

Passenger Rail Usage 2020-21 Quarter 1

8 October 2020

Background:

This quarterly statistical release contains information on passenger rail usage in Great Britain. It covers **passenger journeys, passenger kilometres, passenger revenue, and passenger train kilometres**.

Statistics are presented by **ticket type, sector, and train operating company**.

Sources: LENNON ticketing and revenue database, Train Operating Companies, and Network Rail

Latest quarter: 2020-21 Q1 (April to June 2020).

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Next publication:

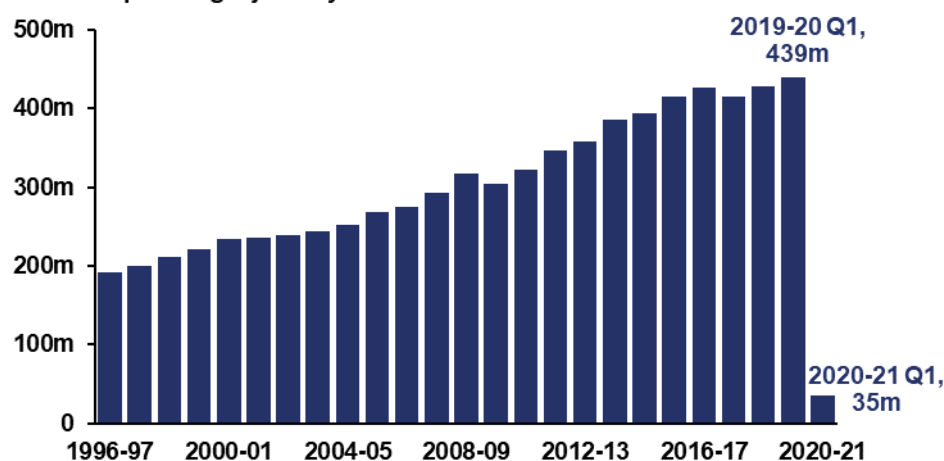
10 December 2020

Passenger rail usage during the first quarter of 2020-21 was severely affected by the coronavirus (COVID-19) pandemic. An alternative methodology was applied to estimate usage with some ticket types. As a result, there is more uncertainty around the 2020-21 Q1 estimates compared with previous quarters.

Rail passenger journeys in Great Britain in 2020-21 Q1 fell to 35 million (8.1% of the 439 million in 2019-20 Q1). This represents [the lowest level of passenger usage since the mid-nineteenth century](#).

Quarter 1 passenger journeys, Great Britain, 1996-97 to 2020-21

Quarter 1 passenger journeys



The fall in passenger usage varied across the three franchised sectors. At 9.1%, the **London and South East** sector recorded the most journeys as a percentage of journeys in 2019-20 Q1. This was followed by the **Long Distance** sector (6.4%) and the **Regional** sector (5.5%).

[Estimates published by the Department for Transport](#) indicate that relative passenger usage increased from around 5% at the start of April to 17% by the end of June.

All data tables, a quality and methodology report and an interactive chart associated with this release are published on the [passenger rail usage page](#) of the ORR data portal. Key definitions are in annex 1 of this release and information on the methodology change is in annex 2.

1. Passenger journeys

Impact of the coronavirus (COVID-19) pandemic

An alternative methodology was used to estimate usage with season and other tickets this quarter, which has increased the uncertainty around the estimates. For further information on the methodological changes, please see annex 2.

The 35 million passenger journeys in Great Britain¹ in 2020-21 Q1 represents [the lowest level of passenger usage since the mid-nineteenth century](#). This fall in usage occurred despite [1.2 million trains being planned in the quarter \(63.3% of trains planned in 2019-20 Q1\)](#), which covered 84 million train kilometres (60.4% of 2019-20 Q1, see section 4 of this release for further details).

This unprecedented fall in usage can be attributed entirely to the measures taken to limit the impact of the coronavirus pandemic. The quarter began with [Great Britain in a state of 'lockdown' with all but essential travel prohibited](#). Some [travel restrictions were eased on 10 May](#) with more workers allowed to travel to their place of work. Nevertheless, the quarter ended with the governments of the UK encouraging people to avoid public transport if possible.

[Estimates published by the Department for Transport \(DfT\)](#) indicate that relative passenger usage increased from around 5% at the start of April to 17% by the end of June. Usage continued to increase after 2020-21 Q1 with as much as 43% of 2019-20 levels being recorded in September.

The [2019 National Travel Survey found that 9% of individuals in England travelled by surface rail at least once a week](#). Furthermore, 5% travelled three or more times a week (see [Table NTS0313](#)). Regular travellers, therefore, were responsible for more than half of passenger rail journeys before the pandemic. The DfT commissioned Ipsos Mori to conduct a [survey of transport use during the coronavirus pandemic](#). They found that 2% of UK adults used a train at least once a week during the 'lockdown' (23 March to 10 May). The survey also found that 88% did not use the railways once during this time. It is likely that those who used the train at least once a week during lockdown were people such as key workers. Regular travellers probably accounted for the vast majority of journeys made during this time, consistent with advice against all but essential travel by public transport.

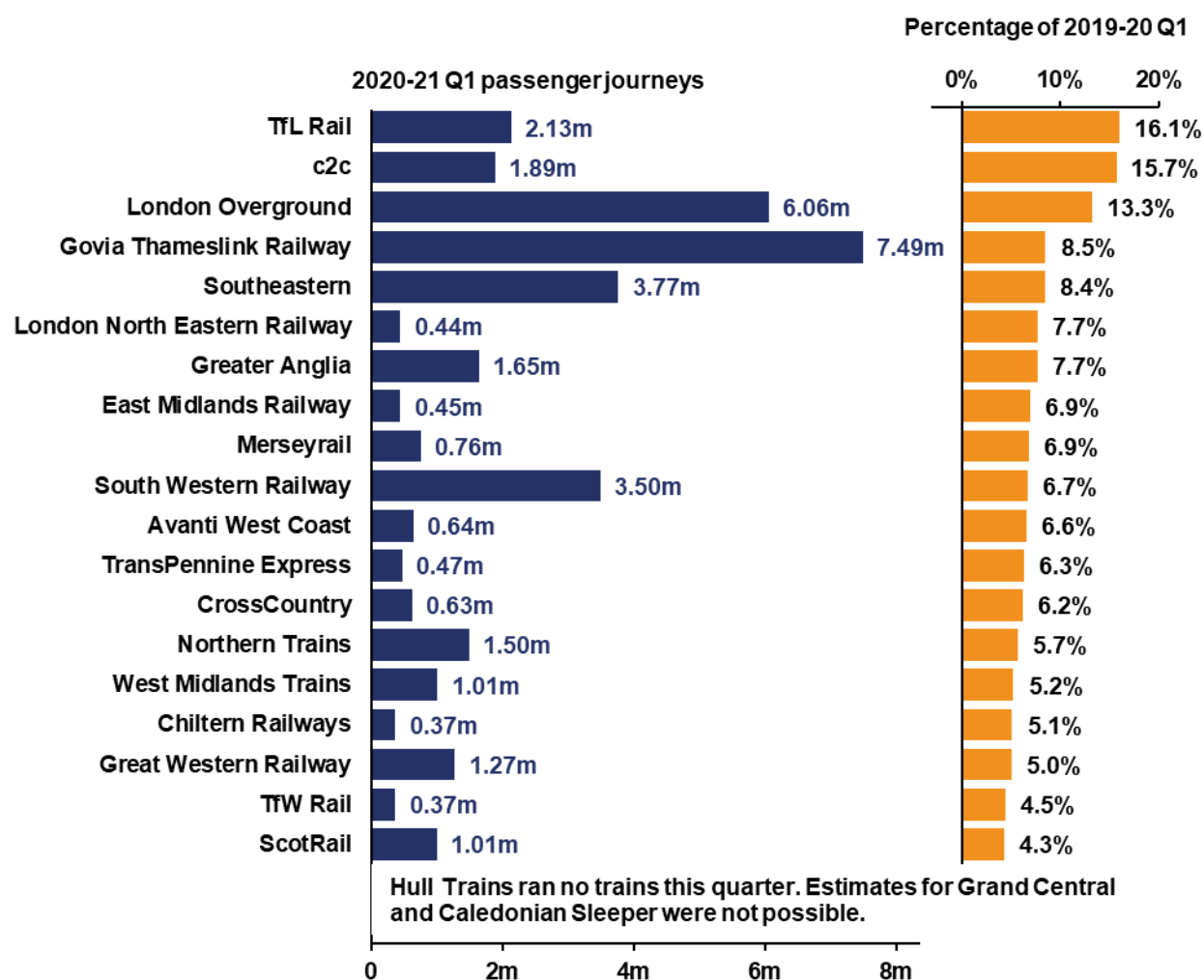
¹ All journeys in Great Britain made on franchised train operators in 2020-21 Q1 with the exception of Caledonian Sleeper. Ordinarily usage for Hull Trains and Grand Central, which are non-franchised (open access) operators, would be included. However, Hull Trains ran no trains during the quarter and Grand Central ran only a small number in the first few days of April. These operators along with Caledonian Sleeper, for which it was not possible to estimate usage this quarter, are therefore not included in the 2020-21 Q1 data. Passenger usage data are not currently available for the third non-franchised operator Heathrow Express.

Passenger journeys by sector and Train Operating Company (TOC)

The London and South East sector recorded 28 million journeys in 2020-21 Q1. This equates to 9.1% of the 303 million journeys in 2019-20 Q1 and is the highest relative usage of the three sectors.

TfL Rail (16.1%), c2c (15.7%) and London Overground (13.3%) recorded the highest usage this quarter as a proportion of journeys made in 2019-20 Q1. The TfL Rail figures can be attributed in part to the [transfer of London Paddington to Reading stopping services to TfL Rail from Great Western Railway on 15 December 2019](#). The other operators in the London and South East sector recorded usage that was less than 10% of the journeys recorded in 2019-20 Q1. Nevertheless, Govia Thameslink Railway still recorded the most passenger journeys in absolute terms this quarter at 7.5 million. The 372,000 journeys on Chiltern Railways in 2020-21 Q1 equates to 5.1% of the journeys made in the same quarter a year earlier.

Figure 1.1: Passenger journeys by TOC, 2020-21 Q1, and percentage of 2019-20 Q1 (Table 1223)



The Long Distance sector recorded 2.4 million journeys this quarter (6.4% of journeys in 2019-20 Q1). London North Eastern Railway (7.7%) recorded the highest usage as a percentage of 2019-20 Q1 journeys in the sector. At 5.0% of journeys in 2019-20 Q1, Great Western Railway recorded the lowest relative usage for a TOC in the Long Distance sector. It should be noted that this figure covers the whole of the operator, which also operates services in the London and South East and Regional sectors.

The Regional sector recorded 5.4 million journeys (5.5% of journeys in 2019-20 Q1). At 6.9%, Merseyrail had the most journeys in the sector this quarter relative to 2019-20 Q1. ScotRail (4.3%) and TfW Rail (4.5%) recorded the lowest usage this quarter as a percentage of usage in 2019-20 Q1.

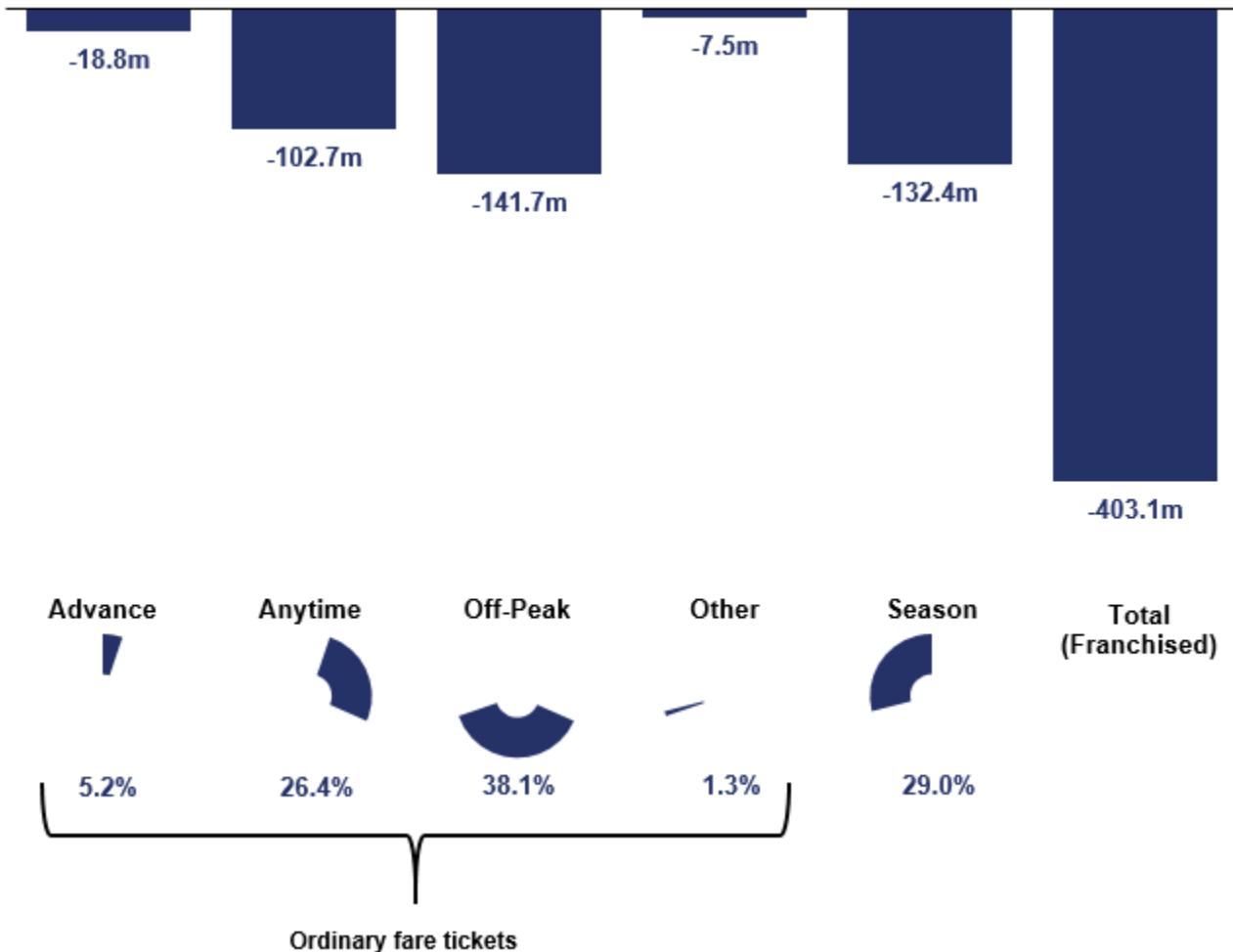
NOTE: Hull Trains are not included in these estimates as they ran no trains this quarter. Grand Central and Caledonian Sleeper were also excluded due to high levels of uncertainty around their actual usage.

Passenger journeys by ticket type

Franchised passenger journeys using ordinary tickets fell to 25 million in 2020-21 Q1, the equivalent of 8.5% of the 296 million in 2019-20 Q1. Advance tickets (8.9%), off-peak tickets (8.7%) and anytime tickets (8.3%) recorded similar usage as a percentage of 2019-20 Q1 usage. There is more uncertainty around the estimate for other ticket journeys (see annex 2 for further details). The 455,000 journeys estimated in this category equates to 5.7% of other ticket journeys in 2019-20 Q1.

There is also more uncertainty for the 10 million journeys estimated to have been made using season tickets in 2020-21 Q1. This is the equivalent of 7.2% of the 143 million journeys made using season tickets in 2019-20 Q1. Furthermore, the 29.0% share of all journeys in 2020-21 Q1 is the lowest recorded by season tickets for any quarter since the time series began in 1994-95.

Figure 1.2: Change in franchised passenger journeys by ticket type, 2020-21 Q1 compared with 2019-20 Q1, and market share percentage, 2020-21 Q1 (Table 1222)



2. Passenger kilometres

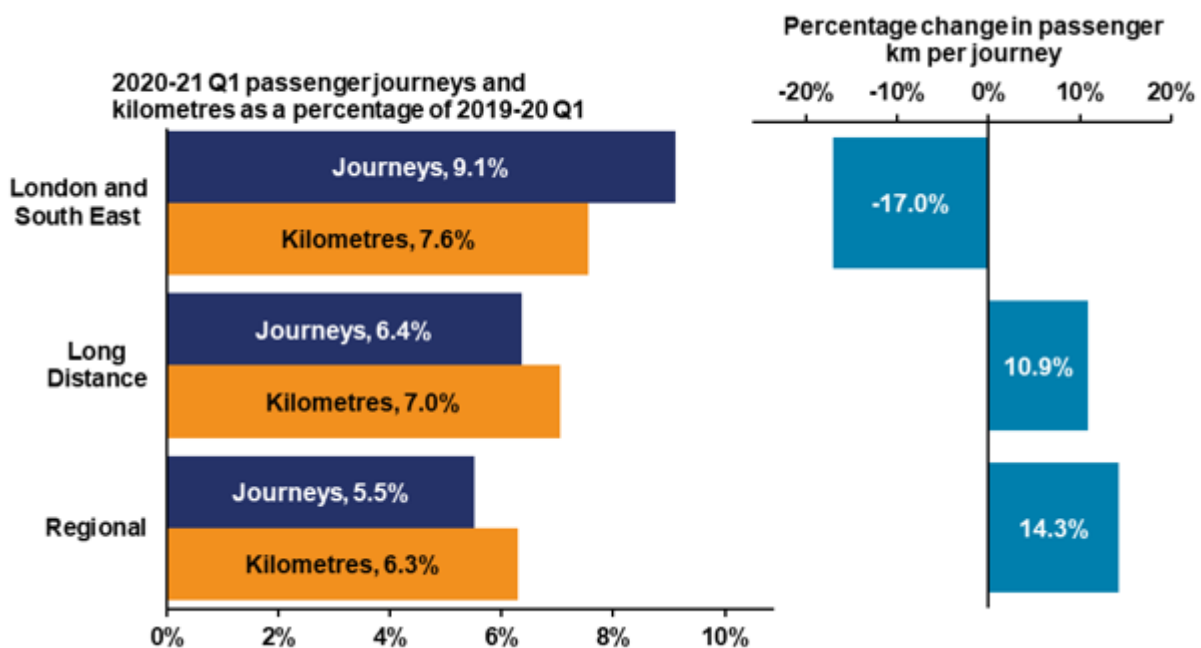
Passenger kilometres by sector

A total of 1.2 billion passenger kilometres were recorded in Great Britain in 2020-21 Q1. This equates to 7.1% of the 17 billion kilometres in 2019-20 Q1. Passenger kilometres per journey fell from 39.5 in 2019-20 Q1 to 34.6 in 2020-21 Q1.

As with passenger journeys, the London and South East sector recorded the most passenger kilometres in both absolute and relative terms. The 595 million kilometres recorded in 2020-21 Q1 equates to 7.6% of the 7.9 billion kilometres recorded in 2019-20 Q1. The Long Distance sector had 415 million kilometres this quarter (7.0% of the 5.9 billion in 2019-20 Q1), while the Regional sector recorded 213 million kilometres in 2020-21 Q1 (6.3% of the 3.4 billion kilometres in 2019-20 Q1).

The London and South East sector recorded relatively more passenger journeys (9.1% of 2019-20 Q1) than kilometres (7.6%) in 2020-21 Q1. Consequently, passenger kilometres per journey in the sector fell from 26.0 to 21.5, a fall of 17.0%. By contrast, kilometres per journey in the Long Distance sector increased from 159 to 176, an increase of 10.9%, while in the Regional sector they increased from 34.6 in 2019-20 Q1 to 39.5 in 2020-21 Q1, an increase of 14.3%.

Figure 2.1: Passenger journeys and kilometres by sector, 2020-21 Q1 as a percentage of 2019-20 Q1, and percentage change in passenger kilometres per journey (Tables 1221 and 1231)



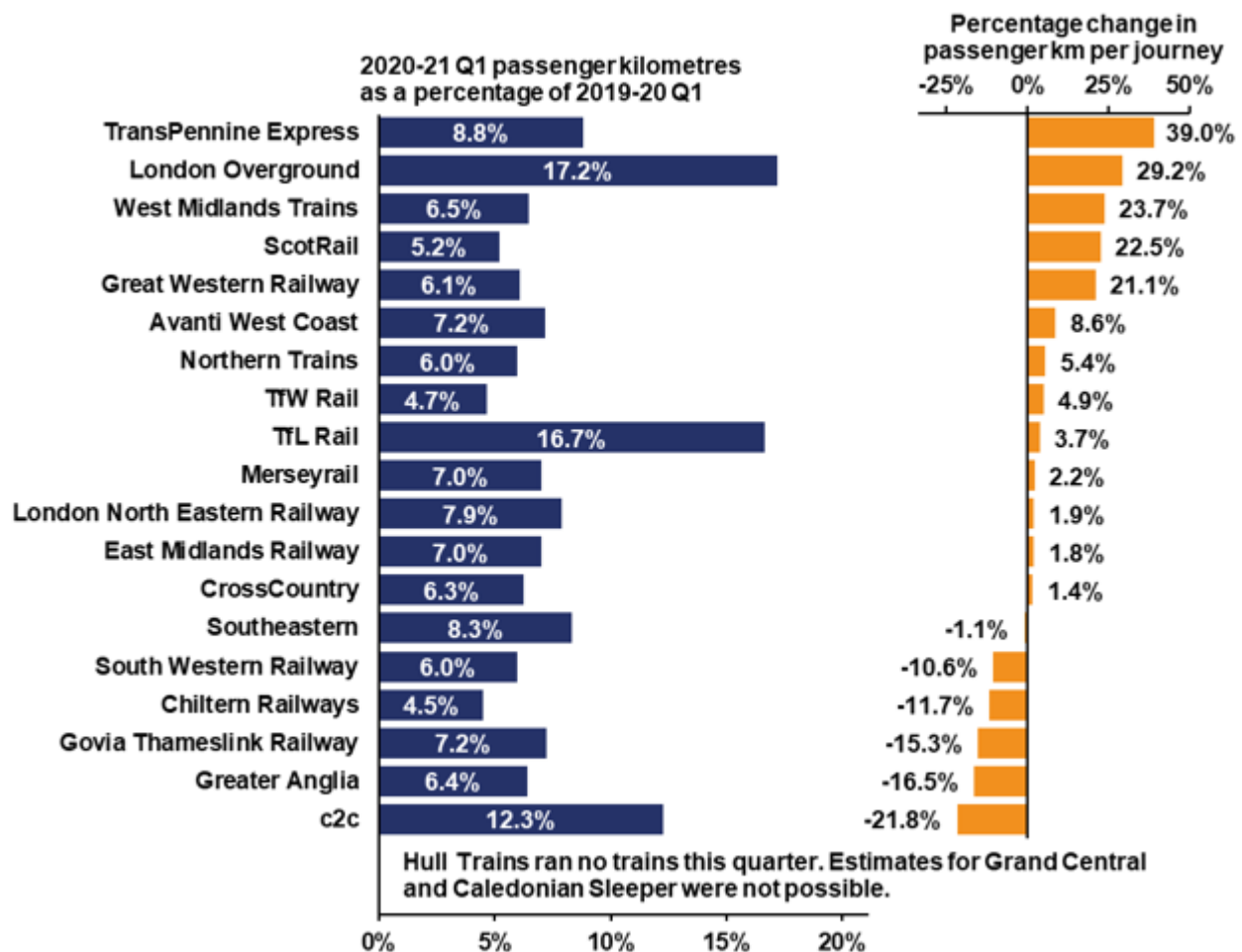
Passenger kilometres by TOC

London Overground (17.2%), TfL Rail (16.7%) and c2c (12.3%) recorded the most passenger kilometres in 2020-21 Q1 as a percentage of kilometres in 2019-20 Q1. Each is part of a different group of TOCs in terms of change in passenger kilometres per journey.

Firstly, c2c recorded proportionally more journeys (15.7%) this quarter compared with kilometres (12.3%). This led to their passenger kilometres per journey falling from 25.4 in 2019-20 Q1 to 19.9 in 2020-21 Q1, a fall of 21.8%. That was the largest fall of five London and South East operators that recorded falls of more than 10%. This is consistent with the fall in journeys within London being smaller than the fall in journeys into and out of London.

Along with eight other TOCs, TfL Rail (up 3.7%) was within 10% of their average journey length in 2019-20 Q1. London Overground (up 29.2%) was one of five TOCs this quarter to record an increase in passenger kilometres per journey of more than 20%. The largest increase was recorded by TransPennine Express with the average journey length increasing from 72 kilometres in 2019-20 Q1 to 100 kilometres in 2020-21 Q1.

Figure 2.2: Passenger kilometres by TOC, 2020-21 Q1 as a percentage of 2019-20 Q1, and percentage change in passenger km per journey (Tables 1223 and 1233)

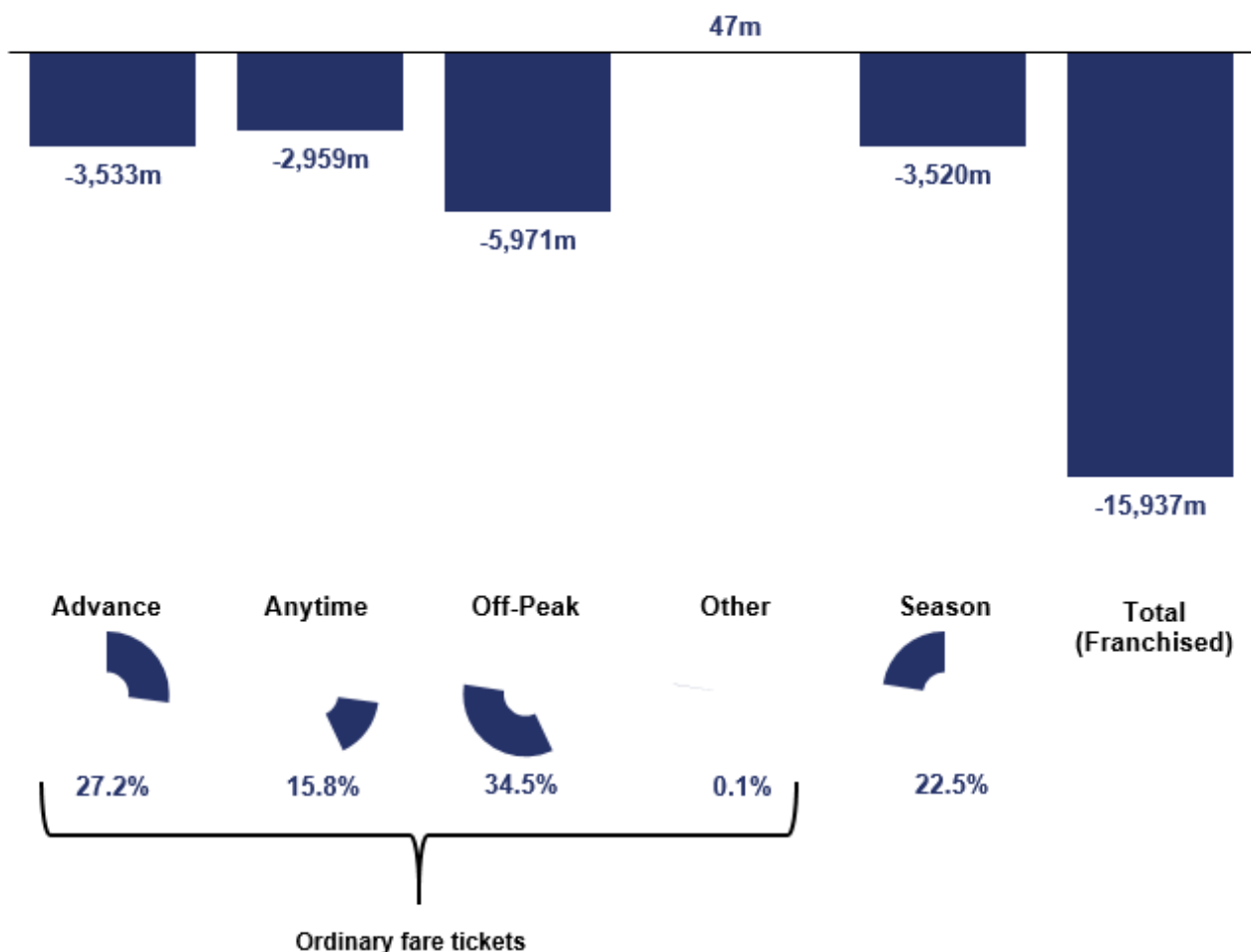


Passenger kilometres by ticket type

Franchised passenger kilometres using ordinary tickets fell to 949 million in 2020-21 Q1, the equivalent of 7.1% of the 13.4 billion in 2019-20 Q1. Advance tickets (8.6%) recorded more usage as a percentage of 2019-20 Q1 usage compared with off-peak tickets (6.6%) and anytime tickets (6.1%). Advance tickets accounted for 27.2% of all passenger kilometres this quarter. This is the highest share for such tickets in any quarter since the time series began in 2010-11.

There is more uncertainty for the 275 million kilometres estimated to have been made using season tickets in 2020-21 Q1. This is the equivalent of 7.2% of the 3.8 billion kilometres made using season tickets in 2019-20 Q1.

Figure 2.3: Change in franchised passenger kilometres by ticket type, 2020-21 Q1 compared with 2019-20 Q1, and market share percentage, 2020-21 Q1 (Table 1232)



3. Passenger revenue

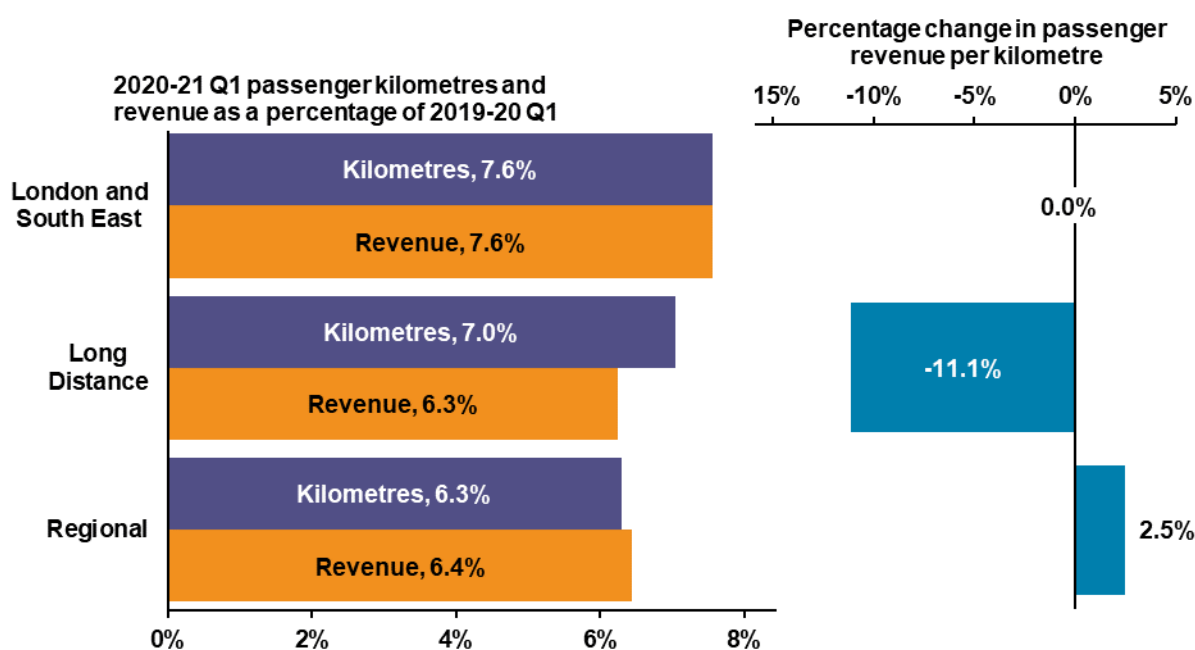
Passenger revenue by sector

Total passenger revenue in Great Britain was £184 million in 2020-21 Q1. This equates to 6.9% of the £2.7 billion in 2019-20 Q1. Franchised passenger revenue per journey fell from £6.05 in 2019-20 Q1 to £5.20 in 2020-21 Q1. This was due to a combination of a decrease in average journey length and an increase in the share of passenger kilometres travelled using advance tickets.

Franchised passenger revenue per kilometre in Great Britain was 15.0p in 2020-21 Q1, which was down from 15.5p in 2019-20 Q1. The Regional sector generated 12.6p for every passenger kilometre in 2020-21 Q1. This was up 2.5% compared with 2019-20 Q1. The London and South East sector recorded 16.7p per passenger kilometre this quarter. This was almost identical to the value recorded in 2019-20 Q1.

The Long Distance sector generated less revenue per passenger kilometre in 2020-21 Q1 compared with the same quarter a year earlier. The 13.9p per kilometre in 2020-21 Q1 was down 11.1% compared with 2019-20 Q1. This may be related to the increase in passenger kilometres travelled using advance tickets this quarter.

Figure 3.1: Passenger kilometres and revenue by sector, 2020-21 Q1 as a percentage of 2019-20 Q1, and percentage change in passenger kilometres per journey (Tables 1211 and 1231)

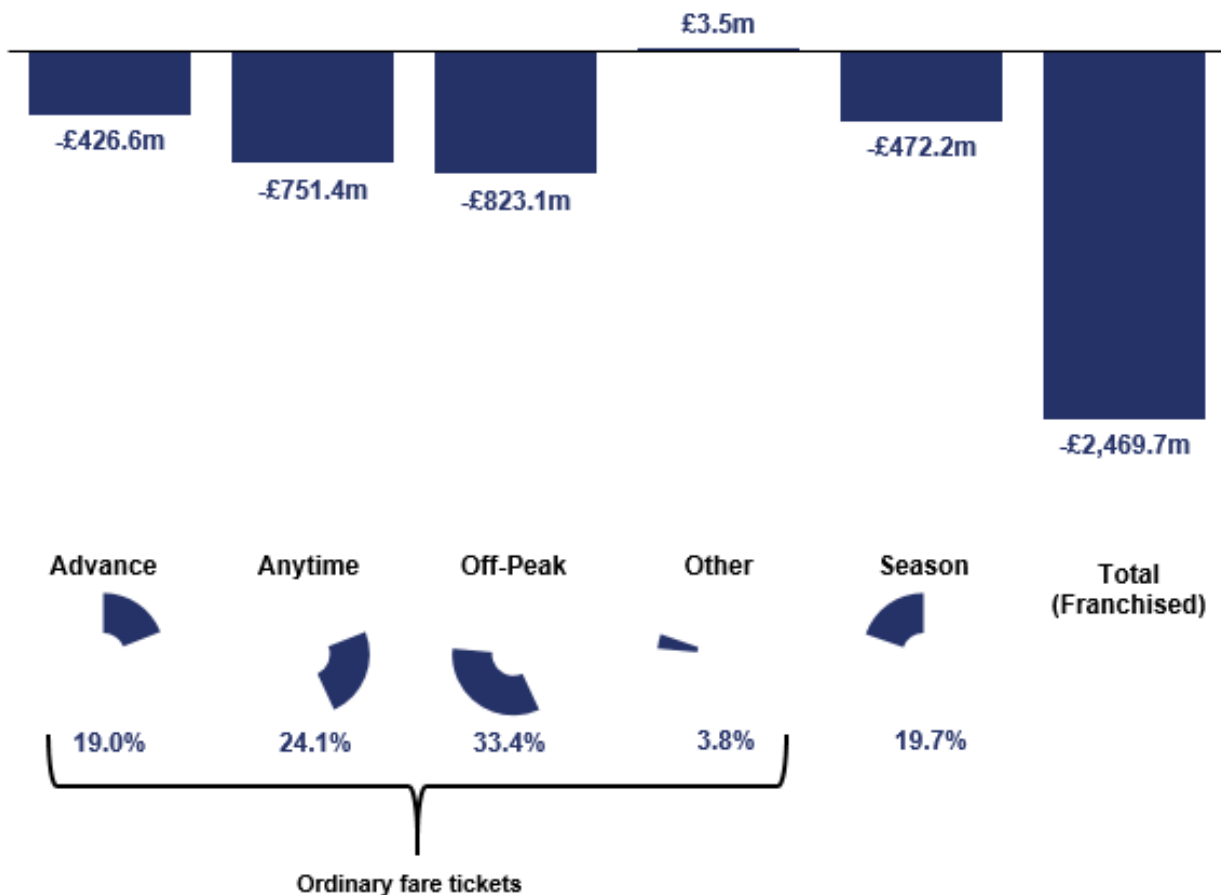


Passenger revenue by ticket type

Franchised passenger revenue using ordinary tickets fell to £148 million in 2020-21 Q1, the equivalent of 6.9% of the £2.1 billion in 2019-20 Q1. Advance tickets (7.6%) and off-peak tickets (7.0%) generated more revenue as a percentage of 2019-20 Q1 usage compared with anytime tickets (5.6%). Anytime tickets accounted for 24.1% of all passenger revenue this quarter. This is the lowest share for such tickets in any quarter since the time series began in 2010-11.

There is more uncertainty for the £36 million estimated to have been earned from season tickets in 2020-21 Q1. This is the equivalent of 7.1% of the £508 million generated from season tickets in 2019-20 Q1.

Figure 3.2: Change in franchised passenger revenue by ticket type, 2020-21 Q1 compared with 2019-20 Q1, and market share percentage, 2020-21 Q1 (Table 1212)

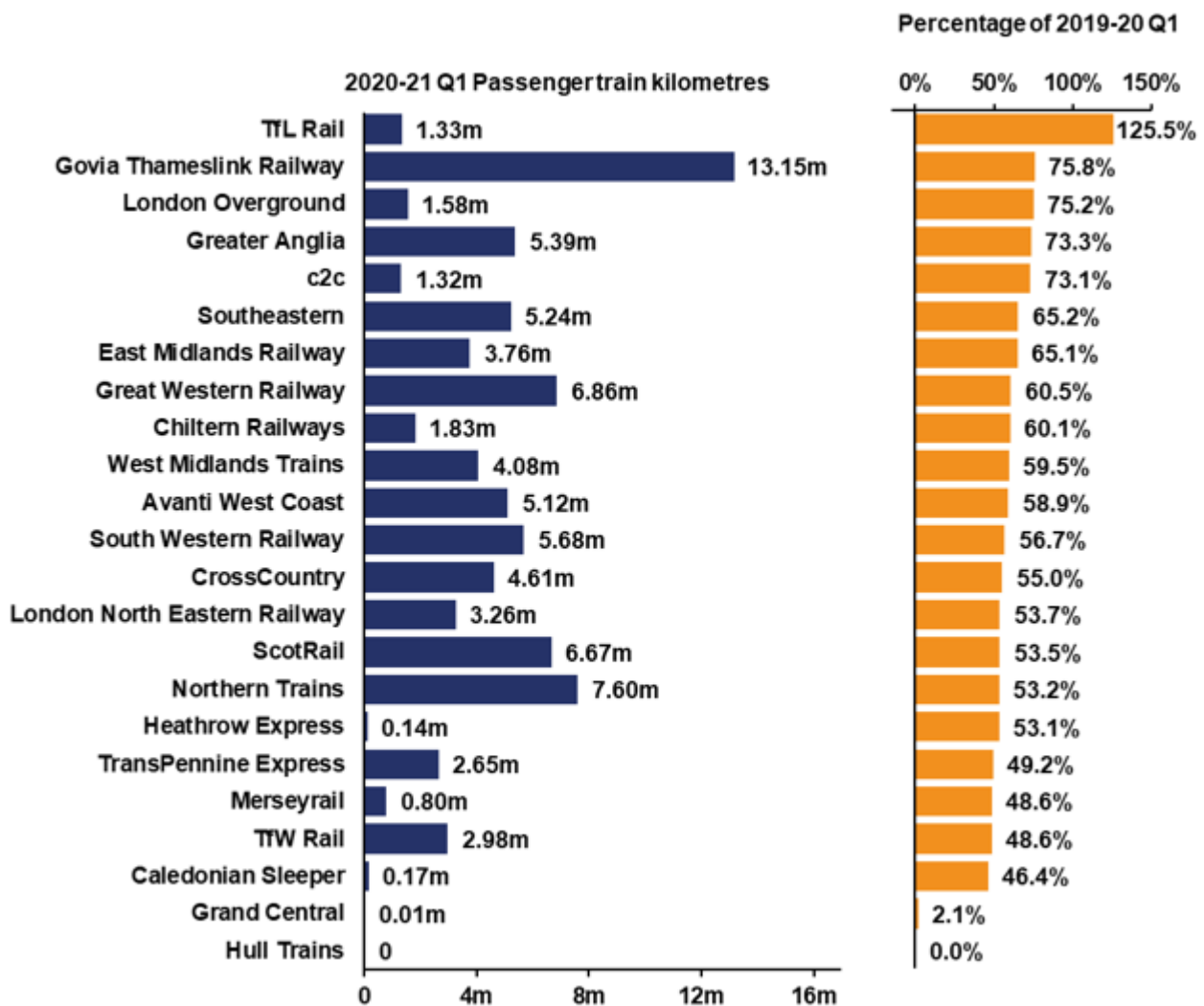


4. Passenger train kilometres

Passenger train kilometres fell to 84 million in 2020-21 Q1, which represents 60.4% of the 139 million train kilometres recorded in 2019-20 Q1. This reduction in train kilometres was due to the [introduction of a reduced timetable](#). This aimed to reduce the spread of the coronavirus (COVID-19) while maintaining a core service. Hull Trains ran no trains this quarter, while Grand Central ran a small number of services at the start of April which equated to 2.1% of their 2019-20 Q1 train kilometres.

TfL Rail recorded 1.33 million train kilometres this quarter, which was up 25.5% compared with 2019-20 Q1. This can be attributed to the [transfer of London Paddington to Reading stopping services to TfL Rail from Great Western Railway on 15 December 2019](#). For the other operators, train kilometres as a proportion of 2019-20 Q1 ranged from 75.8% for Govia Thameslink Railway to 46.4% for Caledonian Sleeper.

Figure 4.1: Passenger train kilometres by TOC, 2020-21 Q1, and percentage of 2019-20 Q1 (Table 1243)



1. Annexes

Annex 1 – Definitions

- **Passenger journeys** are estimated based on travel from an origin station to a destination station. For the purpose of these statistics, where travel includes one or more changes of train, each train used is counted as one journey.
- **Passenger kilometres** are calculated by multiplying the number of passenger journeys on a particular flow by the number of corresponding track kilometres between stations.
- **Passenger revenue** statistics include all ticket revenue and miscellaneous charges associated with passenger travel on national railways. They do not include government support or grants.
- **Passenger train kilometres** refers to the number of train kilometres (million) travelled by revenue earning passenger trains, sourced from Network Rail's Track Access Billing System (TABS). Only kilometres run on Network Rail infrastructure are included in the data.
- **Sectors:**
 - **London and South East** – based on the British Rail Network South East services, this sector includes commuter trains in the London area and inter-urban services in South East England. It extends as far west as Bristol and Exeter (both South Western Railway) and as far northwest as Kidderminster (Chiltern Railways). All Greater Anglia services are included in this sector for passenger rail usage purposes. Southeastern high speed services are included too.
 - **Long Distance** – based on the British Rail InterCity services, this sector covers long distance services on the East Coast, West Coast, Midland, and Great Western mainlines. CrossCountry services are also included.
 - **Regional** – based on the British Rail Regional Railways services, this sector covers other services. This includes both the ScotRail and TfW Rail franchises. TransPennine Express and Caledonian Sleeper are included in this sector for passenger rail usage purposes.
- **Ticket types:**
 - **Advance** – single one-way tickets for a specific train. They are usually cheaper than other ticket types.

- **Anytime / Peak** – fully flexible tickets that can be used on most trains and at most times. They are usually more expensive than other ticket types.
- **Off-Peak** – cheaper than anytime fares, but cannot be used during busier times of day.
- **Other** – includes usage on regional products, rover tickets, some group tickets, and package products (e.g. includes accommodation and/or onward travel with other forms of transport). Non-travel income (e.g. car parking) is also included in this category for passenger revenue, as to are refunds, which can result in this category showing negative numbers.
- **Season** – allow unlimited travel between two locations for a specified period (from a week up to a year). Such tickets are generally cheaper than daily return tickets for those travelling more than three times a week. The number of journeys estimated for a season ticket varies by the length of the period. For example, 480 journeys are assumed to have been made for each annual season ticket sold.

Further information on each of these measures and other definitions can be found in the quality and methodology report on the [passenger rail usage page](#).

Annex 2 – Quality and methodology

Primary data source – LENNON database

Most of the data contained within this statistical release are sourced from the rail industry's LENNON (Latest Earnings Network Nationally Over Night) ticketing and revenue database. The statistics presented here use the post-allocation dataset within LENNON that distributes passenger journeys, kilometres and revenue to the Train Operating Companies. Where travel includes one or more changes of train, each train used is counted as one journey. This is different to [Regional rail usage](#) that uses the pre-allocation dataset. For that release, journeys are based on the origin and destination named on a ticket and do not take into account any changes of train. It therefore produces slightly lower estimates than the total journeys in this Passenger Rail Usage statistical release.

LENNON is primarily an accounting tool, which inevitably faces limitations for estimating usage precisely. Due to the way LENNON is structured and updated, it is possible that errors are made by users when inputting data into the system. Whilst we make every effort to quality assure the data we are using to estimate usage, we are unable to validate each and every entry in LENNON due to the size and complexity of the dataset. Due to the size and complexity of the dataset we are unable to validate each and every entry. For further information on the limitations of the data, please see the [Passenger rail usage quality and methodology report](#).

Impact of the coronavirus (COVID-19) pandemic

In response to the coronavirus (COVID-19) pandemic, the UK government issued [advice against all unnecessary travel was announced on 16 March 2020](#), with [further guidance on 'staying at home' on 23 March 2020 \('lockdown'\)](#). This in turn resulted in a large number of refund applications for both ordinary and season tickets. The LENNON system does not remove existing records when a refund is processed. Instead, a negative item of usage is created to offset the original usage. These records are categorised in the "other" ticket category.

When a monthly or annual season ticket is purchased, the estimated usage is distributed in the post-allocation dataset over the period for which the ticket is valid. For example, an annual season ticket purchased on 6 January 2020 will contribute usage through to 5 January 2021. Refunds for such season tickets are distributed in LENNON in the same way as the original season ticket. However, they are only done so from the point at which the refund is issued. Moreover, there will be unused tickets for which refunds were not claimed.

Given that the coronavirus pandemic affected usage towards only the end of the quarter, no changes were made to the methodology for the [2019-20 Q4 passenger rail usage release](#) with an acknowledgment that usage was likely to have been slightly overstated

due to many expected refunds having not been issued. However, had the regular methodology been used in its entirety in 2020-21 Q1, a more substantial overestimate of usage for the quarter would have resulted. The estimates for usage with advance, anytime, and off-peak tickets were made in the usual way as such tickets are very likely to have been purchased and used within 2020-21 Q1. These were supplemented with estimates for usage with season and other tickets using alternative methodologies.

The number of journeys using season tickets was estimated using a combination of pre-allocation (sales) data, which attributes all expected usage to the point of purchase, and weekly season ticket usage in the post-allocation data, which splits usage by train operating company. Usage with other ticket types includes an estimate for refunds that were not related to tickets purchased before the start of the pandemic. This was done by assessing refund rates against train service reliability. For both season tickets and other tickets, therefore, there is more uncertainty around the estimates this quarter compared with previous quarters.

Other data sources

The passenger journey and kilometre (though, not revenue) data from LENNON are supplemented by data provided directly to the ORR from the train operating companies as LENNON does not contain all journeys.

Data for the actual passenger train kilometres are sourced from Network Rail's Track Access Billing System (TABS).

Revisions

There have been no revisions to historic data. This includes 2019-20 Q4 for which it is not possible to allocate refund data retrospectively. 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 [Passenger 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 [ORR 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 [Passenger rail usage page](#).

Passenger journeys

- Passenger journeys (franchised only) - annual – Table 1220
- Passenger journeys by sector - quarterly – Table 1221
- Passenger journeys by ticket type - quarterly – Table 1222
- Passenger journeys by train operating company - quarterly – Table 1223

Passenger kilometres

- Passenger kilometres (franchised only) - annual – Table 1230
- Passenger kilometres by sector - quarterly – Table 1231
- Passenger kilometres by ticket type - quarterly – Table 1232
- Passenger kilometres by train operating company - quarterly – Table 1233

Passenger revenue

- Passenger revenue by sector - quarterly – Table 1211
- Passenger revenue by ticket type - quarterly – Table 1212
- Revenue per passenger kilometre and per passenger journey (franchised only) - quarterly – Table 1210

Passenger train kilometres

- Passenger train kilometres by operator - quarterly – Table 1243

Other related data

The Department for Transport (DfT) also publishes some [rail statistics](#). For example, Rail passenger numbers and overcrowding on weekdays in major cities.

For more information on COVID-19 impacts see:

- [Transport use during the COVID-19 pandemic \(Department for Transport\)](#)
- [All Change? Travel tracker \(Department for Transport\)](#)
- [Coronavirus and the social impacts on Great Britain \(Office for National Statistics\)](#)
- [Weekly travel during COVID-19 survey \(Transport Focus\)](#)
- [Public transport journeys by type of transport \(Transport for London\)](#)

European Comparisons

[Comparisons with railways in the rest of Europe](#) are available between 1990 and 2017 for passenger kilometres. Only France and Germany recorded more passenger kilometres than Great Britain in 2017.

Annex 4 – ORR’s statistical publications

Statistical Releases

This publication is part of ORR’s [National Statistics](#) accredited releases, which consist of six annual publications: **Rail Finance; 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, ORR also publishes a number of Official Statistics, which consist of four annual publications: **Estimates of Station Usage; Train Operating Company Key Statistics; Rail Statistics Compendium; Occupational Health**; and four quarterly publications: **Signals passed at danger (SPADS); Delay Compensation Claims; Disabled Person’s Railcard (DPRC); Passenger assistance**.

All the above publications are available on the [ORR 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**.

Our [statistical releases were assessed in 2012](#) and hold National Statistics status. Since our 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 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.

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.



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