Regional rail usage 2020-21

17 February 2022

Contents:

Passenger rail usage during financial year 2020-21 was affected by the coronavirus (COVID-19) pandemic. The impact varied regionally with the **South West** (**23.3%**) recording the most journeys in 2020-21 as a percentage of journeys made in 2019-20. **Scotland** (**15.6%**) recorded the lowest percentage of journeys made a year earlier.

Figure 1: Passenger journeys in 2020-21 by region as a percentage of journeys in 2019-20

The **264 million journeys made within regions in 2020-21** were equivalent to **25.9%** of the 1,022 million journeys in 2019-20. **London (149 million)** had the most journeys within a region. The **East of England (35.8%)** recorded the highest percentage of journeys made compared with 2019-20.

The **79.6 million journeys made between regions** in 2020-21 were equivalent to **16.5%** of the 482 million journeys in 2019-20. **London** had the most journeys to or from other regions, while the **East Midlands (18.3%)** recorded the highest percentage of journeys made compared with 2019-20.

All data tables, a quality and methodology report and an interactive dashboard associated with this release are published on the regional rail usage page of the data portal. Key definitions are in annex 1 of this release.

1. Introduction

The statistics presented in this release are derived from the Origin Destination Matrix (ODM), which is also used to produce [Estimates of station usage statistics](#). Over the years, several improvements have been made to the methodology used to produce the ODM (see below). These improvements should be considered when making comparisons between years.

The pandemic meant that adjustments had to be made to the methodology used to produce the ODM in 2019-20 and 2020-21. These adjustments relate to the timing of refunds issued for season tickets. Further details are available in the methodology section of the [Quality and methodology report](#). Refunds issued for journeys on Caledonian Sleeper meant that it was not possible to estimate the number of journeys to or from other regions (i.e. not Scotland) in 2020-21 for Highlands and Islands. Further details on this are provided in Annex 2 of this release.

Methodology improvements

In **2006-07**, estimates of travel on Transport for London sold travelcards were included in the dataset for the first time. This affected the number of journeys within London, and between London and the South East and between London and the East of England. A further methodological change was implemented for **2008-09** with the inclusion of journeys made using tickets specific to Passenger Transport Executive (PTE) areas. This affected a number of regions, most noticeably Yorkshire and the Humber, the North West, Scotland, and the West Midlands. Series breaks have been added to the GB data for 2006-07 and 2008-09 to highlight these significant methodological changes. Where changes have a significant impact at a regional level, series breaks have also been added to the charts for each region in section 3 of this statistical release.

These significant methodological changes together with more minor changes to the methodology are made to continually improve these statistics. For example, in 2020-21, zero-fare concessionary tickets for West Yorkshire PTE were included for the first time this year, which added around 160,000 journeys in the Yorkshire and the Humber region. Similarly, the methodology to estimate journeys using local tickets across the West Midlands PTE area was updated this year, adding around 88,000 journeys in the West Midlands region. Furthermore, journeys made on dedicated Caledonian Sleeper tickets were included for the first time in 2020-21. This added around 62,000 journeys.

Where more minor changes to methodology affect the latest data or trends presented in this release we have highlighted and tried to quantify the impact where possible. Further detail of recent and historical methodological improvements can be found in Annex 2 of the [Quality and methodology report](#).

2. Passenger journeys in Great Britain

There were 344 million passenger journeys made in Great Britain in 2020-21. This equates to 22.9% of the 1,504 million journeys recorded in 2019-20[1]. This is the lowest number of journeys recorded in this time series, which began in 1995-96.

Figure 2.1: Passenger journeys within and between regions, Great Britain, 1995-96 to 2020-21 (Table 1510)
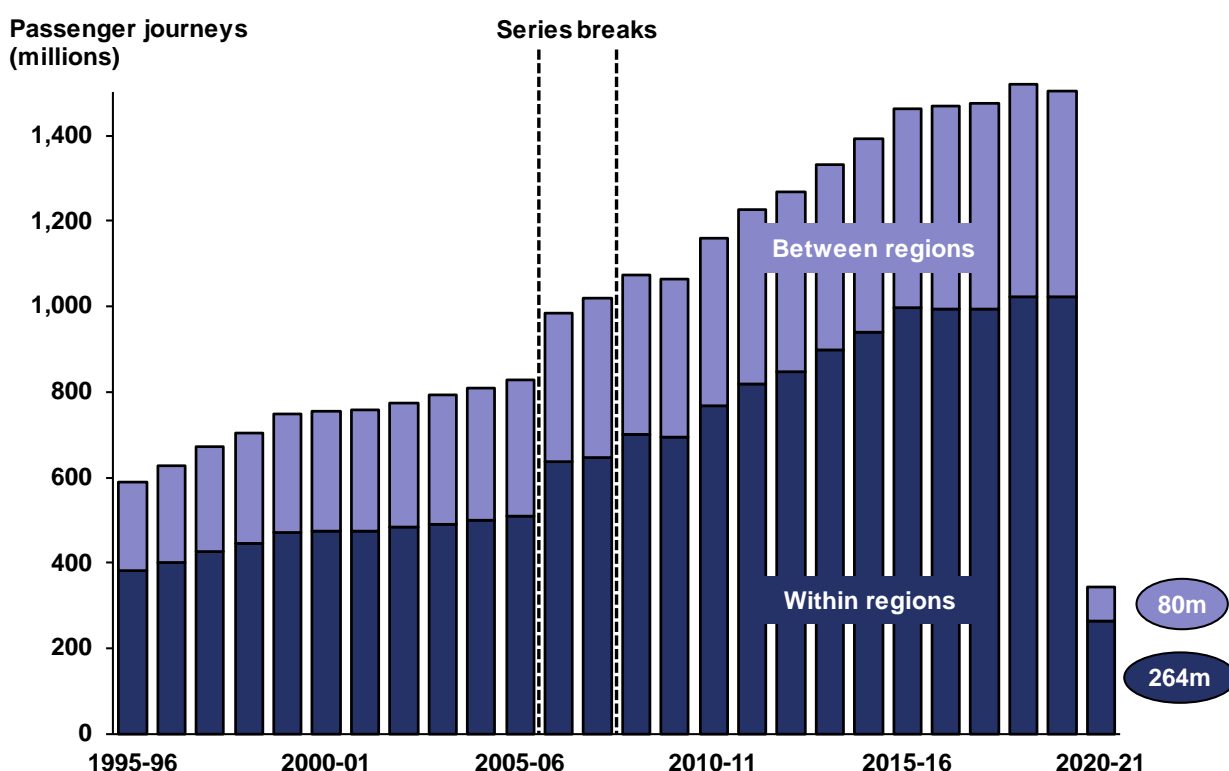
The 264 million journeys made **within regions** in 2020-21 represents 25.9% of the 1,022 million journeys made in 2019-20. A total of 79.6 million journeys were made **between regions** in 2020-21. This is equivalent to 16.5% of the 482 million journeys made in 2019-20. There were some small methodological adjustments in 2020-21. These may have contributed to journeys within regions recording higher relative usage than journeys to or from other regions. Nevertheless, most of the difference can be explained by the restrictions on non-essential travel during the pandemic, which resulted in average journey

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[1] Total journeys in this Regional rail usage statistical release (344 million) is lower than the journeys published in Passenger rail usage (388 million) as the latter takes into account the number of legs of a journey. Please see Passenger journeys in Great Britain for information on methodology differences.

lengths falling by 16.1% in 2020-21 compared with 2019-20 (see Table 1222 and Table 1232 of the [Passenger rail usage statistical release](#)).

Passenger journeys between countries

A total of 1.6 million journeys were made between England and Wales in 2020-21. This equates to 16.9% of the 9.4 million journeys recorded in 2019-20. A total of 1.4 million journeys were made between England and Scotland, which represents 13.8% of the 9.8 million journeys made in 2019-20. This is the first year since 2016-17 when there were more journeys between England and Wales than between England and Scotland.

The number of journeys made between Scotland and Wales is small relative to those between other countries. There were 5,890 journeys made between Scotland and Wales in 2020-21, which equates to 14.5% of the 40,666 journeys made in 2019-20.

Figure 2.2: Passenger journeys between England and Scotland, and between England and Wales, 2010-11 to 2020-21 (Table 1510)
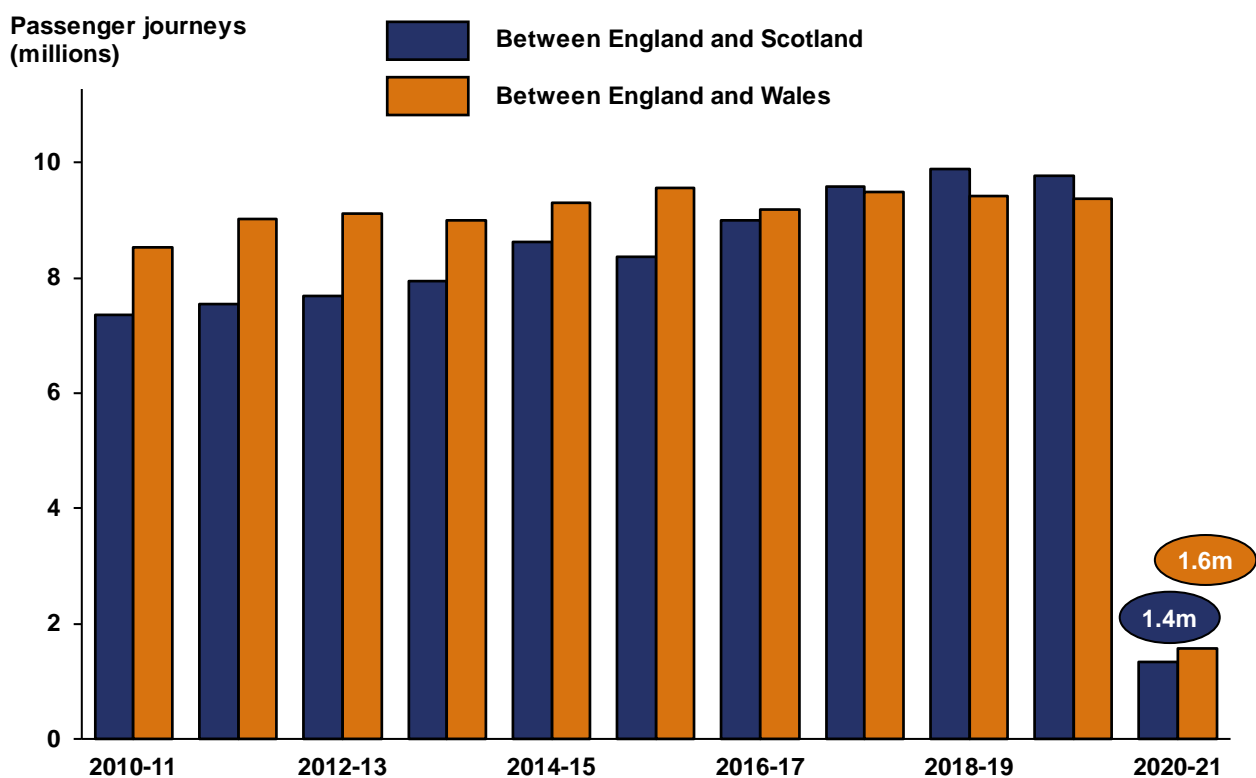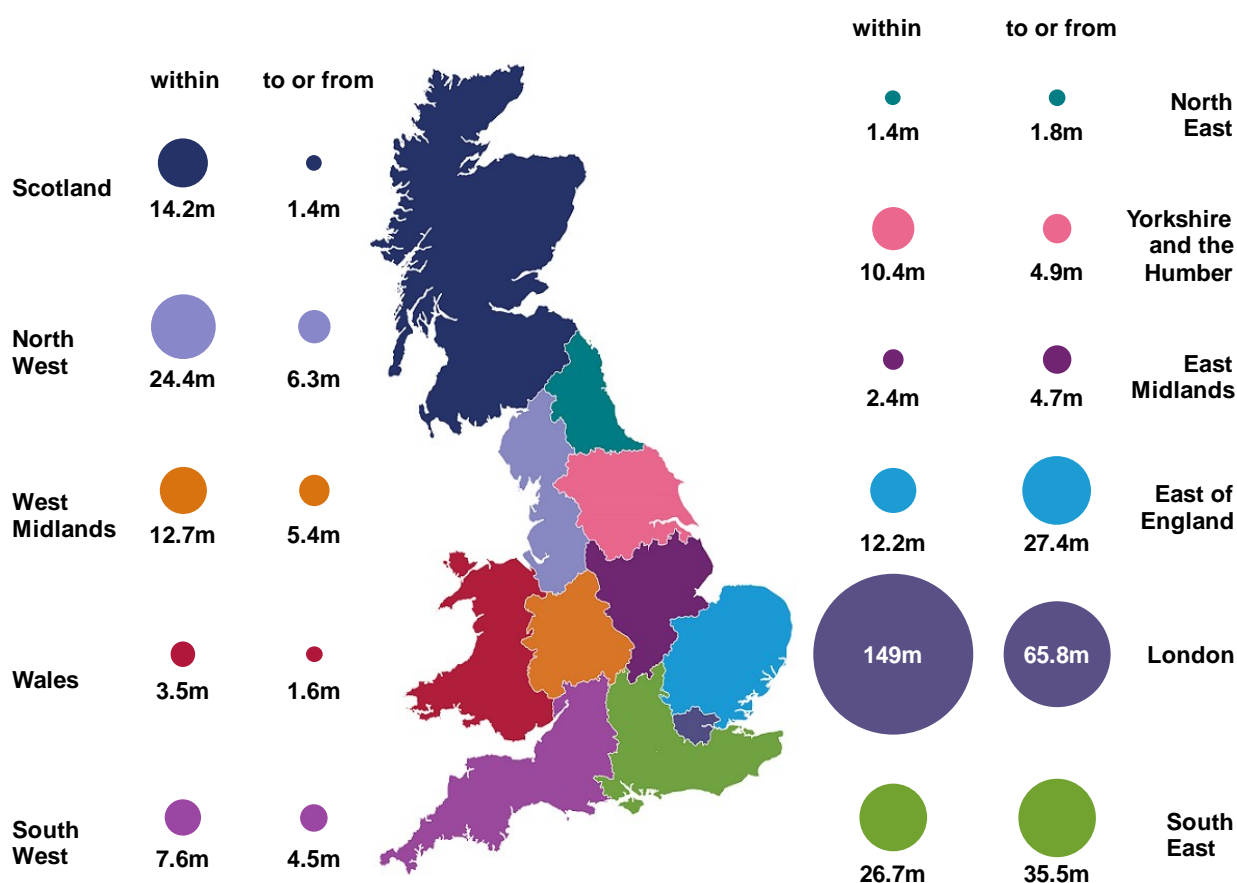
3. Regional rail usage profiles

Summary

London had the most journeys of all the regions with 214 million passenger journeys in 2020-21, equivalent to 22.8% of the 940 million journeys made in 2019-20. Of these, 149 million were made within London and 65.8 million were to or from other regions.

The North East had the fewest journeys with 3.2 million journeys in 2020-21. This equates to 19.6% of the 16.2 million made in 2019-20. Of these, 1.4 million were made within the North East and 1.8 million were to or from other regions.

Figure 3.01: Passenger journeys within, and to or from other regions, Great Britain, 2020-21

*Note: A total of 79.6 million journeys were made **between regions** in 2020-21. For the regional rail usage profiles, each one of these journeys is counted in both regions. Therefore, journeys **to or from other regions** sum to double the actual number of journeys made. Journeys **within** regions sum to the actual total of 264 million.*

Scotland, Wales and all nine regions of England recorded substantial falls in journeys in 2020-21, which was driven by measures to limit the spread of the pandemic. The South West (23.3%) recorded the most journeys in 2020-21 as a percentage of journeys made in 2019-20. Scotland (15.6%) recorded the lowest percentage of journeys made a year earlier.

A total of 264 million journeys made **within regions** were made in 2020-21, equivalent to 25.9% of the 1,022 million journeys recorded in 2019-20. There were 149 million passenger journeys in London, which account for more than half of all journeys within regions. As a percentage of journeys made in 2019-20, the East of England (35.8%) recorded the highest percentage while Scotland (15.8%) recorded the lowest percentage.

The 79.6 million journeys made **between regions** in 2020-21 equate to 16.5% of the 482 million journeys made in 2019-20. For the regional rail usage profiles, each one of these journeys is counted in both regions. Therefore, journeys **to or from other regions** sum to double the actual number of journeys made. After London (65.8 million), the South East (35.5 million) and the East of England (27.4 million) recorded the most journeys to or from other regions in 2020-21. As a percentage of journeys made in 2019-20, the East Midlands (18.3%) recorded the highest percentage while Scotland (13.8%) recorded the lowest percentage. It should be noted that for Scotland, the number of journeys to or from other regions in 2020-21 is likely to be an underestimate due to the way ticket refunds were processed for Caledonian Sleeper journeys in the LENNON ticketing system (see Annex 2 for details).

North East

Figure 3.02: Passenger journeys, North East, 1995-96 to 2020-21 (Table 1555)

Stations: 55
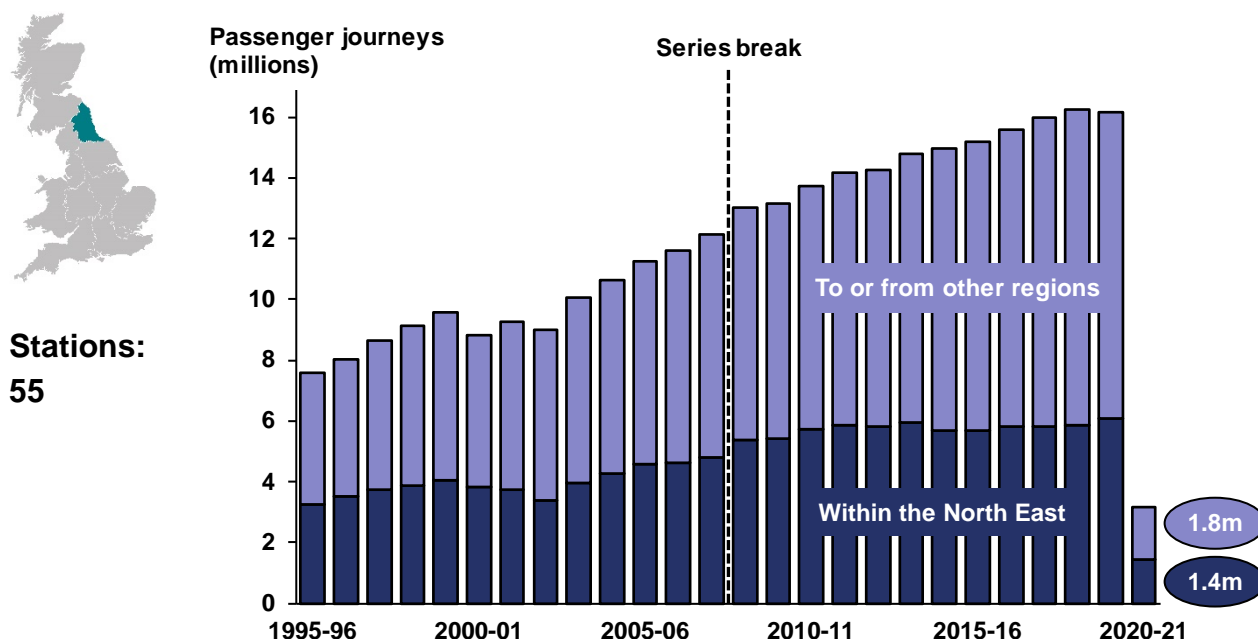
The total number of journeys for the North East region was 3.2 million in 2020-21, which equates to 19.6% of the 16.2 million journeys made in 2019-20.

Passenger journeys for the North East fell over the period between 1999-00 and 2002-03. This 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 and Wear Metro extension to Sunderland, which was completed in 2002-03. In 2008-09, estimates for rail travel in PTE areas were included for the first time including for the Tyne and Wear PTE area.

The North East recorded 1.4 million journeys within the region in 2020-21. This equates to 23.4% of the 6.1 million journeys made in 2019-20.

The North East recorded 1.8 million journeys to or from other regions, the equivalent of 17.4% of the 10.1 million journeys made in 2019-20. Most of these journeys were made to or from Yorkshire and the Humber (37.4%), London (22.3%), Scotland (17.4%), or the North West (11.8%).

The North East has two sub-regions (ITL2). Northumberland and Tyne and Wear accounted for 1.0 million journeys to or from other regions, whilst Tees Valley and Durham had 705,000 journeys to or from other regions.

North West

Figure 3.03: Passenger journeys, North West, 1995-96 to 2020-21 (Table 1560)

Stations: 336

The total number of journeys for the North West region was 30.6 million in 2020-21, which equates to 21.1% of the 145 million journeys made in 2019-20.

The increase in 2008-09 was the result of inclusion of new estimates for rail travel in PTE areas, which affected both Merseyside and Greater Manchester journey numbers. An additional 3.6 million concessionary journeys within Greater Manchester were included for the first time in 2018-19. An additional 3.6 million journeys in the Merseyside PTE area made using tickets purchased off network were included for the first time in 2019-20.

The North West recorded 24.4 million journeys within the region in 2020-21. This equates to 23.1% of the 105 million journeys made in 2019-20.
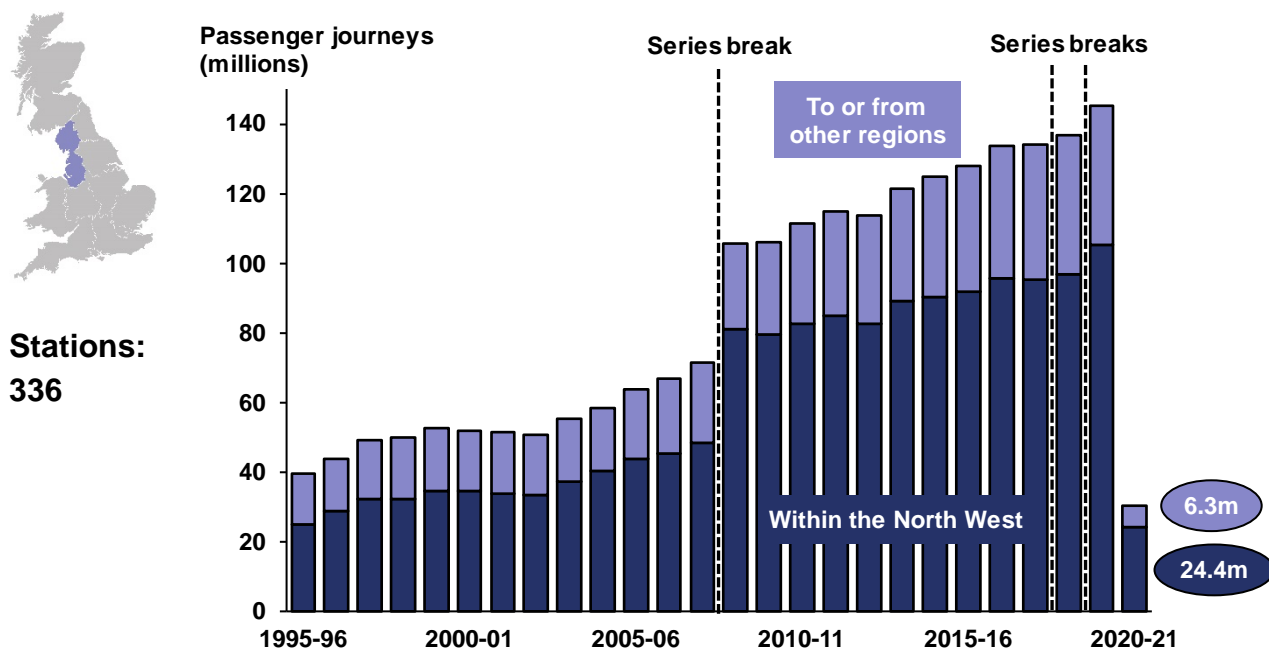
The North West recorded 6.3 million journeys to or from other regions, the equivalent of 15.6% of the 40.0 million journeys made in 2019-20. Most of these journeys were made to or from Yorkshire and the Humber (27.7%), London (23.0%), the West Midlands (16.1%), or the East Midlands (10.8%).

The North West has five sub-regions (ITL2) with Greater Manchester accounting for the most (3.4 million) journeys to or from other regions.

Yorkshire and the Humber

Figure 3.04: Passenger journeys, Yorkshire and the Humber, 1995-96 to 2020-21 (Table 1590)

Stations: 187
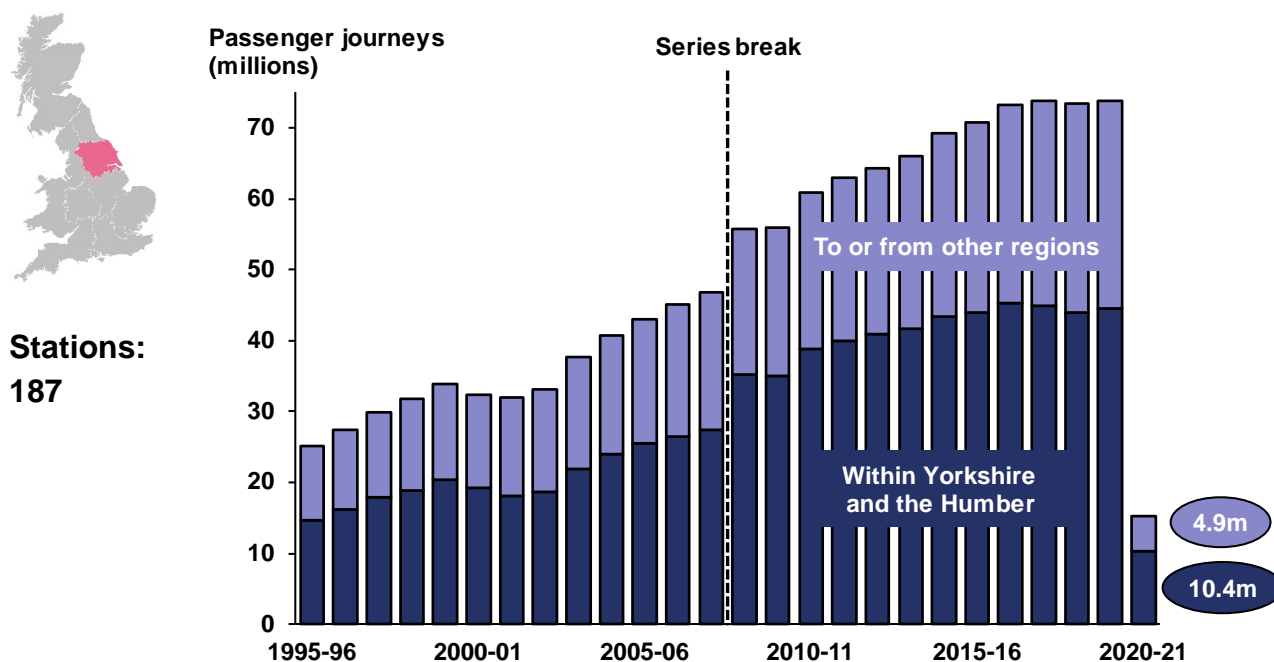
The total number of journeys for the Yorkshire and the Humber region was 15.3 million in 2020-21, which equates to 20.7% of the 73.8 million journeys made in 2019-20.

The increase in 2008-09 was due to the introduction of new estimates of rail travel in PTE areas, which affected both South Yorkshire and West Yorkshire. In 2019-20, around 223,000 journeys made using senior and disabled concessionary tickets in the South Yorkshire PTE area were included for the first time. In 2020-21, zero-fare concessionary tickets for West Yorkshire PTE were included for the first time, which added around 160,000 journeys in the Yorkshire and the Humber region.

The 10.4 million journeys within Yorkshire and the Humber equate to 23.3% of the 44.5 million journeys made in 2019-20.

Yorkshire and the Humber recorded 4.9 million journeys to or from other regions, the equivalent of 16.7% of the 29.3 million journeys made in 2019-20. Most of these journeys were made to or from the North West (35.4%), London (19.5%), the East Midlands (19.2%), or the North East (13.4%).

Yorkshire and the Humber has four sub-regions (ITL2) with West Yorkshire accounting for the most (2.0 million) journeys to or from other regions.

East Midlands

Figure 3.05: Passenger journeys, East Midlands, 1995-96 to 2020-21 (Table 1540)

Stations: 108
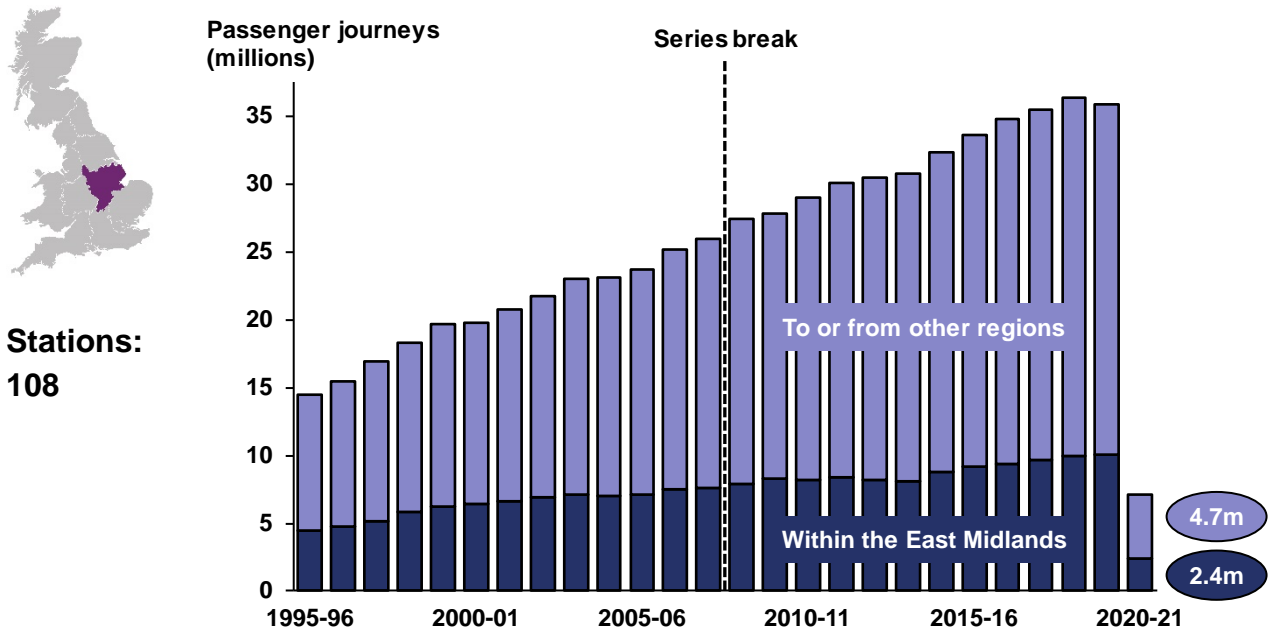
The total number of journeys for the East Midlands region was 7.1 million in 2020-21, which equates to 19.7% of the 35.9 million journeys made in 2019-20.

In 2008-09, estimates for rail travel in PTE areas were included for the first time including for the Greater Manchester and West Midlands PTE areas. This had an impact on the number of East Midlands journeys to or from the North West and to or from the West Midlands.

The 2.4 million journeys within the East Midlands equate to 23.4% of the 10.1 million journeys made in 2019-20.

The East Midlands recorded 4.7 million journeys to or from other regions, the equivalent of 18.3% of the 25.8 million journeys made in 2019-20. Most of these journeys were made to or from London (28.7%), Yorkshire and the Humber (19.9%), the West Midlands (19.0%), or the North West (14.3%).

The East Midlands has three sub-regions (ITL2) with the Derbyshire and Nottinghamshire sub-region accounting for the most (2.5 million) journeys to or from other regions.

West Midlands

Figure 3.06: Passenger journeys, West Midlands, 1995-96 to 2020-21 (Table 1585)

Stations: 156

The total number of journeys for the West Midlands region was 18.2 million in 2020-21, which equates to 18.3% of the 99.4 million journeys made in 2019-20.

The increase in 2008-09 was due to the introduction of new estimates of rail travel in PTE areas, which affected the West Midlands PTE area. The methodology for estimating usage in the West Midlands PTE area was improved in 2011-12, adding around 5 million journeys, and improved again in 2020-21 using local ticketing data, adding around 88,000 journeys in the West Midlands region.
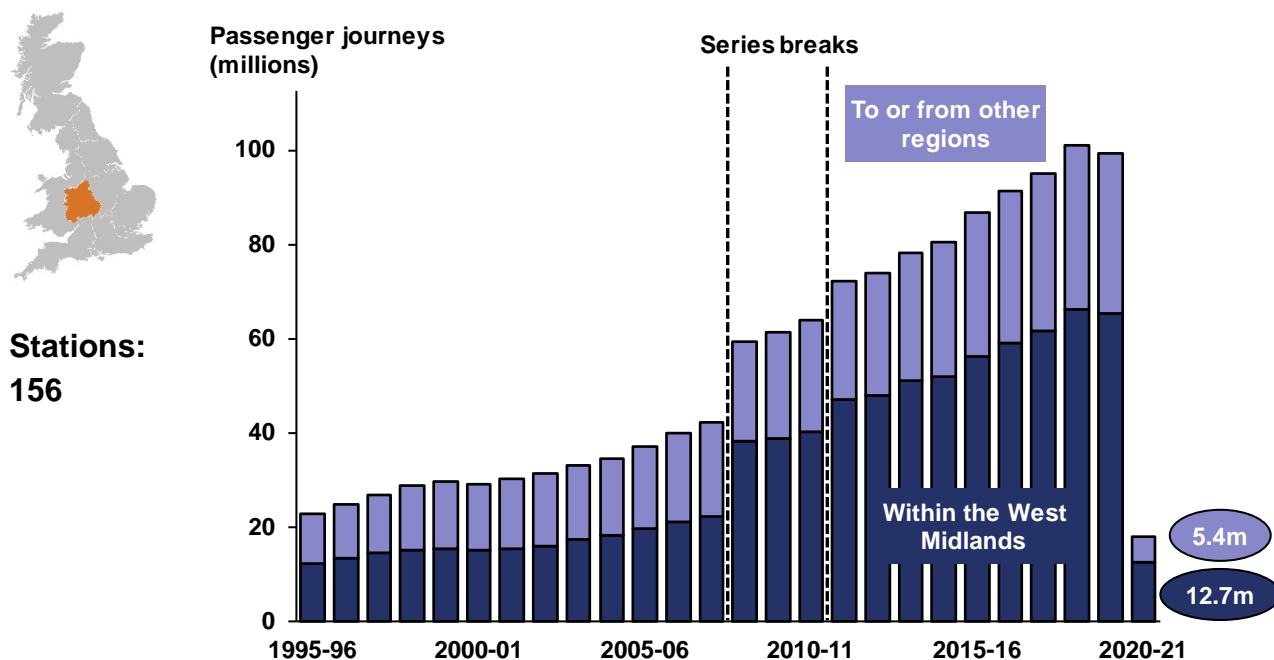
The 12.7 million journeys within the West Midlands equate to 19.5% of the 65.5 million journeys made in 2019-20.

The West Midlands recorded 5.4 million journeys to or from other regions, the equivalent of 16.0% of the 34.0 million journeys made in 2019-20. Most of these journeys were made to or from London (35.0%), the North West (18.5%), the East Midlands (16.6%), or the South East (11.4%).

The West Midlands has three sub-regions (ITL2) with the West Midlands (the metropolitan county) accounting for the most (3.1 million) journeys to or from other regions.

East of England

Figure 3.07: Passenger journeys, East of England, 1995-96 to 2020-21 (Table 1545)

Stations: 214
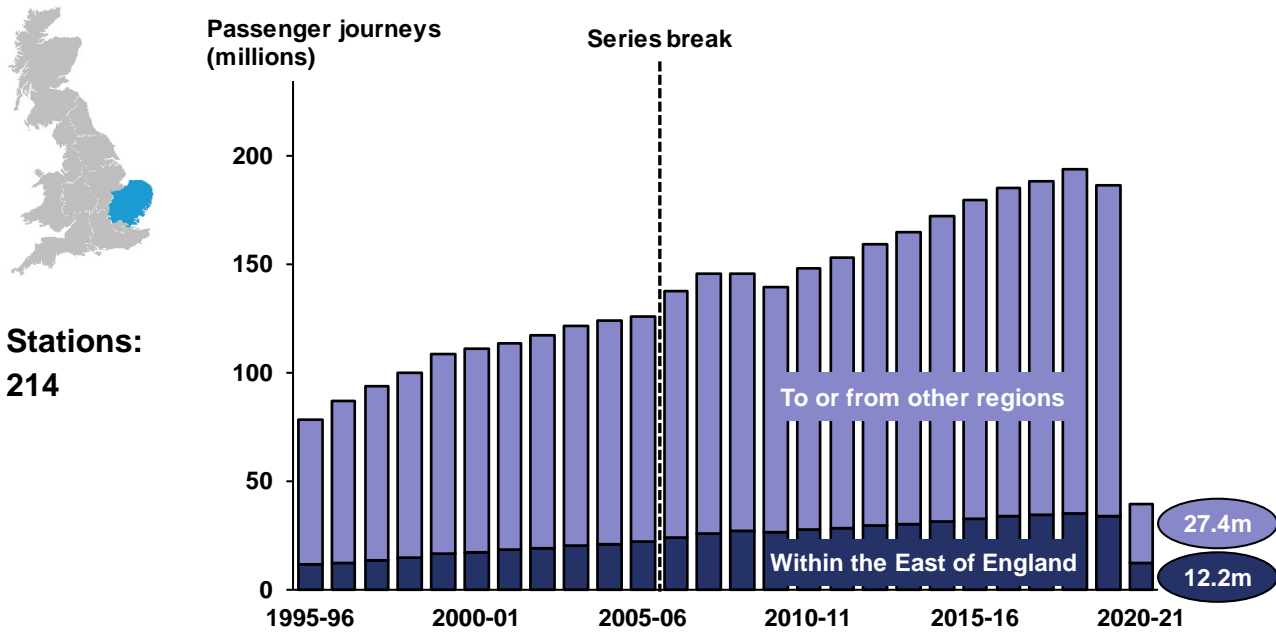
The total number of journeys for the East of England region was 39.6 million in 2020-21, which equates to 21.2% of the 186 million journeys made in 2019-20.

The increase in 2006-07 was due to the introduction of new estimates for travel between London and the East of England on Transport for London sold travelcards. In 2012-13, journeys on Anglia Plus rover tickets were included for the first time.

The 12.2 million journeys within the East of England equate to 35.8% of the 34.2 million journeys made in 2019-20.

The East of England recorded 27.4 million journeys to or from other regions, the equivalent of 18.0% of the 152 million journeys made in 2019-20. London accounted for 93.0% of these journeys. The 25.4 million journeys to or from London in 2020-21 equate to 17.8% of the 143 million journeys recorded in 2019-20.

The East of England has three sub-regions (ITL2) with the Bedfordshire and Hertfordshire sub-region accounting for the most (13.3 million) journeys to or from other regions.

London

Figure 3.08: Passenger journeys, London, 1995-96 to 2020-21 (Table 1550)

Stations: 333
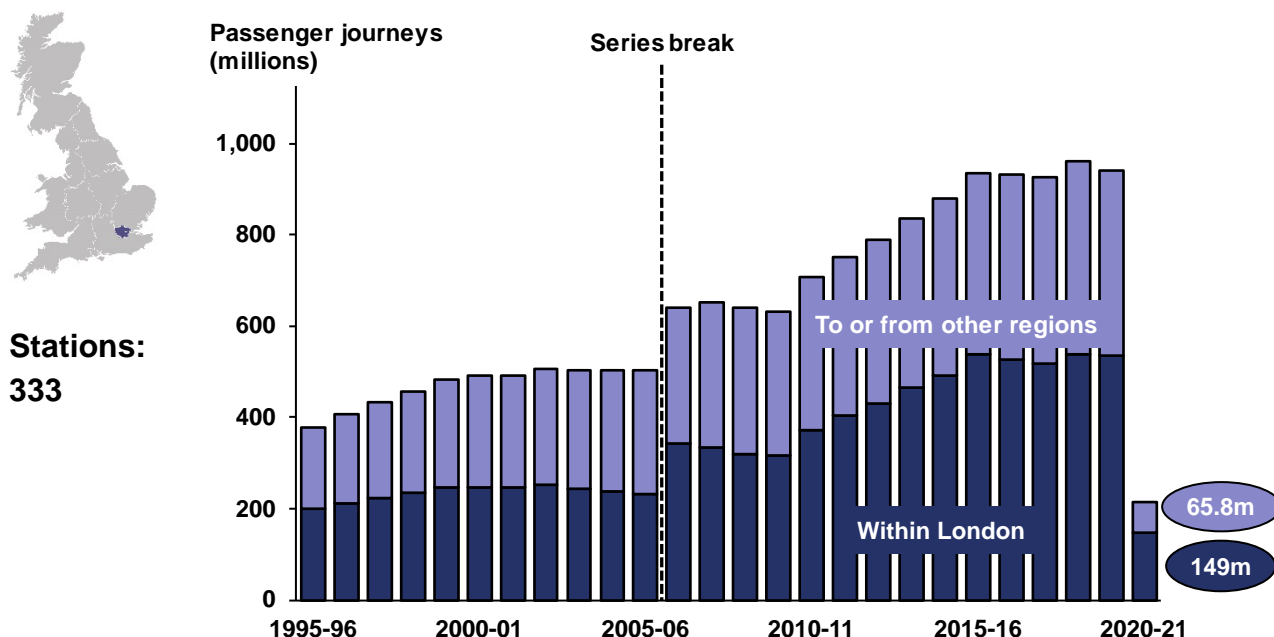
The total number of journeys for the London region was 214 million in 2020-21, which equates to 22.8% of the 940 million journeys made in 2019-20.

The increase in 2006-07 was due to the introduction of new estimates of travel on Transport for London sold travelcards included in the dataset for the first time. This affected the number of journeys within London, and between London and the South East and the East of England. Journeys made using Oyster "pay as you go" were included from 2010-11, while journeys made using TfL freedom passes were included from 2012-13.

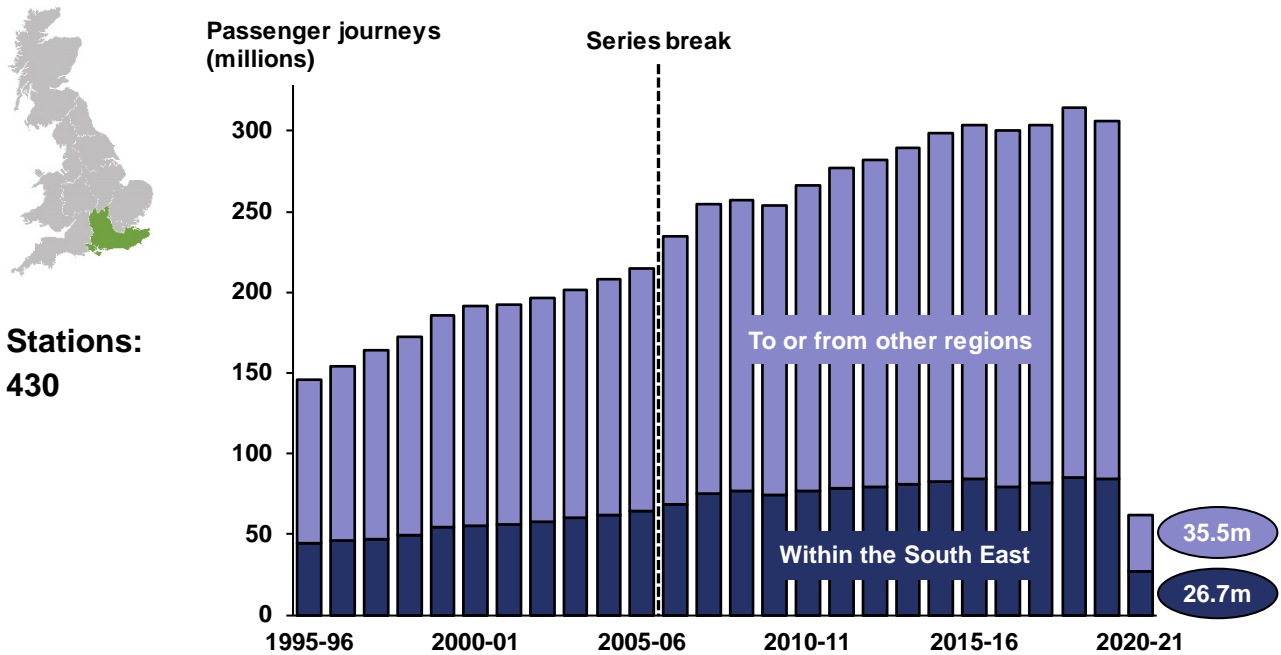The 149 million journeys within London equate to 27.8% of the 535 million journeys made in 2019-20.

London recorded 65.8 million journeys to or from other regions, the equivalent of 16.2% of the 406 million journeys made in 2019-20. Most of these journeys were made to or from the South East (48.4%) and the East of England (38.7%). The 31.8 million journeys to or from the South East in 2020-21 equate to 15.7% of the 203 million journeys recorded in 2019-20. The 25.4 million journeys to or from the East of England in 2020-21 equate to 17.8% of the 143 million journeys recorded in 2019-20.

London has five sub-regions (ITL2) with Inner London - West accounting for the most (38.3 million) journeys to or from other regions.

South East

Figure 3.09: Passenger journeys, South East, 1995-96 to 2020-21 (Table 1570)

Stations: 430

The total number of journeys for the South East region was 62.2 million in 2020-21, which equates to 20.3% of the 306 million journeys made in 2019-20.

The increase in 2006-07 was due to the introduction of new estimates for travel between London and the South East on Transport for London sold travelcards.

The 26.7 million journeys within the South East equate to 31.6% of the 84.4 million journeys made in 2019-20.

The South East recorded 35.5 million journeys to or from other regions, the equivalent of 16.0% of the 222 million journeys made in 2019-20. London accounted for 89.7% of these journeys. The 31.8 million journeys to or from London in 2020-21 equate to 15.7% of the 203 million journeys recorded in 2019-20.

The South East has four sub-regions (ITL2) with the Surrey, East and West Sussex sub-region accounting for the most (15.2 million) journeys to or from other regions.

South West

Figure 3.10: Passenger journeys, South West, 1995-96 to 2020-21 (Table 1575)

Stations: 170

The total number of journeys for the South West region was 12.1 million in 2020-21, which equates to 23.3% of the 52.2 million journeys made in 2019-20.

In 2011-12, journeys made using St Ives Bay Line Rover tickets were included for the first time. In 2012-13, journeys on Devon Day/Evening Ranger, Ride Cornwall, and Freedom Travel Pass (West of England product) tickets were included for the first time.
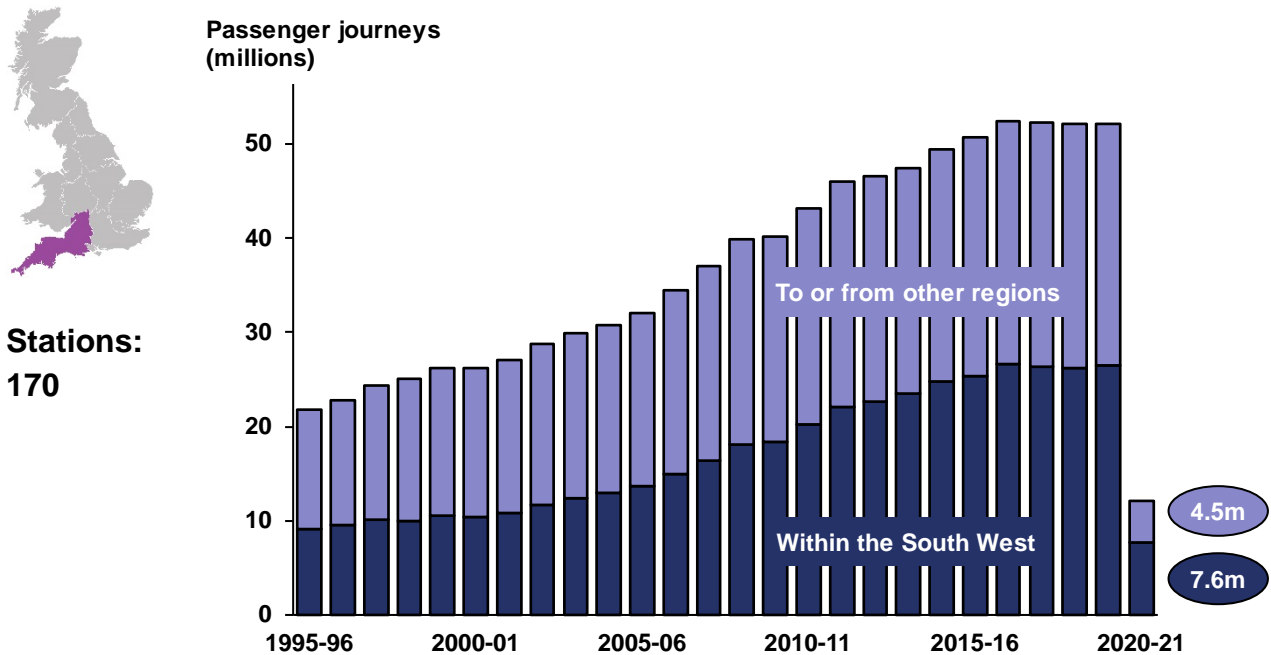
The 7.6 million journeys within the South West equate to 28.7% of the 26.5 million journeys made in 2019-20.

The South West recorded 4.5 million journeys to or from other regions, the equivalent of 17.6% of the 25.6 million journeys made in 2019-20. Most of these journeys were made to or from London (41.3%), the South East (33.0%), Wales (10.9%), or the West Midlands (7.2%).

The South West has four sub-regions (ITL2) with the Gloucestershire, Wiltshire and Bristol/Bath area sub-region accounting for the most (2.7 million journeys) to or from other regions.

Wales

Figure 3.11: Passenger journeys, Wales, 1995-96 to 2020-21 (Table 1580)

**Stations:
223**

The total number of journeys for Wales was 5.1 million in 2020-21, which equates to 17.2% of the 29.9 million journeys made in 2019-20.

In 2011-12, journeys made using Valleys Night Rider and Cambrian Coaster Ranger tickets were included for the first time.

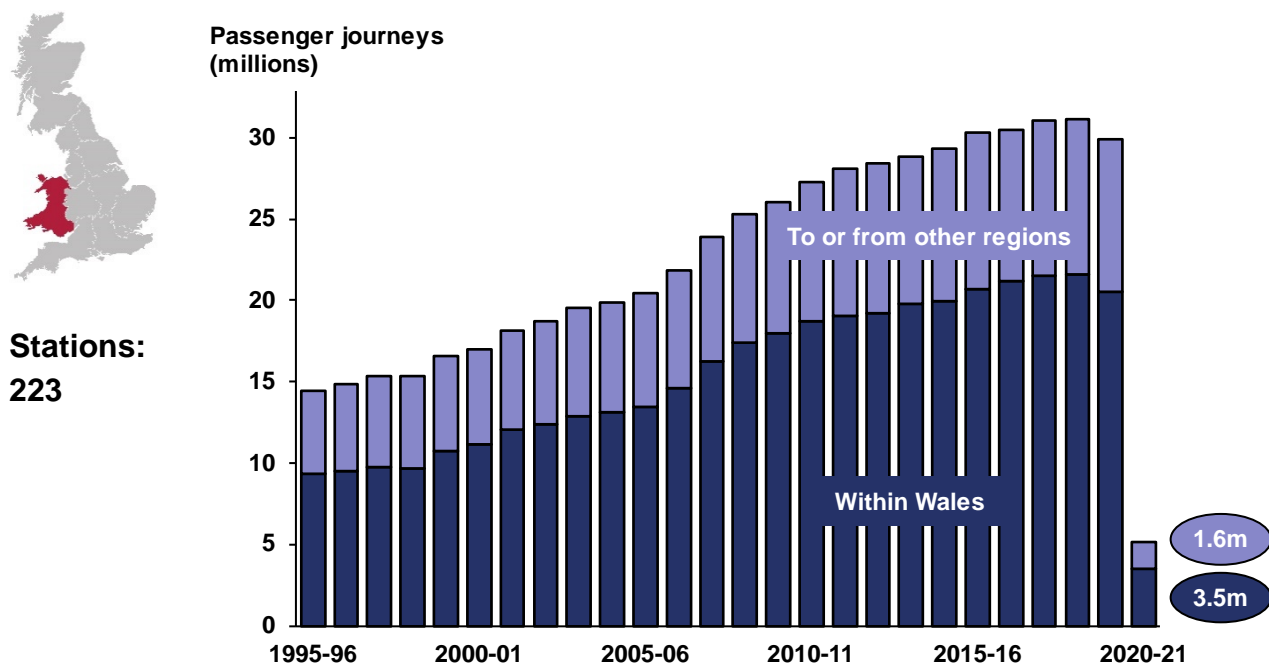The 3.5 million journeys within Wales equate to 17.3% of the 20.5 million journeys made in 2019-20.

Wales recorded 1.6 million journeys to or from other regions, the equivalent of 16.9% of the 9.4 million journeys made in 2019-20. Most of these journeys were made to or from the South West (30.9%), the North West (22.6%), the West Midlands (20.2%), or London (16.8%).

Wales has two sub-regions (ITL2). East Wales accounted for 1.0 million journeys to or from other regions, whilst West Wales and The Valleys had 577,000 journeys to or from other regions.

Scotland

Figure 3.12: Passenger journeys, Scotland, 1995-96 to 2020-21 (Table 1565)

Stations: 358

The total number of journeys for Scotland was 15.6 million in 2020-21, which equates to 15.6% of the 99.6 million journeys made in 2019-20.

In 2008-09, estimates for rail travel in PTE areas were included for the first time including for the Strathclyde PTE area. The methodology for estimating journeys using Strathclyde PTE tickets was improved in 2013-14, resulting in a decrease of around 2.2 million journeys. Journeys made using dedicated Caledonian Sleeper tickets were included for the first time in 2020-21 adding around 62,000 journeys.
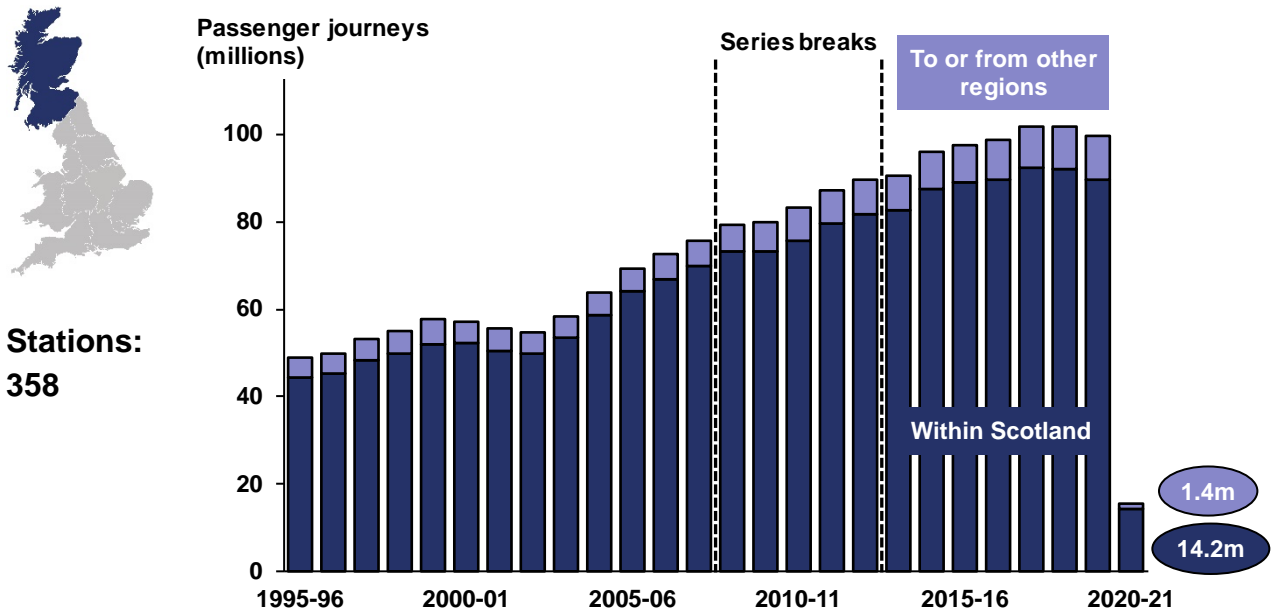
The 14.2 million journeys within Scotland equate to 15.8% of the 89.7 million journeys made in 2019-20.

Scotland recorded 1.4 million journeys to or from other regions, the equivalent of 13.8% of the 9.8 million journeys made in 2019-20. It should be noted that for Scotland, the number of journeys to or from other regions in 2020-21 is likely to be an underestimate due to the way ticket refunds were processed for Caledonian Sleeper journeys in the LENNON ticketing system (see Annex 2 for details). Most journeys to or from other regions were made to or from the North West (30.7%), London (23.6%), the North East (22.6%), or Yorkshire and the Humber (8.7%).

Scotland has five sub-regions (ITL2) with Eastern Scotland accounting for the most (805,000) journeys to or from other regions.

4. Annexes

Annex 1 – Definitions

- **Origin Destination Matrix** (**ODM**) – a comprehensive matrix of passenger flows throughout Great Britain.

- **MOIRA2.2 base matrix** – produced by Resonate as an input into the MOIRA2.2 rail panning tool, it provides an estimate of journeys on the Great Britain rail network for the duration of a financial year. It includes all journeys associated with point to point flows and includes overlays ("infills") to reflect travel using tickets not included in LENNON (e.g. London Travelcards and some specific tickets to or from airports and multi-modal and zonal products sponsored by PTEs).

- **LENNON** – 'Latest Earnings Networked Nationally Over Night' is the rail industry's ticketing and revenue system. It contains information on the majority of national rail tickets purchased in Great Britain. However, it excludes some tickets sales.

- **Passenger Transport Executive (PTE)** – There are six metropolitan counties in England. These are Greater Manchester, Merseyside, South Yorkshire, Tyne and Wear, West Midlands, West Yorkshire. Formerly, each of these areas had a Passenger Transport Executive (PTE), which was a local government body with public transport responsibilities. They were accountable to Integrated Transport Authorities (ITAs), which have now been reformed into Combined Authorities, some with a larger geographic coverage than the ITA they replace. Some Combined Authorities (Greater Manchester, Merseyside, North East, South Yorkshire) continue to have a free-standing transport executive, whilst in others (West Midlands and West Yorkshire) the transport executive has been incorporated within the Combined Authority. In Scotland the Strathclyde Partnership for Transport is the equivalent body covering the region of Strathclyde. For convenience, in this report we continue to refer to these seven areas as PTEs.

- **Passenger journeys** are estimated based on travel from an origin station to a destination station. For the purpose of these statistics, travel between an origin and destination counts as one journey irrespective of any changes of train. For example, a journey from Leicester to Manchester 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 this example as two journeys.

- The data are disaggregated by the following geographies, which are based upon the **2021 International Territorial Levels (ITL)** classification. These were formerly known as **Nomenclature of Territorial Units for Statistics (NUTS)** areas:

  o **ITL1 – Scotland, Wales, and Regions of England:** journeys within each ITL1 area and journeys between each pair of ITL1 areas.

  o **ITL2 – Groups of local government areas:** journeys within an ITL1 area beginning and/or ending within an ITL2 area and journeys to or from other ITL1 areas beginning or ending within an ITL2 area:

    - **London**: five areas – Inner London (East and West) and Outer London (East and North East, South, and West and North West).

    - **Rest of England**: counties, groups of counties, and metropolitan counties/combined authority areas.

    - **Scotland**: five areas – Eastern, North Eastern, Southern, West Central, and Highlands and Islands.

    - **Wales**: two areas – West Wales and The Valleys and East Wales.

Further information on the local authorities in each of the ITL2 areas can be found in the quality and methodology report on the regional rail usage page.

Annex 2 – Quality and methodology

Data sources

These statistics are derived from the Origin Destination Matrix (ODM). The ODM is produced each year by Steer on behalf of the ORR. The journey data in the ODM are primarily based on sales data from LENNON, the rail industry's ticketing and revenue system. These are supplemented with some local ticketing data. Listed below are the data sources used to create the ODM:

- LENNON, Transport for London (TfL) data and train operator data (Gatwick Express and Stansted Express) as an input to the MOIRA2.2 base matrix

- Local ticketing data from Passenger Transport Executives (PTEs)

- Manual station counts

- Heathrow Express ticketing data

- Additional LENNON data

Methodology

These statistics on usage are **estimates** based primarily on tickets sales using the methodology described in detail in the Quality and methodology report. This methodology is the best approach possible given Britain does not have a fully gated rail network or comprehensive and robust count data at every station. However, these data do have weaknesses when utilised for this purpose and, although some of these are catered for in the methodology and we continue to seek improvements to address identified issues, the user should be aware of these acknowledged limitations and bear these in mind when using the data. The key **limitations** are listed below and detailed in the Quality and Methodology report.

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 Leicester to Manchester would be classed as one journey despite the need to change trains. For the Passenger rail usage statistical release, this example would count as two journeys, taking into account the number of legs of a journey. This release, therefore, produces lower estimates than the annual number of journeys published in the Q4 Passenger rail usage statistical release for the corresponding year. Please see Passenger journeys in Great Britain, which explains the differences in more detail.

Station to station flow data are commercially confidential. As a result, we are unable to provide more disaggregated rail usage data without permission from train operators.

Methodology changes

The methodology to produce the ODM and therefore Regional rail usage statistics is reviewed annually, and enhancements are implemented to address known issues. Often these enhancements utilise new sources of data that were not previously available and improve the estimates.

A number of improvements to the methodology have been implemented over recent years. These improvements 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. Significant changes to methodology are highlighted by series breaks within charts. Where other methodology improvements affect the latest figures or trends presented, we have highlighted and tried to quantify the impact where possible. Further detail of recent and historical methodological improvements can be found in Annex 2 of the Quality and methodology report.

How these statistics can and cannot be used

- Monitoring the number of annual journeys within and between Scotland, Wales, and regions of England

- Monitoring how usage in different regions changes over time (subject to methodology changes) and insights as to why

- Comparing the relative rail usage in regions and sub-regions (ITL2 areas) across the whole of Great Britain

- Monitoring passenger rail usage by train operating company or by ticket type (refer to Passenger rail usage statistics)

- Monitoring the number of entries and exits or interchanges at individual stations (refer to Estimates of station usage)

- Exploring rail journey flows between origin and destination stations

Limitations

When using Regional rail usage statistics, it is important to be aware of:

- Methodological improvements made to the dataset over time which can impact consistency between years.

- Limitations of the data and specifically factors, e.g. some ticket sales not being included, that may mean that demand on particular flows is underestimated or overestimated. For example, some train operators, primarily Eurostar, are not included in rail industry ticketing systems, travel using these operators' tickets are not included in these statistics.

Adjustment due to season ticket refunds

For 2020-21 only, an amendment was made to the source data to reflect refunds of season tickets due to the impact of the pandemic:

- A high volume of season ticket refund requests were received in the final weeks of March 2020 (i.e. at the start of the national lockdown). The majority of these requests were processed after March 2020 (and so did not appear in LENNON until the 2020-21 year). These refunded journeys would all be allocated to the 2020-21 financial year, which would have led to a large underestimate in (net) usage. To account for this, refunds for annual and monthly season tickets were excluded from the MOIRA2.2 base matrix for 2020-21. However, it also means that any refunds for these season tickets purchased in 2020-21 were not counted. As a result, usage of these tickets in 2020-21 is likely to have been slightly overstated.

Underestimate of Scotland journeys to or from other regions

The MOIRA 2.2 base matrix does not include dedicated Caledonian Sleeper tickets. Therefore, in the processing of the 2020-21 statistics, an extra LENNON query was used to extract such Caledonian Sleeper tickets, and these were incorporated into this year's statistics. This resulted in the addition of around 62,000 journeys, with the vast majority at London Euston and stations in Scotland (see Table 3-3 in Steer's methodology report).

The pandemic resulted in a large number of refunds for journeys in 2020-21. Whilst refunds associated with monthly and annual season tickets were excluded when estimating usage for 2020-21, refunds associated with ordinary fare tickets were included. This was because it was assumed that most refunds for such tickets would offset journeys counted from the original tickets purchased in 2020-21. However, a particularly large proportion of Caledonian Sleeper bookings are made in advance. This means that many Caledonian Sleeper journeys refunded in 2020-21 due to the pandemic were originally counted in LENNON in 2019-20. This resulted in an underestimate for journeys made on flows dominated by Caledonian Sleeper. Consequently, it was not possible to estimate the

number of journeys to or from other regions (i.e. not Scotland) in 2020-21 for Highlands and Islands.

Revisions

Data for the ITL2 region of South Yorkshire in Table 1590 have been revised between 1995-96 and 2005-06 to include the borough of Doncaster, which had previously been presented separately. Further details on historic revisions can be found in the Revisions log.

Further information on data sources, quality and the methodology used to calculate the data within this release can be found in the Regional rail usage quality and methodology report.

Annex 3 – List of data tables associated with this release and other related statistics

Data tables

All data tables can be accessed on the data portal free of charge in OpenDocument Spreadsheet (.ods) format. We can also provide data in csv format on request.

All tables associated with this release can be found under the Data tables heading at the bottom of the Regional rail usage page. The format of these tables have been changed to improve accessibility.

- Regional passenger journeys between England, Scotland and Wales – Table 1510
- Regional passenger journeys between regions – Table 1520
- Regional passenger journeys – East Midlands – Table 1540
- Regional passenger journeys – East of England – Table 1545
- Regional passenger journeys – London – Table 1550
- Regional passenger journeys – North East – Table 1555
- Regional passenger journeys – North West – Table 1560
- Regional passenger journeys – Scotland – Table 1565
- Regional passenger journeys – South East – Table 1570
- Regional passenger journeys – South West – Table 1575
- Regional passenger journeys – Wales – Table 1580
- Regional passenger journeys – West Midlands – Table 1585
- Regional passenger journeys – Yorkshire and the Humber – Table 1590

Other related data

Passenger rail usage (ORR):

Quarterly statistics reporting the volume of passenger journeys, kilometres and revenue on the mainline network in Great Britain. Statistics are presented by ticket type, sector, and train operating company. Long-running time series on passenger journeys (Table 1220) and passenger kilometres (Table 1230) are updated annually.

Estimates of station usage (ORR):

Annual statistics providing estimates for the numbers of entries/exits and interchanges for each mainline station of Great Britain. These estimates are also produced by Steer based on the ODM.

Passenger numbers and crowding (Department for Transport):

Rail passenger numbers and crowding statistics provides information on the number of passengers travelling by rail into and out of major city centres in England and Wales. The statistics represent passengers on National Rail services on a 'typical' weekday.

Annex 4 – ORR's statistical publications

Statistical Releases

This publication is part of ORR's National Statistics accredited releases, which consist of seven annual publications: **Estimates of station usage; Rail industry finance (UK); Rail fares index; Rail safety statistics; Rail infrastructure and assets; Rail emissions; Regional rail usage**; and four quarterly publications: **Passenger rail performance; Freight rail usage and performance; Passenger rail usage; Passenger rail service complaints.**

In addition, the ORR also publishes a number of Official Statistics, which consist of three annual publications: **Train operating company key statistics; Rail statistics compendium; Occupational health**; and four quarterly publications: **Signals passed at danger (SPADS); Delay compensation claims; Disabled Persons Railcards (DPRC); Passenger assistance.**

All the above publications are available on the data portal along with a list of publication dates for the next 12 months.

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**.

The majority of our statistical releases were assessed in 2012 and hold National Statistics status. Since this assessment we have improved the content, presentation and quality of our statistical releases. In addition, in July 2019 we launched our new data portal. Therefore, in late 2019 we worked with the Office for Statistics Regulation (OSR) to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, OSR published a letter confirming that ORR's statistics should continue to be designated as National Statistics. OSR found many positive aspects in the way that we produce and present our statistics and welcomed the range of improvements made since the statistics were last assessed. Estimates of Station Usage statistics were assessed in 2020.

For more information on how we adhere to the Code please see our compliance statements. For more details or to provide feedback, please contact the Statistics Head of Profession (Lyndsey Melbourne) at rail.stats@orr.gov.uk.