

Minor road traffic estimates benchmarking exercise

This guidance has been developed to provide further information, in the form of frequently asked questions, on the minor road traffic estimates benchmarking exercise.

If you require any further information or have any comments about the exercise, please contact roadtraff.stats@dft.gsi.gov.uk.

Frequently Asked Questions

1. [Why are road traffic estimates for minor roads being rebaselined?](#)
2. [Which data are affected?](#)
3. [Why has the rebaselining only affected roads in England and Wales?](#)
4. [Does this mean that the figures published previously are incorrect?](#)
5. [Does this mean that the figures published in the future will change at some point?](#)
6. [Why have the quarterly figures previously published also changed?](#)
7. [How are the minor road traffic estimates produced?](#)
8. [How was the benchmark sample selected?](#)
9. [How were the adjustments calculated and applied to the data?](#)
10. [Why were adjustment factors calculated by region and not by vehicle type?](#)
11. [What is the size of the change?](#)
12. [Which regions saw the greatest change in their estimates?](#)

1. Why are road traffic estimates for minor roads being rebaselined?

The Department for Transport produces annual estimates of traffic on minor roads by undertaking traffic counts at a sample of points which remain fixed each year. Although retaining a fixed sample ensures a more precise measure of traffic growth between consecutive years, it also means that any errors in the sample will accumulate over time. In order to correct for any sampling errors, a larger benchmark sample is taken every decade which enables us to recalibrate the traffic estimates on minor roads.

The previous minor road benchmarking exercise was undertaken in 1999 so in 2008 and 2009 a larger sample of minor road count points were surveyed. These data have been used to recalibrate minor road traffic estimates since 1999 and to produce new benchmark estimates for 2009.

2. Which data are affected?

The benchmarking exercise only affects minor roads in England and Wales from 2000 to 2010. The changes do not affect major roads (motorways and A roads) but will result in changes to overall traffic estimates in Great Britain on 'all roads'.

Traffic estimates are used in various other analysis and statistics, for example road safety statistics. Rebaselining the minor road traffic series may therefore have an impact on other data series. Further information on individual teams' plans on re-publishing any estimates that use the traffic data can be provided from the respective teams (contact details available at <http://www.dft.gov.uk/statistics/contact>).

3. Why has the rebaselining only affected roads in England and Wales?

The 2008/09 benchmark sample did not include any count points in Scotland. This means that minor road traffic estimates can only be revised for England and Wales. As a result, traffic estimates for Scotland are unaffected by this exercise.

4. Does this mean that the figures published previously are incorrect?

The figures published previously were our best estimate at time of publication. All traffic figures are published as estimates since it is not feasible to get a precise measure of traffic. The rebaselining exercise has enabled us to use a larger dataset of traffic counts on minor roads to improve the accuracy of these estimates. As a result, the road traffic estimates released in February 2012 will replace any previously published estimates.

5. Does this mean that the figures published in the future will change at some point?

The current methodology for producing road traffic estimates requires a benchmarking exercise to be undertaken approximately every 10 years. Therefore, it is likely that traffic estimates from 2010 onwards will be subject to revision when the next rebaselining exercise takes place, although this is unlikely to be for some time.

In June 2012 we will publish the 2011 annual traffic estimates. These estimates, and future annual estimates, will be based on the adjusted benchmarked traffic series.

6. Why have the quarterly figures previously published also changed?

When final annual estimates are released each year, the quarterly estimates for that year are constrained to these totals. Quarterly estimates are provisional until they have been constrained by the final annual estimates each year. Revising the annual estimates from 2000 to 2010 means that the quarterly estimates for this period also need to be revised.

7. How are the minor road traffic estimates produced?

The scale of the minor road network in Great Britain means it is not possible to count traffic on every stretch of road. Instead, a representative sample of minor road sites are counted each year. Growth between the two years is then applied to the overall minor road estimates for the previous year to calculate estimates for the latest year.

Detailed information on the minor road traffic estimates methodology is available at <http://assets.dft.gov.uk/statistics/releases/traffic-estimates-2010/traffic-estimates-2010-methodology.pdf>

8. How was the benchmark sample selected?

The sites chosen for the benchmark sample were selected independently from the existing minor road growth sample. The sample was stratified by local authority and road category (B, C and unclassified roads by rural and urban), allocated to strata using recent traffic estimates, and drawn with probability proportional to the total length of minor roads in each category.

For further technical information about the sampling process, please see the [Office for National Statistics technical report](#) for this project.

9. How were the adjustments calculated and applied to the data?

The Office for National Statistics (ONS) Methodology Unit led and advised the Department on this project. The accompanying [technical paper](#), written by ONS Methodology Unit, provides more detailed and technical information on the project.

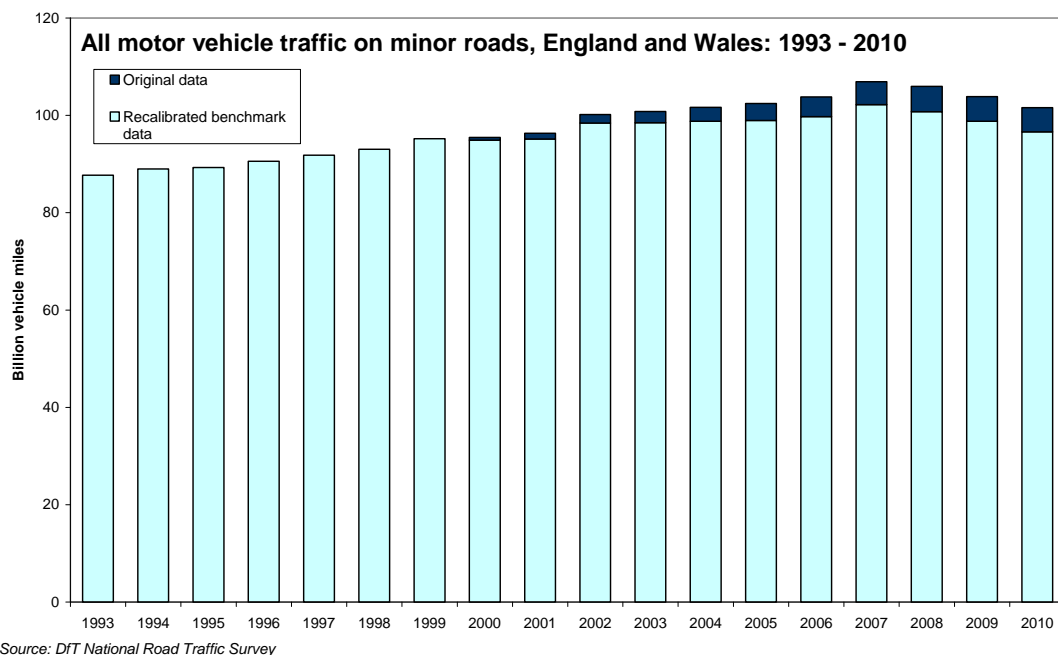
10. Why were adjustment factors calculated by region and not by vehicle type?

The methodology for producing minor road traffic estimates involves calculating annual growth factors. These growth factors are not regional, so they will not highlight different growth rates on minor roads in different parts of the country. This is why it is necessary to undertake the rebaselining exercise at a regional level.

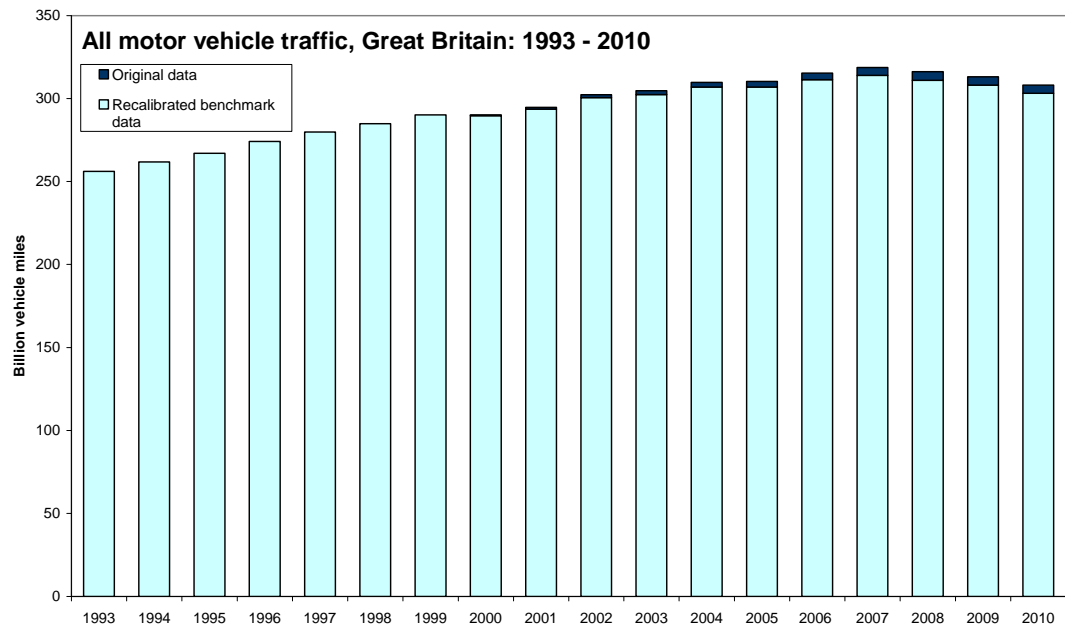
However, the annual growth factors do take into account variations in growth between different vehicle types. For this reason the adjustment factors have only been applied to regions and not to vehicle types.

11. What is the size of the change?

The overall adjustment factor for minor roads in England and Wales is 0.95. This means that the revised figures show a 5% reduction in all motor vehicles on minor roads in 2008, 2009 and 2010. The adjustment has been tapered back to 1999 to ensure a continuous series without a step change. Despite these revisions, the trend for all motor vehicles on minor roads has remained similar, as shown in the chart below.



When considering all roads in Great Britain, the rebaselining has resulted in a reduction in traffic of 1.6% in 2008, 2009 and 2010. The scale of change for the years 2000 to 2007 is progressively less than this. The chart below shows the total vehicle traffic for Great Britain for all motor vehicles.



Source: DfT National Road Traffic Survey

12. Which regions saw the greatest change in their traffic estimates?

The table below shows the change in 2010 total traffic estimates by region as a result of the rebaselining exercise. The North East saw the largest percentage decrease (8.4 per cent) while the South West saw the largest increase (2.8 per cent). East of England and Yorkshire and the Humber saw the least change (less than 1 per cent).

Percentage change in total traffic, by region: 2010

Region	2010		
	Unadjusted	Adjusted	Percentage change
North East	12,344	11,306	-8.4
London	19,567	18,456	-5.7
North West	34,801	33,765	-3.0
West Midlands	30,260	29,457	-2.7
South East	52,766	51,516	-2.4
Wales	17,044	16,763	-1.6
East	34,027	33,709	-0.9
Yorkshire & the Humber	25,650	25,444	-0.8
Scotland	26,837	26,837	0.0
East Midlands	25,122	25,385	1.0
South West	29,730	30,552	2.8
Great Britain	308,148	303,188	-1.6

Million vehicle miles