

TECHNICAL REPORT

NATIONAL TRAVEL SURVEY 1985/6
TECHNICAL REPORT

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CHAPTER 1

INTRODUCTION

1. BACKGROUND

The 1985/6 round of the National Travel Survey (NTS) was the fifth in a series which began in 1965. The Fieldwork for the 1985/6 survey lasted for 12 months, from July 1985 to June 1986, and included over 10,000 households in a nationally representative sample covering Great Britain.

The project was carried out by Social Survey Division of the Office of Population Censuses and Surveys, on behalf of the Department of Transport. The computing resources and programming for the project were provided by the Centre for Analysis and Modelling (CAM Ltd).

Two interviews were held with each household member, the first to collect information about the household, the individuals living there, and their motor vehicles, and the second to collect information about travel during a predefined recording period of 7 days.

Travel data were collected using diaries, lasting a week, in which respondents recorded the journeys they made. The data collected for each journey included details of the purpose, the mode of travel used, the distance travelled, the time the journey took, and the cost where relevant.

The National Travel Survey is a unique national source of information on personal travel and on the use of private transport. It is widely used in the Department of Transport as the main national source of statistics for topics such as walking, cycling, parking, company cars, and the personal characteristics of public transport users. It is also an important source of background data for more detailed research.

The Department of Transport uses the NTS as a major source of data on how individuals and family groups use different forms of transport to meet their travel needs. Since its inception, the survey has provided data to meet several predetermined objectives. These include:

1. to find out about the use of cars, including the distribution of car ownership both across different regions of the country and by socio-economic factors;
2. to examine the prevalence of different means of transport for different types of journey, relating this to the reason for the journey and a range of socio-economic and regional factors;
3. to establish the amount of travelling undertaken by people in different demographic and socio-economic groups, and in different parts of the country; and
4. to forecast traffic levels and estimate the economic benefits of individual road development proposals.

In addition, the survey provides a national database that can be used to augment transport data from other surveys and different sources, such as road accident statistics. As it is a project that is repeated the survey allows for analysis of changes over time, for example in the means of transport used by the population.

2. DEVELOPMENT

There are two reports which cover the extensive development work carried out for the 1985/6 NTS:

1. 'Report on pilot work in June and September 1984'
2. 'Report on the experiment into one versus seven day diaries'

The current section describes the development work undertaken and summarises the outcome.

Originally it was intended to carry out just the one main pilot study, in June 1984, but because of the problems which came to light further pilot work was undertaken. There were two large pilot studies and three small ones:

Timetable of development fieldwork

	<u>Time</u>	<u>Size</u>	<u>Purpose</u>
1.	June 1984	420 addresses	test of survey method, interviewer variance, re-interviews
		35 interviews	develop introductions, questionnaires
2.	Sep 1984	35 interviews	test of new 7 day method
3.	Oct 1984	35 interviews	test of 1 day method
4.	Jan/Feb 1985	1840 addresses	large scale test of new 7 and 1 day methods
5.	May 1985	20 interviews	dress rehearsal

June 1984 pilot study

In April 1984, when commissioning the development work for the 1985/6 NTS the Department of Transport (DTP) wished the survey to follow essentially the same method as used in 1978/9 with the following changes:

- i. no car diaries (a three week car diary was left with main drivers interviewed in 1978/9 for return by post);
- ii. no incentive payments; and
- iii. in general a reduction in the number of questions but with a new section to assess the informant's level of disability (if any) and its effect on transport use, and a few questions on current use of different methods of transport.

In addition DTP were concerned to reduce, and where possible to measure, the level of error from all sources in the NTS: because the data are analysed intensively by a variety of researchers, often interested in small topic areas, they are exposed to criticisms of data quality.

To reduce the error in the NTS the survey method adopted for the June 1984 pilot included:

- more control over the interview through greater use of questions written on the questionnaire (as opposed to providing just code boxes and leaving interviewers to invent or remember a question), and through more interviewer instruction;
- tighter definitions in the Definition Manual leaving less scope for interviewer or informant interpretation; and narrow bands were allowed for answers, eg time to be recorded to within a minute for short journeys and distance to within a quarter of a mile;
- all journeys, including short walks, to be recorded every day, not just the seventh day, to reduce the chance of walks of about a mile and other journeys being omitted on the first six days;
- better training of informants in diary-keeping through instructions on the diaries and through fuller interviewer instructions.

To measure the level of error in the NTS the June 1984 pilot included:

- an experiment to estimate the levels of interviewer variability;
- re-interviews with about 40 informants to test informant understanding of questions, accuracy of answers and omission of journeys;
- tape-recording of interviews;
- other usual pilot measures, such as interviewer reports and interview observation.

Sampling errors had already been extensively investigated in a previous OPCS study for DTp.

Besides assessing the errors in the survey and testing methods for reducing the error, the June pilot also aimed to look at ways to improve methods such as how the survey was introduced by interviewers, how to place diaries with informants, the flow of the interview and new questions (eg on disability).

Although not specifically designed to measure response rate (only 5 different areas were included in the pilot) the low response rate achieved of 58% caused concern and much effort was devoted to ways of improving the survey methods to increase the level of response. Also surprising and disturbing was the fact that the survey method as copied from the previous round did not appear to work: the pick up call was unacceptably long and tedious to both informant and interviewer, taking one to one and a half hours for the average household. This was because every journey had to be checked, details probed and then coded at the pick up call. The other main finding from this pilot was that travel definitions were drawn too tightly as certain concepts such as 'main purpose' are essentially dependent on the informant's opinion.

Several steps were taken to improve response whilst maintaining quality, and to improve the survey method generally.

1. To relieve the pressure on the informant and interviewer, the 7 day diary and the pick-up call were redesigned so that
 - a. the interviewer could take the diary away and code the journeys at home thus reducing the pick-up call to an average of about 20 minutes and
 - b. as in 1978/9 short walks (under a mile) were to be recorded only on the 7th day.
2. To make it easier for interviewers to gain response whilst introducing minimal extra bias the placing pattern rules were amended slightly as were the rules governing when a proxy interview could be taken. In both cases it is likely that the improvement in response was greater than that indicated by the small level of use of the new rules, because interviewers were more motivated to try to obtain response knowing that the rules no longer appeared to work unreasonably against obtaining response.
3. To increase interviewers' motivation, besides the factors mentioned above, greater justification of the survey and description of its value was given in instructions and briefing and greater emphasis was placed on achieving response.
4. The travel definitions were improved in the light of the pilot findings.

Further pilot work

The main survey was put back 3 months to allow for further development work following the June 1984 pilot. The seven day method was modified as described above and as there was doubt whether the seven day method could ever achieve an acceptable level of response a 1 day method was also developed. Both of these methods were tested and compared in the February 1985 pilot (there had been earlier small pilots in September and October 1984.)

The results of the February 1985 pilot were favourable to the seven day method; a good response was achieved (75% - only three percentage points less than for the one day method) and in the initial, limited, assessment the data was of comparable quality. Thus it was decided to use the seven day method for the main survey.

Further analyses of the comparison between the one and seven day methods were carried out at a later stage. One of the analyses looked at the number of journeys per person recorded by each method. In general a method that records a higher number is considered to be better. The analysis showed the 1 day method achieved about 10% more journeys per person. This is probably partly due to more complete recording and perhaps partly due to change in informants' behaviour. Analyses of other aspects of data quality (quality of missing data, proportion of journeys recorded from memory) showed the seven day method as being slightly better.

CHAPTER 2

THE SAMPLE

1. SAMPLE REQUIREMENTS

The survey was required to provide a comprehensive picture of personal travel behaviour over the period July 1985 to June 1986 by people living in private households in Great Britain. It was decided that a sample of about 10,000 households would provide the degree of precision required from the survey, with each member of each household providing information about journeys made in a pre-selected seven day period. Because travel behaviour varies over time, the sample needed to be spread evenly over the year and to be balanced by day of week.

2. SUMMARY OF SAMPLE DESIGN

The sample design, which is described in detail in Appendix 2, was a two stage stratified design using the Postcode Address File (PAF) as a sampling frame. The PAF is constructed by the Post Office as a list of all addresses in the country. OPCS receive a computer file updated twice a year from the Post Office, and then make certain adaptations. The characteristics of the PAF as a sampling frame are described in the paper "An evaluation of the PAF as a sampling frame and its use within OPCS" by P Wilson and D Elliot, published in the Journal of the Royal Statistics Society Series A (1987).

The Primary sampling units (psus) used were postal sectors, areas which contain an average of about 2000 households. (Small sectors were grouped with contiguous ones to achieve a minimum size). These sectors were stratified by Standard Region, metropolitan/non-metropolitan county, and population density; and then car ownership levels and proportions travelling to work by car were used to rank the sectors before selection.

There were 720 sectors selected from 7953 in Great Britain; (postal sectors covering Scottish islands and the Isles of Scilly were excluded). The sectors were selected with probability proportional to the number of addresses. The psu selections were allocated to the 12 months of the fieldwork year so as to provide a nationally representative sample in each month.

From each sector 21 addresses were selected from the PAF making a sampling of 15,120 addresses in total. Given the response rate expected from the pilot its B sample was thought to be sufficient to yield over 10,000 households, and in fact 10,392 household interviews were achieved. In general all addresses were given an equal chance of selection but in a small proportion of cases the Post Office attaches an indicator to show that there is more than one household or business receiving mail at the address. Where this Multi Occupancy Indicator (MOI) was 3 or greater the address was given a higher chance of selection (in proportion to the MOI). Such addresses were called pre-sampled multi-household addresses. As described later, households within such addresses were sub-sampled with the result that every private household in the population was given an equal probability of selection, ie the sample of households was self-weighting. Addresses were then issued to interviewers.

3. FIELD PROCEDURES

The Interviewer Instructions describe on pages 9 to 24 what the interviewers needed to do to deal with the sample in the field. The steps involved finding the selected address, identifying the people and households that live there, if any, and if there is more than one household then taking a sample of one or more of them. The definitions of household and place of residence are the standard SSD ones as given in 'A handbook for interviewers' by Liz McCrossan published by HMSO (1985).

At multi-household addresses the interviewers were instructed to list all households and make a selection according to certain criteria. At pre-sampled multi-household addresses with a Multi-Occupancy Indicator of n they are instructed to use a selection grid which will select 1 in n households; in some such addresses with fewer than n households therefore no household was selected. (Table 8.2 in the chapter on Fieldwork Procedures and Response shows that no household was selected at 1% of all addresses). At multi-household addresses which were not pre-sampled, called 'concealed multi-household addresses' interviewers were instructed to include all households up to a maximum of 3. At addresses with more than 3 households interviewers used concealed multi-household selection grids to select 3 from the number present. This procedure may have introduced a very slight bias against households in concealed multi-household addresses.

Non-residential addresses and institutions, ie residential addresses that do not contain a private household, are classified as ineligible by interviewers. An institution was defined as 'an address at which four or more unrelated people sleep; while they may or may not eat communally, the establishment must be run or managed by a person (or persons) employed for this purpose, or by the owner.' Private households in separate accommodation within an address are included in the survey.

It is known that the PAF includes a proportion of addresses that do not exist because they have been demolished or not yet been built. Thus despite every effort made by the interviewer and the office no trace could be found of a proportion of the addresses and these too were classified as ineligible. 11% of all addresses were ineligible, 9% containing no private household and 2% being untraceable.

4. CALCULATION OF SAMPLING ERRORS

To estimate sampling errors allowing for the full complexity of the design is not difficult. Paragraph 10 of Appendix 2 states that the four digit area number can be used to arrange the psu selections in the correct order, the first two digits giving the major stratum and the second two the psu selection. Then to obtain sampling errors one applies the formula for successive differences within major strata as described in 'A Sampling Errors Manual' by Bob Butcher and Dave Elliot published by OPCS (1987), (Section 3.3 in particular part 3.3.2(ii)).

CHAPTER 3

FIELDWORK PROCEDURES AND RESPONSE

1. INTRODUCTION

This chapter describes the methods used by interviewers and in the Office to interview and collect information from the sampled informants. Where possible for each aspect some assessment is given of how it worked in practice. For example figures are given on how the placement pattern worked, on the extent to which non-response was re-issued to interviewers, and on final response rates.

Fieldwork was carried out over a 12 month period from July 1985 to June 1986; the first diaries to be placed lasted for a 7 day period finishing on 1 July 1985 and the last diaries placed finished on 30 June 1986. Thus with placing calls beforehand and pick up calls afterwards fieldwork extended to about 13 months in all.

Interviewers were each issued with an 86 page book of Interviewer Instructions and with a 64 page Definition Manual. The Interviewer Instructions describe in detail the procedures to be followed by interviewers under the following sections:

Section 1	Introduction
Section 2	Sampling
Section 3	The fieldwork method
Section 4	Travel records and journey schedules
Section 5	Household questionnaire
Section 6	Individual questionnaire
Section 7	Vehicle questionnaire
Section 8	Administration

The procedures are summarised in the next two sections.

In addition to the manual of Interviewer Instructions there were various supplementary instructions issued during the fieldwork. These are reproduced at appendix 4.

During the fieldwork period the schedules themselves were amended and a second version of the household, individual and vehicle schedules were used in September 1985 and subsequent months. There were just seven very minor amendments made:

household schedule	Box G "PAGE 7" altered to "PAGE 6" Q1 box bottom left "(FLAG THE SCHEDULE)" added Q4 "b)" altered to "a)".
individual schedule	Q23 "(A)" at code 1 altered to "(A) (B)" Q35 code 2 altered to "OTHERS IN HOUSEHOLD" Q42 "b)" altered to "a)".
vehicle schedule	Q25 "BOUGHT IN THE WEEK FOR THIS VEHICLE" altered to "PUT INTO THIS VEHICLE DURING THE TRAVEL WEEK".

2. THE INTERVIEWER'S TASK FOR EACH HOUSEHOLD

For each household in an interviewer's quota of work there was a sequence of events to be followed. This is described in detail in the Interviewer Instructions pages 36 to 38 and is described briefly here.

First there was the initial visit or planning call at which the interviewer completed the household questionnaire, interviewing the head of household or spouse, and then for each individual in turn completed the individual questionnaire, the vehicle questionnaire (if the individual concerned was the Main Driver of a vehicle) and then introduced and placed the seven day Travel Record.

There was a reminder call, in person or by telephone or by post or by leaving a reminder card, when there was a gap of more than a day or two between the placing call and the start day of the Travel Week.

For some informants it was useful to have a mid-week checking call. These calls were introduced into the NTS for the first time in the 1985/6 round; they were intended to be used where interviewers judged that informants were likely to have difficulty in completing the Travel Record or where the informant might need encouragement to continue for the full seven days. From counts made in the first three months of fieldwork there were one or more mid-week calls for 16% of those households who had accepted Travel Records (including mid-week calls made to establish contact with a household member who had not yet been interviewed).

Within four days of the end of the Travel Week there was the final pick-up call to collect the Travel Records and any final items of information. The main tasks were to collect the Travel Records, to check them and to obtain any further details needed. As shown in the table, the pick-up call was within 4 days of the end of the Travel Week for 85% of responding individuals.

Delay to pick-up call

No of days the pick-up call is after the travel week end day	% of responding individuals
1	31
2	23
3	18
4	13
5-7	10
8-14	4
over 14	1
Base (= 100%)	25785

Finally the Travel Records were coded in the interviewer's home on to Journey Schedules, the details for each journey being entered on a separate page.

The average length of time per household spent at the different stages (as derived from the calls and contacts sheets or in the case of checking and coding time, from claims forms) was:

Interview timing

placing call	49 minutes
mid-week checking call (carried out at 1 in 6 households)	16 minutes
pick-up call	22 minutes
checking and coding	58 minutes
OVERALL AVERAGE (taking a sixth of a mid-week checking call per household)	132 minutes

Based on pilot reports the guidance given about checking and coding was that checking would take 20 to 30 minutes per household and coding 40 to 45 minutes, 60 to 75 minutes in total. The average, at 58 minutes, was lower than the pilot estimate. The reasons for this included:

- i. the claims forms understated the total amount of time spent by the interviewer on checking and coding because some was carried out in waiting time between interviews, and some was not claimed as interviewers felt that they took too long for some households and underclaimed;
- ii. the greater use of 'duplicate' and 'repeat' journey codes may have reduced coding time following the pilot stages.

The collection and classification of journey information depended crucially on the definitions used. As already mentioned interviewers were issued with a 64 page Definition Manual which they were trained to use through reading, practice, instruction and testing. The Manuals were pocket sized to enable interviewers to carry them around easily and many interviewers commented how useful they were. The Manual covered the survey definitions in 6 sections:

- Section 1 Travel coverage and structure
- Section 2 Journey purposes
- Section 3 Stage methods of travel
- Section 4 Public transport stages
- Section 5 Private transport stages
- Section 6 Household motor vehicles

The Manual was well liked but there were problems in using certain definitions. These are covered in the section on problems and recommendations in Chapter 5 of this report.

There were some complaints from interviewers about the quantity of checking and coding. Some of them had problems in finding space and time at home.

3. THE PLACING PATTERN

The procedures the interviewer had to follow in dealing with the month's work (the 'quota') are described on the Interviewer Instructions pages 25 to 35. Essentially these refer to the placing pattern which is a system that aims to ensure a spread of interviews by day of week and week of month.

There were 21 addresses selected in each area. These were pre-assigned to Travel Week start days - three had to start on a Monday, three on a Tuesday and so on as listed on page 28 of the Instructions. This ensured an even spread by day of week.

Each of the 12 calendar months was divided into four 'allocation weeks', some of seven days and some of eight. The placing pattern required:

- i. that in each allocation week at least five and at most six addresses were dealt with; and
- ii. that no two addresses in one interviewer's quota started on the same day.

This ensured an even spread by week of month.

The interviewers were each given one of four 'pre-set' allocations of addresses to dates as laid down on page 30 of the Instructions. This could be altered, within the constraints described above, if it caused difficulty for instance because the interviewer was not able to work on days that were most efficient for that particular allocation.

Thus before starting work each interviewer had an 'initial allocation' to work to. There were only three circumstances in which the initially allocated Travel Week for an address could be delayed: i) if contact could not be made with someone at the address before the start of the Travel Week; ii) if the household members refused to take part at that time; or iii) if some household members were unavailable at the time. The start day (Monday, Tuesday etc) could not be altered under any circumstances. The detailed guidelines are given on pages 33 and 34 of the Instructions.

To limit the extent to which the initially allocated Travel Week was delayed interviewers were told "Except in areas where people are difficult to contact it would be unusual for you to have more than 2 or 3 addresses where the Travel Week needs to be postponed".

In fact the table shows that overall 17% of households (15% of fully cooperating households) had their allocated Travel Week postponed. From counts made in the first three months of fieldwork about two-thirds of the postponements are due to non-contact, and about a sixth each due to the other two reasons for postponement - 'potential refusal' and 'potential partial'.

Postponements

	All households		Fully cooperating households	
	No.	%	No.	%
Not postponed	12778	83	8711	85
Postponed	2592	17	1555	15
Total	15370	100	10266	100

4. THE INTERVIEWERS

Two hundred and eight interviewers were briefed on the survey. Although it is inevitable on all surveys that some work will be allocated to new or inexperienced interviewers, an effort was made on this survey, whenever possible, to use interviewers with experience on other complex or record-keeping surveys. The majority of interviewers allocated work on NTS were experienced on either FES or GHS, or both. Of the remainder, all but a few had experience of at least one complex survey.

Because of the complexity of NTS and the time invested in training on the survey, interviewers were encouraged to work regularly on NTS to maintain their competence and ability. 82% of interviewers briefed on NTS worked on more than one quota of the survey and 66% worked on three or more quotas. This resulted in an experienced and dedicated fieldforce by the end of the survey.

The allocation of interviewers was especially difficult for the NTS because the availability demands of the survey limited the choice of interviewers. On the first NTS quota, eight weeks availability was required to cover: study, briefing, exercises, fieldwork and coding. On subsequent quotas six or seven weeks was necessary to ensure that enough time was allowed for coding at the end of the field period. The pattern of interviewers' working periods and holidays often made it difficult for them to fit in with the survey availability demands.

5. INTERVIEWER TRAINING

Introduction

All interviewers working for OPCS are given a basic Social Survey Division training in interviewing. All attend a three day training course at HQ and are accompanied by a Field Trainer for 2-3 days on their first quota of work.

As mentioned previously, almost all interviewers allocated work on NTS had worked on at least one complex survey and the majority had worked on either FES or GHS. They, therefore, had had useful field experience before coming onto NTS.

The survey specific training given to an interviewer has two main objectives: the first is to train the interviewer to handle the survey documents and questions, the second is to give the interviewer a

knowledgeable and confident attitude towards the project. The second was particularly important for NTS where pilot results had shown that interviewer morale had a clear effect on the response achieved from the public.

The National Travel Survey required interviewers to master five interviewing documents, a comprehensive instruction manual and a definition manual. Because of the technical complexity of the survey particular attention was paid to ensuring that interviewers received adequate training. The training for the survey was split into three parts: a pre-briefing stage, the main briefing and the post-briefing stage. In addition inexperienced interviewers were given some training in the field, and interviewers working on the NTS after a gap of several months were given some re-training.

Pre-Briefing Stage

From a total of 14 hours study time allowed on this survey, interviewers were expected to spend 8 hours on their pre-briefing preparation. Interviewers received a briefing set of documents (instructions, definition manual and schedules). They were required to study the documents before completing a pre-briefing exercise of questions to test their understanding of certain instructions and definitions. The exercise was returned to HQ, marked and the results passed back to the interviewer at the briefing. In addition, the errors discovered on the exercises were used as examples for discussion in one of the main briefing sessions.

Interviewers were also asked to keep a Travel Record of their own journeys for three days and to code the journey details onto a Journey Schedule. This proved useful in that it helped reinforce the interviewer study and gave them first hand experience of the problems and difficulties in keeping a Travel Record. It also prepared them for the briefing sessions on placement of the Travel Records and coding of the Journey Schedule. Some had useful ideas and suggestions based on their own record keeping.

The Briefing

The briefing lasted for one and a half days. This was an increase of half a day over the early pilot briefings which interviewers had felt were too concentrated and lacked enough practical work.

The programme shows the format of the briefings and the various sessions which were taken by either research or field staff.

Briefing Programme

Day 1

11.00	Introductions Collect pre-briefing exercises	Field
11.15	Background and Purpose of survey	Research
11.30	Allocation calendar and rules Planning the work Achieving response	Field
12.15	Demonstration interview - pick up call	Field
12.45	Use of Definition manual Journey definitions	Research
13.30	Lunch	
14.30	Discussion of pre-briefing exercises	Research
15.00	Interview schedules	Research
15.30	Tea	
15.45	Introducing the Travel Record	Field
16.00	The Journey Schedule	Research
16.15	Practice in coding Journey schedules Questions	Field
17.00	Finish	

Day 2

10.30	Picking up the Travel Record Demonstration interview	Field
11.15	Practice sessions in Groups	Field
12.45	Administration Post briefing exercise Questions	Field/Research
13.00	Finish	

A great deal of preparation preceded the briefings to ensure that they were as interesting and informative as possible for the interviewers. The briefing was organised to incorporate as many practical sessions as possible. The morning of day 2 was spent entirely in groups with interviewers practising probing of Travel Records and coding of Journey Schedules.

The actual length of each session was flexible. The interviewers' pre-briefing preparation usually resulted in interviewers having more comments and questions than is usual at briefings and, as far as possible, these were included in each session. This was particularly true of the sessions concerned with the Allocation Calendar, Planning of work, and the Discussion of exercises sessions. The session on Achieving response often drew on interviewers' experiences of other diary keeping surveys such as the Family Expenditure Survey.

As fieldwork progressed common errors, identified by pre-checking work returns, were included in the relevant sessions; in particular, problems with the vehicle schedule and the coding of escort journeys were covered in more detail at later briefings. In total there were seventeen briefings, 12 in London and 5 regionally. A maximum of fifteen interviewers attended each briefing.

Post-Briefing

The interviewers used their remaining 6 hours study time to complete the post-briefing stage. A post-briefing exercise was designed to consolidate the points learnt in the briefings. These exercises were marked at HQ and the results sent to the interviewer.

A further part of this stage of the training was for the interviewer to carry out a practice placement and pick-up interview with a household not known to them. The interviewers selected a household at random, close to their home or in their work area and carried out a full interview. This was treated as a genuine interview with interviewers checking all documents and coding all journeys onto Journey Schedules. The dummy interview documents were fully checked by field branch staff and written comments returned to the interviewer.

The dummy interview component of the training meant that the interviewer had experience of handling the survey with members of the public before starting work on the real sample.

The post-briefing study time allowance enabled interviewers to carry out any revision as necessary before starting work on their quota.

Field training

Field trainers accompanied the relatively inexperienced interviewers working on NTS who had not previously worked on a diary-keeping survey. It was felt that such interviewers would benefit from help in organising their work and first hand advice on gaining cooperation.

Trainers joined these interviewers for three days: two at the beginning of the quota (for the reasons just given) and one day later in the quota to see pick-up calls and check the quality of coding.

Re-study Exercise

Interviewers who were allocated a quota after not working on NTS for more than 3 months were asked to complete a re-study exercise and were expected to spend 3 hours revising their knowledge of the instructions and definitions. The exercises were marked and returned to the interviewers before they restarted work on the survey.

There were no significant problems with these exercises. Interviewers felt that re-study was vital before restarting work after a long break and all appeared to have carried out this revision conscientiously.

6. QUALITY CONTROL

There were three types of check carried out on interviewers' work.

1. quality checks on work returns (primarily to check the quality of schedule completion);
2. field observations and routine interviewer monitoring (to check interviewer performance in general); and
3. recalls, in person, by telephone or by post (to check interviewer honesty and accuracy).

Quality checks on work returns

Quality checks were of two types.

i. Booking-in checks

When work was first received in HQ and was booked in, several items were checked:

- that all the relevant documents had been included for each household in a quota;
- that all documents were serial numbered correctly;
- that documents were ordered correctly; and
- that response information and interview details were completed on the front pages of the household and individual schedules.

ii. Prechecking

Prechecking was done by NTS Field Office staff and was usually carried out in two parts. Before actual fieldwork began, interviewers new to NTS carried out a practice interview (see preparation section). This was checked thoroughly and a summary of errors sent to the interviewer. Second, two fully cooperating households were checked in detail from each interviewer's first despatch to HQ. Again, individual summaries were sent to each interviewer. In cases where there was some concern over the quality of an interviewer's work further prechecks were carried out later in her or his quota.

In addition the Field Office also received prechecking reports from PAB on a selection of interviewers. These were forwarded to interviewers in summary form.

Errors which occurred frequently were included in general prechecking notes and these were circulated to all interviewers for information. Four general notes were issued during fieldwork and these summarised the common errors identified (see Appendix 4).

Field observations and routine interviewer monitoring

A sample of interviewers were observed by Field Trainers in the routine way as part of SSD's Annual Assessment system. These visits, carried out to ensure that the quality of interviewing is maintained, last for two days and are usually carried out in the middle of quotas to ensure that the whole range of tasks is seen.

Field trainers observed and reported on the work of 51 interviewers working on NTS.

Interviewers' work was also monitored in the following ways:

1. each region monitored interviewer's progress on each quota to ensure work was carried out promptly;
2. the Field Office compiled individual response rates for each interviewer at the end of each month;
3. prechecking (see Prechecking Section above); and
4. recalls (see Recall Section below).

Problems identified by any of these sources were followed up with the individual concerned either by letter, telephone, or by a visit from a field trainer.

Recalls

Recalls were carried out by two main methods.

- i. By telephone, from the SSD central telephone unit in Titchfield, using specialist telephone interviewers. (In addition this unit handled the postal recalls sent to ineligible addresses).
- ii. In person by Field Training staff.

Overall, recalls are carried out on a random selection of interviewers on any one survey, the intention being to recall on the work of every interviewer in the field force at least once a year.

Recalls carried out on NTS were:

	<u>Telephone</u>	<u>Personal</u>	<u>Total</u>
Recalls carried out	34	31	65 quotas

This represented 9% of the quotas issued.

Particular concern had been expressed at the beginning of fieldwork about the average household size on NTS which appeared to be smaller than on the General Household Survey. This item is routinely checked at recall and an error with the household composition was discovered at only one household.

Apart from one case where a serious error was found in the interviewer's placement procedure, other quotas contained no identifiable errors or only errors of a minor nature.

7. MAINTAINING RESPONSE

The response rate achieved on the latest two rounds of NTS had declined and the Department of Transport and SSD were anxious to restore the response to its previous level whilst maintaining the quality of the data collected. There were a number of methods adopted to establish and maintain a satisfactory response rate in this round.

7.1 Briefing and instructions

Emphasis was placed on the importance of response rate in two sections of the briefing. During the 'Planning of work' session, part of the discussion focused on introducing the survey and interviewers were encouraged to give their own ideas and experiences. To help interviewers to persuade reluctant informants to cooperate detailed notes of the uses made of NTS results were given in the instructions (this was greatly expanded from the original pilot version). The 'Introducing the Travel Record' session covered the importance of motivating informants to keep the Travel Records and of avoiding partial interviews.

7.2 Survey Methods

i. Reminder cards/Reminder calls

Whenever there was a delay of more than a few days between the placement interview and the start date of travel record keeping, interviewers were encouraged to remind their informants to start record keeping. It was hoped that using a reminder would reduce the number of partial interviews due to informants forgetting to start their Travel Records. Reminders could be in the form of a call at the address, either in person or by telephone, a letter posted to the address or by putting a specially designed reminder card through the door. It was left to the interviewers' discretion as to whether they used a reminder and which form of reminder they used. In many instances reminders were not found to be necessary but they were useful in some cases such as with elderly informants or those lacking "motivation".

Mid-week checking calls

These calls were optional and to be made whenever the interviewer felt that the informant(s) might need help to complete their Travel Records or encouragement to continue for the full seven days. In a number of cases mid-record calls were made to establish contact with a household member who had not yet been interviewed. As with reminders it was felt that mid-record calls would reduce the number of partial interviews and thereby increase the number of fully cooperating households.

7.3 Response Groups

Five response groups were held over the year with a total of twenty-four interviewers attending. The groups were made up of relatively inexperienced interviewers together with an established interviewer and a Field branch staff member to lead the discussion. The group explored any difficulties its members had found, discussed factors which affect response rates and tactics for making improvements, drawing on the experience of the established interviewer and staff member. All the interviewers who attended the groups had worked on NTS and discussion was centred around the survey and maximising its response rate - particularly for interviewers working in the GLC area.

7.4 The NTS Newsletter

The newsletter was introduced as a means of improving the communication between HQ and the interviewers. All the interviewers who had been trained on the NTS received a total of 5 newsletters throughout the year. Each issue contained a mix of comments about the progress of the survey and more general or light hearted information. The newsletters achieved their aim of keeping interviewers informed about developments on the survey and maintaining interest and enthusiasm. Interviewers found the newsletters particularly welcome at times when they were not actually working on NTS and were keen to know of its progress.

The newsletter had a secondary function in providing back-up to the prechecking notes by providing extra instructions on points which arose at briefings and some information from PAB (see Appendix 4).

7.5 Individual Response Rates

At the end of each Fieldwork month interviewers were sent an individual note of their response rate. The notes sent out consisted of a standard form on which was entered the interviewers' own fully-cooperating response rate and the average response rate for his or her region. Space was available at the bottom of the form for personalised comments when necessary. The majority of interviewers found the notes useful in helping them monitor their own response rates and expressed appreciation of the individual acknowledgement from HQ.

7.6 Telephone Conferences

Telephone Conferences had been proposed as a method of maintaining interviewer motivation during NTS Fieldwork. It had been planned to hold telephone conferences with groups of interviewers who had completed at least one NTS quota and were due to start another. They were intended to provide the interviewers with an opportunity to discuss problems and ask advice of Field or Research staff and

to enable them to exchange response tips between themselves. However, as the NTS field period progressed, the need for these telephone conferences was not realised. The reasons for this were:

- i. Approximately two fifths of the interviewers who worked on the mainstage had already worked on one or more pilot stages. They were, therefore, able to air grievances, pass on tips and ask advice at the briefings. New interviewers were able to learn from this.
- ii. Without the conferences there was a high level of telephone contact with interviewers who rang HQ with queries or to discuss response and other problems.
- iii. All interviewers attended one of several personal conferences in February 1986. Although these were general SSD interviewer conferences, a lecture was given on the NTS developmental work and the opportunity was taken to include a morale-boost element in the talk to help maintain motivation in the last four months of the survey. Field Branch staff also took the opportunity to talk informally to many of the NTS interviewers during these conferences.

7.7 Reissuing addresses

Reissuing non-responding addresses is considered as a last resort in improving a survey's response rate. It is used when response in a particular area, or from an individual interviewer, is low. Usually the addresses are reissued to another interviewer with a proven response record who has had experience in converting refusals and in contacting evasive informants.

On NTS it was proposed to reissue only in Greater London. Response rates in Greater London tend to be about 8 percentage points below the national average although when SSD carried out NTS in 1975/76 response rates in London were 14 percentage points below the national average. With this differential in mind Field Branch originally proposed to reissue automatically any quota with six or more refusals or non-contacts.

Of the 93 quotas issued in the GLC area, nineteen were returned with over five non-response serial numbers. Only nine of these quotas were actually reissued to other interviewers. There were two reasons for not reissuing the other quotas.

1. Refusals were monitored as they arrived in the Field Office. Where interviewers had already made every effort to convert the household and had a good response record, the addresses were not reissued. Similarly addresses where interviewers had reported an aggressive or contentious refusal were not reissued.
2. Pressure of work in some months meant that experienced interviewers were not available to carry out the reissues at the appropriate time.

Seventy addresses were reissued and only 4 converted into fully cooperating households. Although in itself disappointing, the poor conversion rate indicates that the other action taken to improve response had been successful and that interviewers making the initial approach had clearly made the maximum effort to gain response.

Although reissues on this survey made very little difference to the GLC response rate, we would recommend retaining the reissue facility on future surveys.

7.8 Weekend Working

On most surveys, weekend work by interviewers is exceptional and prior permission from HQ is required before Saturday or Sunday work is allowed. Weekend work is usually necessary where contacting informants in an area has been a problem or an informant has only consented to an interview at this time.

Because of the greater difficulty in making contact in London, interviewers working in the old GLC area were allowed greater latitude with weekend working.

On NTS pilots it was found that Saturday work was necessary in the GLC area and it was decided to issue a blanket authority for Saturday work on GLC quotas (ie so that no formal prior authority from HQ was needed).

The guidelines laid down for GLC interviewers were:

- i. They were allowed to work on any Saturday in the month if they were having difficulty contacting households during the week. No prior authority was needed.
- ii. Once a Saturday visit had proved necessary, the interviewers were encouraged to try other addresses to make efficient use of their time in the area.
- iii. They were advised that afternoon calls were more productive than morning calls, with lunchtime being the best time for making contact.
- iv. Sunday working was permitted but only with prior authority from HQ.

Interviewers outside the GLC were encouraged to work on Saturday if this was necessary but prior permission was required.

Weekend working was monitored for the first three months (July to September). One hundred and seventy-six quotas were examined (information was not available for four quotas when the table was compiled).

Saturday working

	GLC area	Non-GLC	Total	
			No	%
Total interviewer quotas in which at least one Saturday was worked:	18	43	61	35
Total interviewer quotas	23	153	176	100

The table shows that overall 35% of interviewers made use of Saturday work during the first three months. Predictably, much greater use of Saturday work was made in the GLC area where 78% of interviewers worked on Saturday.

7.9 The London Leaflet

This leaflet was produced to aid interviewers with quotas of work within Greater London (the old GLC area). It provided written information about the survey as it concerned those who live or work in the capital. The leaflet was designed so that the interviewer could use it either after the initial doorstep contact, as a means of reinforcing the purpose and value of the survey, or as a "calling card" when no contact had been made. There was a space provided on the leaflet for the interviewer to leave a message. The leaflet was produced to try to limit the differences between response in London and the rest of the country.

The interviewers who worked in Greater London expressed satisfaction with the London leaflet and it was widely used. Although it is difficult to assess directly the effect of the leaflet on response, it did help interviewers' confidence in Greater London and will have had an influence on their attitude to the NTS. This may have influenced their response rates. Although the leaflet was welcomed by all interviewers some felt that the quality of the paper was poor and a glossy leaflet would have had more impact.

7.10 Reallocation of addresses

One of the features of the NTS is the placing pattern. Before commencing fieldwork interviewers were obliged to assign their 21 addresses to individual dates throughout the months according to set rules. The assignment controls the start of the Travel Week at each address and ensures an even spread of Travel Weeks throughout the month.

On early pilots interviewers were allowed to reallocate an address and delay the Travel Week only if the informants at the address were not contacted before the Travel Week was due to start. In such cases the Travel Week would be postponed and another address, not yet contacted, would be brought forward to maintain the balance over the month.

For the main survey this rule was amended to allow the postponement of addresses in two other circumstances:

1. where there had been contact with the household but one or more individual household members were not available for interview before the original Travel week; and
2. where the household was reluctant to cooperate at the initial contact and perseverance at that point might precipitate a refusal.

To avoid introducing bias into the reallocation of addresses interviewers were instructed to view reallocations as exceptional cases and reallocations were not allowed once the interviewer had mentioned the Travel Week since it was feared that informants might wish to choose an easy or interesting Travel Week if this was allowed. Thus, interviewers would have to make any reallocation decisions at the doorstep stage before the full details of the survey were given to informants.

During the first three months of fieldwork 14% of addresses were postponed. Almost two-thirds of these were due to non-contacts and would therefore have been postponed by the original allocation rules. The number of extra reallocations produced as a result of the amended allocation rules is relatively small and will have had a small direct effect on the response rate. However, more valuable was the psychological effect of this rule change on interviewers, most of whom felt they were given a "fighting chance" with difficult households which helped promote a positive attitude to gaining response and almost certainly had a beneficial indirect effect on the response rate.

8. ANALYSIS OF RESPONSE RATE

8.1 Overall response rate

The overall response rate for the 1985/6 NTS was 76%. As can be seen in the table this represents an improvement on previous rounds and meets one of the objectives of this round of the survey.

Comparison of response rates by round

Year	Fully cooperating households (%)
1965	71
1972/3	72
1975/6	65
1978/9	59
1985/6	76

The response rates analysed here are taken from field branch records, before the data were edited. During the edit process a few households were reclassified from 'fully cooperating' to other categories but the overall rounded response rate remained at 76%.

8.2 National Response rate analysis

		<u>No.</u>	<u>%</u>	<u>%</u>
Code	Sample set	15120		
	Extra households produced	258		
	Total dealt with	15378	100%	
6&7	No household at address	1430	9%	
8	No household selected	110	1%	
9	No trace of address	240	2%	
	Eligible households produced	13598	88%	100%
1	Fully cooperating	10392		76%
2	Partially cooperating	1223		9%
3	Refusal to placement	1561		11%
4&5	Non-contact	422		3%

8.3 Response rate by month

Month	Total No of Eligible Households	Full Interview	Partial Interview	Refusal	Non-Contacts
		%	%	%	%
July	1167	75	10	13	2
Aug	1106	74	11	11	4
Sept	1150	75	9	13	3
July-Sept	3423	75	10	12	3
Oct	1118	80	8	10	3
Nov	1100	78	8	11	3
Dec	1139	73	11	12	4
Oct-Nov	3357	77	9	11	3
Jan	1146	78	9	10	3
Feb	1130	76	8	13	3
Mar	1156	80	7	9	3
Jan-Mar	3432	78	8	11	3
Apr	1117	77	8	12	3
May	1133	75	9	13	3
June	1136	77	9	10	4
Apr-June	3386	76	9	12	3
Total	13598	76	9	11	3

8.4 Response rate for Greater London by quarter

Quarter	Total No of Eligible Households	Full Interview	Partial Interview	Refusal	Non-Contacts
		%	%	%	%
July-Sept	457	66	12	15	6
Oct-Dec	400	71	9	17	4
Jan-Mar	434	71	10	15	3
Apr-June	414	67	12	16	5
Total	1705	69	11	16	4

8.5 Analysis of non-response

Non-response was analysed in detail for the first four months of 1986. Interviewers coded the reason for refusal and the stage at which refusal occurred on the calls and contacts sheet. Although reasons given for refusal are subjective they provide a broad indication of the types of refusal on the survey.

During the four month period 498 refusals were examined which represented 11% of the eligible sample in that period. Seventy-seven per cent of these refusals came at the doorstep contact and twenty-three per cent during (or after) the full introduction.

Significant numbers of refusals (ie over 10% of refusals) were attributed to:

1. Informants couldn't be bothered with surveys = 29%
2. Informants didn't believe in surveys = 20%
3. Informants were too busy to be interviewed = 17%

Only 2% of informants refused because they disliked the survey subject matter.

Analysis of refusals occurring Jan-Apr 1986

Reason for refusal	Where refusal occurred		Total	
	Initial contact	During/After full intro'	No	%
Doesn't believe in surveys	81	21	102	20
Anti-government	17	6	23	5
Can't be bothered	104	40	144	29
Too old	18	4	22	4
Bad previous experience with surveys	12	5	17	3
Too sick	25	6	31	6
Disliked subject matter	5	3	8	2
Too busy	71	15	86	17
Put off by record keeping	0	1	1	0
Language problem	6	4	10	2
Too frightened/shy	12	2	14	3
Other	32	8	40	8
Total	383	115	498	100

12 refusals where the reason for refusal was not coded are excluded from the above table

Partial interviews during this period accounted for 9% of the eligible sample. Partial interviews occurred in 3 ways.

- i. One or more household member was not available or refused to be interviewed at placement.
- ii. All household members were interviewed at placement but one or more refused or failed to keep Travel Records.
- iii. A combination of i and ii.

Non-contacts, at 3% of the eligible sample were, in line with the proportion of non-contacts on other OPCS surveys.

8.6 Complaints from the public

There were only two written complaints from the public out of 13598 households approached. One person complained that some questions were pointless and other questions an invasion of privacy. The other person complained of the flagrant squandering of taxpayers' money.

CHAPTER 4

DATA PROCESSING

1. INTRODUCTION

This chapter describes and evaluates the procedures used in conveying the survey information from the schedules once they arrive in the office right through to the production of a clean data tape for DTp. The procedures included checking, coding, data capture and editing.

2. SEQUENCE OF WORK

The sequence of events was as follows:

- i. Completed schedules were sent each week by the interviewers and received in Field Branch at Head Office.
- ii. Some initial checks were made on each case (household) received; the first two cases of each interviewer new to the survey were checked thoroughly.
- iii. Schedules were passed to Primary Analysis Branch (PAB) for some further checking and for coding of Socio-Economic Group (SEG) and Industry.
- iv. Schedules were keyed directly on to computer tape, with some range checks made at the point of keying. A tape was sent each week to the computer bureau CAM (Centre for Analysis and Modelling).
- v. PAB ran the computer edit programs on the weekly tape, produced a printout of the errors and inconsistencies, and had it sent from CAM.
- vi. PAB staff investigated each error by reference to the schedule if needed and for many cases by reference to the original travel record as kept by the informant. Corrections were made where possible; any eventuality for which there was not a clear instruction was referred to DTp staff for a decision.
- vii. Lists of update instructions were sent to CAM, keyed in by them and then a new edit run was carried out by PAB and further corrections made as necessary until a 'clean' tape had been produced.

At each stage care was taken to ensure that schedules were not misplaced with despatch notes being issued at different points in the sequence.

3. FIELD PROCEDURES

The main procedures carried out by Field Branch concerned monitoring the performance of interviewers - their response rate and their accuracy in completing schedules. These included for instance the thorough checking (as already mentioned) of the first two households' schedules returned by each interviewer with feedback being given on all errors found. However, there were also a limited number of checks carried out on every schedule, the principle being to check those items which Field Branch was in the best position to correct (using for example the despatch notes sent in by interviewers that included certain information about the household and that were kept by Field, not sent to PAB). The checks carried out by Field staff included:

- serial numbering of all schedules was valid and consistent;
- date of recording period was entered and valid;
- response (code B) was entered and agreed with other returns.

For each interviewer, Field Branch kept a check that work was in progress at a reasonable rate, and that every address issued was dealt with.

Schedules were sent to PAB at least once a week.

4. PAB PROCEDURES - CHECKING AND CODING

On receipt in Primary Analysis Branch (PAB) a few basic checks were carried out on each case:

- serial numbering (this was checked by both Field and PAB because of its importance);
- the outcome code was matched against the presence or absence, and completeness of each type of schedule. for example, for a household to be classed as fully cooperating there must be a completed schedule for each person and a completed Travel Record and Journey Schedule (as well as household and vehicle schedules);
- the date of the end of the recording period was matched against the final allocation week; and
- the number of calls till first contact was checked for completeness.

Interviewers were instructed to pin flags to schedules when they were unable to code a particular case, or else they were unsure of the code. Any items that had been flagged by the interviewer were looked at and the appropriate action taken, if necessary by referring to DTp.

The only items that were coded in the office were Socio-Economic Group (SEG) and Industry, using the job title and industry description collected by the interviewers. This coding work was subject to a random 30% check. (Inexperienced coders had 100% of their work checked until they achieved an acceptable standard, which was an error rate of no more than 2%.)

Because of a delay in the edit program being available PAB staff carried out further checks on the first half of the fieldwork. This was useful in that some common errors were found early in the fieldwork period and were reported back to interviewers through bulletins that were issued from time to time.

The schedules received and processed in one week were put together in a batch and sent for keying. There were 50 weekly batches to cover the year's fieldwork, plus two further batches to cover problem cases making 52 batches in all.

Further details of the checks and coding carried out by PAB are given in the Coding Instructions. Copies are held by DTp.

5. KEYING

The data from the schedules were keyed using PCK (Processor Controlled Keying) equipment which entered the data directly on to magnetic disc; each weekly batch when complete was copied to a tape that was then sent to CAM.

Use of the PCK equipment provided the opportunity to include range checks as the data were being entered. The purpose was not for the keyers to correct the information on the schedule if what was written was outside the valid range but just to pick up keying errors.

In addition the keying was verified, that is a second data processor keyed the data a second time and the machine indicated to this second person any discrepancy in the keyed items, which she or he then corrected. When a data processor first started work on the NTS all her or his work was verified. Once a satisfactorily low error level was reached the verification rate was dropped to a random 10%.

Counts that were carried out on a set of fourteen weekly batches showed that the cases included in the random verification contained a consistent error rate of between 0.10% and 0.12%, that is just over 1 in 1000 characters keyed was in error; many and perhaps all of these would be picked up by the computer edit.

Altogether data for 15353 households were created on tapes - more than this number were keyed as a few were keyed twice since it was sometimes more efficient to do this than alter the computer records (as described later).

The number of records created is shown in the table below.

<u>Number of Records created on tapes</u>	
<u>Record type</u>	<u>Number</u>
Household	15353
Vehicle	10699
Individual	29748
Journey	415396
Stage	438742

The total number of key depressions (effectively, the number of characters of data entered) came to about 20 million, though the precise number was not recorded.

6. EDITING AND CORRECTION

As in previous rounds of the NTS it was planned to have an extensive set of computer error checks so that the final, clean, data set should display as few inconsistencies as possible. This is important since so many different people analyse the NTS. The edit check process was thus expected to create a substantial amount of clerical work. In addition the majority of 'errors' found in most surveys arise from missing data, that is questions where the interviewer has not recorded an answer (maybe the informant could not or did not give an answer, maybe it was uncodeable or maybe the interviewer made a mistake); and in general there is little that can be done manually to deal with these errors. However because the NTS is a diary survey missing data on the journey schedule can often be recovered by referring back to the diary - the Travel Record. Thus the amount of clerical work in editing was expected to be large, but

with no guidance from the previous NTS it was difficult to estimate. In the event the clerical work needed was much greater than expected; for example it was planned that about 50% of households would contain at least one edit error; in fact the proportion was about 66%, (but about 95% of fully cooperating households). Both because of the size of the editing task expected and because it turned out in practice to be even larger various steps were taken to control and reduce the clerical work needed. These are described later following a description of both the computing system and the PAB system used for editing.

6.1 Computer edit system

The edit system that was developed by CAM, under specification from DTp, comprised essentially three parts.

i. The pre-edit carried out the following tasks.

- a. It read the data tape received from the keying staff;
- b. It checked that each data item was in a valid range (and if not inserted an 'invalid' code);
- c. It checked the data for certain structural characteristics (eg appropriate serial numbers and identifiers present and valid, and data records of the right length) - any cases that failed this check were rejected and printed out; and
- d. It restructured the data to form 6 record types at different levels:

household
vehicle
individual
day
journey
stage

The restructuring primarily involved taking individual and vehicle information from the household schedule and consolidating it with the information on the individual and vehicle schedules respectively, but there were some other changes made too. At this stage cases and case numbers were created. A case consisted of all schedules in a sequence which had the same household serial number.

- e. Finally it produced an error printout.

ii. The edit program carried out the following tasks.

- a. It read in the data, a case at a time, 'expanded' any repeat or duplicate journeys (described in more detail later), interpreted blank values as valid (DNA or Does Not Apply) or invalid (NA or No Answer), and carried out about 350 separate checks (some of these being multiple checks in themselves) on each case. The checks fell into 6 types (including automatic corrections) as described below.
- b. The program would then supply a listing of the cases in which errors (or rather check failures - a case may fail an edit check but not necessarily contain an error) were found, together with the values of the variables for each case and a list of the checks that had failed. This

output could be manipulated in various ways, two in particular were used standardly. First any single check or group of checks could be suppressed, which means that failures of that check or group of checks would not produce a report on the case which failed.

There were basically two kinds of edit check, those which had to be satisfied before the case could be accepted as clean and those which may fail even on clean data but which were there to identify items where it was likely a correction could be made. These were called 'hard' and 'soft' errors respectively. The main use of the suppression facility was to stop the reporting of soft check failures on the second and subsequent passes of the edit program.

The second facility enabled the output for a single case to be abbreviated. With several individuals and vehicles and many journeys and stages some cases would take a number of pages of printout to reproduce the data and to list the failed checks. In general the output was limited to the specified record (or records) in error and the associated higher level records. (Even so the quantity of output was large.)

- c. The edit program also processed update instructions as supplied by PAB. Thus at second and subsequent passes of the edit the program would first update each case and create a new data file, it would then expand the duplicate and repeat journeys for the case and run the edit checks. Finally it would produce the printout as specified by the instructions supplied at run time.
 - d. Finally the edit program could produce listings of cases in specified categories. The main use of this was for listing out 'other-specify' cases: there were several questions for which the code list used by interviewers contained a final catch all code, 'other-specify', which the interviewer used but then also wrote in details on the questionnaire. The intention was to enable these questions to be further coded in the office, 1. if there were sufficient such cases at a particular variable to be worthwhile and 2. if the answers written in seemed to fall into distinct categories that were worth distinguishing. A count was made on the pilot and on the early batches of the number of uses of the 'other-specify' code for each variable and if the number was not insignificant, then a listing of such cases was provided, using the edit program. If further coding seemed desirable then a coding frame was constructed and the edit program instructed to list all such cases in future for recoding. In the event there were 13 variables for which the 'other-specify' category was recoded.
- iii. The third program was a routine to check for missing and duplicated household serial numbers. The household serial number consisted of three parts: the 4 digit area number, the 2 digit address number (which ran consecutively from 01 to 21 in each area) and a 1 digit household number which in almost all cases took the value 1 but in multi-household addresses where more than one household was selected it could take the value 2 or 3. To check for missing serial numbers the program was

supplied with a list of all area numbers and then it reported any address number for which there was not at least a household number 1; thus it would not have identified extra households in multi-household addresses that might have been omitted by mistake, but it did check the presence of every address.

These three programs were initially run by CAM on instructions from OPCS and DTP but the first two programs were run by OPCS staff once they had developed sufficient experience.

There was also software to deal with 'housekeeping'. The data files and error reports (held on computer) were large and computer storage costs could be substantial so the storage areas were pruned and reorganised each week to minimise costs.

6.2 Expansion of duplicate and repeat journeys

The facility to code duplicate and repeat journeys was used to reduce the quantity of coding work required of interviewers. A duplicate journey was one which was virtually the same as a journey made by another member of the household (ie two (or more) people travelled together). A repeat journey was one which was virtually the same as another journey by that same person earlier in the week. In both cases the interviewer would enter a reference to the original journey rather than write out all the details in full again. Where one or two items differed from the original journey the interviewer could still record the journey as a duplicate or repeat but would also code the item(s) which varied from the original.

On previous rounds of the NTS duplicate and repeat journeys were written out in full by office coding staff. For this round it was decided to make this 'expansion' of repeat and duplicate journeys a computer task. In the data set produced by the pre-edit and by the edit the journeys were left unexpanded so that any update instructions applied to the original journey would automatically apply to the repeats or duplicates.

These journeys caused particular problems in the edit process. It was relatively easy for the interviewer to make an error in the serial number of the journey being referred back to; it would then take quite some time to work out what had been intended; and also there were logical problems in updating the journeys. This process would need to be reviewed in future rounds.

6.3 The checks made by the edit program

As mentioned previously there were essentially six types of edit check made.

i. NA - 'No Answer' checks reported where a variable was blank but blank was not an acceptable code. Other range errors come later under 'DNA' and 'CON', but blanks had to be treated differently since there was often no way to decide which value to insert so a blank had to be left (or rather an NA code inserted) whereas other range errors were always corrected.

Most NA checks were suppressed at the second and subsequent edits, except for a few key items, including identifiers and the variables age and sex.

ii. DNA - 'Does Not Apply' checks identified variables which should have been blank (usually to be consistent with an earlier filter question) but which were not blank. DNA checks were never suppressed (but see 'Auto-edits' below).

- iii. CON - 'Consistency' checks identified variables which either contained an invalid code (a range error) or contained a valid code that was inconsistent with another variable or variables, either on the same record or on different records. CON checks were never suppressed, though see CON/SUP below.
- iv. PL - 'Plausibility' checks identified values which seemed implausible but were not necessarily impossible. These were suppressed at the second and subsequent edit.
- v. CON/SUP - 'Consistency/Suppressible' checks were consistency checks (as described in iii.) but which were transferred to this group when a household arose which failed the check but for which it was decided, after consultation with DTp, to make no correction. Clearly CON/SUP checks were suppressed at the second and subsequent edits.
- vi. Auto-edits - 'Auto-edits' were checks where automatic corrections were made in the event of a case failing the check. These were developed over time and were not introduced until it was clear from experience that the correction to be made was always going to be the same. The great majority of them were originally DNA checks where it was found that interviewers gave more information than was necessary and so the superfluous information was deleted automatically.

There were some changes made to the edit program over the period of editing. For instance almost every variable had an NA check at the beginning but for some there was never any correction that could be made so these checks were dropped (or in fact permanently suppressed). Likewise there were a few plausibility checks where corrections were rarely made and these were dropped.

A list of all checks made and their status at the end of editing is held by DTp.

6.4 The manual edit system

Each of the 50 weekly batches was treated separately. The pre-edit program and the first pass of the edit program would be run and the printouts sent from CAM to Primary Analysis Branch (PAB) in OPCS. Both printouts would be checked at the same time.

Although the pre-edit picked up some errors, primarily range errors, these were also identified by the edit program and so the only action taken on the pre-edit printout was to identify cases that had been rejected for structural reasons. The schedules were inspected and either re-inserted by using update instructions to the next edit or by correcting and submitting them for keying in a later batch.

Edit check failures as reported by the edit program (either at the first or at later passes) were investigated successively and appropriate action taken.

For NA check failures there are various sources of information that could be referred to - field documents, the travel record, other questions on the schedules, sometimes using outside reference sources such as Parker's Guide for engine size given the make and model of car. Besides certain key information about each case (response code, serial number, date of travel week, and number of calls to

first contact) which had to be completed before the case was accepted there were two other variables which were not allowed to be blank, sex and age of each individual. If either of these two variables was not answered information then manual random imputation was used. There was only a handful of imputations for a missing sex code, but for age there were 82 imputations. Usually there was sufficient information to limit the imputation to within a narrow range, (eg under 11, 65 or over etc); random numbers were used to select the age within the specified range.

For the other types of check the action taken depended on the judgement and experience of the coders and coding supervisor with the first instances of any problem being referred to the OPCS researcher and usually DTp for a decision. A great deal of experience was built up from working on the pilots and from preliminary work on the main survey to enable Editing Instructions (consisting of 37 typed pages) to be written before such editing work started on the main survey. Over the course of the main survey, new problems occurred and further decisions were made. These were written into the Editing Instructions, as additional handwritten instructions. Also a summary of specific decisions made during the course of the survey was produced as an Appendix to the Editing Instructions. As with the Coding Instructions, both the Editing Instructions and Appendix are held by DTp.

The general sequence followed by PAB was

- i. receive pre-edit and edit (ie the first pass of the edit program) printouts, check the error messages, write out sheets of update instructions and send to CAM;
- ii. receive a printout from edit 2 which listed those errors still remaining after the updates had been submitted by CAM; again errors were checked, update sheets written out and sent to CAM;
- iii. receive a printout from edit 3, check the error messages, write out update sheets but rather than send to CAM these were input over the terminal in OPCS directly into the computer at CAM; the relevant cases were re-edited immediately and corrections made until the case was clean (possibly involving reference to the research officer for a decision).

Sometimes updates at stage ii. were input directly over the computer. And because of initial delays in getting updates keyed in by CAM inputting updates from edit 1 directly was considered. This was not necessary in the event. (Delays were perhaps not surprising as there were on average more than 60 A4 sheets of update instructions arising from each batch on edit 1.)

The workload of an average batch (about 300 cases) for an experienced NTS editor would be:

	<u>No of Cases</u>	<u>No of pages of printout</u>	<u>No of sheets of updates written</u>	<u>No of editor weeks needed</u>
Edit 1	300	450	65	2
Edit 2	300	80	7	1/2
Edit 3	300	(not measured)		up to 1/2

The time taken by editors on the early batches was much greater than on the later ones partly as a result of greater experience on the part of the editors, partly the greater experience on the part of the supervisors, and partly the reduction in the editing work required as described in 6.5 later. New editing staff would take up to two weeks each in training and practice.

The main 50 weekly batches of editing work were completed between March and December 1986. Batch 51 (cases that were re-keyed) was also fully cleaned by the end of December. Following this the missing/duplicate serial number routine was run and queries arising from this were resolved, with the result that 60 address serial numbers were found to be missing from the data set; 59 of them were ineligible or non-responding addresses and the missing information was recovered from Field Branch records. The final one appeared from one record to be a fully cooperating household but there was no other evidence supporting this and no schedules that could be found, so the address was classified as non-contact. These missing households made up Batch 52, and the whole edit process was completed by PAB by the end of January 1987.

In order to hasten the main edit procedures a few inconsistencies were allowed through the edit for later checking by DTp (without reference to the original documents).

The quantity of error messages dealt with by PAB can be gauged from the table 6.1. This is based on an analysis of the first 13 batches that were cleaned. These contained just over a quarter of the sample, all taken from the first half of the fieldwork year. Since early batches were more thoroughly checked than later work, the error rates in table 6.1 may understate the volume for the whole data set.

The first point to note is the large number of error messages - 35913 - just under 10 messages on average for each case. This is mainly a reflection of the large quantity of data collected, in fact there was an average of just under 0.2 error messages per record, counting each stage and each journey as a record each.

The error messages can be classified by the level of the record at which they occurred (the few that involve records at more than one level are classified to the lowest). The household, vehicle and individual level records correspond with the household, vehicle and individual schedules quite closely except for the individual and vehicle information which was collected on the household schedule and transferred to the appropriate level record by the pre-edit program. The journey schedule information was split between the journey level record (journey serial number, purpose, time stated and time finished) and the stage level record (the remaining information about each journey).

The majority of the error messages (58%) arose from the journey schedule, which is not surprising as the journey and stage level (which together make up the journey schedule) comprised 94% of all records. However the number of errors per record was much higher for the other levels. Again this is not surprising as these higher levels contained many more items of data per record. The relatively low error rate at household level is partly because of the inclusion of ineligible and non-responding addresses for which few data items were applicable.

TABLE 6.1

COUNT OF ERROR MESSAGES AND RECORDS (IN BATCHES 1, 2, 5, 6, 10, 12-15, 21-24)

Level	Type of error message					Total	%	Records	%	Errors per Case	Errors per Record	Auto- corrections
	NA	DNA	PL	CON	CON/SUP							
Household	52	987	63	40	181	1323	4	3740	2	.4	.35	500
Vehicle	1473	1714	448	566	77	4278	12	2305	1	1.1	.54	1050
Individual	1159	7621	208	449	54	9491	26	6531	3	2.5	1.45	5390
Journey	1968	-	3835	2559	-	8362	23	96366	46	2.2	.09	298
Stage	5700	2394	732	2841	792	12459	35	101367	48	3.3	.12	2974
TOTAL	10352	12716	5286	6455	1104	35913	100	210309	100	9.6	.17	10212

The largest number of error messages for household and individual records were in the DNA category - in general these were due to interviewers completing more information than was necessary 'just to be safe'. More of these error messages could probably have been dealt with automatically but because they were quite complex to program and quite quick to deal with clerically this was not done.

The main problems with the vehicle records arose from the fact that many informants were unable to provide the precise information that was needed and so the schedules were not fully completed or were completed inconsistently. (There is probably no better way to obtain this information though, other than using more in-depth interviews and greater reference to documents.)

The number of auto-corrections made can also be seen from the table. The majority occurred at the individual level and these were mostly dealing with DNA errors. These individual level auto-corrections took several weeks to program and there was a question about whether it was worth the delay, given they are simple to deal with clerically; however dealing with this quantity of errors clerically (about four times 5390 error messages in all) could amount to a couple of months clerical work, and so the programming effort probably was worthwhile.

After the data had been corrected and fully cleaned some of the errors would still remain: NA, PL and CON/SUP. About two thirds of the NAs were corrected (higher than would be expected on most surveys), a half of the PLs and over a half of the CON/SUP.

6.5 Minimising the manual edit workload

As mentioned previously several steps were taken to control and reduce the manual editing work, most of which were planned in advance. Four are described below.

- i. Using data from the pilot and from early returns to the main survey error checks were looked at in detail; those checks that were never possible to correct were removed, and some others where the correction was always of the same sort were written in to the edit program as automatic corrections.
- ii. During the course of the edit work the style of printout was altered a. to reduce the quantity by removing unnecessary data and b. to simplify the layout and improve its readability.
- iii. Once it was known that the response rate of fully cooperating households was going to be as high as 76% it was decided to cease editing partially cooperating households; thus these 'partials' appear in the final data set but many of them still contain inconsistencies.
- iv. There was a good deal of discussion about how to identify those edit tasks that were particularly time-consuming. The first approach was to analyse the number of different types of error which occurred. The table described in section 6.4 shows a broad analysis of this kind. Each individual error message was labelled and the number of occurrences of that message was summed and printed out for each batch. However this did not immediately help identify which cases or parts of cases were going to lead to a great deal of work since for every error

message there were some occurrences that would be resolved quickly, and there were no individual error messages which could be identified as frequently causing a time-consuming problem. The larger problems occurred when there was some confusion within a household as to who (person 1, person 2 etc) was doing which journey and in particular which journeys were the 'originals' for which repeat and duplicate journeys.

To try to understand further the process involved, a timing exercise was undertaken. A sequence of 61 cases in batch 22 were timed during the manual processing of the edit 1 printout. The main finding was that half the total time spent was spent on just 4 of the cases each of which took about three quarters of an hour. The time spent on a case seemed to be directly related to the number of update instructions that were written, however there still did not appear to be any way in which it was possible to predict which cases and which errors were going to cause most work so it was not possible for example to decide to reject certain cases and not edit them to save edit time - it took quite a proportion of the time just to find out if the case was going to be a difficult one. Nevertheless, there was one action taken: for those cases where, once the problem was resolved, there were only a few changes to make (for instance where journey serial numbering had gone away) then it was more efficient to make those adjustments to the schedules themselves and completely rekey them rather than write out many update instructions. If there had been more such cases the best solution would have been to amend the edit program so that the raw data, as keyed, could be updated; with the edit program as written, the restructuring of the data meant that any serial number problems may lead to complete loss of some records and hence a large amount of writing to update the case and create the records again.

These measures taken together did appear to speed up the edit process though it is impossible to identify the effect of accumulated experience from the effect of reducing the workload as outlined in i. to iv.

APPENDIX 1

RESEARCH PROPOSAL (APRIL 1985)

1. The Department of Transport is invited to sponsor work, to be carried out by OPCS, for the mainstage of the 1985/6 National Travel Survey. This proposal describes the work to be sponsored.
2. In brief the OPCS work for the mainstage of the 1985/6 NTS covers:
 - i. sample design and implementation;
 - ii. provision of an experienced fieldforce;
 - iii. training and supervising of interviewers;
 - iv. fieldwork;
 - v. office coding and quality checks;
 - vi. keying data to magnetic tapes;
 - vii. manual corrections of inconsistencies found by computer edit.

A description of the work involved in these items is given below.

3. The sample design is covered in a separate note. It will be implemented using the Postcode Address File sampling system which has been devised by OPCS and which is used for other major Government surveys.
4. Because of the complexity of the National Travel Survey the fieldforce used on it will come from among the more experienced interviewers employed by OPCS. They will all be trained in the standard methods of conducting complex interview surveys and almost all will have had some experience of carrying out such surveys.
5. The initial training of interviewers will include the following items:
 - extensive home study of instructions;
 - pre-briefing exercises;
 - keeping a personal Travel Record and coding journeys;
 - one and a half day briefing covering all aspects of the survey and including practice at picking up the Travel Record and completing the Journey Schedule;
 - post-briefing exercises;
 - a dummy interview with a household not known to the interviewer, including a full week's Travel Record;
 - feedback on the quality of data on the first two interviews achieved;
 - training in the field for inexperienced interviewers for up to 3 days each.

For interviewers on their second or subsequent quota there will be:

- additional study time;
- either in person or by phone, a chance to discuss any problems in their previous work on the NTS and to receive advice and support;
- further post-briefing exercises;
- a 'newsletter' to keep interviewers informed of progress on the NTS.

Supervision of interviewers will include the following items:

- observation by supervisors in the field (which together with training in the field applies to an average of about 10% of quotas on each survey);
- recall on 10% of the sample, some in person and some by telephone, to check on interviewer performance;
- a thorough check on the first 2 interviews returned by each interviewer, with further checks where necessary;
- a check on every schedule returned that certain key items of data are present and valid;
- weekly monitoring of the progress of each interviewer to provide early warning of any problems, including a check on response rates;
- contact by telephone and if necessary in person with any interviewers having difficulties;
- regular monitoring on all surveys of each interviewer's performance, as measured by response rate, supervisors' reports and other sources.

Special attention is being paid to maintaining a good response rate in the GLC area. The measures to be taken are the subject of a separate note, and will include:

- personal discussion with every interviewer working on a second or subsequent quota in London, covering problems encountered in working on the NTS and tactics for maintaining response;
- an allowance for working at the weekend, when needed;
- a special purpose leaflet for London;
- an extra allowance for mid-week checking calls;
- re-issue of selected non-contacts or refusals to a second interviewer for a further attempt at gaining cooperation.

6. The fieldwork itself will be carried out in monthly quotas from July 1985 to June 1986.

7. In the office the interview documents will be handled to the minimum extent necessary prior to keying. There will be coding of Socio-Economic Group and of Industry and there will be manual checks on a limited number of items, including:
 - that all relevant documents are present;
 - that the serial numbers are consistent; and
 - that the outcome codes are correct.
8. Data will be keyed in weekly batches from about mid-July 1985 to early August 1986 and a tape posted to the computer bureau, CAM, each week.
9. Errors and inconsistencies identified by CAM will be corrected by OPCS, again in weekly batches, from late July 1985 to August 1986. It is expected that DTp should have a clean data set available in September 1986.

APPENDIX 2

SAMPLE DESIGN

A. MAIN FEATURES OF THE DESIGN

In the years since the last round of the National Travel Survey (1978/9) there had been much discussion about the sample size needed for a future survey, what sample design should be used, how the sample should be distributed over the year and so on. For the 1985/6 round it was decided, after consulting users, to adopt the following design.

- i. The sample size would be about 15,000 addresses, the same as in the previous round.
- ii. The Postcode Address File (PAF) would be used as the sampling frame (or list) from which to draw the addresses, rather than the electoral register (ER) that had been used in previous rounds. The main advantages of PAF are that it has better population coverage than the ER and that being computerised it is cheaper to use. All the major continuous Government surveys were transferred to PAF in the 1980's. A disadvantage with PAF is that it has a higher ineligibility rate, that is, a higher proportion of addresses than on the ER are non-residential, vacant or do not contain a private household: about 11% on PAF as compared with 5% on the ER. It was decided however to keep the same sample size of addresses as in the previous round since from pilot work it was recognised that using a simpler survey method and the OPCS survey organisation would result in a higher response rate from amongst the households found so that the final sample size of fully cooperating households would actually be increased and would be about 10,000.
- iii. A two stage sample would be used, as opposed to the three stage design in the previous round; that is, there would be a sample of 720 postcode sectors selected from the 8,000 in Great Britain and within each sector a sample of 21 addresses drawn using the PAF, as opposed to the sample of 240 constituencies, 3 wards per constituency and 21 addresses per ward drawn for the 1978/9 round. As the PAF is computerised, it is much easier to draw a two stage sample, a two stage sample provides higher precision and it was estimated there would be no cost saving in terms of deployment of interviewers to use a three stage sample.
- iv. The stratification factors used were similar to previous rounds. Explicit strata were formed using region, metropolitan/non-metropolitan county, and population, density; and then car-ownership levels and method of travel to work were used to rank the postal sectors prior to selection. In addition the sample is controlled at every point to give a balance by time: the whole of a 12 month period is covered to allow for seasonal effects, every month is given an equal sample; within months the sample is controlled by week and by day of week so that as far as possible every day of the 12 months period is represented equally and variations in travel behaviour are fully reflected.
- v. Once the addresses are selected and issued to interviewers the final part of the sampling process is the field sampling procedure carried out by interviewers to identify the households and individuals to interview. This involves a) finding the selected address; b) identifying the people and households that live there, if any; and c) if there is more than one household (ie it is a multi-household address) then taking a random sample of one or more of them. Steps a) and c) are described in detail in the

Interviewer Instructions Section 2 on Sampling. As far as possible multi-household addresses are identified at the point of sampling from information on the PAF. The Interviewer Instructions describe how both 'pre-sampled' and 'concealed' multi-households were dealt with. Step b) is described along with the definitions of household, residence etc in the standard set of instructions for OPCS interviewers found in 'A handbook for interviewers' by Liz McCrossan published by HMSO (1985), available from Field Branch, SSD, OPCS price £5.

B. THE SAMPLE DESIGN IN DETAIL

1. The sampling frame of addresses used was the Postcode Address File (PAF), small users file. The set sample size of addresses was 15,120, which were issued in twelve monthly blocks of 1,260 covering July 1985 to June 1986.
2. There were two stages in the sample selection: postal sectors, then addresses, (in fact delivery points). Postal sectors of less than 500 delivery points were grouped with contiguous sectors so that the minimum size of a group was 500 (250 North of the Caledonian canal). The primary sampling units (psus) were sectors or groups of sectors. There were 7,953 psus in Great Britain created from 8,481 sectors.
3. Postal sectors covering Scottish Islands and the Isles of Scilly were excluded (as for the other major Government surveys). The effect of this was to exclude 2.2% of the delivery points in Scotland, about 0.2% of delivery points in the whole of Great Britain.
4. The sample cluster size within each selected psu was, as in previous rounds, 21 addresses. Thus to produce 15,120 addresses there were 720 psu selections in total.
5. There were two levels of stratification: 42 major strata defined by region, metropolitan county and density; and within each major stratum psus were ranked using two factors, one based on car ownership and the other on method of travel to work, taken from the 1981 Census.
6. The 42 major strata are shown in Table 1. They were formed from the 10 regions of England, 2 parts of Wales and 4 parts of Scotland, each divided into metropolitan and non-metropolitan parts. The non-metropolitan parts were then further divided into 3 bands according to the population density of Local Authority Districts. The 3 density bands consisted of the ranges: 0 to 4.9 persons per hectare, 5.0 to 14.9, and 15.0 or more. The data were taken from the 1981 Census County Monitors. In two cases a pair of density bands were combined because individually they were very small (less than 100,000 delivery points each). The two major strata which resulted from this are 12 and 23.
7. Within each major stratum psus were first ranked in ascending order of the 'percentage of households in the psu with no car', and a cumulative count made of the number of weighted delivery points (called the "MO count"). ("Weighted delivery points" and the "MO count" of a sector are described later in paragraph 15 on multi-household addresses. In general the MO count is slightly larger than the unweighted number of delivery points - in Great Britain as a whole it is 1.82% larger.)

The list of psus in each major stratum was divided into four (approximately) equal sized parts using the cumulative MO count. Within each part the psus were re-ranked using the percentage of employed individuals in the psu who travel to work by car. The order was ascending within the first and third parts, and descending in the second and fourth.

TABLE 1 Number of psu selections by major stratum

<u>Major Stratum</u>			<u>MO Count</u>	<u>Number of psu selections</u>	
<u>No</u>	<u>Name</u>	<u>Density</u>		<u>Expected</u>	<u>Actual</u>
01	GLC Inner	MET	1165403	37.7	38
02	GLC Outer	MET	1678216	54.3	54
03	South East Outer met	(15.0+)	542387	17.6	18
04	South East Outer met	(5-14.9)	787601	25.5	25
05	South East Outer met	(0-4.9)	805208	26.1	26
06	South East rest	(15.0+)	505996	16.4	16
07	South East rest	(5-14.9)	236456	7.6	8
08	South East rest	(0-4.9)	1238839	40.1	40
09	East Anglia	(15.0+)	146251	4.7	5
10	East Anglia	(0-4.9)	656162	21.2	21
11	Northern	MET	480880	15.6	16
12	Northern]	(15.0+)	370636	12.0	12
	Northern]	(5.0-14.9)]			
13	Northern	(0-4.9)	415968	13.5	13
14	Yorks & Humbs	MET	1372288	44.4*	45
15	Yorks & Humbs	(15.0+)	222260	7.2	7
16	Yorks & Humbs	(0-4.9)	408838	13.2	13
17	East Midlands	(15.0+)	435051	14.1	14
18	East Midlands	(5.0-14.9)	305438	9.9	10
19	East Midlands	(0-4.9)	825787	26.7	27
20	Scotland I	(5.0-14.9)	172342	5.6*	5
21	Scotland I	(0-4.9)	268002	8.7	9
22	Scotland II	(15.0+)	200711	6.5	6
23	Scotland II]	(5.0-14.9)]	364322	11.8	12
	Scotland II]	(0-4.9)]			
24	Scotland III	MET	322238	10.4	10
25	Scotland III	(5.0-14.9)	340220	11.0	11
26	Scotland III	(0-4.9)	268683	8.7	9
27	Scotland IV	(0-4.9)	104259	3.4*	4
28	North Western	MET	1645316	53.2	53
29	North Western	(15.0+)	118028	3.8	4
30	North Western	(5.0-14.9)	362755	11.7	12
31	North Western	(0-4.9)	475369	15.4	15
32	West Midlands	MET	1048802	33.9	34
33	West Midlands	(15.0+)	183071	5.9	6
34	West Midlands	(5.0-14.9)	150915	4.9	5
35	West Midlands	(0-4.9)	661812	21.4	21

<u>Major Stratum</u>			<u>MO Count</u>	<u>Number of psu selections</u>	
<u>No</u>	<u>Name</u>	<u>Density</u>		<u>Expected</u>	<u>Actual</u>
36	South Western	(15.0+)	610165	19.7	20
37	South Western	(5.0-14.9)	107432	3.5	3
38	South Western	(0-4.9)	1107584	35.9	36
39	Wales I	(15.0+)	107412	3.5	3
40	Wales I	(5.0-14.9)	357208	11.6	12
41	Wales I	(0-4.9)	221520	7.2	7
42	Wales II	(0-4.9)	451634	14.6	15
<hr/>					
Total Met		Met	7713143	249.6	250
Total Non-met		(15.0+)	3071332	99.4	99
Total Non-met		(5.0-14.9)	3191009	103.3	103
Total Non-met		(0-4.9)	8273987	267.8	268
<hr/>					
GRAND TOTAL			22249471	720.0	720

*Note: For the three strata, 14, 20 and 27 the rounding from expected to actual number of psus was not to the nearest integer but to the next nearest. This was done in order to obtain the correct number in each density band overall whilst keeping the right number in each region as far as possible.

Key to Welsh and Scottish regions:

- Wales I - Counties of West, Mid, and South Glamorgan, and Gwent
- Wales II - Counties of Clwyd, Gwynedd, Dyfed and Powys
- Scotland I - Regions of Tayside, Highlands, and Grampian, including Cities of Dundee and Aberdeen
- Scotland II - Regions of Fife, Central, and Lothian, including City of Edinburgh
- Scotland III - Strathclyde. Glasgow is separated as a Metropolitan type area
- Scotland IV - Regions of Borders, and Dumfries and Galloway.

8. The number of psu selections made from each major stratum is shown in Table 1. It is in proportion to the MO count for the stratum.
9. Having decided the number of psu selections to make from a particular major stratum the actual selections were made using a method which could be described as "an independent selection from each minor stratum", with probability proportional to the size (MO count) of the psu. It operated as follows. If there were n psu selections to make and the MO count of the major stratum is M then n minor strata were created each with an MO count of $m = M/n$.

Using random number tables, n random numbers r_1, r_2, \dots , between 1 and m were selected. The first selection was then the psu which in the cumulative MO count contained the value r_1 , the first random number. This was from the first minor stratum. The second selection (from the second minor stratum) was the psu which contained $m + r_2$, and, in general, the j th selection was the psu containing $(j-1)m + r_j$. It is possible that the same psu could be selected twice if it straddled two minor strata. If this happened to a small psu (less than 1,000 weighted delivery points) then a new random selection would have been made in the second minor stratum. In fact no small psus were selected twice.

10. Each selection was given a 4 digit area number. The first two digits gave the major stratum number and the second two gave the selection number within major stratum. (Therefore sampling errors can be estimated with the method of successive differences putting the psus in area number order within major strata.)
11. The allocation of psu selections to months of the year was carried out in three steps. The aim was to obtain a nationally representative sample in each month.

- i. the number of selections per major stratum per month was decided purposively, ensuring
 - a. 60 selections per month in total
 - b. the correct number of selections in each major stratum over the year
 - c. the correct, rounded, number of selections per month per major stratum.
- ii. A balance was achieved by the first ranking factor, percentage car ownership, within each major stratum across the year as illustrated in the following example. Suppose that 18 selections were needed for a particular major stratum and that the number per month and per quarter was:

1 2 1 2 2 1 1 1 2 2 1 2 18

The four letters A,B,C,D were written out in groups of four in randomly selected sequences. For instance the sequence for this major stratum may have been:

BDAC ACDB DCBA ADCB CBDA

These were then grouped according to the number needed per month:

B DA C AC LB D C B AA DC B CB

Since in this example there were 4 A's, 5 B's, 5 C's and 4 D's, the first 4 selections in the major stratum (serial numbers 01 to 04) are called A-type, numbers 05 to 09 B-type, 10 to 14 C-type and 15 to 18 D-type. Random numbers are used to allocate the A-type selections to the occasions on which the letter occurs and similarly for the others. Thus one might obtain the allocation:

6;18,2;11 4,14;15,7;16 10,5;3,1 17,13;9;12,8

- iii. Finally, once the allocation to months had been done for all the major strata, the order of the four quarters was randomised and also the order of the three months within each quarter.

Table 2 shows the final allocation of selection numbers to months.

12. The addresses were selected from the Postcode Address File, small users file. A systematic random sample of 21 addresses (delivery points) was selected from within each selected psu.
13. Certain addresses which were given a multi-occupancy indicator (MOI) by the Post Office, of 3 or more were given a greater chance of selection. The MOI is intended to indicate the number of "letter boxes" at the address, eg a shop with a flat above may have an MOI of 2. In general an MOI of 3 or more indicates a multi-household address and such addresses were given a chance of selection equal to the MOI. The interviewer was then instructed to subsample the households found at these addresses so that the final sample is self-weighting.

The count of weighted delivery points, or the MO count, in a sector is the total number of delivery points in the sector but counting delivery points with an MOI of 3 or more a number of times equal to the MOI.

TABLE 2 NTS area numbers

Major Stratum	Selection Numbers											
	1985						1986					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
01	06	09	04	03	11	02	07	08	05	01	29	10
	12	14	20	19	25	28	26	21	13	22	32	16
	18	23	27	30	38	31	35	24	15	37	36	17
	34								33			
02	17	10	12	07	09	04	03	06	08	01	05	02
	22	11	20	13	26	16	33	15	21	14	19	18
	32	30	36	42	39	27	52	24	37	38	25	23
	43	31	49	47	40	34	54	35	50	48	28	29
		53			44	45		51			41	46
03	14	06	05	15	11	01	03	02	09	12	16	04
		18	17			07	13	08				10
04	02	12	22	05	09	04	06	15	08	03	11	01
	17	23	25	07	16	20	18	24	14	10	19	21
				13								
05	10	02	01	08	20	06	04	07	12	13	14	03
	19	17	18	26	22	09	24	11	16	15	21	05
	25									23		
06	15	04	05	13	07	03	06	02	10	16	01	09
			11			12	14				08	
07	07	05	-	-	04	02	-	06	01	-	03	08
08	04	10	12	01	03	11	09	07	05	21	15	02
	33	17	29	14	08	27	13	19	25	24	26	06
	35	23	36	18	28	31	16	22	39	37	34	20
		32		30					38		40	
09	-	03	-	05	04	-	01	-	-	-	-	02
10	04	07	13	03	05	08	12	02	09	10	11	01
	06		19		17	16	18	14	21	20		15
11	03	11	05	04	07	15	08	02	09	12	01	06
	13				10			16			14	
12	10	09	07	01	04	12	05	03	11	08	02	06

Major Stratum	Selection Numbers											
	1985						1986					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
13	09	01	05 12	11	02	10	13	07	03	08	04	06
14	08 29 36 40	03 12 18 30	09 17 27 31	01 02 21 44	20 25 42	06 22 26 37	10 14 19 45	13 23 35	05 33 39 41	04 07 24 38	11 15 43	16 28 32 34
15	-	-	05	06	-	02	-	04	07	01	03	-
16	12	07	05	09	03	13	04	06	11	02	01 08	10
17	12	01	04 11	03	14	08	13	05	09 07	02	06	10
18	05	08	-	06	10	02	09	07	04	-	03	01
19	05 17	11 12 25	07 22	20 26	13 16 27	04 09	03 14 15	06 24	08 21	01 10	02 19	18 23
20	-	-	02	-	03	-	-	01	-	05	04	-
21	-	01	03	08	-	06	05	09	02	04	07	-
22	04	-	-	02	-	01	-	-	03	-	06	05
23	03	07	10	08	06	01	09	12	02	05	04	11
24	07	10	01	04	-	09	03	08	02	06	-	05
25	09	02	-	04	01	06	11	07	05	03	08	10
26	05	06	08	01	04	-	02	-	09	07	-	03
27	-	-	04	-	02	-	01	-	-	-	-	03

Major Stratum	Selection Numbers											
	1985						1986					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
28	09	01	06	03	18	04	08	10	11	07	02	12
	19	22	20	13	23	05	27	16	25	24	28	15
	33	31	21	32	37	14	35	17	36	39	29	26
	48	41	43	47	38	34	45	30	44	40	46	49
		42			50	52		53		51		
29	04	-	-	-	02	-	03	-	-	-	-	01
30	10	02	12	07	01	04	09	03	11	05	06	08
31	09	04	13	01	10	15	02	12	08	14	11	03
		07		06			05					
32	04	17	01	07	02	16	06	09	15	19	05	03
	20	29	11	21	14	26	08	33	18	24	10	12
	31	32	22	30	25		13		27	34	23	28
33	05	-	-	02	-	04	-	-	06	03	01	-
34	-	-	02	-	01	-	-	05	-	04	03	-
35	11	03	04	05	07	14	17	01	06	02	08	15
	12		21	13		18		16	09	10	20	19
36	04	05	17	07	03	12	16	02	06	10	18	01
	11	09		08	19		20	14		15		13
37	-	-	01	-	-	03	-	-	-	-	-	02
38	02	01	17	06	04	15	14	18	03	05	22	09
	13	10	23	07	12	21	16	20	08	27	25	11
	32	19	33	24	28	29	26	36	35	34	30	31
39	-	-	-	-	02	-	-	-	03	-	01	-
40	06	01	11	03	04	08	07	02	05	12	10	09
41	01	-	-	03	-	07	-	06	02	05	04	-
42	02	06	08	11	14	04	05	10	03	01	12	13
		15	09				07					

Note: the NTS 'area number' is four digits consisting of the major stratum number as the first two digits and the selection number as the second two.

APPENDIX 3

SUPPLEMENTARY INSTRUCTIONS

In this appendix is a copy of each of the following supplementary instructions that were issued to interviewers during the course of fieldwork.

1. Update and amendments to instructions and documents (July 1985).
2. Prechecking note (August 1985)
3. NTS checking note 2 (November 1985)
4. Prechecking note 3 (January 1986)
5. NTS prechecking note 4 (March 1986)
6. Newsletter number one (September 1985)
7. Newsletter 2 (November 1985)
8. Christmas newsletter (December 1985)
9. NTS newsletter (March 1986)
10. Summer newsletter (May 1986)

1. Interviewer instructions

- i) p55 - add a new paragraph at end:

"Repeat and duplicate journeys must refer back to a fully completed journey record, never to another repeat or duplicate record."

- ii) p62 - stage 2 'where parked' should have the number '5' inserted.

- iii) p66 - Box D, delete the words "or ineligible" from lines 2 and 3. (For ineligible addresses only boxes A, B and C are completed.)

- iv) p74 - Last paragraph, delete all after the first sentence.

Add:

"If it is a new pass then ask Q42 to Q49 on the individual questionnaire."

- v) p79 - After paragraph 1, insert:

"Note that it is important to record all fuel put in to the vehicle, even if it is not 'bought'."

- vi) p85 - Paragraph 10a - The calls and contact sheet is no longer 'light brown', it is now cerise (deep pink).

2. Definition Manual

- i) p17 - Delete the second sentence starting "Walking within ...", and replace it with:

"Walking within a pedestrian precinct is excluded if access is restricted to certain times (eg it is closed at night) otherwise it is included."

ii) p36 - At end of "VAN OR LORRY" add:

"Also included here are lorries if used for personal travel (eg to get to work) rather than for delivering goods."

3. Interview Documents

i) Individual schedule - Q19 - note that "express bus/coach within GB" means public bus as defined in the Definition Manual, pages 34 and 37.

- Q38, the definition of "central London" - take this as comprising :

- the City of London
- The London Borough of Westminster
- Camden - the south side of Euston Road and below
- Islington - the south side of Pentonville Road and City Road and below.

ii) Continuation schedule - beware that occasionally there is a decimal point missing in the mileage column on the front page of this schedule.

4. Enclosed for London Interviewers is a tube map showing mileages which may be useful in helping informants to estimate their mileage.

5. Some points of definition:

i) Series of calls: if two methods of travel are used (eg car and walk), then take the longest. For example, a doctor's round on day 7 may well include walking from the car to the informant's home as well as the much longer car trips themselves. In this case the method of travel should be coded "car - 0.4".

ii) Household vehicle: there is a conflict between the household schedule (Q8) and the Definition Manual (p55 part d). The questionnaire is correct, and vehicles which are temporarily out of use should be included only if they "may come into use in the next month".

NATIONAL TRAVEL SURVEY

Prechecking Note.

Early returns of work have shown a high level of accuracy generally but there are a few areas where errors are occurring. As Primary Analysis Branch only carry out selective checks on schedules before keying, it is important that obvious errors are avoided.

The sections which cause problems are:

1. Vehicle Schedule

Fuel Cost and Milometer readings (Q25 and Q26)

Q25: Fuel Cost: Please check the layout carefully here, we have had examples of:

4.0 gallons of petrol costing £796
and 67 litres of petrol costing £220.

Will you note that we record:

Litres to the nearest whole litre
Gallons to the nearest decimal point.

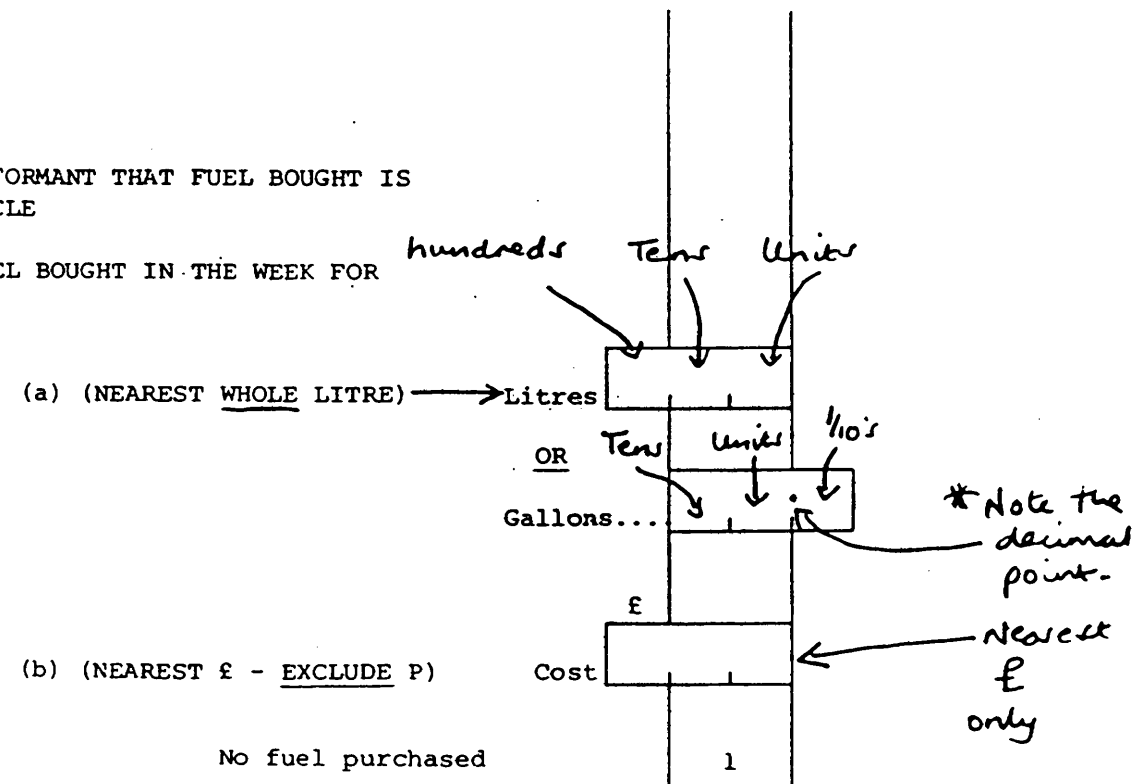
Cost of fuel is entered to the nearest £ only (no pence).

AT PICK UP

FUEL COST

CHECK WITH INFORMANT THAT FUEL BOUGHT IS FOR THIS VEHICLE

RECORD ALL FUEL BOUGHT IN THE WEEK FOR THIS VEHICLE



Note

Q26 Milometer readings:

We have had examples of informants doing minus 200 miles in the Travel week. Obviously the start and end mileages were entered in the wrong boxes.

Note that the order of start and finish mileages is reversed on the front of the Travel Record (start on top and finish below). Please make sure that you copy them into the vehicle questionnaire in the right order (end on top and start below).

Please do not leave the milometer boxes blank if the vehicle has done no mileage in the travel week - enter the same figure in both boxes and zero in the total box below.

26. RECORD MILOMETER READINGS FROM THE TRAVEL RECORD (OBTAIN ESTIMATES IF NECESSARY)

End (on top) → END (circled) → [] [] [] [] [] [] [] [] [] []

(IGNORE $\frac{1}{10}$ MILES)

START (below) → START (circled) → [] [] [] [] [] [] [] [] [] []

(i) SUBTRACT: TOTAL MILEAGE [] [] [] [] [] [] [] [] [] []

Refused/DK (to start or end mileage) 1 → END

(ii) RECORD FROM TRAVEL RECORD

a) HAS MILOMETER BEEN THROUGH ZERO	Yes..	1	
	No..	2	(
b) HAS THE MILOMETER BEEN REPLACED SINCE THE CAR WAS NEW	Yes..	1	
	No..	2	(

Note - whole miles only (no 1/10) right adjust numbers

enter '00' if no miles drive

Vehicle Questionnaire Q16

The layout at this question is cramped and it is easy to miscode (a) and (b). Please take care to code in the correct place.

6. (May I check) do 'you' use the vehicle to get to or from work?

Yes....A	.....	→ (a)
No.....	1	→ 21
Yes....B	.....	→ (b)
No.....	2	→ 21
(b) Do 'you' receive any free petrol	3	} Take care when coding here. Answers to the main question are being coded at (a).
RUNNING PROMPT a mileage allowance	4	
CODE FIRST a fixed allowance which	5	
THAT APPLIES includes something for mileage or some other allowance (Specify)?	6	

60

Individual Questionnaire

Box B Front Page: Please remember to complete this box in all cases where a pick up call was made. If the 'Pick up' occurs before the end of the Travel Week (eg the informants do not keep full Travel Records and hand them back to you at a mid-diary call) enter 00 in the boxes.

Question 1: Please ring all the individual 'No' codes here (if relevant) it is not sufficient to ring the overall 'No' at the bottom of the question (this is not keyed).

Question 42: Note that the Ticket Reference Number is the number given at the top of the coding columns here (not the number in the main body of the column - that is just the code). Remember to ring the Ticket Reference number.

Question 45: If the ticket cost is nil, please enter '0' in the cost box (not underneath it).

42. Do you have any season ticket, area travel card, travel token or special pass of any kind?

Yes 1 → CODE TYPE IN GRID THEN ASK a.
 No 2 → END

b) Do you have any other season ticket, area travel card, railcard, travel token or special pass?

Yes 1 → CODE TYPE IN GRID
 No 2 → 43

** **
 This is the Ticket Reference number used on the Journey Scheduler
 * Ring It!

RING - TICKET REFERENCE NUMBER	1	2	3
Season ticket	01	01	01
Area travel card	02	02	02
Combined season/area travel card	03	03	03
Railcard	04	04	04
Other non-concessionary ticket (Specify)	05	05	05
.....			

45. What was the actual (net) cost to you of the (ticket/pass)?

IF NIL WRITE 0
in boxes

TICKET 1		TICKET 2		TIC
£	P	£	P	£
	00			

HOUSEHOLD QUESTIONNAIRE

Don't forget to code Q8

7. Does your household own or have regular use of any of the vehicles listed on this card? (SHOW CARD A)

Yes

1

COMPLETE a,b,c then ASK Q8

No

2

8

8. And are there any (other) vehicles belonging to anyone in your household which are broken down or not in use, but which may come into use in the next month?

Yes

1

COMPLETE a,b,c then ASK Q9

No

2

Q9 if Q7-1
Q11 if Q7-2

* Code this for all households *



Journey Schedule

Please do not leave blank pages in the journey schedule for days when no journeys were made. Leaving blank pages is dangerous because at the keying stage the keyer-in might not turn over the page to check that there are further journeys and information will be lost.

If an informant does not travel on particular days, there is no need to do anything on the journey schedule - just go to the next travel day and continue coding as normal.

General Points

Do not use 'STET' to show the correct coding on schedules (this will be ignored by Data Prep). If you need to clarify amendments, please write out the correct code and ring it in the coding column (as close as possible to the original printed code). *eg.*

<p>28. Were you working full-time or part-time?</p>		
<p>IF PART-TIME: Was this for more than 10 hours per week or less?</p>	<p>Full-time..... Part-time (more than 10 hours). Part-time (10 hours or less)...</p>	<p>① ② ③ → 30</p>

Use of flags

Although we wish to keep the use of flags to a minimum, if you want any notes brought to the attention of PAB it's essential that you do flag these. It's vital that any questions you have not been able to code are flagged (otherwise these are entered as blanks at the keying in stage and rejected by the computer.) If in doubt flag it.

Partial Interviews

We've had a couple of cases where interviewers have carried out a placement interview with informants who then had holidays abroad for the whole of the Travel week. These were returned as partial interviews - this is incorrect. They are fully cooperating households with no eligible Travel during the travel week. Please take care with outcome codes we don't want to depress response rates inadvertently (again if you have any doubts about an outcome flag it!).



Always 'flag up' any question where you have been unable to code the answer. All blanks must be flagged.

NTS CHECKING NOTE 2

The following note is from Primary Analysis Branch. They have been looking closely at the last few pages of the vehicle schedule and discovered some cases of fairly serious miscoding. I'm disappointed because this was featured in our first pre-checking note (and mentioned at subsequent briefings.) If you would double check the last couple of pages on the vehicle schedule it will help avoid some of the problems PAB have encountered.

To : All Interviewers

From : P.A.B.

Our checking has identified a number of serious but easily avoidable errors on the vehicle schedule. On some quotas 75% of the vehicle schedules are rejected because of coding errors.

There do seem to be some peculiar situations occurring throughout the vehicle schedule. If you are in any doubt as to how to code a situation, please pin a flag on. These can then be dealt with in the Office.

Don't forget, a comment from you written on the schedule will not be seen unless you flag it.

Thank you.

Primary Analysis Branch

Paul Hyatt
Clare Matthews

21 November 1985



Qn. 25

If you bear in mind that a litre of petrol costs approx 45p and a gallon costs approx £2, when transferring information to the boxes, please see that the cost at b) makes sense with the amount of fuel put in at a) in relation to gallons or litres.

Please note that there are 3 boxes for litres, and the entries in these boxes should be right justified.

Example :- 20 litres should be entered as

2	0
---	---

 OR

0	2	0
---	---	---

 BUT NOT

2	0
---	---

The Gallons boxes have a decimal point.

Generally, the informants are giving fairly exact details of the gallons bought, so an answer of 2.85 gallons should be transferred thus.

2	.	8
---	---	---

 ✓

NOT

i.

2	.	8	.	5
---	---	---	---	---

 OR ii.

2	.	85
---	---	----

A keying operator is not aware of what our boxes mean - she doesn't read the schedule, and doesn't attempt to make sense of any of the information. In the above 2 cases she will key in:

i) 28.5, and ii) 2.

The blank at ii) is because there is an allowance for one digit per box, and on seeing 2 squeezed into one space, a keying operator will not key anything at all.

Q25 (cont)

There is a precode for "no fuel put in" precode 1. This should be used where applicable. It is not necessary to enter zeros in litres, gallons and cost boxes, as well as ringing precode (1).

Qn. 26

A lot of salvaging has had to be done at this question, particularly in relation to Q.27. We mentioned the following points in the September Newsletter, but here is a reminder.

WHERE NO MILEAGE DRIVEN

- i. Qn.25 should be answered. This is usually in terms of "no fuel put in" precode 1.
- ii. The END/START mileage should still be recorded - (although they will obviously be the same reading if no miles have been driven).
- iii. The total mileage should be entered as " 0".
- iv. Part ii) a. and b. should be answered.

The above information coupled with the reason coded at Qn.27 will then give the Research Officer the complete picture.

KILOMETRES

Please flag these. There is no provision for the computer to cope with recording in kilometres. PAB will do any conversion necessary, so please enter details at the side of the boxes (this could also apply at Q.23, 28 and 29) and flag it.



NATIONAL TRAVEL SURVEY

Prechecking Note 3

As we enter the New Year and NTS starts its final six months, Primary Analysis Branch have started to look closely at the coding of the Journey Schedules. The quality of coding is generally high and our thanks go out to all those interviewers who are returning schedules of a very high standard. However, there are signs from a few interviewers that mid-survey complacency is creeping into their coding and some obvious errors are coming through. Some apparently minor errors can cause great complications at the edit stage. One of the most serious is:

The omission of the Day or Journey number on the journey schedule.

If either of these bits of information is left off the Journey Schedule, the computer refuses to accept any details for that journey and PAB have to enter all the details individually.

Other simple errors include the omission of 'Method of Travel' and 'vehicle number'. Both are so obvious that it is easy to overlook them in the middle of a coding session. With all coding from now on will you check before despatch that the basic bits of information have been coded particularly the Day and Journey numbers. It will only take a few minutes for each household and should avoid expensive complications at the edit stage.

Remember that coding is a difficult task and requires full concentration, so do put aside enough time each week to carry out the coding conscientiously.

We shall be monitoring the Journey Schedule coding over the next few months.

Paul Hyatt
Clare Matthews
Pauline King

January 1986

68/69



NTS PRECHECKING NOTE 4

As a result of discussions held with interviewers and Primary Analysis Branch, we've decided to go over some of the apparently minor coding omissions which give the computer headaches (all be they of the mechanical kind). Most of the interviewers we spoke to were not aware of these omissions, so please stop and think next time you code at those particular points.

1. Household box: Relationship to HOH - Remember to ring the relevant code number as well as writing in the relationship. If you don't ring the codes, the computer refuses to recognise the household members and will not accept any journeys for them.
2. Vehicle Grid (Q7a, b and C): One or other of these sections is often not coded. It can be a complex grid to complete if there are several cars in the household but again please take care. If the reference number or type of vehicle codes aren't ringed, the computer refuses to acknowledge the cars existence and rejects any household journeys in the vehicle. (Just think of PAB having to re-enter every single vehicle journey because you omitted to ring one code in the vehicle grid.)
3. Duplicate Journeys: Stage Cost. Duplicate journeys are often used for babies on public transport where the parent pays and the child travels free. If you duplicate a parents journey for a baby travelling free would you actually enter zeros in the STAGE COST column for the baby. In other circumstances we leave the stage cost blank for free journeys - however on Duplicate journeys if the column is left blank, the computer will enter the parents cost for the baby. We need to enter zeros to avoid this (we don't want babies paying the adult fare).
4. Vehicle Questionnaire: Q26. Please remember to code the two little questions beneath the mileage boxes (Q26(ii) a + b). They've been omitted on a high number of schedules. The information is normally coded by informants on the Travel Record - don't forget to transfer it.

National Travel Survey

Newsletter Number One

September 1985

This is the first in a series of newsletters intended to keep you upto date with progress and developments on NTS throughout the year. It will be circulated only to interviewers working on the survey and we expect to cover the important issues such as response rates, return of work and the quality of recording and coding on the schedules. We also intend to keep you informed of future NTS events such as response groups and telephone conferences. Finally we hope to be able to pass on the other interviewers any useful tips, advice or information which you think might help other interviewers working on the survey. We look forward to hearing from you (all contributions to Clare Matthews in room 430 please.)

Briefings

A few facts and figures. Briefings have been held in London (four so far). Bristol, Edinburgh, Manchester (two) and Leeds. Field staff have each covered 1388 miles (approximately) travelling between briefings using: Train, bus (ordinary public), car and air transport at various times. It would be interesting to speculate on the sort of Travel Diaries we would have had to keep if any of us had been part of the sample for the briefings weeks. We didn't manage to travel by water transport, maybe next time will have to organise a briefing in Liverpool and take the ferry across the Mersey.

Response

With only a fraction of the work for July outstanding, our fully cooperating response rate stands at 75%. This equals the February pilot result and gives us a tremendous start to the survey. It is a great credit to all interviewers who worked in July tht this rate has been achieved and we would like to thank all of you for all your hard work so far on NTS.

Regional results are:

Region 1	73%
Region 2	81%
Region 3	73%

August response rates look similarly encouraging and we hope to equal the July response. Obviously maintaining a high response rate will be an important priority over the next 11 months and we know you will all play your part in helping to achieve this.

We have our first 100% response rate on the mainstage - congratulations to Mrs Crook working in West Norfolk. And commiserations to Mrs Angus and Mrs Kilkenny who came very close.

Response groups and Telephone Conferences

To help maintain a high response in London we shall be holding response groups for relatively new interviewers starting at the end of September. These will be informal groups where interviewers will be able to discuss response-related topics with members of staff and experienced interviewers. For more experienced interviewers we hope to hold telephone conferences later in the Autumn to give you the opportunity to discuss any points of interest or problems with field and research staff.

London leaflet

Because of the special response problems in London, we are designing an additional leaflet for use in the London area to help convince reluctant London residents of the relevance of NTS to them. A draft of the leaflet is with the Department of Transport and we hope to start using it in October or November. Again, we hope to have more details in the next bulletin.

Dear Interviewers

Now that the NTS has been under way for some weeks we thought that you might like to know how PAB fits into the picture

As you burn the midnight oil coding the information from Travel records to Journey Schedules you are probably wondering what on earth we do' Well, the emphasis of our job has shifted considerably in the last few years - and we've gone from mainly coding and a little correcting by computer editing to a lot of computer editing and a minimum amount of coding.

We code Occupation and Industry, and of course read your flagged queries, just in these early weeks, we have also backed-up some of the checking that Field does although this will now stop.

Overall we think you are doing a great job particularly on the Journey books, which we know are not easy to deal with. The one area, though, where there still seems to be some confusion is the "escort" coding. Do give Clare a ring if you are not sure about this. Its an area where there really can be no computer check. So its up to you to get it right.

The only other dodgy thing that we've noticed is on the Vehicle schedule. Even if the informant hasn't done any mileage we still need answers to question 25 and 26. The dear old computer expects answers at "fuel bought", "end", "start" and "total mileage". Even though we know that of course the informant bought no fuel, that end = start reading and mileage = 00000, the computer doesn't, unless you tell it!

Well, that's it really. We thought that as we're all in this together (in your case on and off) for the next year, we'd keep in touch.

We hope you ar enjoying your contribution to coding.

Best wishes.

Lorraine Polley
Polly Hart Room 308

By the way

Soon to arrive (I hope) are the NTS commemorative mugs (no that's not interviewers who accept a second quota!). These are being hand made (thrown!) and hand painted. The decoration will include the NTS emblem and they will remind everyone of the happy times spent working on the survey. We hope to keep the price below £2 which is a very reasonable price for a unique item.

I've mentioned the NTS emblem but, as yet, the choice of design has not been finalised. Several possible designs are shown on the next page. Current thinking includes the letters 'NYS' as part of a compass rose (see bottom design) - many people think this is a suitable symbol for the survey (compass or rose? I hear you saying.) If any of you have any thoughts on the matter let us know.

As I write this the final response figures for July are not quite complete but they look good - so a slightly premature 'well done' - keep it up!

Finally, on an interesting and serious note, the February pilot results show a curious feature of informant's recording of journeys. The average number of journeys recorded each day falls slightly in the middle of the Travel week. This effect has been noticed on previous NTS mainstages (informant are obviously keen to start of record keeping and after a mid-week lull remember you are coming back at the end of the week!) The February pilot figures are given below.

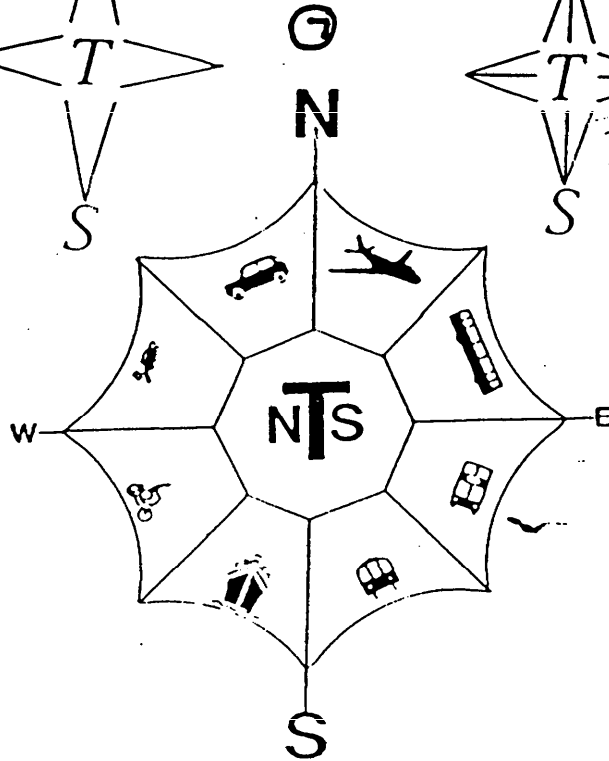
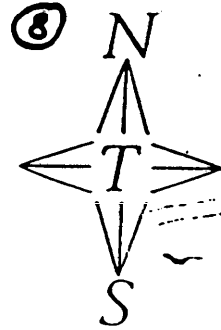
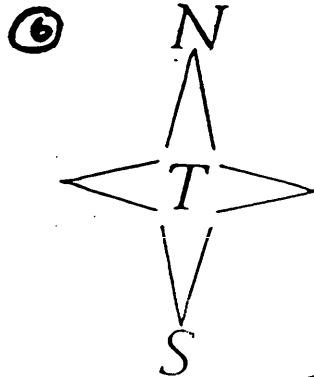
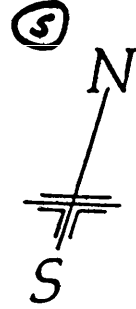
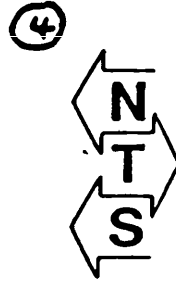
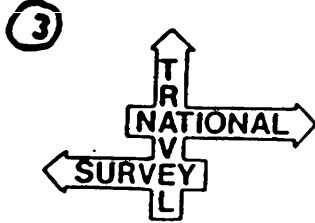
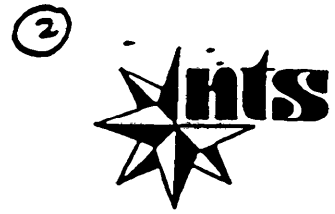
NTS February Pilot

	Day of Recording Period								Average per day
	1	2	3	4	5	6	7	8	
No. of Journeys	2725	2491	2582	2425	2479	2291	2887	2554	
Index Number	107	98	101	95	97	90	113	100	

Jack Eldridge

Clare Matthews
Paul Myatt.

NTS SYMBOL
DESIGNS





NATIONAL TRAVEL SURVEY NEWSLETTER 2

Dear Interviewer

We hope that you found the first of the NTS newsletters of some interest in following the progress of the survey.

The excellent start in July has been sustained with final response rate for August being 74% and 75% for September - a marvellous achievement over the busy summer holiday period.

We have our 2nd 100% response - Congratulations to Mrs Parsley in Scotland.

Well done is also due to the following interviewers who achieved very high response rates in either an August or September quota:-

Region 1

Mrs M Nicholson
Mrs Mercer
Mrs Fordham
Mrs Elmhurst
Mrs Vickers
Mrs Baldry

Region 2

Mrs Veitch
Mrs Reid
Mrs Calder
Mrs Peterson
Mrs Ward

Region 3

Mrs Moulds
Mrs Hemmings
Mrs Nelson
Mr Lynch
Ms Alase

We now have 170 interviewers briefed on the NTS and at least 2 more briefings are planned.

Two response groups have been held for interviewers with NTS experience and we will be inviting some more relatively new interviewers to future groups.

A Christmas newsletter is being planned so if any interviewers have an amusing tale to tell or a helpful hint etc that they would like to be included, then please write to us as soon as possible. Thankyou.

Those of you working on a December or January NTS quota will need to plan your programme very carefully around the Christmas period.

Addresses in Allocation Periods 3 and 4 of the December quota and 1 + 2 of the January quota will have to be placed WELL IN ADVANCE of their starting date so that you manage to contact people before Christmas week. Try and think well ahead and let us know as soon as possible if you anticipate any problems with the placement pattern.

Interviewers who have had a break of 3 months or more from working on the NTS are entitled to 3 hours 'restudy' time. This time should include completion of an exercise which will be sent to you if applicable. For example, interviewers who worked on a July quota only and are now starting their second quota in November are eligible for a 3 hour restudy time.

A special leaflet has been devised for interviewers working in the GLC. It is designed to help overcome non-response in this area and is not intended to replace the standard purpose leaflet. All GLC interviewers with November quotas should have received the GLC leaflets and we hope that they will be useful.

Feeling Isolated?

We realise that many interviewers are new to NTS and that it is a complex survey to cope with alone. Therefore, we intend to hold a series of telephone conferences in the near future for any NTS interviewers wishing to participate.

Whilst sitting in the comfort of your own home, we will link up several interviewers, and HQ staff, to discuss issues and problems related to NTS. It will give you the opportunity to talk to other interviewers in the same position as yourself.

If you would like to take part in one of these conferences please return the slip below as soon as possible (we hope to start in mid-November).

.....

I would like to participate in one of the NTS telephone conferences. (Return to Room 430).

Signed :.....
Auth Number:.....

(N.B. Please note any days and dates when you would not be available in the morning).

ESCORTING

There has been some confusion arising over the use of the escort/accompany code and its usage. Below are two situations involving escorting which have caused problems.

a.

FROM	PURPOSE	TO
01	Home	01
02	Work	02
03	In course of work	03
04	Education	04
05	Shopping	05
	Personal business	
06	- medical	06
07	- other	07
08	Eat/drink	08
09	Visit friends	09
10	Other social	10
11	Entertainment/ public activity	11
12	Sport (participate)	12
13	Holiday base	13
14	(Day) Trip/just walk	14
15	Other (specify)	15
1	Escort/ accompany	1

Firstly, a journey by a wife to pick up her husband from the railway station on his way home from work.

The outward journey is made alone by the wife. The FROM purpose refers to the wife's purpose. When she reaches the station the purpose becomes that of the husband who is going to be escorted (i.e. work). The 'ESCORT' code is therefore only ringed under the 'TO' purpose.

b.

FROM	PURPOSE	TO
01	Home	01
02	Work	02
03	In course of work	03
04	Education	04
05	Shopping	05
	Personal business	
06	- medical	06
07	- other	07
08	Eat/drink	08
09	Visit friends	09
10	Other social	10
11	Entertainment/ public activity	11
12	Sport (participate)	12
13	Holiday base	13
14	(Day) Trip/just walk	14
15	Other (specify)	15
1	Escort/ accompany	1

Returning from the station the escorted is present so the escort codes are ringed both sides and purpose FROM and TO become those of the husband i.e. FROM work TO Home.

The second situation involves an informant going to pick up a friend (or relative) from their home and bringing them back to the informants home for a social visit.

a.

PURPOSE		
FROM		TO
01 Home		01
02 Work		02
03 In course of work		03
04 Education		04
05 Shopping		05
Personal business		
06 - medical		06
07 - other		07
08 Eat/drink		08
09 Visit friends		09
10 Other social		10
11 Entertainment/ public activity		11
12 Sport (participate)		12
13 Holiday base		13
14 (Day) Trip/just walk		14
15 Other (specify)		15

1 Escort/ accompany		1

The first journey has the escort code ringed only under the 'TO' purpose.

When the informant leaves home alone he has his own purpose but when he reaches the friends home his escorting has began and his purpose becomes that of the friend being collected.

Therefore, the 'TO' purpose will be the friends 'HOME'.

b.

PURPOSE		
FROM		TO
01 Home		01
02 Work		02
03 In course of work		03
04 Education		04
05 Shopping		05
Personal business		
06 - medical		06
07 - other		07
08 Eat/drink		08
09 Visit friends		09
10 Other social		10
11 Entertainment/ public activity		11
12 Sport (participate)		12
13 Holiday base		13
14 (Day) Trip/just walk		14
15 Other (specify)		15

1 Escort/ accompany		1

The second journey involves the informant escorting from the friends home back to their own home. As the escortee is with the informant on the journey the escort code is ringed under both the FROM and the TO purpose codes. The purpose codes refer to the friends purpose i.e. going from their home to visit friends.

Quality Report from Keying-In Section

As you probably know already, the involvement of Primary Analysis Branch (or 'coding' as it is popularly known) in the NTS is being kept to a minimum, with only a few essential items of information checked when you return your schedules. Most of your coding is sent direct to our 'Keying In' Section in Titchfield, where details from the schedules are entered directly onto computer tapes. At the end of their first batch of work a report is written on the problems encountered by the keyers-in. They include errors made by keying and PAB as well as coding lapses by interviewers (and HQ staff).

It's very gratifying to note that only two points from a longish list, were noted as problem areas related to coding by interviewers. These were :-

1. Sloppy coding of miles in the 'Distance' column on the journey schedule. Occasionally a number will be written over the decimal point and it's not clear whether it should be before or after the decimal point. I know the space for each digit is quite small and big writers have a problem but if you can keep the coding compact we should avoid keying in errors. (It might be wise to always enter a digit after the decimal point even if this is a zero, just to make sure 5.0 miles isn't interpreted as .5).
2. Occasionally, in the 'Ticket Type' column a code is ringed and a number entered in the 'special pass' box. This confuses the keyers-in because it's contrary to their instructions (and contrary to our instructions too!). Will you note that in the Ticket Type column you should either ring a code or enter one, two or three in the box. Do not do both and don't enter a number higher than 3 in the box.

It would be nice to have these two points cleared up quickly and be given a clean bill of health from Titchfield.

From Jack Eldridge


Bye the way,.....

You will have seen the final choice of logo, on the front of the newsletter. This had the advantage of staying legible when reduced in size, whereas some of the more complex designs became a confused mess with no real 'message' when so treated. The logo will feature on one side of the NTS mug, with the addition of 85/86 just below the 'NTS' letters. The opposite side of the mug will have a transport symbol, so far we are expecting some with cars, some bikes some trains and some with a pair of boots! The first batch should be with us by the time this reaches you!

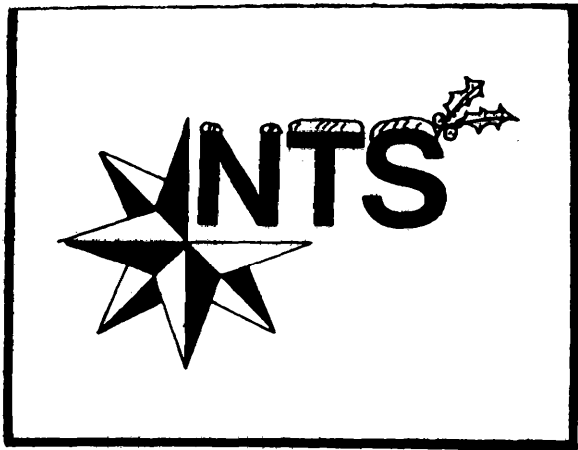
Response is still looking good and everyone here is very pleased with your efforts - lets make the next quarter just as good!

Extra Instruction

We have issued an extra instruction on the Journey Schedule coding of Free Travel for babies and young children on Public Transport. Please stick this in your Definition Manual on page 44 in line with the paragraph on Special Category Reduced Tickets.

<p>Children Travelling Free </p> <p>In some areas children under a specified age (usually 5) travel free on public transport. Include these in Special Category Reduced (code 8.)</p>

Clare Matthews
Paul Hyatt



NATIONAL TRAVEL SURVEY - CHRISTMAS NEWSLETTER

Dear Interviewer

Because it is the festive season there will be no moans and groans about coding errors etc. Instead we would like to thank all of you who have worked on the first 6 months of NTS for your hard work and enthusiasm. At the end of the December quota - the NTS will be half way through - only 6 more months to go!!

The October response rate is continuing along the high trend set.

At the end of December we will have 200 interviewers briefed and working on the survey (not all at once of course.)

We have two more 100% responses in October.

Once again - well done to Mrs Crooke (Region 1)
and also congratulations to Mrs Bateson (Region 3)

Also October produced some very good individual response rates in each Region:

<u>Region 1</u>	<u>Region 2</u>	<u>Region 3</u>
Mr Gilbert	Mrs Kaye	Mrs Morton
Mrs Tetley	Mrs Matthews	Mrs Protherough
Miss Bennett	Mrs Carlyon	Mrs Upton-Brown
Mrs Sergeant		Mrs Peterson
		Mr Pick
		Mrs Kilkenny

Christmas Cheer!

No matter how much thought goes into surveys (or lack of it I hear you exclaim) situations always arise that we had not quite catered for.....

Electric cars, scooters and pavement bikes have turned up and as you can imagine, the vehicle schedule doesn't quite fit. We've also had cars running on liquid petroleum gas and petrol which caused a few furrowed brows Talking of furrows, there have been a few tractors where the mileometer has been replaced by a 'number of hours run' meter for the machine engine which made 'mileage covered' rather difficult to code'!

Mileometer readings have been given in kilometres - which we can just cope with. Whilst on a foreign theme we also had an example of a car imported from Europe and not yet registered in this country.

Also we had a household vehicle that was stolen during the travel week so "miles driven by someone outside the household" was extremely difficult to calculate. The only answer is 'copious notes' and flags!

Some oddities have occurred with the use of travel passes. We have some passes where the first specified number of journeys are free, but subsequent journeys are half price. The journey schedule can cope with this but it does cause some problems in analysis.

And now ... a few interesting coding problems for you

An informant has a regular journey (to work), one stage of which is a floating bridge.

Or - a family making a journey - half of them in a car being towed, the other half in the car doing the towing. Well, how would you code it?

(Answers on a post card please.....).

Jack Eldridge

NEWS

We have issued a second prechecking note based on the vehicle schedule. If you haven't received a copy please phone the NTS Office and we will forward one immediately.

A word from our sponsors.....

Dear Interviewers

We at the Department of Transport were amazed and impressed when SSD told us that you had achieved a 75% 'full' response rate last July. We sat back with bated breath and our hands over our ears waiting for the crash in August, but it didn't come - there was a negligible fall to 74%. And when in September we found we were back at 75% we went for a festive evening in Covent Garden with the team from St Catherine's House - at our own expense, we should add, in case the Treasury is reading this - and began by drinking the healths of all of you.

The reason for our delight was that you had continued the high response rate found on the pilot in February - and this in what are usually the most difficult months of the year for response.

Our telephones are ringing continuously now, with users demanding to know when the results of the NTS will be available, and we have to tell them that we are not even half way through the fieldwork yet. But it does show that there is a hungry audience out there who expect to enjoy the fruits of your labours.

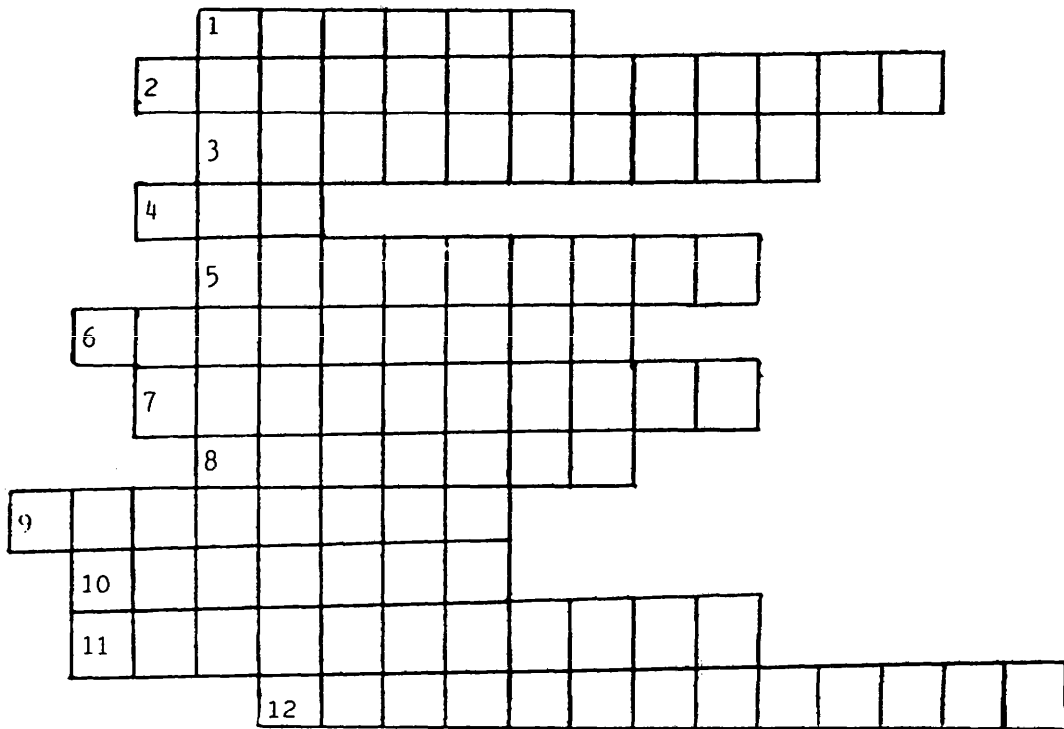
At this moment we are putting the finishing touches to the edit system, which will hunt down and try to correct the errors, most (? but not all) of them unavoidable, on the questionnaires that come back from the field. As part of the edit we ask PAB to look at what we regard as 'implausible' values, most of which of course will be accepted as the sort of unlikely but not impossible things that life sometimes seems to consist of. For instance, a walk of over 100 miles is treated as implausible. Which makes us wonder: Did any of you pick up Ian Botham? (If so, we hope you got off with a flesh wound!).

Merry Christmas and a productive New Year!

GRAEME CHARLES

NICHOLAS BATESON

NTS CROSSWORD (OUR THANKS TO THE DEVIOUS MINDS IN PAB WHO DESIGNED IT)



ANSWER THE 'ACROSS' CLUES, AND MAGICALLY A FORM OF PAYING FOR YOUR BUS JOURNEYS WILL APPEAR IN ONE OF THE DOWN COLUMNS. REMEMBER, ALL THE ANSWERS HAVE SOMETHING TO DO WITH THE NATIONAL TRAVEL SURVEY.

ACROSS CLUES:

1. A CAR FOR A COMPANION?
2. TRAIN NOISE, QUE?!
3. WOULD YOU TIP ROBERT DE NIRO FOR BEING THIS? (4,6)
4. DRUG SQUAD COMING! BUT NOT FOR TEA.
5. FOOTBALL TRAINER'S DAY OUT? (5,4)
6. COLLARLESS TRAIN-SPOTTERS WAY OF GETTING ABOUT.
7. WALKER FINDS TROUBLE (5,5).
8. TWO REVOLUTIONS?
9. CHE LIVES (ANAG.)

10. ONE WAY OF GETTING TO NEW ORLEANS, ALBEJT SLOWLY!
11. ADRIAN DOESN'T LIVE HERE?
12. LOVELY RITA'S OCCUPATION (7,6).

JANUARY QUOTAS

Remember to start early for Christmas'. Experienced interviewers will know of the potential problems contacting informants just before Christmas so it's advisable to start your quota as early as possible to give yourself plenty of time to catch those elusive people.

Finally, a Happy Christmas to you all from the NTS Office and see you in '86.

Clare Matthews.

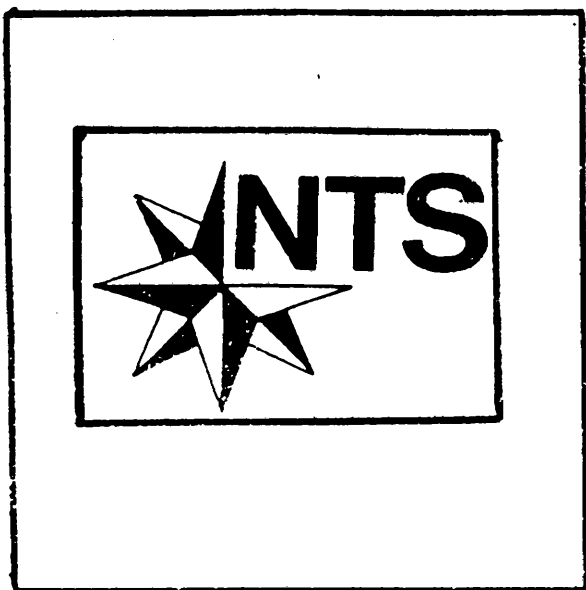
Paul Hyatt.

Pauline King.

CROSSWORD ANSWERS.

- | | | | |
|------------------|---------------|--------------------|----------------------|
| 1. ESCORT | 5. COACH TRIP | 9. VEHICLES | DOWN : SEASON TICKET |
| 2. QUESTIONNAIRE | 6. TRANSPORT | 10. WALKING | |
| 3. TAXI DRIVER | 7. HITCHHIKER | 11. UNDERGROUND | |
| 4. BUS | 8. BICYCLE | 12. TRAFFIC WARDEN | |

MARCH 86



NTS NEWSLETTER

Dear Interviewer

As this is the first Newsletter of 1986 we would like to report the progress of NTS since the Christmas Newsletter was sent out.

Response hit a high in October with an amazing 80% fully cooperating. With all the problems of placement around Christmas time and bad weather conditions you still managed to achieve a response rate of 73% in December.

Month	OCT	NOV	DEC	JAN
National Response Rate	80	78	73	78

In the last 4 months there have been a large number of excellent individual achievements in response rates but we will just mention the 100% responses in this newsletter.

Well done to Mrs Bower (Region 2) in January
and Mrs Wilshaw (Region 1) and Mrs Crook (Reg 1) in February.

A large thank you to all of you who battled through snow and freezing cold this winter - your hard work is greatly appreciated in the office.

NEWS

We have now issued a total of 4 prechecking notes raising problem areas found by PAB in coding and completion of the questionnaire. If you haven't received all of these and would like a copy - please contact the NTS office.

During February we held three NTS response groups at St Catherines House to which we invited NTS interviewers who had recently passed their end of probation test. We hope that all who attended found the sessions interesting and useful.

NTS MUGS

A number of hand-thrown pottery mugs have been made recently and have been on sale to NTS office staff. The mugs are very nicely made with the NTS motif on one side and a travel related picture on the other.

If any interviewers would like to be the proud owners of one of these mugs please send a cheque for £2.50 made payable to **MR JACK ELARIDGE**..... to Rm 430 and your mug will be ordered.

There is a choice of picture on each mug so indicate whether you would prefer a car, bus, bicycle or a pair of boots on yours.

Packing and posting the mugs would double the cost so we intend to keep them in the office once ordered until you are next at St Catherines House.

MID-SURVEY INQUEST

A mid-survey inquest was held on Feb 12th 1986. Seven-interviewers came to HQ to discuss the survey on the half-way stage in fieldwork.

The interviewers had all completed at least 2 NIS quota and were asked to discuss the following topic areas : introducing the survey, the schedules, the travel record, survey definitions, working methods, training and a general session. In each of these the interviewers commented on any difficulties they had found and put forward ideas and examples on how to overcome such problems. In turn HQ staff asked for explanations of why some areas of the schedules were more error prone, as discovered by PAB and Field Branch checks.

The inquest lasted several hours and the ideas gained will form part of the documentation of the survey overall, the interviewers expressed mild surprise at how much they had enjoyed working on the survey and were positive about its reception by the public. Generally, the schedules and travel record had worked well, permitting the interview to feel "like a conversation", although some questions and other elements of the design were commented on. Ideas were put forward on redesigning the journey schedule to ease the burden imposed by the coding which some interviewers felt was a laborious task. The definition manual was well liked and its format found useful, comments about working methods, the briefings and general points about the survey were again largely positive, with suggestions for detailed changes rather than major problems being revealed. The discussion was lively and the points noted will be documented to provide information both for developing any further round of the survey and for assessing the quality of the data from the current round.

Thank you to those interviewers who attended the inquest and may I remind all interviewers that comments about the survey are always welcome and noted.

A PLEA FROM PAB

The four lines below constitute the correction PAB has to enter manually on an update sheet when an interviewer has omitted a single Journey Number on a Journey Schedule !!!

So please make sure that you code as carefully as possible - thank you.

NTS 856

MAIN

Q	H	V	I	D	J	S	Update
282			2	3	2		CRE ; 1=2 ; 2=B ; 3=2 ; 4-8 = 6 ; 9=9
							; 15=0 ; 16=22 ; 17=15 ; 10=1 ; 11-B=B 14=22
						1	CRE ; 1=1 ; 2=4 ; 3=1 ; 4=5 ; 5=1 ;
							; 14=3 ; 15=1 ; 16=B . 6=15 ; 7-11=B . 12=1 ,
							13 = B.

The GLC travel survey

The National Travel Survey provides information on travel problems across the country as a whole. In addition there are a number of local surveys carried out. For example the GLC conducted a third round of its Greater London Transportation Study (GLTS) in 1981. An interviewer (who was working on the NTS) asked me if I knew anything about the GLC survey and I thought it may be of interest to write a short article for this NTS newsletter.

The GLTS is in some ways more comprehensive than the NTS in that it includes a goods traffic survey, it includes 'cordon surveys' in which a sample of vehicles is stopped and asked about place and purpose of visit, vehicle ownership and so on, and in addition there is a large household survey, covering 40,000 responding households - four times the number in the NTS. But it is also less comprehensive in that in the survey of households it only includes weekdays (Monday to Friday) and there is no intention to cover holidays, for example. The purpose of the survey is mainly to measure the use of transport facilities during weekdays, especially rush hours, to help develop plans for roads, cars and public transport.

The method of collecting data is different from the NTS in that interviewers call at sampled addresses (sampled from a combination of the Electoral Register and PAF) and ask each household member (aged 5 or more) to recall full details of every journey carried out the day before the interview. This one day retrospective method of collecting travel information (as it is called) is cheaper than the diary method and it is easier to obtain higher response. They obtained 69% fully cooperating compared with 35% in London on the last NTS, (both the last NTS and the GLTS were carried out by the same company). The response rate on the first 6 months of the current NTS however is also 69% so it is not impossible to obtain good response with a diary method. In addition, although more expensive per household, the diary method does collect 7 times the data and also covers all days of the week. Further, the GLTS uses less control than the NTS in the way that the sample is spread over days of the week and weeks of the month. But as stated before it has a different purpose.

The GLTS makes an important contribution to plans for London. Here are a few of the results to give you a flavour (I can provide more information if you are interested).

Like the NTS, the GLTS collects information on car ownership. For instance it found that 59% of households in London own one or more cars, and 41% do not own a car. But the report points out that even for the 59% with a car the vehicle is not

available to all members of the household. An example is the car used to drive to work and left in the car park all day. The GLTS showed that 70% of cars entering Central London in the morning are not used again until the commuters drive home. Overall there are 30 cars for every 100 people in London.

Next to the car the most used means of transport is walking. 16% of journeys to work by Londoners are made on foot, whilst for shopping journeys it is 50% and for journeys to school 57%. As the GLC say in their report, walking has often been the forgotten transport mode but in reality it is a crucial element in travel needs. It is also an essential part of using other modes of transport. The figures given above do not include the walking we do as part of other journeys - to and from the bus stop, station or car park.

Of course, the NTS itself makes a contribution to travel statistics about London. Its sample is much smaller in London than the GLTS (about 1200 households instead of 40,000), but because the NTS measures travel more comprehensively it is also an important source of London travel information for the Department of Transport.

Bob Butcher

Finally - Best Wishes for the last 3 months of the NTS.

Paul Hyatt
Clare Matthews
Pauline King

24th March 1986



SUMMER NEWSLETTER

This is the last of our newsletters. The final month of fieldwork is now in progress and we are looking forward to a happy and successful conclusion to fieldwork at the end of June. The response rate has

continued at its impressively high level during the first quarter of 1986, much to the delight of everyone concerned with the survey. The fully co-operating response rate were:

January	=	78%
February	=	76%
March	=	80%

The March response rate equals our previous best monthly rate achieved in October of last year (obviously Spring was in the air). Response in April looks set to achieve 77% and May is similarly high. The first despatches for June have only just started to arrive and we confidently expect you all to maintain the high standard you've set for yourselves.

If you have a June quota, do be prompt with your work return. Sadly, some HQ staff will be moving onto other projects at the end of July and we will need to have all the loose ends tied up by then. If you think you may be late returning work let us know as soon as possible.

Primary Analysis Branch will, of course, be continuing to edit the data throughout 1986 and possibly into next year. It would be very pleasing if coding on the Journey Schedules, in June, was as good as is humanly possible (it would give the PAB coders a nice surprise at Christmas time).

We shall be compiling an end of survey report covering all aspects of the design and organisations of the NTS. We have already had feedback from some interviewers (as reported in the last newsletter) and we would welcome further comments from anyone who wants to praise or criticise (constructively we hope) any aspect of the survey. Please send any comments to Clare Matthews in Room 430 as soon as possible.

Our thanks go to Mr Wilmott whose quotation from Bacon's Essays "Of Travel":

"Let diaries, therefore, be brought into use", seemed very appropriate. And to Mrs Ruffy whose Chinese Travel Record was beautifully completed (but wouldn't photocopy clearly so we couldn't reproduce it.)

NTS Mugs

We have now taken delivery of the second edition of NTS mugs. They have been hand thrown by Jerry and Jackie Coleman at Staunton Pottery in Leicestershire. The mugs are attractively rustic - looking and suitably decorated with the NTS logo and a travel-related designs (Boots, bicycles, car or bus.) We are providing them at the cost price of £2.50 which, although more expensive than the mass produced mugs available in Supermarkets, is excellent value for individually, craftsman made objects. They have already proved popular with the interviewers and HQ staff who have seen them, so if you would like a souvenir of the survey or just a unique and attractive mug for your kitchen, please return the slip below quickly to Pauline King in Room 430 (because the mugs are difficult to post we'll hold onto your mug until you visit HQ.) Please make cheques payable to Jack Eldridge. Supplies are limited so please hurry (and state any design preference.)

We've reproduced, for your interest, the Staunton Pottery leaflet.

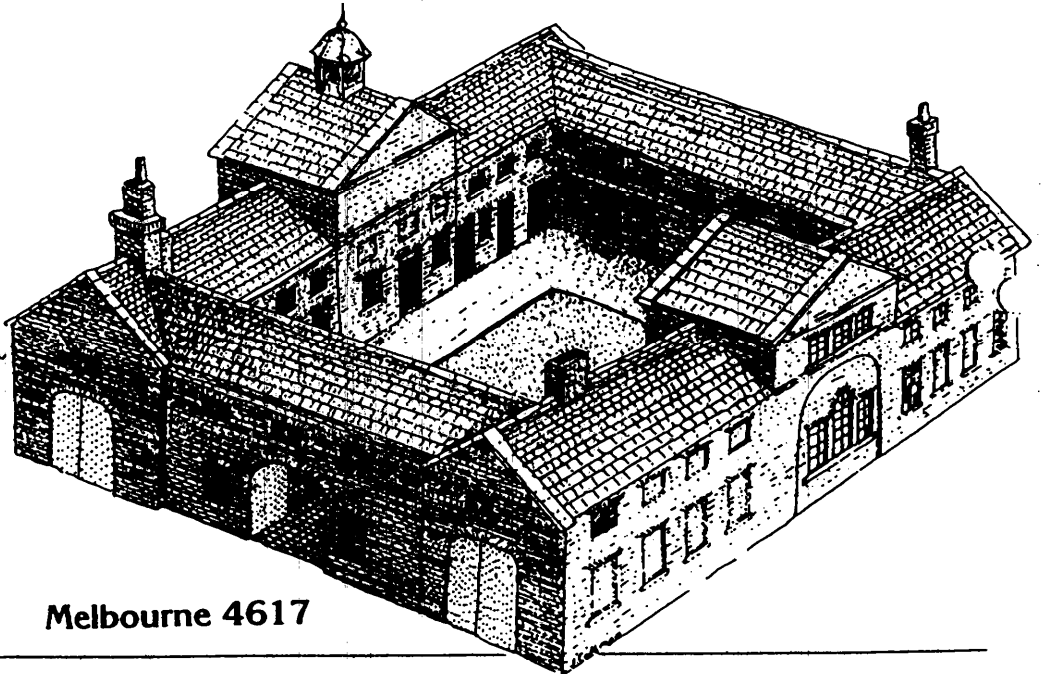
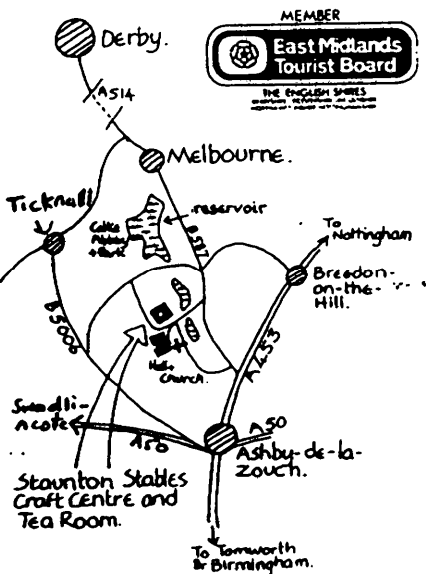
Our best wishes for the summer

Staunton Stables Craft Centre & Tea Room

Paul Hyatt

Clare Matthews

Pauline King



Please reserve an NTS mug for me. I enclose a cheque for £2.50 made payable to Jack Eldridge.

Name (please print).....

Return to Room 430

APPENDIX 4

REFERENCES TO OTHER NTS DOCUMENTS

During the course of carrying out the 1985/6 NTS many working documents and reports were written. The following is a list of the main ones. A copy of each one is held by DTp.

1. Report on pilot work in June and September 1984 (November 1984)
2. Preliminary findings of the February 1985 pilot (March 1985)
3. Report on the experiment into one versus seven day diaries (June 1977)
4. Interviewer Instructions
5. Definition Manual
6. Coding Instructions
7. Editing Instructions
8. Edit Specification

Documents issued to interviewers

For completeness a list of all documents that were at one time or another issued to interviewers working on the NTS is given below. This does not include notes and letters specific to an individual interviewer.

1. Invitation
2. Covering letter and pre-briefing exercise
3. Instructions
4. Definition Manual
5. Household schedule
6. Individual schedule
7. Vehicle schedule
8. Journey schedule
9. Continuation schedule
10. Travel record
11. Extra journey sheet
12. Prompt cards

13. Purpose leaflet
14. Reminder card

15. Calls and contact sheet
16. Weekly progress return
17. Despatch note

18. Allocation calendar (1 per month)
19. London tube map with distances
20. London leaflet and instructions
21. Amendment to instructions) included in Appendix 4
22. Prechecking notes (four of them)) of the Technical Report
23. Newsletters (five of them))

24. Answers to pre-briefing exercises
25. Post-briefing exercises
26. Answers to post-briefing exercises
27. Notes on non-response reissues in London.

APPENDIX 5

SURVEY SCHEDULES

Bound into the technical report at this appendix are original copies of the survey schedules:

- 1 Household (yellow)
- 2 Individual (pink)
- 3 Vehicle (blue)
- 4 Journey (green)
- 5 Travel record (white)

HOUSEHOLD QUESTIONNAIRE

S1220 NTS 1985/G (2)

Interviewers Name.....No.

--	--	--	--	--	--	--	--	--	--

 1

--	--	--	--

--	--

--	--

--

A. OUTCOME (Code one only)			
Fully co-operating	10		Code B to G
Partially co-operating	20		
NON RESPONSE			
Refusal	31		Code B, C, D, E then Contact Sheet
Away all period	32		
Out all calls	33		
INELIGIBLE/OTHER			
Demolished/derelict	41		Code B, C then Contact Sheet
Temp. Accom. only	42		
Empty	43		
Non residential	44		
Institution	45		
No h'hld selected	46		
No trace	47		

D. No. of calls till first contact	1	<table border="1" style="width: 100%; height: 20px;"></table>
(Total number if non contact)		

E. ADDRESS IS		
Whole house		
- detached	1	
- semi-detached	2	
- terrace/end terrace	3	
Purpose built flat/ maisonette	4	
Flat in converted house	5	
Rooms	6	
Mobile home/caravan	7	
Other specify	8	

B. TRAVEL WEEK			
END DAY....			
MON	1		
TUE	2		
WED	3		
THUR	4		
FRI	5		
SAT	6		
SUN	7		
END DATE.....	<table border="1" style="display: inline-table; width: 20px; height: 15px;"></table>	<table border="1" style="display: inline-table; width: 20px; height: 15px;"></table>	
	DAY	MONTH	

F. INTERVIEWER CHECK		
DOES HOUSEHOLD HAVE A TELEPHONE?		
	YES	1
	NO	2

C. ALLOCATION WEEK:				
	ORIGINAL	1	2	3 4
	FINAL	1	2	3 4

G. ASK AT PICK UP CALL		
(Apart from the vehicles that you told me about before). Has your household acquired any (other) vehicles since I last saw you?		
	Yes	1 → (a)
	No	2
(a) GO TO PAGE 6, CODE GRID, THEN COMPLETE VEHICLE SCHEDULE WITH MAIN DRIVER.		

1. HOUSEHOLD BOX.

Person no.	Relationship to HOH	Relationship to HOH						Sex		Marital Status				Age	Working Status		
		HOH	WIFE	CHILD of Hoh/wife	PARENT of Hoh/wife	Other RELATION	UNRELATED person	M	F	M	S	W/D	Sep		ft	pt	not wkg
01	HOH	1						1	2	1	2	3	4		1	2	3
02		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
03		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
04		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
05		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
06		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
07		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
08		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
09		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
10		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
11		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
12		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
13		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3
14		1	2	3	4	5	6	1	2	1	2	3	4		1	2	3

INTERVIEWER
 IF AGE IS REFUSED ESTIMATE
 IF POSSIBLE AND MAKE NOTES.
 (FLAG THE SCHEDULE)

Under 11

Under 16

16 - 20

21 - 29

30 - 39

40 - 49

50 - 59/64

PENSIONABLE AGE

2. Now I would like to ask you about your local bus and train service.

About how long would it take me to walk from here to the nearest bus-stop?

I am interested in the nearest one even if it isn't the main one you use.

IF INFORMANT GIVES
A RANGE eg 25-30 MINS
THEN CODE LOWEST
GROUP ie CODE 4

- 3 minutes or less 1
- 4-6 minutes 2
- 7-13 minutes 3
- 14-26 minutes 4
- 27-43 minutes 5
- 44 minutes or longer 6
- don't know 7

3. How often would I be able to get a bus from that bus stop during the day?

PROMPT AS NECESSARY

IF 'VARIES' TAKE
WEEK DAY
OFF-PEAK FREQUENCY

- less than once a day..... 1
- at least once a day..... 2
- at least once an hour..... 3
- at least once every ¼ hour.... 4
- at least once every ½ hour ... 5
- don't know 6

4. And how long would it take me to walk to your nearest BR railway (or underground) station? Again it is the nearest one I am interested in even if it is not the main one, or the one you use.

- | | | |
|---------------------------|---|-------|
| 6 minutes or less..... | 1 | → 5 |
| 7-13 minutes..... | 2 | |
| 14-26 minutes..... | 3 | |
| 27-43 minutes..... | 4 | → (a) |
| 44 minutes or longer..... | 5 | |
| .don't know..... | 6 | |

Can I just check

(a) How long would it take me to get to the station by bus? Include walking to and from the bus stop but assume there is no waiting time.

- | | |
|--|---|
| No bus service/
quicker to walk | 1 |
| 6 minutes or less..... | 2 |
| 7-13 minutes..... | 3 |
| 14-26 minutes..... | 4 |
| 27-43 minutes..... | 5 |
| 44 minutes or longer..... | 6 |
| don't know..... | 7 |

5. Would you tell me which description is most like your nearest railway (or underground) station?....is it a

- | | |
|--|---|
| Station with frequent services
throughout the day | 1 |
| (at least once per hour) | |
| Station with frequent services
only during rush hours | 2 |
| (at least once per hour) | |
| Station with less frequent services? | 3 |
| DK | 4 |

RUNNING
PROMPT

6. How long would it take me to walk from here to each of the following places? How long would it take me to walk to.....? (TAKE EACH PLACE IN TURN, BEFORE GOING ON TO a)

a) For each of those places how long would it take me to get there by bus? Include walking to and from the bus stops but assume there is no waiting time. How long would it take me to go by bus to.....?

IF TOO FAR TO WALK (IE WOULD TAKE MORE THAN 44 MINS) CODE 44+ MINS

	WALK						a	BUS					
	6 mins or less	7-13 mins	14-26 mins	27-43 mins	44+ mins	DK	No bus/ quicker to walk	6 mins or less	7-13 mins	14-26 mins	27-43 mins	44+ mins	DK
Your doctor's surgery	1	2	3	4	5	6	1	2	3	4	5	6	7
The nearest post office	1	2	3	4	5	6	1	2	3	4	5	6	7
The nearest chemist to get a prescription	1	2	3	4	5	6	1	2	3	4	5	6	7
The nearest shop selling groceries	1	2	3	4	5	6	1	2	3	4	5	6	7
The nearest high St. shopping centre	1	2	3	4	5	6	1	2	3	4	5	6	7
The nearest hospital providing general treatment	1	2	3	4	5	6	1	2	3	4	5	6	

7. Does your household own or have regular use of any of the vehicles listed on this card? (SHOW CARD A)

Yes

No

1

2

COMPLETE a,b,c then ASK Q8

8

8. And are there any (other) vehicles belonging to anyone in your household which are broken down or not in use, but which may come into use in the next month?

Yes

No

1

2

COMPLETE a,b,c then ASK Q9

Q9 if Q7=1

Q11 if Q7=2

DO NOT ENTER THIS CAR ON GRID

IF INFORMANT SAYS THEY HAVE USED CARS FROM A COMPANY CAR POOL. RING CODE

a) ENTER - Vehicle description

- ring reference no.

b) VEHICLE IS:

(From Q7) In regular use

(From Q8) Possibly will come into use

(CODE AT PICK UP) Newly acquired vehicle

c) TYPE OF VEHICLE

4 wheel car

3 wheel vehicle

invalid car

motorcycle/scooter with side car

motorcycle/scooter

moped

light van, landrover, jeep (or similar)

other van or lorry

minibus, motor caravan, dormobile etc

other (specify)

	1	2	3	4	5	6
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
01	01	01	01	01	01	01
02	02	02	02	02	02	02
03	03	03	03	03	03	03
04	04	04	04	04	04	04
05	05	05	05	05	05	05
06	06	06	06	06	06	06
07	07	07	07	07	07	07
08	08	08	08	08	08	08
09	09	09	09	09	09	09
10	10	10	10	10	10	10

9. Who drives the most mileage in(vehicle), (taken over the year as a whole)?

MAIN DRIVER PERSON NO.

10. Who usually has access to the vehicle during normal working hours?

PERSON NO.

11. Now I want to ask about bicycles.

Does your household have any bicycles which are used by adults or older children (that is children aged 6 years or older)?

Yes A → (a)
 No 0 → 12

(a) How many does your household have?

Enter No.

INTRODUCE BACKGROUND QUESTIONS

(eg Now I would like to ask a little bit about circumstances which may affect the travelling that people do)

12. First, how many years has (Hoh) lived at this address?

under 1 year..... 1 → (a)
 1 but under 2 years..... 2
 2 but under 3 years..... 3
 3 but under 5 years..... 4 → 13
 5 but under 10 years..... 5
 10 years or more..... 6
 always lived here..... 7

(a) Is (Hoh's) old address more than 1 mile from here or less than that?

more..... 1
 less..... 2

13. Does your household own or rent this (HOUSE/FLAT/ROOM)?

owns/is buying.... 1 → END
 rents..... 2
 rent free..... 3 → (a)

(a) Do you rent it from a council, or from a private landlord or housing association?

council/ new town corporation..... 1 → END
 private landlord/housing association.. 2 → (b)

(b) Is this (HOUSE/FLAT/ROOM) rented (provided) furnished or unfurnished?

furnished..... 1 → END
 unfurnished/partly furnished.... 2

NOW GO TO INDIVIDUAL QUESTIONNAIRE FOR HOH/SPOUSE

INDIVIDUAL QUESTIONNAIRE

Area	Add	Hhd	Person
2			

COMPLETE BEFORE DESPATCH

<p>A</p> <p>Individual Questionnaire</p> <p>fully or partially completed (in person/by parent)</p> <p>proxy (on behalf of adult)</p> <p>blank</p>	<p>1</p> <p>2</p> <p>3</p>	<p>→ B</p>
<p>B</p> <p>JOURNEY SCHEDULE RETURNED</p> <p>Journey schedule completed for all eligible journeys in period.</p> <p>Journey schedule completed for some but not all eligible journeys in period.</p> <p>NO JOURNEY SCHEDULE RETURNED</p> <p>No journeys made (ie full information)</p> <p>Journeys possibly made (ie missing information)....</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p>	<p>→ D</p> <p>→ C</p> <p>→ E</p>
<p>C</p> <p>IF NO JOURNEYS MADE GIVE REASONS WHY NOT</p>		<p>→ D</p>
<p>D</p> <p>Number of days after end of travel week that pick up call made</p>		<p>→ E</p>
<p>E</p> <p>Travel record placed in person</p> <p>Travel record placed by proxy</p> <p>Travel record not placed</p>	<p>1</p> <p>2</p> <p>3</p>	

TO ALL RESPONDENTS 11 YEARS AND OVER

DNA Under 11 X → 19

1. First of all I want to ask you some questions about any health problems or physical disability that affects travelling.

Do you have any physical disability or other long standing health problem that makes it difficult for you to

a) go out on foot Yes..... 1

No..... 2

b) use buses

Yes..... 1

No..... 2

c) get in and out of a car?

Yes..... 1

No..... 2

ALL NO X → 19

2. IF DIFFICULTY GOING OUT ON FOOT (CODE 1 at Q1 a)) DNA X → SEE 8

Do you go out on foot at all?

Yes..... 1 → 6

No..... 2 → 3

3. Is that because of health problems or for some other reason?

(PRIORITY CODE)

Health problems. 1

Other (specify). 2

.....

→ 4

4. Is it impossible for you to go out on foot or could you manage it but with difficulty?

Impossible..... 1 → 5
 Difficult..... 2 → 6

5. Do you use a wheelchair at all?

Yes.... 1
 No..... 2

→ SEE 8

6. Do you manage this on your own or do you need someone to help you?

Can manage on own..... 1
 Need someone to help..... 2

7. Do you use any aids to walking or movement when you go out on foot such as a.....

INDIVIDUAL PROMPT

	Yes	No
Wheelchair?.....	1	2
Walking frame?.....	1	2
Crutches?.....	1	2
Callipers?.....	1	2
Heavy walking stick?.....	1	2
or anything else (SPECIFY).....	1	2
.....		
.....		

8. IF DIFFICULTY USING BUSES (CODE 1 at Q1 b))

DNA..... X → SEE 15

Do you use buses at all these days?

Yes..... 1 → 9
 No..... 2 → 11

<p>9. When you travel by bus do you usually need someone to help you or can you manage on your own?</p> <p style="text-align: right;">needs help..... 1</p> <p style="text-align: right;">can manage..... 2</p>	<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto;"></div> <p style="text-align: center;">→10</p>	
<p>10. What do you find difficult about using buses?</p> <p style="text-align: right;">getting on or off..... 1</p> <p style="text-align: right;">getting to and from seat..... 1</p> <p style="text-align: right;">getting to the bus stop..... 1</p> <p style="text-align: right;">standing waiting at bus stop.. 1</p> <p style="text-align: right;">other (specify)..... 1</p> <p style="text-align: right;">..... 1</p> <p>INDIVIDUAL PROMPT</p>	<p style="text-align: center;">YES NO</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p>	<p style="text-align: right;">→ SEE 15</p>
<p>11. Is that because of health problems or for some other reasons?</p> <p style="text-align: right;">(PRIORITY CODE) Health problems..... 1</p> <p style="text-align: right;">Other (specify)..... 2</p> <p style="text-align: right;">..... 2</p>	<p style="text-align: center;">1 →12</p> <p style="text-align: center;">2 → SEE 15</p>	
<p>12. What would you find difficult about using the bus?</p> <p style="text-align: right;">getting on or off..... 1</p> <p style="text-align: right;">getting to and from seat..... 1</p> <p style="text-align: right;">getting to the bus stop..... 1</p> <p style="text-align: right;">standing waiting at bus stop.. 1</p> <p style="text-align: right;">other (specify)..... 1</p> <p style="text-align: right;">..... 1</p> <p>INDIVIDUAL PROMPT</p>	<p style="text-align: center;">YES NO</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p> <p style="text-align: center;">1 2</p>	
<p>13. Is it impossible for you to use the bus or could you manage it but with difficulty?</p> <p style="text-align: right;">Impossible..... 1</p> <p style="text-align: right;">Difficult..... 2</p>	<p style="text-align: center;">1 →SEE 15</p> <p style="text-align: center;">2 →14</p>	
<p>14. If you were to use the bus would you need someone to help you or could you manage on your own?</p> <p style="text-align: right;">Needs help..... 1</p> <p style="text-align: right;">Could manage..... 2</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">2</p>	

<p>15. IF ^{sc} DIFFICULTY GETTING IN TO/OUT OF CAR (CODE 1 at Q1 c)</p> <p>Do you travel by car at all these days?</p> <p>IF ANY DOUBT WHETHER RECENT CODE YES</p>	<p>DNA . X</p> <p>Yes..... 1</p> <p>No..... 2</p>	<p>→ 19</p> <p>→ 16</p> <p>→ 17</p>
<p>16. Was that an ordinary car or was it one which is specially adapted in some way?</p> <p>Ordinary.....</p> <p>Adapted/invalid car.....</p> <p>Both.....</p>	<p>1</p> <p>2</p> <p>3</p>	<p>→ 19</p> <p>→ 18</p> <p>→ 19</p>
<p>17. Is that because of health problems or for some other reason?</p> <p>(PRIORITY CODE)</p>	<p>Health problems.....</p> <p>Other (specify).....</p> <p>1</p> <p>2</p>	<p>→ 18</p> <p>→ 19</p>
<p>18. Is it impossible for you to get in to or out of a (an ordinary) car or could you manage but with difficulty?</p>	<p>Impossible.....</p> <p>Difficult.....</p> <p>1</p> <p>2</p>	<p></p>

19. I want to ask you about different methods of transport you currently use.

(You may have told me some of this already but I just need to check).

How frequently do you use a (mode)?

Please choose an answer from this card. Please count each single trip as one journey and each return trip as two.

SHOW CARD B

	3 or more times a week	Once or twice a week	Less than that but more than twice a month	Once or twice a month	Less than that but more than twice a year	Once or twice a year	Less than that or never
Ordinary bus	1	2	3	4	5	6	7
Express bus/ coach within GB	1	2	3	4	5	6	7
British rail train	1	2	3	4	5	6	7
Taxi/mini cab	1	2	3	4	5	6	7
Bicycle	1	2	3	4	5	6	7
Air flight within GB	1	2	3	4	5	6	7

IF CODED 4,5,6 ABOVE ASK (a) ←

OTHERS GO TO 20

(a) When was the last time you travelled by (mode)?

Please choose an answer from this card

SHOW CARD C

	Within the last week	1 to 2 weeks ago	2 weeks to a month ago	1 to 3 months ago	4 to 6 months ago	7 to 9 months ago	10 months to a year ago	More than a year ago
Ordinary bus	1	2	3	4	5	6	7	8
Express bus/ coach within GB	1	2	3	4	5	6	7	8
British rail train	1	2	3	4	5	6	7	8
Taxi/mini cab	1	2	3	4	5	6	7	8
Bicycle	1	2	3	4	5	6	7	8
Air flight within GB	1	2	3	4	5	6	7	8

20. Have you made any journeys in the last twelve months within Great Britain which were 25 miles or longer?			
IF YES: Is that 25 miles or more in one direction, at least 50 miles return, for a return journey?	YES (see note)...	1	→ 21
	NO.....	2	→ 22

21. Which different methods of transport have you used for these long distance journeys? Have you used a			
INDIVIDUAL PROMPT		Yes	No
a car or van?		1	2
a timetabled bus/coach?		1	2
a British Rail train?		1	2
an air flight within GB?		1	2
or any other methods (SPECIFY)? .		1	2
.....			

22. ALL RESPONDENTS AGED 16 OR OVER			
	DNA Under 16 ... X		→ 42
Do you hold a full driving licence valid in Great Britain either to drive a car or to drive a motorcycle, scooter or moped?			
	Yes.....	1	→ 23
INCLUDE DISQUALIFIED DRIVERS AND INTERNATIONAL PERMITS/OTHER LICENCES VALID IN UK	No.....	2	→ 25

23. Is it for a car only, a motorcycle only or for both, or is it for an invalid car?			
	car ..(A)(B).....	1	
	both car and motorcycle .(A&D) .	2	
CODE FIRST THAT APPLIES	motorcycle ..(D).....	3	
	invalid vehicle ... (J).....	4	
	moped ... (E).....	5	

24. How many years have you held a full licence?.....			
	(LESS THAN 6 MONTHS = 00)		
LONGEST HELD IF MORE THAN 1 LICENCE			→ 27
		1	years

25. Do you hold a provisional driving licence for a car, motorcycle, scooter or moped?			
	Yes.....	1	→ 26
	No.....	2	→ 27

26. Is it for a car or a motorcycle or something else?		
Car.....	1	
Car and Motorcycle.....	2	
Invalid car	3	

27. INTRODUCE CLASSIFICATION SECTION		
Were you in paid employment (or self employed) in the week ending last Sunday?		
Yes.....	1	→ 28
No.....	2	→ 29

28. Were you working full-time or part-time?		
IF PART-TIME: Was this for more than 10 hours per week or less?		
Full-time.....	1	] → 30
Part-time (more than 10 hours)..	2	
Part-time (10 hours or less)...	3	

29. Last week were you:			
	waiting to take up a job.....	1	] → 30
	looking for work.....	2	
	intending to look for work but prevented by temporary sickness or injury.....	3	
CODE FIRST THAT APPLIES	(CHECK 28 DAYS OR LESS)		
	going to school/college.....	4	] → 31
	permanently unable to work.....	5	] → 32 (iii)
	retired.....	6	
	looking after the home or family.....	7	] → 31
	or were you doing something else? (SPECIFY)	8	] → 31

30. Are you at present attending a school or college?			
	Yes.....	1	→ (a)
	No.....	2	→ 31
(a) Are you a full-time student?			
	Yes.....	1	] → 31
	No.....	2	

31. IF CURRENTLY NOT IN EMPLOYMENT

DNA In employment X → 32 (i)

Have you ever been in paid employment?

Yes..... 1 → 32 (ii)

No..... 2 → 33

IF EMPLOYED

(i) What was your job last week?

IF NOT EMPLOYED

(ii) What was your most recent job?

IF RETIRED

(iii) What was your main job?

OCCUPATION:

Job title:

OFF. USE

SEG

Describe fully:

INDUSTRY:

OFF. USE

IND

employee..... 1 → (a)

self-employed.. 2 → (b)

(a) IF EMPLOYEE
ASK OR RECORD:

manager..... 1

foreman/supervisor... 2 → (i)

other employee..... 3

(i) How many employees work(ed) in the establishment? 1-24..... 1 → 33
25 or more.... 2

(b) IF SELF-EMPLOYED
Do (did) you employ any other people?

Yes, PROBE: 1-24 employees... 1

25 or more..... 2 → 33

No employees..... 3

33. This card shows a number of possible sources of income. Can you tell me which different kinds of income you receive?

SHOW CARD D

No source of income....

1 ..

→ SEE 35

Refused

9

→ TRY 34

Earned income/salary
Income from self-employment].....

X

Pension from former employer.....

X

Child benefit.....

X

Mobility allowance.....

X

Other state benefits eg
Retirement pension
Family Income Supplement
Unemployment benefit
Housing benefit
Sickness/invalidity benefit
Maternity benefit
Supplementary benefit or pension]

X

Interest from savings, building
society, investment etc.....

X

Other kinds of regular allowances
from outside the household
(eg alimony, annuity, educational
grant).....

X

Other sources.....

X

CODE
ALL THAT
APPLY

34. Could you please look at this card and tell me which group represents your gross income from all the sources mentioned

By gross income, I mean income from all sources before deductions for income tax, National Insurance etc

SHOW CARD E

Group no.....

1

Refused.....

99

→ SEE 37

35. INTERVIEWER CHECK

ONE PERSON HOUSEHOLD

1

→ SEE 37

OTHERS IN HOUSEHOLD

2

→ 36

36. IF HOH (OR H/W IF HOH UNAVAILABLE) •

DNA Not Hoh/HW X → SEE 37

And now the income of the household as a whole.
Which of the groups on this card represents the
income of the whole household?

SHOW CARD E

Group no.....	
Don't know.....	88
Refused.....	99

37. ALL WORKING FULL OR PART-TIME (Q27 CODE 1)

DNA Not working X → 42

When you go to work, do you

	go to the same place every time?	1	] → 38
ONE CODE ONLY	<u>OR</u> go to the same place on at least 2 days running each week?	2	
	<u>OR</u> go to different places?	3	→ 39
	<u>OR</u> work at home or in the same building, as your home?.....	4	→ 42

38. Where is your work place? What town?

DO NOT RECORD NAME ON QUESTIONNAIRE - RING ONE CODE AT (a) OR (b)

(a) IF THE WORKPLACE IS SAID TO BE IN ONE OF THE FOLLOWING URBAN AREAS (OR A DISTRICT OF ONE) ASK IF IT IS IN THE CENTRE IN THE SENSE DEFINED ALONGSIDE

Is it (READ OUT RELEVANT STATEMENT)

URBAN AREA	Is it within minutes walk ?		RING CODE		URBAN AREA	Is it within minutes walk ?		RING CODE	
	WITH-IN	NOT WITH-IN	WITH-IN	NOT WITH-IN		WITH-IN	NOT WITH-IN		
ABERDEEN	5	of Green Market	01	02	LUTON	5	of new Arndale Shopping Centre	51	52
BIRMINGHAM	15	of Bull Ring	03	04					
BLACKPOOL	5	of Deansgate	05	06					
BOLTON	5	of Town Hall (Victoria Square)	07	08	MANCHESTER	15	of St Peters Square	53	54
					MIDDLESBOROUGH	10	of Victoria Square	55	56
BOURNEMOUTH	5	of The Square	09	10	NEWCASTLE-UPON-TYNE	5	of Eldon Square Shopping Centre	57	58
BRADFORD	5	of City Hall	11	12					
BRISTOL	15	of Broadmead	13	14	NORTHAMPTON	5	of The Market Square	59	60
BRIGHTON	5	of Victoria Gardens	15	16	NORWICH	5	of The Castle	61	62
					NOTTINGHAM	10	of The Guildhall	63	64
CAMBRIDGE	5	of Market Place	17	18	PLYMOUTH	10	of Royal Parade	65	66
CARDIFF	5	of High Street	19	20					
COVENTRY	5	of Broadgate	21	22	PORTSMOUTH	10	of The Guildhall	67	68
DERBY	5	of Market Place	23	24	PRESTON	5	of Shopping Centre	69	70
					READING	10	of Broad Street	71	72
DONCASTER	5	of Law Courts	25	26	SHEFFIELD	10	of Town Hall	73	74
DUDLEY	5	of Churchill Precinct	27	28					
DUNDEE	5	of City Square	29	30	SOUTHAMPTON	5	of Bar Gate	75	76
EDINBURGH	10	of Princess Street	31	32	SOUTHEND	10	of Civic Centre	77	78
GLASGOW	10	of Sauchiehall Street	33	34	STOKE-ON-TRENT	5	of Town Hall	79	80
GLOUCESTER	5	of Guildhall	35	36	SUNDERLAND	5	of Central Station	81	82
HUDDERSFIELD	5	of Market Place	37	38	SWANSEA	5	of The Dragon Hotel	83	84
HULL	5	of Victoria Square	39	40	WALSALL	10	of Civic Centre	85	86
IPSWICH	5	of Butter Market	41	42	WARRINGTON	5	of Horse Market	87	88
LEEDS	10	of City Station	43	44	WATFORD	5	of Market Place	89	90
LEICESTER	10	of Clock Tower	45	46	WEST BROMWICH	5	of Sandwell Shopping Centre	91	92
LIVERPOOL	10	of The Main Queensway Tunnel Entrance	47	48	WIGAN	5	of Market Hall	93	94
					WOLVERHAMPTON	5	of Prince's Square	95	96

→ 39

GREATER LONDON.	Is it within an area bounded by the main rail terminals including Vauxhall and Fenchurch Street, but North of the Thames?	49	50
-----------------	---	----	----

→ 39

(b) IF IN ANY OTHER URBAN AREA (OUTSIDE GREATER LONDON)

Is it within 5 mins walk of the main shopping/business centre?

WITHIN
NOT WITHIN ...

97
98

} → 39

IF NOT IN URBAN AREA: CODE

99

→ 39

39. How do you usually travel to work?

PROBE FOR
MAIN METHOD

- | | | |
|---------------------------|---|----------|
| Car/van..... | 1 | → 40 |
| Motorbike/Moped/Scooter.. | 2 | → 41 |
| Bicycle..... | 3 | [] → 42 |
| Bus..... | 4 | |
| B.R. Train..... | 5 | |
| L.R.T. Train..... | 6 | |
| Walk..... | 7 | |
| Other (specify)..... | 8 | |
| | | |
| | | |

40. Is that as a driver, as a passenger or as part of a car pool?

- | | |
|----------------|---|
| Driver..... | 1 |
| Passenger..... | 2 |
| Car pool..... | 3 |

41. Is the vehicle you travel to work in, one that your household owns or has regular use of?

- | | | |
|----------|---|------|
| Yes..... | 1 | → a) |
| No..... | 2 | |

(a) CHECK VEHICLE IS GIVEN ON HOUSEHOLD QUESTIONNAIRE AND CODE VEHICLE NO. → []

42. Do you have any season ticket, area travel card, travel token or special pass of any kind?

Yes
 No

1
 2

→ CODE TYPE IN GRID THEN ASK a)
 → END

a) Do you have any other season ticket, area travel card, railcard, travel token or special pass?

Yes
 No

1
 2

→ CODE TYPE IN GRID
 → 43

RING - TICKET REFERENCE NUMBER

	1	2	3
Season ticket	01	01	01
Area travel card	02	02	02
Combined season/area travel card	03	03	03
Railcard	04	04	04
Other non-concessionary ticket (Specify).....	05	05	05
.....			
.....			
OAP pass	06	06	06
Scholars' pass	07	07	07
Disabled person's pass ...	08	08	08
Subsidised travel tokens..	09	09	09
Other concessionary ticket (Specify)	10	10	10
.....			

FOR EACH TICKET IN TURN GO THROUGH Q 43 TO END					
43. Is the ... (ticket/pass) for the bus, the train or both?	BR train	1	1	1	
	LRT underground/Tyne and Wear metro/Glasgow underground	2	2	2	
	Bus	3	3	3	
	Combined BR train/underground.....	4	4	4	
	Combined BR train/bus.....	5	5	5	
	Combined underground/bus ..	6	6	6	
	Combined BR train/underground/bus	7	7	7	
	Other (specify)	8	8	8	
				
IF ANY CODE 4, 5, 6, 7 (JOINT MODE) ask a)					
a) When you use your combined ticket, on which method of transport do you travel the most mileage?					
	BR Train	1	1	1	
	Underground	2	2	2	
	Bus	3	3	3	
	DK	4	4	4	
ASK FOR ALL EXCEPT TOKENS (Q42 CODE 9) AND TICKETS VALID FOR A SPECIFIC No. OF JOURNEYS					
	Tokens etc DNA	9	9	9	→ END
44. How long does the (ticket/pass) last for?	1 week	1	1	1	
	1 month	2	2	2	
	3 months/school term	3	3	3	
	6 months	4	4	4	
	1 year	5	5	5	
	more than 1 year	6	6	6	
	unlimited	7	7	7	
	Other (specify).....	8	8	8	
				

45. What was the actual (net) cost to you of the (ticket/pass)?	TICKET 1		TICKET 2		TICKET 3	
	£	p	£	p	£	p
IF NIL WRITE 0						
46. Was any of the cost of the ticket/pass paid by or refunded by an organisation/firm?	1		1		1	
Yes.....						
No.....	2		2		2	
47. How many journeys per week would you expect to use the ... (ticket/pass) for? Please count the number of single journeys (AVERAGE OVER THE YEAR)						
IF AVERAGE IS LESS THAN ONCE PER WEEK, CODE						
	<input type="text"/> No. → 49	<input type="text"/> No. → 49	<input type="text"/> No. → 49	<input type="text"/> No. → 49	<input type="text"/> No. → 49	<input type="text"/> No. → 49
	1 → 48	1 → 48	1 → 48	1 → 48	1 → 48	1 → 48
48. IF LESS THAN ONCE PER WEEK Could you look at this card and tell me about how often you use the (ticket/pass)? Please count the outward and return trips as two journeys.						
More than 12 times per year/once a month ...	1		1		1	
Up to 12 times per year/once a month	2		2		2	
Three or four times a year	3		3		3	
Once or twice a year	4		4		4	
Less than once a year or never	5		5		5	
49. When you use the ... (ticket/pass) do you have to pay anything at the time of travel, or do you travel free?						
Pay something.....	1		1		1	
Travel free.....	2		2		2	

VEHICLE QUESTIONNAIRE

3

Area	Address	Hhd	Veh
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

OUTCOME:

Questionnaire is fully or partly completed.	1
blank...	2

If blank or incomplete, give details on the Calls and Contact Sheet.

vehicle description

TAKE VEHICLE INFORMATION FROM PERSON MOST ABLE TO GIVE IT EVEN IF NOT MAIN DRIVER.

Main driver no. (from h'hld qu're).....	<input type="text"/>
Informant no. (if different from above).	<input type="text"/>

1. I need to obtain details about the (VEHICLE DESCRIPTION) which are given in the registration document or log book.		
Seen by interviewer.....	1	COPY ANSWERS TO Q2,3,4,5,&6 ASK Q2,3,4,5,&6
Consulted by informant.....	2	
Not seen/consulted.....	3	

ASK OR RECORD (AND CHECK)

2. First of all, in which year was the (vehicle) first registered?		
DATE OF REGISTRATION	19	<input type="text"/>
DK...	99	<input type="text"/>
(i) Could you tell me the letter on the registration number which denotes the year?	LETTER....	<input type="text"/>
No letter that denotes the year	1	SEE (ii) 3
(ii) IF A, B, OR C, CODE:		
before number.....	1	
after number.....	2	

ASK OR RECORD (AND CHECK)

3. To which of the following taxation classes does
..... (vehicle) belong?

- | | | |
|--|---|----|
| Private?..... | 1 | |
| Light goods (1½ tons or less)?..... | 2 | →4 |
| Taxi (HACKNEY)?..... | 3 | |
| 3 wheel car (TRICYCLE)?..... | 4 | |
| Disabled (DISABLED)?..... | 5 | →5 |
| Motorcycle, scooter, moped, (BICYCLE)? | 6 | |
| Heavy goods (more than 1½ tons)?... | 7 | →6 |
| Other (SPECIFY)?..... | 8 | →5 |
| | | |

4. Is it a petrol or diesel engine?

- | | |
|----------------------|---|
| Petrol..... | 1 |
| Diesel..... | 2 |
| Other (SPECIFY)..... | 3 |
| | |

ASK OR RECORD (AND CHECK)

5. What is the size of the (vehicle's) engine
in cc's?
(1 litre = 1000 cc)

PROBE IF ANSWER IS
GIVEN TO NEAREST 100 cc

	cc → 6
--	--------

DK.....A →(a)

IF ACTUAL SIZE NOT KNOWN

(a) Could you tell me in which of the bands on this
card is the engine size?

- | | | | |
|-------------|--------------------------------------|----|----|
| SHOW CARD G | Up to 50 cc..... | 1 | |
| | 51 to 125 cc..... | 2 | |
| | 126 to 250 cc..... | 3 | |
| | 251 to 700 cc..... | 4 | |
| | 701 to 1000 cc (.7 to 1 litre)..... | 5 | |
| | 1001 to 1300 cc (1 to 1.3 litres).. | 6 | →6 |
| | 1301 to 1500 cc (1.3 to 1.5 litres) | 7 | |
| | 1501 to 1800 cc (1.5 to 1.8 litres) | 8 | |
| | 1801 to 2000 cc (1.8 to 2 litres).. | 9 | |
| | 2001 to 2500 cc (2 to 2.5 litres).. | 10 | |
| | 2501 to 3000 cc (2.5 to 3 litres).. | 11 | |
| | 3001 cc and over (3 litres and over) | 12 | |

DK..... →ASK (b)

IF ENGINE SIZE NOT KNOWN

(b) Could you tell me the make and model of the
vehicle so that we can look up the engine
size at the office?

Make: _____

Model: _____

6. In whose name is the vehicle registered?		
Household member.....	1	→ 8
Someone outside household.....	2	→ (b)
Employer/firm for whom household member works.....	3	→ 12
Other firm/organisation.....	4	→ 7
Don't know.....	5	→ (a)
(a) Who <u>owns</u> the vehicle?		
Household member.....	1	→ 8
Someone outside household.....	2	→ (b)
Employer/firm for whom household member works.....	3	→ 12
Other firm/organisation.....	4	→ 7
Don't know.....	5	→ (b)
(b) Why do you have use of the vehicle?		
Borrowed.....	1	] → SEE 22
Other (SPECIFY).....	2	
7. Is the vehicle on hire or lease, or not?		
Yes.....	1	→ (a)
No.....	2	→ (b)
(a) Who has hired or leased the vehicle?		
Household member.....	1	→ 9
Employer/firm for whom household member works.....	2	→ 11
(b) Why do you have use of the vehicle? (SPECIFY)		
		→ SEE 22
8. Were any of the purchase costs of the vehicle paid for by a firm or organisation?		
Yes.....	1	
No.....	2	
9. INTERVIEWER CHECK		
SOMEONE IN H'HLD WORKING.....	1	→ SEE 10
NO ONE IN H'HLD WORKING.....	2	→ 21

IF VEHICLE HIRED OR LEASED (Q7 code 1)

DNA Not hired/leased....X..... → 11

10. Are any of the costs of hiring/leasing paid for by 'your' employer/firm?

- Yes..... 1
- No..... 2

11. Is 'your' employer/firm responsible for paying any of the running costs of the vehicle, that is, the road tax, insurance, servicing and repairs?

- Yes..... 1 → 12
- No..... 2 → 15

12. Is 'your' employer/firm responsible for paying all of the running costs of the vehicle (that is, the road tax, insurance, servicing and repairs)?

- Yes..... 1 → (a)
- No..... 2 → 14

(a) Does 'your' employer/firm pay all the petrol bills for both work and private mileage?

- Yes..... 1 → 13
- No..... 2 → 15

13. Do 'you' make any payment to that employer/firm for using the vehicle?

- Yes..... 1 } → 19
- No..... 2 }

14. Could you tell me who is responsible for paying for the following; 'you' or 'your' employer/firm?

	Self	Employer/ firm
Road Tax.....	1	2
INDIVIDUAL PROMPT Insurance.....	1	2
Servicing and repairs..	1	2

15. Do 'you' use the vehicle in the course of 'your' work?

- Yes..... 1 → 17
- No..... 2
 - Firm regd → 18
 - Hld regd → 16

16. (May I check) do 'you' use the vehicle to get to or from work?

- Yes....A..... → (a)
- No..... 1 → 21

(a) Do 'you' receive any payment or petrol from 'your' employer/firm for 'your' mileage to or from work or for any other mileage?

- Yes....B..... → (b)
- No..... 2 → 21

(b) Do 'you' receive any free petrol 3
 RUNNING PROMPT a mileage allowance 4
 CODE FIRST a fixed allowance which 5
 THAT APPLIES includes something for mileage .
 or some other allowance (Specify)? 6

→ 21

<p>17. For the mileage that 'you' do in the course of work do 'you' receive....</p> <p>RUNNING PROMPT</p> <p>CODE FIRST THAT APPLIES</p> <p>free petrol (or have the petrol paid for)?.....</p> <p>a mileage allowance?</p> <p>a fixed allowance which includes something for mileage?..</p> <p>is there some other arrangement? (SPECIFY)</p> <p>or none of these?.....</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p>	
<p>18. For 'your' private mileage do 'you' receive from 'your' employer/firm....</p> <p>any free petrol (or have any of the petrol paid for)?.....</p> <p>a mileage allowance?</p> <p>a fixed allowance which includes something for mileage?.....</p> <p>some other allowance (SPECIFY)?.....</p> <p>or none of these?.....</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p>	
<p>19. Does having (the use of) the vehicle mean 'you' have to pay extra income tax?</p> <p>Yes.....</p> <p>No.....</p>	<p>1</p> <p>2</p>	<p>→ 21</p> <p>→ 20</p>
<p>20. Are 'you' able to claim any of the costs of your vehicle against income tax?</p> <p>Yes.....</p> <p>No.....</p> <p>(a) Are 'you' able to claim any of the running costs against income tax?</p> <p>Yes.....</p> <p>No.....</p> <p>(b) VEHICLES NOT HIRED/LEASED Are 'you' able to claim any of the purchase or depreciation costs against income tax?</p> <p>Yes.....</p> <p>No.....</p>	<p>1</p> <p>2</p> <p>1</p> <p>2</p> <p>.....</p> <p>1</p> <p>2</p>	<p>→ (a)</p> <p>→ 21</p> <p>→ SEE (b)</p> <p>→ 21</p>

21. Is there any (other) way in which the cost to you of purchasing or running the vehicle is reduced?

Yes.....

1

→ (a)

No.....

2

→ SEE 22

(a) In what (other) way is the cost to you reduced? (SPECIFY)

IF VEHICLE BORROWED/HIRED (Q6(b) code 1 or Q7 code 1)

DNA ... Not borrowed/hired.....X → 23

22. Is your vehicle borrowed or hired for less than one year or for one year or more?

Less than 1 year.....

1

→ 24

1 year or more.....

2

→ 23

23. I would like to get a figure for the approximate annual mileage of the vehicle.

Can you please estimate for me the total miles the vehicle is driven in a year?

	miles
--	-------

- ENCOURAGE ESTIMATE
- OBTAIN TO NEAREST THOUSAND
- OBTAIN EXPECTED MILEAGE IF VEHICLE ACQUIRED LESS THAN A YEAR AGO

24. INTRODUCE THE TRAVEL RECORD

AT PICK UP

25. FUEL COST

CHECK WITH INFORMANT THAT THE FUEL IS FOR THIS VEHICLE

RECORD ALL FUEL PUT INTO THIS VEHICLE DURING THE TRAVEL WEEK

(a) (NEAREST WHOLE LITRE)

Litres

--

OR

Gallons...

--

£

(b) (NEAREST £ - EXCLUDE P)

Cost

--

No fuel put in

1

26. RECORD MILOMETER READINGS FROM THE TRAVEL RECORD (OBTAIN ESTIMATES IF NECESSARY)

(IGNORE $\frac{1}{10}$ MILES)

END

--

START

--

(i) SUBTRACT: TOTAL MILEAGE

--

Refused/DK (to start or end mileage)

1

→ END

(ii) RECORD FROM TRAVEL RECORD

a) HAS MILOMETER BEEN THROUGH ZERO

Yes. 1

No.. 2

b) HAS THE MILOMETER BEEN REPLACED SINCE THE CAR WAS NEW

Yes. 1

No.. 2

27. IF NO MILEAGE DRIVEN

DNA Mileage driven.....X.....

→ 28

Why was the vehicle not used during the travel week?

Vehicle not insured.....

1

Vehicle being repaired/serviced.....

2

Driver sick/on holiday.....

3

Driver disqualified.....

4

Other (SPECIFY).....

5

.....

→ END

28. I want to separate out any miles driven for purposes not eligible for the survey, so may I just check were any of the miles.....
(26(i))

CODE ALL
THAT APPLY

- | | | |
|--|---|-------------|
| ...driven by someone outside the household..... | 1 | Notes |
| ...driven in order to carry goods in course of work..... | 2 | Notes |
| ...driven off the public road.... | 3 | Notes |
| ...driven outside Great Britain.. | 4 | Notes |
| ...driven as a taxi or hire car?. | 5 | Notes |
| None of these..... | 6 | → END |

IF Q28 coded 1-5 ASK (a)

(a) How many miles were..... ?
FROM ABOVE

ENTER TOTAL INELIGIBLE MILEAGE

→ INTERVIEWER CHECK

DK.....

1

→ END

INTERVIEWER CHECK

mileage at 26(i)

- mileage at 28(a)

Total _____

29. So leaving aside that mileage the remaining miles comes to? (TOTAL AT CHECK)

CORRECT IF NECESSARY
ENTER AN AGREED TOTAL

→ END

Travel day	1
	2
	3
	4
	5
	6
FINAL	7

JOURNEY NO.

Completed
from memory 1

REPEAT JOURNEYS	SAME person, SAME journey ANOTHER day
COMPLETE:	NOT FINAL DAY
(a) Travel day/journey no.	ORIGINAL Day
(b) ORIGINAL day/journey	Journey

DUPLICATE JOURNEY	ANOTHER person, SAME journey SAME day
COMPLETE:	
(a) Travel day/journey no.	ORIGINAL Person Journey
(b) ORIGINAL person/journey	
(c) Check (A) - purpose/escort	
(d) Check (C) - cost/ticket	
(e) Check (D) - pas./driver	

(A) JOURNEY DETAILS				(B) ALL STAGES				(C) PUBLIC STAGES (08-16)				(D) PRIVATE STAGES (04-07)							
FROM	PURPOSE	TO	TIME LEFT	TIME ARRIVED	METHOD OF TRAVEL	DISTANCE	NO. IN PARTY	TRAVEL TIME	STAGE COST	NO. OF BOARDINGS	TICKET TYPE	IF COST: WHO PAID/ PROVIDED	WHICH VEHICLE?	SHARING/ POOLING?	PASSENGER OR DRIVER	DRIVER ONLY			
			Hrs	mins		Miles	No.	Minutes	£	p						WHERE PARKED?	PARKING COST?		
01	Home	01	(24 HOUR CLOCK)		Walk*	01					NO SPECIAL TICKET/PASS	IF		Sharing 1	Front passenger	On own/ friends premises,			
02	Work	02			Bicycle	02							Self/other person	Hhd vehicle	Pooling 2	Rear passenger	1	IF NIL LEAVE BLANK	
03	In course of work	03			Private (hire) bus	03					IF NIL LEAVE BLANK		LEAVE BLANK	Ref No.			2	Firm/work car park	
04	Education	04											-Adult 4				3	Other private car park	
05	Shopping	05					Car/m'cycle combination	04					-Child 5					2	Pence
06	Personal business - medical	06					M'cycle, scooter, moped	05					Reduced (off peak)	Employer 1					
07	- other	07					Van/lorry	06					Other	organisa- tion 2 (specify)	Non-hhd vehicle 7			3	
08	Eat/drink	08					Other private (specify)	07					-Adult 6					4	Public car park
09	Visit friends	09					Ordinary bus - London transport	08					-Child 7					5	Street
10	Other social	10					- other	09					Special category reduced 8					6	Not parked
11	Entertainment/ public activity	11					Coach/express bus	10					Other 9					7	Other (specify)
12	Sport (participate)	12					Excursion/tour bus	11					SPECIAL TICKET/PASS						
13	Holiday base	13					LRT Underground	12					Ticket reference number						
14	(Day) Trip/just walk	14					BR Train (1st class)	13											
15	Other (specify)	15					BR Train (2nd class)	14											
1	Escort/ accompany	1			Taxi/minicab	15													
	Series of calls	1			Other public (specify)	16													

2																		
3																		
4																		
5																		
6																		

.1	50-250 yds
¼ mile	251-450 yds
.3	451-600 yds
.4	601-800 yds
½ mile	801-950 yds
1,000 yds	951-1150 yds
¾ mile	.8

Travel Record

Travel week

START day _____

FINISH day _____

- Enter every journey you do by mechanical transport (bus, train, car, bicycle etc.)
- Include walks on the first six days if they are a mile or more. Include all walks on the final day.

DRIVERS only

1. Milometer reading:
 at beginning of START day

 at end of FINISH day

2. Fuel put in vehicle during travel week

	Total cost	Price per litre/gal	Number of litres/gals
1st time			
2nd time			
3rd time			

3. May we just check.....

Is the milometer on its second cycle, in other words has it reached its maximum figure and been through zero again?

	Yes	1
(please ring)	No	2

4. Has the milometer been replaced since the car was new?

	Yes	1
(please ring)	No	2

HOW TO FILL IN YOUR TRAVEL RECORD

PURPOSE OF JOURNEY

We are interested in a simple description such as 'to work', 'to get home', 'from work to shops', 'shopping', 'take a child to school' etc. If you are unsure, make a note and the interviewer will sort it out.

NO. IN PARTY

This means the number of people who set out together. To be included in your party a person must be with you for at least 1/2 the distance.

METHOD OF TRAVEL

Show each different method on a separate line, eg car, train, bus. On the first 6 days include walk as a method if it is a mile or more (20 minutes or more). On the final day include every walk you do

TIME TRAVELLING

Give time spent travelling on a bus/train, in a car or walking. Please do NOT include time spent waiting for buses/trains.

Cost

Write the amount paid for the actual journey - so for a journey made with a season ticket write nil. A journey made with a pass may be free or you pay something. If so, write down the cost.

Pas/Driver

For journeys by car or motorbike please record whether you were a Front Passenger FP Rear Passenger RP or the Driver DR

	Purpose of Journey	Time left	Time arrived	Method of travel	Distance	No. in party	Time travelling
1	Go to shops	10.35	10.55	1 Bus	1/2	1	15
				2			
2	Return Home	12.15	12.45	1 Bus	1/2	1	25
				2			
3	Go to friend's	3.30	4.20	1 Bus	2	1	15
				2 Walk				1/4	1	25
4	Return home	6.15	6.25	1 Car	3	2	10
				2			

If BUS or TRAIN (or taxi)

Cost	No. of boardings
1 50p	2
2 50p	2
3 60p	1
4	

If CAR or MOTORBIKE

Which car/motorbike used	Pas./dr (FP, RP or DR)	DRIVERS only: Where parked and cost
Friends	FP	

DRIVERS ONLY-

Where parked/cost

We would like to know here if the car/motorbike was parked:
 - 'on the street'
 - 'on own/friends property'
 - 'in a public or firms car park'
 - 'in a private car park'
 - or 'not parked.'

Also please record the cost of parking, if any.

1				1			
				2			
2				1			
				2			
3				1			
				2			
4				1			
				2			

1	
2	
3	
4	

Include ALL JOURNEYS BY TRANSPORT (bus, train, car, bike etc). Include walks if 1 mile or more.

DRIVERS: Remember to enter your milometer reading on the front page.

Purpose of Journey	Time left	Time arrived	Method of travel	Distance	No. in party	Time traveling
--------------------	-----------	--------------	------------------	----------	--------------	----------------

If BUS or TRAIN (or taxi)

Cost	No. of boardings
------	------------------

If CAR or MOTORBIKE

Which car/motorbike used	Pas./dr (FP, RP or DR)	DRIVERS only: where parked and cost	Notes
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DAY 1

1			1			
			2			
2			1			
			2			
3			1			
			2			
4			1			
			2			
5			1			
			2			
6			1			
			2			

11 12

1						
2						
3						
4						
5						
6						

DAY 2

1			1			
			2			
2			1			
			2			
3			1			
			2			
4			1			
			2			
5			1			
			2			
6			1			
			2			

1						
2						
3						
4						
5						
6						

Include ALL JOURNEYS BY TRANSPORT (bus, train, car, bike etc). Include walks if 1 mile or more.

Purpose of Journey	Time left	Time arrived	Method of travel	Distance	No. in party	Time travelling
--------------------	-----------	--------------	------------------	----------	--------------	-----------------

DAY 5

1			1			
			2			
2			1			
			2			
3			1			
			2			
4			1			
			2			
5			1			
			2			
6			1			
			2			

DAY 6

1			1			
			2			
2			1			
			2			
3			1			
			2			
4			1			
			2			
5			1			
			2			
6			1			
			2			

If BUS or TRAIN (or taxi)

Cost	No. of boardings
------	------------------

If CAR or MOTORBIKE

Which car/motorbike used	Pas.ldr (FP, RP or DR)	DRIVERS only: Where parked and cost
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Notes

	11	12				
1						
2						
3						
4						
5						
6						

1						
2						
3						
4						
5						
6						

On this LAST day please include ALL WALKS,
(even if they are less than 1 mile) as well
as other journeys you do.

DRIVERS: Remember to enter your
milometer reading on the front page.

Purpose of Journey	Time left	Time arrived	Method of travel	Distance	No. in party	Time travelling
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If BUS or TRAIN (or taxi)

Cost	No. of boardings
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If CAR or MOTORBIKE

Which car/motorbike used	Pas./dr (FP, RP or DR)	DRIVERS only: Where parked and cost
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Notes

DAY 7

1				1			
				2			
				3			
2				1			
				2			
				3			
3				1			
				2			
				3			
4				1			
				2			
				3			
5				1			
				2			
				3			
6				1			
				2			
				3			
7				1			
				2			
				3			
8				1			
				2			
				3			

11 12

1										
2										
3										
4										
5										
6										
7										
8										

1										
2										
3										
4										
5										
6										
7										
8										