National Rail notes and definitions

National Rail/London Underground passenger traffic: Table RAI0101

The figures shown for national rail passenger traffic during 1919 and 1923 include all journeys on those ‘London Railways’ subsequently taken over by the London Passenger Transport Board in 1933. Additionally, in 1919 a journey using the services of more than one company was reported by each of them, with consequent duplication in the figures. The figures for journeys on the London Underground from 1948 include those originating on the former British Railways network (approximately 70 million journeys in 1948), and on those lines transferred to the London Transport Passenger Executive on 1 January 1948 (estimated at 62 million journeys in 1947).

Electrified route: Pre-1947 figures refer to track length, not route length, and include electrified sidings. In 1947, there were 3,370 electrified track kilometres.

National Railways passenger journeys and kilometres: Figures from 1986/87 to 2002/03 were calculated from CAPRI (Computer Analysis of Passenger Revenue Information), the rail industry's former central ticketing system. These were based on tickets issued through the All Purpose Ticket Issuing System (APTIS) and are not comparable with earlier years. The rail series for passenger data changes after privatisation in 1994, with possible double counting of journeys. Post-privatisation, a journey involving a change of train would be classed as two journeys. This contrasts with results published prior to privatisation when a through-ticketed journey was counted only once, irrespective of the number of changes made.

There is some underestimation of passenger journeys and kilometres in 1997/98 and 1998/99. This is because CAPRI did not capture the passenger kilometres of certain ticket types, such as operator specific tickets and Passenger Transport Executive (PTE) multi-modal tickets. The figures were reviewed and revised by the Strategic Rail Authority (SRA) to include best estimates for non-CAPRI data. This exercise was backdated to the start of 1999/00.

Figures from 2003/04 are based on the rail industry's current central ticketing system, LENNON (Latest Earnings Nationally Networked Over Night), which replaced CAPRI. LENNON holds information on the vast majority of national rail tickets purchased in Great Britain and is used to allocate the revenue from ticket sales between train operating companies. Oyster pay as you go (PAYG) journeys were included within LENNON from January 2010. Journey growth from the final quarter of 2009/10 may be partially driven by PAYG where people have switched from travelcards to point to point travel.

London Underground passenger kilometres: From 1965, passenger kilometres are those actually travelled. Prior to 1965, a different method of estimation was used, leading to slight overestimates of the order of 0.1 billion passenger kilometres per year.

National Rail passenger revenue, passenger traffic and timetabled train kilometres: Tables RAI0102 and RAI0103

Passenger revenue: Passenger revenue includes all ticket revenue and miscellaneous charges associated with passenger travel on national railways, e.g. car parking charges. For journeys involving some travel on London Transport, receipts have been apportioned appropriately. Passenger revenue does not include government support or grants.

Passenger kilometres: Estimates of passenger kilometres are made from LENNON. To record travel on season tickets appropriate factors are assumed for the number of journeys per season ticket.

For both the revenue and the passenger kilometres series, new methodologies were applied in 2003/04 and in 2007/08 to improve the categorisation of ticket type. Further details can be found in the National Rail Trends Yearbook, published by ORR:

http://www.rail-reg.gov.uk/server/show/nav.2026

Timetabled train kilometres: This shows the number of kilometres each train operating company would achieve according to the winter and summer train timetable if they were operating at full capacity.

For this series a new methodology was used from 2002/03 quarter 2. Previously timetabled train kilometres were published using data sourced from DfT. However, ORR has revised the methodology behind these data, and is now using more comprehensive data supplied by the Association of Train Operating Companies (ATOC) to generate these statistics. These data include non-franchised TOC information. Further details can be found on ORR's National Rail Trends Portal (http://dataportal.orr.gov.uk/).

Route and station/depots open to traffic: Table RAI0104

The length of route open for rail traffic is that managed by Network Rail (formerly Railtrack). It does not include track managed by private companies or Passenger Transport Executive services operating on separately managed tracks.

Please note that route open is not the same as track open. For example, for a double track section of line, the figure for track will be double the figure for route open.

The break in the route open series between 2003/04 and 2004/05 is due to a change in the methodology for collection of the route length. Up until 2003/04 the data were collected on a semi-manual basis from various systems. From 2004-05 the principal track engineers' database, GEOGIS, has been used. The apparent drop from 2004/05 to 2005/06 does not reflect an actual reduction in route kilometres open for traffic but is due to improvements in data collection and data

quality that resulted in a restatement of route length. Data from 2007/08 are not consistent with earlier years as a new methodology has been introduced because of revisions to route classification data.

Public Performance Measure: Table RAI0105

Public Performance Measure (PPM) was introduced in 2000 by the then Shadow Strategic Rail Authority, replacing the Passengers' Charter as the main means of measuring passenger train performance. Unlike the Charter measure that only covered particular services, PPM covers all scheduled services, seven days a week, and combines the previously individual punctuality and reliability results into a single performance measure. PPM is measured against the *planned* timetable, which makes allowance for specific delays (e.g. engineering works) and so may differ from the previously published timetable. PPM is therefore the percentage of trains ‘on time’ compared to the total number of trains planned.

A train is defined as on time if it arrives within five minutes (i.e. four minutes 59 seconds or less) of the planned destination arrival time for London and South East and regional operators; or ten minutes (i.e. nine minutes 59 seconds or less) for long-distance operators.

When a train fails to run its entire planned route, calling at all timetabled stations, it will either be counted as cancelled (if it runs less than half its planned mileage) or will be added to the trains in the ‘20 minutes or more’ lateness band.

From 2006/07, the rail industry has re-classified TransPennine Express (TPE) to the long distance sector for performance purposes. Hence, TPE services are now considered 'on time' if they arrive within ten minutes of the scheduled arrival time (not within 5 minutes as was the case up to 2005/06).

Average age of national rail rolling stock: Table RAI0106

All rail vehicles (excluding locomotives) leased from rolling stock leasing companies (ROSCOs) by train operators that have a franchise agreement with DfT are included in the calculations of average age.

The age of each rail vehicle is the time between the date of entering into service and the end of each quarter; e.g. a vehicle which entered service in January 2000 would be, at the end of 2001/02 Q1 (30 June 2001), 1.5 years old. The date of entry into service is deemed to be the first day of the quarter in which the rail vehicle came into service; e.g. all rail vehicles which entered service between 1 April 2001 and 30 June 2001 are given a service entry date of 1 April.

Where the date of entry into service is not available (essentially for rail vehicles introduced prior to privatisation) the date used is either:

- 1 January in the year of manufacture of the relevant class of rail vehicle; or
- the midpoint of the period over which the relevant class of rail vehicle was manufactured, e.g. if a class of rail vehicle was manufactured over the time frame March 1972 to March 1976 then the midpoint would be March 1974.

A vehicle drops out of the calculations when its lease either expires or is terminated.

The average age is calculated by adding up the individual ages and dividing by the number of rail vehicles in service. The refurbishment or other improvement of a rail vehicle is not taken into account in calculating average age.

There is a series break for the all operators average age between 2006/07 and 2007/08. This is because it was found that the average age was being calculated incorrectly, as some long-distance fleet data were being omitted. This has now been rectified back to 2007/08, but it has not been possible to calculate an accurate all operators average age prior to 2007/08 due to electronic records not being available.

Passengers in excess of capacity: Table RAI0107

Passengers in excess of capacity (PiXC) is the difference between the planned capacity of each national rail service arriving in London against the actual number of passengers (excluding first class) on the service at its most crowded point on the journey.

PiXC applies to all London and South East operators' weekday train services arriving at a London terminus during the 3-hour AM peak (07:00 and 09:59), and those departing during the 3-hour PM peak (16:00 and 18:59). The overall PiXC is derived by combining both peaks.

The PiXC measure considers the planned standard class capacity of each service arriving at or departing from London, and the actual number of standard class passengers on the service at the point where the passenger load is highest. PiXC is the number of standard class passengers that exceed the planned standard class capacity for the service, so is the difference between the two if the number of passengers on the service is greater than the capacity, or zero if the number of passengers is within the capacity.

The standard class capacity is based on the booked formation of the service. It includes the number of standard class seats on the train and may include an allowance for standing room. No allowance for standing is made when a service has no stops for more than 20 minutes before (AM) or after (PM) the point where the passenger load is highest, but it is allowed when there is a stop within 20 minutes. The allowance for standing varies with the type of rolling stock but, for modern sliding door stock, it is typically approximately 35 per cent of the number of seats.

The PiXC values stated in the table are the total PiXC on all peak services expressed as a

percentage of the total number of standard class passengers on all peak services provided by that train operator.

Channel Tunnel: Table RAI0108

The Channel Tunnel opened for freight traffic in June 1994 and for passenger services in November of that year. Passenger shuttle services opened in December. Four different types of service operate through the Channel Tunnel, as follows:

- Freight shuttles - carrying road freight vehicles between Folkestone and Calais.
- Tourist shuttles - carrying passenger vehicles between Folkestone and Calais.
- Freight trains - through freight trains between Great Britain and Europe.
- Eurostar trains - carrying passengers between London, France and Belgium.

Commercial traffic is fare-paying traffic using the tunnel. Non-commercial traffic is non-fare-paying traffic (e.g. staff and authorised agents).

These notes and definitions relate to the detailed statistics on national rail that can be found on the rail tables web page.