

Scottish
Household
Survey

TRAVEL DIARY

User Guide

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1. Introduction

1.1 The Travel Diary collects information on personal travel, on the day prior to the interview, from randomly chosen adults (aged 16+) in Scotland. It is part of the Scottish Household Survey (SHS), which is a major cross-sectional survey, commissioned by the Scottish Government in order to provide reliable and up-to-date information on the composition, characteristics and behaviour of Scottish households, both nationally and at a sub-Scotland level. Please see the separate user guidance, “*Scottish Household Survey: User Guide*” for more information on the “main”, (i.e. “non-travel diary”) SHS data. Technical reports on the SHS can be purchased from the Stationery Office bookshop and found on the following website www.scotland.gov.uk/shs.¹

1.2 From the outset, it was intended that the main SHS data and the SHS Travel Diary should be made publicly available for analysis. The aim of this document is to provide potential users and other interested parties with a description of the structure and content of the Travel Diary datasets.

1.3 This document has the following structure.

- A brief account of the background and a description of the coverage of the Travel Diary appear in *section 2*.
- The main definitions used for the Travel Diary data and a list of variables is given in *section 3*.
- Brief overview of collection and imputation of information about journeys and comparisons with the GB National Travel Survey (NTS) are covered in *section 4*.
- Information on how distance is calculated is provided in *section 5*.
- This document also describes how distances between “home and work” and “home and school” are estimated (they are provided in files which are separate to the Travel Diary), *section 6*.
- The *Annex* at the end of this document contains more details of the problems found in the data and imputation methods used.

2. Background to the SHS Travel Diary

2.1 Background

2.1.1 The SHS Travel Diary is part of the Scottish Household Survey (SHS). The SHS covers a wide range of topics to allow links to be made between different policy areas. There is a particular focus on information on transport, communities and local government. The SHS is financed by the Scottish Government and undertaken by a partnership of TNS-BMRB Scotland and MORI Scotland. It started in February 1999.

2.1.2 The sample for the survey is designed to meet a number of criteria. It is designed to provide nationally representative samples of private households and of the adult population in private households. This is achieved by splitting the interview between a household

¹ The website includes a full set of documentation including the Scottish Household Survey User Guide, Technical Reports, Questionnaire and Topic lists. This documentation is provided under the ‘Publications’ and ‘Survey details’ section of the website.

respondent and an adult selected at random from the permanent residents of the household. In order to meet the reporting requirements, the sample is structured to be nationally representative each quarter and to provide a representative sample for larger local authorities each year (those with over 120,000 households). The randomly chosen adult answers the SHS Travel Diary.

2.1.3 The sample is also designed to provide data for each local authority over a two-year period. This is achieved by disproportionately sampling to achieve a minimum sample equivalent to a simple random sample of 500 in each local authority in each two-year period. Reweighting factors “correct” for the disproportionate sampling.

2.1.4 A combination of clustered and unclustered sampling is used. The Scottish Government’s urban rural classification is used to identify areas where sample should be clustered or unclustered. The general approach was that areas classified as ‘large urban areas’ or ‘other urban areas’ would use unclustered sampling while areas in the other four categories (accessible small towns, remote small towns, accessible rural and remote rural) would use clustered sampling. This approach is modified in two ways:

- Where more than 80% of households in a local authority fall into the ‘urban’ or ‘non-urban’ category, the whole local authority is treated as that category
- The three island local authorities (Eilean Siar, Orkney Islands and Shetland Islands) use wholly unclustered sampling even though their urban rural classification suggests that they should use wholly clustered sampling. In these areas, the sampling interval is between 1 and 6 households and 1 in 8 households, which means that clustered sampling would be no more efficient than unclustered sampling.

2.1.5 The sample is selected from the Small User File of the Postal Address File (PAF) for Scotland, expanded to take account of addresses which might only be listed once but actually contain multiple dwellings, such as tenement blocks and multi-storey flats. Although the small user PAF excludes many institutional addresses such as student halls of residence or nurses’ homes, there are no geographical exclusions from the survey.

2.1.6 The survey questionnaire is in two parts. The Highest Income Householder or his/her spouse/partner completes Part 1 of the interview. Once the composition of the household has been established, one of the adults in the household is randomly selected to complete Part 2 which contains the Travel Diary. In all households with a single adult the same person completes both parts but as the number of adults in the household increases, the probability of the random adult being the same as the household respondent declines.

2.1.7 The Highest Income Holder, or his/her spouse/partner section of the interview deals with topics such as household composition, housing and tenure, health, the vehicles available to the household, the occupation and industry of the highest income householder, household income, financial services and housing costs. The random adult section deals with individuals’ housing change, neighbourhood problems, community safety and anti-social behaviour, internet use, transport and use of public transport, public services, volunteering, culture and sport, income and employment as well as travel made on the previous day.

2.1.8 Interviewing was conducted using Computer Assisted Personal Interviewing (CAPI). Instead of using pen and paper to record responses, data is collected on handheld computers.

2.1.9 In 2007 and 2008, a total of 27,238 valid interviews were carried out with householders. Of these 27,238 households, interviews were achieved with 24,615 random adults (aged 16+) (90%). Of the random adults interviewed, 56% had made a journey on the previous day.

2.1.10 In summary, the SHS Travel Diary is asked of a random sample of adults (aged 16+) living in private households across Scotland about the travel they made on the day prior to the interview. This information is obtained from interviews with one randomly chosen adult per household in the sample. Each adult in the household has an equal chance of selection for these questions. Reweighting factors “correct” for the lower selection probability of individual adults in larger households.

2.2 The coverage of the SHS Travel Diary

2.2.1 The SHS Travel Diary collects information about travel for private purposes or for work or education, provided the main reason for the journey is for the traveller himself or herself to reach the destination. It includes the following types of travel:

- personal travel for domestic, social or recreational purposes - e.g. driving to and from work, travelling into town to go shopping, and going to see friends;
- journeys in the course of work, provided the purpose of the journey is for the traveller to reach a destination - e.g. taking a bus into town to attend a meeting, flying down to London on business;
- journeys made to take or accompany someone else - e.g. taking the children to school, walking someone home.

2.2.2 Journeys made by land, air or water within the United Kingdom are included. Journeys which start or end outwith the UK (e.g. a holiday flight from Spain) are excluded. However, if a respondent were to say that he or she had flown back from a holiday abroad on the previous day, the interviewer should record details of the journey home from the airport (but *not* record details of the flight to the UK).

2.2.3 The SHS Travel Diary does *not* cover:

- journeys which are made in the course of work by people who are employed (e.g.) as drivers or crew of public transport vehicles; to drive lorries; to deliver letters, parcels, leaflets or goods; as police officers or traffic wardens; etc. However, it does cover their journeys to and from their places of work;
- travel away from public roads or highways, such as taking a dog for a walk across some fields, walking or climbing in the hills, and yachting or flying for pleasure;

2.2.4 The Travel Diary collects information about three different types of journey:

- “single stage” journeys (98.75% of the journeys recorded in 2007/2008) - such as driving to an out-of-town shopping centre, or going from home to work by bus
- “multi-stage” journeys (0.76%) - such as going by bus to the station (the first stage, assuming that the walk to the bus stop is below the threshold) and then catching a train to - say - Manchester (the second stage);
- “series of calls” journeys (0.49%) - in order to reduce the burden on respondents, travel involving a number of stops for the same main purpose and using the same form of transport is treated as one continuous “series of calls” journey from the first such call to the last one. Only shopping and travel in course of work can be treated in this way.

Information is collected about the part of the journey to the first call, the total number of calls, and the part of the journey after the last call. In the case of a doctor's round, for example, the interviewer might ask about the travel from (say) the surgery to the first patient, the total number of calls, and the travel from the final patient back to the surgery (or wherever the doctor went after the last call).

The three types are treated differently to facilitate the interviewing process. There are slight differences in the detailed kinds of information collected about each type of journey, which have implications for the processing and analysis of the data but do not affect the main conclusions that can be drawn.

3. SHS Travel Diary datasets and variables

3.1 The data for the 2007/2008 Travel Diary has been supplied in two files: a "Journey" file containing one record per journey (for multi-stage journeys, the record contains details of the origin of the first stage and the destination of the last stage; similarly, for series of call journeys, the record contains the information on the origin of the first call and the destination of the last call); and a "Stage" file containing one record for each stage of each journey, i.e. one record for each single stage journey, one record for each stage of a multi-stage journey, and, in the case of a series of call journey, one record for the first call and one record for the last call.

3.2 The basic definitions used in the Travel Diary

3.2.1 *Journeys*: the basic unit of travel, a journey, is defined as a one-way course of travel having a single main purpose. Outward and return halves of a return journey are treated as two separate journeys. A journey cannot have two separate purposes, and if a single course of travel involves a mid-way change of purpose then it, too, is split into two journeys. However, trivial subsidiary purposes (e.g. a stop to buy a newspaper) are disregarded.

3.2.2 *Stages*: a journey consists of one or more stages. A new stage is defined when there is a change in the form of transport or when there is a change of vehicle requiring a separate ticket.

3.2.3 *Journey purpose*: the purpose of a journey is normally taken to be the activity at the destination, unless that destination is "home" in which case the purpose is defined by the origin of the journey. A number of purposes are distinguished, such as "place of work", "in the course of work", "educational establishment", "shopping", and so on. Separate categories are used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school.

3.2.4 *Mode of transport*: in the code-lists which are used by the interviewers to record details of the journeys, vans are counted with cars; taxis and minicabs are in a separate category from ordinary cars; and there are separate categories for (i) rail and (ii) underground, and for (a) school bus, (b) works bus and (c) ordinary (service) bus.

3.2.5 *Main mode of transport*: where a journey involves more than one mode of transport (e.g. first a bus and then a train), the main mode of a journey is defined, as in the GB National Travel Survey, as that used for the longest (in distance) stage of the journey. For example, if a journey involved a two mile bus ride followed by a 50 mile train trip, the main mode for the

journey would be "rail". It should be noted that this definition does *not* use the total of the distances travelled by each of the different modes to determine the main mode - for example, a journey involving a 1 mile walk to a bus stop, a 1½ mile bus ride and a 1 mile walk to the ultimate destination would be classified as "main mode = bus", because bus was the mode of transport used for the longest stage of the journey, even though more than half the total distance was covered on foot. If there is no single longest stage, and the two (or more) longest stages do not involve the same mode of transport, the "main" mode of the journey is defined (as in the GB National Travel Survey (NTS)) as the mode which was used for the last of the longest stages. In practice, because of the way that the distances are calculated (which produces results which appear to be accurate to about the nearest metre, although they will not be as precise as this - see *section 5*), it is unlikely that there will be many journeys which have two stages which involve *exactly* the same distance.

3.3 List of variables on the Travel Diary Datasets

3.3.1 The following table shows the names of each of the travel diary variables, an explanation of what they are, and a list of possible values where applicable.

(J) = on journey dataset only, (S) = on stage dataset only.

<u>VARIABLE NAME</u>	<u>LABEL</u>	<u>VALUE / CODE</u>
UNIQID	Unique household identifier	Any numeric
DYEAR	The year's data the household is included in for the annual reports	2007, 2008 etc.
QUARTER	The quarter in which the interview took place	1,2,3,4
TRIPNO	Number of the journey – derived in chronological order, derived from the reported start times of each journey	Numeric
STAGE (S)	Number of stage of multi-stage journey	Numeric: <ul style="list-style-type: none"> • 1-n if multi-stage journey • “missing” if single stage journey • 1 if a “series of calls” journey

DD	Day of travel	1 - 31
MM	Month of travel	1 - 12
YY	Year of travel	e.g. 2007, 2008, etc.
TRAVDAY	Day of travel	i.e. 1 = Monday, 2 = Tuesday etc.
RE16	Type of journey	1 = Single stage journey, 2 = Multi-stage journey, 3 = Series of calls journey
TRAV_WT	Travel Diary weight: weighting factor for Travel diary data: "corrects" for differences in selection probabilities between local authorities, between adults in different sizes of household and between days on which people are available to be interviewed. See <i>section 4.2</i> for more details.	Numeric
MODE (S)	Mode of transport used for the stage of the journey	1 = Walking 2 = Driver Car/Van 3 = Passenger Car/Van 4 = Motorcycle/ Moped 5 = Bicycle 6 = School Bus 7 = Works Bus 8 = Ordinary (Service) Bus 9 = Taxi/Minicab 10 = Rail 11 = Underground 12 = Ferry 13 = Aeroplane 14 = Horse-riding 15 = Other 16 = Not stated
MAINMODE (J)	Main mode of journey. For multi-stage journeys, this is the mode from the stage with the greatest distance. See <i>section 3.2.5</i> for more details.	Same as MODE.

PURPOSE	Purpose of the journey	<p>0 = not stated 1 = place of work 2 = in course of work 3 = educational establishment 4 = shopping 5 = visit hospital or other health 6 = other personal business 7 = visiting friends or relatives 8 = eating/drinking alone or at work 9 = eating/drinking other occasions 10 = entertainment/other public activities 11 = participating in sport 12 = coming/going on holiday 13 = day trip 14 = other not coded 21 = escort - home 22 = escort - work 23 = escort - at work 24 = escort - education 25 = escort - shops 26 = escort - personal 27 = escort - other 28 = go home 29 = just go for a walk</p>
NUMOCC (S)	Number of occupants (if mode for the stage is by "car/van")	Numeric: "missing" if mode not "car/van"
STARTHR	Start hour of stage / journey (as appropriate)	0 – 24 (NB: Midnight's hour = 24)
STARTMIN	Start min of stage / journey (as appropriate)	0 - 59
ENDHR	End hour of stage / journey (as appropriate)	0 – 24
ENDMIN	End min of stage / journey (as appropriate)	0 - 59
DURATION	Duration in minutes – derived from start time and end time	Minutes
ORIGPLC	Numeric variable showing whether the origin is Home, Work or Other	1 = Home, 2 = Work, 3 = Other
DESTPLC	Numeric variable showing whether the destination is Home, Work or Other	1 = Home, 2 = Work, 3 = Other

ORIGC	Council area of origin	100 Aberdeen City 110 Aberdeenshire 120 Angus 130 Argyll & Bute 150 Clackmannanshire 170 Dumfries & Galloway 180 Dundee City 190 East Ayrshire 200 East Dunbartonshire 210 East Lothian 220 East Renfrewshire 230 Edinburgh, City of 235 Eilean Siar 240 Falkirk 250 Fife 260 Glasgow City 270 Highland 280 Inverclyde 290 Midlothian 300 Moray 310 North Ayrshire 320 North Lanarkshire 330 Orkney Islands 340 Perth & Kinross 350 Renfrewshire 355 Scottish Borders 360 Shetland Islands 370 South Ayrshire 380 South Lanarkshire 390 Stirling 395 West Dunbartonshire 400 West Lothian 500 Other UK “Missing” or “0” means the council area could not be derived.
DESTC	Council area of destination	Same as ORIGC.
RTPORIG	Regional Transport Partnership area of origin	10 Highlands and Islands 20 North East 30 Shetland 40 South East Scotland 50 South West Scotland 60 Strathclyde 70 Tayside and Central Scotland
RTPDEST	Regional Transport Partnership area of destination	Same as RTPORIG

OCODE	Indicator of quality of origin postcode	h = Home postcode, w = Work postcode, d = Definite postcode, n = Notional postcode See <i>section A.1.9</i>
DCODE	Indicator of quality of destination postcode	Same as OCODE.
CONGA (S)	Whether part of trip was delayed due to traffic congestion (if mode for the trip was by car/van)	1 = Yes 2 = No
CONGB (S)	Estimated time lost due to traffic congestion (if mode for the trip was by car/van)	Mins
CONGC (S)	Whether part of trip was delayed (if mode for trip was by bus/train)	1 = Yes 2 = No
CONGDA (S)	Whether (part of) bus/train journey was delayed by bus/train arriving late	1 = Yes 2 = No
CONGDB (S)	Whether (part of) bus/train journey was delayed by bus/train not turning up	1 = Yes 2 = No
CONGDC (S)	Whether (part of) bus/train journey was delayed by bus/train breaking down	1 = Yes 2 = No
CONGDD (S)	Whether (part of) bus/train journey was delayed by bus/train being involved in or being delayed by accident	1 = Yes 2 = No
CONGDE (S)	Whether (part of) bus/train journey was delayed by bus lane being blocked	1 = Yes 2 = No
CONGDF (S)	Whether (part of) bus/train journey was delayed by congestion on the roads	1 = Yes 2 = No
CONGDG (S)	Whether (part of) bus/train journey was delayed by assault on bus/train crew	1 = Yes 2 = No
CONGDH (S)	Whether (part of) bus/train journey was delayed by vandals damaging vehicle or track	1 = Yes 2 = No
CONGDI (S)	Whether (part of) bus/train journey was delayed by traffic lights/signals not working	1 = Yes 2 = No
CONGDJ (S)	Whether (part of) bus/train journey was delayed for other reasons	1 = Yes 2 = No
CONGDK (S)	Whether (part of) bus/train journey was delayed by bad weather	1 = Yes 2 = No
CONGDL (S)	Whether (part of) bus/train journey was delayed by a large number of passengers getting on or off	1 = Yes 2 = No

CONGDM (S)	Whether (part of) bus/train journey was delayed as bus/train full so took a long time to get people on or off	1 = Yes 2 = No
CONGDN (S)	Whether (part of) bus/train journey was delayed by bus passengers asking for directions about the route	1 = Yes 2 = No
CONGDO (S)	Whether (part of) bus/train journey was delayed as bus passengers needed change/without correct fare	1 = Yes 2 = No
CONGDP (S)	Whether (part of) bus/train journey was delayed by other reasons	1 = Yes 2 = No
CONGDQ (S)	Don't know why journey was delayed	1 = Yes 2 = No
CONGE (S)	Estimated time thought lost in bus/train journey	Mins
PAYA (S)	Whether paid for parking at the end of (part of) the journey	1 = Yes 2 = No
PAYB (S)	Where vehicle was parked	1 = In a commercial car park 3 = On the street in a space you pay for 4 = Paid for in a car park provided by employer 8 = Residential parking permit 9 = Other
PAYC (S)	How much paid for parking	Pence
PAYD_HR (S)	Length of time parked at parking place	Hours
PAYD_MN (S)	Length of time parked at parking place	Mins
DISTANCE (S)	Stage Distance (as the crow flies)	Km (with decimal places)
JOURDIST (J)	Journey Distance (as the crow flies)	Km (with decimal places)
SERDIST	Estimated distance travelled on all calls	Miles (with decimal places)
IMPUTED	Flag for imputed stages / journeys	Please see <i>section A</i> in the <i>Annex</i> for more details of the values of this variable.
IMPDIST	Flag for imputed distance	Please see <i>section A</i> in the <i>Annex</i> for more details of the values of this variable.

3.4 Number of records on the Travel Diary datasets

The following datasets are available from the Data Archive, with the number of records and number of variables (shown in brackets) given for each dataset:

	Journey	Stage	Home-Work Distances	Home-School Distances
1999/2000	57,045 (27)	61,913 (29)	13,497 (4)	5,737 (3)
2001	28,519 (27)	30,406 (29)	7,260 (4)	2,977 (3)
2002	26,944 (27)	28,812 (29)	6,799 (4)	3,110 (3)
2003	26,790 (29)	28,412 (51)	6,877 (4)	3,015 (3)
2004	27,122 (29)	28,881 (51)	7,334 (4)	3,083 (3)
2005	24,658 (31)	26,387 (58)	7,094 (5)	2,995 (4)
2006	25,215 (31)	27,177 (59)	7,157 (5)	2,966 (4)
2007/2008	40,968 (29)	41,364 (57)	14,573 (5)	4,273 (4)

3.5 Linking the Travel Diary to the “main” SHS data

Each household has a unique identifier called “UNIQID”. A combination of “UNIQID” and “TRIPNO” will identify any journey on the “Journey” dataset, and a combination of “UNIQID”, “TRIPNO” and “STAGE” will identify any stage on the “Stage” dataset. If you want to link the “main” SHS data to the Travel Diary you would use “UNIQID”. Make sure you select the random adult’s information for any analysis by personal characteristics (e.g. age, sex etc). The person number of the random adult is contained in the variable “RANDPEO” which is on the “main” SHS dataset. The User Guide for the “main” SHS dataset describes some variables which contain particular pieces of information about the random adult (e.g. the random adult’s age “RANDAGE”, sex “RANDSEX”, current situation “RANDECON”, etc).

3.6 Requesting specialised datasets

The postcodes of the origin and destination of most stages are recorded in the SHS Travel Diary. For reasons of confidentiality, postcodes are *not* available in the version of the Travel Diary at the UK Data Archive. Two types of dataset with more detailed geographical information may be made available in a limited number of special cases by the Scottish Government, they are:

- Postcode Sector information for origins and destinations, and;
- Self specified zones i.e. one would have to specify zones using a “shape” file which could be sent to the Scottish Government GIS to be matched to the Travel Diary. In order to ensure that the zones are of a sufficient size, each zone must contain a minimum number of sampled households, which the Scottish Government will calculate taking account of the sampling fraction(s) for the local authority(ies) concerned, and the number of years data to be provided.

In both cases the need for “anonymisation” of data means that only a few variables relating to the household and the random adult will be provided, and that there will be (e.g.) banding of age and income. If you wish to apply for a specialised dataset please contact the SHS Project Manager (*see section 7.1*) to discuss what might be available.

4. The collection and imputation of information about journeys

4.1 The Travel Diary collects information about journeys that were made on the day *before* the interview: so, someone interviewed on Sunday will be asked about the journeys he or she made on Saturday. Journeys which start on one day and finish on another should be counted on the basis of the day on which they *started*: so, if a person interviewed on Sunday went out on Friday evening and returned home in the early hours of Saturday, the journey home on Saturday should be recorded only if it started after midnight (because that would mean that it started on the day before the interview); and if the person went out on Saturday evening, the journey home should be reported provided that it started before midnight.

4.2 Interviews are *not* spread evenly across the week, because some types of people are more likely to be found at home, available for interview, on certain days. Therefore, the results need to be re-weighted using factors, which depend upon the day of the week and the adult's current situation (or economic status), so that, within each category of "current situation", the reweighted number of interviews is spread evenly across the days of the week. The reweighting process covers *all* interviews, including those with people who had *not* made any journeys on the day before the interview. Therefore, the reweighted numbers of people who said that they had made journeys, and the reweighted numbers of journeys themselves, are *not* necessarily evenly spread over the days of the week.

4.3 It may be felt that the SHS's results will be biased, tending to over-estimate the number of journeys, because the interviewer asks only about travel on the previous day: for example, people may be more likely to be interviewed on the days on which they made no journeys than on the days on which they made many journeys, since they are more likely to be available for interview on days on which they have not made any journeys. Therefore, the probability of being interviewed on a particular day depends, to some extent, upon the amount of travel on that day. It follows that the day for which the information about journeys is collected (the day before the interview) does not represent a "completely random" choice of day, and therefore that the Travel Diary results may not be properly representative.

4.4 The Scottish Government has therefore imputed additional journeys, in cases where it is obvious that they are missing – e.g. if the only journey recorded for the day was to work at 8.00 a.m., a return journey was imputed, using the same mode of transport and with the same duration. The imputation process uses information about the time spent at the destination by other people with the same current situation (economic status) who had reported making both an outward journey and a return journey for the same purpose. The average times spent at the destination, and the distributions of such times, are used to impute the times at which the return journeys would start (unless the imputed time would be after midnight, in which case a return journey is not imputed). The Scottish Government also split what were recorded as "circular"/"round trip" journeys (such as a two-stage journey from A to B and then back to A) into separate outward and return journeys. Imputation in these, and other, cases has increased the total number of journeys in the database by about 0.2 %. However, it *cannot* compensate for the full extent of under-reporting of journeys, because there will be many "overlooked" journeys that cannot possibly be imputed from the information that was recorded (e.g. in a case where two journeys were recorded - to work and back - one would not know if the person had forgotten to mention - say - mid-day journeys from work to some shops and back). More information on the methods of imputation used can be found in the *Annex* at the end of this document.

4.5 Because the imputation process does not compensate fully for the under-reporting of journeys in the SHS, the published results so far have not included any estimates of the averages of the total numbers of journeys, or of the total distance travelled, per person per year, as such estimates would undoubtedly be too low. Instead, information has been provided about the characteristics of the journeys which were recorded (such as the percentage made using each mode of transport), which should not be affected greatly by under-reporting (unless, for some reason, the journeys which were reported were markedly atypical of all journeys made by adults).

4.6 Initial examination of the data collected in the SHS's first few months of interviews identified a number of problems, as a result of which several improvements were made to the interviewers' computer systems, in order to collect better quality data. However, the nature of the SHS is such that it cannot collect travel data of the same quality as are obtained by the GB National Travel Survey (NTS). There are a number of reasons for this:

- the SHS is a multi-purpose survey, which has transport as just one of its (from 1999 to 2006) three priority topic areas. The NTS is a specialised survey, designed to collect information about travel;
- the SHS collects information about one day's travel by one randomly-chosen adult member of the household. The NTS collects information about seven days' travel by every member of the household, including children;
- the SHS interviewee has to recall, off the top of the head, with no prior warning, details of journeys made on the previous day, during an interview on many topics. In the NTS, each member of the household is asked to record, using a special form, information about journeys which are made in a subsequent period of seven days;
- the SHS interviewer normally has only one contact with the randomly-chosen adult member of the household. The NTS interviewer makes contact on several occasions (to make an appointment, if necessary; before the seven day period for the travel diaries starts, to explain the procedures to the household; sometimes, a mid-"week" visit to remind and help the household; following the travel diary period, to pick up the completed forms; and, rarely, a telephone call or a further visit if there are outstanding queries);
- the SHS interviewers' computers carry out some simple checks on the information as it is collected (e.g. that the time recorded for the end of the journey is after the time at which it was recorded as starting). The NTS also has computer checks. In addition, at the "pick up" visits, the NTS interviewers check the credibility and completeness of the journeys recorded in the travel diaries, sometimes discovering that some journeys had not been recorded, and obtaining details of them. (Inevitably, such scrutiny of the data, and discussions with respondents about what they did and how they recorded it in the travel diary, will identify errors that could not be detected by any computer check on the details that are keyed in.).

Overall, therefore, the NTS data about travel are undoubtedly more comprehensive and of better quality than those of the SHS. However, the NTS's small sample size in Scotland (only about 300 households per year up to 2001; about 900 households per year from 2002) means that it is not suitable for detailed analyses relating to Scotland, such as looking at the differences in travel patterns between different sub-groups of the population.

5. Origins and destinations, and distances travelled

5.1 *Origin and destination:* the interviewer asks where the person started from, and where he or she went to, and records the origin and destination of each stage of each journey. "Home" and "work" can be recorded easily; for other origins and destinations, the interviewer types in as much detail as possible of the address (e.g. the name of a shop, the street and the town). When appropriate, the interviewer can specify that the previous destination is the origin of the current stage / journey. The contractors determine the relevant postcodes at a later stage in the processing of the data from the survey. In cases where only an approximate location is recorded (e.g. "centre of Edinburgh"), an arbitrary "notional" postcode (such as that of the main post office) is assigned. In some cases, the contractors may be unable to allocate a postcode, and can only provide a less "precise" indication of the location, such as a postal district (e.g. "EH10"). Inevitably, there are occasions on which the contractors cannot provide any indication of the location of the origin or the destination of a journey. Since the survey started, the interviewers' computer systems have been improved, to collect better "address" data.

5.2 The interviewer also records the times at which each stage of each journey started and ended. The recording process will only be accurate to - at best - say the nearest five minutes, for example because many people will not remember precisely, or correctly, the times at which some (or all) of their journeys on the previous day started and finished. Therefore, the estimated durations of some journeys will be subject to possibly large percentage errors.

5.3 *Distance travelled:* the length of any journey stage is the estimated distance "as the crow flies", based upon the grid co-ordinates of the "centres" of the postcodes (or whatever types of area were recorded) of the origin and destination of that stage of the journey. Therefore, the estimated distance would be zero in the case of a stage for which exactly the same postcode (or other type of area) was recorded (or derived) for both the origin and the destination. For example, if it was known (or deduced) only that the stage involved travel from (say) "EH10" to "EH10", the estimated distance would be zero. However, if it was known (or deduced) that the journey was from "EH10 6UD" to "EH10 6XE", the "crow flies" distance between the "centres" of the two postcodes would be calculated. Clearly, the percentage error in the estimation of distances will tend to be smaller for longer journeys - such as for a journey from "EH10 6UD" to "EH6 6QQ", or for one from "EH1" to "G1". (Because the distances are estimated using grid co-ordinates recorded to the nearest metre, they may appear to be accurate to about a metre. However, it must be remembered that the grid co-ordinates relate to the "centres" of the areas concerned, and a journey may start or finish some distance from the "centre" of the recorded area, so the estimated distances are not as precise as might be thought from the number of digits that are produced).

5.4 In cases where the interviewer could not obtain sufficient details of the origin and/or destination to enable the contractors to assign a postcode (or other type of area), the Scottish Government had imputed the distance travelled. The imputation process uses information about the recorded time taken for the trip and an imputed speed for the trip. The imputed speed is based upon information about the speeds of other trips made by the same mode of transport for the same purpose by people who live in the same type of area (in terms of the "urban"/"rural" category), distinguishing between journeys which start in what may be described as "peak" periods (for this purpose, taken as 7.00 a.m. to 9.30 a.m. and 4.30 p.m. to 6.30 p.m.) and at other times of the day. Both the average speed and the distribution of speeds for each mode / purpose / area / time category were used to impute the speed for each

journey for which this was required. The imputed speed was then multiplied by the recorded journey time to calculate the imputed distance. Overall for 2007/2008, the distance was imputed for about 14.5% of all journey stages.

5.5 The distance of a multi-stage journey was calculated by adding up the distances of each of its component stages. For series of calls journeys, as information is only collected about the first and last calls, there are no estimates of distance for all the intermediate stages, and therefore the total distance is underestimated. In addition, as most journeys are not made in a straight line, the "crow flies" distance will underestimate the actual distance travelled.

6. **“Home to Work” and “Home to School” distances**

6.1 The SHS interviewer asks the randomly chosen adult for their work address and work postcode (or for as much of it as they know), and asks the Highest Income Householder or his/her spouse for the name and LA of the randomly chosen school child’s school. This information is then used by the contractors to derive the work postcodes where they were not complete (i.e. only the address was provided), and the Scottish Government uses information collected about the randomly chosen school child’s school, to obtain the schools postcode. The straight line “as the crow files” distance between “home and work” and “home and school” is calculated by the Scottish Government using grid references. Please see *section 5* above for more details on how distance is calculated.

6.2 Imputation was not carried out for the small percentages of cases where distance was “missing” for “home to work” or “home to school”, because it was not felt worthwhile to develop imputation methods for small numbers of “missing” cases. Therefore, a “Home to Work” distance record has only been provided where there were “Home” and “Work” postcodes (and the random adult was not “unemployed” or did *not* “work from home”). Similarly, “Home to School” distance records have only been provided where there were both “Home” and “School” postcodes.

6.3 The “home and work” and “home and school” distances are available as separate files called “dswk07_08da” (containing the unique identifier “UNIQID”, and the distance between home and work) and “homesc07_08da” (containing “UNIQID”, and the distance between home and school) respectively.

7. Enquiries and further information

7.1 General enquiries about the SHS should be addressed to the survey's Project Manager:

SHS Project Manager
 Scottish Government
 Area 1-F (Dockside)
 Victoria Quay
 Edinburgh, EH6 6QQ

Tel: 0131 244 8420
 Fax: 0131 244 7573
 E-mail: shs@scotland.gsi.gov.uk

7.2 Enquiries about the SHS Travel Diary data should be addressed to:

SHS database Administrator
 Transport Statistics Branch
 Scottish Government
 Victoria Quay
 Edinburgh, EH6 6QQ

Tel: 0131 244 7256
 Fax: 0131 244 7281
 E-mail: transtat@scotland.gsi.gov.uk

7.3 Further information about the survey can be found on the SHS website at <http://www.scotland.gov.uk/shs>

This website provides some background to the survey, information about the progress of the survey, and the published results.

7.4 Published results from the SHS Travel Diary are available in the Scottish Government Statistical bulletins "*Scottish Household Survey Travel Diary results*", published February 2002; "*Scottish Household Survey Travel Diary results for 2001*", published February 2003; "*Scottish Household Survey Travel Diary results for 2002*", published May 2004; "*Scottish Household Survey Travel Diary results for 2003*", published March 2005; "*Scottish Household Survey Travel Diary results for 2004*", published March 2006; "*Scottish Household Survey Travel Diary results for 2005/2006*", published April 2008 and "*Scottish Household Survey Travel Diary results for 2007/2008*", published September 2009. They are available at the Stationery Office bookshop, or at the following website www.scotland.gov.uk under the topics of 'Statistics' and 'Transport and Travel' (Please note the Scottish Government has carried out subsequent data cleaning since the first bulletin was published in February 2002. Therefore, results using the data from the Data Archive might differ slightly from those published).

7.5 Please contact the Project Manager if you wish to be added to an *e-mail mailing list* to be kept informed of any significant updates to the information on the SHS website. The Project Manager will also, on request, distribute paper copies of information about the survey, and about significant developments when they occur, to people who are unable to access the website.

ANNEX

A. Details of the problems found and the imputation methods used

A.1 Investigation of the Travel Diary revealed the following problems:

A.1.1 Mode Duration Hours and Minutes are equal

Some adult's journeys have been recorded by the interviewers in error. These journeys have the same Hours and Minutes for the duration of their Mode of transport. (eg. Hours = 15 and Minutes =15). This has been recorded as the time of day instead of the duration of 15 minutes only.

A flowchart was developed by the Scottish Government to get around this problem, based on various scenarios within the data. These are detailed as follows (in the order they should be applied):

- if Purpose is 'Place of Work' or 'In Course of Work' and Start time > 9.am then use Minutes
- if Mode is 'Aeroplane' then use Hours
- if Mode is 'Taxi' then use Minutes
- if Mode is 'Driver Car/Van' and hours > 6 then use Minutes
- if Mode is 'Walking' and Purpose is 'Participating in Sport' or 'Day Trip' or 'Just go for a Walk' and hours > 6 then use Minutes
- if Mode is 'Walking' or 'Bicycle' and Purpose is 'Place of Work' or 'In Course of Work' and hours > 1 then use Minutes
- if Mode is 'Walking' or 'Bicycle' and Purpose is 'Place of Work' or 'In Course of Work' and hours = 1 then use Hours
- if Mode is 'Walking' and hours > 2 then use Minutes
- if Mode is 'Walking' and hours are 1 or 2 then use Hours
- if Purpose is 'Shopping' and hours > 2 then use Minutes
- if a Return Journey and the Mode is the same as the Outward Journey and Mode then use Minutes from Outward Journey
- if hours = 0 and minutes =0 and the Destination is known then Impute using the Imputation programs

A.1.2 Pre-Imputation Data Edits

As agreed with The Scottish Government, a Pre-Imputed Data file would be produced as a 'check' of the data prior to the Imputation stage of the analysis. It was apparent that a change to the questionnaire from Q1 2007 with regards to allowing Journeys of less than 15 minutes Duration and Interviewer error, has produced Journey data that was not acceptable.

Data Edits were developed based on different scenarios. Once the Edits were applied, it would be 'flagged' for The Scottish Government to look at. They could then see that the 'corrections' were applied correctly and either accept or reject them. If they rejected any of the data, the data would be modified, or if the data was erroneously deleted, added back in.

Scenarios detailed as follows (in the order they should be applied):-

- **No Information To Process, Then Delete** – there is no Start or End Time even though there is Journey data, so the Journey would be deleted

- **Zero Durations** – if the Duration was zero, then the Journey would be deleted
- **Stages Recorded As Journeys** – firstly get a chronological chain of at least two Journeys.

If the Duration between the two Journeys is less than or equal to 5 minutes and the 1st Journey Origin Address was not equal to the 1st Journey Destination address and the 2nd Journey Origin Address was not equal to the 2nd Journey Destination address and the Purpose of the two Journeys was equal, then delete one and flag' the data for checking.

If the Duration between the two Journeys is less than or equal to 5 minutes and the 1st Journey Origin Address was not equal to the 1st Journey Destination address and the 2nd Journey Origin Address was not equal to the 2nd Journey Destination address and the Purpose of either Journey was 'Just Go For A Walk', then delete one and 'flag' the data for checking.

There is also a check that none of the Multi-Stage Journeys have Walking Stages within them.

- **Precise Duplicates** – within the same Uniqid (Respondent no.), two Journeys have the same Mode, Purpose, Start Time and Duration. If this is the case, delete one. If they have a Return Journey, delete the Return Journey as well.
- **Imprecise Duplicates** - within the same Uniqid (Respondent no.), two Journeys have the same Start Time, regardless of the Mode, Purpose or Duration. If this is the case, delete one, If they have a Return Journey, delete the Return Journey as well.
- **Accidental Returns** – if the Start Time of a Return Journey equals the Start Time of the Outward Journey then do:-
If the Mode is the same, then drop the Single Journey and keep the Return.
If the Mode is different, then drop the Return Journey and replace the Purpose of the Original Journey with the Return Journey Purpose.

A.1.3 Non chronological order of journeys

Some adults' journeys were not recorded in chronological order, because, in some cases, respondents do not report journeys in chronological order. This was corrected by sorting the data in order of the start time of each journey and deriving a new variable called "TRIPNO".

A.1.4 Similar consecutive single stage journeys at different times

A number of similar consecutive journeys at different times were found (*about 0.2% of journeys*). In such cases, both journeys had the same origin, and both had the same destination e.g. "Home to Work" in the morning and "Home to Work" in the evening with nothing recorded in between.

It was decided to "correct" only consecutive "single stage" journeys. The correction involved swapping the origin and destination of a journey in cases where the origin of the first journey matched the origin of the second journey and the destination of the first journey matched the destination of the second. But which journey should be "swapped" round?

Example A

Journey 1 Home to work from 8 am to 8.30am

Journey 2 Home to work from 5pm to 5.30pm

It would be reasonable to “correct” the second journey to become “Work” to “Home” from 5pm to 5.30pm.

But in the following case:

Example B

Journey 1 Work to Home from 8am to 8.30am

Journey 2 Work to Home from 5pm to 5.30pm

It would perhaps make more sense to “swap” the origin and destination of the first journey.

What should be done could also depend on what the person’s current situation is. The above “corrections” make sense if the person works in a “normal” full time job, but, it might not be the case if they are, say, a part time cleaner. Therefore, it was decided to look at “swapping” only in cases where the “swapped” details would be more likely to be correct in general. This meant that only those cases for which the origin was “Home” or the destination was “Home”, as these were the only ones for which one can easily apply a “general rule” – e.g. in general one might expect the first journey of the day to start at home. So, if the first journey of the pair is the first journey for the person and it starts at “Home” the origin and destination of the second journey of the pair were “swapped”. Or, if the last journey of the pair is the last for the person, and the journey ends at “Home” then the origin and destination of the previous journey of the pair were “swapped”.

The “IMPUTED” flag is set to “10” for these cases.

A.1.5 Only one journey made

A large number of people were found to have made only one journey (e.g.) a journey in the morning from “Home” to “Work”, with nothing else recorded for the rest of the day (*about 1.6% excluding series of calls journeys and those journeys for the purpose of coming back from / going on holiday*). Series of calls journeys were excluded from this method of imputation, as they could be genuine. Circular journeys were also excluded as these were dealt with separately.

It was decided to only impute a reverse journey in cases where either the origin or destination of the only recorded journey was “Home”, as imputing a reverse journey in other cases would probably not be correct e.g. suppose the only recorded journey was a single stage journey from the “shops” to “a friend’s house”. If a return journey was imputed then this person would appear to spend the rest of the day (until after 12 midnight) at the shops!

Examples of the method used are as follows:

Case 1) **Two journeys both** with origin = “Home” and destination = “anywhere else”

Case 2) **Two journeys both** with origin = “anywhere else” and destination = “Home”

In case 1) a reverse journey would be generated x hours later, only if the start time was *not* after 23.59.

In case 2) a previous journey would be generated x hours earlier, only if the start time was *after* 00.00.

For example, for only one “single” stage journey with origin “Home”, the imputation method works as follows:

- a reverse journey would be generated
- the “purpose”, “mode” and “distance” would be the same
- the origin and destination information would be “swapped”
- start time would depend on the end time of the journey from “Home”, the “purpose” of the journey and the person’s “current situation” (e.g. journey “to work” and the person was in “full-time employment”)
- the “end time” would be calculated by working out the duration of the first journey and adding it to the “start time”
- the journey would not be imputed if it started after 23.59

In order to impute the start time of the reverse journey, an estimate of how long the person might have spent at “the place” was derived. This was done by working out the mean and standard deviation of the time spent at “the place” for all the combinations of “purpose” and “current situation” for those people who had made *two* journeys in the day: one from “Home” and one to “Home”. The imputed value was then taken as a random variate from a normal distribution with the relevant mean and standard deviation. However, if there were fewer than ten “donor cases” valid journeys for that combination of “purpose” / “current situation” (e.g. “purpose” of “to work” and “current situation” of “full-time employment”) then the relevant mean was used as the imputed time spent at “the place”.

The “IMPUTED” flag is set to “21” where the reverse journey of a single stage journey has been imputed and “IMPUTED” is set to “22” where the reverse journey of a multi stage journey has been imputed.

A.1.6 Circular journeys

A “circular” journey is one for which the origin and the destination are the same e.g. from “Work” to “Work”. A number of circular journeys were found to have been recorded (*about 6%*). They may be the result of (e.g.) two journeys mistakenly entered as one journey, or perhaps the person took a dog for a walk (i.e. the journey had no “obvious” real destination). (Circular series of calls journeys were excluded from this method of imputation, as they may well be genuine e.g. it would be perfectly valid to record a “series of calls” journey from “Home” to calls at several shopping centres and then back to “Home”.

The imputation method works as follows:

- Return Circular journeys are selected from everybody, regardless of the number of stages or Purpose. Then the outward journey is deleted. (“IMPUTED” is set to “31.5” in these cases)
- Circular journeys with only one stage were split into two journeys: one to an unknown destination, and the other the trip back. (It is assumed that the person spends a minute at the unknown destination). (“IMPUTED” is set to “31” in these cases)
- Circular journeys with two stages were split into two journeys with one stage each. (“IMPUTED” is set to “32” in these cases)
- Circular journeys with three stages were split into two journeys. How the stages were split between the two new journeys depended on the “time gaps” between the stages. If the gap between stages 1 and 2 was longer than the gap between stages 2 and 3 the journey was split so that stage 1 became a single journey and stages 2 and 3 became stages 1 and 2 of a new journey. Otherwise they were split so that stages 1 and 2 form the

first journey and stage 3 became a new single stage journey. (“IMPUTED” is set to “33” in these cases).

- Circular journeys with 4 or more stages were not included in the imputation process as the number of these journeys was small.

A.1.7 Apparently incomplete sequences of journeys

Investigation also revealed some apparently “incomplete” sequences of journeys, e.g. in cases where a journey 1 was from A to B and journey 2 was from A to C so it appears that there is a missing journey from B to A, (*about 2.4%*).

It is reasonable to impute journeys to fill the gaps where the origin of the previous journey matches the origin of the next journey e.g.

Journey 1 A to B

Journey 2 A to C

And where the destination of the previous journey is the same as the destination of the next journey e.g.

Journey 1 B to A

Journey 2 C to A

Nothing was done in cases where journey 1 was from A to B, and journey 2 from C to D with a “gap” between B and C, because it would have been too complicated to try to impute a journey to fill the “gap” as there is no information in either of the recorded journeys with which to impute the apparently unreported journey (and B and C might be very close together).

For simplicity, journeys were only imputed where there were single stage journeys on either side of the gap, neither of which was non-circular, and they had either

- (a) the same origin e.g. A to B then A to C – when “B to A” was imputed to fill the gap, or
- (b) the same destination e.g. A to B then C to B – when “B to C” was imputed to fill the gap.

The methodology used was like that described in *section A.1.5* above, except that the mean and standard deviation of the combinations of “purpose” and “current situations” are used for *all* valid journeys.

The “IMPUTED” flag is set to “40” for these cases.

A.1.8 No return journey to “Home” at the end of the day

A large number of respondents’ journeys were found not to end up at home at the end of the day (*about 5%*). Therefore, a return journey has been imputed to home where the last stage is “Home” to “somewhere” – excluding those cases where the final recorded journey had the “purpose” of “coming back from/going on holiday”, series of calls journeys, and cases where the imputed journey would start after mid-night (e.g. a night shift worker’s return journey to home would start after midnight, so would not be imputed). For simplicity, return journeys to home were only imputed for those who made single stage journeys (*about 1.5%*).

The “IMPUTED” flag is set to “50” for these cases.

A.1.9 Missing or suspect distances

As explained in *section 5* above, distance is calculated from grid references obtained from the postcodes of the origins and destinations of the stages. Missing or incomplete origin and destination postcodes led to missing distance information for about 1.9% of stages. The following tables give an indication of the quality of the postcodes recorded. (Note the results are from the “Stage” file for 2007 and 2008 *prior* to imputation and that some of the postcodes that were recorded or derived were not complete)

Origin postcode	Number of cases	Percentage of cases
Home	20,442	49.5 %
Work	2,198	5.3 %
Definite (not “Home” or “Work”)	9,908	24.0 %
Notional (usually the nearest post office)	8,511	20.6 %
“Missing”	242	0.58 %

Destination postcode	Number of cases	Percentage of cases
Home	19,185	46.5 %
Work	2,418	5.9 %
Definite (not “Home” or “Work”)	10,671	25.8 %
Notional (usually the nearest post office)	8,815	21.3 %
“Missing”	212	0.51 %

The methodology for imputing distances was similar to that described in *sections A.1.5 and A.1.7* above. A speed was calculated for each stage, for which a distance had been estimated. It will only be approximate because of the imprecision of the estimates of the distance and the journey time (calculated as the difference between the “start time” and the “end time”). The mean and standard deviation of the speeds were then calculated for the Main Mode of Transport. In cases where the distance was “missing”, or the calculated speed was “suspect” the speed for the stage was imputed. The following “suspect” speeds were replaced by imputed values:

- Walking speeds greater than 20km/hr
- Driver/passenger car/van, motorcycle/moped, taxi/minicab speeds greater than 150km/hr
- Bus, underground, horse riding, ferry, other speeds greater than 100km/hr
- Aeroplane speeds greater than 1000km/hr.

NB: these thresholds are “high” because of the imprecision of the estimated distance and the estimated time spent travelling (since both the “start time” and “end time” may be rough estimates).

Imputed distance was then calculated as $\text{Distance} = \text{Imputed Speed} * \text{Travelling Time}$. Journey distance (as opposed to stage distance) for multi-stage journeys is the sum of the distances for the individual stages.

If distance has been imputed the “IMPDIST” flag is set to “10”.

A2. Flags for imputed stages and journeys

The table in *section A.3* below summaries the “IMPUTED” and “IMPDIST” flags used in the Travel Diary “Stage” and “Journey” datasets. The coding used for multi-stage journeys can be complicated. If there is an entry in the “IMPUTED” or “IMPDIST” variables for a multi stage journey on the “Journey” dataset this has to indicate whether information has been imputed for the first and/or last stage of the journey. When a four digit code is used, the first two digits relate to the first stage, and the last two digits relate to the last stage. Some examples of this are:

- Suppose the only journey recorded for the day was a multi stage: stage 1: A to B and stage 2: B to C.
 - A reverse journey would be imputed, Journey 2: stage 1 C to B, stage 2 B to A.
 - The “IMPUTED” flag on the “Stage” dataset would be set to “22” for both stages of the imputed reverse journey, and on the “Journey” dataset “IMPUTED” would be set to “2222”.
- Suppose the only journey recorded for the day was a multi-stage journey which had three or more stages then the “IMPUTED” flag on the “Journey” dataset would only indicate if the first or last stage of the journey had been imputed, (e.g.) stage 1 A to B, stage 2 B to C, and stage 3 C to D.
 - A reverse journey would be imputed, Journey 2 stage 1 D to C , stage 2 C to B, and stage 3 B to A.
 - The “IMPUTED” flag on the “Stage” dataset would be set to “22” for all stages of the imputed reverse journey, and on the “Journey” dataset “IMPUTED” would be set to “2222” indicating that the first and last stages of the journey had been imputed.
- If the distance was imputed for the first stage and the last stage of a multi-stage journey the “IMPDIST” flag on the “Journey” dataset would be set to “1010”.

A.3. Number of imputed records generated

The following tables show the number of imputed journeys and stages generated by the imputation process for each “problem” mentioned above. They also show the resulting values of the “IMPUTED” and “IMPDIST” flags.

“Flags” on the “Stage” dataset for 2007 and 2008

Name of problem	Name of “flag”	Value of “flag”	Number of stages in 1999/2000	Percentage of stages in 1999/2000
Similar consecutive single stage journeys at different times	IMPUTED	10	96	0.23
Only one single stage journey made	IMPUTED	21	554	1.33
Only one multi stage journey made	IMPUTED	22	0	0
Circular journey: delete return	IMPUTED	31.5	267	0.64
Circular journey: one stage	IMPUTED	31	2,060	4.98
Circular journey: two stages	IMPUTED	32	44	0.10
Circular journey: three stages	IMPUTED	33	0	0
Apparently incomplete sequences of journeys	IMPUTED	40	1,005	2.42

No return journey to “Home” at the end of the day	IMPUTED	50	632	1.52
Missing or suspect distances	IMPDIST	10	6,019	14.55

“Flags” on the “Journey” dataset for 2007 and 2008

Name of problem	Name of “flag”	Value of “flag”	Number of journeys in 1999/2000	Percentage of journeys in 1999/2000
Similar consecutive single stage journeys at different times	IMPUTED	10	96	0.23
Only one single stage journey made	IMPUTED	21	554	1.35
Only one multi stage journey made (first and last stage imputed)	IMPUTED	2222	0	0
Circular journey: delete return	IMPUTED	31.5	267	0.65
Circular journey: one stage	IMPUTED	31	2,060	5.02
Circular journey: two stages	IMPUTED	32	44	0.11
Circular journey: three stages	IMPUTED	33	0	0
Circular journey: three stages (first and last stage imputed)	IMPUTED	3333	0	0
Apparently incomplete sequences of journeys	IMPUTED	40	1,005	2.45
No return journey to “Home” at the end of the day	IMPUTED	50	632	1.54
Missing or suspect distances	IMPDIST	10	5846	14.27
Missing or suspect distances (first stage distance was imputed)	IMPDIST	1000	77	0.19
Missing or suspect distances (first and last stage distance was imputed)	IMPDIST	1010	35	0.09

B. Numbers of records before and after imputation*Based on 2007/2008 data (unweighted numbers)***B.1 Number of records**

	before	after	change
Stage Dataset	41,301	41,364	63
Journey Dataset	40,847	40,968	121

B.2 Number of stages by type of journey

Type of journey	before	after	change
Single stage	40,276	40,454	178
Multi-stage	813	312	-501
Series of calls	212	202	-10

B.3 Unweighted frequencies of “mode” and “purpose”

Mode	Stages			% of all stages		
	Before	after	change	before	after	diff
Not Recorded	0	0	0	0	0	0.00
Walking	9,553	9,415	-138	23.13	22.76	-0.37
Driver Car/Van	20,629	20,728	99	49.95	50.11	0.16
Passenger Car/Van	5,322	5,353	31	12.89	12.94	0.05
Motorcycle/ Moped	61	63	2	0.15	0.15	0.00
Bicycle	347	366	19	0.84	0.88	0.04
School Bus	49	48	-1	0.12	0.12	0.00
Works Bus	103	104	1	0.25	0.25	0.00
Ordinary (Service) Bus	3,686	3,747	61	8.92	9.06	0.14
Taxi/Minicab	566	573	7	1.37	1.39	0.02
Rail	538	546	8	1.30	1.32	0.02
Underground	78	75	-3	0.19	0.18	-0.01
Ferry	81	76	-5	0.20	0.18	-0.02
Aeroplane	49	49	0	0.12	0.12	0.00
Horse-riding	2	3	1	0.00	0.00	0.00
Other	237	218	-19	0.57	0.53	-0.04

Purpose	stages			% of all stages		
	before	after	change	before	after	diff
not stated	0	0	0	0.00	0.00	0.00
place of work	9,186	9,127	-59	22.24	22.07	-0.17
in course of work	578	576	-2	1.40	1.39	-0.01
educational establishment	880	881	1	2.13	2.13	0.00
shopping	10,018	10,015	-3	24.26	24.21	-0.05
visit hospital or other health	1,235	1,257	22	2.99	3.04	0.05
other personal business	3,211	3,236	25	7.77	7.82	0.05
visiting friends or relatives	4,803	4,825	22	11.63	11.66	0.03
eating/drinking alone or at work	251	262	11	0.61	0.63	0.02
eating/drinking other occasions	1,392	1,431	39	3.37	3.46	0.09
entertainment/other public activities	1,273	1,293	20	3.08	3.13	0.05
participating in sport	1,595	1,631	36	3.86	3.94	0.08
coming/going on holiday	65	66	1	0.16	0.16	0.00
day trip	747	756	9	1.81	1.83	0.02
other not coded	82	82	0	0.20	0.20	0.00
escort - home	358	369	11	0.87	0.89	0.02
escort – work	249	254	5	0.60	0.61	0.01
escort – at work	90	85	-5	0.22	0.21	-0.01
escort – education	1,244	1,244	0	3.01	3.01	0.00
escort – shops	164	168	4	0.40	0.41	0.01
escort – personal	540	556	16	1.31	1.34	0.03
escort – other	426	463	37	1.03	1.12	0.09
go home	1090	1,172	82	2.64	2.83	0.19
just go for a walk	1,788	1,615	-173	4.33	3.90	-0.43

SCOTTISH HOUSEHOLD SURVEY

Travel Diary

Questionnaire

February 2008

Question name	Question	Amendments, notes and known issues
INTROTD	SHOW FOR ALL IN STREAMS 2, 4, 5, 7, 9 AND 10 INTERVIEWER: This is the start of the Travel Diary	
STARTDAY	SHOW FOR ALL IN STREAMS 2, 4, 5, 7, 9 AND 10 READ OUT We are collecting detailed information about the travel patterns of the Scottish population, so I'd like to ask you some questions about what you did yesterday. Did you start the day at home yesterday? 01: Home 02: Elsewhere	Travel diary asks about trips made the previous day. Before doing that, it establishes where people started and ended the day. If people started and ended in the same place and made no trips out then rest of travel diary is skipped. All of travel diary is asked in streams 2, 4, 5, 7, 9 and 10. One question – workingcheck – is filtered from ha7, response for random adult
STARTFROM	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF STARTDAY = Elsewhere TYPE IN DETAILS USING KEYBOARD. So where did you start FROM? PROBE FOR FULL DETAILS – AT MINIMUM GET POST TOWN OF ORGANISATION/SHOP Postcode Organisation/shop Number/street/road District/area Post town/city	
ENDDAY	ASK ALL IN STREAMS 2, 4, 5, 7, 9 AND 10 Text variation: substitute organisation/shop (or post town/city if unavailable) at STARTFROM in code 02 {start} And where did you end the day? 01: Home 02: {start} 03: Elsewhere	
ENDUP	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF ENDDAY = Elsewhere TYPE IN DETAILS USING KEYBOARD. And where did you end the day? PROBE FOR FULL DETAILS – AT MINIMUM GET POST TOWN OF ORGANISATION/SHOP Postcode Organisation/shop Number/street/road District/area Post town/city	
TRIPSOUT	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF STARTED AND ENDED THE DAY AT THE SAME PLACE - (STARTDAY = home AND ENDDAY = home) OR (STARTDAY = elsewhere AND ENDDAY = {start}) Text variation: IF STARTDAY = home – out of the house Did you go out [of the house] at all yesterday? 01: Yes 02: No	

Question name	Question	Amendments, notes and known issues
WORKINGCHECK	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 and 10</p> <p>SHOW IF TRIPSOUT = No AND (RANDOM ADULT CODED AS WORKING AT HA7 (SELF-EMPLOYED, FULL TIME, PART TIME)</p> <p>Did you not go out to work yesterday?</p> <p>01: Yes 02: No</p>	
GENTRIPCHECK	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF TRIPSOUT = No</p> <p>Are you sure you didn't leave the house at all yesterday, even for a short journey up the road?</p> <p>01: I definitely DIDN'T go out yesterday SKIP REST OF TRAVEL DIARY SECTION - GO TO TIMESTAMP AT END OF TRAVEL DIARY SECTION 02: Actually I DID go out yesterday CONTINUE</p> <p>INSERT TIMESTAMP [TRAVDIARY]</p>	
PURPOSE	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK ALL WHO WENT OUT YESTERDAY: (IF STARTDAY = home AND (ENDDAY = {start} OR elsewhere)) OR (IF STARTDAY = elsewhere AND (ENDDAY = home or elsewhere)) OR (IF TRIPSOUT = yes) OR (IF GENTRIPCHECK = yes)</p> <p>SHOWCARD TD1</p> <p>To start with, please can you briefly tell me where you went yesterday, including any short walks out from the house or from work? This list might help to remind you about what you did. Just read out the numbers in the order you did things during the day.</p> <p>INTERVIEWER - IT IS THE PURPOSE NOT THE DESTINATION THAT WE ARE AFTER AT THIS STAGE</p> <p>SINGLE CODE INDIVIDUAL TRIP ON THIS SCREEN, FURTHER TRIPS ON SUBSEQUENT SCREENS</p> <p>ONLY USE 'GO HOME' IF THIS IS NOT SIMPLY THE RETURN LEG OF A JOURNEY</p> <p>PROBE UNTIL THERE ARE NO MORE JOURNEYS</p> <p>01: Go Home 02: Go to Work 03: Make trips in the course of work 04: Go to school/college/education 05: Go shopping 06: Go for personal business - medical 07: Go for personal business - other 08: Go to visit friends or relatives 09: Go to eat/drink alone or at work 10: Go out to eat/drink other occasions 11: Go out to entertainment/public activity 12: Go out to participate in sport/exercise 13: Coming or going on holiday 14: Go on a day trip / recreational journey 15: Just go for a walk 16: Other non-escort 17: Taking someone else to/from home 18: Taking someone else to/from work 19: Taking someone else in the course of work 20: Taking someone else to/from educational establishment 21: Taking someone else to/from shops 22: Taking someone else to/from personal business 23: Taking someone else for any other reason 24: No more journeys</p>	<p>This question is coded on a series of up to 10 single coded screens, one for each purpose. If fewer than 10 screens coded, the last one should be coded no more journeys</p>

Question name	Question	Amendments, notes and known issues
GOHOMECHECK	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF PURPOSE = Go home AND AT LEAST ONE OTHER PURPOSE IS CODED (NOT INCLUDING NO MORE JOURNEYS)</p> <p>Are you sure this isn't a return leg of a journey you've already recorded?</p> <p>01: This is NOT just the return leg of another journey 02: This is the return leg of another journey</p>	<p>GOHOMECHECK to RETURN are asked where appropriate of each purpose coded above immediately after a purpose is coded</p>
RETURNWARN	<p>SHOWN ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF GOHOMECHECK = This is the return leg of another journey</p> <p>WARNING</p> <p>The return leg of a trip using essentially the same route/modes of transport should NOT be coded as a separate journey.</p> <p>Press OK to return and amend your answer. RETURN TO PURPOSE</p>	
SERIES	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK IF PURPOSE = make trips in the course of work OR taking someone else to/from in the course of work</p> <p>Text variation: If purpose = taking someone to/from in the course of work – 'taking someone else'</p> <p>Can I just check, was that a single journey you made {taking someone else} in the course of work, or a series of calls?</p> <p>SERIES OF CALLS IS DEFINED AS JOURNEYS WITH THE SAME PURPOSE AND SAME MODE OF TRANSPORT</p> <p>01: Series of calls 02: Single journey</p>	<p>REPEAT SERIES IF BOTH make trips in the course of work AND taking someone else to/from in the course of work ARE CODED</p>
RETURN	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK IF PURPOSE ≠ No more journeys AND SERIES ≠ series of calls FOR THIS JOURNEY</p> <p>Can I just check, did you make a return journey using essentially the same route and modes of transport, either straight away or later in the day?</p> <p>01: Yes 02: No</p>	

Question name	Question	Amendments, notes and known issues
PURREVIEW	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>Text variation in screen list: if return = yes for a trip, then show return text as 'with return journey essentially the same'. if return journey = no for a trip then show text as 'not returning in the same way/route'.</p> <p>Text substitution in screen list:: {purpose} is description shown below, which corresponds to the purpose coded at PURPOSE for that trip:</p> <p>Text substitution in DESCRIPTION LIST: If PURPOSE = make trips in the course of work for any journey and SERIES = Series of calls – a series of calls; If PURPOSE = make trips in the course of work for any journey and SERIES = Single journey – trips; if PURPOSE = take someone else in the course of work for any journey and SERIES = Series of calls – on a series of calls.</p> <p><u>DESCRIPTION LIST</u></p> <p>Went home Went to Work Made {trips/a series of calls} in the course of work Went to school/college/education Went shopping Went for medical reasons Went for other personal business Went to visit friends or relatives Went to eat/drink alone or at work Went out to eat/drink other occasions Went out to entertainment/public activity Went out to participate in sport/exercise Came or went on holiday Went on a day trip / recreational journey Just went for a walk Went on another journey (not escorting any one else) Took someone else to/from home Took someone else to/from work Took someone else in the course of work {on a series of calls} Took someone else to/from educational establishment Took someone else to/from shops Took someone else to/from personal business Took someone else for any other reason</p>	
	<p>Just to confirm then, these are all the trips you made yesterday.</p> <p>01: {purpose1} - {return1} 02: {purpose2} - {return2} 03: {purpose3} - {return3} 04: {purpose4} - {return4} 05: {purpose5} - {return5} 06: {purpose6} - {return6} 07: {purpose7} - {return7} 08: {purpose8} - {return8} 09: {purpose9} - {return9} 10: {purpose10} - {return10}</p> <p>Is that correct or did you make any other trips during the day such as going out at lunchtime or in the evening?</p> <p>01: Yes, correct (CONTINUE) 02: No (RETURN TO PURPOSE TO ADD MORE TRIPS UP TO 10)</p>	
INTNOTE	<p>INTERVIEWER: THE NEXT SET OF QUESTIONS ASKS ABOUT THE JOURNEYS MADE BY THE RESPONDENT YESTERDAY. IN THESE QUESTIONS WE ARE ONLY INTERESTED IN THE OUTWARD JOURNEY IF THE RETURN JOURNEY WAS ESSENTIALLY THE SAME AS THE OUTWARD JOURNEY. QUESTIONS WILL BE ASKED ABOUT THESE RETURN JOURNEYS LATER.</p> <p>Continue</p>	

Question name	Question	Amendments, notes and known issues
INTROMODES	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW FOR EACH JOURNEY LISTED AT PURREVIEW</p> <p>Text variation: If asking about first or only journey use text starting 'Now I would like to ask a few more detailed questions about...'; if more than one journey and asking about 2nd or subsequent journey – 'And now I'd like to ask you about your'</p> <p>Text substitution: If one journey listed at PURREVIEW – 'this journey'; if more than one journey listed at PURREVIEW and asking about first journey– 'each of these journeys, starting with the first one'.</p> <p>Text substitution: Substitute 2nd, 3rd, 4th etc. according to which journey is being asked about as listed at PURREVIEW</p> <p>(Now I would like to ask a few more detailed questions about {this journey/each of those journeys, starting with the first one} / And now I'd like to ask you about your {2nd/3rd/4th/5th/6th/7th/8th/9th/10th} journey).</p>	<p>Following is order in which all remaining questions are asked (where appropriate)</p> <ul style="list-style-type: none"> ▪ Intromodes and mode_1-10 - origincheck is asked about the first journey ▪ 'mode_1-5from' to '30minwarn' are asked where appropriate for each stage of the first journey and repeated until all stages of that journey are asked about ▪ This is followed by finaldest for the first journey (only asked once per journey). ▪ Then return journey is asked about for all stages of the first journey where appropriate – from 'returnremind' to 'r30minwarn_5-1' ▪ Questions from mode_1-10 are repeated again in the same order the next journey and all stages within it, and so on until all journeys, and all stages within them, have been asked about.

Question name	Question	Amendments, notes and known issues
MODES_ 1-10	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK MODES_ 1-10 FOR EACH TRIP LISTED AT PURREVIEW</p> <p>Text insertion: {Count} is taken from trip number shown at PURREVIEW. {DESCRIPTION} is description shown below, which corresponds to the purpose coded at PURREVIEW for that trip</p> <p>Text variation in question: If SERIES skipped OR = Single journey - Tell me in order what stages there were to your journey.</p> <p>Text Substitution in DESCRIPTION LIST: If PURPOSE = make trips in the course of work for this journey and SERIES = Series of calls – a series of calls; If PURPOSE = make trips in the course of work for this journey and SERIES = Single journey – trips; if PURPOSE = take someone else in the course of work for this journey and SERIES = Series of calls – on a series of calls.</p>	<p>description list shown here is equivalent of text shown at purpose, but words are changed to make sense in this question</p>
	<p><u>DESCRIPTION LIST</u></p> <p>Go Home Go to Work Make {trips/a series of calls} in the course of work Go to school/college/education Go shopping Go for personal business - medical Go for personal business - other Go to visit friends or relatives Go to eat/drink alone or at work Go out to eat/drink other occasions Go out to entertainment/public activity Go out to participate in sport/exercise Come or go on holiday Go on a day trip / recreational journey Just go for a walk Go on another journey (not escorting any one else) Take someone else to/from home Take someone else to/from work Take someone else in the course of work {on a series of calls} Take someone else to/from educational establishment Take someone else to/from shops Take someone else to/from personal business Take someone else for any other reason</p>	
	<p>SHOWCARD TD2</p>	
	<p>TRIP NUMBER {COUNT}: How did you {DESCRIPTION} yesterday? (Tell me in order what stages there were to your journey)</p>	
	<p>INTERVIEWER: CODE UP TO FIVE STAGES.</p>	
	<p>CODE 'WALK' ONLY AS SOLE MODE.</p> <ul style="list-style-type: none"> - DO NOT INCLUDE WALKS TO BUS/TRAIN ETC IF THEY ARE TO OR BETWEEN STAGES OF A JOURNEY. - IF RESPONDENT DROVE TO LOCATION FOR A RECREATIONAL WALK, CODE DRIVE ONLY 	
	<ul style="list-style-type: none"> - Stage 1 - Stage 2 - Stage 3 - Stage 4 - Stage 5 	

Question name	Question	Amendments, notes and known issues
MODES_1-10 (CONTINUED)	<u>Response Options</u>	
	01: Walking 02: Car/van as driver 03: Car/van as passenger 04: Motorcycle/moped 05: Bicycle 06: School bus 07: Works bus 08: Ordinary (service) bus 09: Taxi/minicab 10: Train 11: Underground 12: Ferry 13: Aeroplane 14: Horse-Riding 15: Other	
MODESWALKW ARN	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF 'Walking' CODED ON ANY STAGE AND ANY OTHER MODE IS CODED ON A DIFFERENT STAGE WARNING CODE 'WALK' ONLY AS SOLE MODE If 'Walk' is coded for a journey, you cannot code any other mode!	
	Press OK to return and amend your answer RETURN TO MODES_1-10	
MODESWARN	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF TWO ADJACENT STAGES ARE CODED WITH THE SAME MODE (I.E. STAGES 1 AND 2, 2 AND 3, 3 AND 4, 4 AND 5) WARNING Adjacent journey stages MUST use different modes of transport!	
	Press ok to return and amend your answer RETURN TO MODES_1-10	
SERIESWARN	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 SHOW IF MORE THAN ONE STAGE IS CODED AT MODES_1-10 AND SERIES = series of calls FOR THIS JOURNEY WARNING For journeys described as a 'series of calls', please just code one MAIN mode of transport.	
	Press ok to return and amend your answer RETURN TO MODES_1-10	
ORIGINCHECK	ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10 ASK FOR JOURNEY 1 AT PURREVIEW AND FOR STAGE 1 CODED AT MODES_1 ONLY Text substitution: If STARTDAY = Home – 'from home'; if start day = elsewhere – {(from organisation shop) (in post town/city)} Text insertion: {organisation/shop} and {post town/city} are taken from text in STARTFROM; where both are typed in, show both. otherwise just show whichever one is available Can I just check, you started this trip (from home/ from {organisation/shop}) (in {post town/city}) 01: Yes 02: No	

Question name	Question	Amendments, notes and known issues					
MODE_1-5FROM	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK IF (ORIGINCHECK = No OR IF ASKING ABOUT ANY OF STAGE CODED AT MODES_2-5 FOR JOURNEY 1) OR IF ASKING ABOUT JOURNEY 2 - 10 CODED AT PURREVIEW, ANY STAGE.</p> <p>Text insertion: {Count} is taken from trip number shown at PURREVIEW; {Description} is description shown at PURREVIEW (purpose only); {Mode} is mode coded at MODES_1-10 for this stage</p> <p>Text Substitution: If asking about stage 1 coded at MODES_1-10 for any journey coded at PURREVIEW – When you {Description}; If asking about stage 2-5 coded at MODES_1-10 for any journey coded at PURREVIEW - And for the {mode} stage</p> <p>Text Variation: If asking about stage 2-5 coded at MODES_1-10 for any journey coded at PURREVIEW – this stage of</p> <p>TRIP NUMBER {COUNT}: (When you {DESCRIPTION}) / And for the {mode} stage) where did you start (this stage of) the journey from?</p> <p>CODE HOME, WORK OR OTHER PLACE, OR TYPE IN DETAILS USING KEYBOARD.</p> <p>WRITE IN IF OTHER – PROBE FOR FULL DETAILS – AT MINIMUM GET POST TOWN OF ORGANISATION/SHOP</p>	<p>Place 1 – 9 includes the final destination of all previous journeys (from finaldest and seriesend) when asking about stage 1 coded at modes_2-10 of any journey (after journey 1) coded at purreview. If asking about journey 1, or about stages 2-5 coded journey 2-10 then place 1-9 is not shown.</p>					
	<p>Postcode</p> <p>Organisation/shop</p> <p>Number/street/road</p> <p>District/area</p> <p>Post town/city</p>	<table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>					
	<p>01: Home</p> <p>02: Work</p> <p>03: {Place 1}</p> <p>04: {Place 2}</p> <p>05: {Place 3}</p> <p>06: {Place 4}</p> <p>07: {Place 5}</p> <p>08: {Place 6}</p> <p>09: {Place 7}</p> <p>10: {Place 8}</p> <p>11: {Place 9}</p>						

Question name	Question	Amendments, notes and known issues
MOD_1-5TIMEO	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>Text insertion: {count} is taken from trip number shown at PURREVIEW; {Origin} is place coded at MODE_1-5 FROM or, if MODE_1-5 FROM not coded, is taken from text substituted at ORIGINCHECK; {Description} is description shown at PURREVIEW (purpose only).</p> <p>Text Variation: If asking about stage 1 coded at MODES_1-10 for any journey coded at PURREVIEW – to {DESCRIPTION}</p> <p>TRIP NUMBER {COUNT}: At what time did you leave {ORIGIN} (to {DESCRIPTION})?</p> <p>ENTER TIME AS APPLICABLE</p> <p><u>Hour</u></p> <p>01: 1 am 02: 2 am 03: 3 am 04 :4 am 05: 5 am 06: 6 am 07: 7 am 08: 8 am 09: 9 am 10: 10 am 11: 11 am 12: 12 pm 13: 1 pm 14: 2 pm 15: 3 pm 16: 4 pm 17: 5 pm 18: 6 pm 19: 7 pm 20: 8 pm 21: 9 pm 22: 10 pm 23: 11 pm 24: 12 am</p> <p><u>Minutes</u></p> <p>00: 00 05: 05 10: 10 15: 15 20: 20 25: 25 30: 30 35: 35 40: 40 45: 45 50: 50 55: 55</p>	
JTIMERWARN	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF TIME CODED AT MOD_1-4TIMEO IN PREVIOUS STAGE IS = OR > TIME IN MOD-2-5TIMEO IN CURRENT STAGE</p> <p>WARNING</p> <p>Each stage of a journey must commence LATER than the previous stage!</p> <p>You have entered a time which is before /equal to a time mentioned in an earlier stage of the journey</p> <p>PRESS OK TO RETURN AND AMEND YOUR ANSWER</p>	

Question name	Question	Amendments, notes and known issues
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SERIESEND

ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 ASK IF SERIES = SERIES OF CALLS
 Where did you end up following this series of calls
 WRITE IN IF OTHER – PROBE FOR FULL DETAILS – AT MINIMUM GET POST TOWN OF ORGANISATION/SHOP

Postcode	<input type="text"/>
Organisation/shop	<input type="text"/>
Number/street/road	<input type="text"/>
District/area	<input type="text"/>
Post town/city	<input type="text"/>

01: Home
 02: Work

MODEDURSER

ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 ASK IF SERIES = SERIES OF CALLS
 And what was the total time spent travelling for this series of calls?
 ENTER TIME IN HOURS AND MINUTES

hrs	mins
-----	------

MODEDISSER

ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 ASK IF SERIES = SERIES OF CALLS
 And what was the total distance travelled for this series of calls?
 ENTER DISTANCE AND CODE WHETHER MILES/KILOMETRES

1-96
 97: Miles
 98: Kilometres

DISTANCE WARN

ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 SHOW IF MODEDISSER >300 AND = MILES OR IF MODEDISSER >500 AND = KILOMETRES
 Text variation: AMOUNT = 300 miles where MODEDISSER = miles or = 500 kilometres where MODEDISSER = kilometres
 WARNING
 Over {AMOUNT} (miles/kilometres) seems a great distance for a series of calls; please check and confirm with respondent.
 Press next to return and amend your answer RETURN TO MODEDISSER

MODE_1-5DUR

ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 ASK FOR EACH STAGE/JOURNEY EXCEPT IF SERIES = SERIES OF CALLS
 Text insertion: {mode} is mode coded at MODES_1-10 for this journey/stage
 Text variation: If more than one stage coded at MODES_1-10 for this journey – stage of the; If MODES_1-10 ≠ Walking for this journey – 'Please also include any time spent walking to/from the {mode}';
 TRIP NUMBER {COUNT}: And how long did that {mode} (stage of the) journey take you? (Please also include any time spent walking to/from the {mode})
 WRITE IN HOURS AND MINUTES

hrs	mins
-----	------

Question name	Question	Amendments, notes and known issues
OCCUP_1-5,SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE/SERIES OF CALLS</p> <p>Text insertion: If >1 stage coded at MODES_1-10 for this journey coded at PURREVIEW – part of the</p> <p>Text variation: If SERIES = Series of calls – series of calls; Otherwise - journey</p> <p>How many occupants were there in the car/van for this [part of the] (journey/series of calls), including the driver?</p> <div data-bbox="422 533 727 600" style="border: 1px solid black; width: 191px; height: 30px; margin: 10px auto;"></div> <p>1..10</p>	<p>Occup_1-5 – qconge_1-5 are asked where appropriate for each stage coded at modes_1-10 for each journey listed at purreview. Where series = series of calls then ask occup_ser – qconge_ser instead and use appropriate text variation.</p> <p>Note that ppostwarn_1-5 is not asked for journeys that are series of calls</p>
PAYPARK_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE/SERIES OF CALLS</p> <p>Text variation: If >1 stage coded at MODES_1-10 for this journey coded at PURREVIEW – this part of</p> <p>Text insertion: [DESCRIPTION] = description shown at MODES_1-10</p> <p>Text variation: If SERIES = Series of calls – final destination for this series of calls; Otherwise – end of.....to [DESCRIPTION]</p> <p>Did you pay for parking at the (end of [this part of] the journey to [DESCRIPTION]/final destination for this series of calls)?</p> <p>01: Yes 02: No</p>	
CARPARK_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF PAYPARK1 = YES FOR THIS STAGE/SERIES OF CALLS</p> <p>SHOWCARD TD3</p> <p>Where did you park your vehicle?</p> <p>01: In a commercial car park 03: On the street in a space you pay for 04: Paid for, in a car park provided by employer/school/college/university 08: Residential parking permit 09: Other (Write in)</p>	
PARKCOST_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF CARPARK1 = commercial car park; on the street....; paid in a car park...; Other FOR THIS STAGE/SERIES OF CALLS</p> <p>Text variation: If SERIES = Series of calls – in total</p> <p>How much did you pay (in total)?</p> <p>WRITE IN PENCE (E.G.£2.50 = 250p)</p> <div data-bbox="422 1653 727 1720" style="border: 1px solid black; width: 191px; height: 30px; margin: 10px auto; text-align: right;"> p </div> <p>1...9996 9997: £10 or more Don't know Refused</p>	

Question name	Question	Amendments, notes and known issues
PCOSTWARN_1-5	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF PARKCOST_1-5 = >0 AND <20 FOR THIS STAGE. DON'T ASK FOR PARKCOST_SER (i.e. IF SERIES = SERIES OF CALLS FOR THIS JOURNEY)</p> <p>TEXT INSERTION: {amount} comes from amount entered at PARKCOST1</p> <p>WARNING</p> <p>{amount} pence seems low for the cost of parking – please check with respondent and amend if necessary!</p> <p>01: Amount correct CONTINUE</p> <p>02: Amount incorrect RETURN TO PARKCOST_1-5, SER TO AMEND</p>	
PARKTIME_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF CARPARK1 = commercial car park; on the street...; paid in a car park...; Other FOR THIS STAGE/SERIES OF CALLS</p> <p>Text variation: if SERIES = Series of calls – in total</p> <p>How long did you stay at that parking place (in total)?</p> <p>INTERVIEWER: ENTER ANSWER IN HOURS AND MINUTES. IF FOR EXAMPLE, THE RESPONDENT PARKED FOR 45 MINUTES, PLEASE ENTER ZERO FOR THE NUMBER OF HOURS.</p> <div data-bbox="424 909 727 969" style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <div style="display: flex; justify-content: space-around; width: 100%;"> hrs mins </div> </div> <p>03: Park for more than a day Don't know Refused</p>	
PARKFREE_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF PAYPARK1 = No FOR THIS STAGE/SERIES OF CALLS</p> <p>SHOWCARD TD4</p> <p>Did you park on-street, in a drive or garage, in a car park or what?</p> <p>01: On-street 02: Drive/garage 03: Lay-by/pull-in 04: Designated car park 05: Waste ground 06: Other</p>	
CONGEST_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE/SERIES OF CALLS</p> <p>Text insertion: If SERIES = Series of calls – any part of the series as a whole; otherwise – this part of your trip</p> <p>Was (this part of your trip / any part of the series as a whole) in the car/van as a driver delayed due to traffic congestion?</p> <p>01: Yes 02: No</p>	
CONGTIME_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF CONGEST1 = Yes FOR THIS STAGE/SERIES OF CALLS</p> <p>How much time do you think was lost due to traffic congestion?</p> <p>WRITE IN IN MINUTES. FOR EXAMPLE 1 HOUR AND 15 MINUTES = 75 MINUTES</p> <div data-bbox="424 1895 727 1955" style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <div style="display: flex; justify-content: flex-end; width: 100%;"> mins </div> </div> <p>1...997 Don't know Refused</p>	

Question name	Question	Amendments, notes and known issues
QCONGC_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF MODES_1-10 = ORDINARY (SERVICE) BUS OR TRAIN FOR THIS STAGE/SERIES OF CALLS</p> <p>Text Substitution: If SERIES = Series of calls – any part of the journey; otherwise – this....journey</p> <p>Text Variation: If >1 stage of this journey coded at MODES_1-10 – part of the</p> <p>Text Variation: If SERIES – Series of calls – across the whole series of calls</p> <p>Was (this [part of the] journey / any part of the journey) delayed [across the whole series of calls]?</p> <p>01: Yes 02: No</p>	
QCONGD_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF QCONGC1 = Yes FOR THIS STAGE/SERIES OF CALLS</p> <p>MULTICODE</p> <p>Text Variation: If >1 stage of this journey coded at MODES_1-10 – part of the</p> <p>Text substitution: If MODES_1-10 = ordinary(service) bus – {Bus}; If MODES_1-10 = train – {Train}</p> <p>Text Variation: If SERIES = Series of calls – series of calls; otherwise - [part of the] journey</p> <p>Why was this ([part of the] journey / series of calls) delayed?</p> <p>01: {Bus/Train} arrived late 02: {Bus/Train} did not turn up 03: {Bus/Train} broke down 04: {Bus/Train} involved in an accident / delayed by an accident 05: Bus lane blocked 06: Congestion on the roads 07: Assault on {bus/train} crew 08: Vandals damaged vehicle or track 09: Traffic lights / signals not working 12: Road works / maintenance work 13: Bad weather 14: Large numbers of passengers getting on or off 15: {Bus/Train} full so took a long time to get people on or off 16: Bus passengers asking for directions / about the route 17: Bus passengers needed change / without correct fare 10: Other reasons (WRITE IN) Don't know</p>	
QCONGE_1-5, SER	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF QCONGC1 = Yes FOR THIS STAGE/SERIES OF CALLS</p> <p>How much time do you think was lost because of this?</p> <p>WRITE IN IN MINUTES. FOR EXAMPLE 1 HOUR AND 15 MINUTES = 75 MINUTES</p> <div data-bbox="424 1588 727 1653" style="border: 1px solid black; width: 190px; height: 29px; margin: 10px auto; text-align: center;"> mins </div> <p>1-997 Don't know Refused</p>	
30MINWARN_1-5	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF QCONGE1 >30 MINUTES FOR THIS STAGE</p> <p>Text insertions: {mins} comes from minutes coded at QCONGE1</p> <p>WARNING!</p> <p>You said that you were delayed for {mins} minutes, is this correct?</p> <p>01: Yes CONTINUE 02: No RETURN TO QCONGE1 TO AMEND</p>	<p>this warning is not shown for a series of calls</p>

Question name	Question	Amendments, notes and known issues										
FINALDEST_1-10	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>ASK FOR EACH JOURNEY CODED AT PURPOSE EXCEPT THOSE WHERE SERIES = SERIES OF CALLS</p> <p>And where was the final destination of that journey? By final destination I mean the outward destination of the journey.</p> <p>WRITE IN IF OTHER – PROBE FOR FULL DETAILS – AT MINIMUM GET POST TOWN OF ORGANISATION/SHOP</p> <table data-bbox="325 517 949 651"> <tr> <td>Postcode</td> <td><input type="text"/></td> </tr> <tr> <td>Organisation/shop</td> <td><input type="text"/></td> </tr> <tr> <td>Number/street/road</td> <td><input type="text"/></td> </tr> <tr> <td>District/area</td> <td><input type="text"/></td> </tr> <tr> <td>Post town/city</td> <td><input type="text"/></td> </tr> </table> <p>01: Home 02: Work 03: {Place 1} 04: {Place 2} 05: {Place 3} 06: {Place 4} 07: {Place 5} 08: {Place 6} 09: {Place 7} 10: {Place 8} 11: {Place 9}</p>	Postcode	<input type="text"/>	Organisation/shop	<input type="text"/>	Number/street/road	<input type="text"/>	District/area	<input type="text"/>	Post town/city	<input type="text"/>	<p>Place 1 – 9 includes the final destination of previous journeys (from finaldest_1-10) when asking about journeys 2-10 coded at purreview.</p> <p>Place 1-9 is not shown for the first journey coded at purreview as no 'finaldest' information is available.</p>
Postcode	<input type="text"/>											
Organisation/shop	<input type="text"/>											
Number/street/road	<input type="text"/>											
District/area	<input type="text"/>											
Post town/city	<input type="text"/>											

RETURNREMIN ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10

SHOW IF RETURN = YES FOR EACH STAGE CODED AT MODES_1-10 FOR EACH JOURNEY CODED AT PURPOSE

Before I go on to ask about any other trips, just a few questions about the return aspects of the journey you have just told me about

Continue

Question name	Question	Amendments, notes and known issues
RMOD_5-1TIMO	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE, FOR EACH STAGE CODED AT MODES_1-10</p> <p>Text insertion: {DESCRIPTION} = description shown at MODES_1-10; {MODE} = mode coded at MODES_1-10 for this stage;</p> <p>ORIGIN = is place coded at FINALDEST_1-5 for the equivalent stage (e.g. if RMOD_1TIMO then origin taken from finaldest for last outward stage coded);</p> <p>RETURN LEG – trip is {DESCRIPTION}, made by {MODE}</p> <p>At what time did you leave {ORIGIN}?</p> <p>ENTER TIME AS APPLICABLE</p> <p><u>Hour</u></p> <p>01: 1 am 02: 2 am 03: 3 am 04 :4 am 05: 5 am 06: 6 am 07: 7 am 08: 8 am 09: 9 am 10: 10 am 11: 11 am 12: 12 pm 13: 1 pm 14: 2 pm 15: 3 pm 16: 4 pm 17: 5 pm 18: 6 pm 19: 7 pm 20: 8 pm 21: 9 pm 22: 10 pm 23: 11 pm 24: 12 am</p> <p><u>Minutes</u></p> <p>00: 00 05: 05 10: 10 15: 15 20: 20 25: 25 30: 30 35: 35 40: 40 45: 45 50: 50 55: 55</p>	<p>Journeys are asked about in reverse order of the outward journeys; so the last stage of the outward journey becomes the first stage of the return journey. The second last stage of the outward journey becomes the second stage of the return journey and so on. The first stage of the outward journey is the last stage of the return journey numbering of question is reverse of outward journey, so if 3 stages to the journey, return questions below start at r..._3 and finish at r..._1</p>

Question name	Question	Amendments, notes and known issues		
RJTIMERWARN	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF TIME CODED AT FINAL STAGE OF OUTWARD JOURNEY MOD_1-5 IS = OR > EQUIVALENT TIME IN RMOD_5-1TIMEO FOR FIRST RETRUN STAGE, OR IF RMOD_4-1TIMEO IN PREVIOUS STAGE IS =OR > TIME IN RMOD_5-2TIMEO FOR ANY OTHE RETURN STAGE</p> <p>WARNING</p> <p>Each stage of a journey must commence LATER than the previous stage!</p> <p>You have entered a time which is before /equal to a time mentioned in an earlier stage of the journey</p> <p>PRESS OK TO RETURN AND AMEND YOUR ANSWER</p>			
RMODE_5-1DUR	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE, FOR EACH STAGE CODED AT MODES_1-10</p> <p>Text insertion: {DESCRIPTION} = description shown at MODES_1-10; {MODE} = mode coded at MODES_1-10 for this stage;</p> <p>Text variation: if MODES_1-10 ≠ walking – ‘please also include any time spent walking to/from the {mode}’;</p> <p>RETURN LEG – trip is {DESCRIPTION}, made by {MODE}</p> <p>And how long did that {mode} journey take you. (Please also include any time spent walking to/from the {mode})?</p> <p>WRITE IN HOURS AND MINUTES</p>			
ROCCUP_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE AND IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>Text insertion: If >1 stage coded at MODES_1-10 for this journey coded at PURREVIEW – part of the</p> <p>How many occupants were there in the car/van for this [part of the] journey, including the driver?</p>			
	<table border="1" style="width: 100%; height: 100%;"> <tr> <td style="width: 50%; text-align: center;">hrs</td> <td style="width: 50%; text-align: center;">mins</td> </tr> </table>	hrs	mins	
hrs	mins			
	1..10			
RPAYPARK_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE AND IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>Text variation: If >1 stage coded at MODES_1-10 for this journey coded at PURREVIEW – this part of</p> <p>Text insertion: [DESCRIPTION] = description shown at MODES_1-10</p> <p>Did you pay for parking at the end of [this part of] the journey to [DESCRIPTION]?</p> <p>01: Yes 02: No</p>			

Question name	Question	Amendments, notes and known issues
RCARPARK_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RPAYPARK1 = YES, FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>SHOWCARD TD3</p> <p>Where did you park your vehicle?</p> <p>01: In a commercial car park 03: On the street in a space you pay for 04: Paid for, in a car park provided by employer/school/college/university 08: Residential parking permit 09: Other (Write in)</p>	
RPARKCOST_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RCARPARK1 = commercial car park; on the street....; paid in a car park...; Other FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>How much did you pay?</p> <p>WRITE IN PENCE (E.G.£2.50 = 250p)</p> <div data-bbox="422 728 727 792" style="border: 1px solid black; width: 191px; height: 29px; margin: 10px auto; text-align: right; padding-right: 5px;">p</div> <p>01: £10 or more Don't know Refused</p>	
RPCOSTWARN_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RPARKCOST_5-1 = >0 AND <20 FOR THIS STAGE OF THE RETURN JOURNEY.</p> <p>TEXT INSERTION: {amount} comes from amount entered at RPARKCOST_5-1</p> <p>WARNING</p> <p>{amount} pence seems low for the cost of parking – please check with respondent and amend if necessary!</p> <p>01: Amount correct CONTINUE 02: Amount incorrect RETURN TO RPARKCOST_5-1 TO AMEND</p>	
RPARKTIME_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RCARPARK_5-1 = commercial car park; on the street....; paid in a car park...; Other FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>How long did you stay at that parking place?</p> <p>INTERVIEWER: ENTER ANSWER IN HOURS AND MINUTES. IF FOR EXAMPLE, THE RESPONDENT PARKED FOR 45 MINUTES, PLEASE ENTER ZERO FOR THE NUMBER OF HOURS.</p> <div data-bbox="422 1514 727 1579" style="border: 1px solid black; width: 191px; height: 29px; margin: 10px auto; text-align: center; padding: 2px;"> hrs mins </div> <p>03: Park for more than a day Don't know Refused</p>	
RPARKFREE_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RPAYPARK_5-1 = No FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>SHOWCARD TD4</p> <p>Did you park on-street, in a drive or garage, in a car park or what?</p> <p>01: On-street 02: Drive/garage 03: Lay-by/pull-in 04: Designated car park 05: Waste ground 06: Other</p>	

Question name	Question	Amendments, notes and known issues
RCONGEST_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE AND IF MODES_1-10 = CAR/VAN AS DRIVER FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>Text insertion: If more than one stage coded at MODES_1-10 for this journey coded at PURPOSE – part of your</p> <p>Was this (part of your) trip in the car/van as a driver delayed due to traffic congestion?</p> <p>01: Yes 02: No</p>	
RCONGTIME_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RCONGEST_5-1 = Yes FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>How much time do you think was lost due to traffic congestion?</p> <p>WRITE IN IN MINUTES. FOR EXAMPLE 1 HOUR AND 15 MINUTES = 75 MINUTES</p> <div data-bbox="424 792 727 860" style="border: 1px solid black; width: 190px; height: 30px; margin: 10px auto; text-align: center;"> <p>mins</p> </div> <p>Don't know Refused</p>	
RCONGC_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RETURN = YES FOR A JOURNEY CODED AT PURPOSE AND IF MODES_1-10 = ORDINARY (SERVICE) BUS OR TRAIN FOR THIS STAGE OF THE RETURN JOURNEY</p> <p>Text Variation: If >1 stage of this journey coded at MODES_1-10 – part of the</p> <p>Was this [part of the] journey delayed?</p> <p>01: Yes 02: No</p>	
RCONGD_5-1	<p>ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10</p> <p>SHOW IF RCONGC_5-1 = Yes FOR THIS STAGE OF THE RETURN JOURNEY MULTICODE</p> <p>Text Variation: If >1 stage of this journey coded at MODES_1-10 – part of the</p> <p>Text substitution: If MODES_1-10 = ordinary(service) bus – {Bus}; If MODES_1-10 = train – {Train}</p> <p>Why was this [part of the] journey delayed?</p> <p>01: {Bus/Train} arrived late 02: {Bus/Train} did not turn up 03: {Bus/Train} broke down 04: {Bus/Train} involved in an accident / delayed by an accident 05: Bus lane blocked 06: Congestion on the roads 07: Assault on {bus/train} crew 08: Vandals damaged vehicle or track 09: Traffic lights / signals not working 12: Road works / maintenance work 13: Bad weather 14: Large numbers of passengers getting on or off 15: {Bus/Train} full so took a long time to get people on or off 16: Bus passengers asking for directions / about the route 17: Bus passengers needed change / without correct fare 10: Other reasons (WRITE IN)</p> <p>Don't know</p>	

Question name	Question	Amendments, notes and known issues
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RCONGE_5-1 ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 SHOW IF RCONGC_5-1 = Yes FOR THIS STAGE OF THE RETURN JOURNEY
 How much time do you think was lost because of this?
 WRITE IN IN MINUTES. FOR EXAMPLE 1 HOUR AND 15 MINUTES = 75 MINUTES

mins

Don't know
 Refused

R30MINWARN_5-1 ASKED ONLY IN STREAMS 2, 4, 5, 7, 9 AND 10
 SHOW IF RCONGE_5-1 >30 MINUTES FOR THIS STAGE OF THE RETURN JOURNEY
 Text insertions: {mins} comes from minutes coded at RCONGE_5-1
 WARNING!
 You said that you were delayed for {mins} minutes, is this correct?
 01: Yes CONTINUE
 02: No RETURN TO RCONGE_5-1 TO AMEND

Scottish Household Survey

*The travel diary:
Revised version 2007*

AUGUST 2007

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1.1. What is the travel diary?

The travel diary section of the questionnaire is an attempt to collect information about the 'previous day' travel patterns of a representative sample of the population. Unlike other 'diary' exercises you may have done with respondents in the past, however, this is not done on paper, or left with the respondents to send back. It forms part of the CAPI interview, with you entering details of their journeys directly onto the computer.

For the new contract in 2007 we have substantially revised the structure of the diary. However, it probably remains the most complicated part of the SHS interview, so it is important that you feel comfortable with the various concepts and the way in which respondents' answers should be entered. Hopefully this document will answer most of the queries you might have but, **if you unsure about anything at all** to do with the travel diary, please contact either your supervisor or a member of the research team (telephone numbers given in the main briefing document). It is very important that we get this right from the beginning and that you understand the changes that have been made from the previous version of the diary.

Some of the changes have been introduced to eliminate curious terms and definitions that we needed to use previously to harmonise with the national travel survey (NTS) - we have found other ways of doing this now. However, some have been introduced because we have noted over the years that there has been a systematic deterioration in the data that has been collected, and we think this is a result of the structure and phrasing of the previous version.

1.2. Journeys that should be included

The travel diary is intended to collect information about the following types of travel.

- **All journeys** - regardless of their length - including, for example, popping up the road to the local shop
- **Personal travel** made for domestic, social or recreational reasons, e.g.
 - driving to or from work

- travelling into town to go shopping
- going to see friends
- Travel **in the course of work**, where the purpose of the journey is for the traveller to reach the destination and so is *incidental* to the work that is being carried out, e.g.
 - taking a bus into town to attend a meeting
 - flying down to London on business
- Journeys made **to take or accompany** someone else
 - taking the children to school
 - walking someone home
- Journeys made by land, water or air **anywhere in the UK** are included in the travel diary. Journeys which start or end outside the UK (e.g. a holiday flight from Spain) are excluded. We are, however, interested in any journeys made within the UK to or from airports, ports, etc. So, if a respondent says they returned from holiday in Spain the previous day, we are interested in the journey home from the airport, but not in the flight from Spain itself.

1.3. What kind of information does the travel diary collect?

The travel diary is intended to collect information about journeys made by respondents in the random adult section of the questionnaire on the **day before** the interview takes place.

Thus, if you are completing the random adult section of the interview on a Saturday, we are interested in hearing about journeys that the respondent made on the Friday (the reference day).

More specifically, in that example, we are interested in any journeys that **started** between midnight on Thursday night and midnight on Friday night.

Having gained an overview of what your respondent did the day before, in terms of the journeys they made, the script will then take you through a series of loops, and the kind of information which will be collected about these journeys is:

- The mode(s) of transport
- Whether the respondent made return journey later (same mode(s) and essentially the same route

-
- The place the journey (or each stage of the journey) started
 - The place the journey ended
 - The time the respondent left and the duration of each journey or stage

1.4. The need for detail

This information will help The Scottish Executive to build up a picture of the travel patterns of the Scottish population. The information on where journeys started and ended is particularly important, so we are asking you to record this in **as much detail as possible**. When we examine the data, we will be trying to assign precise postcodes to these start and end points, so if at all possible, we would like you to enter this information for us - note that we know their home postcode from the sample, and we will derive their work postcode from information you gather elsewhere in the interview, so we have provided pre-codes for these. If someone living in Edinburgh tells you they went 'into town', ideally, we want to know the name of an example store they went to, and the street or area they went to (e.g. Princes Street or Tollcross). Failing that, you should enter 'city centre' **but remember to put 'Edinburgh'** too or we will not know which city centre is being referred to!

We recognise, however, that sometimes people will not know or be able to describe exactly where they went. Similarly, they may not remember exactly when they left or when they arrived. In these cases, we need you to enter the respondents' best estimates. The important thing to remember here is that:

- We are looking for the best information we can get from each individual respondent
- **But some information is better than none**, so estimates or approximations will do if detail is not available.

1.5. Outline of the structure of the diary section

Once you have established where your respondent started and ended the previous day, you will collect information on what they did that day. It is very unlikely that they will not have gone out at all, so there are some checks on this question, particularly if

the respondent is in work and the previous day was a week day. Broadly speaking, the sequence from then is

- What did the respondent do the day before (ie, what journeys out of the house did they make)
- Was each of the outward journeys followed by a return trip later in the day, using essentially the same route and mode(s) of transport
- Once all the journeys have been collected in this way, there is a screen asking you to check that the respondent hasn't left any trips out - even a short walk up to the shop - so that you can enter more if needed
- For each journey, what mode(s) of transport did they use
- What time did they start the journey (using pre-coded buttons to record the time) and how long did it take - if less than an hour, you need only complete the 'minutes' box (where a journey involves more than one mode of transport, this information is collected for each of the stages)
 - o If they drove there is a special section of questions, and there is a special section if they took a bus or train too

1.6. Sequence of journeys

You may find that respondents recall what they did the day before in a slightly haphazard way. While it might be easier for you if they do tell you about their day before in a logical order, we can deal with trips that are out of order (since you will be asking questions about the time trips are made). We would much rather have trips in a haphazard order than not have them recorded at all.

1.7. Some points in more detail

What respondents did the day before - note that one of the response options here is 'Go home'. Use this if your respondent started their day away from home, and one of the things they did in the day was to go home - perhaps their first journey for

example. On the other hand, if someone says they went to the shops (or to work) and then later went home, don't use this code, as you will collect information about this journey as the 'return' leg of an outward journey (who's purpose will be to go shopping etc).

A series of calls - some jobs, such as travelling salespeople or doctors, might entail making multiple calls. Because these use the same mode of transport (usually a car) and the same purpose (in the course of work) we are reducing the interview burden by truncating the information gathered. Note that we are not asking whether these journeys were replicated by a return leg later in the day, because by their nature, a series of calls will often be a 'circular' route. So we have structured the questions slightly differently.

Walking - we only want you to record 'walking' as the mode of transport if this is the sole mode, for example going out of the house to take the dog for a walk, pop up the road to the shop, or leaving the office at lunchtime to get a sandwich and go shopping. If, on the other hand, someone has walking stages as part of a journey - for example a walk to the bus stop, or a walk between a bus stop and the train station, or a walk from a bus stop to their office/friend's house - do not record the walking stage(s) at the 'mode' screen. Subsequently record the destination of journeys or stages as the destination following any short walks. Effectively, this will mean that if a person catches a train to Waverley station, but then walks to their office in George Street, you will record the journey as if they caught the train to George Street. Only if they caught a bus (say) from Waverley to George Street would that stage of the journey be defined separately. Another important example is if someone goes on a hike in the hills, and drives to the foothills as part of this trip. We only want you to record the driving stage (and subsequently the return leg), not the walk itself. Notice that at the 'what did you do yesterday question' this should be coded as 'go out to participate in sport/exercise', and NOT as 'just to go for a walk'.

1.8. Journeys that should be excluded

There are some very important types of people whose working journeys are excluded from the survey (although their journey to or from work would still be included).

- Any work journeys made by **people whose job it is to deliver goods** in the course of work are excluded - e.g.
 - a van or lorry driver
 - a pizza delivery person
- Any work journeys made by **people whose job is as crew** in public or commercial vehicles in the course of their work - e.g.
 - bus and train drivers
 - bus conductors or air stewards
 - refuse collectors and crane drivers
 - taxi drivers, ambulance drivers etc
- Any work journeys made by people who **are paid to walk** are similarly excluded - e.g.
 - Police officers and traffic wardens
 - Postmen and women
- Travel **away from the public highway** is excluded, since this is not part of the transport infrastructure (although a drive to a location to do these things will be included) - e.g.
 - walking or climbing in the hills
 - yachting or flying (e.g. gliding) for pleasure

1.9. The approach to completing the diary

The most important things about completing the diary are:

- **try to go through the day systematically** from the first journey of the day to the last. The diary does not need to be completed in this order but it may be easier for people to think through their day like this.
- **try to get a picture of the journey** before recording any of the details. This will let you know whether the journey should be split into stages or not. In many cases this will be obvious - 'I took the bus into town and then caught the train to Glasgow' is clearly a journey with two stages.

- **We have used certain fixed descriptions for journey purposes which clearly won't fit individual circumstances.** For example, 'Go to eat/drink alone or at work' would be used for someone who goes out at lunchtime to get a sandwich to eat.
- remember to record **as much detail as possible** in terms of start points and end points of journeys - this is an essential part of our analysis

Travel Diary: Additional guidance for interviewers

Definition of a trip (or journey)

- A trip (or "journey") is defined as a one-way course of travel having a single main purpose. It's the main purpose which is key as it's this which separates one trip from another. Hence a trip would be your journey to work. But if you were to stop at the cashpoint on your way to work, that wouldn't be counted as a separate trip because your main purpose was to go to work - you just happened to stop at the cashpoint on your way.
- The purpose of a journey depends on what the person did at the end of their journey. So a person who goes to the corner shop will have made a journey for the purpose of food/grocery shopping. A journey can only have one main purpose.
- A journey can be subdivided into stages. A new stage is defined when there is a change in the form of transport.
- Short journeys made on foot (i.e. just popping into a neighbour's house down the street) are to be included as a journey.

Walking

- If walking is only one stage of a journey using different modes of transport (e.g. a journey from home to work, which consists of a 5 min walk to the train station, then a 30 min train ride) then the script will require the walking stage of the journey to be excluded, and only information about the train stage of the journey would be included.
- However, if walking is the sole mode of transport for the trip (or journey) then this is included and information about the journey is collected.
- Circular trips (e.g. going for a walk, going out to walk the dog, jogging for exercise, short trip to the post box, or just a walk for a breath of fresh air) should be entered as an outward journey with no return leg (because there was no specific destination). Just code the purpose as best you can from the list.
- Can walking be coded as a return journey? If someone just went for a walk from their home to a specific point and then walked back home the same way, this can be coded as a return journey. However, you do have some discretion here and should ask yourself if knowing the destination of this type of journey is of any use to anyone e.g. can it be recorded and translated into a postcode? Therefore you need to decide before logging the trip whether it is worthwhile to code this as a return journey or not. When the journey purpose is being recorded, the respondent will either say a destination, if they have one. This implies an outward and (maybe) a return journey. Otherwise they will say that they didn't go anywhere, and you can record it as a circular journey. It does still require you to think about it and make a decision.

- Riding in non-motorised wheelchairs, prams, pushchairs, jogging, roller-skating and riding a skateboard or non-motorised scooter are also regarded as walking.

Trips (or journeys) which start/finish outwith the 24 hour period

- It is possible that a trip could span across 2 days e.g when someone started their journey at 11pm at night and did not arrive at their destination until 2pm in the morning (on the day we are asking them about). For these cases where the trip starts *before* the 24 hour period, we will be excluding these.
- However, where the journey starts within the 24 hour period but finishes *after* this time (ie. Got the train at 10pm on the day we are interested in, but didn't arrive at destination until 2am in the morning), we are including these.