

Assessment of compliance with the Code of Practice for Official Statistics

Statistics on Road Conditions in England

(produced by the Department for Transport)

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About the UK Statistics Authority

The UK Statistics Authority is an independent body operating at arm's length from government as a non-ministerial department, directly accountable to Parliament. It was established on 1 April 2008 by the *Statistics and Registration Service Act 2007*.

The Authority's overall objective is to promote and safeguard the production and publication of official statistics that serve the public good. It is also required to promote and safeguard the quality and comprehensiveness of official statistics, and good practice in relation to official statistics.

The Statistics Authority has two main functions:

1. oversight of the Office for National Statistics (ONS) – the executive office of the Authority;
2. independent scrutiny (monitoring and assessment) of all official statistics produced in the UK.

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ASSESSMENT AND DESIGNATION

Under the provisions of the *Statistics and Registration Service Act 2007*, the UK Statistics Authority has a statutory function to assess sets of statistics against the Code of Practice for Official Statistics, with a view to determining whether it is appropriate for the statistics to be designated, or to retain their designation, as National Statistics.

Designation as National Statistics means that the statistics are deemed to be compliant with the Code of Practice. Whilst the Code is wide-ranging, designation may be broadly interpreted to mean that the statistics meet identified user needs; are produced, managed and disseminated to high standards; and are well explained.

Designation also signifies that, subject to any caveats in this report, the Statistics Authority judges that the statistics are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest.

Assessment reports will not normally comment further, for example on the validity of the statistics as a social or economic measure; though reports may point to such questions if the Authority believes that further research would be desirable.

Designation as National Statistics will sometimes be granted in cases where some changes still need to be made to meet fully the requirements of the Code, on condition that steps are taken by the producer body, within a stated timeframe, to address the weaknesses. This is to avoid public confusion and does not reduce the obligation to comply with the Code.

Designation is granted on the basis of the information provided to the Statistics Authority, primarily by the organisation that produces the statistics. The information includes a range of factual evidence and also assurances by the producer organisation. The views of users are also sought. Should further information come to light subsequently which changes the Authority's analysis, the Assessment report may be withdrawn and revised as necessary.

Once designated as National Statistics, it is a statutory requirement on the producer organisation to ensure that the set of statistics continues to be produced, managed and disseminated in compliance with the Code of Practice.

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1 Summary of findings

1.1 Introduction

1.1.1 This is one of a series of reports prepared under the provisions of the *Statistics and Registration Service Act 2007*¹. The report covers *Road Conditions in England*², produced by the Department for Transport (DfT). *Road Conditions in England* presents statistics on the surface condition of public roads in England. The main measures in the statistical release are the Highways Condition Index³ (HCI), National Indicators 168 (condition of local authority principal roads) and 169 (condition of local authority non-principal roads)⁴, and skidding resistance statistics. Factors affecting road condition, such as traffic volume and maintenance expenditure, are also presented for context.

1.1.2 This report was prepared by the Authority's Assessment team, and approved by the Board of the Statistics Authority on the advice of the Head of Assessment.

1.2 Decision concerning designation as National Statistics

1.2.1 The Statistics Authority confirms that the statistics published in *Road Conditions in England* are designated as National Statistics, subject to DfT implementing the enhancements listed in section 1.5 and reporting them to the Authority by October 2010.

1.3 Summary of strengths and weaknesses

1.3.1 DfT has recently published a range of statistical policy statements that strengthen its compliance with the Code.

1.3.2 The methods and presentation of *Road Conditions in England* have been developed significantly in recent years. The introduction of machine-based surveys for the majority of the road network has improved data quality and reduced costs. The technical note explains the methods used in a particularly comprehensive and accessible format.

1.3.3 Two user groups were convened by DfT in 2009 to discuss the development of these statistics. Members of these groups were drawn from a narrow, expert audience. Perhaps as a result of the narrow membership of these groups, the statistics in *Road Conditions in England* are not as relevant or accessible to all potential audiences as they could be.

¹ http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf

² <http://www.dft.gov.uk/pgr/statistics/datatablespublications/roadtraffic/maintenance/rce2009>

³ The Highways Condition Index (HCI) provides an indication of the proportion of the road network surveyed during the year that is in a 'good' condition.

⁴ www.dft.gov.uk/pgr/roads/network/local/servicelevels/ni168ni169guidance.pdf

1.4 Detailed recommendations

- 1.4.1 The Assessment team identified some areas where it felt that DfT could strengthen its compliance with the Code. Those which the Assessment team considers essential to enable designation as National Statistics are listed in section 1.5. Other suggestions, which would improve the statistics and the service provided to users but which are not formally required for their designation, are listed at annex 1.

1.5 Requirements for designation as National Statistics

Requirement 1	Engage with the wider user community to identify ways to increase the relevance of <i>Road Conditions in England</i> to the public debate on road conditions (para 3.4)
Requirement 2	Clarify the Department's pricing policy for supplementary statistical services (para 3.6)
Requirement 3	Confirm that contextual statistics produced by other organisations are of sufficient quality to meet users' needs for this purpose, and ensure that users are informed about where the statistics come from and what methods are used in their production (para 3.10)
Requirement 4	Review the presentation of <i>Road Conditions in England</i> to ensure it can be understood by non-expert users (para 3.17)
Requirement 5	Include the name and contact details of the responsible statistician in statistical reports (para 3.21)
Requirement 6	Update the Department's Statement of Administrative Sources so that it identifies all of the elements required in the Code (para 3.22)

2 Subject of the assessment

- 2.1 *Road Conditions in England* presents statistics on the surface condition of public roads in England. From 1977, the main measure used was the Defects Index, calculated from data collected by the National Road Maintenance Condition Survey (NRMCS) – a manual visual survey of road condition. Since 2001 the Highways Agency has used machine-based surveys known as TRACS (Traffic-speed Condition Survey) to inspect the condition of trunk roads. TRACS vehicles drive along between 5 and 6 thousand kilometres of Highways Agency road each year, collecting information about a range of technical parameters including cracking, texture and profile.
- 2.2 Local authorities introduced their own machine-based survey tool (Surface Condition Assessment for the National Network of Roads, or SCANNER) in 2006/07. This is based on TRACS, but does not collect the same information. SCANNER has been used to collect data about all classified roads, but not unclassified roads which are still surveyed visually. SCANNER surveys are carried out by local authorities for both operational purposes (to inform engineers of maintenance requirements) and for reporting of National Indicators 168 and 169.
- 2.3 In 2009, DfT commissioned a central database to store SCANNER and TRACS data: the National Road Condition Database (NRCD). In consultation with users and suppliers, DfT developed a new road condition indicator: the Highways Condition Index (HCI).
- 2.4 There have been some difficulties in correctly loading the data for all the surveys carried out. This problem was highlighted in the 2009 bulletin and all HCI figures were provisional. DfT is working to obtain a full dataset and publish revised HCI figures in 2010.
- 2.5 DfT spends approximately £12,000 each year producing these statistics. All of this cost is in staff resource time. In addition, approximately £95,000 was spent developing the NRCD, producing reporting tools, and collecting and checking SCANNER data.
- 2.6 Local authorities measure road conditions to inform decisions about road maintenance and to estimate how much money they will require to keep roads in a safe and serviceable condition. The statistics presented in *Road Conditions in England* are used to compare the conditions of roads between local authorities. While the statistics are not used to directly allocate funding, they help local and central government make decisions about investment in road maintenance and inform views about acceptable standards of road condition. National Indicators 168 and 169 are derived from the same data source, but these are calculated by local authorities themselves, and are initially published by the Audit Commission. There is also a wider public interest in road conditions. Campaign groups⁵ publish their own statistics on potholes, and there is consistently high media interest in the matter, particularly following the recent adverse weather conditions. Acknowledging the toll the recent bad

⁵ Such as the Asphalt Industry Alliance (AIA) <http://www.asphaltindustryalliance.com/>

weather has taken on roads - and the 'explosion' in the number of potholes – the chancellor announced an extra £100m for local road repairs in the 2010 budget.

3 Assessment findings

Principle 1: Meeting user needs

The production, management and dissemination of official statistics should meet the requirements of informed decision-making by government, public services, business, researchers and the public.

- 3.1 DfT recently published a User Service Statement⁶ that sets out the mechanisms by which it engages with users. There are two established user groups where DfT discusses plans and developments: the Transport Statistics User Group⁷ (TSUG) and the Central and Local Information Partnership Transport Sub-group (CLIP-TS). TSUG is an independent group which runs seminars once a month on specific topics. CLIP-TS meets quarterly and provides a forum for local government users and data suppliers to comment on and discuss transport statistics.
- 3.2 In 2006, DfT sent a consultation questionnaire to users of *Road Conditions in England* to better understand their needs and wishes in relation to planned developments to the statistics. After commissioning the NRCD in 2009, DfT set up two user groups - the Road Conditions Publication Group (RCPG) and the Unclassified Road Condition Data Group (URCDG) - to discuss technical and presentational issues. Both groups were made up of officials from local and central government. The groups were set up for specific purposes, and there are no plans for them to meet again. The Assessment team feels that while these groups were good examples of engaging with expert users on technical issues, restricting membership of these groups to local and central government may have caused *Road Conditions in England* to be narrowly focused in its purpose and overly technical in its presentation. DfT statisticians told us that they plan to set up a new user group for these statistics; we suggest that the wider user community is involved in this group.
- 3.3 Public debate on road conditions tends to centre on the issue of potholes. There is often much media coverage of the issue, and groups which campaign for improvements to road conditions have produced their own statistics on potholes. *Road Conditions in England* does not present statistics that can be easily interpreted and used in this debate. The main measure, the HCI, tells highway engineers about the surface condition of the road, but is not accessible for users interested in the quality of the road from a driver or rider perspective, or the number of potholes.
- 3.4 The statistics in *Road Conditions in England* are of a highly technical nature. DfT told us that since £3.9 billion is spent by highways authorities and local authorities on road maintenance, these bodies are more significant users than the general public or media. The Assessment team regards the media interest in potholes and the views of groups speaking on behalf of road users as evidence of a much wider public interest in road conditions. While highways authorities and local authorities are important users, DfT should investigate ways to maximise public value in these statistics by enhancing their relevance

⁶ <http://www.dft.gov.uk/pgr/statistics/standardsreview/userservice.pdf>

⁷ <http://www.tsug.org.uk/>

to the wider public debate. As part of the designation as National Statistics, DfT should engage with the wider user community to identify ways to increase the relevance of *Road Conditions in England* to the public debate on road conditions⁸ (Requirement 1). The statisticians in DfT told us they are considering developing a ‘ride quality’ indicator that could make the publication more relevant to wider users; we suggest this idea be discussed with users.

⁸ In relation to Principle 1 Practice 1 of the Code of Practice

Principle 2: Impartiality and objectivity

Official statistics, and information about statistical processes, should be managed impartially and objectively.

- 3.5 All DfT statistics are released according to a published timetable, and are available from DfT's website without charge to the user. DfT recently published a revised departmental revisions policy⁹. *Road Conditions in England* is presented impartially and objectively.
- 3.6 The statisticians in DfT told us they don't usually charge for supplementary statistical services, but may do for particularly large or complex requests. There are currently no formal guidelines in DfT on what would constitute a large or complex request. As part of the designation as National Statistics, DfT should clarify its pricing policy for supplementary statistical services¹⁰ (Requirement 2).

⁹ <http://www.dft.gov.uk/pgr/statistics/standardsreview/revisionpolicy.pdf>

¹⁰ In relation to Principle 2 Practice 9 of the Code of Practice

Principle 3: Integrity

At all stages in the production, management and dissemination of official statistics, the public interest should prevail over organisational, political or personal interests.

- 3.7 No incidents of political pressures, abuses of trust or complaints relating to professional integrity, quality or standards were reported to or identified by the Assessment team.

Principle 4: Sound methods and assured quality

Statistical methods should be consistent with scientific principles and internationally recognised best practices, and be fully documented. Quality should be monitored and assured taking account of internationally agreed practices.

- 3.8 The statistics presented in *Road Conditions in England* have undergone a considerable amount of change in recent years. The majority of the road network is now surveyed using machine-based techniques rather than manual visual surveys. There are four main sources of data:
- TRACS was developed to provide a consistent method of measuring the surface condition of motorways and trunk roads. The system was commissioned by the Highways Agency and surveys are carried out by a single independent contractor using a purpose-built survey vehicle.
 - SCANNER, based on the TRACS system. These surveys are commissioned by local authorities. There are currently three survey contractors operating accredited survey vehicles.
 - Visual surveys are carried out on unclassified roads, as the SCANNER survey vehicle is too large. A new Visual Survey Inspector accreditation scheme was introduced in 2007.
 - SCRIM (Sideway-force Coefficient Routine Investigation Machine) measures the skidding resistance of roads. Local authorities can set their own skid resistance policies, accounting for the traffic flow and accident characteristics of their road network, though most are based on Highways Agency standards.
- 3.9 Information about the methods used is presented in a Technical Note¹¹. The Assessment team considers this note to be particularly comprehensive and accessible. The note includes details of the quality assurance procedures used to check the data.
- 3.10 Some of the tables presented in the release are marked as 'outside the scope of National Statistics'. DfT told us the tables are not National Statistics because they are produced by other organisations, such as local authorities, the Highways Agency, or the Audit Commission, and are initially published elsewhere as performance indicators. DfT includes them in the National Statistics publication as context for users. As part of the designation as National Statistics, DfT should confirm that contextual statistics produced by other organisations are of sufficient quality to meet users' needs for this purpose, and should ensure that users are informed about where the statistics come from and what methods are used in their production¹² (Requirement 3).
- 3.11 *Road Conditions in England* presents statistics for England only. Statistics for Scotland, Wales and Northern Ireland are published separately by the corresponding devolved administrations. Users we spoke to expressed a preference for a single publication presenting road conditions statistics across the UK. DfT told us there may be difficulties with making Northern Ireland data comparable as there are different Ordnance Survey references, but they plan to

¹¹ <http://www.dft.gov.uk/pgr/statistics/datatablespublications/roadtraffic/maintenance/rcmtechnote.pdf>

¹² In relation to Principle 4 Practices 1 and 2 of the Code of Practice

produce a GB or UK release if data are forthcoming. We support this plan and would like to see a comparable set of UK statistics produced.

Principle 5: Confidentiality

Private information about individual persons (including bodies corporate) compiled in the production of official statistics is confidential, and should be used for statistical purposes only.

3.12 DfT has assured us that it takes all necessary steps to protect the confidentiality of the data it collects. Statistical staff undertake training in protecting information and all statistics are subject to the department's data handling and sharing procedures. Data used to produce statistics in *Road Conditions in England* are not confidential personal data.

Principle 6: Proportionate burden

The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.

- 3.13 Data for *Road Conditions in England* are collected by local authorities, primarily for their own operational purposes. The data are sent to DfT electronically, so the additional burden on local authorities is negligible.

Principle 7: Resources

The resources made available for statistical activities should be sufficient to meet the requirements of this Code and should be used efficiently and effectively.

- 3.14 There are four main statistics teams in DfT, embedded within separate policy directorates. Separate business plans are held for each of these directorates, and these plans include details of the allocation of resources to statistics. DfT's head of profession for statistics meets regularly with other senior statisticians in the Department for the purpose of co-ordination.
- 3.15 Appropriate recruitment and development policies are in place at DfT to ensure suitably skilled people are employed in the statistical production process.

Principle 8: Frankness and accessibility

Official statistics, accompanied by full and frank commentary, should be readily accessible to all users.

- 3.16 The DfT website is easy to navigate and makes access to the statistics straightforward. All DfT statistics are accompanied by Excel format tables, to encourage analysis and reuse.
- 3.17 The Assessment team feels that the publication is not accessible to non-expert users. DfT told us that this is because the main audience for these statistics is specialist engineers; however, there is a wider public interest in road conditions. As part of the designation as National Statistics, DfT should review the presentation of *Road Conditions in England* to ensure it can be understood by non-expert users¹³ (Requirement 4).

¹³ In relation to Principle 8 Practice 2 and Principle 8 Practice 5 of the Code of Practice

Protocol 1: User engagement

Effective user engagement is fundamental both to trust in statistics and securing maximum public value. This Protocol draws together the relevant practices set out elsewhere in the Code and expands on the requirements in relation to consultation.

3.18 The requirements for this Protocol are covered elsewhere in this report.

Protocol 2: Release practices

Statistical reports should be released into the public domain in an orderly manner that promotes public confidence and gives equal access to all, subject to relevant legislation.

- 3.19 DfT releases its statistics according to a published timetable for twelve months ahead. Lists of those who have access to statistics prior to their release are published alongside each product.
- 3.20 *Road Conditions in England* has recently undergone considerable development, some of which is ongoing. The statisticians in DfT expect that it may be possible to bring forward the release date once processes are finalised.
- 3.21 As part of the designation as National Statistics, DfT should include the name and contact details of the responsible statistician in statistical reports¹⁴ (Requirement 5).

¹⁴ In relation to Protocol 2 Practice 6 of the Code of Practice

Protocol 3: The use of administrative sources for statistical purposes

Administrative sources should be fully exploited for statistical purposes, subject to adherence to appropriate safeguards.

- 3.22 DfT has a published Statement of Administrative Sources. DfT plans to update this to reflect a wider range of administrative systems in DfT. There are also other elements required by the Code which are missing from the statement. As part of the designation as National Statistics, DfT should update its Statement of Administrative Sources so that it identifies all of the elements required in the Code¹⁵ (Requirement 6).
- 3.23 Data for *Road Conditions in England* are collected by local authorities, primarily for their own operational purposes. Common information technology and information management systems are used. The Assessment team regards this as a good example of enhancing the statistical potential of administrative sources.

¹⁵ In relation to Protocol 3 Practice 5 of the Code of Practice

Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to DfT, in the interest of the public good. These are not formally required for designation, but the Assessment team considers that their implementation will improve public confidence in the production, management and dissemination of official statistics.

- | | |
|---------------------|---|
| Suggestion 1 | Involve the wider user community in future user groups (para 3.2) |
| Suggestion 2 | Discuss the development of a 'ride quality' indicator with users (para 3.4) |
| Suggestion 3 | Publish a comparable set of UK statistics (para 3.11) |

Annex 2: Summary of assessment process and users' views

A2.1 This assessment was conducted from December 2009 to March 2010.

A2.2 The Assessment team – Joe Cuddeford and Elspeth Maclean - agreed the scope of and timetable for this assessment with representatives of DfT in December. The Written Evidence for Assessment was provided on 8 January 2010. The Assessment team subsequently met with DfT during March 2010 to review compliance with the Code of Practice, taking account of the written evidence provided and other relevant sources of evidence.

Summary of users contacted, and issues raised

A2.3 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of statistics, and we invite comments via an open note on the Authority's website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare assessment reports.

A2.4 The Assessment team received five responses from the user consultation. The respondents were grouped as follows:

Local Authorities	2
Devolved Administrations	2
Independent consultant	1

A2.5 Users made positive comments about the accessibility of the statistics and the explanation of methods in the technical note. Some users felt that the presentation of the statistics could be improved with more analysis, graphical interpretation and commentary explaining the context and meaning of the data. Issues of UK comparability were raised, with users commenting that it would be useful to draw statistics together in a single publication.

A.2.6 Users that responded reported little or no contact with the producers. This was mostly because they felt there was little need for contact. One user commented that the statistics team were willing to engage and answered questions promptly and courteously, but that responsibility transfers within DfT had damaged informal networks of communication.

Key documents/links provided

Written Evidence for Assessment document

List of assessment reports published to date¹⁶

1. Statistics from the National Drug Treatment Monitoring System
National Treatment Agency for Substance Misuse
2. Recorded Crime in Scotland
Scottish Government
3. Statistics on Enrolments at Schools and in Funded Pre-School Education in Northern Ireland
Department of Education, Northern Ireland
4. Road Casualty Statistics
Department for Transport
5. UK Energy Sector Indicators
Department of Energy and Climate Change
6. Statistics on Road Freight
Department for Transport
7. Prison Population Projections
Ministry of Justice
8. Migration Statistics
Office for National Statistics
9. Statistics on International Development and the ODA:GNI Ratio
Department for International Development
10. The Scottish Health Survey
Scottish Government
11. Scottish House Condition Survey
Scottish Government
12. Scottish Crime and Justice Survey
Scottish Government
13. Statistics on Children Looked After by Local Authorities in England
Department for Children, Schools and Families
14. Statistics on Children Looked After by Local Authorities in Scotland
Scottish Government
15. Statistics on Children Looked After by Local Authorities in Wales
Welsh Assembly Government
16. Statistics on Children Looked After by Health and Social Care Trusts in Northern Ireland
Department of Health, Social Services and Public Safety, Northern Ireland
17. Wealth in Great Britain
Office for National Statistics
18. Statistics on the National Child Measurement Programme
NHS Information Centre
19. Average Weekly Earnings
Office for National Statistics
20. Energy Statistics
Department of Energy and Climate Change
21. 18 Weeks Referral to Treatment Statistics
Department of Health
22. Agriculture in the UK and selected crop and livestock statistics
Department for Environment, Food and Rural Affairs

¹⁶ Published reports are available at: <http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html>

23. Child Benefit Statistics
Her Majesty's Revenue and Customs
24. Producer Price Indices
Office for National Statistics
25. Services Producer Price Indices
Office for National Statistics
26. Scottish Household Survey outputs
Scottish Government
27. Scottish Labour Market Statistics
Scottish Government
28. Special Assessment of the 2011 Censuses in the UK: Phase 1
Office for National Statistics, the General Register Office for Scotland and the Northern Ireland Statistics and Research Agency
29. Labour Market Statistics for Northern Ireland
Department of Enterprise, Trade and Investment, Northern Ireland
30. Child and Working Tax Credit Statistics
Her Majesty's Revenue and Customs
31. Emissions Statistics
Department of Energy and Climate Change
32. Council Tax Levels set by Local Authorities
Department for Communities and Local Government
33. Welsh Labour Market Statistics
Welsh Assembly Government
34. UK Labour Market Statistics
Office for National Statistics
35. Statistics on Freedom of Information
Ministry of Justice
36. Statistics on Court Activity
Ministry of Justice
37. Statistics on Cancer in Scotland
NHSScotland
38. Statistics on Cancer Screening in Scotland
NHSScotland
39. Statistics on NHSScotland Workforce
NHSScotland
40. Statistics on Road Conditions in England
Department for Transport
41. Statistics on School and Pupil Characteristics, and Absence and Exclusions, in England
Department for Children, Schools and Families

