Total traction electricity consumption between April 2021 and March 2022 increased by 1% (to 3,754 million kilowatt hours) compared with the previous year. Total traction diesel consumption increased by 9% to 552 million litres. These increases led to a 2% rise in estimated carbon dioxide equivalent (CO2e) emissions, with a combined total from electricity and diesel of 2,332 kilotonnes. This was still 19% below the 2,893 kilotonnes recorded in the pre-pandemic year April 2019 to March 2020. This is the second lowest emissions level since the start of the comparable time series in April 2011.

**Passenger train emissions**

Total passenger traction CO2e emissions in the latest year (April 2021 to March 2022) were 1,875 kilotonnes. This was an increase of 2% compared with the previous year, but still 22% down on the 2,400 kilotonnes recorded in the pre-pandemic year April 2019 to March 2020.

**Freight train emissions**

Total freight traction CO2e emissions in the latest year were 457 kilotonnes. This was an increase of 5% compared with the previous year but still 7% down on the 493 kilotonnes recorded in the pre-pandemic year April 2019 to March 2020.

**Electric and diesel vehicle kilometres**

This release contains new normalised measures, split by electric and diesel vehicle kilometres. The data is normalised to show the average electric or diesel CO2e emission per vehicle kilometre.

<table>
<thead>
<tr>
<th>Type</th>
<th>Electric emissions</th>
<th>Diesel emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger</td>
<td>358g CO2e per electric vehicle km</td>
<td>1400g CO2e per diesel vehicle km</td>
</tr>
<tr>
<td>Freight</td>
<td>211g CO2e per electric vehicle km</td>
<td>598g CO2e per diesel vehicle km</td>
</tr>
</tbody>
</table>

All data tables, a quality and methodology report and an interactive dashboard associated with this release are published on the [rail emissions page](#) of the ORR data portal. Key definitions are in annex 1.
1. New normalised electric and diesel metrics

ORR has a time series going back to April 2005 for normalised emissions based on passenger kilometres, or net freight tonne kilometres. Based on feedback received from stakeholders, this year we are publishing new normalised emissions based on vehicle kilometre data for passenger and freight. This includes historic data going back to year starting April 2011.

The vehicle kilometre data is split by two traction types, electric or diesel. This allows ORR to produce new metrics for estimated emissions (grams CO$_2$e) per electric or diesel vehicle kilometre.

Vehicle kilometres measure the distance travelled by individual vehicles on the rail network. As a comparison, a ten vehicle train travelling one kilometre would be measured as one train kilometre, but ten vehicle kilometres.

For both passenger and freight operators, the following new measures are included:

- Carbon dioxide equivalent emissions from electric traction energy (grams per electric vehicle kilometre)
- Carbon dioxide equivalent emissions from diesel traction energy (grams per diesel vehicle kilometre)
- Carbon dioxide equivalent emissions from traction energy (grams per total vehicle kilometre)

ORR will continue to publish the normalised measures showing CO$_2$e for passenger kilometres or net freight tonne kilometres moved. However, it is not possible to divide either of these into traction type.

Further development of these statistics

We welcome feedback on these new normalised measures, and the new data tables. Please email us on rail.stats@orr.gov.uk.

New electric and diesel vehicle kilometre data is expected to be published at an operator level in autumn 2022, with the Passenger rail usage release and Freight rail usage and performance release.
2. Passenger train emissions

The electricity consumption for passenger trains increased by 1% compared with the year April 2020 to March 2021. There was a larger increase in electric vehicle kilometres of 9%. The diesel consumption for passenger trains increased by 11% compared with the previous year, but it was down 18% compared with two years ago (April 2019 to March 2020).

The figures for the year April 2020 to March 2021 were affected by the pandemic, where train services on the network were at historically low levels.

Figure 2.1 Comparison of passenger train energy usage and emissions, Great Britain, annual data, April 2019 to March 2022

<table>
<thead>
<tr>
<th>Measure</th>
<th>April 2019 to March 2020</th>
<th>April 2020 to March 2021</th>
<th>April 2021 to March 2022</th>
<th>Comparison of latest year with April 2019 to March 2020</th>
<th>Comparison of latest year with April 2020 to March 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity consumption (million kWh)</td>
<td>4,189</td>
<td>3,669</td>
<td>3,689</td>
<td>−12%</td>
<td>1%</td>
</tr>
<tr>
<td>Electricity CO\textsubscript{2}e emissions (Ktonnes)</td>
<td>1,087</td>
<td>868</td>
<td>795</td>
<td>−27%</td>
<td>−8%</td>
</tr>
<tr>
<td>Electric vehicle kilometres (millions)</td>
<td>2,457</td>
<td>2,043</td>
<td>2,218</td>
<td>−10%</td>
<td>9%</td>
</tr>
<tr>
<td>g/CO\textsubscript{2}e per electric vehicle kilometre</td>
<td>442</td>
<td>425</td>
<td>358</td>
<td>−19%</td>
<td>−16%</td>
</tr>
<tr>
<td>Diesel consumption (million litres)</td>
<td>476</td>
<td>354</td>
<td>391</td>
<td>−18%</td>
<td>11%</td>
</tr>
<tr>
<td>Diesel CO\textsubscript{2}e emissions (Ktonnes)</td>
<td>1,313</td>
<td>977</td>
<td>1,080</td>
<td>−18%</td>
<td>11%</td>
</tr>
<tr>
<td>Diesel vehicle kilometres (millions)</td>
<td>950</td>
<td>687</td>
<td>772</td>
<td>−19%</td>
<td>12%</td>
</tr>
<tr>
<td>g/CO\textsubscript{2}e per diesel vehicle kilometre</td>
<td>1,382</td>
<td>1,422</td>
<td>1,400</td>
<td>1%</td>
<td>−2%</td>
</tr>
<tr>
<td>g/CO\textsubscript{2}e per vehicle kilometre (all traction)</td>
<td>704</td>
<td>676</td>
<td>627</td>
<td>−11%</td>
<td>−7%</td>
</tr>
</tbody>
</table>
There was a decrease in estimated CO₂e emissions per vehicle kilometre in the latest year. It decreased by 7% to 627g between April 2021 and March 2022 compared with 676g the previous year. This is the lowest level since the start of the comparable time series began in April 2011.

**Figure 2.2 Normalised passenger emissions have decreased steadily since 2014-15**

Normalised emissions for passenger trains all traction types (grams of CO₂e per vehicle kilometre), Great Britain, annual data, April 2011 to March 2022
Although there was an increase in electricity consumption, the CO$_2$e emissions from electricity fell by 8% to 795 KTonnes. Historically emissions from electricity consumption have been lower than emissions from diesel consumption despite increases in electricity usage. This is predominantly due to a transition towards renewable energy sources in the electricity sector in Great Britain.

There was a larger increase in diesel consumption, which grew by 11% to 391 million litres. This resulted in 1,080 kilotonnes of CO$_2$e emissions. Compared with two years ago, emissions from diesel decreased by 18% which reflects the change in network traffic since the pandemic.

**Figure 2.3 Emissions from traction electricity continued to fall, while emissions from diesel consumption increased in the last year**

Emissions from passenger train traction electricity and diesel consumption (CO$_2$e) Great Britain, annual data, April 2011 to March 2022.
3. Freight train emissions

The electricity consumption for freight trains increased by 2% compared with the year April 2020 to March 2021. The diesel consumption for freight trains increased by 5% compared with the previous year, but it was down 7% compared with two years ago (April 2019 to March 2020). Electric vehicle kilometres increased by 11%, and diesel vehicle kilometres increased by 14%.

Figure 3.1 Comparison of freight train energy usage and emissions, Great Britain, annual data, April 2019 to March 2022

<table>
<thead>
<tr>
<th>Measure</th>
<th>April 2019 to March 2020</th>
<th>April 2020 to March 2021</th>
<th>April 2021 to March 2022</th>
<th>Comparison with April 2019 to March 2020</th>
<th>Comparison with April 2020 to March 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity consumption (million kWh)</td>
<td>70</td>
<td>64</td>
<td>65</td>
<td>−7%</td>
<td>2%</td>
</tr>
<tr>
<td>Electricity CO$_2$e emissions (Ktonnes)</td>
<td>18</td>
<td>15</td>
<td>14</td>
<td>−23%</td>
<td>−7%</td>
</tr>
<tr>
<td>Electric vehicle kilometres (millions)</td>
<td>61</td>
<td>60</td>
<td>66</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>g/CO$_2$e per electric vehicle kilometre</td>
<td>301</td>
<td>251</td>
<td>211</td>
<td>−30%</td>
<td>−16%</td>
</tr>
<tr>
<td>Diesel consumption (million litres)</td>
<td>172</td>
<td>153</td>
<td>161</td>
<td>−7%</td>
<td>5%</td>
</tr>
<tr>
<td>Diesel CO$_2$e emissions (Ktonnes)</td>
<td>475</td>
<td>422</td>
<td>443</td>
<td>−7%</td>
<td>5%</td>
</tr>
<tr>
<td>Diesel vehicle kilometres (millions)</td>
<td>710</td>
<td>651</td>
<td>742</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>g/CO$_2$e per diesel vehicle kilometre</td>
<td>669</td>
<td>648</td>
<td>598</td>
<td>−11%</td>
<td>−8%</td>
</tr>
<tr>
<td>g/CO$_2$e per vehicle kilometre (all traction)</td>
<td>640</td>
<td>615</td>
<td>566</td>
<td>−12%</td>
<td>−8%</td>
</tr>
</tbody>
</table>
There was a decrease in estimated CO$_2$e emissions per vehicle kilometre in the latest year. It fell by 8% to 566g between April 2021 and March 2022 compared with 615g the previous year. This is the lowest level since the start of the comparable time series began in April 2011.

**Figure 3.2 Normalised freight emissions continued to fall steadily**

Normalised emissions for freight trains, all traction types (grams of CO$_2$e per vehicle kilometre), Great Britain, annual data, April 2011 to March 2022

Although there was a small increase in electricity consumption and electric vehicle kilometres, the CO$_2$e emissions from electricity fell by 7% to 14 kilotonnes. In comparison, electricity emissions fell by 23% compared with the year April 2019 to March 2020. This reflects the decrease in the electricity conversion factor, which is used to estimate emissions. The conversion factor fell by 9%, due to a significant decrease in coal generation, and an increase in renewable and nuclear generation since the previous year.

There was a larger increase in diesel consumption, which grew by 5% to 161 million litres. This resulted in 443 kilotonnes of CO$_2$e emissions. Compared with two years ago, emissions from diesel decreased by 7% which reflect the change in network traffic since the pandemic.

Due to an increase in electricity charges, Rail Freight Group (RFG) advised in a October 2021 press release some freight operators withdrew their electric fleet and ran diesel trains. Some operators also reported running dual traction locomotives only in diesel mode. In October 2021, one operator reported the price they paid to Network Rail for operating electric services increased by more than 210 per cent between September and October 2021.
Figure 3.3  Emissions from diesel consumption remained substantially higher than from traction electricity for freight trains

Emissions from freight train traction electricity and diesel consumption, (CO$_2$e) Great Britain, annual data, April 2011 to March 2022
4. Transport emissions in context

This section provides sources of other data on transport emissions, to show rail emissions in context. The Department for Business, Energy and Industrial Strategy (BEIS) produces statistics on greenhouse gas emissions. These figures are for a different time period (calendar year 2020), with a different methodology. They cover the United Kingdom, whilst ORR statistics cover Great Britain’s rail network.

Rail made up 1.5% of the UK’s transport CO$_2$e emissions in 2020, but in comparison 2.7% of all passenger kilometres were made using rail. Rail emissions accounted for 0.4% of the UK’s total CO$_2$e emissions in 2020.

Road transport is the largest sector of emissions within transport, with passenger cars making up the majority of this. In 2020, emissions from transport were estimated to be 98.8 MtCO$_2$e (million tonnes of estimated carbon dioxide equivalent emissions). Road transport made up over 90% of this (89.6 MtCO$_2$e).

Figure 4.1 Estimated emissions from passenger cars dropped substantially in 2020 due to the pandemic

Estimated emissions by transport category ((MtCO$_2$e), UK, annual data, 1990 to 2020

Source: Final UK greenhouse gas emissions national statistics: 1990 to 2020 BEIS
In 2020, UK emissions from the seven greenhouse gases covered by the Kyoto Protocol were estimated to be 406 million tonnes carbon dioxide equivalent (MtCO₂e). Greenhouse gases in 2020 were estimated to be 49.7% lower than they were in 1990.

In total, transport makes up 24% of all the UK’s CO₂e emissions. The transport sector has historically been the second largest sector in terms of emissions. However, reductions over time in what was the largest sector (energy supply) mean that since 2016 transport has been the most emitting sector. It remained this in 2020, despite the unusually large fall in emissions.

**Figure 4.2    Proportion of greenhouse gas emissions by sector, UK, 2020**

![Figure 4.2 Proportion of greenhouse gas emissions by sector, UK, 2020](image)

Source: Final UK greenhouse gas emissions national statistics: 1990 to 2020, BEIS

**Traction emissions for rail in context**

A 2020 study commissioned by RSSB and led by Carbon Intelligence developed an estimate of the rail carbon footprint. It estimated that the rail sector was responsible for approximately 9.5 MtCO₂e. It includes emissions as direct result of the sector’s activities, and indirectly though activities in the supply chain. The estimate was for the year April 2019 to March 2020.
The largest source of emissions in the rail industry for this period was embodied carbon. This is defined as the emissions associated with extracting, manufacturing, transporting, installing, maintaining, and disposing of materials and products used in rail infrastructure and other assets. This includes both new manufacturing, and extending the life of existing products. Most of the embodied carbon originated from Network Rail and the ROSCO’s supply chains (rolling stock leasing companies).

The next two largest sources of emissions were estimated to be traction diesel or gas oil, and traction electricity. Non-traction electricity was the fourth largest source of emissions in the rail industry. This covered electricity used in office, depots and stations. The assumption is that stations consume the greatest proportion of non-traction electricity.

**Network Rail environmental data**

Network Rail report their annual energy consumption (electricity, gas and fuel) and the associated carbon emissions. In the year April 2021 to March 2022, Network Rail reported a reduction of 18% in greenhouse gas emissions (excluding traction) against the baseline year April 2018 to March 2019. The current Control Period for Network Rail runs from April 2019 to March 2024.

Network Rail publish the annual carbon and energy use for their managed stations. In the year April 2020 to March 2021, the total emissions were 26,065 kilotonnes from combined electricity and gas consumption. This was 28% lower compared with 36,442 kilotonnes CO$_2$e for the previous year April 2019 to March 2020. This is likely due to reduced activity in stations and changes in rail travel during the pandemic.

**Sixth Carbon Budget**

The UK government has a legally binding Sixth Carbon Budget which aims to reduce emissions by 78% by 2035 compared to 1990 levels, and reach net zero UK carbon emissions by 2050. Net-zero means any emissions would need to be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage. Since 1990, the UK has reduced emissions by 44%.

Figures using April 2012 to March 2013 data showed that each tonne of freight transported by rail reduces carbon emissions by 76% compared to road. ORR rail freight statistics showed there were 5.6 million lorry journeys avoided through transporting freight by rail rather than road in April 2020 to March 2021. This was the lowest number of avoided lorry journeys since the time series began in April 2004, reflecting the lower volumes of freight moved by rail in the year ending March 2021.

Analysis into the value of rail freight showed that there are around £800m in benefits to wider society through removing around 7 million lorry journeys from the road network each
year. This includes £27.9 million in social benefits each year through reduced emissions, noise, infrastructure wear and better safety outcomes.

**Decarbonisation**

Department for Transport (DfT) published their [Transport decarbonisation plan](https://www.gov.uk/government/publications/transport-decarbonisation-plan) in July 2021, which sets out plans to achieve a **net zero emission rail network by 2050**. This will save around 21-22 MtCO$_2$e and achieve up to £1 billion in air quality benefits between 2020 and 2050. This could be achieved by further electrification of the rail network, leading to a removal of diesel passenger trains and investment in new electric locomotives for freight. DfT also published a [Rail Environment Policy statement](https://www.gov.uk/government/publications/rail-environment-policy-statement) in 2021, which set out environmental priorities for the mainline railway.

In 2018, DfT challenged the rail industry to **remove all diesel-only trains from the network by 2040**. The Scottish Government has set a target to decarbonise domestic passenger rail services by 2035. As rail traction accounts for the largest proportion of rail emissions, to achieve net-zero diesel traction will need to reduce. The alternatives to diesel passenger trains are battery, electric or hydrogen rolling stock.

Transport Scotland have published a [Rail Services Decarbonisation Action Plan](https://www.gov.uk/government/publications/rail-services-decarbonisation-action-plan). This looks at how to decarbonise passenger rail services and continue to reduce carbon emissions. Scotland have emissions reduction targets set in law to reach **net-zero greenhouse gas emissions by 2045**. It is estimated that 76% of passenger and 45% of freight journeys in Scotland run on electric traction.

In 2020, Network Rail published a [Traction Decarbonisation Network Strategy](https://www.gov.uk/government/publications/traction-decarbonisation-network-strategy), which aims to provide recommendations for Government ‘to inform decisions required to remove diesel trains from the network, achieve net-zero legislative targets, and identify the capital works programme required to achieve this’.

Rail Safety and Standards Board (RSSB) have published as part of the Rail Industry Decarbonisation Taskforce a [Final Report for the Minister for Rail](https://www.gov.uk/government/publications/final-report-for-the-minister-for-rail). This looks at the challenge set by DfT to remove diesel only trains from service by 2040, and produces a vision for how the rail industry will decarbonise.
5. Annexes

Annex 1 – Definitions

- **Traction energy** refers to rolling stock (railway vehicles, including both powered and unpowered vehicles, such as locomotives, carriages and freight wagons) on the rail network, and the energy used to power passenger and freight train movements. Non-traction emissions are excluded, such as heating and lighting in buildings, depots and stations.

- **Diesel** refers to gas, oil, diesel or biofuel volume (in litres) consumed in train movements.

- **Electricity** measures the amount of electricity consumed (in kWh) in train movements. **Kilowatt hour (kWh)** is a unit of energy by calculating electricity usage - one kWh is the electric energy converted by a one kW appliance used for one hour.

- **Passenger kilometres** are calculated by multiplying the number of passenger journeys on a particular flow by the number of corresponding train kilometres between stations.

- **Net tonne kilometres** measures the amount of freight moved on the railway network, taking into account the weight of the load and distance carried.

- **Vehicle kilometres** measures the distance travelled by an individual vehicle (locomotives, carriages, wagons, etc.) on the rail network. It includes vehicle kilometres travelled on Network Rail infrastructure and other railways such as HS1. For example a ten vehicle train travelling one kilometre is measured as one train kilometre, but ten vehicle kilometres.

- **Greenhouse gases** are gases in the Earth’s atmosphere which trap heat. They allow sunlight to pass through the atmosphere, but prevent heat from sunlight leaving the atmosphere. This creates a ‘greenhouse effect’, where the Sun's energy is trapped, which causes the Earth and in particular the oceans, to warm, the higher the amounts of greenhouse gases in the atmosphere, the warmer the Earth becomes. There are seven greenhouse gases covered under the Kyoto Protocol: carbon dioxide (CO2), methane (NH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3).

Further information on each of these measures and other definitions can be found in the quality and methodology report on the Rail Emissions page.
Annex 2 – Quality and methodology

Data sources
Energy consumption data has been collected directly from train operators:

- Franchised passenger operators
- Non-franchised (open access) passenger operators
- Freight operators
- Eurostar services (UK side).

Passenger kilometre data is sourced from LENNON (Latest Earnings Networked Nationally Over Night) ticketing and revenue system and supplemented with data from train operators who have passenger journeys/kilometres recorded outside of LENNON. Data was included for Lumo, who began running passenger services on 25 October 2021.

The net tonne kilometres data and vehicle kilometre data, used for the normalised measures is sourced from Network Rail.

Vehicle kilometre data are sourced from the Track Access Billing System (TABS), which is used to bill train operators. As well as Network Rail infrastructure, it includes vehicle kilometres travelled on HS1, Core Valley Lines, London Underground, and the East London Line. Vehicle kilometres for bimodal trains are either classified as electric or diesel, depending on whether the train ran in diesel or electric mode.

Estimates for missing data
Operators provided either actual diesel and electricity traction consumption figures, or estimated figures.

For the year ending April 2022 the following were estimated by ORR due to operators not providing data:

- Energy consumption from four freight operators. However, more than 99.5% of freight tonne kilometres are covered by the five largest freight operators who provided data.

- All 25 passenger train operators provided actual or estimated energy consumption data, so no estimates from ORR were needed.
Methodology

Energy consumption data is converted into CO₂e using standard conversion factors from the Department for Business, Energy and Industry Strategy (BEIS). The emission conversion factors allow activity data (for example, litres of fuel used or kWh consumed) to be converted into kilograms of CO₂e.

Revisions

There have been no revisions to historic data in this release. Details of previous 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 quality and methodology report on the Rail Emissions page.

How these statistics can and cannot be used

- Monitoring and comparing electricity and diesel traction consumption by passenger and freight trains over time
- Monitoring estimated CO₂e emissions from traction energy by passenger and freight trains over time
- Monitoring normalised CO₂e emissions for passenger and freight trains over time
- Comparing emissions for a specific train type or route (refer to DfT journey emission comparisons data)
- Comparing emissions for a specific passenger or freight operator
- Identifying emissions for heritage or other non-mainline operators
- Calculating emissions for non-traction energy such as stations, buildings or depots
- Identifying expenditure on diesel fuel for passenger operators (refer to rail industry finance)
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 Rail Emissions page.

- Estimates of normalised passenger carbon dioxide equivalent emissions – Table 6100
- Estimates of passenger energy consumption and carbon dioxide equivalent emissions – Table 6105
- Estimates of normalised freight carbon dioxide equivalent emissions – Table 6110
- Estimates of freight energy consumption and carbon dioxide equivalent emissions – Table 6115

Passenger usage data is published on the Passenger rail usage page on the data portal. This includes the number of passenger journeys, passenger kilometres by operator and train kilometres by operator.

Passenger performance data is published on the Passenger rail performance page on the data portal. This includes the number of trains planned every quarter.

Freight usage data is published on the Freight rail usage and performance page on the data portal. This includes the number of annual freight trains ran, freight moved by commodity and freight train kilometres by operator.

The Rail infrastructure and assets page on the data portal contains information on track and route length, including the proportion of the rail network which is electrified.

The new data for electric and diesel vehicle kilometre data is expected to be published at an operator level in autumn 2022.

Environmental statistics

The Department for Business, Energy & Industrial Strategy (BEIS) publish estimates of UK territorial greenhouse gas emissions.

The Department for Environmental, Food & Rural Affairs (Defra) publish data on emissions of air pollutants in the UK. This includes data for transport and railways.

The National Atmospheric Emissions Inventory (NAEI) publish the Greenhouse Gas Inventory. It covers the UK’s greenhouse gas emission estimates since 1990, broken down
by industry. Rail data is included in the inventory, split into emissions from coal, freight
diesel, intercity diesel and regional diesel (gas oil). There is also an interactive map which
shows CO\textsubscript{2}e emissions by local authority with an option to filter for emissions from diesel
railways.

The Office for National Statistics publish UK greenhouse gases and total emissions by
industry, This covers the period 1990 to 2020. This data is used in UK Environmental
Accounts, which measures the impact of economic activity on the environment.

There is a list on GOV.UK of resources relating to historical UK greenhouse gas
emissions.

**European comparisons**

The United Nations Framework Convention on Climate Change (UNFCCC) publishes
national inventory submissions for greenhouse gas emissions.

The European Environment Agency (EEA) publishes data on greenhouse gas emissions
for transport from the EU. Railway emissions, (which only include emissions from diesel
trains) have halved since 1990, but they constitute a small proportion of overall transport
emissions.
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, 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 Person’s Railcards (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.

The majority of these statistical releases were assessed in 2012 and also 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 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.