Transport Statistics Great Britain: 2012

Notes and Definitions: Public Transport

This section provides notes and definitions for the public transport section of Transport Statistics Great Britain published in December 2012.

Notes and Definitions Include:

- Information on sources
- Information on data quality.
- Definitions.
- General information for the tables including links to background information.

National Rail

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 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.

Figures from 2003/04 are based on the rail industry's central ticketing system, LENNON. 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.

There is some underestimation of passenger journeys and kilometres in 1997/98 and 1998/99. This is because LENNON 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-LENNON data. This exercise was backdated to the start of 1999/00. 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 RAI0301 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 about the methodologies used to calculate revenue and passenger kilometres can be found on the Office of Rail Regulation (ORR) website:

http://www.rail-reg.gov.uk/server/show/nav.1527

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 train operators. Further details can be found on the ORR website (http://www.rail-reg.gov.uk/server/show/nav.1527).

National Rail route and stations open to traffic: Table RAI0104

The length of route open for rail traffic is that managed by Network Rail. 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 RAI0210

This table shows passengers in excess of capacity (PiXC) on 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.

PiXC is a measure of overcrowding. The PiXC measure considers the planned standard class capacity of each service 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 passenger loads for each service are based on passenger counts carried out by train operators on weekdays during school term time in the autumn period each year.

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 at their highest load points.

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).

Government Support to the Rail Industry: Table RAI0302

Government support to the rail industry chiefly consists of DfT support grants paid to Network Rail and Train Operating Companies, and PTE Special Grants. Rail freight grants are also paid by Government to encourage the movement of freight by rail.

Prior to 1994-95, Government support to the rail industry comprised grants to British Rail and the Passenger Transport Executives (PTEs), and borrowing by British Rail from the National Loans Fund. Grants to British Rail consisted of Public Service Obligation (PSO) Grant and Level 1 Crossing Grant.

The privatisation of the rail industry in April 1994 led to changes in the basis of government funding. On 1 April 1994, PSO grants were replaced by Office of Passenger Rail Franchising (OPRAF) support and grants to British Rail and, from the point of franchise, to private sector train operating companies. In 2001 OPRAF support was replaced with Strategic Rail Authority support, which in 2005 was replaced with grants made by the Department for Transport (DfT), the Welsh Assembly Government and Transport Scotland.

Since 1994-95 Central Government grants have involved franchise payments to train operators and performance receipts. Franchise payments are payments to or from train operators contracted in their franchise agreements. Performance receipts are payments that vary depending on the financial performance of the train operator, and can result in payments from an operator to the Government as well as from Government to the operator. Negative values show where the Government was in receipt of payments. From 2010-11, these figures also include contract payments by the Department for Transport to Merseytravel PTE and Transport for London which are made under funding arrangements for devolved operations.

PTE grants are currently paid to the five Passenger Transport Executives and Transport for Greater Manchester. These figures include grants made to PTEs specifically for rail, so will not include any spending on rail made by PTEs from general grants. All grants to PTEs are currently made by the Department for Transport. Between 1995-96 and 2005-06 PTE rail funding also included loan repayments under Deeds of Assumption (DoA). These were payments to the PTEs relating to their past capital investment in the railway. They were made by British Rail and DoA Ltd until 2001, when the Strategic Rail Authority took over responsibility for the payments until they were paid off.

Since the creation of Network Rail in 2001 to replace Railtrack, Network Grant has been paid to Network Rail. Prior to this, Railtrack was funded by network access charges paid by train operators. These 'Direct rail support' figures also include payments to London and Continental Railways during the construction of the High Speed 1 route. In 2010-11 the direct rail support figure is net of a £100m rebate that was received from Network Rail during the year.

The year by year profile of Government support to the rail industry was affected by the decision in the Access Charges Review 2003 to reprofile Network Rail's income. This led to Government support being lower than it otherwise would have been in 2004-05 and 2005-06, with the shortfall being made up in later years.

Private investment in the railway industry: Table RAI0303

The data for this table are collected by the Office for National Statistics (ONS) every quarter on behalf of the Office of Rail Regulation (ORR). ORR select up to 40 companies to take part in the survey every quarter.

The survey asks for investment in the following categories:

- track and signalling including new routes and new electrification
- rolling stock including eligible refurbishment work;
- stations including retail outlet buildings; and
- all other expenditure associated with the rail business, such as non-rail vehicles and business related costs such as IT and web related costs.

Negative numbers can occur due to a company's disposal of rail assets.

Underground Systems

London Underground: Table LRT9901

Data obtained from the London Underground Directors Report and Accounts each year up to 2002/03. Responsibility for the Underground transferred to Transport for London in July 2003. Transport for London's (TfL) Annual Report provides further detail.

Traffic receipts data are provided by TfL in 13 four week periods per year. These include revenue from car parking and penalty fares. Season ticket journeys are those estimated to have been made in each year, irrespective of when the ticket was sold.

Glasgow Underground: Table LRT9902

Data is obtained from the system operator [Strathclyde Partnership for Transport] each year using the Light Rail and Tram questionnaire set out in the next section.

Light Rail and Tram Systems

The Light Rail and Tram annual statistical tables are compiled from responses to the Light Rail and Tram Survey. A blank questionnaire is provided in the Light Rail and Tram Technical Information section and can be accessed from the following link. (https://www.gov.uk/government/organisations/department-for-transport/series/light-rail-and-tram-statistics)

The survey covers urban systems which are primarily surface running. Questionnaires are sent to the following systems:

- Docklands Light Railway
- Croydon Tramlink
- Nottingham Express Transit
- Midland Metro
- Sheffield Supertram
- Tyne and Wear Metro
- Manchester Metrolink
- Blackpool Tramway

In addition to the London and Glasgow underground networks, the above eight systems are those which sit outside of the UK National Rail network but carry a large number of passengers on a daily basis in an urban setting. However, this should not be considered an exhaustive list of the light rail systems currently operating in the UK. There are many other such systems, including funiculars, airport transit systems, heritage and tourist railways, which are not covered by these statistics.

The cooperation of the systems is greatly appreciated and the response rate has consistently been 100%, which implies robust statistics are being produced as no imputation (the substitution of

some value for a missing data point) is required.

Definitions

For the purposes of published DfT statistics:

"Light Rail" covers:	Docklands Light Railway, Croydon Tramlink, Nottingham Express Transit, Midland Metro, Sheffield Supertram, Tyne and Wear Metro and Manchester Metrolink.
"Tram" covers:	Blackpool Tramway
"Underground" covers:	London Underground, Glasgow Subway

Further details on the Light Rail and Tram systems can be found in the Notes and Definitions in the Light Rail and Tram Technical Documentation section, accessible from the following webpage (https://www.gov.uk/government/organisations/department-for-transport/series/light-rail-and-tram-statistics)

Buses and Concessionary Travel

General comments

Tables for the bus and coach industry refer to the activities of all holders of Public Service Vehicle (PSV) operators' licences. These vehicles are generally classified in the Bus Tax Class. An operator wishing to run bus or coach services is normally required to possess a PSV licence. However, certain vehicles and types of service are exempt from licensing and are excluded from the tables, such as community buses and local services operated by taxis. Taxis are generally classified in the Private Light Goods tax class, with private cars, so they are excluded from the PSV tables. Most of the information in these tables, which mainly refer to local bus services, is derived from annual returns made to DfT by a sample of holders of PSV operators' licences.

A local bus service is a stopping service available to the general public, where the route is registered with the Traffic Commissioner, which is eligible for Bus Service Operators Grant.

Bus and coach services which comprise contract, private hire, tours, excursions and express journeys are generally classified as "non-local" or "other" work. Some services, such as long distance coach services, might contain a mixture of local work and non-local express work.

Some important changes have been made to the legal framework under which the industry operates.

Outside London:

      • from 1 April 1986, the Passenger Transport Authorities in metropolitan areas were

subjected to precept control;

• local bus services outside London were deregulated on 26 October 1986, introducing on-the-road competition;

• widespread privatisation of public sector bus operations took place from 1986. There are fewer bus operators in the public sector.

Within London:

• responsibility for London (Regional) Transport transferred from the former Greater London Council to the Secretary of State for Transport from 29 June 1984. On 1 April 1985, a separate operating subsidiary, London Buses Ltd, was established;

• progressive tendering of local bus services in London was introduced in July 1985;

• the former operating divisions of London Buses Ltd were privatised by the end of 1994;

• from July 2000, Transport for London (TfL) was established as a successor body to London Transport, with strategic control of local buses through the Greater London Authority (GLA) under an elected Mayor of London.

Outside London, after bus deregulation in 1986, general subsidy was no longer feasible as most services were provided on a purely commercial basis, with on-the-road competition for routes. Public transport support was restricted to unprofitable but socially necessary services, the operation of which was generally put out to tender. In London, nearly all local bus services are operated by the private sector under contract to TfL. Bus routes, once awarded to a contractor after a tendering process, are then protected from on-the-road competition.

More detailed notes and definitions relating to the Department's bus statistics and concessionary travel can be found on the [DfT bus statistics web page](#), alongside a copy of the main PSV survey questionnaire.

Local passenger journeys by area: Table BUS0103

These are collected through DfT's annual sample PSV survey of operators and, for London, from TfL. They are a count of boardings of each vehicle, so a trip which requires a change from one bus to another would show two boardings. TfL obtains data on boardings from on-bus surveys and smartcard data.

Bus vehicle miles: Table BUS0203 and BUS0205

Service miles operated are measured by DfT's annual sample Public Service Vehicle (PSV) survey of operators, and, for the bus contractors in London, by TfL. The majority of local bus service miles are run on a commercial basis.

Local bus fares indices: Table BUS0405

Information required for the calculation of the index of local bus fares is obtained from a DfT survey of a panel of bus operators, who account for about 85 per cent of receipts from passengers on local bus services. Operators supply information about the size of each fare change, each quarter. Indices for groups of operators in different areas of Great Britain are obtained by averaging changes, using weights based on receipts from passengers from DfT's PSV annual survey (receipts used for the index exclude concessionary fare reimbursement and subsidies from local authorities and central government). The DfT local bus fares index is a small part of the Retail Prices Index.

The index is intended to measure the change in the average cost to the fare paying passenger. In practice as cash-less transactions become more common (e.g. pre-paid travel passes) the index can only give a broad guide to fare changes. Also, fare changes outside London are frequent, so adjustments must be made to the index each quarter. Bus fare changes in London usually take place once a year, in January.

Operating revenue: Table BUS0501

Operating revenue includes passenger fare receipts, public transport support, concessionary travel reimbursement and Bus Service Operators Grant payments received.

Local authorities and passenger transport authorities run concessionary fare schemes for groups such as the elderly, the disabled and children. From April 2006, schemes in England offered, as a minimum, free off-peak bus travel to elderly and disabled residents in their local area. From April 2008, the scheme was extended across England to allow elderly and disabled residents to travel anywhere in England, in line with the national schemes already in place in Scotland and Wales. Concessionary fare reimbursement should be seen as an incentive to the passenger to travel more. The operators should not lose, or gain, revenue through such schemes.

Estimated net support for local bus services Table BUS0502

Please carefully read the footnotes to this table.

Bus and coach stock: Table BUS0601

These figures are derived from data collected through the annual PSV survey, for local PSV operators.

Concessionary Travel journeys and journeys per pass Table BUS0821

These figures are derived from data provided by Travel Concession Authorities (TCAs) in England as part of the Department's annual Concessionary Travel survey. TCAs are responsible for administering concessionary travel schemes at local level.

A statutory bus concession for older and disabled people has been in place since 2001. This initially provided for a minimum half-fare concession for older and disabled people travelling on buses within their local authority of residence, extended to a full fare (i.e. free) concession in 2006. In 2008, the concession was extended further to cover free local bus travel between 0930 and 2300 to older and disabled people anywhere in England. This statutory concession is referred to as the English National Concessionary Travel Scheme (ENCTS).

The journeys figures presented in this table refer to all concessionary journeys by older and disabled pass holders, including discretionary journeys made under locally available concessions, such as pre-0930 or post-2300 journeys.

Taxis

Taxis (or 'hackney carriages') are available for immediate hire and can be hailed in the street (known as 'plying for hire'). Taxis can also accept pre-bookings. For taxis there are two types of licence, a vehicle licence and a driver's licence. The vehicle licence is issued to the owner of the taxi.

Private Hire Vehicles (PHVs) (sometimes known as 'minicabs') must be pre-booked and cannot use taxi ranks. It is illegal for PHVs to ply for hire. For PHVs there are three types of licence: a vehicle licence, a driver's licence and an operator's licence. The operator accepts bookings and is the person with whom the customer makes a contract for carriage; services can be provided either by licensed PHV owners who are also licensed drivers or by licensed drivers who rent a licensed vehicle.

These statistics are collected through a survey of the 316 licensing authorities in England and Wales (lower tier local authorities, and TfL for London).

> These notes and definitions relate to the detailed statistics (tables and charts) on "public transport" that can be found on the Transport Statistics Great Britain public transport statistics web page.