Meeting customers’ needs: Users and uses of road traffic statistics and data

This document lists some of the main users of road traffic statistics and data. It gives examples of the ways in which users make use of traffic data. It also provides a summary of a user feedback survey, which was carried out in February 2012. The survey has helped the Department for Transport (DfT) understand how the statistics meet users’ needs and plan how the outputs can be improved.

The UK Statistics Authority’s Code of Practice for Official Statistics emphasises the importance of user engagement and of meeting users’ needs; the survey and this report are steps towards meeting those requirements.

Traffic statistics are provided by vehicle category and road type and by geographical breakdown such as local authority. Traffic is measured in vehicle kilometres or miles, and as annual average daily flows. These data are published quarterly and annually.

Main uses of road traffic statistics:

- Road traffic statistics are used to produce the National Atmospheric Emissions Inventory (NAEI), a legal requirement for EU Air Quality Directives, and for the UN Framework Convention on Climate Change.
- The Department for Transport’s National Traffic Model uses most traffic and speeds outputs to make forecasts and to inform policy decisions on a broad range of issues.
- Local Authorities (including Transport for London) and devolved governments use the data for transport planning, road engineering and policy monitoring at a regional or local level.
- Road accident and safety statistics use annual and quarterly traffic estimates to produce road safety and accident rates, as required for the Strategic Framework on Road Safety.
- The Department for Communities and Local Government uses traffic data on major roads to contribute towards the funding settlement for local authorities.
1. Engagement with users

How we collect customers’ views

We have collected views on the published road traffic statistics from a range of key users, to find out how well we meet their needs.

Views were collected during February 2012 from 18 representatives of road traffic statistics’ main customers. Users were questioned by phone or face to face\(^1\), with the aim of reviewing what road traffic statistics the customer uses, how they use them, whether there is anything we do not provide which they would find valuable, or whether any of our current services are unneeded.

Users were asked to rate each of the department’s published outputs for major and minor roads as “essential”, “extremely valuable”, “useful”, “liked but little used” or “not used”. The responses make up much of section 2 below.

How we deal with enquiries from the public

The team operates a public enquiry point (see section 4 below), which is advertised both on the website and in all publications. The public enquiry point receives over 1,000 enquiries each year. By interacting with customers in this way, we are able to get a good understanding of which data customers find most useful, and we have used this knowledge to inform our decisions about what content to publish online. Customers are able to request additional data formats and more detailed breakdowns of information.

The web tables for road traffic statistics on the DfT’s website were accessed by almost 10,000 unique users during the final quarter of 2011. In response to numerous customer enquiries, the Department also designed an online map, showing the location of all major road count points, with associated traffic and flow figures for the latest available and previous years. We know that the tool receives up to 2,500 visits each month, including 1,500 unique visitors. This enables customers to access data directly, without having to go through the customer enquiry point. Feedback from customers has shown that they find our mapping service particularly useful.

User groups

The Transport Statistics Users Group (TSUG) is a UK body which aims to:

- Identify problems in the provision and understanding of transport statistics and to discuss solutions with the responsible authorities.
- Provide a forum for the exchange of views and information between users and providers.

Members of the department are involved in attending, organising, hosting or presenting at TSUG seminars.

\(^1\) One response was obtained by email.
2. Users and uses of road traffic statistics

Road traffic data are a key source of management information on the country’s infrastructure. Given the importance of moving people and goods around the country, it is essential to monitor the use of this valuable and strategic national asset. The department has two impact indicators informed by road traffic statistics in its 2011-15 business plan, which it now publishes:

- Reliability of journeys on the Highways Agency’s motorway and A road network.
- Total greenhouse gas emissions from transport.

Atmospheric Emissions

- The atmosphere and environment consultancy, AEA, use our data to produce the National Atmospheric Emissions Inventory (NAEI).
- This is a legal requirement, both within the UK and at international level for EU Air Quality Directives (e.g. 2008/50/EC) and the UN Framework Convention on Climate Change.
- They require count point-level data, and rate most outputs as essential. If further disaggregations were available, they would want these as well, as they seek to map the UK in 1 km squares.

The European Union (EU) and United Nations (UN)

- There is growing international interest in road traffic statistics, particularly in the context of climate change. The EU, United Nations Economic Forum for Europe (UNECE) and International Transport Forum (ITF) currently request some information via their ‘Common Questionnaire’. This is not a mandatory collection but the possibility of a new EU Regulation on road traffic statistics has been raised and a statutory collection may therefore be introduced in the medium/long term.
- There is growing interest within the EU on collecting vehicle kilometres data to monitor the 10-year strategy in the European Transport White Paper (2011).

Communities and Local Government

- The Department for Communities and Local Government (DCLG) uses traffic data on major roads to contribute towards the funding settlement for local authorities.

Local Authorities

- Local authorities and passenger executives use traffic data for strategic planning, to monitor and regulate buses, freight and sustainable transport measures, to score project submissions for funding of road building and safety initiatives, to calculate local road safety rates, and to validate objectives and policies.
- Information needs of local authorities are facilitated by the CLIP-TS group (Central Local Information Partnership – Transport Statistics).

Transport for London

- Transport for London (TfL) uses DfT data to create TfL’s road traffic estimates for all London roads, and to inform all their roads policies and traffic models.

Welsh and Scottish governments

- The DfT manages the collection of traffic data in Wales and Scotland, which is used to produce national estimates for Great Britain.
The Welsh and Scottish governments use the data to monitor roads policy and trends, to measure road safety targets, to construct models of CO₂ production, to plan the building of roads, to guide the Welsh Local Government Revenue Settlement, and to publish Scotland Transport Statistics.

National Traffic Model (NTM)

- The Department for Transport’s NTM is a highly disaggregated model of land-based transport in Great Britain. It comprises six modes: car driver; car passenger; rail; bus; walk and cycle. The NTM has two main objectives:
  - To produce forecasts for future years of the main road transport indicators – traffic, congestion, carbon dioxide and pollutants
  - To provide a policy and scenario testing tool by estimating the impact of a transport policy scenario or a change in forecasting assumptions.
- The NTM uses most traffic and speeds outputs to make forecasts and inform policy decisions on a broad range of issues.

Road Safety and Policy

- Within the DfT, the Road Accidents and Safety statistics team use the department’s annual and quarterly estimates to produce road safety and accident rates.
- A number of the outcome indicators for the government’s Strategic Framework for Road Safety make use of traffic data, in particular the six key indicators at national level and three at local level. These indicators are overseen by the Standing Committee on Road Accident Statistics (SCRAS).
- The DfT uses traffic data to define specific problems on an ad hoc basis, and to inform policy solutions, notably to define needs for major projects spending.
- Recently, traffic statistics have been used as evidence for the National Infrastructure Plan, the Speed Limit Review, Lorry Road-user Charging, and the Growth Review.

Other uses by DfT and its agencies

- The Highways Agency uses DfT data for the Strategic Road Network at aggregate level, for business planning, to measure and predict traffic and congestion and their relation, to construct time series, to compare with their own data, and to answer ad hoc queries such as Parliamentary Questions.
- Teams within the DfT use road traffic data in various ways:
  - The Buses and Local Transport statistics team use traffic data to develop benchmarks for Local Authorities on a range of topics.
  - The Vehicle Licensing statistics team use vehicle flow data to weight and gross their estimates for evasion of Vehicle Excise Duty and road tax, MoT non-compliance and foreign vehicle estimates.
  - The Road Congestion statistics team use flow data for major roads to weight their statistics on average congestion during peak times.
  - The Road Freight statistics team uses the traffic team’s estimates of Heavy Goods Vehicle traffic as a check against their own estimates.
- Our data is also used to answer Parliamentary questions and correspondence from MPs.
Other external users and uses

In addition to the regular users surveyed, there are many thousands of ad hoc customers who access the road traffic statistics enquiry point or web site. These groups include academic researchers, traffic consultants, private businesses, utility companies, construction firms, residents’ groups, campaign groups, or road user bodies such as the AA. They use the data for a variety of purposes – for example, buying property, deciding on the location of a new business, planning road works, purchasing space on advertising billboards, or campaigning for a new by-pass.

How customers view traffic data quality and service

Our outputs are valued by all regular customers as the main nationally comparable source of traffic data. Although customers vary in which of the road traffic outputs they use most frequently, all of the department’s current forms of disaggregating traffic data are highly valued by several customers. Two users (AEA and TfL) rate almost all our outputs as essential. Regular customers are currently satisfied with the ways they obtain data and with the quality of data and service we supply.

3. Responding to users needs

How the format of tables matches customer needs

Our series currently show road traffic by vehicle category, by road type, by urban or rural areas, by region and local authority. Traffic is measured in vehicle kilometres or miles, and as annual average daily flows. These data are published quarterly and annually.

Discussions with main, regular customers have shown that the levels of detail and disaggregation supplied in publications all match customer needs.

Data are made available at the lowest level of disaggregation possible. Raw data from manual traffic counts is now available on data.gov.uk and automatic traffic count data is due to follow later in 2012.

Several customers surveyed said they would find useful a break down of traffic by fuel-type (petrol / diesel / other), and this is something the Department is investigating.

All tables are available in both Excel and CSV format which enables traffic statistics customers to choose how they access and use our outputs.

Keeping customers informed

The Traffic statistics series page has a technical account of the methodology used to produce annual and quarterly publications, and also lists of who is entitled to early access to tables, the day before publication (see section 5 below).

Where revisions to published data take place, customers are clearly informed in advance and afterwards. For example, on 9th February 2012, the Department released revised road traffic estimates for the period 2000 - 2010, following a scheduled re-benchmarking of the sample of minor roads, which takes place every ten years. This exercise was advertised in advance on the DfT website, and upon publication was accompanied with a FAQs document (which included information about the impact of the revisions) as well as a technical report.
Constraints on meeting customer needs

The methodology used to produce road traffic estimates has to be a balance between the costs of data collection, and customers' ideal needs. For example, many of traffic statistics customers require individual link-level data. We are able to produce this for the major road network; however the scale of the minor road network makes it unfeasible to measure all links on all minor roads. Therefore, the department’s current methodology is designed to produce the lowest level of geography possible within funding constraints.

Below regional level, traffic estimates are not robust enough to be classified as National Statistics, owing to typically small sample sizes at local authority level. The cost of increasing the sample size to achieve National Statistics status would be prohibitive. However, some customers find Local Authority statistics useful, so we continue to publish statistics at this level but include caveats to highlight data quality issues.

4. How customers may contact us

We are always interested in getting further feedback and comments from users. If you have any specific requests, suggestions or ideas, please email roadtraff.stats@dft.gsi.gov.uk or call 020 7944 3095.

5. Further information available to customers

National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure they meet customer needs.

This is a link to the Department’s user service statement.

In the interests of being as open with customers as possible, and in accordance with Protocol 2 of the Code of Practise, pre-release lists (those who are given access to tables 24 hours before their publication) are available here:

Annual road traffic estimates
Quarterly road traffic estimates
Speeds.

To help customers understand the department’s data, and in accordance with Principle 4 of the Code of Practice, full guidance on the methods used to compile road traffic statistics can be found here:

- Quarterly estimates methodology
- Annual estimates methodology.