## Annual Bus Statistics: 2010/11



## **Notes and Definitions**

This document provides information about DfT bus statistics.

Bus statistics are published annually by the Department for Transport, and include figures relating to bus passenger journeys, vehicle miles travelled, revenue and costs, fare levels, Government support, vehicles owned by PSV operators and number of staff employed. In addition to the annual publication, estimates of patronage are available on a quarterly basis.

#### These Notes and Definitions include:

- 1. Introduction to the statistics
- 2. Information on data sources and methods
- 3. Information relating to the published tables including key definitions
- 4. Sources of further information related to but not covered by these statistics
- 5. Background and contextual information

**Section 1** presents a brief overview of the statistics, covering the following questions:

- What do these statistics cover?
- Why are the statistics collected and how are they used?
- What are the sources of data used to compile the statistics?
- What methods are used to compile the published information?
- How reliable are the statistics? What should be considered when using them?
- How often are these statistics updated?
- What other information is available on buses and bus travel?

**Section 2** provides further general information about the main data sources used to compile the statistics, including the methods used to produce figures for publication and data quality issues.

**Section 3** presents information relevant to specific aspects of the published figures, including definitions of key terms and specific issues relevant to the interpretation of individual tables or sections.

**Section 4** provides details of further sources of statistics on buses and bus travel which are not covered by these statistics

Section 5 provides links to relevant contextual information about the bus industry and bus policy

The annexes contain more detailed information as referenced in the appropriate section above.

#### **Acknowledgement**

DfT is grateful to all data providers, in particular bus operators, for providing the data which is essential in producing these statistics. We appreciate the time and effort taken in returning the data and answering queries relating to these returns.

## 1. Introduction to DfT bus statistics

#### What do these statistics cover?

DfT bus statistics provide information on a range of indicators covering local bus services and PSV operators in Great Britain including bus passenger journeys, vehicle miles travelled, revenue and costs, fare levels, Government support, vehicles owned by PSV operators and number of staff employed.

These statistics refer to the activities of holders of *Public Service Vehicle (PSV) operators' licences*. 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 figures, such as community buses and local services operated by taxis.

Most of the information in the tables relates to *local bus services*. 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.

#### Why are the statistics collected and how are they used?

These statistics represent the most comprehensive single source of official data on the bus industry in Great Britain, and provide data which is used in monitoring trends, developing policy and providing accountability for the subsidy provided to the industry at a high level. Many of the figures have been collected and compiled in a broadly similar way since the deregulation of the bus industry and therefore allow trends over time to be measured. The underlying data are used as inputs to the Department's National Bus Model and more generally in econometric analysis.

Currently two of the DfT Business Plan indicators are based on data included as part of these statistics. These cover levels of subsidy for the bus industry per passenger journey, and measures of punctuality at local authority level. Data on bus patronage collected for these statistics also forms part of the Department's quarterly data summary which allows monitoring of the Department's performance. The DfT local bus fares index is a small part of the Retail Prices Index.

Outside central government, these statistics are typically used to provide background context to studies of the bus industry. Recently this has included investigations into the local bus market conducted by the Competition Commission and the Transport Select Committee. The data have also been used in a number of academic research studies.

These statistics provide data which allows bus operators, and local authorities to compare their own data with the wider sector, although evidence suggests this is a less common use.

#### What are the main sources of data used to compile the statistics?

Most of the information in these tables is derived from annual returns made to DfT by a sample of holders of PSV operators' licences ('the PSV survey'). This survey provides information on passenger journeys, vehicle miles, passenger receipts and operating costs.

Separate, smaller, surveys managed by DfT collect information about fare changes, service

reliability and quarterly patronage from the larger bus operators and on bus punctuality from local authorities.

Further information is taken from a range of other sources, including Transport for London (who provide key data for London) and local government finance returns.

Section 2 contains further information on the main data sources used.

#### What methods are used to compile the published information?

The majority of figures are based largely on data provided directly by operators, aggregated to national and sub-national level. Where such figures are not available (either because an operator was not included in a survey, or was selected but did not provide a return) figures for that operator are imputed using previous years figures where possible, applying other data if available or based on the number of licence discs held.

The list of operators for which figures are imputed is based on information held by VOSA on licensed operators, with local operators identified from the Department's records of those claiming Bus Service Operators Grant (BSOG) for local services or from previous year's returns. Further information on methods used to compile these statistics, including more detail on imputation methods, is given in sections 2 and 3.

### How reliable are the statistics? What should be considered when using them?

Many of the statistics included in this publication have been collected on a broadly comparable basis from bus operators for many years. For the key indicators (passenger journeys and vehicle miles operated) the data provided covers around or above 90 per cent of the total figure. Comparison with other sources suggests that, at aggregate (national) level, the statistics are likely to provide a robust measure of both levels and trends.

However, figures representing smaller groups of operators and year on year changes should be treated with caution as these are more susceptible to measurement errors (for example an inaccurate return by an operator) which are more likely to even out at the Great Britain level or over time. Regional, and particularly local authority, figures should be interpreted with caution. Here, comparison with other sources, for example data collected by local authorities or Passenger Transport Executives (PTEs) often reveals differences for individual areas.

Because the local bus sector is dominated by relatively few large operators, most of whom provide data, sampling errors (that is random fluctuations due to selecting only a sample of operators) are very small in relation to other non-sampling errors (for example, inaccurate data provided by operators). More specific issues affecting particular aspects of the data collected are covered in sections 2 and 3 below.

Users should be aware that improvements to the method of imputation used to derive figures not provided by operators, and the fact that imputations for earlier years can on occasion be improved using data for later years, can result in (typically minor) revisions to previously published data although trends are rarely affected substantively. For example, for many of the tables there is a break in the data series from 2004-05 reflecting a significant review of the imputation methodology; figures for old and new methods are shown and this provides an indication of the nature of potential future revisions.

#### How often are these statistics updated?

The majority of the tables in this publication relate to the 2010-11 financial year which ran from 1 April 2010 to 31 March 2011. DfT collected data from operators during the summer for publication in October 2011, approximately 7 months after the end of the period to which the figures relate. Nearly all the tables contain annual data, and will be updated on an annual basis with figures for 2011-12 likely to be available during Autumn 2012.

There are several exceptions, particularly table BUS0106 which shows passenger journeys data on a quarterly basis. This table is updated quarterly as part of the Department's separate quarterly bus statistics usually in December (2011 Q3), March (2011 Q4) and June (2012 Q1). Q2 figures are included with the annual publication. Other tables can be updated or revised on a more ad-hoc basis as better information becomes available; updated tables will usually be published alongside the earliest quarterly publication following revision. For example, the tables relating to revenue and support include figures initially estimated based on budgets for the latest year published, but are routinely updated when out-turn expenditure data becomes available from local government returns.

#### What other information is available relating to buses and bus travel?

Although these statistics arguably provide the most comprehensive single source of national and sub-national level data about local bus operations in Great Britain, they are complemented by data on buses and bus travel available from a range of other sources.

In particular, the *National Travel Survey* provides data on travel by bus including information on the characteristics of bus users (for example by age, gender, car ownership) and take-up of concessionary travel. The NTS also offers an alternative measure of bus patronage. Further information can be found here: <a href="http://www.dft.gov.uk/statistics/blog/series/national-travel-survey/">http://www.dft.gov.uk/statistics/blog/series/national-travel-survey/</a>

Passenger Focus represents bus passenger interests, and conducts research related to buses including a survey of passenger satisfaction (which has superseded the previous DfT Bus Passenger Satisfaction Survey, no longer collected). For further details, see: http://www.passengerfocus.org.uk/bus/research/

The Department commissions ad-hoc surveys of attitudes to bus use by both users and non users. The latest such survey was carried out in early 2011 and the results are available on the Department's website.

Other sources of data on buses not covered by this publication are outlined in section 4 below, including links to further information.

## 2. Data sources and methods

The published bus statistics use data from a number of different sources. The following provides brief details of these data sources. The majority of the published figures are derived from the Department's main annual survey of over 1,000 PSV operators ('the PSV survey', sometimes known as STATS100). Other sources include:

- Smaller surveys of larger operators on reliability, fares and quarterly passenger journeys
- Information provided by local authorities on bus punctuality based on data that they collect
- Figures from Transport for London (TfL) covering key data for London
- Other data obtained from administrative datasets and non-DfT surveys

### **PSV Operator Survey (STATS100)**

The PSV Survey is an annual survey run by DfT to collect information on the bus and coach industries, and is a legal requirement under the Statistics of Trade Act (1947). It is a source for data on passenger journeys (tables BUS01xx), vehicle miles (tables BUS02xx), passenger miles (tables BUS03xx), operating revenue and costs (tables BUS04xx), vehicles (tables 06xx) and staff (table BUS0701).

#### Sampling

The survey population is licensed PSV operators operating in Great Britain. In 2010-11 VOSA records show there were 8,600 eligible licensed operators. The list of current operators maintained by DfT derived from VOSA records forms the sample frame for the survey. In 2010-11 a sample of 1,600 operators were selected to take part in the PSV survey.

PSV operators provide public services on buses, coaches, minibus and other similar vehicles. In total, around 1,000 operators were operating local bus services (identified through previous survey returns and DfT Bus Service Operators Grant claims database). These operators provide the majority of published data and are therefore over-represented in the sample; 800 of the 1,600 sampled operators were local operators.

A probability proportional to size (PPS) random sampling method was used to select the sample for local and non-local operators separately, based on the number of vehicles they are licensed to run (the number of 'discs') and stratified by local authority. That is, the larger the operator (in terms of number of discs), the more likely they will be included in the sample. However, selection is not entirely random and the following apply:

- Any 'large' operator (having more than 20 licence discs, which would normally equate to 20 vehicles) is automatically included. In 2010-11 this applied to around 566 operators.
- For local operators, any operator required to provide coverage of 90 per cent of mileage run in each local authority area in England was automatically selected (based on data obtained from the National Public Transport Data Repository (NPTDR), operators being ordered largest first). This resulted in approximately a further 26 operators (having 20 discs or fewer) being automatically selected.
- Only 242 operators were selected to receive the questions asking for financial information, of which 200 were large operators.

#### Questionnaire and survey response

Most of the data are collected online through a secure website, though some operators complete a paper return. A copy of the survey questions can be found here:

#### http://assets.dft.gov.uk/statistics/series/buses/psv-survey-questionnaire.pdf

Although all operators are encouraged and reminded to return the survey, greater effort is made to receive data from larger local operators to ensure that resulting estimates are as robust as possible. In 2010-11, full or partial responses were received from 638 local operators (a response rate of 80 per cent; three-quarters of responses were complete giving a full response rate of 60 per cent) and 536 non-local operators (a response rate of 67 per cent, or 50 per cent for complete responses). The overall (full or partial) response rate of 73 per cent compares with an equivalent figure of 61 per cent in 2009-10, 70 per cent in 2008-09 and 72 per cent in 2007-08. Note that some of the original sample of 1,600 were subsequently found to be out of scope (e.g. no longer operating PSV services); these operators have however been included in calculating these response rates.

#### Compilation of figures from survey data (Imputation)

Published figures derived from PSV survey data include imputed figures. Imputation is the process of estimating figures within a survey when they are not available. In the PSV survey imputation is used in three cases: when an operator is not part of the sample; when an operator is part of the sample but does not respond; and when an operator responds to the survey but misses certain questions.

The method used for imputation was reviewed in 2010, prior to publication of the 2009-10 statistics. Although the precise approach varies depending on the figures being imputed, the approach generally uses, in order of availability:

- Data supplied in previous years for the same measure if available. This may be scaled up or down in line with general changes for the same type of operator, calculated from data provided by other operators.
- Alternative data sources for the same measure. For instance vehicle kilometres data are available from BSOG returns and these figures are used when survey data is not available.
- Applying a factor to another response in this year's survey. For example if the respondent has
  completed the total number of journeys but not the total number of vehicle kilometres a factor
  can be applied to the journeys figure to estimate the missing figure.
- Basic information collected on all operators by VOSA, which is their address and the number of discs they hold, typically by applying a scaling factor to the number of licence discs depending on the type of area (urban/rural classification) in which the operator is based.

Following imputation, each operator (in the list derived from VOSA records) has a figure for each question in the survey, either directly measured (i.e. from the survey) or imputed so no grossing up is required. The figures at this level are commercially confidential. They are aggregated to produce the published figures.

The following table shows the percentage of annual estimates accounted for imputation rather than direct measurement for the key measures of passenger journeys and vehicle miles. Figures for measures like the number of vehicles will be higher as these include non-local operators which are under-represented in the PSV Survey.

	Vehicle miles – percentage imputed	Passenger journeys – percentage imputed
2004/05	8	3
2005/06	8	3
2006/07	9	4
2007/08	9	4
2008/09	9	7
2009/10	12	6
2010/11	8	4

#### Data quality issues

The key sources of errors arising in the production of statistics derived from the PSV survey is likely to be the result of inaccurate returns provided by bus operators. DfT attempts to mitigate the impact of such errors through data validation, in particular comparing data provided by the larger operators with previous years, though this is not always possible. Some aspects of the survey are particularly difficult for some operators, usually the smaller ones, to complete and these are covered in section 3 below.

#### **Quarterly Panel Survey**

The quarterly bus panel is a quarterly survey of the 18 largest non-metropolitan operators, Passenger Transport Executives (for the metropolitan areas) and Transport for London which provides quarterly estimates of passenger journeys figures (given in table BUS0106) and the first provisional estimate of the annual figure (for example, the 2010-11 figure can be estimated when data up to Q1 2011 have been collected). Figures provided by operators are aggregated by type of area and seasonally adjusted using the X12 ARIMA software package.

The quarterly panel survey covers over 90 per cent of the journeys made in Great Britain. However, it is not as precise as results from the PSV Survey, which aims to cover more journeys and many smaller operators. Therefore the quarterly panel figures are adjusted to be consistent with the annual figures from the PSV Survey once they become available. Quarterly estimates are therefore subject to future revision.

#### **Bus Fares Panel Survey (STATS30A)**

Information required for the calculation of the index of local bus fares (shown in table BUS0405) is obtained from a DfT survey of a panel of around 80 of the larger bus operators and TfL (who set fares in London), who account for about 85 per cent of receipts from passengers on local bus services. Receipts used for the index exclude concessionary fare reimbursement and subsidies from local authorities and central government. Operators supply information about the size of each fare change, each quarter. Data are collected on a quarterly basis. The response rate is around 85 per cent. The survey questionnaire can be found here:

http://assets.dft.gov.uk/statistics/series/buses/fares-survey-questionnaire.pdf

Annual indices for groups of operators in different areas of Great Britain are obtained by averaging changes, using weights based on receipts from passengers from the DfT PSV annual survey described above.

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. 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.

The bus fares index and the survey used in its derivation have recently been independently reviewed. A copy of the review report and the DfT response to the recommendations made can be found here:

http://assets.dft.gov.uk/statistics/series/buses/bus-fares-review.pdf

## Reliability Panel Survey (STATS105)

Information on bus service provision (table BUS0901) in England is collected through an annual DfT panel survey of around 70 of the largest bus operators (who provide data for England outside London) and TfL (who provide data for London) which in total cover around 60 per cent of annual service miles operated. Information is collected on scheduled service mileage and mileage operator, together with reasons for non-running. A copy of the survey questionnaire can be found here:

http://assets.dft.gov.uk/statistics/series/buses/reliability-survey-questionnaire.pdf

In 2010-11, 52 of the 68 operators selected provided a return, representing a response rate of 76 per cent. Data returns are validated largely through consistency checking and comparison with previous years figures, querying any strange results. Published figures are produced by aggregation of data collected, without imputation or weighting.

#### Other (non-DfT survey) Data Sources

Besides the above DfT surveys of bus operators, the following sources are used to provide information for these statistics:

- Data provided by *Transport for London* covering passenger journeys, vehicle mileage and revenue for London. More detailed information relating to bus travel in London can be found on the TfL website: <a href="http://www.tfl.gov.uk/corporate/about-tfl/publications/1482.aspx">http://www.tfl.gov.uk/corporate/about-tfl/publications/1482.aspx</a>
- Data on public transport support and concessionary travel reimbursement is taken from local
  government finance returns, published (in England) by CLG. The relevant data are collected
  on form RO2. Equivalent figures for Scotland and Wales are also used.
  <a href="http://www.communities.gov.uk/localgovernment/localregional/localgovernmentfinance/statistics/revenueexpenditure/">http://www.communities.gov.uk/localgovernment/localregional/localgovernmentfinance/statistics/revenueexpenditure/</a>
- Data on staff obtained from Office for National Statistics (ONS) datasets including employee
  jobs from the Short Term Employment Survey and average weekly earnings and hours worked
  from the Annual Survey of Hours and Earnings. <a href="http://www.ons.gov.uk/ons/index.html">http://www.ons.gov.uk/ons/index.html</a>
- The National Public Transport Data Repository (NPTDR) holds annual snapshots of public transport route and timetable information (for one week in October) including static data such as bus stop locations and is used to produce tables on bus vehicle trips. Further information is available from www.data.gov.uk/dataset/nptdr or www.nptdr.org.uk

## 3. Notes to tables

### Passenger journeys (tables BUS0101 to BUS0109)

The tables in this section relate to *passenger journeys* on local bus services, which represent a count of the total number of boardings of each vehicle, so a trip which requires a change from one bus to another would be counted as two journeys in these figures. Figures do not include children under 5 years of age.

Data sources. Data are collected through DfT's annual PSV survey of operators and, for London, from TfL who obtain data on boardings from on-bus surveys. Figures outside London include imputation, which in 2010-11 accounts for around 4 per cent of the total. This imputation is based on previous years data, or derived from applying scaling factors to data on vehicle mileage, number of vehicles or number of licence discs in that order.

Data quality issues. The key source of potential measurement error relates to under-recording of journeys by operators. Whilst cash fare passengers are likely to be recorded relatively accurately, previous research has shown that figures relating to ticketless passengers or those with multi-journey tickets are understated. The published figures are based on data provided by operators, including any operator-level adjustments for such under-recording where they are made, with the level of adjustment varying from operator to operator; no further adjustment is applied (in total, in 2010/11 adjustment for under-recording by operators contributed around 100 million journeys to the published total, approximately 2 per cent, though some operators reported having under-recording without making an adjustment so that this is likely to understate the true effect). Any change in operators' approaches to adjusting their figures could also affect year on year comparisons. As the proportion and nature of ticketless journeys changes, users should be aware of the potential impact on the trends shown.

Figures are disaggregated in a number of ways, including breakdowns by country and metropolitan area status (BUS0103), region (BUS0108) and local authority (BUS0109). Operators provide overall figures with a breakdown by local authority area. The latter are used to produce all sub-national figures, aggregated appropriately. Some operators report that the assignment of overall journeys to areas is estimated. This can have noticeable impacts on figures for individual local authorities and regions which should therefore be interpreted with caution, but is likely to have a minimal effect of the figures shown at greater levels of aggregation.

Table BUS0105 shows concessionary passenger journeys. 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. Some authorities offer non-statutory extensions to these schemes. The figures shown in this table relate to journeys by both statutory and non-statutory concessionary travel where operators receive full or partial reimbursement from local authorities, but exclude commercial concessions which may be offered by some operators (for example, free travel for their staff).

Further details of eligibility for concessionary travel and changes to the scheme which may affect patterns shown are given in Annex B. For example, the age of eligibility for the statutory national scheme changed in April 2010.

*Table BUS0106* shows quarterly passenger journeys, derived from the DfT quarterly panel survey. These figures are scaled to the latest available annual totals and so are subject to revision.

Table BUS0108 shows passenger journeys by region. As a broad indication, at the regional level year on year changes of 5-10 million journeys (or less) should be interpreted with caution as they can often arise from a change in recording practice by a single large operator.

Table BUS0109 shows passenger journeys by local authority. These figures have been derived from the PSV survey for the first time in 2010-11 and should be treated as provisional. Previously, data were collated from local authorities on a different basis; these figures are not directly comparable with those produced using the PSV survey but historic figures are shown in a separate table for information.

#### **Vehicle distance operated (tables BUS0201 to BUS0210)**

The tables in this section related to *vehicle miles operated* on local bus services (equivalent figures are shown in kilometres). This includes only 'live' (i.e. service) miles and not 'dead' running e.g. from depots to the start of a route. These statistics provide a measure of bus service provision.

Data sources. Service miles operated are measured by the annual DfT PSV survey and for the bus services in London by TfL. Where operators do not provide figures, they are imputed from previous years returns, BSOG data or based on number of vehicles or licence discs. Overall 8 per cent of the total vehicle miles figure was based on imputed data in 2010-11.

Data quality issues. Most local operators are required to record both live and dead mileage for BSOG claims and therefore it is likely that the majority of figures provided will be relatively accurate. Comparisons with BSOG returns suggest it is possible that dead mileage is included by some operators. In addition, some 'non-local' services include sections which are registered (for example inter-urban services which run on motorways for much of their length). For such services, operators may find it difficult to separate local and non-local mileage and it is likely that some returns will include some non-local mileage. In total, the published figures are likely to overstate the true local service mileage though this is difficult to assess precisely and, provided operators provide data consistently, is unlikely to affect broad trends.

As with estimates of passenger journeys (above), sub-national figures are derived through aggregation of data provided at local authority level which is often based on best estimates by operators and changes of 5-10 million miles should be interpreted carefully.

Table BUS0205 shows a breakdown of mileage run by on commercial and subsidised services. The latter are services awarded following competitive tendering, or services run for local authorities under de-minimis arrangements. Deregulation of the bus industry took place part way through 1986/87 so this table shows all data available on a consistent basis. Users should be aware that some operators report that the split between commercial and subsidised service mileage is based on best estimates. Where operators provide a total but not a split, the split is imputed based on previous years' data or from operators operating in a similar type of area. Changes of 5-10 million miles in this table should therefore be interpreted with caution.

## Passenger distance travelled (table BUS0301)

Passenger mileage is calculated by applying average bus boarding lengths derived from the National Travel Survey to passenger boardings collected through the PSV survey. Figures are calculated for individual countries (with England split into metropolitan, non-metropolitan and London) and aggregated.

## Revenue, costs and fare levels (tables BUS0401 to BUS0408)

The tables in this section cover operating revenue and costs for local bus services.

Revenue figures cover passenger receipts from the PSV survey and support to operators from administrative data (outlined in section 5). Receipts relate to all fare paying passengers, including those where partial reimbursement is received from local authorities.

Operating costs are derived entirely from survey data. Operators are asked to provide their local and non-local costs and separate figures for administration and depreciation costs, which are apportioned pro-rata.

Please refer to the notes to tables for details of coverage and data sources for individual tables. Figures for revenue and fares in London are provided by TfL.

All figures are shown in both current prices, and in real terms (2010/11 prices), with the latter calculated using the HM Treasury GDP deflator: <a href="http://www.hm-treasury.gov.uk/data\_gdp\_fig.htm">http://www.hm-treasury.gov.uk/data\_gdp\_fig.htm</a> All figures in the 2010/11 tables are based on the deflator as at 28 June 2011.

The exception is table *BUS0405* (bus fares), where figures in 2010/11 prices are calculated using the ONS Retail Prices Index.

Data issues. The sample of operators who are selected to answer the finance questions in the PSV survey is considerably smaller than the overall sample (250 compared with 1,600) and the coverage of smaller operators is lower. 177 operators provided complete finance data in 2010-11, a response rate of 74 per cent. Where figures are not available, they are imputed, largely from previous years data or number of passenger journeys. Total passenger receipts includes 10 per cent imputed data in 2010/11. The equivalent figure for costs is 20 per cent.

Therefore the figures in this section are likely to be less robust than those for kilometres and journeys and this should be kept in mind when analysing the data.

Some operators report difficulty in separating costs relating to local and non-local services and sometimes assign everything to the dominant category or make best estimates. This may impact on the figures but will not affect trends providing a consistent approach is taken which is usually the case.

Whilst operators provide a split of revenue by local authority, which is used to produce subnational splits, cost figures are provided at operator level.

When first published, *Tables BUS0401 to BUS0404* include, for the latest year, estimates of concessionary fare reimbursement and public transport support derived from budget data. Such figures are indicated as provisional and are revised as soon as out-turn data becomes available. These revisions can be substantial in terms of the impact of year on year changes.

*Table BUS0405* shows the local bus fares index, derived from data collected through the DfT Fares Survey. Further details are given in section 2 above.

#### Government support to operators and passengers (tables BUS0501 to BUS0504)

Tables in this section relate to Government support for both bus operators and passengers. They cover England only. Users should read the footnotes provided carefully. Further background on funding of the bus industry in England is provided in annex C.

Data sources for this table include the PSV survey (passenger receipts only), DfT BSOG records, and local government finance returns provided to Communities and Local Government (concessionary travel and public transport support figures). Figures for concessionary travel in London are provided by London Councils.

All figures are shown in both current prices, and in real terms (2010/11 prices), with the latter calculated using the HM Treasury GDP deflator: <a href="http://www.hm-treasury.gov.uk/data\_gdp\_fig.htm">http://www.hm-treasury.gov.uk/data\_gdp\_fig.htm</a> All figures in the 2010/11 tables are based on the deflator as at 28 June 2011.

When first published, the tables in this section include, for the latest year, estimates of concessionary fare reimbursement and public transport support derived from budget data (the year on year increase in budget being applied to the latest out-turn data). Such figures are indicated as provisional and are revised as soon as out-turn data becomes available. These revisions can be substantial.

*Table BUS0501* provides a breakdown of operating revenue by revenue source; total revenue is consistent with figures for England shown in table BUS0401.

*Table BUS0502* shows Government support to bus operators *and* passengers. Public transport support and BSOG represent operator subsidy; concessionary travel represents subsidy to passengers to encourage them to travel more.

Table BUS0504 is based on data collected by the Association of Transport Co-ordinating Officers (ATCO) through their Price, Expenditure and Competition survey which has collected information on competition and prices for local bus and school contracts and local authority bus service expenditure each year since 1998. The latest survey was sent to 119 local authorities, with a response rate of 69 per cent. For further details of this survey, please contact ATCO: <a href="http://www.atco.org.uk/">http://www.atco.org.uk/</a>

#### **Vehicles (tables BUS0601 to BUS0607)**

The tables in this section relate to vehicles operated by local <u>and</u> non-local PSV operators, though the majority of *buses* are owned by local operators. The footnotes to table BUS0601 provide further details of coverage. Note that the London figures shown are derived from the PSV survey and not from TfL as is the case with other areas of these statistics.

In some cases equivalent tables are provided for vehicles operated by those operators running some local services; this will include vehicles used for non-local work done by these operators.

Where survey data are not provided, they are imputed from previous returns or based on the number of licence discs held. The proportion of buses with different types of equipment is imputed from data provided by similar operators who did respond to the survey. For the overall figures,

totals for buses include 13 per cent imputed data compared to 60 per cent for coaches and 80 per cent for minibuses.

*Table BUS0602* shows buses by country and metropolitan area status. This breakdown is based on assigning an operator's vehicles to their main area of operation.

Table BUS0603 relates to accessible buses. Further information about the relevant regulations can be found here: <a href="http://www.dft.gov.uk/publications/bus-coach-accessibility-faqs/">http://www.dft.gov.uk/publications/bus-coach-accessibility-faqs/</a>
All buses weighing up to 7.5 tonnes are required to be fully accessible from 1 January 2015.

Table BUS0605 shows average age of the bus fleet based on age groups of vehicles collected in the PSV survey. Averages are calculated taking the mid-point of each group, except for the last category where all buses age 20 years or older are assumed to be 21.5 years old in 2010/11.

#### Staff (tables BUS0701 to BUS0704)

These tables show data on PSV staff from a number of different sources.

Table BUS0701 shows staff employed by local and non-local bus operators derived from the DfT PSV survey. Data are provided as full time equivalents, classified according to main job. Contract staff, and those whose main job is not PSV work (e.g. hotel staff) are excluded. Where data are not provided through the survey they are imputed, from past data where available or from number of licence discs held. There are indications that the data provided by small operators is less robust; however these represent a relatively small proportion of the overall total.

*Table BUS0702* compares total staff employed by PSV operators with data from the Short Term Employment Survey provided by ONS. These figures relate to numbers as at 31 March; this is a change from previous years where non-PSV survey data was June figures.

#### Punctuality and reliability (tables BUS0901 to BUS0903)

The tables in this section relate to England only.

*Table BUS0901* shows lost scheduled bus mileage. Figures are derived from the DfT reliability survey described in section 2.

Tables BUS0902 and BUS0903 relate to bus punctuality and are based on data provided by local authorities. Figures are missing where authorities did not provide a return. The figures are based either on surveys carried out by authorities, or from electronic data derived from Automatic Vehicle Location devices. The figures shown were previously provided to CLG as part of the National Indicators series, and the guidance used remains unchanged. This can be found here: <a href="http://www.clip.local.gov.uk/lgv/core/page.do?pageld=36703">http://www.clip.local.gov.uk/lgv/core/page.do?pageld=36703</a>

#### Bus service provision and other statistics (tables BUS1001 to BUS1003)

The tables in this section cover a range of other statistics relevant to local bus services in England, derived from several sources, including administrative data and reputable industry bodies. They are outside the scope of National Statistics, but included in order to provide wider context.

Tables BUS1001 and BUS1002 are derived from the National Public Transport Data Repository (NPTDR) which holds annual snapshots of public transport route and timetable information (for

one week in October) including static data such as bus stop locations. Further information is available from www.data.gov.uk/dataset/nptdr or www.nptdr.org.uk

These tables relate to annual *bus vehicle trips*. These represent a single vehicle working from the origin to the terminus of a timetabled route. Figures for passengers per bus vehicle trip will therefore typically be greater than average bus occupancy as passengers will board and alight from a service along its route.

*Table BUS1003* is based on data collected by RTIG (<a href="http://www.rtig.org.uk/web/">http://www.rtig.org.uk/web/</a>) from their annual public transport technology survey. The latest survey covers data to end 2010 and provides further background to the figures. A copy of the latest report can be found here: <a href="http://www.rtig.org.uk/web/Portals/0/RTIG-PR014-D001-1.1%20Survey%202010.pdf">http://www.rtig.org.uk/web/Portals/0/RTIG-PR014-D001-1.1%20Survey%202010.pdf</a>

## 4. Other sources of information on buses and bus travel

These statistics provide a range of information relating to local bus services in Great Britain, and represent the most comprehensive single source of publicly available information collected from bus operators. However, there are a number of further sources of useful information on buses and bus travel which provide alternative, additional or contextual data.

Information on **bus users** including take up of concessionary travel passes is provided by the National Travel Survey (NTS). The NTS covers all modes of personal travel and therefore allows bus travel to be compared with other modes and the **mode share** to be estimated. It also provides alternative measures of bus patronage. There is an NTS factsheet which provides an introduction to the range of information available and compares patronage figures from the NTS and PSV survey. For further information see:

http://www.dft.gov.uk/statistics/series/national-travel-survey/ NTS factsheet on buses

Data relating to **bus user satisfaction**, and related research, is available from Passenger Focus who represent bus passengers. See:

http://www.passengerfocus.org.uk/bus/research/

DfT commissions occasional survey modules covering **attitudes to bus use** among users and non-users. The most recent of these ran in 2011 and the results are available via the DfT statistics website.

Information related to the **impact of buses on the environment** is published by DfT, based on Defra statistics. The following link shows the tables available <a href="http://www.dft.gov.uk/statistics?s=ENV&tag=mode-of-travel">http://www.dft.gov.uk/statistics?s=ENV&tag=mode-of-travel</a>

Information on **vehicles** licensed as buses and coaches is available from DfT statistics on licensed vehicles. These provide an alternative measure of the vehicle stock, which is not directly comparable with data collected in the PSV survey (see notes to table BUS0601 for details). <a href="http://www.dft.gov.uk/statistics/series/vehicle-licensing/">http://www.dft.gov.uk/statistics/series/vehicle-licensing/</a>

Although these statistics relate to Great Britain, several sections relate only to England. More detailed figures for **Scotland** are published by the Scottish Government: <a href="http://www.scotland.gov.uk/Topics/Statistics/Browse/Transport-Travel/PubBusCoach">http://www.scotland.gov.uk/Topics/Statistics/Browse/Transport-Travel/PubBusCoach</a>

There are a number of industry bodies that collect information related to buses, and either publish or make available data. These include:

The **Association of Transport Co-ordinating Officers** (ATCO), which represents local authority transport officers. They run annual surveys to collect data for benchmarking and on Price, Expenditure and Competition (the latter provides the data for table BUS0504). These surveys are run largely for the benefit of ATCO members but some results may be available on a commercial basis.

http://www.atco.org.uk/

The **Real Time Information Group** (RTIG) carry out an annual survey of public transport technology which is publicly available (see link below). This provides the information for table BUS1003.

http://www.rtig.org.uk/

RTIG Public Transport Technology Survey 2010

Local authorities and Passenger Transport Executives/Integrated Transport Authorities collect data about bus services in their areas, including data on bus punctuality included in this publication. Figures can sometimes be obtained from local transport plans. **PTEG** represents the PTEs and commissions research related to buses. Individual PTEs run surveys to collect data on patronage in their areas and further information may be obtained through PTEG. <a href="http://www.pteg.net/">http://www.pteg.net/</a>

## 5. Background and contextual information

Over the period to which these statistics relate, changes have been made to the framework under which the bus industry in Great Britain operates, principally the deregulation of services in 1986.

- Outside London, local bus services were deregulated on 26 October 1986, introducing on-theroad competition; widespread privatisation of public sector bus operations took place from
  1986. Most services are now provided on a purely commercial basis, with public transport
  support restricted to unprofitable but socially necessary services, the operation of which is
  generally put out to tender.
- Within London, responsibility for London (Regional) Transport transferred from the former Greater London Council to the Secretary of State for Transport in 1984. In 1985, a separate operating subsidiary, London Buses Ltd, was established. Progressive tendering of local bus services in London was introduced in July 1985 and 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. 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.

Further context to the bus statistics is given in the annexes:

- Annex B describes concessionary travel schemes in England
- Annex C provides an overview of funding flows relevant to the bus industry
- Annex D gives a summary of key events affecting the bus industry from deregulation. These
  events should be borne in mind when interpreting the bus statistics, particularly when
  considering trends over time.

The latest information relating to bus policy in England can be found here: <a href="http://www.dft.gov.uk/topics/public-transport/buses/">http://www.dft.gov.uk/topics/public-transport/buses/</a>

## **Annex A: Key Definitions**

### Public Service Vehicle (PSV) operator

For the purposes of these statistics, these are licensed operators of Public Service Vehicles in Tax Classes 34 and 38 using buses, minibuses or coaches for public service (which include local bus services, school services, long distance coaching, tours, excursions and private hire). Taxi services and any work not intended for carrying passengers is excluded.

#### Local bus service

Local services are scheduled stopping services registered with the Traffic Commissioner. School bus services should be included if the service is registered as a local service available to the general public and it is eligible for Bus Service Operators Grant (BSOG).

In Greater London, local services include tendered services for Transport for London or those run with a London Service Permit. Outside London, local services include commercial, tendered and de-minimis local bus services including those supported by Rural Bus Subsidy Grant or Challenge funding.

#### **Non-local services**

These include (the non-registered parts of) scheduled coach services, school contracts where the service cannot be used by fare-paying members of the public at bus stops, private hire where the vehicle is hired in advance and pre-booked tours. Only work done in Great Britain is included.

#### Passenger journeys

A count of the total number of boardings of each vehicle, so a trip which requires a change from one bus to another would be counted as two journeys in these figures. Figures do not include children under 5 years of age.

#### Concessionary passengers

This category covers all passengers (elderly, disabled and youth) where operators receive full or partial fare reimbursement from local authorities as part of a statutory or non-statutory concessionary travel scheme. Commercial concessions which may be offered by some operators (for example, free travel for their staff) are excluded.

#### **Vehicle mileage / kilometres (local bus services)**

Mileage (kilometres) operated on local bus service. This includes only 'live' (i.e. service) miles and not 'dead' running e.g. from depots to the start of a route.

### Subsidised services [also called tendered or supported services]

These services are those that receive local authority support for all or part of their operation, normally where there is insufficient commercial demand to sustain the service without such support. Examples will include school routes, evening services on certain routes, or socially necessary services in communities where buses would not otherwise call. They are awarded following competitive tendering, or run for local authorities under de-minimis arrangements

## **Annex B: Concessionary Travel in England**

Local authorities and passenger transport authorities run concessionary travel schemes for groups such as the elderly, the disabled and children.

Statutory Concessionary Travel in England

- 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.

Some Travel Concession Authorities (TCAs) also offer discretionary enhancements, such as free or discounted travel at peak times, travel on other modes, companion passes, taxi tokens or concessions for young people

Concessionary travel reimbursement should be seen as an incentive to the passenger to travel more. The operators should not lose, or gain, revenue through such schemes. TCAs reimburse bus operators on the basis that they should be left "no better, no worse off" as a result of carrying concessionary passengers on their services.

#### Eligibility for a Concessionary Travel Pass in England

#### Older people

Until 2002 eligibility for concessionary travel in England was linked to the state pension age, with women becoming eligible at 60 and men at 65. In 2002, the age of eligibility was equalised at 60 for both men and women. From 6 April 2010, the age of eligibility for concessionary travel in England was linked to the pensionable age applying to women. So, as the pensionable age for women gradually increases from 60 to 65 over the eight-year period from 2010 to 2018 so too will the age of eligibility for concessionary travel increase for both men and women

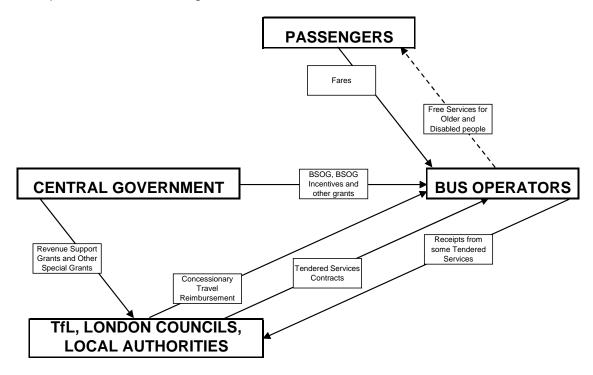
#### Disabled people

A person is eligible for the concession on disability grounds if he/she:

- (a) is blind or partially sighted,
- (b) is profoundly or severely deaf,
- (c) is without speech,
- (d) has a disability, or has suffered an injury, which has a substantial and long-term adverse effect on his ability to walk,
- (e) does not have arms or has long-term loss of the use of both arms,
- (f) has a learning disability, that is, a state of arrested or incomplete development of mind which includes significant impairment of intelligence and social functioning, or
- (g) would, if he applied for the grant of a licence to drive a motor vehicle under Part III of the Road Traffic Act 1988, have his application refused pursuant to section 92 of that Act (physical fitness) otherwise than on the ground of persistent misuse of drugs or alcohol.

## Annex C: Funding flows relating to the bus industry in England

There are several funding flows, which are not always clear to the non-specialist and the following attempts to explain these. The diagram below shows the main flows.



#### **Revenue Support Grant and other Special Grants**

Central Government funds the statutory Concessionary Travel Scheme in England through the local government Formula Grant system. Formula Grant is managed by the Department of Communities and Local Government and supports all local government services. It is paid by central government to local government as a non-ringfenced, unhypothecated block grant (that is to say, local authorities are free to spend the money on any service, provided they meet their statutory duties). Special Grants are additional grants paid to local authorities outside of Formula Grant. Travel Concession Authorities (TCAs) received a Concessionary Travel Special Grant between 2008/09 and 2010/11, to fund the extension of the statutory Concessionary Travel Scheme introduced in April 2008. Discretionary concessions (over and above the England-wide statutory concession, described below) apply in certain areas. These are funded from local resources, including council tax and business rates.

#### **BSOG, BSOG Incentives and Other Grants**

BSOG (Bus Service Operators Grant) is a subsidy paid by Central Government to operators directly. Operators are paid based on their kilometres run. BSOG also includes incentives for the use of ITSO compatible smartcard technology, and Automatic Vehicle Location (AVL) equipment. Central Government also provides other grants direct to operators from time to time, such as the Green Bus Fund.

#### **Concessionary Travel Reimbursement**

Since 1<sup>st</sup> April 2008 all eligible older and disabled residents in England have been entitled to free off-peak travel on buses anywhere in England (see Annex B). This is the statutory Concessionary Travel Scheme. Some Travel Concession Authorities (TCAs) also offer discretionary enhancements. TCAs reimburse bus operators on the basis that they should be left "no better, no worse off" as a result of carrying concessionary passengers on their services.

Our tables report Net Concessionary Travel reimbursement costs, as some TCAs have arrangements where one TCA administers the scheme on behalf of several others. This necessitates inter-TCA funding transfers which have no net effect but leads to double counting in local authorities' total gross expenditure figures. The figures are also net of sales (e.g. revenue from sale of companion passes), fees and charges, internal recharges, other non-grant income. In London the Concessionary Travel Scheme is administered by London Councils on behalf of the individual London boroughs.

#### **Tendered Service Contracts**

Tendered and supported services are those that receive local authority support for all or part of their operation, normally where there is insufficient commercial demand to sustain the service without such support. Examples will include school routes, evening services on certain routes, or socially necessary services in communities where buses would not otherwise call. Local Authorities take a range of approaches to the handling of passenger fare revenue under tendered service contracts. Some contracts specify that the operator keeps all of the passenger fare receipts, some specify that only a proportion is retained, and some specify that all fare revenue is passed back to the local authority. The variable nature of these contracts means there will be, in some cases, a flow of funding from operators to Local Authorities in the form of returned fare receipts.

London operates a different market structure to the rest of the country: <u>all</u> local bus operations in London are tendered services. This means that comparisons of bus travel in London and bus travel the rest of England should be drawn with caution, particularly where financial issues are concerned.

# Annex D: Key Events in the Bus Industry 1985 – 2009

1985	October	The Transport Act 1985 received Royal Assent, providing for the deregulation of bus services outside London and the privatisation of the National Bus Company.
1986	April	Abolition of the GLC and Metropolitan County Councils. London Boroughs and Passenger Transport Authorities (PTAs - joint Boards of Metropolitan Districts) took over transport functions.
	October	Deregulation of bus services outside London, with on-the-road competition in the provision of local services. All Passenger Transport Executives and municipal bus undertakings transferred to independent public transport companies (PTCs) owned by local authorities (Regional Councils in Scotland, PTAs or District Councils elsewhere). Provision made for voluntary privatisation.
1987	January	Bus deregulation outside London became fully operational.
1988	April July	Sell-off of National Bus Company subsidiaries completed.  The Transport (Scotland) Act 1989 received Royal Assent, providing for the privatisation of the Scottish Bus Group.
	December	The Government set London Transport formal quality of service objectives to be achieved by April 1992.
1991	March	Consultation paper 'A Bus Strategy For London' issued by the Department of Transport, setting out proposals to deregulate London's bus services.
	April	Formal dissolution of the National Bus Company.
1994	March April	Proposals for the sale of London Buses Ltd subsidiaries announced.  Bus and Coach Council became the Confederation of Passenger Transport (CPTUK) to include the fixed track sector.
1995	February	The Traffic Commissioners gained increased powers to regulate the frequency and number of buses to be used on local bus routes in order to limit unfair competition.
	May	The Disability Discrimination Bill proposed greater access to buses, using low-floor designs, but the technical feasibility of adapting vehicles and the effect on the industry to be examined before the introduction of new regulations.
1998	July	Publication of the Transport White Paper A New Deal for Transport. (The Stationery Office ISBN 0-10-139502-7.)
1999	November	Targets set at the Bus summit. Bus operators given performance targets on scheduled mileage to be operated and on the age of vehicles. The London bus operators got additional funding to increase reliability.
2000	February	Arriva bought MTL, the employee-owned Liverpool based bus and train operator, for £84.7 million. Arriva agreed to divest some bus operations.

	July	LTB re-activated London Buses Ltd to take over direct operation of the six tendered services formerly run by Harris Bus. The 64 leased buses trade as East Thames Buses.  Transport for London (TfL) established on 3 July under the control of the Greater
		London Authority and the Mayor of London, elected in May.
2001	June	Statutory minimum bus concessionary fares introduced in England. Local authorities must offer a concession of at least half the single fare to women aged 60 and over, men aged 65 and over. The concession need not cover peak periods. The permit/photocard is free of charge.
2002	April	Introduction of free off-peak concessionary fare bus travel in Wales for residents aged 60 or over. The scheme gives travel across local authority boundaries, so it is effectively a national scheme.
	June	Buses on the two Red Arrow routes in London replaced with 31 new articulated buses with cashless boarding at all entrances.
	September	Introduction of free off-peak concessionary fare bus travel in Scotland for female residents aged 60 or over & male residents aged 65 or over. It is zoned in groups of adjacent local authorities giving the concession across boundaries.
2003	April	Introduction of equal age for concessionary fares for men and women, at age 60. England retained its statutory minimum half fare scheme at local authority level. Wales has a national scheme of free bus travel for those aged 60 and over. Scotland's free scheme is based on zones which combine groups of adjacent unitary authorities and is extended to men aged 60 or over.
	October	All central London bus routes adopted off-bus prepayment ticketing, using roadside ticket machines for singles and multi-journey tickets.
2005	July September December	Stagecoach purchased Glenvale Transport in Merseyside for £3.4 million.  TfL introduced free bus and tram travel for those aged under 16.  Stagecoach bus group purchased the Traction Group for £26 million.
2006	April	Free concessionary bus travel introduced in England for disabled passengers and those aged 60 or over. Local Authorities in England were given £350 million in 2006/07 to reimburse bus operators for journeys made by residents in their own areas. Some authorities continued to fund travel into other areas or on other modes of transport in their area at their discretion.
		National free concessionary travel introduced in Scotland for disabled
	December	passengers and those aged 60 and over.  Department for Transport publishes <i>Putting Passengers First</i> on 12 December.  This set out the Government's proposals for the future direction of bus policy, including making quality contract schemes a realistic option.
2007	January	Transdev (Lancashire United) purchased Blackburn Transport for an undisclosed
	May	sum on 22 January.  Government published its draft Local Transport Bill on 22 May. The draft Bill supports the Government's efforts to tackle congestion and improve public

transport.

July First Group plc purchased Chester City Transport on 2 July.

November The first Statutory Quality Partnership scheme in England came into operation in

Sheffield.

2008 April Free off-peak local bus travel for older and eligible disabled people was extended

nationally in England, providing greater freedom and independence to around 11

million people.

November The Local Transport Act 2008 secures Royal Assent.

December Stagecoach group purchases Eastbourne Buses

2009 January Stagecoach group purchases Preston Bus

March Office of Fair Trading (OFT) announces a market study into the UK bus market

April Passenger Focus, the consumer watchdog for rail passengers, begins working on

bus and coach issues in shadow form (in advance of gaining their statutory

powers in April 2010).

August OFT consults on proposal to refer GB bus market (outside London) to the

Competition Commission