

## Use of the Strategic Road Network Sampling and Methodology

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Department  
for Transport

This paper provides further information on the two sources of data used in the 'Use of the Strategic Road Network' paper.

### Office of National Statistics (ONS) Opinions and Lifestyle Survey

#### Background and Sampling Information

The ONS Opinions and Lifestyle Survey (OPN) runs on a monthly basis, and includes a set of core questions and a number of commissioned modules. Non-profit organisations, such as Government Departments and Charities, have the option to buy-in to the survey by creating question modules, which can cover a wide variety of topic areas.

The OPN uses a two-stage random probability stratified sample. The sampling frame used is the Royal Mail Postcode Address File (PAF), which includes the address details for approximately 27 million private households receiving fewer than 50 items of post per day in the UK. The PAF is updated every three months.

This PAF sampling frame is stratified by region, household car ownership, National Statistics Socio-economic Classification (NS-SEC) and the age of the household reference person. The primary sampling units (postcode sectors) are selected with a probability that is proportional to size on an annual basis, but the sample is designed so that the monthly sample of 67 sectors is nationally representative. Within each sector, 30 households are selected at random, giving a final sample of 2,010 addresses each month. The survey aims to achieve response rates of 60%.

The OPN sample covers households in Great Britain, excluding the Isles of Scilly, and the Scottish Highlands and Islands. With sampled addresses receiving advance letters giving a brief explanation of the survey, and advising residents that an interviewer will be calling.

Computer Assisted Interviews are conducted by ONS interviewers, who have full training for National Statistics surveys. The interviewers are expected to make up to eight calls at a sampled address at different times of the day and week, before coding the household as a non-contact. As with all National Statistics surveys, a quality check on field work is carried out through recall interviews with a proportion of residents.

Further information about the ONS Opinions and Lifestyle Survey, including survey contact details, can be found through the ONS website, here: [http://www.ons.gov.uk/ons/about-  
ons/products-and-services/opn/index.html](http://www.ons.gov.uk/ons/about-ons/products-and-services/opn/index.html)

## Department for Transport module on Transport Issues

The Department for Transport (DfT) bought a question module in the ONS Opinions and Lifestyle Survey (OPN), with the questions forming part of the February, March and April 2013 waves of the survey.

The questions in this module included asking the respondent how frequently they had travelled on the Strategic Road Network (SRN) over the previous 12 months. For a full list of the questions, please refer to Annex A of this document.

Over the three waves of the module (February, March and April 2013), 2,114 GB-resident individuals were surveyed. This sample included 1,856 England residents, 97 Wales residents and 161 Scotland residents.

Respondents were shown 'show cards' to help them identify whether their journeys had included travel on SRN roads. The show card provided a list of SRN roads, and detailed maps of the SRN were also provided during the interview. There were four of these maps, each covering a different area of England:

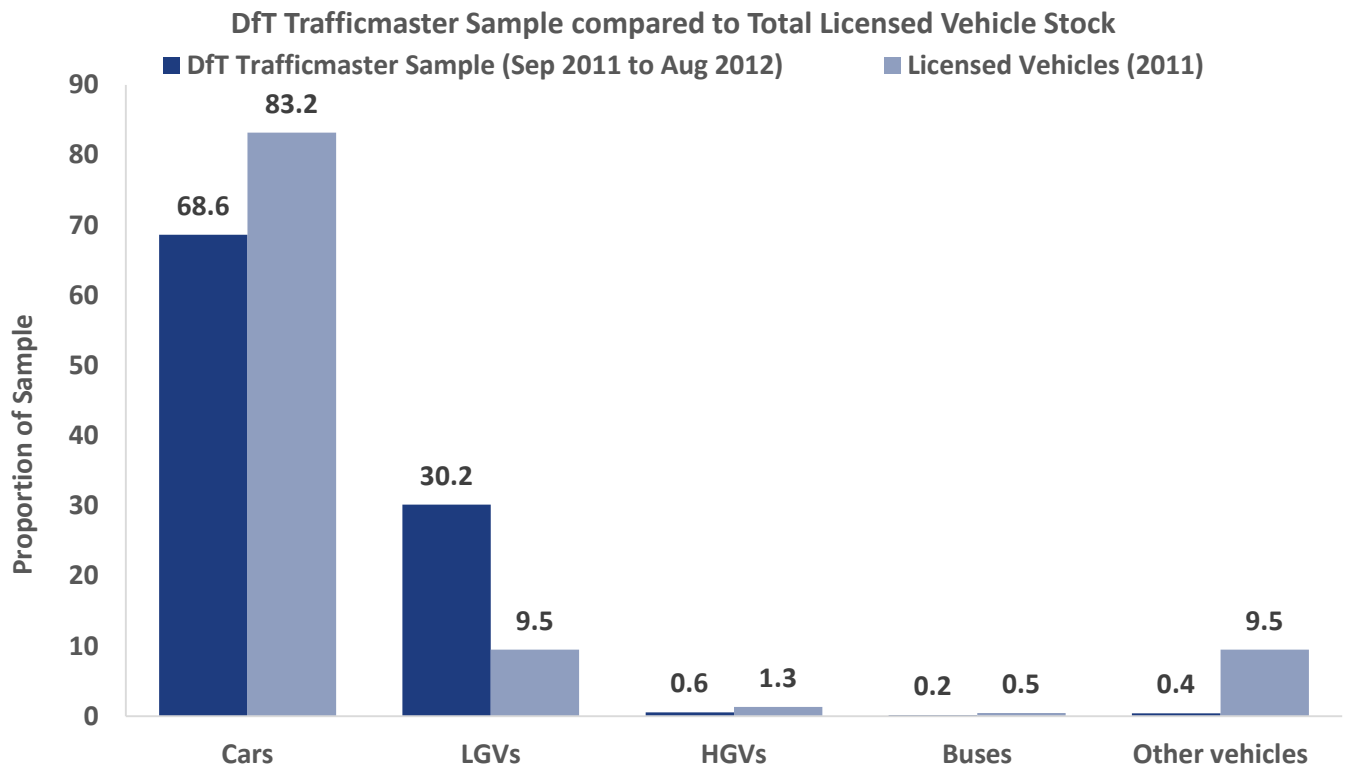
- North of England
- The Midlands
- South West
- South East

The show card, and detailed SRN area maps can be found as annexes to this document.

## DfT-held 'in vehicle' GPS sample

The GPS vehicle sample used in this analysis was made up of 54,018 vehicles with 'built-in' Trafficmaster GPS systems; this is different to the more well-known, portable GPS systems that can be easily removed from the vehicle.

Due to the types of vehicles that tend to have 'built-in' Trafficmaster GPS devices fitted - Fleet Vehicles (for Fleet Tracking purposes) and vehicles that have theft tracking systems; these types of vehicles are likely to be slightly over-represented in the DfT Trafficmaster vehicle sample used for this analysis.



As the graph shows, there is an under-representation of cars, and an over representation of LGVs, in the DfT Trafficmaster sample, when compared to the proportions of licensed vehicles.

The vehicle data refer to journeys made over a twelve month period; from September 2011 to August 2012. The total number of vehicles in the sample was around 86,000, but just over 32,000 vehicles were omitted from the sample used for this analysis because they had not travelled in both the first and last months of the 12-month period. The GPS subscriptions for these excluded vehicles are likely to have started, or ended part-way through the year, and so they would have not provided a full year of travel behaviour.

## Annex A: Questions asked by DfT as part of the ONS Opinions & Lifestyle Survey

### Intro

The next set of questions is about transport issues and is being asked on behalf of the Department for Transport.

These questions relate to journeys undertaken by car, light van, motorcycle, scooter or moped, including all journeys undertaken in company vehicles. We are interested in all types of journey, both personal and in the course of business, undertaken as the driver or passenger in your vehicle on roads in England in the last 12 months.

### MDN Bike

*ASKED TO THOSE WHO DO NOT HAVE A CAR IN THE HOUSEHOLD AS PART OF THE CORE QUESTION*

**Do you have a motorcycle, scooter or moped available at your household?**

[Set of 3]

Motorcycle

Scooter

Moped

None of these

### Intro2

I'd like to ask for some details about the vehicle you use most often so that we can collect information about the types of motor vehicles that people use.

### MDN Reg

**Would you be willing to give me the registration number?**

ADD IF NECESSARY: If you are able to give us the registration number, we will be able to get some of the information we need from DVLA or other DfT Agencies rather than asking you for the information now.

**READ OUT: The registration number will not be used to identify you or your household and will not be given to anyone outside the statistics section at the Department for Transport.**

IF PROMPTED: DVLA = Driver and Vehicle Licensing Agency

Other DfT Agencies include:

Vehicle Certification Agency (VCA)

Vehicle and Operator Services Agency (VOSA)

Willing to give (British) registration number

Not willing to give registration number

Willing to give registration number but cannot remember it correctly

Foreign registration number

### MDN RegNo

*ASKED TO THOSE WILLING TO GIVE BRITISH REG NO*

**What is the registration number of the vehicle you use most often?**

STRING[7]

**MDN Make**

**Secondly, what is the make and model of your vehicle?**

IF PROMPTED: This information is requested to validate that we have obtained information on the correct vehicle.

.....

**MDN Veh**

**Finally, is this vehicle your household's only vehicle, primary vehicle or secondary vehicle? Please remember to include not just cars but also light vans, motorbikes, scooters and mopeds.**

Only vehicle

Primary vehicle – *the vehicle with the highest annual mileage available for use by the household*

Secondary vehicle – *any vehicle which is not the primary vehicle*

**Annual Vehicle Mileage (Only asked in March and April 2013 survey waves)**

**I would like to get a figure for the approximate annual mileage for this vehicle. Can you please estimate for me the total miles this vehicle has been driven, by any driver, in the last 12 months?**

**INTERVIEWER: If respondent unsure, encourage estimate. If necessary, obtain to the nearest thousand. Obtain expected annual mileage if vehicle acquired less than a year ago.**

**MDN Oft**

**Typically, how frequently do you travel in this vehicle?**

5 or more days a week

2-4 days a week

1 day a week

Less than 1 day a week but more than 2 days a month

1-2 days a month

Less than 1 day a month but more than 2 days a year

1-2 days a year

Less than 1 day a year

**Intro3**

The following question relates to the Strategic Road Network. This is England's core road network, managed by the Highways Agency, which consists of:

- motorways (blue roads on the maps); and
- trunk roads (red on the maps – these are the major, but not all A roads).

The trunk roads tend to link motorways to each other, or to major cities and ports.

Most other roads, all those which are not shown on the maps, are roads managed by local authorities.

*[Show maps, highlight difference between the Strategic Road Network and local roads so respondent understands the difference]*

**MDN Strat**

**Thinking about all trips you have made in this vehicle as a driver or passenger, how frequently have you travelled on the Strategic Road Network in England in the last 12 months?**

Motorways are shown by the blue roads on the maps  
Trunk roads are shown by the red roads on the maps  
*[Show maps and show card]*

5 or more days a week  
2-4 days a week  
1 day a week  
Less than 1 day a week but more than 2 days a month  
1-2 days a month  
Less than 1 day a month but more than 2 days a year  
1-2 days a year  
Less than 1 day a year  
Have not travelled on the Strategic Road Network in the last 12 months

**MDN MWay**

**Thinking about all trips you have made in this vehicle as a driver or passenger, how frequently have you travelled on the motorways in England in the last 12 months?**

Motorways are shown by the blue roads on the maps  
Trunk roads are shown by the red roads on the maps  
*[Show maps and show card]*

5 or more days a week  
2-4 days a week  
1 day a week  
Less than 1 day a week but more than 2 days a month  
1-2 days a month  
Less than 1 day a month but more than 2 days a year  
1-2 days a year  
Less than 1 day a year  
Have not travelled on motorways in the last 12 months

**Show Card**

The following roads comprise the Strategic Road Network:-

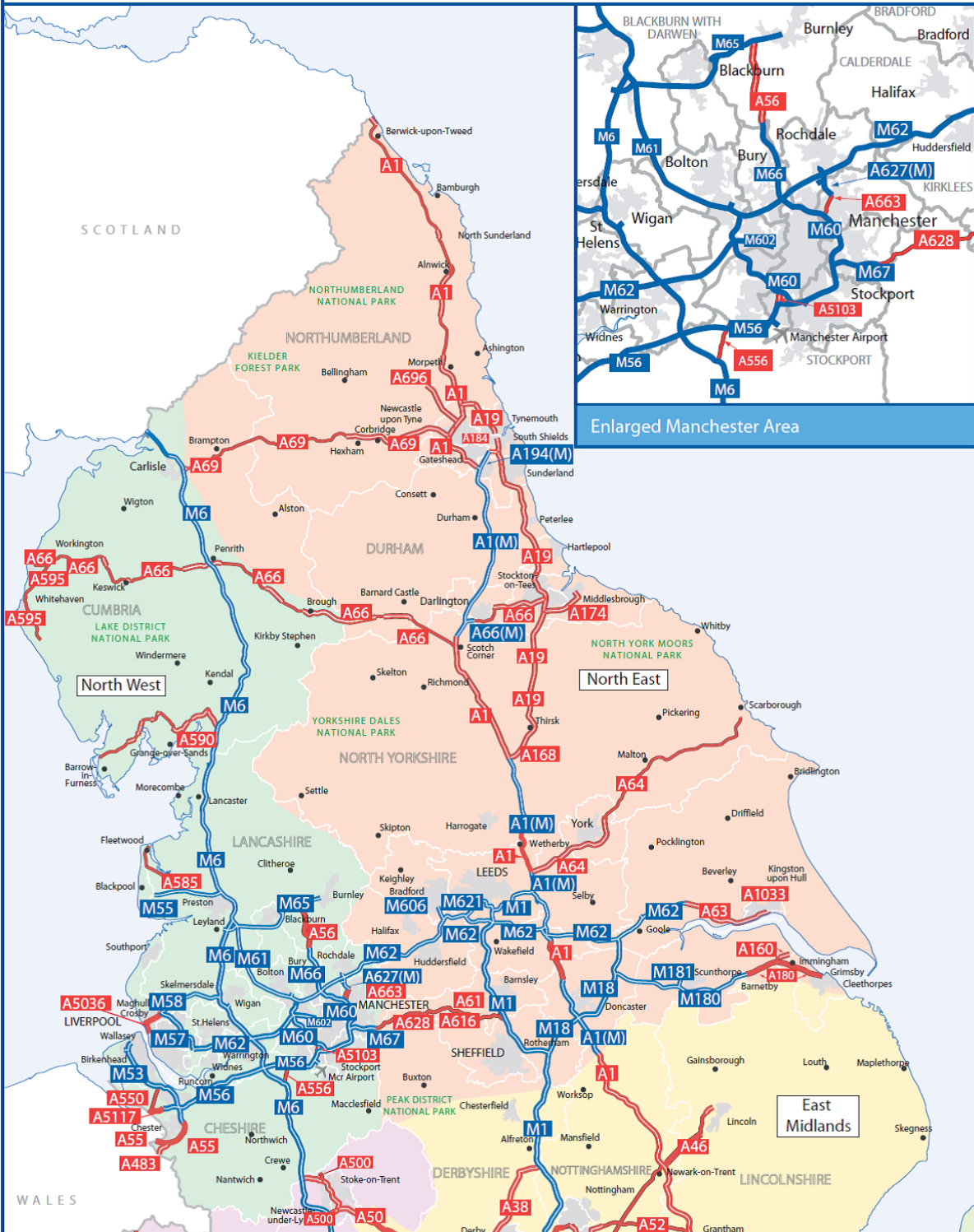
*Motorways*

M1 .....	M25.....	M40 .....	M54.....	M602.....	M69.....
M11 .....	M26.....	M42 .....	M55.....	M606.....	A1(M) .....
M18 .....	M27.....	M45 .....	M56.....	M61.....	A194(M) ...
M180 ....	M271...	M48 .....	M57.....	M62.....	A3(M) .....
M181 ....	M275...	M49 .....	M58.....	M621.....	A308(M)....
M2 .....	M3.....	M5 .....	M6 .....	M65.....	A404(M).....
M20 .....	M32.....	M50 .....	M6 Toll..	M66.....	A627(M)....
M23 .....	M4.....	M53 .....	M60.....	M67.....	A66(M).....
					A74(M) .....

*Trunk roads*

A1.....	A2070 ...	A36.....	A452.....	A55.....	A696.....
A1033 ...	A21 .....	A38.....	A453 .....	A550.....	A74.....
A1089 ...	A23 .....	A4.....	A458 .....	A556.....	Dartford
A11.....	A24 .....	A40.....	A46 .....	A56.....	Crossing
A12.....	A259 .....	A404.....	A47 .....	A585.....	Bridge.....
A120 ....	A26 .....	A405.....	A483 .....	A590.....	Dartford
A13.....	A27 .....	A41.....	A49 .....	A595.....	Crossing
A14.....	A282 ....	A414.....	A5.....	A6.....	Tunnel.....
A160 ....	A3 .....	A417.....	A50 .....	A61.....	
A168 ....	A30 .....	A419.....	A500 .....	A616.....	
A174 ....	A303 .....	A42.....	A5036 ...	A628.....	
A180 ....	A31.....	A421.....	A5103 ...	A63.....	
A184 ....	A3113 ...	A428.....	A5111 ...	A64.....	
A19.....	A316 .....	A43.....	A5117 ...	A66.....	
A2.....	A34 .....	A446.....	A5148 ...	A663.....	
A20.....	A35 .....	A45.....	A52 .....	A69.....	

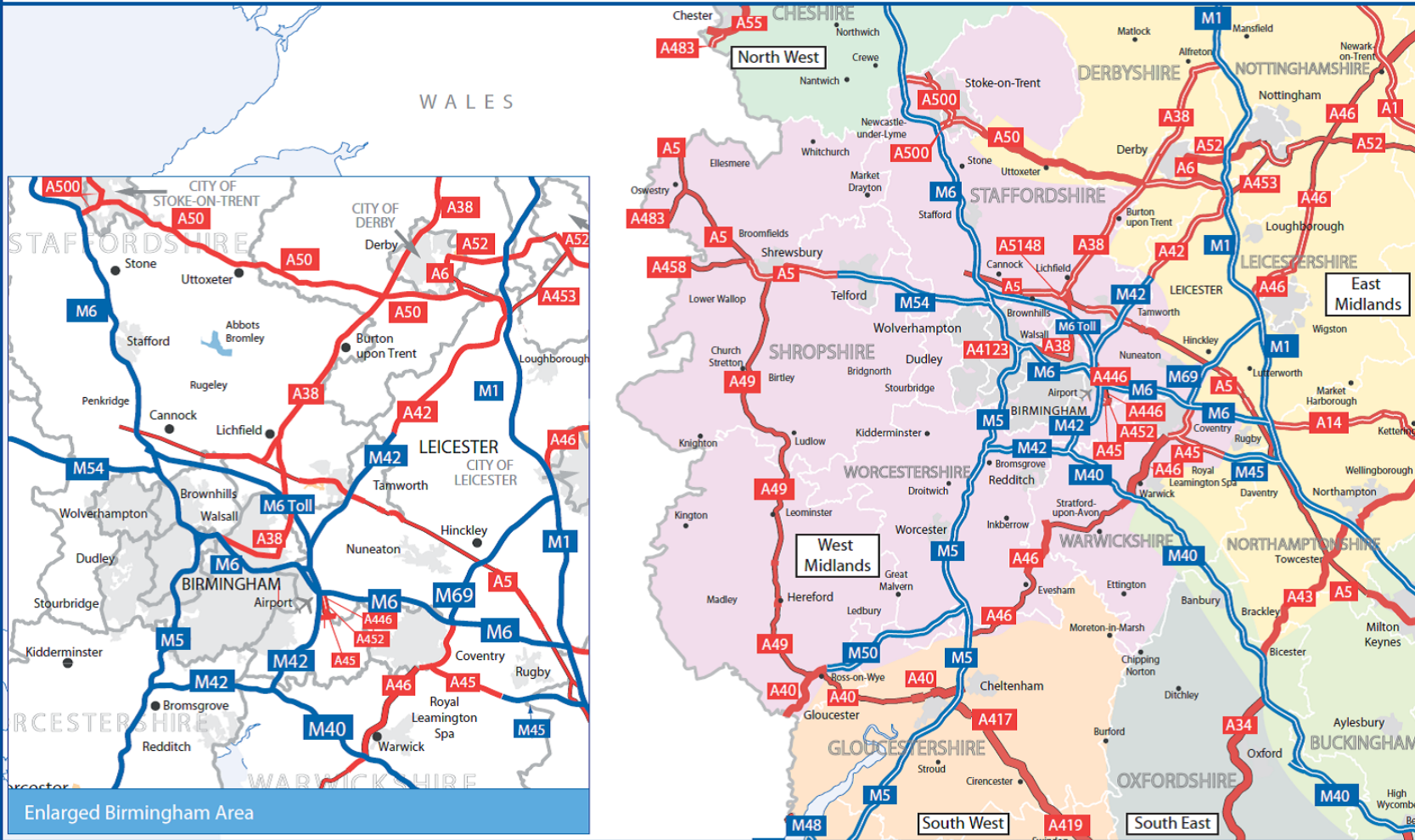
Safe roads, Reliable journeys, Informed travellers



Enlarged Manchester Area



Safe roads, Reliable journeys, Informed travellers



Safe roads, Reliable journeys, Informed travellers



Safe roads, Reliable journeys, Informed travellers

