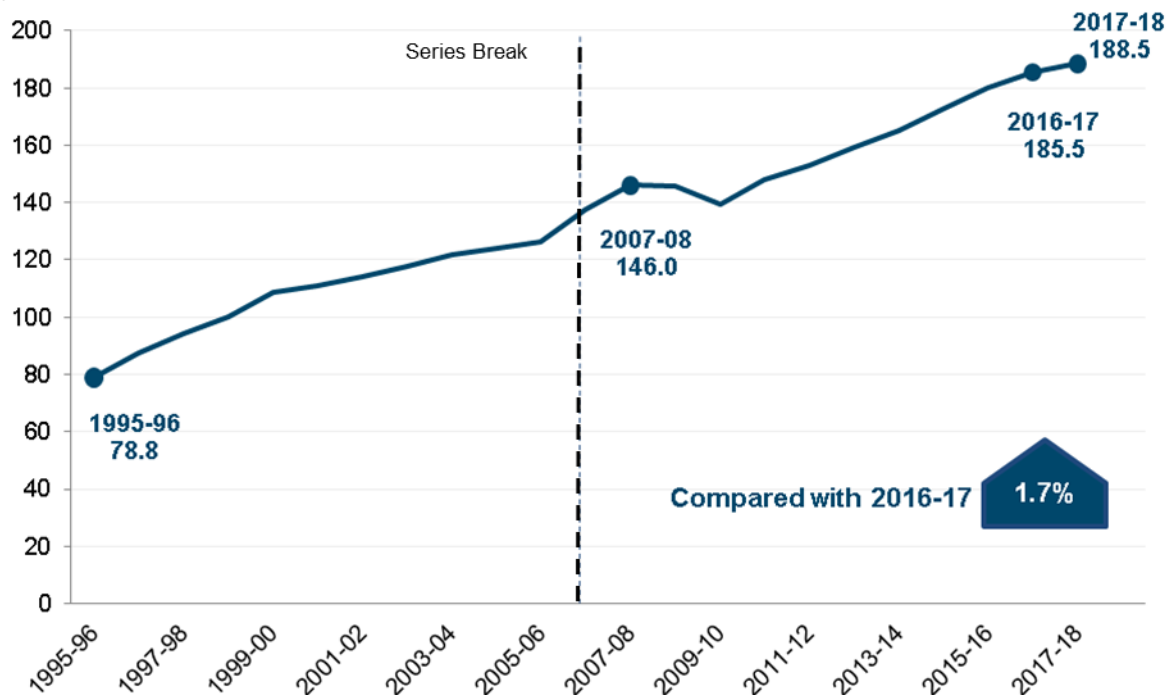
Journeys between the West Midlands and other regions rose by 3.5% in 2017-18, to 33.4 million. Journeys to/from London, the East Midlands, and the North West, which together account for 72% of journeys to/from the West Midlands and are the three most popular routes, increased by 2.2%, 4.2%, and 4.3% respectively.

Journeys within the West Midlands rose by 1.9% in 2017-18, to 60.3 million. Journeys starting or ending in the Metropolitan area of West Midlands (which includes Birmingham and Wolverhampton), which accounted for 79% of journeys within the West Midlands region, increased by 1.7% in 2017-18.



2.06 East of England

Figure 2.06: Total passenger journeys (millions): East of England, 1995-96 to 2017-18



The total number of journeys for the East of England was 188.5 million in 2017-18, an increase of 1.7% compared to the previous year. This is the smallest overall increase in journeys since 2009-10.

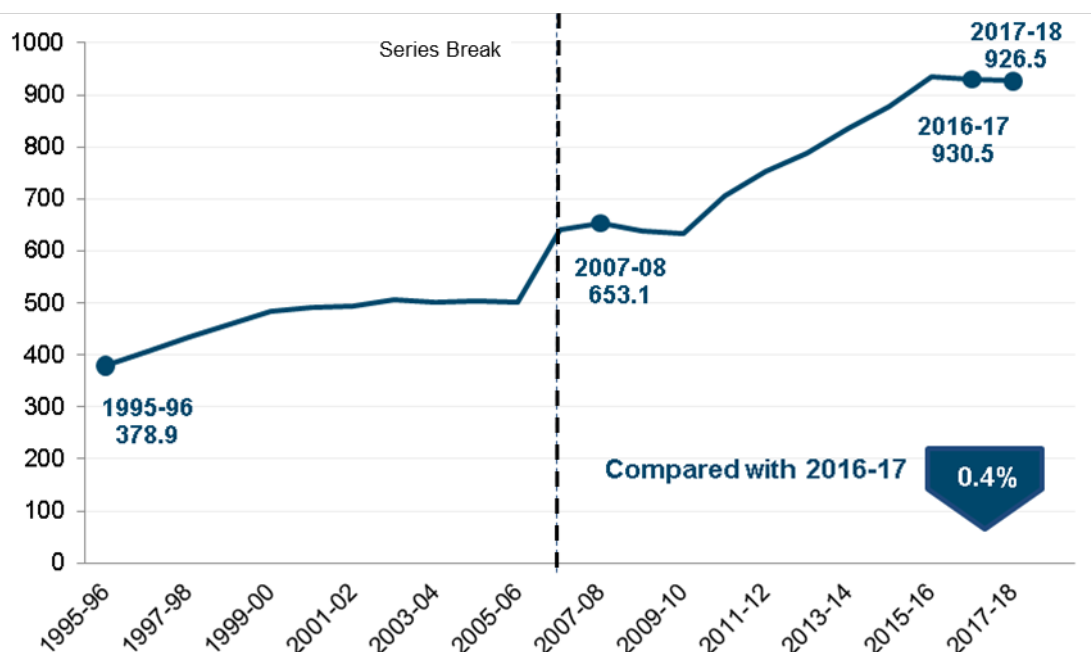
Journeys between the East of England and other regions rose by 1.6% in 2017-18, to 153.9 million. Journeys to/from London, which account for over 90% of all journeys between the East of England and other regions, increased by 1.6% in 2017-18. The reduction in season ticket usage in 2017-18 may have had an impact on the number of passenger journeys between the London and the East of England.

Journeys within the East of England rose by 1.9% in 2017-18, to 34.6 million. Journeys starting or ending in the Essex or East Anglia areas, which together accounted for 71% of journeys within the East of England, increased by 3.9% and 2.3% respectively in 2017-18.



2.07 London

Figure 2.07: Total passenger journeys (millions): London, 1995-96 to 2017-18



The total number of journeys for London was 926.5 million in 2017-18, a decrease of 0.4% compared to the previous year. This is the second consecutive year that the overall journeys for London has decreased.

The sharp rise in 2006-07 was the result of an improvement in the methodology as estimates of travel using Transport for London (TfL) sold travelcards were included in the dataset for the first time. The drop in 2009-10 coincided with the economic downturn.

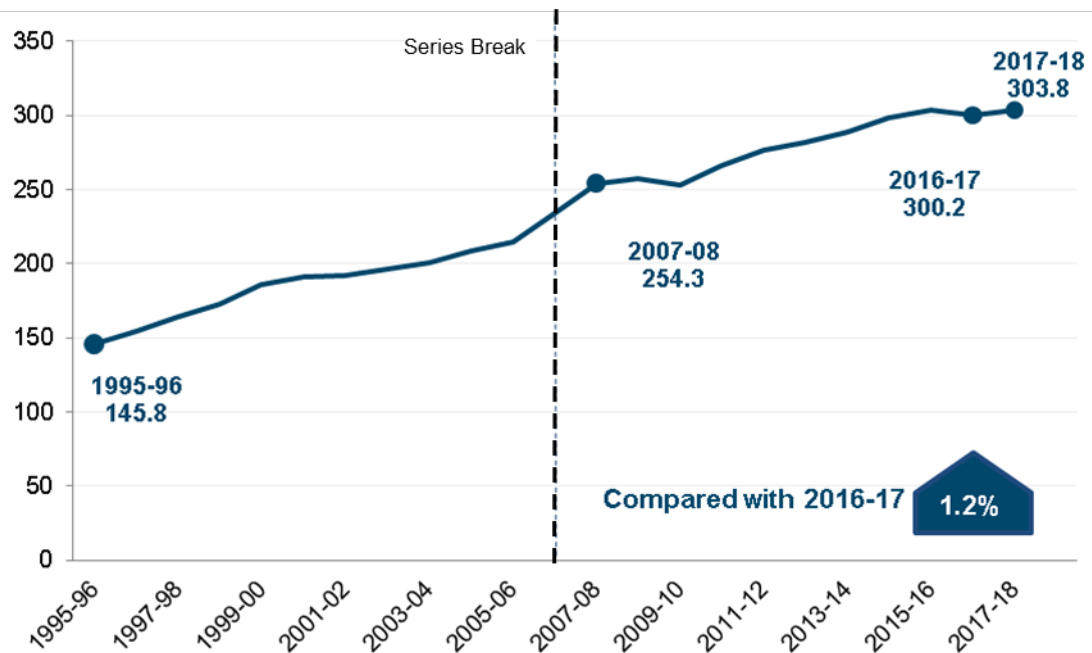
Journeys between London and other regions rose by 0.8% in 2017-18, to 407.6 million. The largest growth rate for journeys to/from London was for Scotland, which increased by 12.1%. This was the highest annual growth since 2010-11 and was in part due to [completion of engineering schemes](#). Journeys to/from the South East, which accounted for 50% of total journeys, grew by 0.2%, and journeys to/from East of England, which accounted for 35% of total journeys, grew by 1.6%.

Journeys within London fell by 1.4% in 2017-18, to 518.9 million. The largest contribution to this change was from the 'Inner London - East' area which accounts for 42% of all journeys in London, and had a decrease in journeys of 1.3% in 2017-18.



2.08 South East

Figure 2.08: Total passenger journeys (millions): South East, 1995-96 to 2017-18



The total number of journeys for the South East was 303.8 million in 2017-18, an increase of 1.2% compared to the previous year.

Journeys between the South East and other regions rose by 0.4% in 2017-18, to 221.6 million. Journeys to/from London, which accounted for over 90% of all journeys between the South East and other regions, increased by 0.2%. This is the lowest growth in journeys between London and the South East since 2009-10. The reduction in season ticket usage in 2017-18, and the decrease in passenger journeys on GTR services may have had an impact on the number of passenger journeys between the London and the South East.

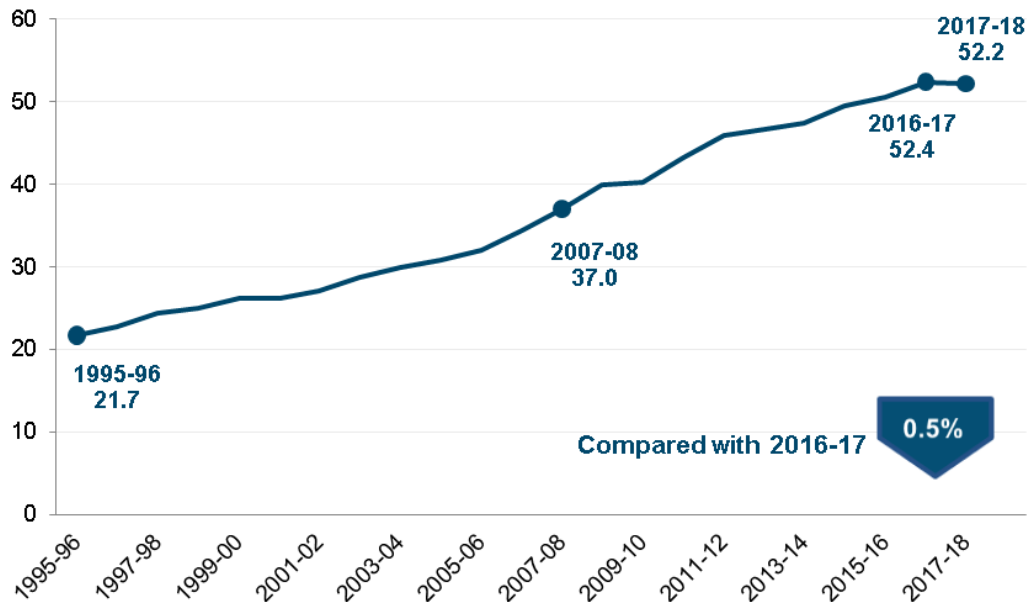
Journeys to/from Kent, which account for 20% for journeys to/from the South East and other regions, increased by 1.8%.

Journeys within the South East rose by 3.5% in 2017-18, to 82.2 million. The Surrey, East and West Sussex area (which includes Brighton), accounted for 42% of journeys within the South East and increased by 5.3% in 2017-18.



2.09 South West

Figure 2.09: Total passenger journeys (millions): South West, 1995-96 to 2017-18



The total number of journeys for the South West was 52.2 million in 2017-18, a decrease of 0.5% compared to the previous year. This is the first decrease in passenger journeys since the time series started in 1995-96.

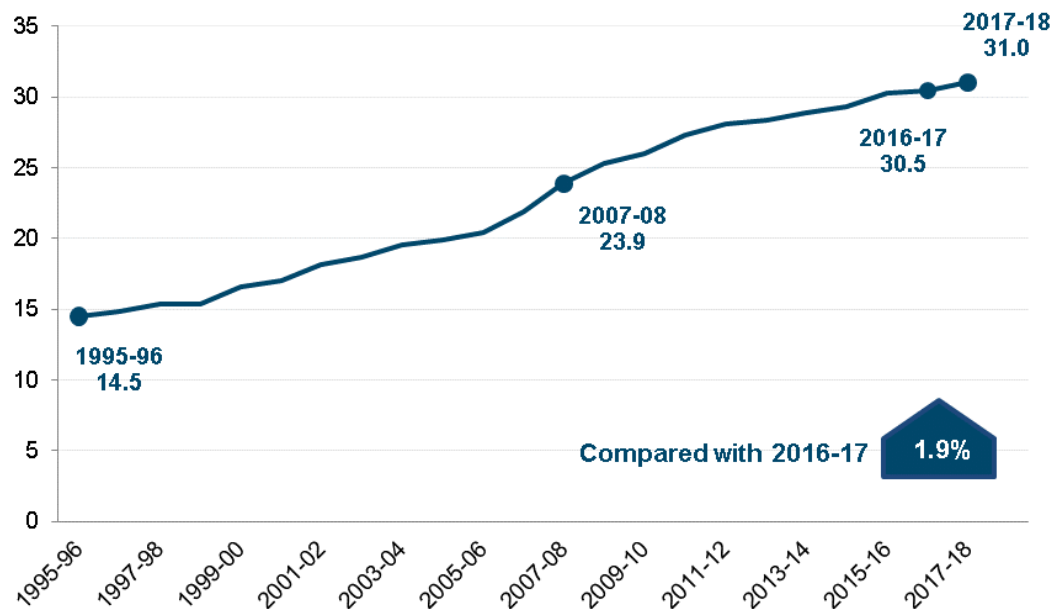
Journeys between the South West and other regions remained the same at 25.8 million in 2017-18. Journeys to/from London, which accounted for 46% of all journeys between the South West and other regions, decreased by 3.3%, partly due to engineering works at London Waterloo, [industrial action](#) and [adverse weather](#) in early March. This decrease in journeys was offset by two other flows, to/from the South East and to/from Wales, which increased by 2.2% and 6.0% respectively, and jointly accounted for 38% of all journeys.

Journeys within the South West region fell by 0.9% in 2017-18, to 26.4 million. Journeys with an origin and/or destination within the Gloucestershire, Wiltshire and the Bath/Bristol area, which accounted for 51% of journeys within the South West, decreased by 2.5%.



2.10 Wales

Figure 2.10: Total passenger journeys (millions): Wales, 1995-96 to 2017-18



The total number of journeys for Wales was 31.0 million in 2017-18, an increase of 1.9% compared to the previous year. The total number of journeys for Wales has increased every year since 1995-96.

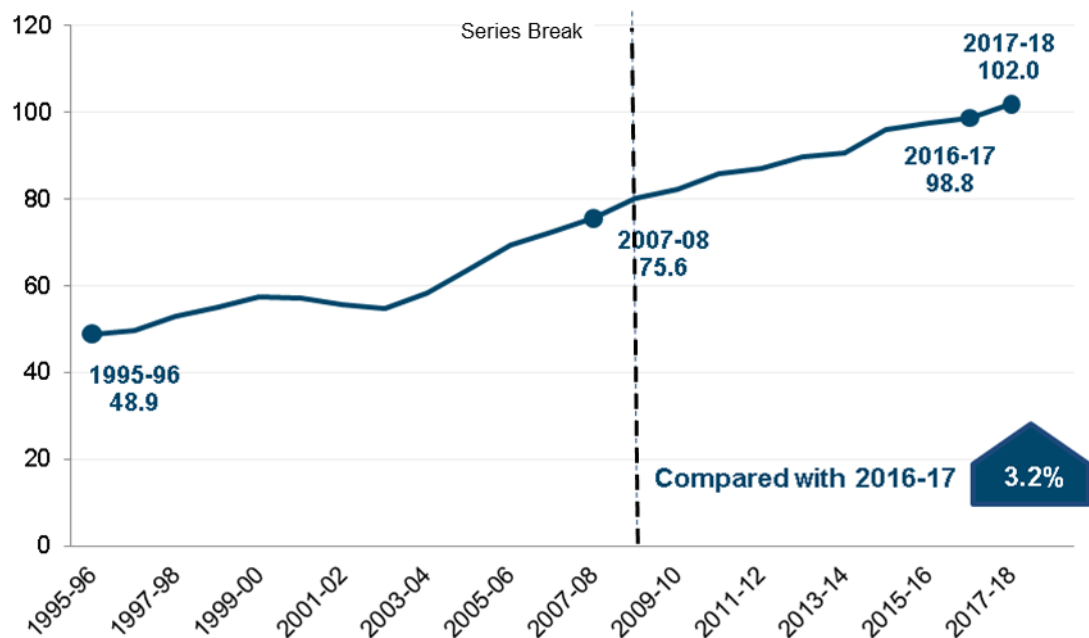
Journeys between Wales and other regions rose by 3.3% in 2017-18, to 9.5 million. The largest contribution to this change was journeys to/from the South West, which accounted for 31% of journeys between Wales and other regions, increased by 6.0%.

Journeys within Wales rose by 1.3% in 2017-18, to 21.5 million. The East Wales area (which includes Cardiff), accounted for 57% of journeys within Wales and increased by 2.1% in 2017-18.



2.11 Scotland

Figure 2.11: Total passenger journeys (millions): Scotland, 1995-96 to 2017-18



The total number of journeys for Scotland was 102.0 million in 2017-18, an increase of 3.2% compared to the previous year. This was the highest percentage growth of any region in 2017-18.

Journeys between Scotland and other regions rose by 6.3% in 2017-18, to 9.6 million. Journeys between Scotland and London, which rose by 12.1%, accounted for nearly half (48%) of the increase. This can be attributed to the [completion of improvements projects](#) and [electrification works](#) in 2017-18.

Cross-border services to/from Eastern Scotland (which includes Edinburgh) and South Western Scotland (which includes Glasgow) areas, together account for 96% of journeys to/from Scotland and increased by 7.4% and 5.8% respectively in 2017-18.

Journeys within Scotland rose by 2.9% in 2017-18, to 92.3 million. Journeys starting or ending in South Western Scotland (which includes Glasgow), accounted for 68% of journeys within Scotland and increased by 3.0%.

Annex 1 – List of data tables available on the ORR Data Portal

All data tables can be accessed on the [ORR data portal](#) free of charge and can be downloaded in Excel format. We can also provide data in csv and ods format on request.

All tables associated with this release can be found under Data Tables on the [Regional rail usage page](#).

Passenger journeys in Great Britain

- Regional rail journeys - GB and England, Scotland and Wales, 1995-96 and 2017-18 – Table 15.3
- Regional rail journeys - Passenger journeys by GB Regions, 2018-19 – Table 15.13

Regional rail usage profiles

Each of the tables below provides a time series from 1995-96 to 2017-18 of total rail journeys to/from and within each region or country, including a breakdown by sub-region.

- Regional rail journeys - East Midlands – Table 15.1
- Regional rail journeys - East of England – Table 15.2
- Regional rail journeys - London – Table 15.4
- Regional rail journeys - North East – Table 15.5
- Regional rail journeys - North West – Table 15.6
- Regional rail journeys - Scotland – Table 15.7
- Regional rail journeys - South East – Table 15.8
- Regional rail journeys - South West – Table 15.9
- Regional rail journeys - Wales – Table 15.10
- Regional rail journeys - West Midlands – Table 15.11
- Regional rail journeys - Yorkshire and the Humber – Table 15.12

Revisions: There have been no revisions to the previously published dataset. Further details on historic revisions to the data set can be found on the [Revisions log](#).

Annex 2

Statistical Releases

This publication is part of ORR's [National Statistics](#) accredited releases, which consist of:

Annual

- Rail Finance
- Rail Fares Index
- Rail Safety Statistics
- Rail Infrastructure and Assets
- Rail Emissions
- Regional Rail Usage
- *Estimates of Station Usage (not National Statistics)*

Quarterly

- Passenger Rail Performance
- Freight Rail Usage and Performance
- Passenger Rail Usage
- Passenger Rail Service Complaints

A full list of publication dates for the next twelve months can be found in the [release schedule](#) on the data portal.

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at [DfT Rail Statistics](#). For example, Rail passenger numbers and overcrowding on weekdays in major cities.

National Statistics

The United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm - Office for Statistics Regulation (OSR). The OSR considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is ORR's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the OSR promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

For more information on how we adhere to the Code please see the [UKSA Code of Practice](#) page on the ORR data portal.

For more details, please contact the Statistics Head of Profession Lyndsey Melbourne at rail.stats@orr.gov.uk.

Annex 3 – Methodology and limitations

Methodology

As Britain does not have a fully gated rail network, ORR commissions Steer to produce the annual Origin Destination Matrix (ODM), a comprehensive matrix of rail flows throughout Great Britain. It is based upon the MOIRA2 rail planning tool which itself is derived from LENNON, the rail industry's ticketing and revenue system. In addition, ODM is further augmented by a range of other data sources to provide a more complete representation of travel on the national rail network. These consist of:

- Journeys with non-geographical destinations, e.g. zonal products, Rovers;
- Tickets sold at some non-National Rail outlets, e.g. newsagents; and
- Train Operating Company (TOC) tickets on airport flows, and tickets for TOCs.

A passenger journey presented in this Regional Rail Usage statistical release is based on the origin and destination stations named on the ticket. For example, a journey from Cardiff to Oxford, which may involve two trains (one from Cardiff to Didcot and another from Didcot to Oxford), would be classed as one journey despite the need to change trains. This differs from the definition used in the [Passenger Rail Usage statistical release](#), which would class the above example as two journeys, taking into account the number of legs of a journey. This release therefore produces slightly lower estimates than the total journeys published each quarter in the Passenger Rail Usage statistical release. Please see [passenger journeys in Great Britain](#) which explains the differences in more detail.

London Stations Methodology Change

A significant change was made to the way that usage at London stations had been estimated in 2015-16.

Oyster data from TfL has been used to give a more accurate distribution of usage across stations.

This does not affect the journeys flows between London and other regions or within London.

However, at a sub-regional level within London direct comparisons between 2015-16 and 2014-15 are not valid.

Limitations

The ODM data is derived from the rail industry's ticketing and revenue database (LENNON). However, it is not possible to derive all passenger journeys from ticket sales data. As some train operators, primarily Eurostar and Heathrow Express, are not included in rail industry ticketing systems travel using these operators' tickets are not included in the ODM data. The [Quality Report](#) details the limitations associated with the ODM data.

A number of improvements to the methodology have been implemented over recent years. These changes should be taken into account when considering year on year changes in journeys for

some regions as it may not reflect an actual change in demand. These improvements, and the reasons for them, are detailed in the [Quality Report](#).

Whilst ORR has gained agreement to publish aggregated outputs from the ODM dataset in this statistical release, we are unable to publish more disaggregated information which is commercially confidential.

Estimates of Station Usage

ORR also publishes estimates of station usage for all stations in Great Britain. The latest 2017-18 estimates are available on the [ORR data portal](#).

Regional rail usage profiles

Regional rail usage profiles present the number of rail passenger journeys made on the network between each region of Great Britain and within each region. This is broken down by sub-regions.

The sub-regions used in all the 11 regional tables use the 2015 NUTS2 boundary definitions.

For London, details on which London boroughs are mapped to each sub-region are included in the [Quality Report](#).



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