



# Regional Rail Usage (Passenger Journeys) 2015-16 Annual Statistical Release

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Next release: January 2018

## Background

This release contains information on regional passenger journeys by rail in Great Britain during the period 1995-96 to 2015-16 with the latest data referring to 1 April 2015 to 31 March 2016.

The journeys presented are based on the origin and destination named on a ticket and do not take into account any changes of train. It therefore produces lower estimates 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. This is mainly derived from the rail industry's ticketing and revenue database, LENNON, supplemented with other industry data for some regions.

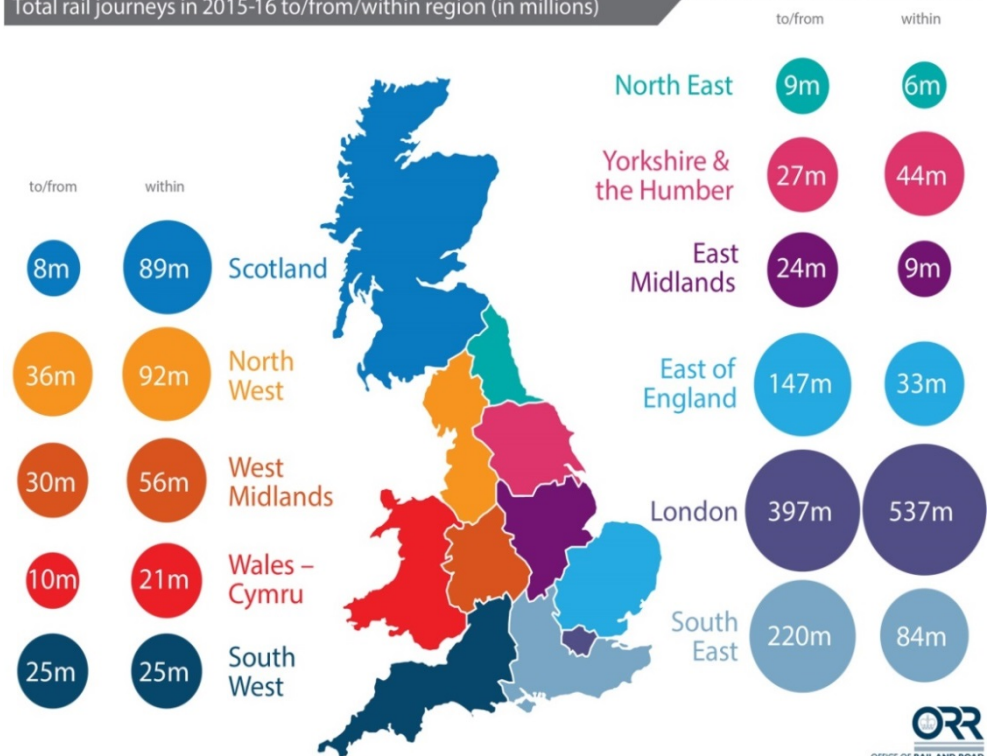
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Total rail journeys in 2015-16 to/from/within region (in millions)



The number of **rail passenger journeys** in Great Britain has more than doubled between 1995-96 and 2015-16.

All regions, except for Scotland, saw an annual increase in **journeys to/from other regions**, with an overall increase of 3.0%. The largest contribution to the overall change was journeys to/from London, with over 11 million more journeys made in 2015-16. The highest growth rate was for journeys to/from the West Midlands, with an increase of 6.1%.

**Journeys within regions** increased by 6.1%. London, which accounts for more than half of all journeys within regions, recorded the highest growth rate of 9.2%.

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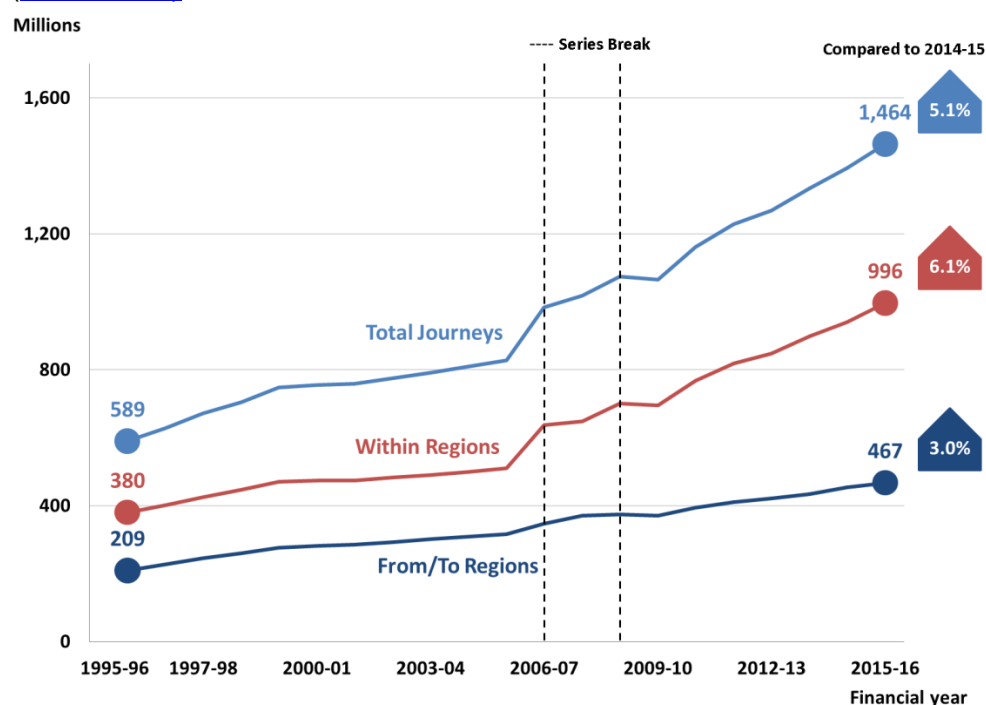
# 1. Passenger journeys in Great Britain



The number of journeys presented in this Regional Rail Usage statistical release are based on the origin and destination named on a purchased 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) is treated as one journey in this release. In contrast, in the [Passenger Rail Usage release](#), it is treated as two journeys, accounting for the two services used. Therefore, the national level estimates of passenger journeys are different. Please see [Annex 3](#) for more details.

## 1.1 Great Britain passenger journeys 2015-16 results

Passenger journeys (millions) to/from and within regions, Great Britain, 1995-96 to 2015-16 ([Table 15.3](#))



There were 1,464 million passenger journeys<sup>1</sup> made in Great Britain in 2015-16. Compared to 2014-15, the number of passenger journeys increased by 5.1%, of which 0.5 percentage points are due to methodological improvements to the data.

<sup>1</sup> This is lower than the passenger journeys published in [Passenger Rail Usage](#) (1,718 million) which takes into account the number of legs in a journey. Please see [Passenger journeys in Great Britain](#) which explains the differences in more detail.

The number of passenger rail journeys in 2015-16 has more than doubled compared to 1995-96. It has risen every year with the exception of 2009-10, which saw a small dip coinciding with the economic downturn.

The highest annual growth was in 2006-07, although this was driven by 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, East of England and the South East. A further significant methodological change was implemented for 2008-09. This affected Passenger Transport Executive areas in a number of regions, most noticeably Yorkshire & the Humber, North West, Scotland and West Midlands.

All regions, except for Scotland, saw an annual increase in journeys to/from other regions, with an overall increase of 3.0%. The largest contribution to the overall change was journeys to/from London, with over 11 million more journeys made in 2015-16. The highest growth rate was for journeys to/from the West Midlands, with an increase of 6.1%. This could be partly attributed to the London Midland timetable improvements in the West Midlands area which included journey time and frequency improvements. Journeys to/from Scotland fell by 3.0% in 2015-16. This followed the high growth seen in 2014-15 as a result of the Commonwealth Games held in Glasgow in summer 2014.

Journeys within regions increased by 6.1% to 996.5 million in 2015-16. All regions except for the North East saw an annual increase; the North East fell by 0.2% compared to 2014-15. Journeys within London continued to increase with a 9.2% rise since 2014-15. There has also been high growth within the West Midlands with journeys increasing by 8.7% since 2014-15. This could be attributed to the completion of the Birmingham New Street station works in September 2015.

#### The **Origin Destination**

**Matrix (ODM)** is the source of journey<sup>2</sup> data for this release. This is mainly derived from the rail industry's ticketing and revenue database, LENNON, but there are additional estimates of rail journeys made on TfL sold travelcards, airport flows and in Passenger Transport Executive (PTE)<sup>3</sup> areas. For a brief overview of the limitations of the data please see [Annex 3](#).

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

<sup>2</sup> A journey is based on travel from an origin station to a destination station. Regional passenger journeys are calculated based on the origin and destination named on a ticket and does not take into account any changes of train.

<sup>3</sup> Passenger Transport Executives (PTEs) are local government bodies which are responsible for public transport within large urban areas. There are five PTEs in England, for each of the metropolitan counties (Merseyside, South Yorkshire, Tyne and Wear, West Midlands and West Yorkshire) with the former Greater Manchester Passenger Transport Executive being replaced by Transport for Greater Manchester from April 2011. In Scotland the Strathclyde Partnership for Transport is the equivalent body covering the region of Strathclyde. For convenience in this release we refer to all these areas as PTEs.

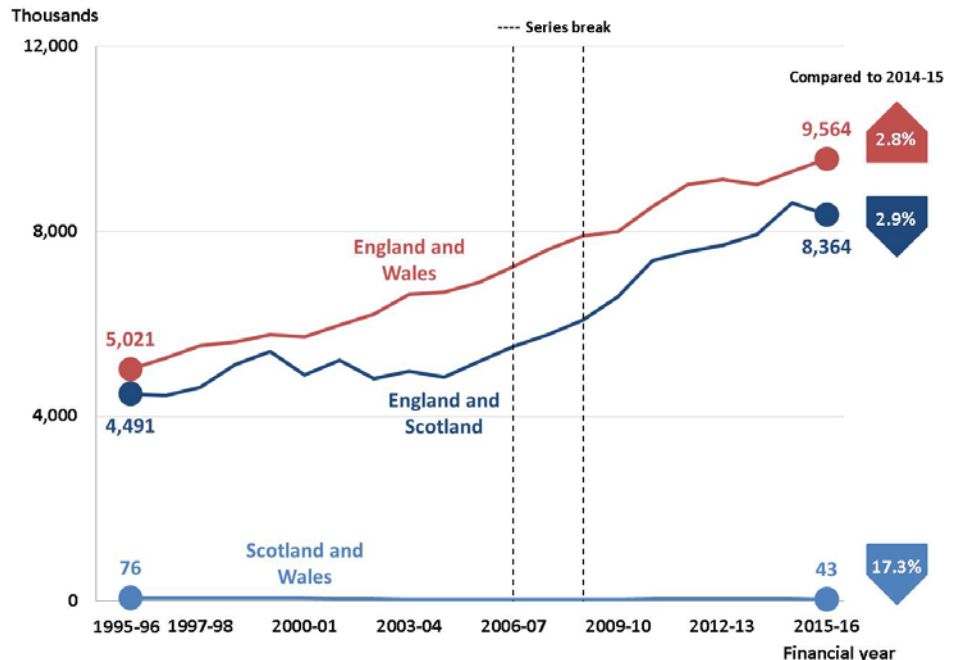


## 1.2 England, Scotland and Wales passenger journeys 2015-16 results

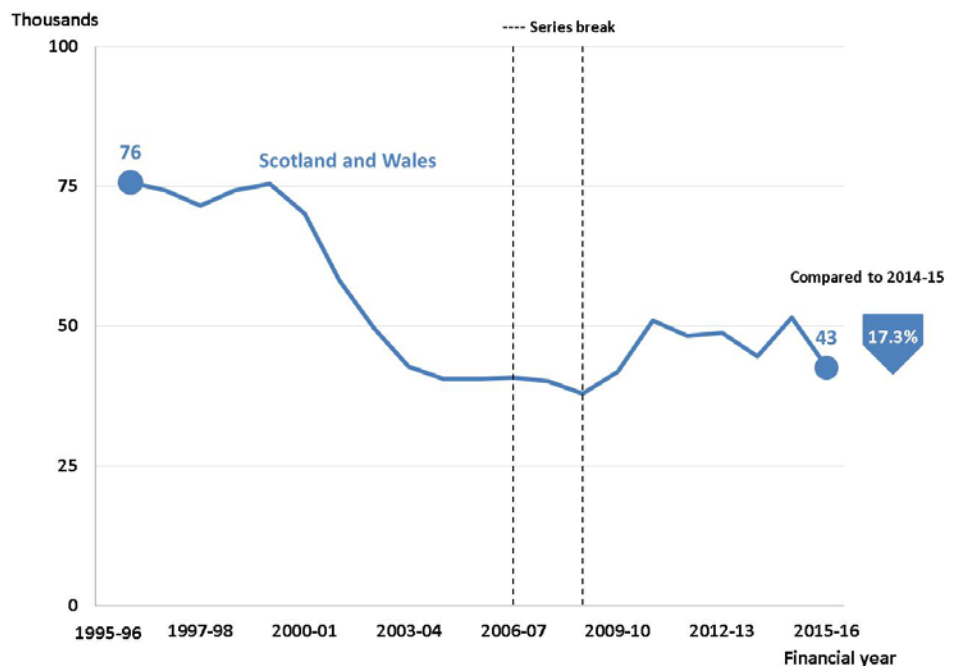
Passengers journeys (thousands) between England, Scotland and Wales, 1995-96 to 2015-16 ([Table 15.3](#))

The number of rail journeys between England and Wales has maintained its steady long-term increase and grew by 2.8% to 9.6 million compared to 2014-15.

The number of journeys between England and Scotland had risen every year since 2004-05. After a steep growth of 8.6% in 2014-15 due to the Commonwealth Games in Glasgow, it has fallen by 2.9% to 8.4 million in 2015-16.



The number of journeys made between Scotland and Wales is small when compared to those between England and Scotland or Wales and Scotland. There were 43 thousand journeys made between Scotland and Wales in 2015-16, representing a 17.3% decrease from the previous year. The fluctuation in the last two years is most likely due to the modal shift between aviation and rail.



## 2. 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. A more detailed breakdown by sub-region is also available on the [ORR Data Portal](#).

There is a set of [regional infographics](#), which accompanies this statistical release, showing the total number of journeys for each region in Great Britain for 2015-16, alongside a comparison with the previous year.

### Summary

London had the highest number of total journeys, 934.6 million in 2015-16, of which 397.2 million journeys were to/from other regions and 537.4 million were within London. The North East had the lowest number of total journeys (15.2 million) of which 9.5 million journeys were to/from other regions and 5.7 million were within the North East.

There was an increase in total journeys for all regions in 2015-16. The West Midlands had the largest annual growth rate with 7.7%, reaching a total number of journeys of 86.8 million in 2015-16. The North East had the lowest growth rate at 1.3%.

In 2015-16, 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 which showed the largest difference between to/from and within was the South East with 219.6 million and 83.9 million respectively.

There were seven regions whose total number of journeys to/from other regions was less than the journeys within that region. Starting from the largest difference, these were London, Scotland, North West, West Midlands, Yorkshire and the Humber, Wales and the South West.

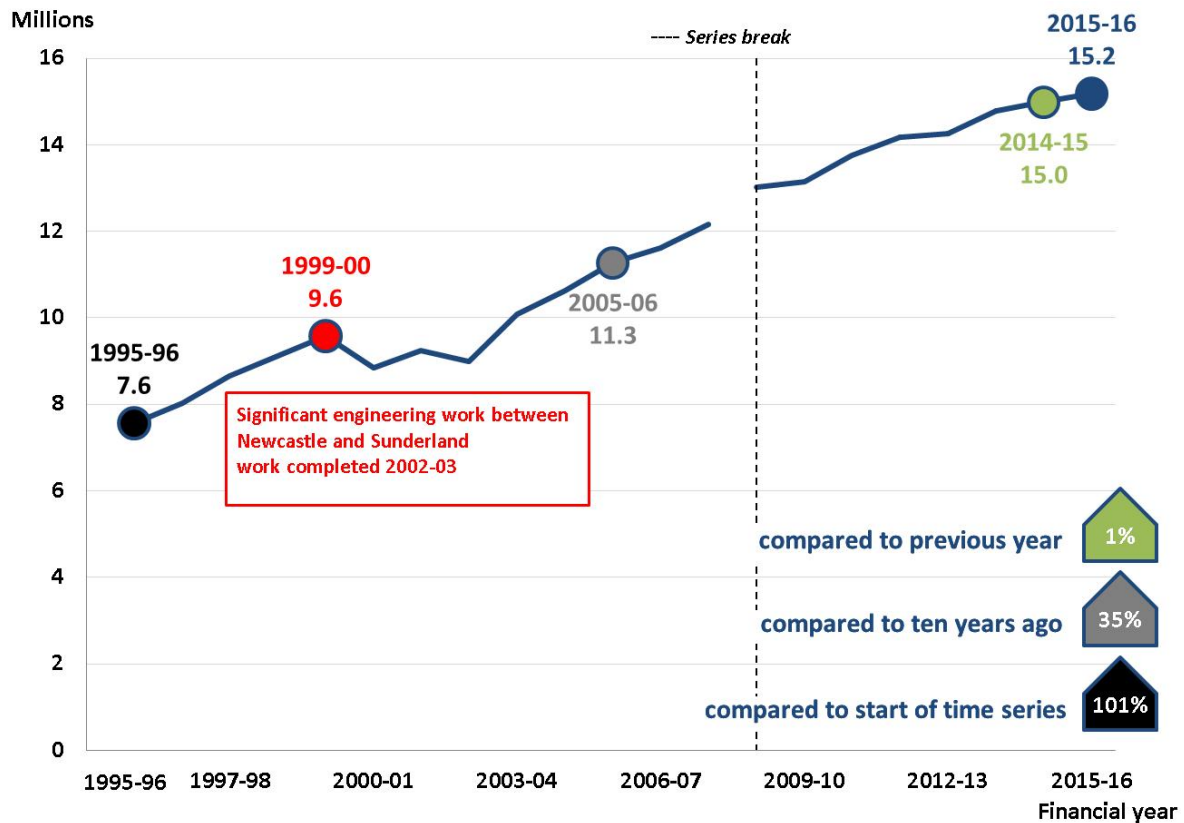
Although the South West had fewer journeys to/from other regions than within, it was very similar and both rounded to 25.2 million journeys.





## 2.1 North East

Passenger journeys (millions) to/from and within the North East, 1995-96 to 2015-16 – [\(Table 15.5\)](#)



The number of journeys in the North East in 2015-16 reached 15.2 million. The 1.3% increase in journeys since 2014-15 was the lowest growth in total journeys for any region in 2015-16.

Passenger journeys for the North East fell between 1999-00 and 2002-03. This fall was driven by a decrease of 15.9% in journeys within the region over that period, which was largely due to significant engineering work between Newcastle and Sunderland as the line was upgraded for the Tyne & Wear Metro extension to Sunderland, completed in 2002-03. The total number of journeys for the North East has increased gradually since 2002-03.

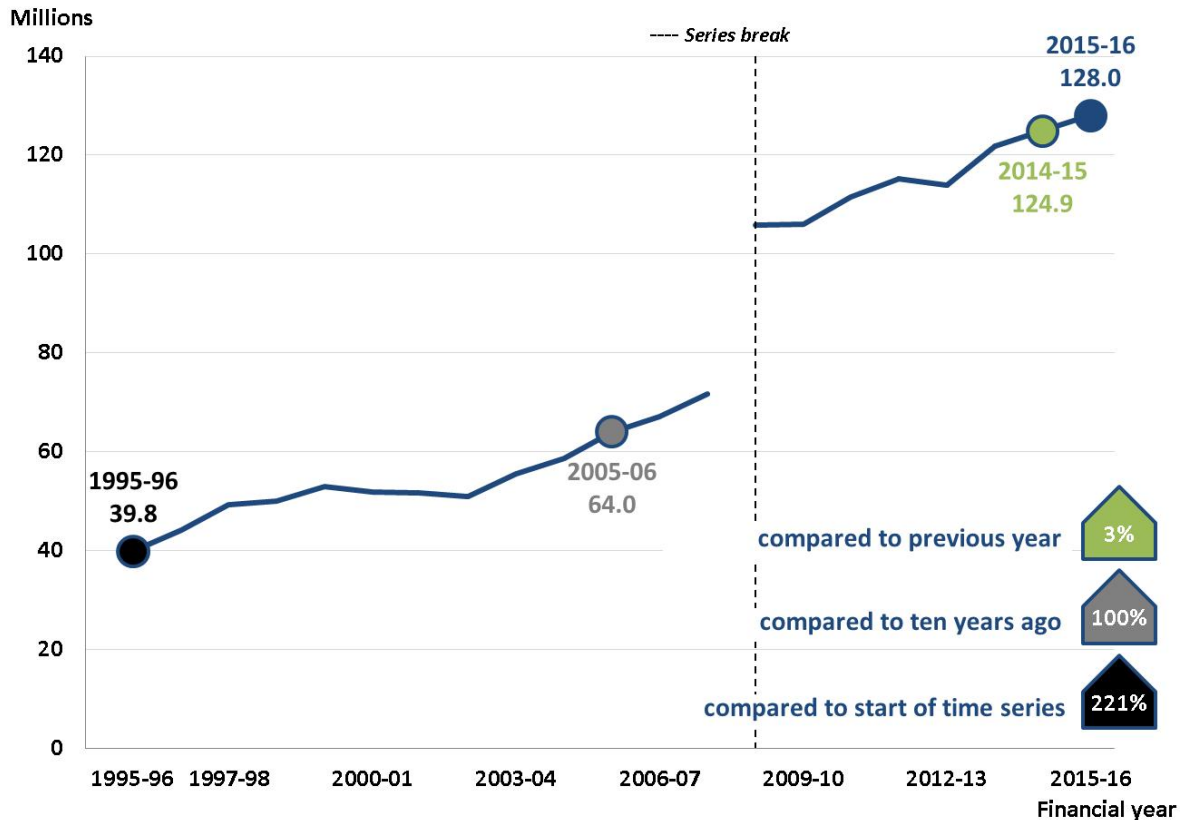
Journeys between the North East and other regions rose by 2.2% overall, to 9.5 million in 2015-16. Journeys to/from London and Yorkshire and the Humber, which together accounted for 56% of all journeys to/from the North East, increased by around 3% each. This was at a slightly lower rate than the previous year.

The number of journeys within the North East decreased slightly to 5.7 million – 0.2% lower than 2014-15. This was driven by a 7.2% reduction in journeys with an origin or destination in Northumberland, which accounts for around 12% of journeys within the North East.



## 2.2 North West

Passenger journeys (millions) to/from and within the North West, 1995-96 to 2015-16 – [\(Table 15.6\)](#)



Total journeys in the North West has maintained its increasing trend since 2012-13 and reached 128.0 million journeys in 2015-16.

The total number of journeys for the North West increased since 1995-96 before falling in three successive years between 2000-01 and 2002-03. It then rose gradually before the inclusion of new estimates for rail travel in PTE areas in 2008-09, which resulted in a sharp increase. These new estimates impacted on both Merseyside and Greater Manchester journey numbers.

There were 36.0 million journeys made to/from the North West. This was an increase of 4.8% compared to 2014-15 and was the second highest growth rate for journeys to/from another region in 2015-16.

All the regions, except for Scotland, showed an increase in journeys to/from the North West. The highest contributors were the primary flows, London (up 6.1%) and the cross-Pennine route to/from Yorkshire and the Humber (up 6.5%), which account for 54% of all journeys to/from the North West. There was also high demand to/from the West Midlands (up 6.3%) which could be attributed to the completion of works at Birmingham New Street station.

55% 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 eleventh year in succession, rising 6.1% in 2015-16.

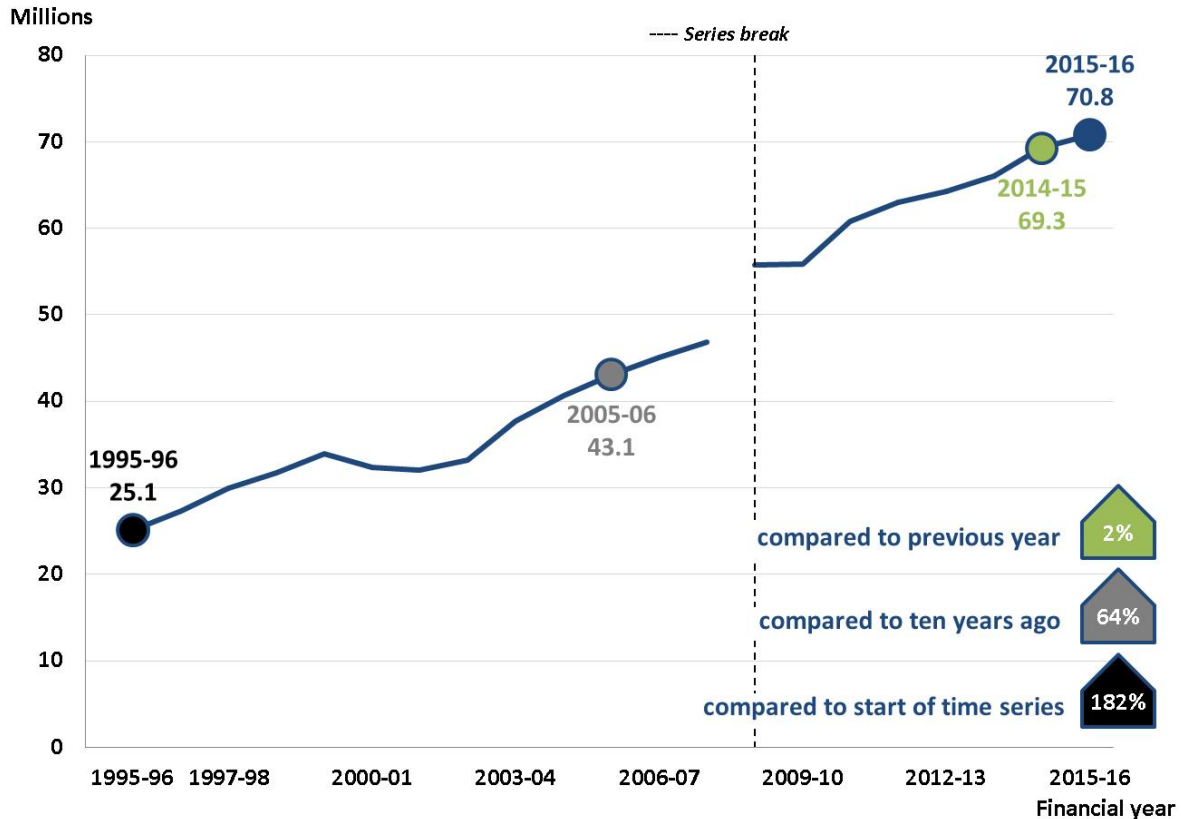
The number of journeys within the North West reached 92.1 million in 2015-16, increasing by 1.6% since 2014-15. Merseyside and Greater Manchester together accounted for 80% of all journeys within the North West in 2015-16, increasing 1.8% and 1.5% respectively since 2014-15.





## 2.3 Yorkshire and the Humber

Passenger journeys (millions) to/from and within Yorkshire and the Humber, 1995-96 to 2015-16 – [\(Table 15.12\)](#)



The total number of journeys for Yorkshire and the Humber was 70.8 million in 2015-16 – an increase of 2.3% compared to 2014-15.

Between 1995-96 and 1999-00, the total number of journeys for Yorkshire and the Humber increased at a steady rate before falling 2.3% between 1999-00 and 2002-03. Journey numbers plateaued again during the economic downturn in 2009-10 but have increased every year since then.

The sharp increase in 2008-09 was due to the introduction of new estimates of rail travel in PTE areas, which impacted on journeys within the region for South Yorkshire and West Yorkshire.

There has been a 3.9% increase in the number of journeys between Yorkshire and the Humber and other regions, reaching 26.8 million in 2015-16. This was attributed mainly to the journeys to/from the North West, which accounted for 33% of journeys and increased by 6.5% compared to the previous year. This may be due to continued growth between Manchester and Leeds as a result of the fifth train per hour introduced in May 2014. This is

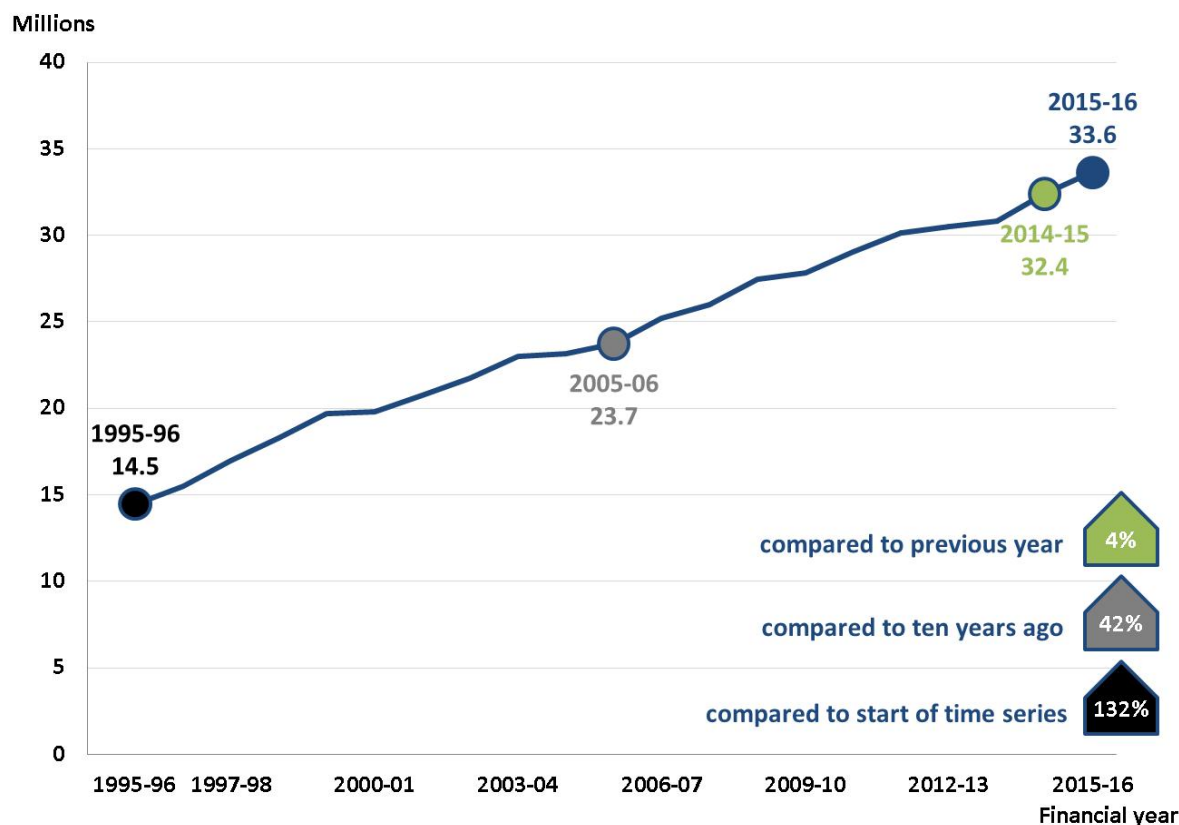
reflected in journeys between West Yorkshire and other regions increasing by 5.4% in 2015-16 to add to the 6.3% growth seen in 2014-15.

The number of journeys within Yorkshire and the Humber increased to 44.0 million - up 1.3% compared to 2014-15.



## 2.4 East Midlands

Passenger journeys (millions) to/from and within East Midlands, 1995-96 to 2015-16 – ([Table 15.1](#))



The total number of journeys for the East Midlands reached 33.6 million in 2015-16, with a rise of 3.9% compared to the previous year.

Journeys have consistently increased in each year since 1995-96.

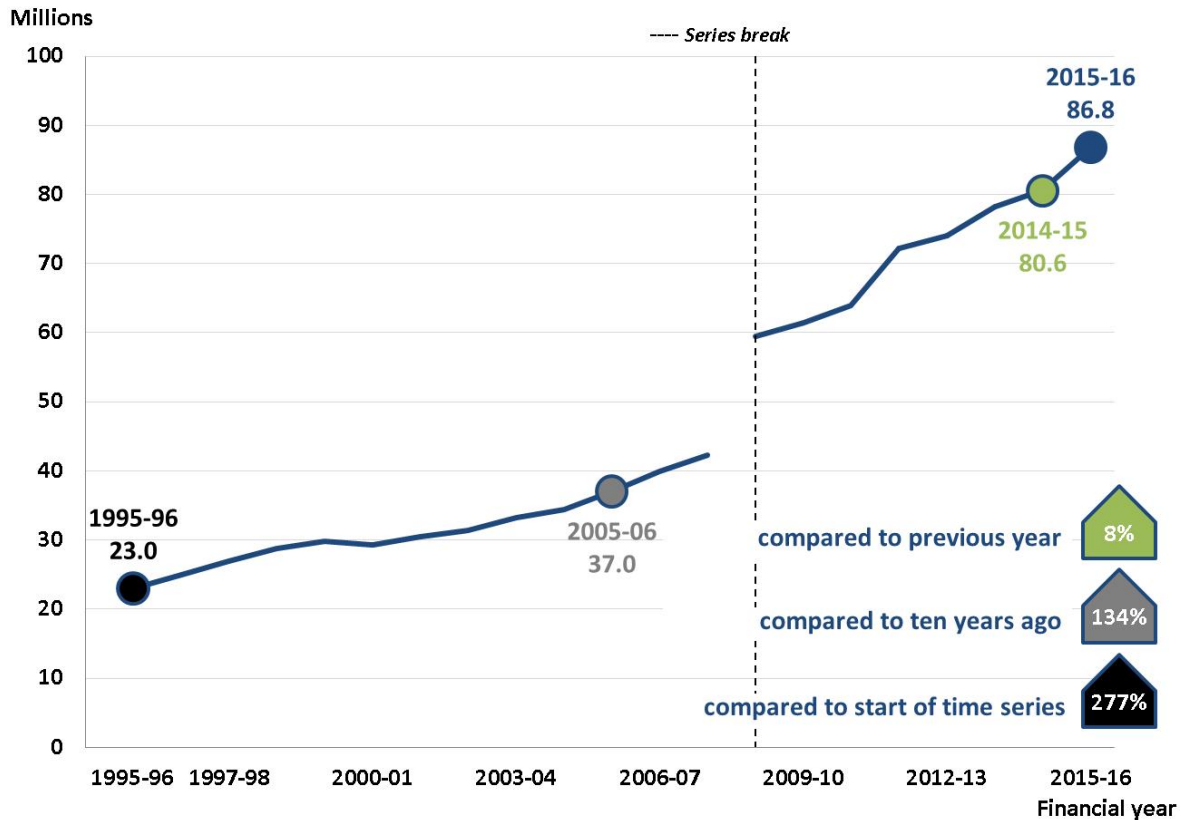
The number of journeys made between the East Midlands and other regions in 2015-16 was 24.5 million. This was an increase of 3.8% compared to the previous year. The largest contribution to this change was journeys to/from the West Midlands, accounting for 18% of journeys and an increase of 6.8%. This can in part be attributed to the completion of the works at Birmingham New Street station in September 2015.

Journeys within the East Midlands reached 9.2 million in 2015-16, increasing by 4.0% compared to 2014-15. Journeys starting in Nottinghamshire and Nottingham accounted for 36% of journeys within the East Midlands and had the largest growth rates, with 5.6% and 5.1% respectively.



## 2.5 West Midlands

Passenger journeys (millions) to/from and within the West Midlands, 1995-96 to 2015-16 – [\(Table 15.11\)](#)



The total number of journeys for the West Midlands has increased by 7.7% to 86.8 million in 2015-16. This is the highest percentage growth in any region in 2015-16 and coupled with general increase in rail usage, it could be partly attributed to the completion of the Birmingham New Street station works in September 2015, and the effect of London Midland timetable improvements.

Total journeys for West Midlands have increased every year since 1995-96 with the exception of 2000-01 and have nearly quadrupled over that period. However, some of the change is due to the improved estimates of rail travel in the West Midlands PTE area, with improvements introduced in 2008-09 and 2011-12.

Journeys between the West Midlands and other regions have continued to rise, reaching 30.4 million in 2015-16. This was an increase of 6.1% compared to the previous year, which was the highest annual growth rate since 2010-11. Journeys to/from the West Midlands increased for all regions; the largest percentage increase was for the East of England with 8.1%. However, the overall increase is primarily driven by the growth in demand for the three most popular routes – to/from East Midlands, to/from London and to/from the North West,

which rose by 6.8%, 6.4% and 6.3% respectively, and jointly accounted for 71% of journeys made to/from the West Midlands.

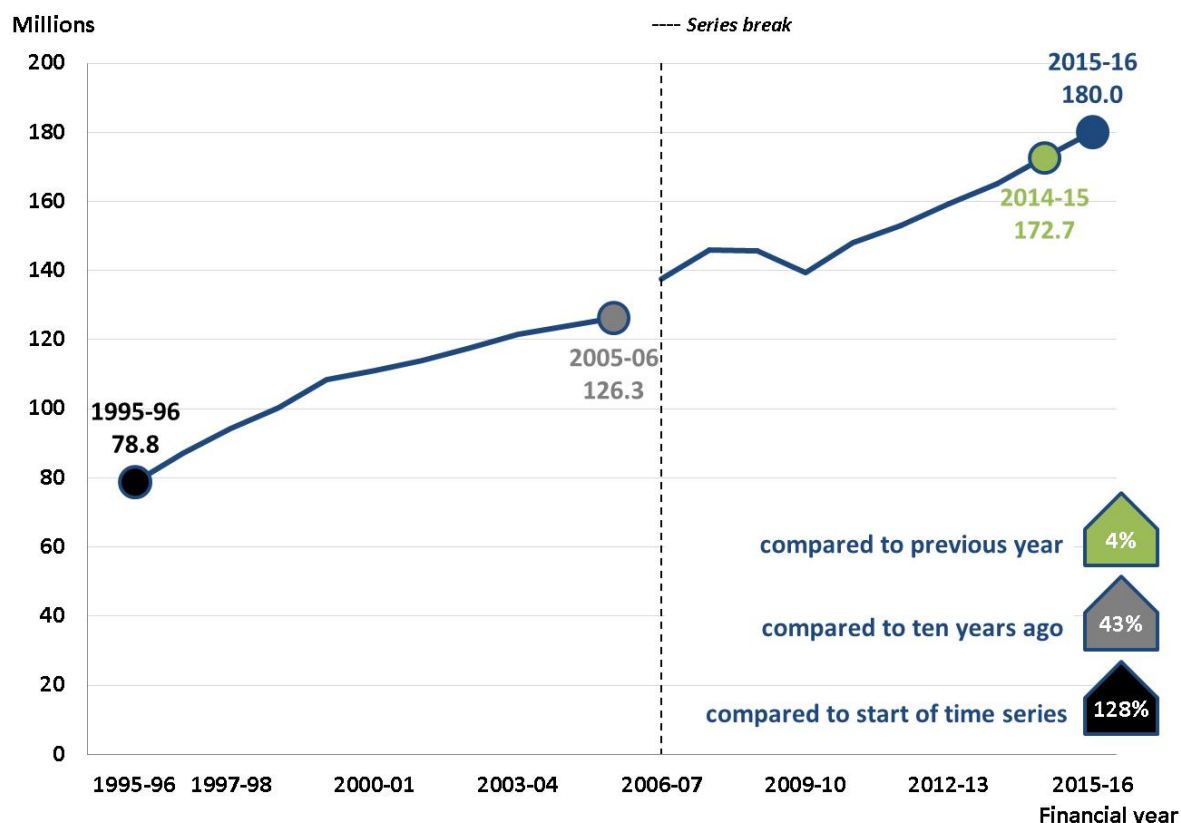
Overall, there were 56.4 million journeys made within the West Midlands in 2015-16, up by 8.7% compared to the previous year.

More than three-quarters (78.4%) of journeys started or ended in the metropolitan authority of West Midlands and the 9.4% increase since 2014-15 was the main contributor to the overall increase in all journeys within West Midlands.



## 2.6 East of England

Passenger journeys (millions) to/from and within the East of England  
1995-96 to 2015-16 – [\(Table 15.2\)](#)



There were 180.0 million journeys for the East of England in 2015-16, an increase of 4.3% compared to the previous year.

The number of journeys for the East of England has increased in almost every year since 1995-96, except in 2008-09 and 2009-10. As a key commuter route, this might have been driven by the economic downturn.

Journeys between the East of England and other regions rose by 4.4%, to 147.3 million in 2015-16. Journey numbers increased by 8.1% to/from the West Midlands and 4.6% to/from London. Journeys to/from London account for over 90% of all journeys between the East of England and other regions and are a major contributor to the increase in rail demand.

Essex and Hertfordshire sub-regions combined accounted for 67% of all journeys between the East of England and other regions. Both had an increase in 2015-16 – 4.9% and 4.5% respectively.

Sub-regions which showed the highest percentage increase in demand between the East of England and other regions in 2015-16 were Thurrock (10.6%) and Luton (7.3%).

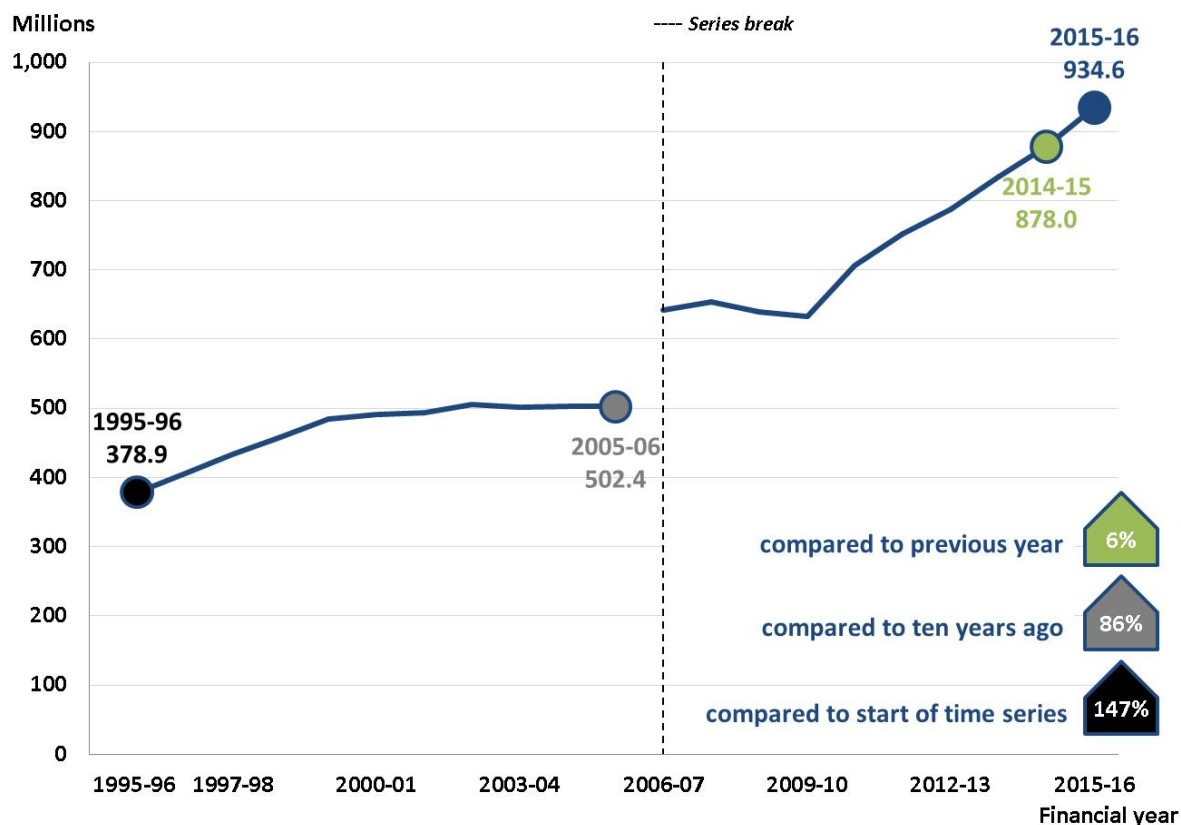


Journeys within the East of England rose by 3.7% to 32.7 million in 2015-16, with increased demand of 5.6% each for Cambridgeshire and Hertfordshire. Cambridgeshire has seen a period of sustained growth with increases in excess of 4.5% in each year since 2010-11. Journeys starting or ending in Essex, which accounts for 26% of total journeys in the East of England, rose by 2.4%.



## 2.7 London

Passenger journeys (millions) to/from and within London, 1995-96 to 2015-16 – [\(Table 15.4\)](#)



The total number of journeys for London was 934.6 million in 2015-16, an increase of 6.4% compared to 2014-15. It has more than doubled since 1995-96.

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. Journey numbers plateaued before falling in 2008-09 and 2009-10, possibly as a result of the recession.

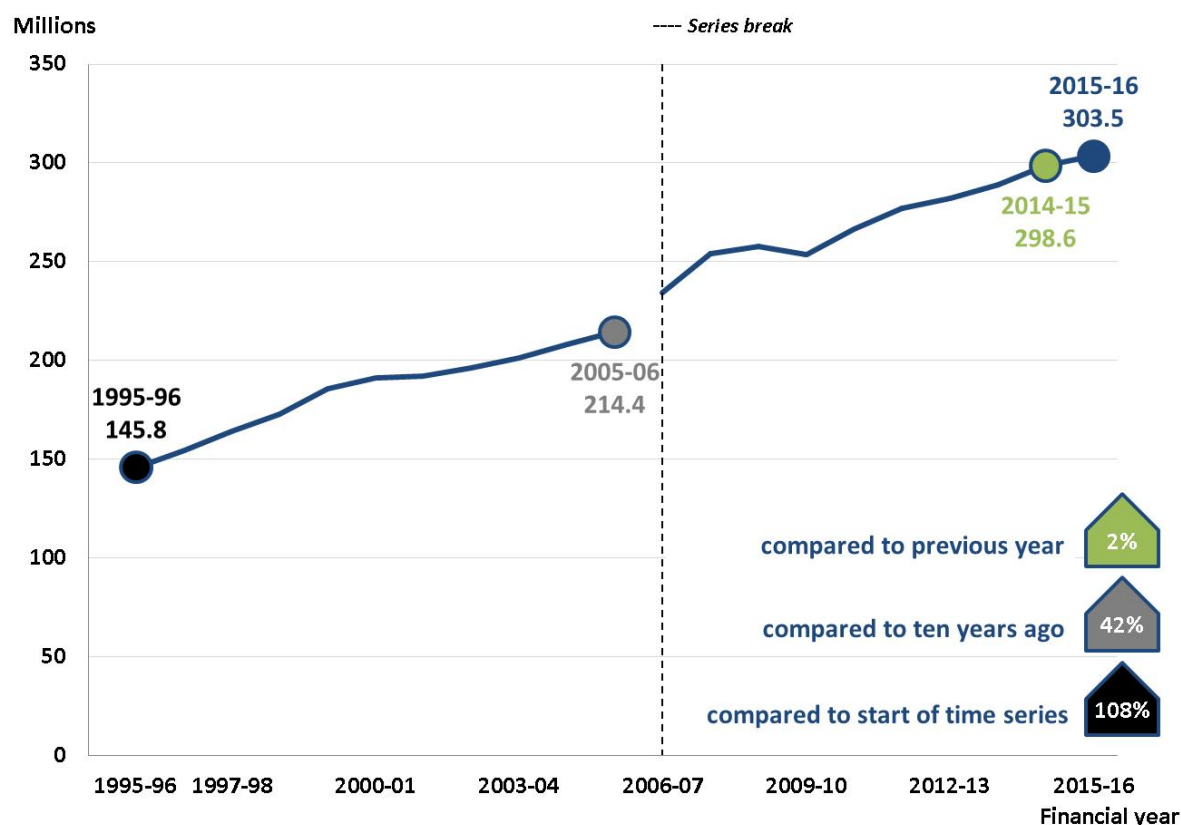
The number of journeys to/from London increased by 3.0% between 2014-15 and 2015-16. The largest growth rate for journeys to/from London was for the West Midlands which increased by 6.4%. This may be due to competitive service provision on that route with three operators running trains between London and Birmingham. It could also be partly attributed to the London Midland timetable improvements. Journeys to/from the South East, which accounted for 51% of total journeys, grew by 1.7% and journeys to/from East of England accounting for 35% of total journeys increased by 4.6%.

Journeys within London reached 537.4 million in 2015-16, increasing by 9.2% compared to 2014-15. This has more than doubled compared to 1995-96.



## 2.8 South East passenger journeys

Passenger journeys (millions) to/from and within South East, 1995-96 to 2015-16 – [\(Table 15.8\)](#)



There were 303.5 million journeys for the South East in 2015-16, an increase of 1.7% compared to 2014-15. The number of journeys has increased every year since 1995-96 with the exception of the dip in 2009-10, which is likely to be due to the economic downturn.

Journeys between the South East and other regions increased by 1.7% to reach 219.6 million in 2015-16. This is the lowest rate of growth since the fall in journeys in 2009-10. Journeys to/from London, which accounted for over 90% of all journeys between the South East and other regions, increased by 1.7%. After the large increase in journeys to/from Scotland seen in 2014-15 due to the Commonwealth games, journeys fell by 9.0% in 2015-16.

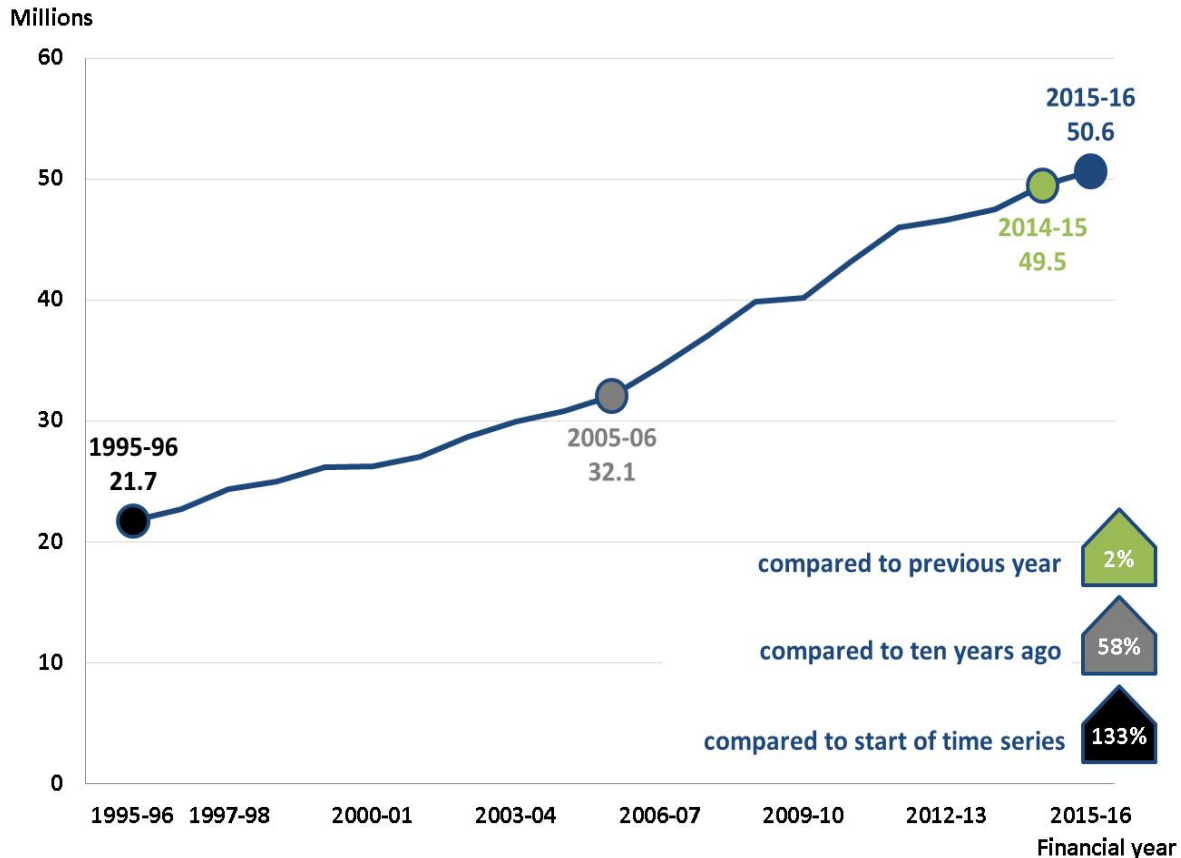
The number of journeys to/from Oxfordshire has increased every year since 1995-96, rising 5.3% in 2015-16 compared to the previous year. This might be due to the new Chiltern service between Oxford Parkway and Marylebone, which opened in September 2015.

There was an increase of 1.5% for journeys within the South East compared to 2014-15, rising to 83.9 million in 2015-16. The key areas for the increase in journeys within the South East were Kent (up 2.9%) and Hampshire (up 1.7%), jointly accounting for a quarter of all journeys made within the South East. Journeys starting or ending in Milton Keynes saw the highest growth rate in 2015-16, increasing by 6.9%.



## 2.9 South West passenger journeys

Passenger journeys (millions) to/from and within South West, 1995-96 to 2015-16 – [\(Table 15.9\)](#)



The total number of passenger journeys for the South West was 50.6 million. This represented an increase of 2.4% compared to the previous year.

The total number of journeys for the South West has continuously increased since 1995-96. The rate of growth slowed during the economic downturn in 2009-10 but has increased in subsequent years.

The number of journeys between the South West and other regions increased 2.7% to 25.3 million in 2015-16. This can be attributed to the two flows, to/from London and to/from the Wales which increased by 2.4% and 7.9% respectively, and jointly accounted for 59% of all journeys.

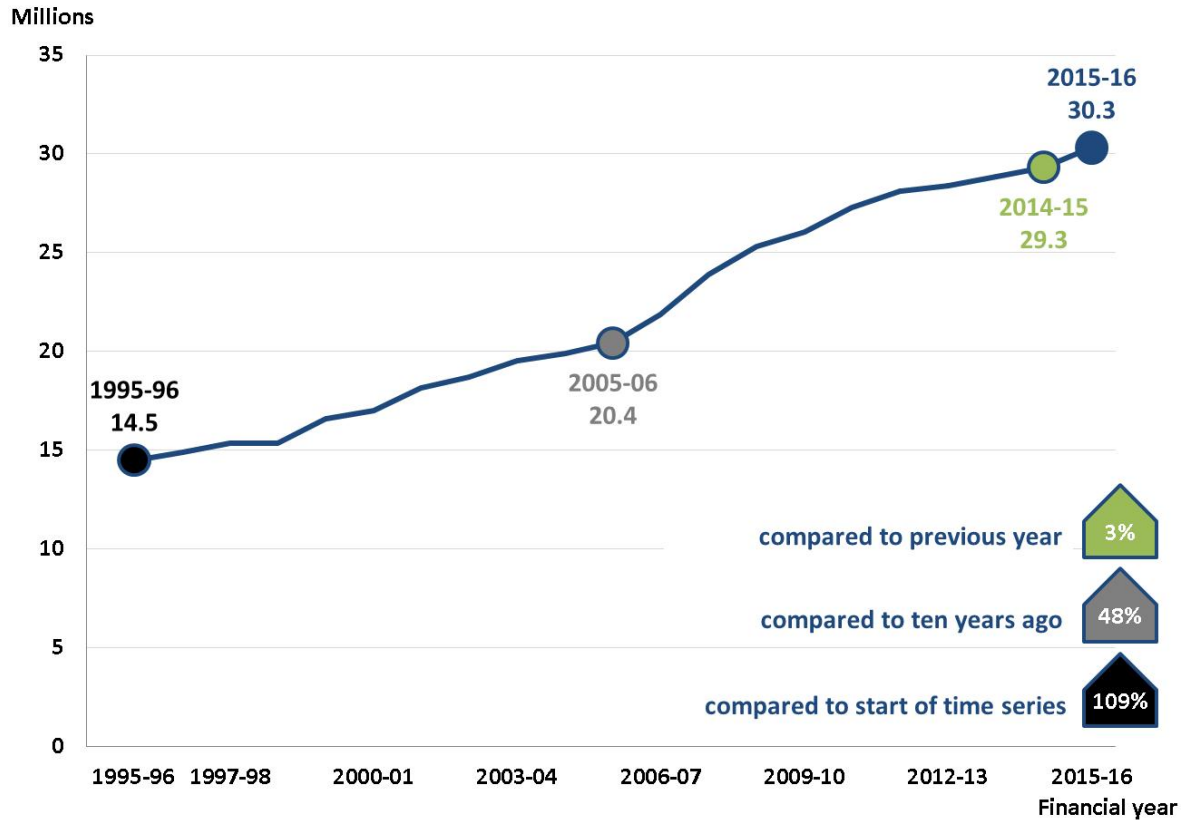
Another contributor to the increase is the rise in journeys of 7.9% between the South West and Wales, accounting for 12% of all journeys. This may be due to the Rugby World Cup 2015 which was held in September and October 2015 as one of the venues was in Cardiff.

Journeys within the South West region rose by 2.1% to 25.3 million in 2015-16. Journeys with an origin and/ or destination within the City of Bristol, which accounted for 17% of total journeys, increased by 6.7%. There has been increased demand in Torbay with a 23.5% percentage increase since 2013-14 and despite the cooler and wetter summer in 2015, journeys starting or ending in Torbay increased by 9.2% since 2014-15.



## 2.10 Wales passenger journeys

Passenger journeys (millions) to/from and within Wales, 1995-96 to 2015-16 – [\(Table 15.10\)](#)



There were 30.3 million passenger journeys for Wales in 2015-16. This was an increase of 3.4% compared to the previous year. This represents the highest annual growth rate for Wales since 2010-11. The total number of journeys for Wales has increased continuously since 1995-96, more than doubling over that time period.

Journeys between Wales and other regions increased to 9.6 million in 2015-16, up 2.7% compared to 2014-15. This was mainly due to the increase in journeys to/from the South West, which accounted for 31% of journeys and increased by 7.9%. This may in part be due to the Rugby World Cup matches in Cardiff in autumn 2015.

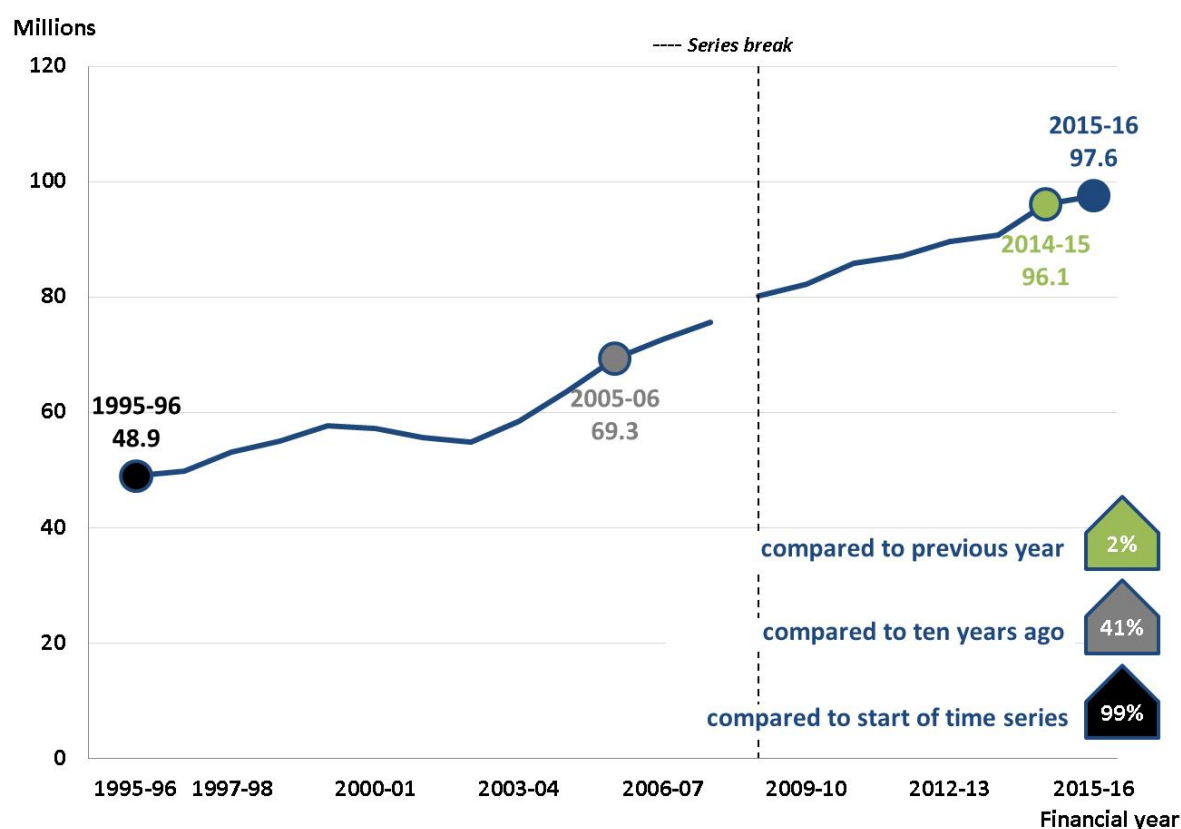
There were 20.7 million journeys made within Wales in 2015-16, up by 3.7% compared to 2014-15. Nearly 41% of journeys within Wales started or ended in Cardiff and the 5.9% increase compared to 2014-15 was the main driver for the overall increase in journeys within Wales. Journeys starting or ending in the Conwy Valley dropped by 7.8%, possibly following the flood damage in winter 2015.





## 2.11 Scotland passenger journeys

Passenger journeys (millions) to/from and within Scotland, 1995-96 to 2015-16  
– [\(Table 15.7\)](#)



Total journeys for Scotland reached 97.6 million in 2015-16, a 1.5% increase compared to the previous year.

From 1995-96 the total number of journeys for Scotland increased gradually up to 1999-00 before declining in three successive years up to 2002-03. It has continuously increased since and rose sharply in 2014-15 as a result of the Commonwealth Games held in Glasgow in 2014.

Journeys to/from Scotland in 2015-16 totalled 8.4 million in 2015-16. After 10 years of successive growth, this was a decrease of 3.0% after the large increase in journeys in the previous year due to the Commonwealth Games.

Journeys fell on a number of flows between Scotland and other regions in 2015-16; only journeys to/from North East, West Midlands and Yorkshire & the Humber showed an increase compared to the previous year though these were all under 1%. One of the major flows to/from London fell by 7.7%.

Journeys to/from Glasgow, which is one of the primary origins/destinations for cross-border services accounting for approximately a quarter of journeys, decreased by 6.5% compared to 2014-15.

The number of journeys within Scotland increased by 2.0%, to reach 89.2 million in 2015-16. The highest growth rates were for Fife (8.1%) and Perth and Kinross (7.3%). The increase in journeys for Glasgow (2.1%) and Edinburgh (3.7%), jointly accounting for more than half of the journeys in Scotland, more than offset the fall of 9.2% in Aberdeen City.

# Annex 1 – List of pre-created reports available on the ORR Data Portal

All data tables can be accessed on the data portal free of charge. The ORR [Data Portal](#) provides on screen data reports, as well as the facility to download data in Excel format and print the report. We can provide data in csv format on request.

## Passenger journeys in Great Britain

- Regional rail journeys - GB and England, Scotland and Wales, 1995-96 and 2015-16 – [Table 15.3](#)

## Regional rail usage profiles

Each of the tables below provides a time series from 1995-96 to 2015-16 of total rail journeys to/from and within each region or country, including a breakdown by sub-region. Charts within the tables provide a comparison between 2015-16 and 2014-15.

- Regional rail journeys - North East – [Table 15.5](#)
- Regional rail journeys - North West – [Table 15.6](#)
- Regional rail journeys - Yorkshire and the Humber – [Table 15.12](#)
- Regional rail journeys - East Midlands – [Table 15.1](#)
- Regional rail journeys - West Midlands – [Table 15.11](#)
- Regional rail journeys - East of England – [Table 15.2](#)
- Regional rail journeys - London – [Table 15.4](#)
- 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 - Scotland – [Table 15.7](#)

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

## Annex 2

### Statistical Releases

This publication is part of the statistical releases which cover the majority of reports that were previously released through the [Data Portal](#). The statistical releases consist of four annual and four quarterly themed releases:

#### **Annual:**

- Rail Finance & Rail Fares Index;
- Rail Safety Statistics;
- Rail Infrastructure, Assets and Environmental;
- Regional Rail Usage.

#### **Quarterly:**

- Passenger and Freight Rail Performance;
- Freight Rail Usage;
- Passenger Rail Usage;
- Passenger Rail Service Satisfaction.

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

## 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. The Authority 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 Authority 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 details please contact the Statistics Head of Profession Lyndsey Melbourne on 020 7282 3978 or contact [rail.stats@orr.gsi.gov.uk](mailto:rail.stats@orr.gsi.gov.uk).

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at [DfT Rail Statistics](#)

## Annex 3 – Methodology and limitations

### Methodology

As Britain does not have a fully gated rail network, ORR commissions Steer Davies Gleave (SDG) 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 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 release](#), which takes 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 has been made to the way that usage at London stations has 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 to 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](#).

## Estimates of Station Usage

ORR also publishes estimates of station usage for all stations in Great Britain. The latest 2015-16 estimates are available at <http://orr.gov.uk/statistics/published-stats/station-usage-estimates>

## 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.

In order to maintain consistency with historic data, the sub-regions used in all the 11 regional tables have not been updated to the 2015 boundary definitions as has been done in the 2015-16 estimates of station usage dataset. The regional rail usage has continued to use the local authority boundaries as they existed prior to the 2009 reorganisation when 36 district authorities were combined to form eight unitary authorities and a further two districts became unitary authorities. It is possible, however, to aggregate the data for the relevant local authorities to produce counts for the current local authorities if this is required. For information on the changes made in 2009, please refer to the [ONS Website](#).

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



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