

Regional rail usage April 2022 to March 2023



22 February 2024

Background:

This annual statistical release contains information on regional rail usage in Great Britain. It covers **passenger journeys** within and between **Scotland**, **Wales** and the **regions of England**.

The journeys presented here do not take into account any changes of train. As a result, estimates of total journeys in this release are *lower* than the total number of annual journeys published in the **Passenger rail usage** statistical release. Numbers presented in this release are rounded.

Sources: LENNON and local ticketing data.

Latest year: 1 April 2022 to 31 March 2023

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Next publication: February 2025

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Passenger rail usage from April 2022 to March 2023 was higher than the previous year (April 2021 to March 2022), but remained lower than three years ago (April 2019 and March 2020), before the pandemic.

London and the South East regions combined had nearly two-thirds of all journeys. The North East and Wales had the fewest, each with 1% of all regional journeys.

Figure 1 Half of all regional journeys were to or from stations in London

Passenger rail journeys from April 2022 to March 2023 and as a percentage of all journeys, by region

	(millio	er journeys ons)	Percentage of all journeys
North East	15.2m		1%
North West	106.9m		7%
Yorkshire and The Humber	60.4m		4%
East Midlands	29.9m		2%
West Midlands	68.8m		4%
East of England	144.4m		9%
London	800.5m		50%
South East	228.7m		14%
South West	46.6m		3%
Wales	23.5m		1%
Scotland	69.4m		4%

The **863 million journeys made** *within* **regions** in the latest year were equivalent to **84%** of the 1,022 million journeys made three years ago, before the pandemic.

The **366 million journeys made** *between* **regions** in the latest year were equivalent to **76%** of the 482 million journeys made three years ago.

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

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1. Introduction

The statistics presented in this release are derived from the Origin Destination Matrix (ODM), which is based primarily on ticket sales and is also used to produce <u>Estimates of</u> <u>station usage statistics</u>.

Various methodological improvements in the latest year make comparisons to data from previous years unreliable. However, the trends of increasing passenger journeys shown here are consistent with the <u>Passenger rail usage</u> statistical release. Therefore, we will continue to provide some comparisons to data from previous years to contextualise the results for the latest year. These comparisons must be treated with caution, as methodology changes will mask the true change from previous years. With this in mind, the regional profiles in this publication will mainly focus on results in the latest year.

The data sources and methodology used to produce these statistics is the best approach possible given Great Britain does not have a fully gated rail network or comprehensive and robust data to capture every passenger journey. There are a number of limitations that users should be aware of:

- Some ticket sales and ticketless travel are not included, which may mean that usage in some areas is underestimated.
- Ticket sales data does not always specify precise journey origins and/or destinations, so these are estimated using alternative data sources.
- Assumptions are made about the number of journeys made with multi-use tickets e.g. that each weekly season ticket will be used to make 10.3 journeys.
- Passengers may purchase tickets from/to different stations to the ones they use in practice, e.g. to stations at the end of the fare zone.
- Methodology improvements, e.g. inclusion of ticket sales previously not available, means that estimates are not always comparable over time. For the April 2022 to March 2023 statistics, improvements were made to account for the impact of split ticketing. Series breaks have been added to the timeseries charts to highlight where any significant methodological changes have taken place.

In section 3, regional profiles are shown for the countries and regions of Great Britain. In each of these profiles, we present the proportion of journeys within and between regions. We also discuss the number of journeys by <u>local authority district and county</u>, which henceforth will be referred to as 'local authority'. When presenting local authority journeys, the number shown is the number of journeys which started or ended at a station in that local authority. Therefore, a journey from Nottinghamshire to Camden is counted in both local authorities. A journey within a local authority is only counted once in the local authority it occurs in.

In the tables associated with this release, <u>International Territorial Level 2 (ITL2)</u> was previously the lowest form of geography presented. However, for the first time we have produced a csv file to accompany this release which contains the number of journeys between all local authority pairs as flows; therefore each pair of local authorities only occurs once in the table. We welcome feedback on whether these geographic disaggregations are useful. As the underlying data (the ODM) is now available on the <u>Rail Data Marketplace</u>, we encourage users to explore the dataset and associated <u>station attributes table</u>.

Further information on the methodology underlying these statistics and their limitations can be found in Annex 2 and in the <u>Quality and methodology report</u>.

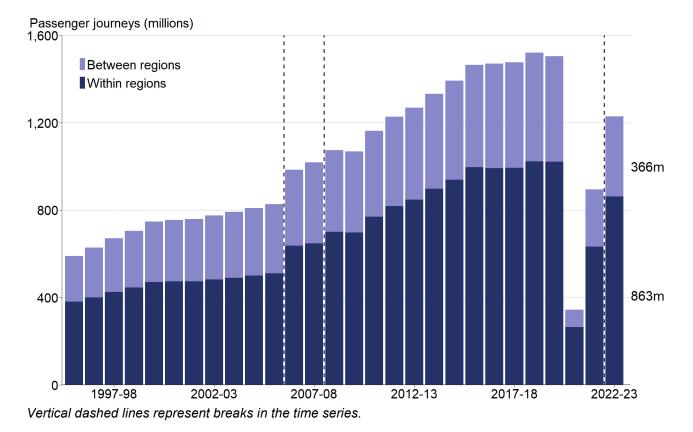
2. Passenger journeys in Great Britain

There were 1,228 million passenger journeys¹ made in Great Britain from April 2022 to March 2023. This is an increase (up 37%) from 894 million in April 2021 to March 2022. The journeys in the latest year equate to 82% of the 1,504 million journeys recorded three years ago (April 2019 to March 2020), before the pandemic.

Passenger journeys *within* regions increased slightly more than passenger journeys *between* regions. The 863 million journeys made within regions in the latest year represent 84% of the 1,022 million journeys made three years ago. A total of 366 million journeys were made between regions in the latest year. This is equivalent to 76% of the 482 million journeys made three years ago.

Figure 1.2 Passenger journeys both within and between regions in the latest year remained below pre-pandemic levels

Number of passenger journeys within and between regions, Great Britain, annual data, 1 April 1995 to 31 March 2023 (Table 1510)



¹ Total journeys in this Regional rail usage statistical release (1,228 million) are lower than the journeys published in <u>Passenger rail usage</u> (1,385 million) as the latter takes into account the number of legs of a journey. Please see <u>Passenger journeys in Great Britain</u> for information on methodology differences.

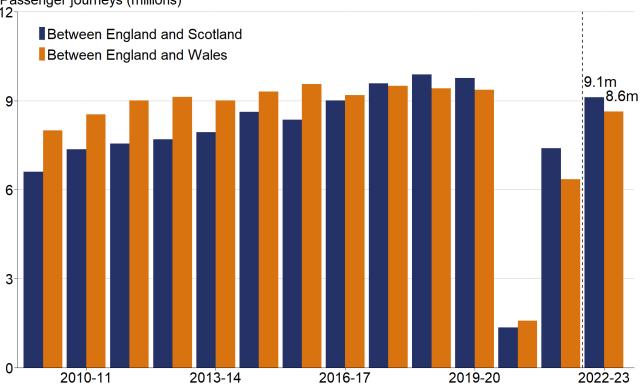
Passenger journeys between countries

There were 486,000 more journeys between England and Scotland than there were between England and Wales in the latest year. A total of 9.1 million journeys were made between England and Scotland in the latest year, which represents 93% of the 9.8 million journeys made three years ago. There were 8.6 million journeys made between England and Wales in the latest year; this equates to 92% of the 9.4 million journeys recorded three years ago. These percentages are both higher than the GB total number of journeys relative to three years ago (82%), suggesting these flows have recovered faster.

The number of journeys made between Scotland and Wales is small relative to those between other countries and regions of England. It is the flow with the second lowest number of journeys. There were 32,600 journeys made between Scotland and Wales in the latest year, which equates to 80% of the 40,700 journeys made three years ago.

There were more journeys between England and Scotland than there Figure 1.3 were between England and Wales

Passenger journeys between England and Scotland, and between England and Wales, annual data, 1 April 2009 to 31 March 2023 (Table 1510)



Passenger journeys (millions) 12

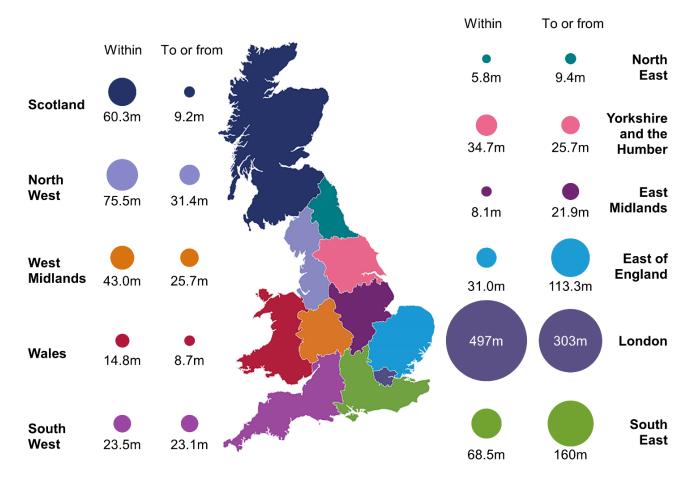
Vertical dashed lines represent breaks in the time series.

3. Regional rail usage profiles

Summary

London had the most journeys of all the regions with 800 million passenger journeys from April 2022 to March 2023, this made up 50% of the total journeys made within and between the regions and countries of Great Britain. The North East, East Midlands, East of England and South East all had more journeys between than within regions. The other seven regions all had more journeys within the region than between other regions.

Figure 2.1 London had the highest total number of passenger journeys, while the North East had the least



Passenger journeys within, and to or from other regions, Great Britain, April 2022 to March 2023

Note: A total of 366 million journeys were made **between regions** from April 2022 to March 2023. For the regional rail usage profiles, each one of these journeys is counted in both the origin and destination 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 863 million.

The North East had the fewest journeys (15.2 million) in the latest year. This equates to 94% of the 16.2 million made three years ago, which is the highest percentage recovery of all the regions. West Midlands (69%) recorded the lowest percentage of journeys compared with three years ago.

In comparison to the previous year (April 2021 to March 2022), Scotland, Wales and all nine regions of England recorded increases in journeys in the latest year. This increase is despite our introduction of methodology changes to account for the impact of split ticketing (which reduced the number of journeys). However, all regions remained below the level of usage recorded three years ago.

A total of 863 million journeys **within regions** were made in the latest year, equivalent to 84% of the 1,022 million journeys made three years ago. There were 497 million passenger journeys between London stations, which account for over half (58%) of all journeys within regions. After London, the North West (76 million) and the South East (69 million) recorded the most journeys within a region in the latest year.

The 366 million journeys made **between regions** in the latest year equated to 76% of the 482 million journeys made three years ago. Note that 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 (303 million), the South East (160 million) and the East of England (113 million) recorded the most journeys to or from other regions.

Journeys between London and the East of England or the South East accounted for over two thirds (68%) of all journeys between regions in the latest year. The 20,500 journeys between Wales and the North East accounted for the smallest proportion of journeys between regions (less than 0.1%).

North East

The total number of journeys for the North East region was 15.2 million from April 2022 to March 2023, which equates to 94% of the 16.2 million journeys made three years ago. There were 5.8 million journeys within the North East in the latest year.

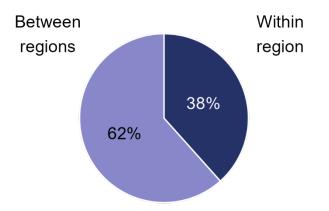
The North East recorded 9.4 million journeys to or from other regions. Most of these journeys were made to or from London (30%), Yorkshire and the Humber (28%), Scotland (20%), or the North West (12%). The least travelled to or from region was Wales (less than 1%).



55 stations

Figure 2.2 Most North East journeys were made to or from other regions

Percentage of journeys made within and between other regions, North East, annual data, April 2022 to March 2023



There are ten local authorities in the North East. Of these, Newcastle upon Tyne recorded the highest number of journeys, at 8.4 million across two stations, followed by County Durham (3.1 million across eight stations) and Darlington (2.3 million across four stations). Teesside Airport station is located in Darlington and was <u>the least used station in Great</u> Britian in the latest year. The lowest number of journeys recorded was in Gateshead (414,000 journeys across four stations).

The most popular local authority flow within the region was between County Durham and Newcastle upon Tyne (1.2 million journeys). The most popular local authority flow to a different region was between Newcastle upon Tyne and Camden (London) (1.5 million journeys).

Table 2.1The top five local authority flows and the busiest station flow within and
between local authorities, North East, annual data, April 2022 to March
2023 (Table 1595)

Local authority flow	Journeys	Busiest station flow
Newcastle upon Tyne and Camden	1,470,000	Newcastle and London Kings Cross
County Durham and Newcastle upon Tyne	1,230,000	Durham and Newcastle
Newcastle upon Tyne and Northumberland	1,080,000	Newcastle and Morpeth
Newcastle upon Tyne and City of Edinburgh	721,000	Newcastle and Edinburgh Waverly
Newcastle upon Tyne and York	617,000	Newcastle and York

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North West

The total number of journeys for the North West region was 107 million from April 2022 to March 2023, which equates to 74% of the 145 million journeys made three years ago. There were 75.5 million journeys within the North West in the latest year.

The North West recorded 31.4 million journeys to or from other regions. Most of these journeys were made to or from London (27%), Yorkshire and the Humber (27%), or the West Midlands (14%). The least travelled to or from regions were the South West and the East of England (both 2%).

336 stations

Figure 2.3 Most North West journeys were made within the region

Between

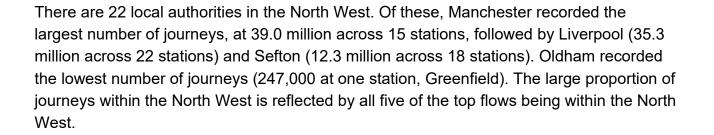
regions

Percentage of journeys made within and between other regions, North West, annual data, April 2022 to March 2023

29%

Within

region



71%



The most popular local authority flow within the region was between Liverpool and the Wirral (6.7 million journeys). The most popular local authority flow to a different region was between Manchester and Camden (London) (3.0 million journeys).

Table 2.2The top five flows and the busiest station flow within and between local
authorities, North West, annual data, April 2022 to March 2023 (Table
1595)

Local authority flow	Journeys	Busiest station flow
Liverpool and Wirral	6,730,000	Liverpool Central and Birkenhead Hamilton Square
Within Liverpool	6,540,000	Liverpool Central and Orrell Park
Liverpool and Sefton	6,330,000	Liverpool Central and Blundellsands and Crosby
Within Sefton	3,980,000	Birkdale and Southport
Manchester and Stockport	3,810,000	Manchester Piccadilly and Stockport

Yorkshire and the Humber

The total number of journeys for the Yorkshire and the Humber region was 60.4 million from April 2022 to March 2023, which equates to 82% of the 73.8 million journeys three years ago. There were 34.7 million journeys within Yorkshire and the Humber in the latest year.

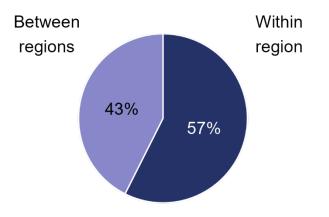
Yorkshire and the Humber recorded 25.7 million journeys to or from other regions. Most of these journeys were made to or from the North West (33%), London (28%), the East Midlands (15%), or the North East (10%). The least travelled to or from region was Wales (less than 1%).



187 stations

Figure 2.4 Most Yorkshire and the Humber journeys were made within the region

Percentage of journeys made within and between other regions, Yorkshire and the Humber, annual data, April 2022 to March 2023



Yorkshire and the Humber has 15 local authorities. Of these, Leeds had the largest number of journeys with 26.0 million across 15 stations, followed by Sheffield (10.1 million across six stations) and Bradford (10.0 million across 16 stations). The local authority with the lowest number of journeys was North Lincolnshire (335,000 across 12 stations).

The most popular local authority flow within the region was between Bradford and Leeds (5.4 million journeys). The most popular local authority flow to a different region was between Leeds and Camden (London) (1.9 million journeys).

Table 2.3The top five flows and the busiest station flow within and between local
authorities, Yorkshire and the Humber, annual data, April 2022 to March
2023 (Table 1595)

Local authority flow	Journeys	Busiest station flow
Bradford and Leeds	5,400,000	Bradford Interchange and Leeds
Within Leeds	3,220,000	Guiseley and Leeds
Leeds and Wakefield	2,180,000	Leeds and Wakefield Westgate
Kirklees and Leeds	2,120,000	Huddersfield and Leeds
Leeds and North Yorkshire	1,970,000	Leeds and Harrogate

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East Midlands

The total number of journeys for the East Midlands region was 29.9 million from April 2022 to March 2023, which equates to 83% of the 35.9 million journeys made three years ago. There were 8.1 million journeys within the East Midlands in the latest year.

The East Midlands recorded 21.9 million journeys to or from other regions. Most of these journeys were made to or from London (36%), the West Midlands (18%), Yorkshire and the Humber (18%), or the North West (13%). The least travelled to or from region was Wales (less than 1%).

Between regions

Figure 2.5 Most East Midlands journeys were made to or from other regions

Percentage of journeys made within and between other regions, East Midlands, annual data, April 2022 to March 2023

There are 12 local authorities in the East Midlands. Of these, Nottingham had the largest number of journeys, at 6.8 million across the two stations, followed by Derbyshire (5.2 million across 35 stations) and Leicester (4.9 million at one station). The local authority with the fewest journeys was Rutland (172,000 journeys at one station, Oakham). There were a total of 7.7 million journeys made between local authorities in the East Midlands and Camden. These included journeys to and from London Kings Cross, London Euston and London St Pancras International.



27% 73% he East Midlands. Of these, Notting

Within

region

The most popular local authority flow within the region was between Nottingham and Nottinghamshire (1.0 million journeys). The most popular local authority flow to a different region was between Derbyshire and Manchester (North West) (1.2 million journeys).

Table 2.4The top five flows and the busiest station flow within and between local
authorities, East Midlands, annual data, April 2022 to March 2023 (Table
1595)

Local authority flow	Journeys	Busiest station flow
Derbyshire and Manchester	1,240,000	Glossop and Manchester Piccadilly
West Northamptonshire and Camden	1,190,000	Northampton and London Euston
North Northamptonshire and Camden	1,110,000	Kettering and London St Pancras International
Nottingham and Camden	1,070,000	Nottingham and London St Pancras International
Nottinghamshire and Camden	1,020,000	Newark Northgate and London Kings Cross

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West Midlands

The total number of journeys for the West Midlands region was 68.8 million from April 2022 to March 2023, which equates to 69% of the 99.4 million journeys made three years ago. There were 43.0 million journeys made within the West Midlands in the latest year.

The West Midlands recorded 25.7 million journeys to or from other regions. Most of these journeys were made to or from London (38%), the North West (18%), the East Midlands (15%), or the South East (10%). The least travelled to or from region was the North East (1%).

Between

regions

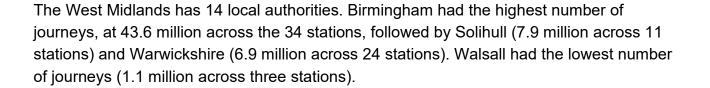
Figure 2.6 Most West Midlands journeys were made within the region

37%

Percentage of journeys made within and between other regions, West Midlands, annual data, April 2022 to March 2023

Within

region



63%



156 stations

The most popular local authority flow within the region was within the Birmingham local authority (11.1 million journeys). The most popular local authority flow to a different region was between Birmingham and Camden (London) (2.7 million journeys).

Table 2.5The five top flows and the busiest station flow within and between local
authorities, West Midlands, annual data, April 2022 to March 2023
(Table 1595)

Local authority flow	Journeys	Busiest station flow
Within Birmingham	11,100,000	Birmingham New Street and Selly Oak
Birmingham and Solihull	4,130,000	Birmingham New Street and Birmingham International
Birmingham and Sandwell	3,380,000	Birmingham New Street and Tame Bridge Parkway
Birmingham and Coventry	2,730,000	Birmingham New Street and Coventry
Birmingham and Camden	2,700,000	Birmingham New Street and London Euston

East of England

The total number of journeys for the East of England region was 144 million from April 2022 to March 2023, which equates to 77% of the 186 million journeys made three years ago. There were 31.0 million journeys made within the East of England in the latest year.

The East of England recorded 113 million journeys to or from other regions. London accounted for 93% of these journeys, followed by the South East (3%). As a percentage of total journeys, the East of England had the highest proportion of journeys between regions, at 79%.

Between regions

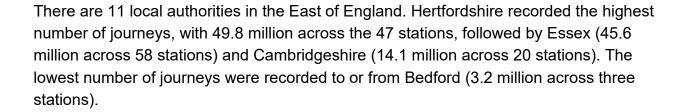
Figure 2.7 Most East of England journeys were made to or from other regions

Percentage of journeys made within and between other regions, East of England, annual data, April 2022 to March 2023

21%

Within

region



79%



215 stations

The most popular local authority flow within the region was within the Essex local authority (5.3 million journeys). The most popular local authority flow to a different region was between Essex and City of London (22.8 million journeys).

Table 2.6The five top flows and the busiest station flow within and between local
authorities, East of England, annual data, April 2022 to March 2023
(Table 1595)

Local authority flow	Journeys	Busiest station flow
Essex and City of London	22,800,000	Stansted Airport and London Liverpool Street
Hertfordshire and Camden	15,900,000	Watford Junction and London Euston
Hertfordshire and City of London	7,140,000	Bishops Stortford and London Liverpool Street
Within Essex	5,310,000	Shenfield and Chelmsford
Hertfordshire and Islington	4,970,000	St Albans City and Farringdon

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London

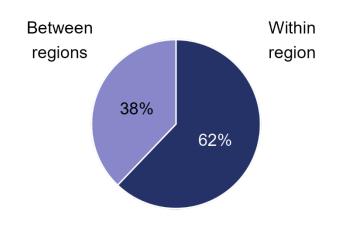
The total number of journeys for the London region was 800 million from April 2022 to March 2023, which equates to 85% of the 940 million journeys made three years ago. Six new stations opened in London during the latest year. There were 497 million journeys made within London.

London recorded 303 million journeys to or from other regions. Most of these journeys were made to or from the South East (48%) and the East of England (35%). The least travelled to or from region was Wales (1%).

Figure 2.8 Most London journeys were made within the region

Percentage of journeys made within and between other regions, London, annual data, April 2022 to March 2023

London has 33 local authorities. Of these, Westminster recorded the highest number of journeys, at 145 million across the five stations, including London Paddington, which was <u>the second busiest station</u>. This was followed by Camden (141 million across 14 stations) and City of London (121 million across six stations). The City of London included London Liverpool Street, which is the busiest station in the latest year. The local authority with the lowest number of journeys was Kensington and Chelsea (2.3 million at one station, Kensington Olympia).





339 stations

The most popular local authority flow within the region was between Lewisham and Southwark (13.9 million journeys). The most popular local authority flow to a different region was between City of London and Essex (East of England) (22.8 million journeys).

Table 2.7The five top flows and the busiest station flow within and between local
authorities, London, annual data, April 2022 to March 2023 (Table 1595)

Local authority flow	Journeys	Busiest station flow
City of London and Essex	22,800,000	London Liverpool Street and Stansted Airport
Lambeth and Surrey	17,500,000	London Waterloo and Woking
Camden and Hertfordshire	15,900,000	London Euston and Watford Junction
Lewisham and Southwark	13,900,000	Lewisham and London Bridge
Lambeth and Wandsworth	12,300,000	London Waterloo and Clapham Junction

South East

The total number of journeys for the South East region was 229 million from April 2022 to March 2023, which equates to 75% of the 306 million journeys made three years ago. There were 68.5 million journeys made within the South East in the latest year.

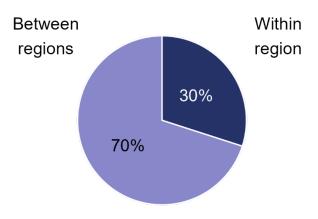
The South East recorded 160 million journeys to or from other regions. London accounted for 91% of these journeys. Wales, Yorkshire and the Humber, Scotland and the North East all accounted for less than 1% each.



430 stations

Figure 2.9 Most South East journeys were made to or from other regions

Percentage of journeys made within and between other regions, South East, annual data, April 2022 to March 2023



The South East has 19 local authorities. Surrey had the highest number of journeys at 47.0 million across 84 stations, followed by Kent (40.5 million across 98 stations) and West Sussex (38.3 million journeys across 38 stations). Isle of Wight had the lowest number of journeys (345,000 across eight stations). Journeys into London from the South East had a range of potential destination stations, including London Waterloo (Lambeth), London Victoria (Westminster) and London St Pancras International (Camden).

The most popular local authority flow within the region was within Kent (8.6 million journeys). The most popular local authority flow to a different region was between Surrey and Lambeth (London) (17.5 million journeys).

Table 2.8The five top flows and the busiest station flow within and between local
authorities, South East, annual data, April 2022 to March 2023 (Table
1595)

Local authority flow	Journeys	Busiest station flow
Surrey and Lambeth	17,500,000	Woking and London Waterloo
West Sussex and Westminster	9,060,000	Gatwick Airport and London Victoria
Within Kent	8,650,000	Tonbridge and Tunbridge Wells
Hampshire and Lambeth	7,750,000	Basingstoke and London Waterloo
Kent and Camden	7,080,000	Ebbsfleet International and London St Pancras International

South West

The total number of journeys for the South West region was 46.6 million from April 2022 to March 2023, which equates to 89% of the 52.2 million journeys made three years ago. There were 23.5 million journeys made within the South West in the latest year.

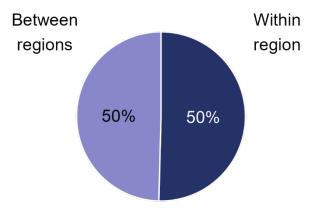
The South West recorded 23.1 million journeys to or from other regions. Most of these journeys were made to or from London (50%), the South East (25%) or Wales (11%). The least travelled to or from region was the North East (less than 1%).



169 stations

Figure 2.10 There was an equal number of South West journeys made within and between other regions

Percentage of journeys made within and between other regions, South West, annual data, April 2022 to March 2023



The South West has 14 local authorities. Of these, City of Bristol had the highest number of journeys with 10.3 million across 12 stations, followed by Devon (9.7 million across 41 stations) and Bath and North East Somerset (6.1 million across four stations). The local authority with the fewest journeys was Torbay with (1.4 million across three stations).

The most popular local authority flow within the region was within Devon (4.6 million journeys). The most popular local authority flow to a different region was between City of Bristol and Westminster (London) (1.5 million journeys).

Table 2.9The five top flows and the busiest station flow within and between local
authorities, South West, annual data, April 2022 to March 2023 (Table
1595)

Local authority flow	Journeys	Busiest station flow
Within Devon	4,550,000	Exmouth and Exeter Central
Within Cornwall	2,210,000	St Ives and St Erth
Bath and North East Somerset and City of Bristol	1,530,000	Bath Spa and Bristol Temple Meads
City of Bristol and Westminster	1,460,000	Bristol Temple Meads and London Paddington
Bath and North East Somerset and Westminster	1,230,000	Bath Spa and London Paddington

Wales

The total number of journeys for Wales was 23.5 million from April 2022 to March 2023, which equates to 79% of the 29.9 million journeys made three years ago. There were 14.8 million journeys within Wales in the latest year.

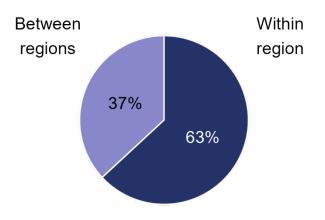
Wales recorded 8.7 million journeys to or from other regions. Most of these journeys were made to or from the South West (30%), London (24%), the North West (22%), or the West Midlands (14%). The least travelled to or from region was the North East (less than 1%).



223 stations

Figure 2.11 Most Wales journeys were made within the region

Percentage of journeys made within and between other regions, Wales, annual data, April 2022 to March 2023



Wales has 22 local authorities. Cardiff had the highest number of journeys with 13.4 million across 20 stations, followed by Newport (2.5 million across three stations) and Rhondda Cynon Taf (2.4 million across 22 stations). The local authority with the lowest number of journeys was Isle of Anglesey (250,000 journeys across six stations).

The most popular local authority flow within the region was between Cardiff and Vale of Glamorgan (1.7 million journeys). The most popular local authority flow to a different region was between Cardiff and Westminster (London) (0.8 million).

Table 2.10The five top flows and the busiest station flow within and between local
authorities, Wales, annual data, April 2022 to March 2023 (Table 1595)

Local authority flow	Journeys	Busiest station flow
Cardiff and Vale of Glamorgan	1,690,000	Cardiff Central and Barry
Within Cardiff	1,640,000	Cardiff Bay and Cardiff Queen Street
Cardiff and Rhondda Cynon Taf	1,570,000	Cardiff Central and Trefforest
Caerphilly and Cardiff	1,300,000	Caerphilly and Cardiff Central
Cardiff and Newport	1,200,000	Cardiff Central and Newport

Regional rail usage April 2022 to March 2023 Office of Rail and Road | 22 February 2024

Scotland

The total number of journeys for Scotland was 69.4 million from April 2022 to March 2023, which equates to 70% of the 99.6 million journeys made three years ago. Two new stations opened in Scotland during the latest year. There were 60.3 million journeys within Scotland.

Scotland recorded 9.2 million journeys to or from other regions. Most journeys to or from other regions were made to or from London (35%), the North West (22%), North East (20%), or Yorkshire and the Humber (10%). Scotland had the smallest proportion of journeys between regions, at 13%.

Figure 2.12 Most Scotland journeys were made within the region

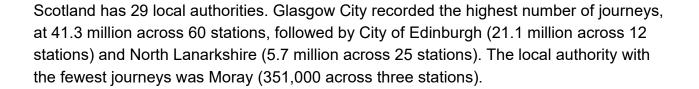
Between regions

Percentage of journeys made within and between other regions, Scotland, annual data, April 2022 to March 2023

13%

Within

region



87%



360 stations

The most popular local authority flow within the region was within Glasgow (10.4 million journeys). The most popular local authority flow to a different region was between City of Edinburgh and Camden (London) (2.1 million).

Table 2.11The five top flows and the busiest station flow within and between local
authorities, Scotland, annual data, April 2022 to March 2023 (Table
1595)

Local authority flow	Journeys	Busiest station flow
Within Glasgow City	10,400,000	Glasgow Central and Mount Florida
Glasgow City and South Lanarkshire	4,430,000	Glasgow Central and East Kilbride
Glasgow City and North Lanarkshire	4,110,000	Glasgow Queen Street and Croy
City of Edinburgh and Glasgow City	3,370,000	Edinburgh Waverley and Glasgow Queen Street
Glasgow City and Renfrewshire	3,350,000	Glasgow Central and Paisley Gilmour Street

4. Annexes

Annex 1 – Definitions

- **Origin Destination Matrix** (**ODM**) a comprehensive matrix of passenger flows throughout Great Britain.
- **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 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 <u>2021 International Territorial Levels (ITL)</u> classification. These were formerly known as **Nomenclature of Territorial Units for Statistics (NUTS)** areas:
 - ITL1 Scotland, Wales, and regions of England: journeys within each ITL1 area and journeys between each pair of ITL1 areas.
 - 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.
- The April 2022 to March 2023 data are also disaggregated by local authority district and county. In this publication, the geography is referred to as 'local authority'. Further information can be found in the station attributes table notes. 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 and methodology

These statistics are **estimates** derived from the Origin Destination Matrix (ODM) which is a comprehensive matrix of passenger flows throughout Great Britain. 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.

The methodology described in detail in the <u>Quality and methodology report</u>. 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 given on page 2 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 <u>Passenger rail usage</u> 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 Quarter 4 (January to March) Passenger rail usage statistical release for the corresponding year. Please see <u>Passenger journeys in Great Britain</u>, which explains the differences in more detail.

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 and tables.

Key methodological changes made for the April 2022 to March 2023 ODM and their impact on Regional rail usage is listed below. Information on historical methodological improvements can be found in Annex 2 of the <u>Quality and methodology report</u>. Split ticketing is where a passenger completes a single journey using two or more tickets. In previous years total journeys at some locations will be significantly over estimated due to some passengers not boarding or alighting at the split point and instead staying on the train. In our previous release covering April 2021 to March 2022 we identified the following common ticket split points: Basingstoke, Croydon BR (East Croydon and West Croydon), Didcot Parkway, Doncaster, Gatwick Airport, Leeds, Milton Keynes Central, Peterborough, Sheffield, and York.

Rail Delivery Group have developed an algorithm to detect split tickets, and we have incorporated the output of this into our data processing. Therefore, in the latest year (April 2022 to March 2023) we only count a journey at the start and end, whereas previously multiple journeys would have been recorded between split point stations along the way.

- An updated distribution has been used for allocating journeys for passengers who have bought non-travelcard tickets with a destination of London Terminals, for example Oxford to London Terminals. The new distribution uses modelled data from the December 2022 Central Allocation File (CAF) to allocate flows to each station based on possible travel routes. Previously these were allocated using results from the 2001 London Area Travel Survey (LATS). While many allocations to London Terminals will be similar to when the LATS took place, some will have changed significantly (e.g. due to the impacts of Thameslink). This represents a significant methodological improvement.
- An updated distribution has been used for allocating journeys using West Yorkshire Metro tickets. The new distribution uses latest year (April 2022 to March 2023) data (replacing the April 2021 to March 2022 data), better reflecting post-pandemic travel patterns.
- The methodology for calculating concessionary demand in the Greater Manchester region has been updated. A new data source was available (rail surveys undertaken in August 2023) which covered all ticket types (including concessions on radial Manchester rail routes). Previously survey data from 2017 was used. This data is to estimate the proportion of concessions across all ticket types to account for concessionary travel that would otherwise not be covered by the ticket purchase data.

Revisions

There have been no revisions to previously published data. Details on previous revisions can be found in the <u>Revisions log</u>.

How these statistics can 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 across the whole of Great Britain

How these statistics cannot be used



- Monitoring passenger rail usage by train operating company or by ticket type (refer to <u>Passenger rail usage statistics</u>)
- Monitoring the number of entries and exits or interchanges at individual stations (refer to <u>Estimates of station usage</u>)
- Exploring rail journey flows between origin and destination stations (refer to the <u>Origin and Destination Matrix (ODM)</u>)

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

Data tables

All data tables can be accessed on the <u>data portal</u> 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 <u>Regional rail usage page</u>.

- 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
- Passenger journeys between local authorities Table 1595 (csv format) NEW

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 based on the ODM.

Origin and destination Matrix (ORR):

The ODM contains the estimated number of journeys between each pair of mainline stations in Great Britain. Datasets for each of the last five years are available on the <u>Rail</u> <u>Data Marketplace</u>.

Passenger numbers and crowding (Department for Transport):

<u>Rail passenger numbers and crowding statistics</u> 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

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the <u>Code of Practice for</u> <u>Statistics</u> that all producers of official statistics should adhere to. You are welcome to contact us directly with any comments about how we meet these standards by emailing <u>rail.stats@orr.gov.uk</u>. Alternatively, you can contact OSR by emailing <u>regulation@statistics.gov.uk</u> or via the OSR website.

Statistical Releases

This publication is part of ORR's 'accredited official statistics', 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.

ORR also publishes a number of other official statistics, which consist of five annual publications: Common Safety Indicators; Passenger satisfaction with complaints handling; Train operating company key statistics; Occupational health; Rail statistics compendium; 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 <u>data portal</u> along with a list of <u>publication</u> <u>dates</u> for the next 12 months.

Accredited official statistics

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007. They are official statistics that have been independently reviewed by the Office for Statistics Regulation and found to comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics.

The majority of our <u>statistical releases were independently reviewed by the OSR in June</u> <u>2012</u>. They comply with the standards of trustworthiness, quality and value in the <u>Code</u> <u>of Practice for Statistics</u> and are labelled accredited official statistics.

Since our review 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 OSR to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, <u>OSR published a</u> <u>letter</u> confirming that ORR's statistics should continue to be accredited official 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 <u>independently reviewed by OSR</u> in November 2020 and <u>their accreditation was confirmed</u> on 1 December 2020.

For more information on how we adhere to the Code please see our <u>compliance</u> <u>statements</u>.

If you have any feedback or questions, please email <u>rail.stats@orr.gov.uk</u>.



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