

NTS Travel Record Review Stage 1

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Contents

List of tables	6
Acknowledgements	7
1 BACKGROUND	8
1.1 Research design.....	8
1.2 Structure of report	9
2 SECONDARY ANALYSIS OF NTS TRAVEL RECORD DATA	10
2.1 Background to the NTS	10
2.1.1 Journeys and stages	10
2.1.2 Size of household	11
2.1.3 Explanation of the Travel Record task	11
2.1.4 Demographics	11
2.1.5 Item non-response.....	12
2.1.6 Qualitative evidence of response error.....	13
2.1.7 Travel Record aspects perceived to be problematic.....	13
3 WORKSHOPS WITH NATCEN INTERVIEWERS.....	15
3.1 Aims	15
3.2 Background to the workshops	15
3.3 Findings	16
3.3.1 Introducing the Travel Record	16
<i>How interviewers introduce the Travel Record.....</i>	16
<i>Respondents initial reactions to the Travel Record.....</i>	16
<i>Questions respondents ask.....</i>	16
<i>Respondents reactions to children's Travel Records</i>	17
<i>Collecting the Travel Records</i>	17
3.3.2 Example pages	17
<i>Blank example</i>	17
<i>Filled in example.....</i>	18
3.3.3 Side flaps and instructions.....	19
Notes (A), (B), (C).....	19
3.3.4 Common errors.....	20
<i>Skipped pages.....</i>	20
<i>Purpose of journey (column A).....</i>	20
<i>Time left/Time arrived (columns B & C)</i>	20
<i>From/To (columns D & E).....</i>	20
<i>Day 7: Postcode</i>	21
<i>Method of travel (column F).....</i>	21
<i>Distance/miles (column G)</i>	22
<i>Number in party (column H)</i>	22
<i>Time travelling (column I)</i>	22
<i>Public transport.....</i>	23
<i>Ticket type (column J)</i>	23
<i>Cost (column K).....</i>	23
<i>Number of boardings (column L).....</i>	23
<i>Which car/motorbike (column M).....</i>	23
<i>Driver/Passenger, Front or Rear (column N).....</i>	23
<i>Where parked and cost</i>	24
3.3.5 Ideas for improvement and changes to the Travel Record	24
Structure re-design	25
Instructions as questions	25
Answers as tick boxes	25
Order of columns	25
Column headings.....	25
Size, shape and colour	26

	Other suggestions	26
4	EDITOR COMMENTS ON SPECIFIC PROBLEMS WITH THE TRAVEL RECORD	27
4.1	Purpose of journey (A).....	27
4.2	Time left (B) & Time arrived (C).....	27
4.3	From (D) & To (E).....	27
4.4	Method of travel (F)	27
4.5	Mileage (G)	27
4.6	Type of tickets (J)	28
4.7	Where parked and cost (O)	28
4.8	Return journeys.....	28
5	COGNITIVE INTERVIEWS.....	29
5.1	Sample members	29
5.2	Filling in the Travel Record.....	30
5.2.1	Comprehension of the exercise and initial reaction	31
5.2.2	How different types of people approach filling in the Travel Record	31
	<i>Shortcut heuristics</i>	<i>31</i>
	<i>'Readers and 'Skimmers'</i>	<i>31</i>
5.2.3	Strategies for filling in the Travel Record	32
	<i>Reading and referring to instructions</i>	<i>33</i>
	<i>Filling in the blank example page</i>	<i>33</i>
	<i>Finding the instruction flaps.....</i>	<i>33</i>
	<i>Starting straight away.....</i>	<i>33</i>
	<i>Getting stuck and looking for help</i>	<i>33</i>
	<i>Choosing not to find help.....</i>	<i>34</i>
	<i>Leaving out information</i>	<i>34</i>
	<i>Seven rows for seven days</i>	<i>34</i>
5.2.4	How these strategies lead to respondent error	34
	<i>Filling in the blank example page</i>	<i>34</i>
	<i>Missing return journeys</i>	<i>34</i>
	<i>Round trips</i>	<i>35</i>
	<i>Walks.....</i>	<i>35</i>
	<i>Journey stages</i>	<i>35</i>
	<i>Conflicting information.....</i>	<i>35</i>
	<i>Postcodes.....</i>	<i>35</i>
	<i>Understanding column headings.....</i>	<i>36</i>
	<i>Missing journeys.....</i>	<i>36</i>
	<i>Seven rows for seven days</i>	<i>36</i>
	<i>Too little or too much</i>	<i>36</i>
	<i>New strategies.....</i>	<i>36</i>
5.2.5	Specific problems with the filled in example page and instructions	36
	<i>Filled in example page.....</i>	<i>36</i>
	<i>Side flaps.....</i>	<i>37</i>
	<i>A,B,C headings.....</i>	<i>38</i>
	<i>Top of page instructions</i>	<i>38</i>
5.3	How respondents described the task after completion.....	39
	<i>Difficult sections highlighted.....</i>	<i>39</i>
5.3.1	How respondents approached each column and specific problems	40
	<i>Purpose of Journey (A).....</i>	<i>40</i>
	<i>Time left (B) & Time arrived (C)</i>	<i>41</i>
	<i>From (D) and To (E)</i>	<i>41</i>
	<i>Method of travel (F)</i>	<i>43</i>
	<i>Distance (miles) (G).....</i>	<i>44</i>
	<i>Number in party (H).....</i>	<i>44</i>
	<i>Time travelling (I).....</i>	<i>44</i>
	<i>Ticket type (J)</i>	<i>45</i>
	<i>Cost (K).....</i>	<i>45</i>

	<i>Number of boardings (L)</i>	46
	<i>Which car/motorbike used (M)</i>	46
	<i>Driver/Passenger (N)</i>	47
	<i>Where parked and cost (O)</i>	47
	<i>Road tolls/Congestion charges (P)</i>	48
5.3.2	Order of the Travel Record.....	50
5.3.3	Appearance.....	50
5.3.4	Acceptability of the task.....	50
5.3.5	Suggestions for improvements.....	51
	<i>Layout</i>	51
	<i>Size, colour, appearance</i>	51
6	SUGGESTIONS FOR IMPROVEMENT AND RECOMMENDATIONS	52
6.1	General layout.....	52
	<i>Recommendations</i>	54
6.2	Example pages.....	55
	<i>Recommendations</i>	56
6.3	Side flaps.....	56
	<i>Recommendations</i>	57
6.4	Other instructions.....	57
	<i>Recommendations</i>	59
6.5	Specific suggestions for improving each column.....	59
	<i>Purpose of Journey (A)</i>	59
	<i>Recommendations</i>	59
	<i>Time left (B) & Time arrived (C)</i>	60
	<i>From (D) & To (E)</i>	60
	<i>Recommendations</i>	61
	<i>Method of travel (F)</i>	61
	<i>Recommendations</i>	62
	<i>Distance (miles) (G)</i>	62
	<i>Recommendations</i>	62
	<i>Number in party (H)</i>	62
	<i>Time travelling (I)</i>	63
6.5.1	Public transport/taxi columns.....	63
	<i>Ticket type (J), Cost (K) & Number of boardings (L)</i>	63
	<i>Recommendations</i>	63
6.5.2	Car and motor vehicle columns.....	64
	<i>Which car/motorbike used (M)</i>	64
	<i>Recommendations</i>	64
	<i>Dr/Pass (N)</i>	65
	<i>Recommendations</i>	65
	<i>Where parked and cost (O)</i>	66
	<i>Recommendations</i>	66
	<i>Congestion charges/road tolls (P)</i>	66
APPENDIX A	BREAKDOWN OF FIELD AREAS.....	67
APPENDIX B	INTERVIEWER WORKSHOP TOPIC GUIDE.....	68
APPENDIX C	TECHNICAL DETAILS OF COGNITIVE PHASE.....	71
	COGNITIVE RECRUITMENT QUOTA SHEET.....	75
APPENDIX E	COGNITIVE QUESTION AND PROBE SHEET.....	76
APPENDIX F	LETTER TO COGNITIVE INTERVIEW PARTICIPANTS.....	81
APPENDIX G	CURRENT ADULT TRAVEL RECORD.....	82
APPENDIX H	CURRENT CHILD TRAVEL RECORD.....	82

List of tables

Table 2-1	Whether NTS respondents completed the Travel Record.....	10
Table 2-2	Item non-response to the NTS Travel Record.....	12
Table 5-1	Summary of characteristics of interviewed respondents	30
Figure 5-2	Strategies for filling in the Travel Record.....	32
Table 5-3	Summary table of main column problems	49

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BACKGROUND

The Department for Transport (DfT) commissioned the Question Design and Testing Hub within the Survey Methods Unit at NatCen to evaluate the existing Travel Record used as part of the National Travel Survey (NTS). The NTS is a large, continuous, national cross-sectional survey that collects detailed information about people's travel patterns and behaviour. Information is collected via face-to-face interview and each member of the household is asked to complete a seven day Travel Record.

The current format for the Travel Record is row-based, which means respondents should record each journey they make on a separate row, filling in the columns with the required information. Yet evidence suggests a columnar format, where information about each journey is collected in a column, may be easier for respondents to complete¹. This is certainly the design that is used more commonly elsewhere in Europe and across the World. DfT are potentially interested in a columnar design, if it will improve data quality. However it is recognised that changing the format of the Travel Record is not an activity that should be undertaken lightly. There are a number of costs and risks involved in changing the format. Potential costs include printing, as the Record may need to have more pages or be printed on larger paper to accommodate the new design, and data entry, as a new system would need to be devised to reflect a columnar Record. The risks of introducing a new Travel Record are that the re-design might not improve data quality universally (i.e. it improves data quality for certain types of respondent with certain kinds of travel patterns but not others); or it improves data quality but this affects the time series (e.g. improves the recording of walks, so walking rates go up). DfT need to be certain that any changes to the design of the Travel Record will improve data quality, and that this improvement is worth the risks associated with change.

A two-stage research programme was therefore proposed to develop a new Travel Record for the NTS. Stage One would involve an evaluation of the current Record. Stage Two would involve re-designing the Record, potentially adopting a columnar approach. Stage Two would only take place if evidence from Stage One indicated that the format of the current Travel Record was problematic and that changing the format might resolve some of these problems.

This report is concerned with Stage One, presenting evidence on the performance of the current Travel Record and its design, and recommendations for its re-design. The current adult and child Travel Records can be found in Appendices G and H.

1.1 Research design

Stage one involved evaluating the layout and content of the existing NTS Travel Record. This involved the following activities.

- Secondary analysis of NTS Travel Record data. The analysis sought to identify data items that had high item non-response or high incidence of data needing to be changed at the edit process, which might indicate problems with the current layout of the Travel Record.
- Workshops with NTS interviewers discussing the kinds of errors respondents made when completing the Travel Record; any reformatting of information they (the interviewers) do (i.e. breaking down composite journeys into single journeys, adding in missed journeys or information about journeys); and suggestions for improvement. Three

¹ Axhausen K (1995), *Travel Diaries: An annotated catalogue*, 2nd edition (draft)

workshops were held with interviewers working in different areas of the country, with different levels of experience of working on the NTS.

- Discussions with the NTS Travel Record editors to identify problems encountered with the Records once returned to the office.
- Cognitive interviews with respondents completing (retrospectively) two days of the Travel Record, to understand how respondents use the Record and whether the **format** of the current Record causes them any problems.

Each of these activities sought evidence of the performance of the current Record. The activities took place sequentially, in the order shown above, with findings from earlier activities feeding into later ones.

1.2 Structure of report

This report is divided into five sections.

- Chapter 2 concentrates on the secondary analysis conducted on the 2004 data and examines problematic features of the Travel Record. Specifically we aimed to look at items that had high item non-response and also examined whether the Record was less likely to be completed by certain populations groups.
- Chapter 3 details findings from the three workshops held with NTS interviewers in March 2006. These workshops identified errors respondents typically made when completing the Travel Record and the types of reformatting of information that interviewers end up doing before returning the Records to the office. For instance, breaking down composite journeys into single journeys and adding in missed journeys. This chapter also summarises interviewers' suggestions for improving the Record.
- Chapter 4 details the main problems the office-based editors at NatCen deal with when the Records are returned, to prepare for data processing.
- Chapter 5 presents finding from the cognitive interviews undertaken in April 2006 to evaluate the current Travel Record. This chapter includes suggestions for improving the design of the Record made by respondents.
- Finally chapter 6 sets out recommendations for future work, including re-designing the Record, based on all the evidence collected during Stage One to evaluate the current Record.

SECONDARY ANALYSIS OF NTS TRAVEL RECORD DATA

This chapter details the findings of the secondary analysis² of 2004 NTS (edited) data. These analyses were carried out in order to help us identify problematic features of the Travel Record and particular types of respondent who experienced difficulty with the record-keeping task. Specifically we aimed to look at items that had high item non-response and items that required a 'large' amount of editing. We also examined whether the Travel Record was less likely to be completed by certain population groups. The findings of this analysis fed into the formulation of research questions to be addressed by the interviewer workshops (described in Chapter 0) and cognitive testing (described in Chapter 0).

1.3 Background to the NTS

As mentioned earlier, the NTS is a large, continuous, national cross-sectional survey that collects detailed information about peoples travel patterns and behaviour. Information is collected via face-to-face interview and each member of the household is asked to complete a seven-day Travel Record. In 2004, a total of 9,022 households participated in the NTS of which 748 households returned no Travel Records at all (8.3%). These 9,022 participating households represent 21,693 individuals - 16,992 adults and 4,701 children - of whom 2,138 did not complete a Record (9.9%). These 2,138 non-completers comprised 1,641 adults (9.7%) and 497 children (10.6%). Encouraging all household members to complete the Travel Record is therefore a key objective for the survey.

Table 0-1 Whether NTS respondents completed the Travel Record

Respondents	Total NTS respondents		Completed Travel Record		Did not complete Travel Record	
	N	%	N	%	N	%
Households	9,022		8,274	91.7	748	8.3
Individuals	21,693		19,555	90.1	2,138	9.9
Adults	16,992		15,351	90.3	1,641	9.7
Children	4,701		4,204	89.4	497	10.6

1.3.1 Journeys and stages

Respondents are asked to record their travel over a seven-day period, detailing all journeys they make and the individual stages within each journey. A stage is defined as a change in means of transport, so for example, a journey from home to work may include several methods of transport: a walk, a bus and a train. Each of these separate forms of transport would be considered to be a 'stage'. The Travel Record also collects information on costs of travel (for example, ticket prices and parking charges) and the purpose of the journey.

Those respondents who completed Travel Records conducted a total of 315,065 journeys, an average of 16.1 journeys per week. These journeys comprised 327,750 stages, an

² Secondary analysis was undertaken using 'clean' (edited) NTS data collected in 2004, using SPSS. Simple analyses were undertaken in the first instance, such as running frequencies and cross tabulations to identify broad patterns and trends. More complex multivariate analyses were then carried out, where appropriate, using logistic regression.

average of 1.04 stages per journey. In short, the NTS Travel Record collects a lot of complex information, placing a considerable response burden on respondents. The next section describes some of the known problems with these data.

1.3.2 Size of household

Secondary analysis revealed a relationship between whether respondents completed the Travel Record and the size of their household. Specifically the fewer people there are in the household the more likely the household is to complete Travel Records. Furthermore, households tended to complete Travel Records en mass or not at all, that is to say if one person completed a Travel Record in the household everyone else would. Only a small proportion of households returned fewer Travel Records than the number of people living at the household.

1.3.3 Explanation of the Travel Record task

Secondary analysis also revealed an association between the length of time the interviewer spent explaining the task and the likelihood of the respondent completing the Travel Record; the longer the interviewer spent explaining the Travel Record the more likely the respondent was to complete it. This may indicate that the task was clearer for these respondents as the interviewer may have run through a number of examples relevant to their individual situations. The exception to this rule was where the interviewer spent 51-60 minutes (the longest period of time recorded) explaining the task; a greater proportion of Travel Records were not completed. Interviewers spent 16 minutes, on average, explaining the task³.

1.3.4 Demographics

The next stage was to examine whether there was any relationship between respondents' characteristics and their likelihood of completing the Travel Record. Initial analyses indicated that certain types of respondent were more likely to complete a Record than others. The characteristics looked at were:

1. sex;
2. age;
3. ethnic group;
4. marital status (adults); and
5. work status (adults).

Given that it is likely to be the case that these factors are inter-connected, separate logistic regression models were run for adults and children. Both models showed 'Age' and 'Ethnic group' to be significant factors in whether a Travel Record was completed. A clear pattern was shown within age; younger people were less likely to complete the Record than older people and this pattern was repeated for children. White respondents were most likely to complete the Record and Black and Asian groups less likely to do so. Again, this pattern was repeated for children with the exception of the Chinese and other category, who were more likely to complete the Record than White respondents. 'Marital status' also appeared to be a significant factor in the adult model. Married respondents were more likely to complete the Record than other types of respondent.

³ This information comes from interviewer self-reports of the amount of time they spent explaining the Travel Record to the respondent.

1.3.5 Item non-response

Having examined total non-response to the Travel Record we wanted to identify specific data items that had high item non-response. Rigorous editing (both by interviewers and office-based staff) before they are keyed made it very difficult to identify items respondents had difficulty with or left blank through secondary analysis. Table 2.2 below shows the percentage of item non-response for each Travel Record data item, which is minimal; for the majority of questions it is less than one percent.

Table 0-2 Item non-response to the NTS Travel Record

Data item	Non-response*	
	N	%
Total journeys	315,065	
(A) Purpose of journey (from)	230	0.07
(A) Purpose of journey (to)	188	0.06
(B) Time left	2298	0.73
(C) Time arrived	2501	0.79
(D) From	0	0.00
(E) To	0	0.00
Total stages	327,750	
(F) Method of travel	90	0.03
(G) Distance (in miles)	4488	1.37
(H) Number in party	708	0.22
(I) Time travelling (minutes)	1765	0.54
(J) Ticket type	539	0.16
(K) Cost	1483	0.45
(L) Number of boardings	337	0.10
(M) Which car/motorbike used	510	0.16
(N) Driver/Passenger	415	0.13
(O) Where parked	2041	0.62
(O) Cost of parking	263	0.08
(P) Road tolls/Congestion charges	45	0.01

*following interviewer formatting and operations editing

As an alternative means of trying to assess the quality of pre-edit Travel Records, a qualitative review of unedited Records was undertaken and its findings are described in the next section.

1.3.6 Qualitative evidence of response error

We reviewed a number of completed Travel Records⁴ to familiarise ourselves with their content, pinpoint key errors respondents make, and identify common corrections that interviewers and office editors subsequently make. Because the editor always writes in red and the interviewer in green it is easy to distinguish at what stage particular editing has taken place. The following were errors that appeared to be consistent across these Travel Records.

- Parking and cost of parking left blank (O);
- Indication of whether respondent was a driver or passenger in a car or van left blank (N);
- Method of travel (F) not recorded in the required order (e.g. where there was more than one stage to a journey, the stages were not in the correct order);
- Missing home or return journeys;
- Respondents (wrongly) included walks of less than a mile on days 1-6;
- Confusion over the concept of a 'journey' as opposed to a 'stage'. The word 'stage' is first used in the description at (L) and it may be helpful to explore whether the fuller explanation of this concept at section (F) would be useful. Stages are sometimes counted as journeys where the method of travel was changed (e.g. taking a train from university and being picked up from a train station by parents in their car - this is one journey with a number of stages but respondent may regard this as two or three separate journeys);
- Filling in cost of season tickets rather than leaving it blank as specified;
- Filling in journeys after midnight on the next day (rather than the day the respondent began the journey as specified);
- AM and PM not always used (B and C) (and some respondents used 24 hour clock);
- 'H' not always used to denote home - occasionally respondents would fill in full address including their postcode (D and E).

Some of the errors listed above are less problematic than others as, although what the respondent records is not precisely correct, it is sufficient information for the coder to record the correct information (e.g. where respondents record short walks on days 1-6 and writing 'Home' instead of recording 'H').

1.3.7 Travel Record aspects perceived to be problematic

Below are some key aspects of the Travel Record that the secondary analysis stage identified as being potentially problematic, which were taken forward to be explored with both interviewers and respondents during the later stages.

- The change in the way information should be recorded for day 7: including postcodes and walks of less than a mile (we would also like to explore how respondents understand the 'series of calls' rule);
- Any difficulty in recording journeys that start and finish at home (e.g. walking the dog).
- The instructions on 'Driver or passenger' (N);
- Any confusion with the different ticket types and instances where tickets have not 'fitted into' the current Travel Record format (e.g. new Oyster card system on the London underground) (J);
- Whether respondents fill in the day and date at the top of each page. Currently these are not included on the early example pages;
- How helpful the example is and whether interviewers fill in the initial blank page with one respondent in each household;

⁴ We reviewed 21 Travel Records from 8 households; these Travel Records were selected at random from a recently edited batch.

- Whether respondents enter the type of car rather than simply 'car' (M);
- How easy it is for the respondent to distinguish between food shopping and other types of shopping (A);
- Whether respondents read the instruction to complete the milometer and fuel gauge reading on the yellow chart.

WORKSHOPS WITH NATCEN INTERVIEWERS

1.4 Aims

Following the secondary analysis and prior to a phase of cognitive testing, workshops with NTS interviewers were conducted to identify and understand the kinds of errors respondents make when completing the Travel Record, any reformatting of information that is done and suggestions respondents and interviewers make for improvements. Findings from these workshops, alongside findings from the secondary analysis (described in Chapter 0) and the cognitive interviews (described in Chapter 0) informed the recommendations for improving the Travel Record contained in Chapter 0.

More specifically the objectives for the interviewer workshop were to:

- explore participants' experiences of respondent error in completing the NTS Travel Record;
- obtain their views and perceptions as to why these errors occur;
- identify the extent of 'editing' or reformatting of the Travel Record interviewers carry out;
- ascertain what changes to the content of the Travel Record would, in the interviewers' opinion, make the task of completing the Record easier for respondents;
- map participants' views about the impact of the layout and design of the Record on respondents' ability to complete it 'correctly';
- elicit suggestions for further changes that might ease the task for respondents.

1.5 Background to the workshops

Two researchers from the Question Testing and Development (QDT) Hub lead the three workshops. The workshops were conducted in London, Birmingham and Newcastle. Each workshop had between six and eight NatCen interviewers from eight of NatCen's nine field areas (see Appendix A for further details). Interviewer experience of working on the NTS varied, ranging from 18 months up to eight years. Most of the interviewers who attended the workshops worked on the NTS regularly. On the whole interviewers described the NTS to be "*non-intrusive*", a favourite and a preferred choice of survey to work on. In short, interviewers seemed to like the survey, which is good news as research has shown that interviewers' attitudes toward surveys can affect response rates (a positive attitude towards the survey can lead to high response rates)⁵.

⁵ Nicolaas, G., Legard, R., Collins, D. and Thomas, R. (2005) 'A review of non-response in NatCen face-to-face surveys' National Centre for Social Research.

1.6 Findings

Interviewers were given a number of pre-identified topic areas to openly discuss in turn. Findings from each of these areas are detailed in this section of the report.

1.6.1 Introducing the Travel Record

How interviewers introduce the Travel Record

Interviewers reported using a number of different strategies when introducing the Travel Record to respondents though most interviewers said they tend to keep it simple. One interviewer introduces the Record by saying *"it looks horrendous but I can assure you it isn't"*, another said to lighten the load she tries to *"jolly them into it!"*. At the end of a long interview, introducing the Record can be a bit of an imposition. One interviewer's tactic to overcome this is to roll into it and not mention the Record as a separate thing; *"the computer bit is nearly finished, there's one little bit we need to go through before we are done"*.

Other strategies interviewers reported using to introduce the Travel Record included explaining the Record in terms of *"things you can't ask about in a survey"*; mentioning the £5 voucher when they introduce the Record, which was felt to help with low income households; and, explaining to respondents during the interview that *"you will have a chance to give us some feedback about your experiences"*. Interviewers found that a successful strategy was to emphasise to respondents that the Record is their chance to give (us) feedback.

Respondents initial reactions to the Travel Record

Respondents reactions to the Travel Record depend on a number of factors, one being the way it had been introduced. As shown, interviewers adopted various different styles of introduction depending on what they felt comfortable with and what had been a successful strategy for them. Some interviewers said it was better to be *"up front"* about the Record at the beginning of the survey interview. Respondents, according to some interviewers, react well to this method and it never causes a problem. Other interviewers however had had problems introducing the Record right at the beginning of the interview and preferred to leave it until the end. People in problem areas require you to *"work on them"* so it's best to not mention the Record until the end. Some interviewers however said explaining the Record after the interview can be problematic because respondents react badly to being asked to do another task.

Questions respondents ask

Interviewers commented that people do not tend to ask questions about the Travel Record task as they have usually just completed a long CAPI interview. One interviewer said when she introduces the Record the respondent can think *"oh no, I've been suckered into this"*. Interviewers said that they tended to keep the explanation short as too much information could overload respondents, who might not remember it. Interviewers therefore tended to highlight the main points to for respondents to remember when filling in the Travel Records. These were return journeys, the purpose of the journey, 'escorting', 'public highway' (particularly relevant for rural areas), walks of 20 minutes or more, one line per journey rather than for each stage, and that respondents were not required to enter journeys in chronological order, so they could add in forgotten journeys using the next available row for that day.

Respondents reactions to children's Travel Records

Again, reactions to the child Travel Record varied widely. Some respondents perceived it to be a lot of work, particularly for parents with one or more young children. According to one interviewer, the ones who *"really don't like it are the parents with three children"*; and added *"you can't expect me to do mine, and that one and that one and I stand there saying it's very easy"*. This interviewer added, *"people get muddled filling in their baby one"* (under 2 years). Children of this age group could be dropped off and picked up by different people and this could get *"terribly confusing"*. The reassurance that *"it doesn't have to be complicated"* could help with this. Interviewers also found that including children in their explanation, if they were old enough, could help overcome initially negative reactions to the children's Travel Records. Interviewers commented that children tend to fill it in for a day or two and then give up and the parent then takes over completing it. Interviewers agreed that generally it was *"mum or dad who fills it in"*. One interviewer said that teenagers were unlikely to include journeys they make with their parents; instead they tend to include only journeys they make by themselves.

Interviewers suggestion(s) for improvement:

1. One suggestion was that the child Travel Record needs to be made more *"child-friendly"*, somewhere between the jotter and the adult Record. Another suggestion was that pictures could be included and maybe more colours, some interviewers felt that green is not suitable. Another interviewer suggested that each child has a different colour Record though this suggestion was not supported by all interviewers;
2. Interviewers also spotted that the child Record has 'diary' written on the front instead of 'Travel Record' and that this needs to be made consistent.

Collecting the Travel Records

Interviewers reported on the amount of reformatting they need to do, to put the Travel Records right after the mistakes people made. There was usually, as one interviewer put it, *"lots of untangling to do"*. The time it takes to go through the Travel Records and fill in parts which were missed or to seek clarification on certain items could vary widely among different households. Sometimes interviewers said they *"can be there longer than the initial interview"*. Another interviewer reported that a family with 5 or 6 Travel Records is *"half a morning's work"*; just *"making sense of it"* takes time. You can also be there a while trying to make sense of people's days as they had not included walks or waiting times; seeing the pattern of their journey day can be confusing.

1.6.2 Example pages

Some interviewers said they used the example page(s), others said they did not. Those who did use the example page(s) said they found them useful in demonstrating how to go about filling in the Record.

Blank example

There was a mixture of opinion in terms of the example pages. Some thought they were useful as you could go through specific examples with the respondents to demonstrate how to fill it in with an example related to their own circumstances. However others felt that as they cannot always fill in the blank page of every household members Record this page should be removed as people sometimes start filling it in by mistake. It was suggested that these might be better positioned at the back of the Record. One interviewer pointed out that you can always put a line through the page to discourage people from filling it in.

One suggestion (which received unanimous agreement in one workshop) was that we should remove the blank page altogether and create blank rows at the top of the filled in example to use as practice rows. However, it was felt that the bottom rows could be used in this way too.

Filled in example

All interviewers in one of the workshops agreed that it was "essential" to have a filled in example. One interviewer only uses this example as it's "very clear and it really says everything". Another interview said it's "got your walk, your train, your bus, your taxi, your season ticket, almost every possibility that you're likely to encounter". This interviewer tends to interview in rural areas where it is not considered to be such a difficult task as people often use cars.

Other interviewers did not think the filled in example was useful on the basis that people do not look at it and that this is obvious from the way they have filled in the Record. Another interviewer said that she did not use the filled in example page as she found respondents reacted badly when they saw it, saying, "they go white". This interviewer felt the example page to be overcomplicated. Another interviewer pointed out that "we don't all live in London"; the example page shows a common journey for London with three stages but some interviewers felt that most of the rest of the country tend to make journeys comprising of just one stage. A further interviewer said that the example can "frighten respondents", the elderly in particular. They do not want to fill it in in case they "make a mess".

Interviewers in one workshop emphasised that is important to have an example page but not something that's too busy as more people refer to this than to the instruction flaps.

Interviewers suggestion(s) for improvement:

1. Include a much more simple filled in example with a straightforward return journey by car and then one by bus and then a mixed stage journey;
2. Instead of including examples, which are often found to be confusing, dedicate more space to explanations displayed in larger print;
3. Use a different background on these pages, to make the example stand out more;
4. Remove the blank example page and incorporate space on the filled in example page to write into;
5. Alter the number of rows to six or eight; most journeys are there and back so there should be an even number of spaces for journeys. Interviewer said would prefer eight rows as some people do a lot of journeys;
6. It would be helpful to have the instruction about the space for extra journeys directly following the end of the last row so that people could see this more easily. Respondents often miss this instruction and try to cram everything onto the bottom of the page.

1.6.3 Side flaps and instructions

Interviewers could not comment in great detail on how respondents find the side flaps and instructions but they made a number of suggestions for how these could be better displayed and worded.

Interviewers suggestion(s) for improvement:

1. The instructions are in small print and there is rather a lot of information on the side flaps. One suggestion was to cut down the information and increase the size of the font to make it easier to digest;
2. Include all the instructions on a page inside the Record, before day 1. This would allow for larger font size as the instructions could be across a double page spread. However, there were mixed feelings about an exclusive instructions page replacing the flaps. One interviewer said she had had people who commented on using the flaps as they were filling in the Record and how useful they were;
3. Include all the instructions on one side flap at the front of the Record so that the flap could double over. This suggestion generated agreement within this particular workshop with interviewers saying it would be much easier for respondents to have all the information in the same place. According to interviewers, it would make the process of explaining where the instructions are easier for themselves;
4. Remove the top row on each page (thus having six rows per page) and use this space for the notes currently on the side flaps. This would mean that the notes were nearer to each column and the respondent would be more likely to read them. Other interviewers, however, felt that this might make the top of the Travel Record too crowded;
5. Note 'please take five minutes to read the instructions in the front of the Record – it will help you to fill it in' on the front cover. Currently it is too complicated and respondents are unlikely to read it.

Notes (A), (B), (C)

Interviewers also had a few suggestions for the notes displayed at the top of each column. It was seen as important to retain the reference to the instructions in there as some people do read instructions.

Interviewers suggestion(s) for improvement:

1. Add 'See Note A' at the top of each column. However others pointed out that if the instructions said **See note A** etc it might be too much instruction, you do not want to tell people to do too much as you might risk them not wanting to do it at all! Some interviewers thought that there is no purpose of the brackets around the letters;
2. Instead of (A), (B) etc we could use 'Note A' so they know where to refer. Some are confused by simply (A). Although the interviewer explains the Record they do not explain it to everyone in the household so some rely on the notes/instructions.

1.6.4 Common errors

Skipped pages

Interviewers commented that some people skip pages and start on the wrong day and "it's all chaos". They may then try to alter it but it is better to mark on that they have reversed the days and let the office deal with it. Some interviewers mark up the days at the top of the page with a magic marker to try and prevent this. Others call in to respondents homes or ring half way through the week to see how it is going.

Interviewers suggestion(s) for improvement:

1. Include tabs for each day, to make it clearer that there are 7 days and example(s). The pages could be tabs in the same way as a telephone directory;
2. Remove first example page.

Purpose of journey (column A)

- Type of shopping is a problem as respondents do not tend to note down whether they went food shopping or went shopping for other items;
- Some respondents will simply write 'leisure' which does not give enough detail;
- It is not always clear for who's purpose the journey was made, for example a parent might record 'went to football' but it was actually the child who went to football, the parent was simply providing a lift;
- People will often record multipurpose journeys in one row and have trouble deciding on the main purpose, for example when people went to the shops but also to the bank and to the supermarket etc.

Interviewers suggestion(s) for improvement:

1. The heading could read Why did **you** make this journey? Or Why did **you** travel there? Or What was the purpose of **your** journey? This would place them emphasis on **your**. Some interviewers thought if the headings were posed as questions, people might answer them!

Time left/Time arrived (columns B & C)

- Respondent's do not have problems filling in the time they left but they do not always recall the time they arrived, unless they are going to work or to an appointment and therefore this varies by the type of activity;
- This is particularly difficult with walks as people do not time them; formal journeys (e.g. going to work) tend to be easier to record.

From/To (columns D & E)

- Children may write a description of where they went from or to (e.g. school) rather than a village or town. This is something that can potentially be explored up when the Travel Records are collected. Adults sometimes do the same and write 'garden centre' or 'cinema' and do not note exactly where that garden centre or cinema was;
- Respondents often write in their home town rather than simply noting an 'H';
- Often return journeys are not recorded and interviewers generally felt that people tend to miss these out in particular. This might be because sometimes people do not actually get out of their car, they may be going to pick up the children and then coming straight home;

- Interviewers also commented that occasionally respondents would write in 'Local area' or 'town' rather than the actual place name.

Interviewers suggestion(s) for improvement:

1. Could change the heading to Where did you start from? It might be more user friendly to ask it in the form of a question;
2. Another option is to have a tick box for home and then if the respondent did not start their journey from home the place could be written in;
3. It was suggested that the instruction is altered to read 'From' or 'To' or 'Town name' or 'Name of' as respondents sometimes write in 'Local area' or 'town';
4. A further suggestion concerned return journeys - insert arrows to show the journey has simply been reversed and insert "*ghost lines*" or faintly printed arrows and a box to tick if it is a return journey. This would reduce the burden on respondents where they are currently required to enter the same information twice, once on each row. Interviewers agreed that many journeys are return journeys.

Day 7: Postcode

- One interviewer commented "*most people are unable to recall postcode*", especially for friend's houses though some respondents will offer to go look it up;
- People can be reluctant to give postcodes, some respondents worry about confidentiality of friends'/clients' addresses;
- Lots of people put in their full home address on day 7 which is a problem in terms of confidentiality.

Interviewers suggestions for improvement:

1. Remove 'Full address' from the first box though people may not always start their day from home;
2. Another option is to have a tick box for home and then if the respondent did not start their journey from home the place could be written in;
3. It was suggested that the instruction is altered to read 'From' or 'To' or 'Town name' or 'Name of' as respondents sometimes write in 'Local area' or 'town'.

Method of travel (column F)

- Stages – People often do not record the multiple stages of their journeys;
- Round trips – People often combine journeys, particularly when it involves taking children somewhere and going to pick them up. Dog walkers or people exercising tend to record these walks or runs as round trips (from home to home). These kinds of trip need to be thought of as "*a mile from A to B and a mile from B to A*" rather than as a 2 mile journey. Interviewers often need to alter this aspect of the Record after clarifying the journey with the respondent;
- Walks of under a mile – People often record walks of under a mile on days 1-6. People do not have concepts for the distance they walked and will just guess. People want to record walks to show they are active and some even include rounds of golf. The instructions for this are either not clear enough or people just do not read them. However, discounting walks can sometimes make it more difficult to understand the pattern of respondents days and it is hard to determine whether a mistake has been made;
- Walks on day 7 - People forget to enter their walks on day 7 because they have not done so all week;
- Public highway - There is "*confusion between walking on the public highway and in parks and with tarmac paths*". Walks away from the public highway do not need to be recorded and this is not outlined in the Record itself, it is up to the interviewer to explain this and

interviewers see it as a murky area. This is often a problem for dog walkers and so interviewers often give a more detailed explanation when they come across these types of people;

- Some people note the brand of car in the method of travel column. One interviewer had had someone put 'Jeep' all the way through his Travel Record;
- Some people include taxis in the car section of the Record rather than the public transport section and then record the make of car they travelled in at column M (Which car/motorbike was used).

Interviewers suggestion(s) for improvement:

1. Include all walks regardless of the length and then exclude them at the end. However others disagreed, as it would be too complicated. You would have to include all *"little walks round to the corner shop"* e.g. walk to sandwich shop, to pub after work, you would *"end up including so many walks that this Record would double in size"*.

Distance/miles (column G)

- Respondents do not tend to know distances and this is one of the more significant problems with the Record. One interviewer commented *"people who don't drive cars don't know how far things are"*. This problem is worse for respondents who use public transport and are therefore not looking at milometers, unlike car drivers. Children, especially, struggle with this column and can guess wildly at distances. Some interviewers look at maps and postcodes to work things out for themselves, one referring to this as *"doing a bit of homework"*;
- People have a tendency to over estimate, particularly where they have had to wait in congested traffic;
- Respondents find it easier to give the travelling time rather than the actual mileage especially on public transport;
- This information is often omitted in respondent Travel Records (and child's Travel Records as well) as people *"don't have a clue"*. One interviewer said that he estimated *"50% of respondents tell me where they travelled and I have to work out the approximate mileage"*. This interviewer also felt that some respondents found miles difficult to estimate and would be able to work out the number of kilometres more easily.

Number in party (column H)

- People do not always include themselves in the figure they enter in this column;
- People's accounts do not always add up which is more of a problem for return journeys where the number of passengers does not always tally. One interviewer said *"she might have been dropping little Johnny off and then she still has him in the car when she's coming back – or there's a mysterious passenger!"*;
- Another interviewer said that children are often involved in taxi trips where the number of passengers can vary considerably over quite a short journey including siblings and friends and so on. This makes entering the number of children very difficult.

Time travelling (column I)

- Respondents tend to include waiting times and find it difficult to distinguish between travelling and waiting time;
- Time spent travelling will not always add up to the time left and time arrived and this is a clue for the interviewer to ask further questions;
- Respondents often like to give you a round trip time rather than the time they got to their destination and then turned round and came back;

- People regard the start of their journey as where they were leaving from and what time that was, for instance if they walk 100 metres to bus stop, that can still be counted as travelling time.

Public transport

- People do not always record taxis in the public transport columns and instead record details of this journey in column M (Which car/motorbike was used). Respondents do not define a taxi journey as using public transport.

Ticket type (column J)

- This column is often not filled or respondents do not give enough information about the type of ticket they used.

Cost (column K)

- In particular, taxi fares tend not to be recorded and it is not always clear who actually paid for the taxi, for example it is not obvious whether the taxi journey cost £5 or whether each person contributed £5 each;
- The Oyster card system is very confusing as season tickets are covered in the main body of the survey but not pre-pay cards. The flexibility of the Oyster card system makes it very difficult to fit into the Record;
- Another interviewer found that bus fares are often omitted.

Number of boardings (column L)

- Sometimes people forget but this column is not generally found to be a problem.

Which car/motorbike (column M)

- People sometimes miss the car columns altogether. This may be due to their location within the Record (i.e. at the end after the public transport columns);
- Some people leave out journeys in other cars outside of the household, assuming that we only want to know about journeys made in their own cars;
- Respondents do not enter information consistently or fully, for example one interviewer said, *“the problem with these columns is that people will put in information once and then don't bother to put the rest in and you have to either ask them or assume it is the same”*.
- People will write 'friend's car' rather than the make but this is not required so is not a problem. Children will put 'dad's car' or 'mum's car' rather than the make of the car.

Interviewers suggestion(s) for improvement:

1. Change the colour of the headings on the page or have them in a bigger print to make them stand out more;
2. Insert a panel at the beginning of the Record for respondents to list the vehicles owned by the household. They would then only need to enter a number in column M and '9' for any non-household vehicle.

Driver/Passenger, Front or Rear (column N)

- Respondents often do not enter where they sat in the car and interviewers need to ask about this upon collecting the Travel Records;
- It was generally felt that respondents do not know what is meant by 'Dr/Pass'. 'Dr' especially is confusing and some respondents think this means doctor;

- Some respondents leave the column blank as they feel that if they drove their own car then *"it's obvious"*;
- One interviewer stated that *"the bigger problem is whether they sat in the front or the back"* and others agreed with this viewpoint. One stated *"passengers mostly forget to put whether they were in the front or rear of the car"*;
- It was also felt that people are more likely to remember their own position in the car but sometimes forget where their child sat.

Interviewers suggestion(s) for improvement:

1. Alter the format to include three little columns for respondents to tick (Driver, Front passenger, Rear passenger);
2. Another suggestion was that only passengers note their position in the car and that drivers are not required to enter anything;
3. One interviewer suggested that we insert another column for the driver only to record the section about road tolls and congestion charges.

Where parked and cost

- Interviewers felt this box to be problematic because it tries to *"do two things in one box"*. If respondents have not paid for parking they do not think they need enter where they parked.
- Information in this column is often missing. When it is entered respondents sometimes note that they parked in a private car park when it was actually public (for example they may write *"private car park for tesco's"*);
- One interviewer added, *"parking a car is in a car park"*. Respondents do not think they have 'parked' it on the street outside their house or in the drive and so leave it blank;
- Interviewers stated that very few parking costs are filled in and felt that it is likely that we are missing information here that interviewers are not aware of.

Interviewers suggestion(s) for improvement:

1. It would be helpful to pose this as a question asking, "where did you park your car?";
2. A further comment was that the notes for parking instructions need to be improved. Interviewers suggested including short hand codes for the answers we want (e.g. on street, in driveway etc).

1.6.5 Ideas for improvement and changes to the Travel Record

At the end of the three workshops, interviewers were asked, in addition to the suggestion made on individual items whether they had more generally suggestion for improvements of the overall layout and presentation of the Travel Record to make it more user friendly. Below is a summary of further suggestions for improvement:

Structure re-design

- Re-design the Travel Record into a list of destinations running down the page; each trip appearing as a column rather than a row. It might make the return journey aspect a bit simpler as respondents often leave out return journey details as they feel it to be a duplication of information and effort. A "*vertical listing*" would mean that the respondent would only need to enter information once. Currently the respondent is required to write out again the same information for columns D and E on the next row. This idea was supported by a number of interviewers;
- Others felt however that there is no need to alter the format of the Record; instead we need to cut down on the level of detail of the information to make the task easier for respondents. Very busy people find the level of detail too difficult and time-consuming to enter;
- Create a panel at the front of the Record in which to enter "*standard journeys*", for example a simple return journey to work or to school. This journey would then be referred to throughout the Record and only variations to this would be recorded separately.

Instructions as questions

- To make the Record easier to fill in pose the instructions at the top of the page as questions e.g. What was the purpose of your journey? What time did you leave? What time did you arrive? etc.

Answers as tick boxes

- Include a tick box to denote 'home' and if not, a space to write in where the journey started or finished. Interviewers found that respondents often write in their home town rather than 'H'. This suggestion was taken further to say that the Record could include **tick boxes** in other places e.g. respondents could tick either DR/FP/RP, which car and type of ticket they used. It was felt that a surprising number of people have real difficulties with writing and that having boxes to tick or options to circle would help rather than asking them to write out long hand entries.

Order of columns

- Change the order of columns so that the car columns come before the public transport ones. If respondents have a car they often stop after column I and all interviewers, in two of the workshops agreed that there are more car journeys than public transport journeys so it would make more sense to reverse these columns. The car columns are very difficult to try and fill in at the end if they forgot while filling in the Record initially;
- Alter the columns to ask first for the time left (B), the number in party (H), where the respondent leaves from (D), the method of travel they use (F), where they are going (E), the number of miles (G), the time spent travelling (I), the time they arrived (C) and the purpose of the journey (A). This was suggested by one interviewer who felt this order was more logical than the current order.

Column headings

- Make the column headings bolder and in capitals, i.e. PURPOSE of your journey.

Size, shape and colour

- In general interviewers were quite indifferent about the difference this would make;
- The paper could be improved as biro sometime smudges. The front of the Record appears dull and could benefit from graphic improvement;
- The Travel Record does not currently fit easily through a postbox; it needs to be taller and thinner. Another pointed out that we need to bear in mind people's writing and how this can differ in size;
- Blue and green can be problematic for colour blind people especially as the lettering is blue and green too as is the diagram on the side flaps. One interviewer suggested simply black and white though this may be *"a bit boring"*.

Other suggestions

- One interviewer said that the instructions about filling in the mileage chart could be in yellow to make it stand out;
- Insert space for additional notes on day 7 as well as days 1-6;
- The thank you should appear on the last page rather than on the back.

EDITOR COMMENTS ON SPECIFIC PROBLEMS WITH THE TRAVEL RECORD

Two members of staff in the operations team at NatCen hold overall responsibility for resolving queries about the NTS Travel Record data. Travel Records are received in batches and are keyed by a large team of staff; queries or discrepancies are then passed back to the two individuals in the office.

As part of this review a meeting was held with one of these editors who was asked to give detail on the data items that cause the most difficulty and require a large amount of editing. The following is a brief summary of the key points:

1.7 Purpose of journey (A)

- Respondents tend to put where they are going but **not why**.
- They also often enter insufficient information e.g. 'leisure'.

1.8 Time left (B) & Time arrived (C)

- These times can overlap and are often estimates.

1.9 From (D) & To (E)

- Respondents will enter a place that is "*too local*", for example 'golf club', 'town' or 'local area'. They will also enter a description of a place (e.g. 'mum's house') rather than where it is located.
- Day 7 postcodes are often missing or the only data recorded is the postcode. Editors expect that people would be reluctant to give postcodes, especially for friends or personal addresses.
- People often enter an **diagonal arrow** down to row 2 to indicate a return journey rather than writing the information out again.

1.10 Method of travel (F)

- 'Public highway' causes a problem in that it is unclear exactly where people walked, particularly if respondents have entered walking the dog.
- It can be very confusing in office where people have taken walks and not included them (albeit correctly) as you cannot be sure that they have not made a mistake. Respondents occasionally make a note at the bottom of the page to say when and how far they walked if it was under a mile and this helps in understanding the pattern of the day.
- Sometimes people make a note saying 'didn't use car today' and this may indicate that the respondent is not including walking, cycling or public travel in their Record.

1.11 Mileage (G)

- This is often a guess and can be wildly out. People often overestimate, especially children, when thinking about walks. Drivers tend to be more accurate.
- This is also difficult for journeys on public transport particularly the bus; the editors use a marked up tube map to enter correct tube distances.

1.12 *Type of tickets (J)*

- Oyster cards can cause problems as the new system is so flexible and therefore respondents can be confused about how to enter the details. There is no guidance on how to enter trips using Oyster cards in the current Record. There is often an unexplained discrepancy between the CAPI interview and the Record in that people will pay for tickets rather than using their season ticket. It may be that the season ticket has run out but that this has not been recorded.

1.13 *Where parked and cost (O)*

- Respondents will enter 'parked at work' and not whether this is a public or private car park. The information in this column is often missing.

1.14 *Return journeys*

- People will enter these as a round trip or forget to record their return journey. Some trips can be very complicated e.g. dropping off two or three children at separate places.

COGNITIVE INTERVIEWS

Following the secondary analysis and interviewer workshop stages a phase of cognitive interviewing with respondents was conducted in April 2006 to further evaluate the current Travel Record. This chapter details the findings from this cognitive phase and includes suggestions for improving the design of the Record made by respondents.

Cognitive respondents were asked to complete two days of the Travel Record thinking about the previous two days. A mixture of think aloud and cognitive probing techniques were used to evaluate the Record and the question probe sheet is reproduced in Appendix E. Appendix C contains further details on cognitive interviewing methods, the conduct of interviews and the analysis of data.

Specifically the cognitive interviews aimed to find:

- whether the current format or layout of the Travel Record is problematic for respondents;
- how respondents understand the task of filling in the Record, the kinds of strategies they use and subsequent errors they make;
- whether respondents refer to the instructions and example pages and whether these are easy to use;
- whether there are comprehension and recall problems with specific data items (i.e. the columns).

1.15 Sample members

The table below provides details on the characteristics of respondents interviewed as part of this study.

Table 0-1 Summary of characteristics of interviewed respondents

Characteristics		No. with characteristic
Gender of respondent	Male	15
	Female	16
Currently working	Yes	18
	No	13
Household composition	Lives on own	12
	Lives with other adults	8
	Lives with children	11
Car ownership	Yes	25
	No	6
Age of respondent	16-30	6
	31-74	19
	75+	6
Respondent with long standing illnesses or health problem(s)		1

Cognitive interviews were conducted with respondents in their own homes. Interviews lasted about an hour and were tape recorded with respondents consent. After the interview detailed notes were made and these were analysed using a content analysis approach, described in Appendix C.

1.16 Filling in the Travel Record

Respondents were told that we were 'testing' the Record to find whether there were problematic aspects to fill in. They were asked to fill in day 1 of the Record for the previous day, 'thinking out loud' as they did so. Talking through their thoughts as they went about filling in the Record gave a valuable insight into how different types of people approached the task. As much time as necessary was spent beforehand explaining the 'think aloud' technique. All interviewers were instructed to use the same introduction wording to ensure consistency across interviews. After filling in day 1 respondents were asked to turn to day 7 and fill in this day thinking about the day before yesterday again thinking out loud as they did so. Following this interviewers probed retrospectively about the whole task.

1.16.1 Comprehension of the exercise and initial reaction

Respondents were asked about their initial reaction to the Record and gave a range of responses. Some said they felt daunted by what seemed to be such a huge task, others immediate thought was that it was going to take a lot of time to fill it in and that it was too much to ask of people; one respondent said *"it seems like an awful lot, it's too busy"* (Female, early 50's, Car user, Skimmer 2). Occasionally respondents said they felt frightened or embarrassed by the task; in these cases they did not usually fill in forms, someone else did this for them. There was a general feeling among some respondents that they wanted to *"do it right"* and were concerned about making mistakes. On day 7 respondents noticed immediately that there was a different layout; some described the page as confusing and complicated. Again respondents felt they were being asked for too much detail, mainly in the form of postcodes. Some respondents were immediately concerned that they would not know the amount of detail required; one respondent said, *"...each address needs to be written in full, oh lord"* (Male, 79, Car user, Skimmer 2). Respondents generally felt this page would take too much time to fill in.

1.16.2 How different types of people approach filling in the Travel Record

A wide range of different types of people were interviewed and they adopted a number of different strategies for filling in the Record. Existing literature has shown that people approach tasks in a variety of ways, one common way being that they immediately look for the quickest way to complete the task or a 'shortcut'.

Shortcut heuristics

Heuristics are mental shortcuts or 'rules of thumb' that allow people to make inferences or decisions quickly and with reduced effort⁶. These heuristics have been used to explain how people draw conclusions in social settings but the same rule can be applied to a task such as filling in a Record. The desire to take a shortcut forms an important part of the cognitive process people go through when making decisions about each part of this Record. Different people therefore employ different 'rules of thumb' when filling in the Record and two main groups have been identified for the purpose of this report.

'Readers and 'Skimmers'

Jenkins et al⁷ suggest that people fall into two categories when completing a form; the 'Readers' are those that read through all or most of the material or instructions provided and the 'Skimmers' read only as much as they think is required to complete the task (or in other words taking the shortest route possible). Using this analogy Readers are on the whole able to work through a badly designed questionnaire or form but Skimmers are more likely to make mistakes if they are unable to understand quickly and easily the information presented to them. If the task becomes difficult Skimmers may become frustrated with the effort required and so give up on the task altogether. This simple distinction was found in the approach our respondents took towards filling in the Record. Our hypothesis, based on this theory, is that the Readers in our sample will have experienced fewer problems than Skimmers in completing the Record and those that they do have will be based on comprehension issues that can potentially be solved. The problems that Skimmers experienced are expected to be more complex; if Skimmers look for help when they come

⁶ Kahneman, D. and Tversky, A., (1973) 'On the Psychology of Prediction' in Psychological Review Vol 80, No 4, American Psychological Association.

⁷ Jenkins, C.R., Ciochetto, S. and Davies, W. (1992) 'Results of cognitive research on the public school 1991-92 field test questionnaire for the schools and staffing survey'. Unpublished, in Collins, D. and White, A. (1995) 'Making the next Census form more respondent-friendly' in Survey Methodology Bulletin July 1995, No 37, OPCS.

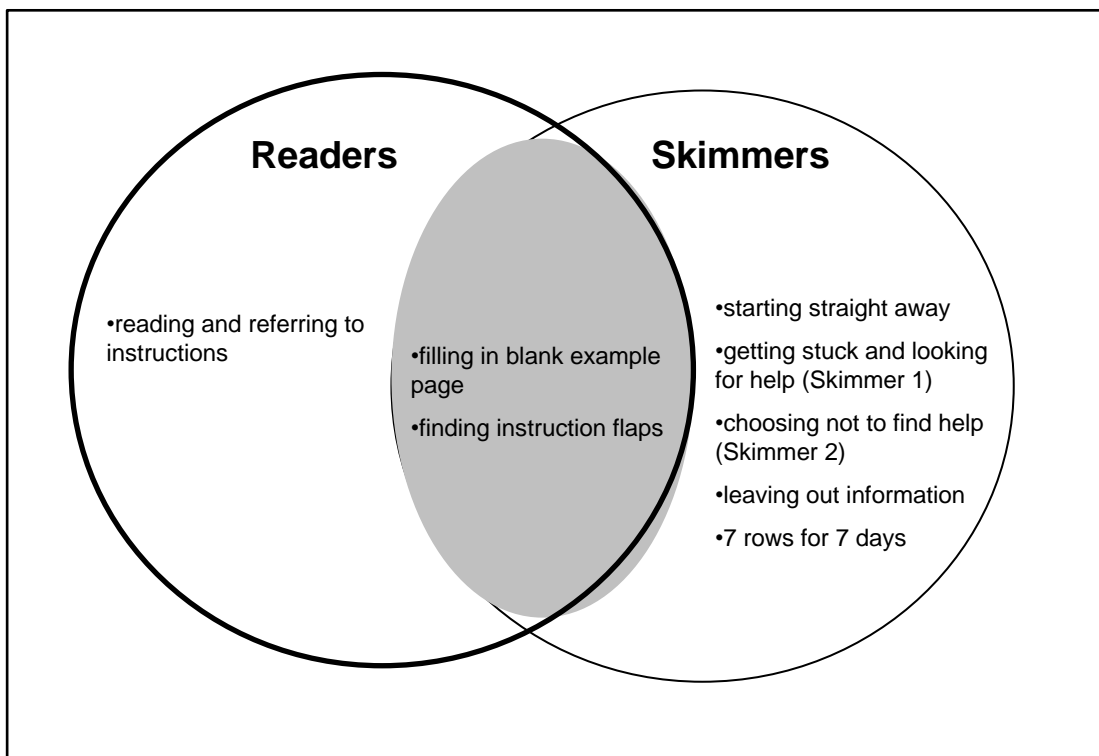
across difficulty it may be possible to solve the problems they had but the real difficulty is findings ways to enable Skimmers who will give up at the first hurdle to complete the Record.

1.16.3 Strategies for filling in the Travel Record

Using the categories identified above we have identified two main groups of people: Readers and Skimmers. Within the Skimmers different strategies were employed when the Record became difficult to fill in and two further groups have been identified: Skimmers who look for help upon 'getting stuck' (Skimmer 1s) and Skimmers who give up as soon as the task becomes too much effort (Skimmer 2s). It is clear that the information this final group requires must be easily accessible if they are to complete the task. With the exception of this clear difference in the way the two groups of Skimmer dealt with problems their overall strategies for filling in the Record were broadly similar. Readers and Skimmers will be referred to throughout this chapter and the finer detailed distinction between the two types of Skimmer (1 and 2) will be commented on where relevant.

The diagram below shows the main strategies respondents employed to complete the Record and which group or groups of people adopted each one.

Figure 0-2 Strategies for filling in the Travel Record



Generally our sample was made up of the first type of Skimmer (those who look for help upon 'getting stuck' or Skimmer 1s), a smaller group of the second type of Skimmer (those who give up when the task becomes difficult or Skimmer 2s) and a few Readers dotted here and there; it is expected that this pattern exists throughout the general population and therefore within respondents to the NTS.

Each strategy is described below in a little more detail:

Reading and referring to instructions

Readers tended to either **read through the instructions** before they began or **referred to the example page and/or instructions** as they worked through the task. None of our respondents read every instruction before beginning to fill in the Record. Some Readers immediately located the left hand flap and read through that, one respondent said *“I’m going to fill in each box as I read each instruction”* (Female, 30, No access to car.).

Filling in the blank example page

However, despite reading instructions Readers, as well as Skimmers, made the mistake of **filling in the blank example page** as day 1. Respondents did not notice the word ‘EXAMPLE’ printed across this initial page; it seemed logical to fill it in and in doing so respondents often did not notice the filled in example page. Anecdotal evidence from interviewers showed that this is something experienced in the field and respondent can become disheartened and lose motivation when they turn to fill in day 2 and realise they have made a mistake.

Finding the instruction flaps

Both Readers and Skimmers **did not always locate the instruction flaps** despite searching through the Record for help on filling in certain sections. While some respondents **found the front flap** with relative ease this did not always lead them to think that there would subsequently be one at the back.

Starting straight away

Both groups of Skimmers were more likely to want to **get started immediately** to get the task finished in as short a time as possible and would find the first place they considered they should write and start writing. This was a straightforward example of the desire to take a shortcut; respondents initial comments included:

“the impetus is to get on and fill it in rather than check the info that’s there”.

(Male, 51, Car user, Skimmer 1).

“I am one of these people that when I fill in forms I do not read the bits I am not interested in. I go straight to fill it in”.

(Male, 62, Car user, Skimmer 1).

Others commented that you do not feel you have achieved or done anything if you have not started writing.

Getting stuck and looking for help

The first group of Skimmers (1) would **start, get stuck and at that point search through the Record for help**, perhaps finding the example page or one or both of the instruction flaps. One respondent said:

“you don’t read the instructions about how to put your kettle together, you wait until something doesn’t work and then you go rummaging for the right bit”.

(Female, 27, Car user, Skimmer 1).

Another said, upon getting stuck, *“I wonder if there is a key”* (Female, 33, Car user, Skimmer 1).

Choosing not to find help

Other Skimmers (predominantly Skimmer 2s) **knew the instruction flaps were there but chose not to refer to them**, even if they were not sure they were entering the information correctly. In these cases the Skimmers took shortcuts through making assumptions about what was required or *“what would do”* rather than taking the time to ensure they had recorded the correct information. One respondent said the side flaps contained *“just text that’s dumped there with no reason to draw your attention”* and that if there was something he did not understand he *“wouldn’t be bothered to look for help anyway as it should be self-explanatory”* (Male, 29, Car user, Skimmer 1).

Leaving out information

Both types of Skimmer entered information in columns A to F only and **missed the public transport and car sections**. Some respondents simply did not notice these columns or had assumed they did not apply to them. Skimmers also on occasion took shortcuts through **omitting journeys deliberately** as it was too much effort to enter them. One respondent upon realising he had made another journey before returning home said:

“shall I just say home, is it cheating to say home? I have got three journeys that day so have I got to put all those three down?”

(Male, 62, Car user, Skimmer 1)

Seven rows for seven days

A few Skimmers (both 1 and 2) assumed the **seven rows** on day 1, or the blank example page, represented the **seven days of the week** and entered all of their travel for day 1 onto the top row.

1.16.4 How these strategies lead to respondent error

The strategies outlined above meant that our Readers and Skimmers made various mistakes and raised a number of issues when completing the Record; these problems are outlined below.

The following is a summary of the mistakes and queries made by **both types of respondent**:

Filling in the blank example page

As mentioned above both Readers and Skimmers began to fill in day 1 on the blank example page.

Missing return journeys

A common mistake for both types of respondent was the omission of return journeys. Some respondents raised this as a question during think aloud, stating they were not sure whether to include them or not. One respondent decided not to enter his return journey on the basis that *“if you have gone somewhere they can work out that you have also come back”* (Male, 38, No access to car, Skimmer 2) and therefore it was not necessary to enter it.

Round trips

Both Readers and Skimmers entered round trips into the Record as they considered a 'whole journey' to be from home and then back home again so that you end up where you started. This was particularly problematic for people who had not had a clear destination point mid way through their journey, for instance people who had been out exercising or going for a walk. All types of respondent also found it difficult to work out how to record journeys where they stopped off (e.g. to pick something up) or went out of their way (e.g. to take a friend home).

Walks

All types of respondent missed out walks as they did not realise they were meant to include them. People do not consider walks to be 'travelling' and so forget about them; one respondent said during retrospective probing *"I only considered vehicular journeys, never thought to include walks"* (Male, 51, Car user, Skimmer 1). Readers who had seen the instructions about walks experienced confusion over which walks they were meant to include, one respondent filling in day 7 said:

"well it says here to record all walks, even if they're less than a mile but I have only stepped out the door for a few yards as my car's parked outside the front door but there doesn't seem to be a place to put that on the form".

(Female, 78, Car user, Skimmer 2)

Another respondent (a Reader) was confused over whether to include walks she did at work up and down her hospital ward which is a quarter of a mile long. Other respondents (mainly Readers and the occasional Skimmer 1) would start off including walks and then forget about them as they went on and as the task became more complicated.

Journey stages

Both Readers and Skimmers were occasionally confused over how to enter the different elements or stages of a journey at column F. Some respondents entered each stage of their journey as a completely new journey and then had difficulty entering postcodes as they did not know the postcodes of bus stop or tube stations on day 7. Respondents tended to be inconsistent in the way they broke down their journeys, sometimes entering the information correctly and other times making mistakes.

Conflicting information

Both Readers and Skimmers were unsystematic in the way they filled in the data columns within the Record and this often meant that the information recorded in some columns did not tally with or match that recorded in others. One respondent, for example, entered the time he left home and the time he arrived at the supermarket in columns B and C (thus a round trip) but only recorded the time it took to get to the supermarket in column I, thus missing out the time it took to get home.

Postcodes

Both groups of respondents found it difficult to enter full addresses including postcodes on day 7. Respondents either did not have the information to hand, which could make them worry they had not completed the task adequately, or they did not wish to enter this level of personal information in the Record. Respondents often wrote their full home address in the Record after entering H to denote home on day 1.

The following is a summary of additional errors made or problems raised by **Skimmers**:

Understanding column headings

Skimmers occasionally became stuck at some column headings, column N (Dr/Pass) in particular. When this occurred Skimmer 1s tended to look for help while Skimmer 2s either guessed what to enter or simply **left the column blank**. Some Skimmers were confused by the A,B,C headings and again Skimmer 1s would look for further direction and Skimmer 2s were more likely to just ignore them.

Missing journeys

As stated above Skimmers would leave out some journeys, either deliberately or by mistake.

Seven rows for seven days

Again, as earlier mentioned some Skimmers mistook the seven rows on day 1 to signify the seven days of the week.

Too little or too much

The second group of Skimmer (2) took shortcuts through leaving columns or whole sections blank, as it was not immediately obvious what was required of them. The car sections were often omitted as respondents assumed this did not apply to them, one respondent *said "I'll ignore that, it doesn't concern me at all"* (Male, 73, Car user, Skimmer 2) even though he had used his car for every journey. On the other hand some respondents (both Readers and Skimmers) would enter too much detail into the boxes, particularly D and E, for example one respondent put all the information required in later columns into column D without realising it would be recorded later on.

New strategies

On the whole respondents worked across the page filling in each box; some would get to column F and begin the next row and either return to complete columns G-P or leave them blank. Two respondents used completely different strategies altogether. One of these began by filling in column A for each journey, thinking about the sequence of her day, and then filled in the remaining columns afterwards. In doing this the respondent made the mistake of entering each **stage** of her journey as a new journey. The second respondent entered information for his first journey up to column F and then wrote the mileage for each section of his journey at each line in column G and then stopped.

1.16.5 Specific problems with the filled in example page and instructions

A number of observations and problems were raised specifically about the example page and instructions when respondents filled in the Travel Record. These are detailed below:

Filled in example page

As previously shown some respondents referred to the example page while filling in the Record (Readers and Skimmer 1s) and others did not manage to find it (predominantly Skimmer 2s). Those who did use it had a mixture of options. Neither group of respondent studied the example page before starting to complete the Record; rather it was a useful example to refer to throughout the task, one respondent *said "it gave me what I needed to know so I didn't look at it any further"* (Female, 46, Car user, Reader). Another *said it was the first thing he looked at to get a "basic idea of what to do"* (Male, 52, Car user, Skimmer 1). A

third said it was helpful to find the sorts of things he could put it, H for home for instance and that he could abbreviate.

Despite these opinions both Readers and Skimmers thought the example page contained too much information. Some respondents saw the example page but chose not to look at it, one describing the page as *“unhelpful”* as there was nothing to catch his eye and make him want to look at it. Another said it was *“official looking and a bit boring”* and that she *“wouldn’t bother looking at it because you’re not gaining anything”* (Female, 36, Car user, Skimmer 1). Other respondents did not use the example page because they felt it did not apply to them or was not required, one said filling it in was *“common sense”* and another said *“it’s human nature, I thought it didn’t concern me”* (Male, 73, Car user, Skimmer 2). This respondent said in retrospect that he wished he had spent more time looking at it. Another respondent saw Covent Garden on the example page and said, *“oh London based”* and looked no further.

Respondents, predominantly Skimmers, who had not come across the example page while filling in the Record thought generally that it would have been helpful had they found it. Some felt strongly that it was important to have this example page as part of the Record to guide people in what to enter, one respondent said *“it is integral to this booklet to have that sample page there”* (Female, 27, Car user, Skimmer 1).

Respondents suggestion(s) for improvement:

1. The example page needs to be better signposted so respondents can find it more easily. One respondent described it as a *“big page of nothing”*;
2. Use a different colour to draw peoples attention to it;
3. Remove the blank example page as it confuses people and make this one the first page so respondents cannot miss it;
4. Enter the instructions underneath the headings on the example page.

Side flaps

As explained above some respondents did not notice either flap even in cases where they had filled in the blank example page. On the whole these were Skimmer 2s though some Skimmer 1s did not find the side flaps either. One respondent described the flaps as being *“hidden”*. Another pointed out that *“nothing leads you to the side flaps. The arrows on the example page say ‘please unfold the flap’ but these are underneath the side flaps so this is pointless and stupid”* (Female, 30, No access to car, Reader). Other respondents simply did not notice what the flaps were and thought they were there to hold down the pages or to *“keep the other pages tidy and in order”*. Another thought they were for decoration as there is a picture of a wheel on the front rather than any sign that they are instructions; she said *“they are a bit designey and arty”* (Female, 27, Car user, Skimmer 1).

Readers and Skimmer 1s found the front flap and reasoned there would also be one at the back, particularly if they needed to find help with the later columns. One Skimmer said *“it must have been somewhere”* and another said, *“it stands to reason that it would be on the other side”* (Male, 31, Car user, Skimmer 1). Others did not follow this logic and could not locate the back one, it did not automatically follow that it would be there, one respondent said *“this [the front flap] seemed obvious though the back one didn’t”* (Female, 34, Car user, Reader). Another respondent said *“no, that is not very distinctive at all. It’s not a lot of good having it at the back”* (Female, 62, Car user, Skimmer 2).

Some respondents (Readers and Skimmer 1s) just came across the instructions by flicking through the Record. Those who did find the instructions had different views on how useful they were. Some described them as useful, particularly those who were used to reading instructions, on exam papers for example. Others felt the print to be too small or that there

was too much to read. Those respondents who used these either referred to them as they filled in the Record or quickly scanned through a few paragraphs on the front one before starting, one respondent said *“I’m just skimming through, I must admit”* (Female, 36, Car user, Skimmer 1).

Respondents suggestion(s) for improvement:

1. Use a different colour for the instruction flaps to highlight their use;
2. Bring all information together and incorporate on a larger flap at the front. Some respondents thought the idea of a side flap was good as it enabled them to refer to it as they filled in the Record; it just needed to be easier to find;
3. Incorporate clearer instructions about what is required, one respondent suggested *“what would be ideal would be to have a double folding page of instructions and the example, all together”*;
4. Remove the flaps altogether and include the key information at the top of each column in a different colour or typeface;
5. The side flaps are currently *“too hidden”*, and need to be made more noticeable.
6. Make the side flaps more noticeable by indicating what they are so that people open them and read them, perhaps entering the information onto stiff card in the middle of the booklet;
7. Enter a bold clear instruction on the front page ‘please see example page and read instruction (side flaps) before filling this in’;
8. Remove the *“obvious”* instructions on the side flaps, like Time left (B) and Time arrived (C) to make room for other instructions.

A,B,C headings

Again, respondents gave differing reports of whether or how they used the A,B,C headings. Some Skimmers, particularly Skimmer 2s, did not notice these at all or noticed them but did not bother to try to find out what they were for or felt they did not need to use them. One respondent said:

“when it says purpose of journey and yours was to go to work you don’t need Note A, I mean what could be simpler?”

(Male, 79, Car user, Skimmer 1)

Others wondered about what these might mean, *“F, what does F mean?”* (Male, 90, Car user, Skimmer 2) but only searched for what they might mean when they needed help; this tended to happen when respondents reached the car section. Some Skimmers did not make the connection at all between the side flaps and the A,B,C headings. Others assumed they must be *“a key”* or *“some sort of legend”* and the real difficulty was finding the side flap. Other Skimmers thought the A,B,C was just some sort of order, like 1,2,3 rather than a guide to more information.

Generally, those who used the A,B,C headings to locate instructions found them to be helpful and cleared up confusion. A few Skimmer 2s experienced difficulty in understanding what they were for, one respondent said *“the A, B and C under the titles, that was confusing”* (Male, 90, Car user, Skimmer 2).

Top of page instructions

The instructions at the top of the page were the only instructions some Skimmers used and therefore they need to be extremely clear. Some described them as very helpful and self-explanatory. Other respondents reported not having seen them or really noticed them and preferred having the side flaps to refer to. It was generally felt that the abbreviations were

confusing, particularly column N (Dr/Pass) and column H (No. of boardings). Some respondents thought the line running along the top of the page to be awkward and unnecessary, one respondent said he had read the instructions immediately above the columns but nothing above the line and therefore had missed that he should enter return journeys and walks.

Respondents suggestion(s) for improvement:

1. Remove the line running along the top of the page;
2. Do not punch the hole in the top corner as it removes some of the notes;
3. Highlight 'Remember to include all return journeys back home' with an asterisk and move this instruction to the left hand side of the page to make it more difficult to miss;
4. Do not use any abbreviations;
5. Include clear step by step instructions about what to do on the front page.
6. The arrows pointing to the side flaps should be on the Travel Record pages, at either side of the columns rather than at the top where you do not see them;
7. Use white highlighted boxes (as used on day 7) for all instructions on the Record page as it really catches your eye on day 7 or enter important instructions in red;
8. Column headings could be in different colour to make them stand out more;
9. Write on each page 'please read all instructions carefully before completing the Record'.
10. Colour code the instructions so that there is a colour key; each column heading on the Record page in a separate colour corresponding with the matching instructions in colour;
11. Add more instruction about walks on the page.

1.17 How respondents described the task after completion

On completing the task respondents were asked how they had found filling in the Record. Respondents generally felt it to be quite straightforward whether they had made mistakes or not. The main point appeared to be that the task required a lot of time to fill in and read through the instructions, particularly for busy people who make lots of journeys. Other respondents (predominantly Skimmers) felt, in hindsight, that they should have spent more time reading the instructions, particularly those who were concerned about "*doing it right*". Some respondents said that the task was complicated and asked for too much detail and it was unclear why so much detail was required. It was also felt that the Record did not always give enough space to write in and some said they would have preferred tick boxes rather than having to write everything out themselves. When asked about the format of the Record respondents generally felt it to be workable; one respondent said he liked the format, it was "*progressive*" to him, moving from left to right across the page.

Difficult sections highlighted

Respondents were asked whether there were particular sections they found difficult; the following were highlighted:

Respondents found the **car section** generally quite problematic; it was not clear what they were meant to include and the abbreviations made the task longer and more difficult. The heading at **column N (Dr/Pass)** caused particular problems as this abbreviation was unhelpful and respondents sometimes did not look or could not find the relevant instruction.

Respondents also experienced considerable difficulty with the **walks instruction and the postcodes on day 7**. Respondents tended to not know postcodes or were reluctant to enter them. Walks were entered inconsistently or not at all and the instruction was described as confusing.

Respondents struggled with **column G (Mileage)** in particular and approximations at this column could vary widely. There was also the feeling that this could be ‘worked out’ at the office.

Respondents found it difficult, in some cases, to enter the **time left and arrived**, particularly for ‘informal’ journeys, for example social outings or day trips. Respondents tended to be clearer on these times if they needed to leave at or arrive somewhere by a specific time, for example going to work or to an appointment.

Respondents were generally unaware of the extra pages at the end of the Record and some commented that there would not be enough space for busy people who had made a large number of journeys. Respondents were also generally unsure what the space at the bottom of the page was used for. On the whole it was not mentioned or used.

1.17.1 How respondents approached each column and specific problems

Purpose of Journey (A)

On the whole respondents did not seem to have any major problems with this column and tended to think about what they had done on the previous day and the reasons why they had been out of the house. One respondent said he thought he was being asked to record:

“what the actual activity was, what the reason for doing the journey was rather than just destination”

(Male, 29, Car user, Skimmer 1).

The amount of detail recorded for purpose of journey varied from as little as ‘go to work’, for what were described as “*straightforward*” journeys, to more detailed accounts given by respondents who felt that they needed to add more detail, for example ‘go to church for a PCC meeting’.

On filling in the purpose of the journey (column A), there was evidence of confusion around whether to include return journeys, on the whole this tended to occur amongst both types of Skimmers although did depend on the type of journey. If it was a straightforward journey, such as ‘go to work’, respondents tended to record their return journey, however if the journey was a day out, respondents would be more likely to miss the return journey. One suggestion was to reposition the instruction ‘Remember to include return journeys back home’ so that it appeared next to this column, so that in theory it would be seen first.

Regardless of the type of respondent in terms of the three categories, there was some evidence of uncertainty around whether to include short journeys, such as dog walks or in one respondent’s case going round to her mother’s house that was 5 minutes away on her bike. One suggestion was to pose the column heading as a question; ‘Why did you make this journey?’ however in general the column heading was not problematic for respondents. The fact that all respondents could fill this column in is evidence of this. Cognitive testing also revealed evidence of uncertainty around recording separate journeys on separate rows.

The Skimmer 1s, in the odd case, referred to the example page to obtain an idea of the level of detail that was required of them. Rarely did any type of respondent need to refer to the instruction flaps when recording information in this column.

Respondents suggestion(s) for improvement:

1. Move the instruction ‘Remember to include return journeys back home’ to left hand side

- of the page, so that it appears next to column A;
2. Change the column heading to; 'Why did you make this journey?';
 3. Add an instruction on Day 1 to use a separate row for each journey.

Time left (B) & Time arrived (C)

In general respondents tended to be able to record the times they had left and arrived for each journey without any difficulty and the answer strategies did not differ between the three categories of respondents. Respondents reported on a range of different ways in which they had remembered this information. These included:

- having visualised the clock just before leaving;
- having this information to hand as it is the same each day, part of a daily routine, (especially if the respondent's journey was going to work);
- if they had had an appointment to get to, which may have meant leaving 5 minutes prior to the appointment allowing time to get there for example;
- basing the information on the time that they had left and the time they knew it would take to get to where they were going to work out when they had arrived;
- if they had arranged a time to have someone pick them up from their home or if they had arranged a time to meet someone; and
- having remembered hearing the time on the radio.

Respondents tended to find remembering the time they had left and arrived easier, and therefore gave more accurate answers, if the journey was one they did frequently or was part of their routine such as going to work or taking the dog for its daily walk. One respondent for example said she knew what time she had arrived the previous day as she always arrives at work at the same time every day, within a couple of minutes either way.

Respondents tended to find this information more difficult to recall if the day had not been a "scheduled day", or as one respondent put it "this was more difficult for social things" (Female, 27, Car user, Skimmer 1) and therefore respondents were more likely to guess rather than give accurate times. One respondent for example said she was not clock watching, as it was a leisurely day out.

From (D) and To (E)

On the whole most respondents tended to find this column straightforward. Respondents tended to write 'home' or the village in which they lived, when leaving from home and generally recorded the place name of where they had gone to, such as the name of the village or town. The amount of information differed from as little as a place name to full addresses, even on day 1. Respondents tended to record less detailed information about starting points and destinations if these were within their local areas. There were a number of errors made by all three types of respondents these included:

- recording destinations in column D (From). One respondent said she had done this because in the previous column she had entered time arrived and so was thinking where she had arrived at;
- entering destinations in both columns D & E;
- omitting information altogether in both columns D (From) and E (To) based on assumptions that it could be worked out using information recorded elsewhere in the Record, for example if the journey was a return one;

- recording 'home' in column D (From) and minimal detail of destination in column E (To), such as 'local paper shop' or 'sainsburys local'. Respondents tended to do this when the destination was in their local area;
- recording 'village', 'town' or 'local area' in both columns D (From) and E (To), based on an assumption that one of these should be used as the column heading suggested or if the respondent did not know or remember the address of the place.

The column heading prompt **Village/Town/Local Area** on the whole was not too problematic for respondents. Respondents tended to think about where they had come from and where they were going. In some cases however this heading caused problems for respondents, for example one respondent did not understand what was meant by 'local area'. One suggestion, made by a respondent who thought the column headings were "*a bit ambiguous*", was to change it to read 'place travelled from' and 'place travelled to' or 'destination'. See below for other suggestions made by respondents.

A problem potentially associated with recording '**round trips**' was highlighted. One respondent said she was thinking of one journey (one row of the Record) as from home to home. The instruction, which she had read, for columns D (From) and (To) 'write down the name of the place where your journey started and finished' encouraged her to think in this way.

Postcodes (on day 7)

In general respondents were able to record full or part postcodes of places they were familiar with, such as home or work. Respondents were generally not able to recall postcodes of other places. For example one respondent said:

"place of work was easy but when you go to places you don't normally go to, it's not so easy...if it was Asda or something like that I'd just put Asda, the road or whatever and think you've got the details now".

(Female, 31, Car user, Skimmer 1)

Respondents left this part blank if they did not know the postcode. The odd respondent went away and looked up the postcode however it should be noted here that the cognitive interview and interviewer effects might have influenced this.

Respondents' willingness to give details of their friends and family addresses and postcodes on day 7 varied. Some said that they would be happy recording addresses and postcodes, if known, of friends and family and others said that they would be concerned with issues of confidentiality, may get consent before doing so or would not feel comfortable recording any information at all.

Cognitive interviews revealed respondents classified as both Skimmer 1s and 2s did not always read the instruction to write H for home and on occasion even if they had read it, did not actually adhere to it.

Respondents suggestion(s) for improvement:

1. Change column heading to either:
 - 'Starting point' (D) and 'finishing point' (E);
 - 'Place travelled from' (D) and 'place travelled to' (E);
 - 'Place name of departure' and 'place name of destination.'

Method of travel (F)

Employing a range of different answer strategies, ease of recording the method(s) of travel differed considerably across those interviewed. Some of the answer strategies respondents used included:

- looking back at the filled in example page to see what they should be recording here;
- looking at the instruction flap for more information about what to record here;
- assuming all walks should be recorded (on day 1), despite not having read the instructions; and
- recording the method of travel with little difficulty, for example as one respondent demonstrated in a think-aloud “*method of travel bike*”.

Respondents who tended to use only one method of transport, car for example, were more likely to query why there were separate lines (1,2,3 for the different methods of travel). A suggestion to make this clearer was to state at the column heading ‘list as many as appropriate/used’.

Walks of a mile or more on day 1

Respondents who did record walks on day 1 were those who had read the instruction or those who said they were not sure whether to record walks so did so anyway, despite not having read the instruction. Of these was a mixture of Skimmer 1s and Skimmer 2s, Readers tended to correctly record walks. Respondents tended to be more likely to record a walk if the walk had had a “*specific purpose*” such as walking from home to the station on the way to work.

Respondents who did not record walks on day 1 had either not done any walks, had not read the instruction to include walks (both Skimmer 1s and Skimmer 2s) or did not consider the walks they had done as significant or having a purpose, “*not going somewhere*”, such as a dog walk. There was evidence that respondents would not have thought about recording walks at all, as they did not consider walking as travel. One respondent who had not thought about including walks for example said “*transport, I just assume it’s public transport and cars*” (Female, 31, Car user, Skimmer 1).

All walks on day 7

The Readers tended to take note of the change of rule for recording walks for day 7, explained in the instruction box on day 7. Both Skimmer 1s and Skimmer 2s rarely noticed or read the instruction about the rule change to walks. Similarly to day 1, some respondents said that they would not have thought about recording walks at all on day 7 as the walks they had done had been dog walks, which were not considered to be travel as such, or short walks which did not seem significant.

Round trips

Respondents who entered round trips tended to be dog walkers and did not think these should be recorded as two separate trips as they did not stop at any time. Both Skimmer 1s and Skimmer 2s entered round trips whereas no Readers in our sample entered round trips.

Respondents suggestion(s) for improvement:

1. Add an instruction somewhere to ‘list as many methods of travel as used’.

Distance (miles) (G)

On the whole respondents tended to know the distances of journeys that they made regularly, such as from home to work and were fairly confident about the accuracy of the information they were providing. Respondents who were familiar with their local areas and distances within these and those that were on the road a lot, or travelled by car, were also more aware of distances and found this information easy to recall.

Respondents who did not know or roughly guessed the distances they had travelled said they had not really thought about how far things were before. One respondent for example said she was not “*a very good judge of distances*” (Female, 76, No access to car, Skimmer 2). Respondents who used public transport and non-drivers tended not to be as aware of distances either. One respondent for example said, “*I don't know the distance in miles as I didn't drive it*” (Female, 34, Car user, Skimmer 1).

There was evidence to suggest a common answer strategy used by respondents was to use the time travelling and speed of which they had travelled at to estimate the distance in miles.

Number in party (H)

In general respondents reported on finding this column straightforward and there were no major recording problems. On the whole respondents were able to record this information without hesitation or having to search for help. The information required in this column was interpreted by one respondent as “*how many people you were travelling with*” (Female, 31, Car user, Skimmer 1).

There were however cases where respondents left this column blank. This tended to be where respondents were travelling alone, and so assumed it was obvious that they did not need to give this detail. Respondents who cycled also tended to omit this column, as they did not think it was necessary to fill it in.

In one case a respondent referred to the instruction flap for help as he had travelled on a motorbike (alone) but had set out with two other people, also on motorbikes. This respondent queried what to record in this column, recognising that if he recorded that there were three in the party, it might be interpreted as three men on one motorbike! Another respondent queried whether to include the taxi driver as part of the party travelling and decided not to on the basis that “*if I was on a train, I wouldn't include the train driver*” (Male, 29, Car user, Skimmer 1).

One suggestion was a change of column heading replacing ‘Number in party’ with ‘Number of people’. The column heading had thrown one respondent, as she did not expect to see the word ‘party’. Although the respondent understood what was being asked within this context, she suggested this column heading change to make the task clearer.

Respondents suggestion(s) for improvement:

1. Change column heading to ‘Number of people travelling’.

Time travelling (I)

Respondents in general did not seem to find this column problematic and reported on using a number of different answer strategies when recording the time travelling (in column I), these included:

- basing the information on how long the journey usually takes, be it the drive to work or the walk to the station for example;
- basing the information on the average time it takes to do the journey; taking into account the distance, traffic lights, speed limit and time of day;
- basing the information on knowledge of local area and having a good idea of how long it takes to get from one place to another; and
- basing the information on the times given at previous columns, Time left (B) and Time arrived (C), and working out the difference.

On occasion respondents recorded their time travelling in hours instead of minutes. This was a preference, as one respondent said:

“it’s a faff working it out in minutes and I thought the people being paid to analyse it could work it out”

(Female, 34, Car user, Skimmer 1).

The instructions in the Travel Record instruct respondents to exclude time spent waiting. Cognitive testing revealed that very occasionally respondents correctly excluded waiting times, these were both respondents who had not read the instructions as well as those who had (Skimmer 1s, Skimmer 2s and Readers). One respondent queried why the time travelling was needed if time left and time arrived had already been asked but then said *“I suppose...is that like if you stopped off or something for a drink”* (Female, 31, Car user, Skimmer 1). There was evidence to suggest that respondents were including waiting time. For example one respondent included time spent waiting for connections for the bus and for the tram.

Ticket type (J)

Respondents who had not used public transport on the previous day, rightly so, left this column blank, put a line through it or wrote in N/A or No.

Those respondents who had used public transport did not report on any problems with this column. In general respondents were able to state which ticket type that had used, a ‘monthly pass’ for example. One respondent, a 16-year-old who is entitled to free travel on London buses, wrote in ‘free’ instead of Oyster card.

One respondent, although had used a taxi on the previous day, stumbled when he came to this column and said:

“it assumes that you have used public transport when in fact if you had used a taxi, it wouldn’t be applicable”.

(Male, 29, Car user, Skimmer 1).

Cost (K)

On the whole respondents did not encounter any major problems recalling the cost, whether it was the cost of a bus ticket, a taxi fare or no cost at all due to the respondent’s eligibility for free travel.

There was evidence to suggest that respondents who had not read the instruction flap were at times unsure of what to record, these tended to be both types of Skimmers. For example one respondent, who had not read the instruction to record NIL for a season ticket, queried how to record his monthly ticket:

“I wouldn’t put the cost of a monthly would I? I’d just put down roughly what it costs [per day] would I?”

(Male, 44, Car user, Skimmer 1).

Number of boardings (L)

Generally respondents seemed to comprehend what information they were being asked to provide in this column, regardless of whether they were a Reader or one of the two Skimmers. For example one respondent entered ‘2’ because she had caught two buses. Another respondent made an error by only recording ‘2’ but had boarded three times and thought it might be helpful if the column heading instead said ‘How many vehicles did you board on this journey?’.

One respondent was frustrated when he came to this column as he had used a taxi and therefore this column was not applicable. This respondent said this column assumes you have used public transport and he thought it was *“silly to lump together public transport and taxis”* in the same section and suggested the column heading said ‘Number of boardings (if applicable)’ (Male, 29, Car user, Skimmer 1).

Respondents suggestion(s) for improvement:

1. Change column heading to ‘How many vehicles did you board on this journey?’;
2. Change column heading, so that it’s more appropriate for taxi users, to read ‘Number of boardings (if applicable)’.

Which car/motorbike used (M)

The Readers tended to read the instructions on the back flap and record the relevant information, reporting on little difficulty in doing so. The answer strategies employed by the two groups of Skimmers tended to be fairly similar. In some cases respondents looked for help when they got stuck and did not know what was required of them and in other cases respondents did not look for help and instead used guesswork. The odd respondent left the column blank all together because they were not sure what to record here. Those who did not read the instructions, and therefore used their own judgement or guessed either recorded the make or model of the car, wrote ‘my car’, ‘car’ or ‘van’. The main difference between the two types of Skimmers was that Skimmer 2s tended to be more likely to leave this column blank if they were not sure what was required of them.

If they found the instruction flap at the back of the Record, with the instructions for this column, respondents were generally able to record the correct information without any problems. This suggests there are no fundamental problems with the instructions, should they get found. There was however evidence that respondents searched for help but could not find it. It became apparent in the cognitive interviews that this was due to the fact the instructions for this column appear on the back/left hand instruction flap, which is more likely to be missed because of it’s position.

There were a number of suggestions respondents gave to improve the column heading and therefore make it more clearer for the Reader, see below.

Respondents suggestion(s) for improvement:

1. Change column heading to:
 - 'Who's car was used?';
 - 'What make/type of car was used?';
 - 'Record which make or model of car used'.

Driver/Passenger (N)

On the whole this column proved to be the most problematic for respondents. In many cases respondents were confused by the abbreviations in the column heading. DR was often understood, on first glance, to mean Doctor. PASS was confused with a parking pass, a bus pass, a disabled person's pass and even by one respondent who thought it meant a pass in terms of success in Doctor's qualifications. Commonly respondents did not understand what FP and RP meant, without referring to the instructions on the side flap at the back. The Readers within the sample tended to look for help straight away when they needed it and once they had found the back side flap were able to understand what they were supposed to record here.

The Skimmer 1s tended to search for help when they were unsure of what was required of them in this column. This either involved looking for instructions on the side flaps, which were not necessarily always found, or flicking back to the filled in example page which did not help seeing as it was only filled in with DR anyway. On occasion, if the instructions were not found or if the respondent had no idea, the Skimmer 1s left the column blank.

The Skimmer 2s were less likely to search for help at all when they came to fill this column in and as a result tended to leave this column blank if they were unsure of what to record.

The odd respondent worked out what the abbreviations meant without looking for help in the instructions or on the example page but still reported on being confused at first. For example, one respondent thought at first that DR meant doctor but because this column was in the car section worked out that DR/PASS was referring to driver and passenger. See below for the suggestions for change given by respondents.

Respondents suggestion(s) for improvement:

1. Change column heading to 'Driver/Passenger';
2. Add more detailed information about what is required in this column at the column heading.

Where parked and cost (O)

Respondents, on the whole, did not tend to look for help when they came to this column. Regardless of whether the respondent was a Reader, a Skimmer 1 or a Skimmer 2, there were three main answer strategies used by respondents:

- leaving the column blank if they had not been the driver;
- leaving the column blank all together if they had been the driver but had not paid anything for the parking (often if they had parked on the street or on their drive); and
- recording where parked but leaving the cost blank if they had not paid anything for parking.

Respondents on the whole assumed that they only needed to use this column or record where they had parked if they had paid for parking. One respondent for example assumed he should only enter where he had parked if it had cost him anything. One suggestion to

overcome these recording errors was to ask about where parked and cost in two separate columns. Another suggestion, to make the task clearer, was to specify 'where driver parked' and 'if cost: enter amount' in the column heading.

An error some respondents made was to record information in this column even if they were a passenger. One respondent said when she goes out with other people she always pays for parking, another was the passenger but still filled in where her and her husband had parked and how much it had cost them.

Respondents suggestion(s) for improvement:

1. Separate the 'where parked' and 'cost' into two columns;
2. Change column heading to 'where driver parked, if cost enter amount'.

Road tolls/Congestion charges (P)

There were no reported problems faced by respondents with this column or the column heading. In general all respondents understood what information they would need to record here. Examples of the type of thing respondents would record here were payment for road use, bridge and tunnel cost, road tolls and the congestion charge in London. The majority of respondents left this column blank, wrote NIL or drew a line through it as it did not apply to them and no-one looked for help in the instructions or on the filled in example page.

The table below summarises the main problem the different groups of respondents experienced when filling in the columns. The four columns at the right hand side of the table indicate which group or groups experienced each problem (**All**, Readers (**R**), Skimmer 1s (**S1**) and Skimmer 2s (**S2**)).

Table 0-3 Summary table of main column problems

Column	Problem or error	All	R	S1	S2
A	Confusion around including return journeys			✓	✓
	Confusion around whether to include short journeys	✓			
<i>B & C</i>	<i>No problems</i>				
D & E	Recording destinations in column D instead of origins	✓			
	Entering destinations in both columns D & E	✓			
	Leaving both columns D & E blank	✓			
	Recording minimal information in columns D & E (e.g. sainsburys local)	✓			
	Entering 'village' 'town' or 'local area' in both columns D & E.	✓			
	Lack of knowledge for postcodes in general and reluctance to record friends/family's postcodes if known	✓			
	Not writing 'H' for home on Day 7			✓	✓
F	Incorrectly recording walks on Day 1			✓	✓
	Incorrectly recording walks on Day 7			✓	✓
G	Recording round trips			✓	✓
<i>H</i>	<i>No problems</i>				
I	Including time spent waiting	✓			
<i>J</i>	<i>No problems</i>				
K	Confusion around how to record ticket type			✓	✓
<i>L</i>	<i>No problems</i>				
M	Leaving the column blank				✓
N	Comprehension problems with column heading (DR/PASS & FP/RP)	✓			
	Leaving the column blank			✓	✓
O	Leaving the column blank if they had not paid anything for parking	✓			
	Entering information even if they were the passenger	✓			
<i>P</i>	<i>No problems</i>				

1.17.2 Order of the Travel Record

In general respondents were happy with the order of the Travel Record, it seemed to follow a “logical order” and to some the order did not make any difference as to how the Record was completed. One respondent said she thought she would have completed the Record in the same way if it were asked in a different order, with the same instructions. The odd respondent said they would have preferred to be asked about their travel information in a different order. The following were suggestions made by respondents:

Respondents suggestion(s) for improvement:

1. Swap round the last two sections (J-L and M-P), asking about car travel (columns M-P) before public transport (columns J-L);
2. Remove the break/divide between J-L and M-P as your eyes cut off after column L as it visually cuts the last columns off as they look separate;
3. Move From (D) and To (E) so that they appear prior to Purpose (A). One respondent for said “*sequentially it would make more logic to be asked where I was coming from and where I was going to and then about the activity I was doing*” (Male, 29, car user, Skimmer 1).

In general respondents did not comment on the horizontal format of the Record however one respondent said he liked the way “*it goes across the page...prefer it horizontally rather than vertically as it makes more sense, it’s like a journey!*” (Male, 32, Car user, Skimmer 1).

1.17.3 Appearance

As part of the cognitive interview respondents were asked what they thought about the way the Record looked; its size, shape, colour and so on. There was a mixture of comments, some of which included:

- it looks like an old fashioned bureaucratic form;
- a handy size, plenty of room to put stuff, well laid out;
- the colour is boring, a bit government;
- looks like an exam paper or an MOT booklet;
- very official looking;
- colour could be more fun;
- shiny cover is good idea.

1.17.4 Acceptability of the task

After filling in the Record, as part of the task, respondents were asked whether they could think of any reasons why they would not want to fill it in. The following are some of the reasons respondents gave:

- it takes too long and asks for too much detail;
- it is repetitive and requires a lot of writing;
- it would be too complicated to Record a number of trips on different forms of transport;
- concern about privacy and confidentiality;
- it would be too daunting and too much work to fill in for a big family.

1.17.5 Suggestions for improvements

Respondents were also asked, as part of the cognitive interview, whether they had any suggestions for ways in which the Travel Record could be improved to make it more 'user friendly'. Respondents specific comments on the layout and appearance of the Record are shown below:

Layout

Respondents suggestion(s) for improvement:

1. To have tick boxes with multiple choice options and return journeys;
2. Day 7 needs to be made simpler. It looks too busy at the moment and is asking too much information and people won't record it correctly if it appears this way.

Size, colour, appearance

Respondents suggestion(s) for improvement:

1. Make the Travel Record smaller and sturdier;
2. Use different colours to make important items stand out more;
3. Change the font type occasionally;
4. Include more visuals; photographs and pictures.

SUGGESTIONS FOR IMPROVEMENT AND RECOMMENDATIONS

This section brings together the suggestions for improvement made by interviewers (**I**), editors (**E**) and respondents (**R**) throughout this report and comments on where this is supported by our secondary analysis (**SA**) and cognitive findings (**CF**). This information is presented in a grid format; the suggestions for improvement are shown on the left and on the right are five columns, a tick denoting where each suggestion was supported by the five different types of evidence. As expected some points were supported by all five types of evidence while others were only raised by one group or type of evidence. This does not mean, however, that suggestions with just one tick are any less important or significant than those suggestions with five ticks; rather this suggestion was only relevant or apparent to that group.

After highlighting the suggestions on each section of the Travel Record our overall recommendations for re-design of the Record are outlined. These recommendations are laid out as general principles for improvement rather than prescriptive detail of each and every change in wording. Once these principles have been agreed with the Department and a professional designer hired we can begin to explore practical ways of implementing these recommendations. In places we have highlighted specific data items we recommend are removed from the Travel Record and these, in particular, need to be considered by the Department before taking further.

1.18 General layout

Suggestion(s)	SA	I	E	R	CF
<p>Columnar approach Redesign the Travel Record into a "<i>vertical listing</i>" of destinations running down the page; each trip appearing as a column rather than a row to minimise duplication of information and effort. NB: Not all interviewers agreed with this view; others felt there is no need to alter the format of the Record; instead the amount of information should be cut down to make the task easier.</p>		✓			
<p>Order of columns Change the order of columns so that the car columns come before the public transport ones as these are often missed.</p>		✓			
<p>Panel for standard journeys at the front of the Record Create a panel at the front of the Record in which to enter "<i>standard journeys</i>", for example a simple return journey to work or to school.</p>		✓			

Suggestion(s)	SA	I	E	R	CF
<p>Answers as tick boxes</p> <p>Interviewers commented that a surprising number of people have real difficulties with writing and that having boxes to tick or options to circle would help rather than asking them to write out long hand entries. Editors agreed that this would be a good idea as it would help improve accuracy and would also speed up the process for respondents. This would be particularly useful at columns D and E where respondents could simply tick a box for 'home'. Interviewers also suggested inserting arrows at columns D and E to show the journey has simply been reversed and insert "<i>ghost lines</i>" or faintly printed arrows and a box to tick if it is a return journey. Interviewers agreed that many journeys are return journeys. Tick boxes would also be useful at column N, respondents could simply tick DR/FP or RP. Respondents agreed with this some stating that they would have liked to have tick boxes with multiple choice options rather than writing the information in themselves. Respondents also thought tick boxes to be a good idea for denoting return journeys.</p>		✓	✓	✓	
<p>Graphic improvement and colour</p> <p>Improve the overall look of the Record, currently it is "<i>a bit boring</i>". It was also commented that the Records are either "<i>too blue</i>" or "<i>too green</i>" and more colour should be incorporated, particularly at the instructions and side flaps. Respondents suggested using warmer, more vibrant colours and different fonts within the Record. Some respondents also commented that there should be more "<i>visuals</i>", more photographs and pictures.</p>		✓		✓	
<p>Tabs for each day</p> <p>Insert tabs for each day to make it clearer that there are 7 days and example(s).</p>		✓			
<p>Shape</p> <p>The Record does not currently fit easily through a postbox; it needs to be taller and thinner. Some respondents thought a smaller and slimmer Record might have been more useful and easier to fill in.</p>		✓		✓	
<p>A straightforward format for day 7</p> <p>Respondents felt they were asked for too much detail on day 7 and that the task needs to be more straightforward; currently it looks too busy and respondents felt that many mistakes would be made on these pages.</p>		✓		✓	

Recommendations

- **Retain a row approach rather than moving to a columnar format.** Our evidence suggests that the problems with the Record would not be solved by adopting a columnar format; rather the problems are related to other aspects of the Record such as not being able to locate instructions and confusion over specific data items and the example page. In addition, switching to a columnar approach would carry significant risks in terms of disrupting the continuity of the data.
- In general, **request less detail** from the respondent. The Record asks for a large amount of information and evidence showed that filling in this level of detail could often be burdensome for respondents. Exact data requirements need to be confirmed with the Department.
- Alter the task so that the respondent **does not need to write in as much** information as is currently required. Introduce tick boxes to make filling in the Record quicker and easier. Respondents could find the task lengthy and burdensome and some commented that they would have preferred to be able to tick a box rather than write out details into the Record.
- In general, improve the layout of the Record through **professional re-design** and introducing more colour. Certain aspects of the Record were confusing and could be improved through re-design. Respondents also commented that colour could be better used to highlight important points and assist with making the Record easier to fill in.
- In general, **improve instructions** (see further recommendations). Some of the instructions on the side flaps were found to be confusing for those respondents who referred to them.
- **Reverse the car and public transport columns.** Evidence showed there to be a greater number of car journeys than those involving public transport and it was generally felt that the car columns should follow directly after the main journey columns.
- **Remove the lines** between the three sets of columns. In some cases respondents found these lines to be a 'barrier' to the car and public transport columns and thus did not fill them in.
- Turn column headings into **questions** (e.g. 'what time did you leave?') to better direct the respondent as to what information is required, without having to refer to instructions. Respondents were often not prepared to consult instructions and so it was necessary to ensure the column headings 'made sense on their own'.
- Alter the **shape** of the Record slightly so that it is able to easily fit through a postbox.
- Introduce **'tabs'** for each day (similar to a telephone directory) so that respondents can find each day easily.
- Alter the format so that it is **easier to record return journeys** through introducing lines or arrows to denote this.

1.19 Example pages

Suggestion(s)	SA	I	E	R	CF
<p>Remove blank example page</p> <p>Interviewers and respondents suggested removing the blank example page. Respondents often mistook this for the first page and began entering information on it. These respondents, upon realising their mistake could become very disheartened and may give up on the task altogether. Respondents did not tend to notice the word 'EXAMPLE' written across the page. It was felt by both interviewers and respondents that space could be incorporated on the filled in example page to practice writing into.</p>		✓		✓	✓
<p>Simple filled in example</p> <p>Improve the current filled in example page by making it simpler, perhaps including a more straightforward example of a return journey. The abbreviations on this page were also felt to be confusing, particularly Dr/Pass and DR/FP/RP at column N. Generally both interviewers and respondents felt the inclusion of this example page to be important.</p>		✓		✓	✓
<p>Example should 'stand out'</p> <p>Make the example page more obvious and easier to find. Suggestions included using different colours and backgrounds. Respondents said the example page needs to be better signposted and that people's attention should be drawn to it, so you "<i>can't miss it</i>". This was supported in our cognitive findings; many respondents did not find the example page at all.</p>		✓		✓	✓
<p>Even number of rows</p> <p>Alter the number of rows to six or eight; most journeys are there and back so there should be an even number of spaces for journeys. This interviewer view was supported by our cognitive findings; respondents could be confused by the seven journey rows and mistake these as representing seven days, one for each day of the week.</p>		✓			✓

Suggestion(s)	SA	I	E	R	CF
<p>Extra journey pages need to 'stand out'</p> <p>Move the instruction about the space for extra journeys to the end of the last row so that people could see this more easily. Respondents often miss this instruction and try to cram everything onto the bottom of the page. Cognitive findings showed that respondents were generally unaware of the extra pages at the end of the Record.</p>		✓	✓		✓

Recommendations
<ul style="list-style-type: none"> • Remove the blank example page and incorporate more space onto the filled in example page for interviewers and respondents to practise on. This will also bring people to the filled in example page as it would then be the first thing they see. • Improve the example page by making it more simple, straightforward and use a more suitable example (e.g. a return journey). Respondents often missed out their return journey home. • Use a different colour for the example page so it catches the eye. • Remove any abbreviations. As stated, respondents were often unprepared to consult instructions meaning particular abbreviations at columns could be misunderstood. • Remove a row (on all pages) so there are 6 instead of the current 7. Evidence showed that respondents could assume the seven rows on the first page were for the seven days of the week. It was also found that many journeys are return journeys and so an even number of rows would be more appropriate. • Move the instruction about extra space to a better location so it catches the respondents eye. This instruction was rarely noticed.

1.20 Side flaps

Suggestion(s)	SA	I	E	R	CF
<p>Reduce the amount information on side flaps</p> <p>Interviewers and respondents both felt there was too much information on the side flaps and interviewers suggested increasing the font size. Reducing the amount of information would make the flaps clearer and easier to read and respondents would also be more likely to read the information. Respondents also suggested removing "obvious" instructions to make room for the more important ones.</p>		✓		✓	✓

Suggestion(s)	SA	I	E	R	CF
<p>Bring instructions together</p> <p>Interviewers and respondents felt the instructions on the side flaps should be brought together in one place; as the cognitive findings showed respondents often could not locate the back flap even after having found the front one. It was suggested by interviewers and respondents that all instructions were included on a larger, and more obvious, front flap at the front of the Record.</p>		✓		✓	✓
<p>Side flaps need to be better signposted</p> <p>As shown respondents could not always locate the side flaps. Respondents suggested using a different colour to highlight them or adding a note to the outside of the flap to say more clearly that there are instructions inside. One respondent described the flaps as being “<i>hidden</i>”. Another respondent pointed out that “<i>nothing leads you to the side flaps. The arrows on the example page say ‘please unfold the flap’ but these are underneath the side flaps so this is pointless and stupid</i>”. Another respondent suggested including the instructions on a stiffer flap in the centre of the booklet.</p>				✓	✓

Recommendations

- **Reduce the amount of information** on the side instruction flaps and make the **terminology** throughout the flaps more consistent. Respondents commented that there was too much information on the side flaps and that this could discourage reading them. It was also thought that the terminology was inconsistent in places.
- **Bring all the information on the side flaps together** and incorporate it on one side flap at the front of the Record. The existing Record has two flaps (one at the front and one at the back), both containing instructions. Respondents who were willing to search for help with completing the Record did not always locate either flap, the back flap in particular. Therefore bringing the information together and introducing one flap at the front of the Record would enable respondents to find instructions more easily.
- Highlight the side flap by introducing an **instruction on the outside of the flap**, enabling respondents to find it more easily. As shown, respondents often did not locate either flap and so better ‘signposting’ to instructions is required.
- Incorporate more **colour** into the side flaps so the information stands out, perhaps through colour coding, using a key or some other kind of visual link.

1.21 Other instructions

Suggestion(s)	SA	I	E	R	CF
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<p>Incorporate clearer instructions</p> <p>Respondents suggested including clearer step by step instructions about how to complete the Record on the front page. Interviewers suggested adding the note 'please take five minutes to read the instructions in the front of the Record – it will help you to fill it in' on the front cover; currently it is too complicated and respondents are unlikely to read it. Respondents added that the instructions on walks are particularly difficult to understand and that better guidance is required. Cognitive findings showed that clearer instructions were required as respondents were often confused by instructions, sometimes could not find the appropriate instructions (and may subsequently give up altogether) and in some cases did not bother to look for help at all.</p>		✓		✓	✓
<p>Move instructions to the top of each column</p> <p>Respondents suggested removing the flaps altogether and instead including the key information at the top of each column in a different colour or typeface. Although it was generally felt that the side flaps were important the view that more information should be included at the top of each column was supported by interviewers. Cognitive findings further supported this idea as respondents, skimmers in particular, were not prepared to search for help with filling in the Record; they wanted the information to be "<i>right there</i>".</p>		✓		✓	✓
<p>Add 'Note' A</p> <p>Interviewers considered the A,B,C instructions to be confusing and this was supported by the cognitive findings. Interviewers suggested adding 'See Note A' or 'Note A' rather than simply A. Some respondents were confused by these letters and some ignored them altogether.</p>		✓		✓	✓
<p>Improve layout at top of page</p> <p>Respondents felt the line at the top of the page should be removed as it prevents people from reading above the line. Both interviewers and respondents commented that the hole punched at the top of the page meant some text was omitted. As respondents often omit return journeys, interviewers and respondents both felt the instruction 'remember to include return journeys back home' needed to be highlighted and perhaps moved over to the left of the page next to column A. As previously mentioned abbreviations were generally felt to be unhelpful and confusing.</p>		✓		✓	✓

Suggestion(s)	SA	I	E	R	CF
Instructions as questions Pose the instructions at the top of the page as questions e.g. What was the purpose of your journey? Why did you make this journey? What time did you leave? What time did you arrive? etc.		✓		✓	

Recommendations
<ul style="list-style-type: none"> • Introduce clearer instructions on the front page and better highlight them, perhaps using more colour. • Improve the Improve the information at the top of each column, remove any abbreviations and make terminology more consistent. As earlier stated, abbreviations could be confusing, particularly for those who were not prepared to look for, or could not find instructions. • Highlight the link between the column headings and the side flaps, using 'See Note A' for example. The letters in brackets at the top of each column were not always understood.

1.22 Specific suggestions for improving each column

Purpose of Journey (A)

Suggestion(s)	SA	I	E	R	CF
Move return journeys instruction As shown above respondents suggested moving the instruction 'Remember to include return journeys back home' to the left hand side of the page, so that it appears next to column A. Secondary analysis supported that respondents often omit return journeys.	✓		✓	✓	
Include instruction on using separate rows Some respondents commented that they would have liked an instruction next to column A to clarify that a separate row was needed for each journey.				✓	

Recommendations
<ul style="list-style-type: none"> • Move the instruction about return journeys to sit next to this column. Respondents often missed return journeys and so this instruction must sit in a better location, where it is more likely to catch the respondents eye.

- Insert an instruction about **using a separate row for each journey** next to this column. Respondents can often become muddled by what to classify as a 'journey' and a 'stage' and how to enter these into the Record. Respondents occasionally entered information about multiple journeys into one row, particularly return journeys ('there and back').

Time left (B) & Time arrived (C)

There were no specific suggestions for these columns.

From (D) & To (E)

Suggestion(s)	SA	I	E	R	CF
Remove 'local area' Interviewers suggested asking for the 'Name of town' rather than Town/Village/Local area as some respondents simply enter "local area" or "town". Our cognitive findings supported this view; respondents suggested asking for 'starting point' and 'finishing point', 'place travelled from' and 'place travelled to' or 'place name of departure' and 'place name of destination'.		✓	✓	✓	✓
Remove 'full' address from first box As respondents often fill in their full addresses on day 7, thus compromising confidentiality, it was suggested that 'full' is removed from 'full address at the first box'.	✓	✓			✓
Remove postcode Interviewers and respondents both questioned why postcode is collected and it was generally felt to be asking too much of respondents. Respondents often do not know postcodes and/or are reluctant to enter them. Secondary analysis supported this further.	✓	✓		✓	✓

Recommendations

- **Remove 'local area'** from the headings at columns D and E. This wording could encourage respondents to actually record 'local area' in the Record, rather than the area name, to indicate that they had journeyed to a local place.
- **Remove postcode;** this is too difficult for the respondent and compromises confidentiality as respondents regularly enter their home postcode on day 7. On the whole, the only postcode respondents knew is their own home and occasionally work. Respondents also worried when they did not know the postcode, thinking they had "*done it wrong*". Others would become annoyed and ask why this level of detail was required.

Method of travel (F)

Suggestion(s)	SA	I	E	R	CF
<p>Include or exclude all walks</p> <p>It was generally felt that the instructions on walks are very confusing for the few who notice them. Interviewers suggested asking respondents to include all walks and those not required could be deleted in the office.</p> <p>NB: Interviewers did not agree on this view; some felt this to be asking too much of respondents. Secondary analysis and cognitive testing showed that very few respondents included walks as people do not tend to read instructions and walks are not generally considered to be 'transport'. The alternative is to include no walks at all.</p>	✓	✓	✓	✓	✓
<p>Include better instructions about 'journeys' and 'stages'</p> <p>General confusion existed over the distinction between journeys and stages and this was supported by interviewers and respondents. This concept is not explained anywhere in the Record and the first place a 'stage' is mentioned is on the back flap at column L. One respondent suggested adding the instruction 'list as many methods of travel used'.</p>	✓	✓		✓	✓

Recommendations

- **Walks are very problematic and are recorded inconsistently.** The exclusion of walks sometimes prevents interviewers from pinpointing mistakes in the Record as they cannot picture the overall travel pattern of a respondents day. Further guidance is needed from the Department about the data requirements. Possible options would be to ask respondents to record all walks for each travel day (rather than only for day 7) or to ask for all walks to be recorded on day 1, not day 7.
- Incorporate a clear instruction about what is required in terms of **'stages'** at the top of column F and explain this concept earlier on in the instructions on the side flap.

Distance (miles) (G)

Suggestion(s)	SA	I	E	R	CF
<p>Remove column</p> <p>Interviewers and respondents felt that people do not know how many miles they have travelled and approximations can vary widely. Both interviewers and respondents suggested that this could be computed or "worked out" in office rather than asking respondents to guess. Cognitive testing showed that estimations can be very inaccurate and respondents are often not at all confident in their answer. Secondary analysis showed this to be one of the items most often omitted.</p>	✓	✓		✓	✓

Recommendations

- **Respondents do not know how many miles they have travelled** and question why this is required of them. Estimations could vary wildly from an accurate answer to a complete guess and that this column was found to be burdensome on the respondent.
- **Remove** this from the Record and impute from origin and destination data.
- If this item is retained **do not ask for part miles**, except half miles, and remove this from the example (5.3).

Number in party (H)

There were no specific suggestions for this column.

Time travelling (I)

Again, there were no specific suggestions for this column but interviewers generally felt that respondents include waiting times and this view was supported by respondents during cognitive testing. Readers occasionally realised they should exclude time spent waiting and a few skimmers but on the whole this instruction was missed. As shown in the main body of this report respondents also tended to enter conflicting information into the Record (for example including the time spent going to the supermarket and home again at columns B and C and only the time spent getting to the supermarket in column I).

1.22.1 Public transport/taxi columns**Ticket type (J), Cost (K) & Number of boardings (L)**

Interviewers commented that few respondents fill in these columns and this was supported during our cognitive testing phase. Respondents commented that it seemed strange to lump taxis together with public transport as Taxis are not generally considered to be a form of public transport.

Suggestion(s)	SA	I	E	R	CF
Improve instructions on tickets Interviewers felt that the instructions about types of ticket were confusing and respondents agreed with this view. Oyster cards were particularly difficult as they are so flexible and therefore difficult to incorporate in the Record. Therefore instructions about types of ticket need to be improved. Secondary analysis showed the cost column to be one of the more likely to be left blank.	✓	✓	✓	✓	✓

Recommendations

- Clarify with the Department the **level of detail** required on types of ticket.
- **Improve instructions on ticket types** incorporating clear instructions on what to record if an Oyster card was used. Currently there is no instruction on Oyster cards in the Record.
- **Consider moving the cost of taxi journeys** into a separate section or including in the car and motor vehicle section. Respondents did not include taxi journeys as 'public transport'. The ticket type and number of boardings columns can also cause confusion as they are not relevant to taxi journeys, the only relevant column being the cost of the journey.

1.22.2 Car and motor vehicle columns

Which car/motorbike used (M)

Suggestion(s)	SA	I	E	R	CF
<p>Car columns should 'stand out'</p> <p>Interviewers felt that these columns should stand out as respondents sometimes failed to notice them. The blank lines or gaps between columns I and J and columns L and M should be removed as they can encourage respondents to stop and return to column A to complete the next journey. This was supported by the cognitive testing; some respondents missed the car columns altogether or assumed they did not apply to them.</p>		✓		✓	✓
<p>Panel for cars at the front of the Record</p> <p>Create a panel at the front of the Record in which to enter household vehicles and then respondents could refer to a number throughout the Record. It is felt, however, that generally speaking only readers would fill in this panel.</p>		✓			
<p>Improve column heading</p> <p>The column heading was generally found to be difficult to understand and a number of alternatives were suggested: 'who's car was used?', 'What make/type of car was used?' and 'Record which make/model of car was used'</p>				✓	

Recommendations

- **Improve the heading** at this column to make it clear to respondents what information is required.

Dr/Pass (N)

Suggestion(s)	SA	I	E	R	CF
<p>Improve column heading</p> <p>The heading Dr/Pass was found to be the most problematic of all headings and therefore must be altered so that it can be understood at face value. DR/FP/RP was also confusing along with other abbreviations in the Record. Respondents suggested altering this to Driver/Passenger and adding more detail at the column heading.</p>		✓		✓	✓
<p>Remove Dr/Pass</p> <p>It was also suggested that this item be removed as interviewers and respondents both raised question of the relevance of where a person sat in the car.</p>		✓		✓	

Recommendations

- **Remove** this item as respondents often questioned it's relevance.
- Alternatively **collect this information within the CAPI questionnaire** as it is unlikely to change throughout the Travel Record and respondents often end up entering the same information each time.
- If this item is retained, **improve the heading** at this column to make sense on its own, without having to refer to instructions.

Where parked and cost (O)

Suggestion(s)	SA	I	E	R	CF
<p>Divide column into two It was generally felt that this column was trying to do two things at once, find out where the car was parked and how much it cost. Thus, this column was often ignored.</p>		✓		✓	✓
<p>Improve instructions on parking There is a lot of information on how to record where the respondent parked and some found it confusing. The box is also too small to enter the detail required. One respondent suggested using codes to alleviate this problem and make the task simpler. The information to be entered and instructions on this both need improvement.</p>		✓	✓	✓	✓

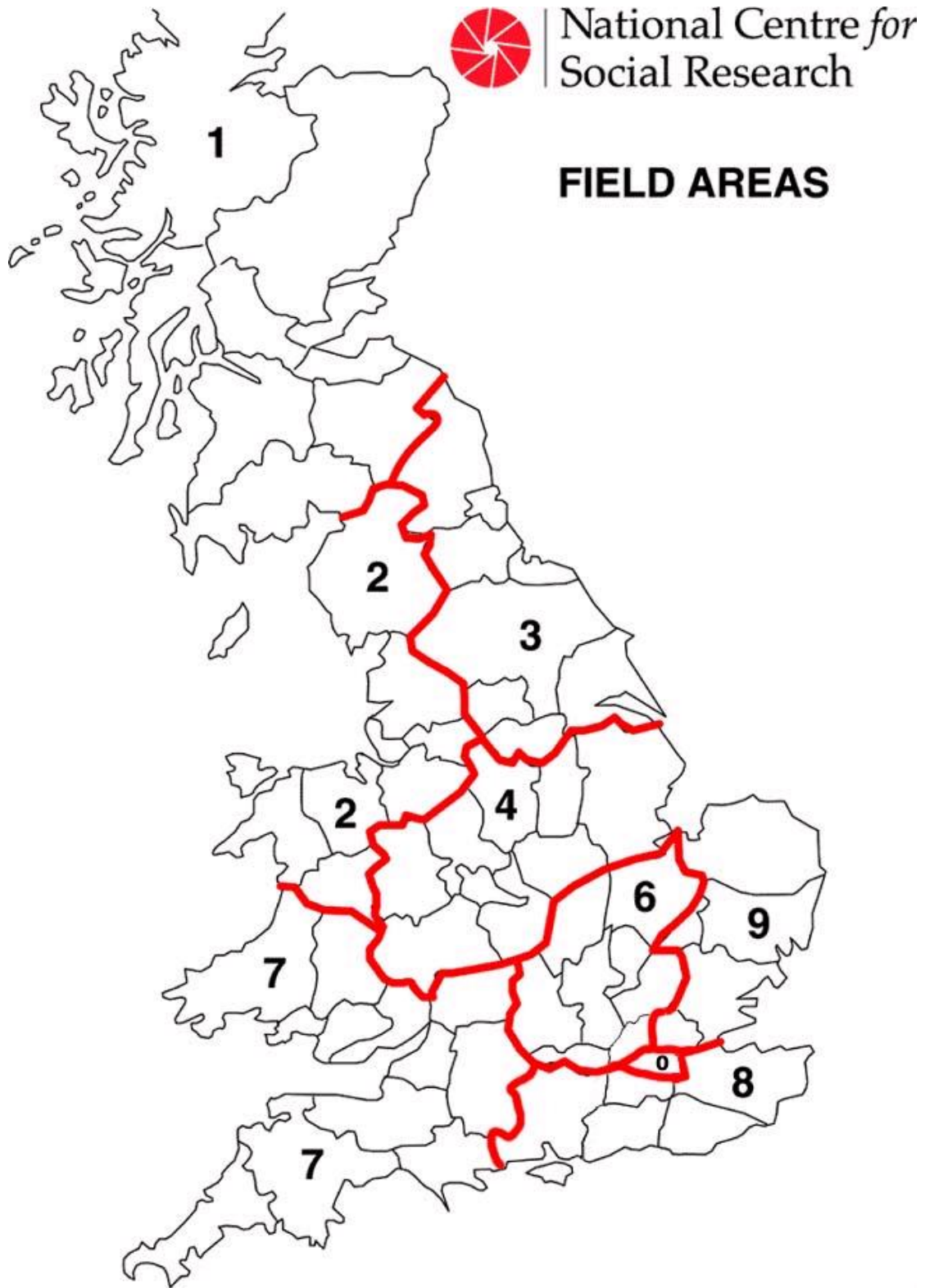
Recommendations

- **Divide this column into two**, it currently attempts to collect two pieces of information.
- Alternatively, this information could be **collected within the CAPI questionnaire**, again respondents often end up entering the same information throughout the Record.
- If retained, **improve the instructions** at this column and in the flap.

Congestion charges/road tolls (P)

There were no specific suggestions for this column.

APPENDIX A BREAKDOWN OF FIELD AREAS



APPENDIX B INTERVIEWER WORKSHOP TOPIC GUIDE

NTS Travel Diary Review INTERVIEWER WORKSHOPS - Topic guide

Objectives

- To explore participants' experiences of respondent error in completing the NTS diary
- To obtain their views and perceptions as to why these errors occur
- To explore the 'editing' or reformatting of the diary interviewers carry out
- To ascertain what changes to the content of the diary would make the task easier
- To obtain participants' views about the impact of layout and design on the ease of the task
- To explore suggestions for further changes that might ease the task for respondents

Introductions

- Introduce moderators and QDT Hub
- Explain purpose of the workshop
- Set out format and ground rules for the session

- Ask each participant to give a brief introduction in turn:
 - Name and area
 - Length of time working for NatCen
 - Length of time and frequency working on NTS

1. Explaining the diary

- How do they introduce the diary to respondents
 - What kind of explanation do they give, and why
- How do respondents react to the diary
 - What kinds of questions do they ask
- Importance of the initial explanation, and why
 - Why respondents make mistakes when filling in the diary

2. Brainstorm session

A. Participants work in pairs to identify typical errors that respondents make when filling in the NTS diary

B. Feedback from pairs to the whole group. Moderator writes each suggested change on to a flip chart as prompts for discussion during the workshop

- C. Go through issues from the brainstorm in turn;
- For each error, ask for reasons why occur
 - Types of edit they have had to do
 - What could be done to prevent them occurring

3. Completing the Diary

Then go through each section of the **diary page for Days 1 to 6** to identify **any other types of error** that can occur when respondents are completing the pages

- Types of error
 - Possible reasons for them
 - Types of edit required
 - What could be done to prevent these errors occurring

Then go through the aspects of the **diary page for Day 7** which are different to days 1-6.

- Full address and postcode
 - Possible reasons for them
 - Types of edit required
 - What could be done to prevent these errors occurring
- Walks of less than a mile
 - Possible reasons for them
 - Types of edit required
 - What could be done to prevent these errors occurring

Child diary

- Common mistakes
- Different aspects to adult diary - Number in party divided into adults and children

Now want them to look at the diary as if they themselves were a respondent. Want them to think of changes that would assist respondents to fill in the diary correctly first time, i.e. without the help of an interviewer.

4. Specific features of the Diary

- Views about the **layout** of the diary pages; wording, spaces for comments etc.
 - Any suggested improvements
- Views about the **column headings**
 - Any improvements to the wording of each heading, and why
 - Any improvements in terms of size, layout etc., and why
- Views about the **example pages** (completed and incompleted)
 - How useful: which and why
 - Any suggestions for how could be made more helpful for respondents
- Views about the **instructions** for respondents
 - Location of instructions (side flaps)
 - How clearly signposted to respondents
 - Any suggested improvements

5. Suggested improvements

- What are the principal changes that would make the task of completing the diary easier for respondents
- Our idea - common addresses at the front of the diary/CAPI interview e.g. work, school, food shopping.
 - Views and reasons
- If they were re-designing the diary from scratch what would they do differently, and why
 - Size & shape
 - Font size
 - Colour
 - Other
- Any other issues which participants would like to raise

APPENDIX C TECHNICAL DETAILS OF COGNITIVE PHASE

This appendix describes in further detail the design and conduct of the cognitive testing.

Study Design

This project was designed to test the current row-based format for the Travel Record to find whether we should move to a columnar approach through uncovering the different problems respondents experience upon filling in the Record. The study was designed in a two-stage research programme, firstly to evaluate the existing Travel Record and secondly to develop and test a new Record. Following these stages a pilot study of the new Record would be conducted. This report details the first stage which included secondary analysis of 2004 Travel Record data, workshops with experienced NTS interviewers and a phase of cognitive testing.

Cognitive respondents were asked to complete two days of the Travel Record thinking about the previous two days. Once this had been done interviewers asked a number of specific probes to ascertain what they understood particular aspects of the Record to mean and how and why they decided to enter each piece of information. Respondents were encouraged to 'think-aloud' as they filled in the Record. Interviews were tape recorded and conducted by NatCen researchers and field interviewers trained in cognitive methods. Tapes were reviewed and detailed notes made. Notes were analysed using a content analysis approach described below.

The aim was to conduct 32 interviews covering the range of different types of respondents. Characteristics identified as being associated with travel were:

- age;
- whether currently working;
- household composition, specifically whether live with children;
- whether own or have use of a car.

These characteristics were used to set quotas as shown in table 1.

Table 1 Illustration of recruitment quota to achieve 32 interviews

	Men					
	Working			Not working		
HHL D comp.	Lives on own	Lives with other adults	Lives with children	Lives on own	Lives with other adults	Lives with children
Achieved interviews	3	2	3	3	2	3
	Women					
	Working			Not working		
HHL D comp.	Lives on own	Lives with other adults	Lives with children	Lives on own	Lives with other adults	Lives with children
Achieved interviews	3	2	3	3	2	3

Cognitive Methods

Cognitive interviewing methods, which are derived from cognitive psychology, enable researchers to examine (in greater detail) the question and answer process, helping to identify problems with questions and possible solutions. Cognitive interviewing techniques focus on four main processes:

- how respondents understand and interpret questions;
- how respondents recall the information required to answer questions;
- the judgements they make as to what information to use when formulating their answers; and
- how to respond to the questions.

The two most frequently used cognitive interviewing techniques are ‘think aloud’ and probing. In this study a mixture of think aloud and probing techniques were used. In the think aloud technique, respondents are asked to say out loud what they are thinking as they go about answering completing the task. For example, respondents would be encouraged to articulate what they think a particular data item means, what information they are drawing on to complete each section, what decisions they make about what they are being asked to provide or what information is required to answer it and how they provide their (final) information for each item. In addition, for self-completion questionnaires or in this case a Travel Record, think aloud methods can be used to explore how the respondent goes about completing the form, highlighting any layout problems. In the probing technique the interviewer will ask specific, usually scripted, questions which provide similar information. These ‘probes’ are partly pre-scripted and provide a guide to the topics to be covered in the cognitive interview. Probing was carried out retrospectively, once the form had been completed. A copy of the cognitive probes used can be found in Appendix E.

Recruitment

Interviewers were asked to recruit their own respondents through knocking on doors and were each given a quota to fill. Interviewers were given broad areas in which to carry out their screening to ensure a spread of respondents living in urban and rural regions. The areas in which interviewing took place were:

- Greater Manchester;
- South East and Greater London;
- Orpington, Kent;
- Washington, Tyne and Wear;
- Grantham.

Interviewers were also given letters for each respondent explaining more detail about the study, providing contact details for the researcher and confirming the appointment. Copies of the screening and quota sheet and the letter for respondents are contained in Appendices D and F.

Some quotas were not filled because particular types of respondent were quite rare (see Table 2). In total 31 interviews were conducted. Table 5.1 in Chapter 0 shows the breakdown of respondents who were recruited and interviewed by quota type.

Table 2 Number of respondents required in each quota and number interviewed in each quota

HHL D comp.	Men					
	Working			Not working		
	Lives on own	Lives with other adults	Lives with children	Lives on own	Lives with other adults	Lives with children
Number of interviews set to achieve	3	2	3	3	2	3
Number of interviews achieved	4	1	3	2	3	1
HHL D comp.	Women					
	Working			Not working		
	Lives on own	Lives with other adults	Lives with children	Lives on own	Lives with other adults	Lives with children
Number of interviews set to achieve	3	2	3	3	2	3
Number of interviews achieved	3	2	3	3	2	3

Conduct of Interviews

Cognitive interviews took place in respondents' homes and were conducted face-to-face, on a one-to-one basis, to ensure respondent confidentiality. Interviews lasted around an hour and were recorded with respondents' consent. Respondents were given a £20 High Street voucher as a token of our appreciation for taking part in the interview.

Analysis

The members of the research team and the field interviewers, all of whom were trained in cognitive methods, made detailed notes on their cognitive interviews, with reference to the recording of the interview. These notes, recordings of the interviews and the completed test questionnaires were reviewed as part of the analysis process.

Notes were analysed using a content analysis approach based on Framework, an analytic tool developed by the Qualitative Research Unit at NatCen. A matrix was set up, which listed the respective areas of the Record we tested across the page and cases down the page. The matrix included a summary of the characteristics of respondents; such as their gender, who they live with, whether they were in or out of employment, and if they owned a car. Under each question of the Travel Record, a summary was made of each respondent's understanding of the question, recall strategies used, judgements made in formulating an answer and the answer provided. Any other problems were also recorded. Thus data could be read

horizontally as a complete case record for an individual, or vertically by question, looking across all cases.

Once the matrix was completed the data were reviewed. In reviewing the matrix the full range of problems with the Record were explored.

APPENDIX D COGNITIVE RECRUITMENT QUOTA SHEET

**Cognitive testing of the NTS Travel Diary
Recruiting respondents**

A - Using the 'doorstep pointer' introduce the study and establish whether the individual would like to take part.

B - Next, see whether they fit into our quota. We need to ensure we have a good spread of people so have some criteria to fill. You need to interview **6** people in total, please refer to the red boxes on the opposite page to identify these 6.

Q1 - Car ownership

Do you own or have continuous use of a vehicle at present?
INCLUDE NOT JUST CARS BUT ALSO LIGHT VANS, MOTOR BIKES, SCOOTERS AND MOPEDS (and company cars).
ENTER A TICK AT 'YES' OR 'NO' IN THE TALLY CHART

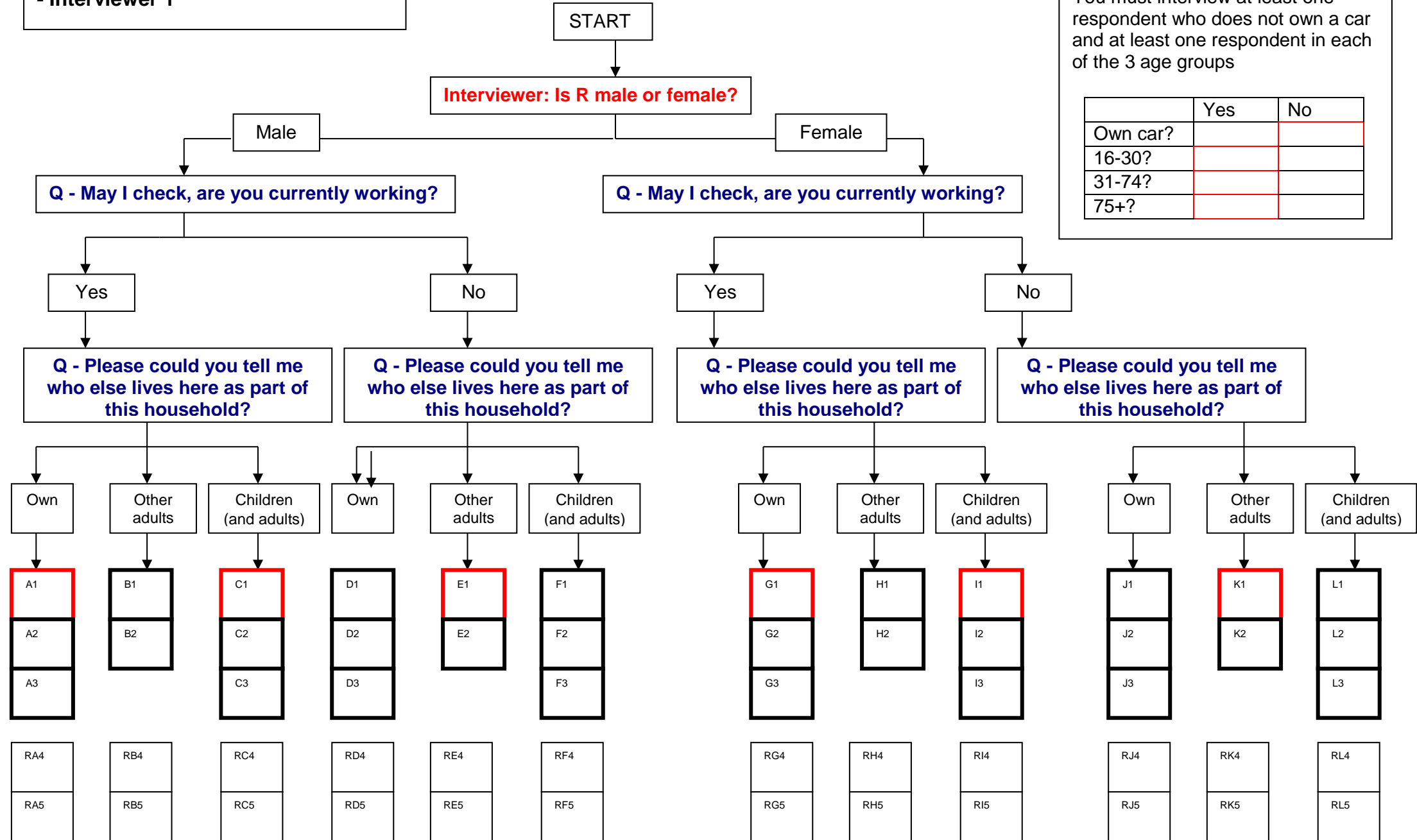
Q2 - Age

What was your age last birthday?
ENTER A TICK FOR EACH AGE CATEGORY AT 'YES' OR 'NO' IN THE TALLY CHART

C - Please bear in mind that you must interview at least one respondent who does not own a car and at least one respondent in each of the 3 age groups. These three criteria are important but they do not form part of the interlocking quota (sex, work status and household composition).

D - NOW RUN THROUGH THE SCREENING QUESTIONNAIRE ON THE OPPOSITE PAGE

**P2556 – Screening and quota sheet
- Interviewer 1**



Tally chart

You must interview at least one respondent who does not own a car and at least one respondent in each of the 3 age groups

	Yes	No
Own car?		
16-30?		
31-74?		
75+?		

If the R does not fit into one of the red boxes explain that we may contact them if we need to after completing the first round of interviews. Enter a tick in the relevant reserve box (eg: RA4). **Remember to fill in the information about the household on the Yes and No sheet!**

APPENDIX E COGNITIVE QUESTION AND PROBE SHEET



P2556

NTS Travel Diary Review - Question and Probe Sheet

Aims/Research questions

We are testing the travel diary which forms part of the National Travel Survey (NTS) to find out whether the current format of the diary is problematic for respondents. We are specifically interested in testing the overall layout of the diary and ways in which it could be improved. We would also like to find out whether respondents refer to the instructions and example pages and whether these are easy to use. We are also testing some individual sections of the diary to uncover problems respondents experience, including the more detailed information on day 7, how different stages of journeys are recorded and how specific information is recalled such as arrival time and number of miles.

Stage One - Rapport and 'think aloud'

It is very important to spend as much time as you need building a rapport with the respondent as we want to ensure that they fill in the diary as if they were doing it at home. Therefore the respondent needs to feel comfortable with taking as much time as they need and it is important to emphasise this.

*Next, explain the **'think aloud' technique**. Explain to your respondent that you would like them to talk you through how they are filling in the diary and why. Run through the windows example with them giving a demonstration - **'How many windows are there in your home?'** and ask them to describe what they are thinking as they work through their answer.*

Stage Two - Establishing journey day

Establish whether the respondent made any journeys the previous day. If they did not, then ask them to think back to the last day on which they completed at least one journey. This is the day they will need to think about during the task.

Stage Three - Filling in day 1

INTERVIEWER: GIVE DIARY TO RESPONDENT AND READ WORDING BELOW EXACTLY AS WRITTEN.

"Please fill in day 1 of this diary thinking about your travel yesterday or the last day on which you travelled. Please fill this in as you would do if I were not here **and please take as much time as you need.**"

We would like you to encourage the respondent to think aloud as they fill in the diary. Do not conduct any retrospective probing after they complete day 1.

Stage Four - Filling in day 7

INTERVIEWER: READ WORDING BELOW EXACTLY AS WRITTEN.

"Now please turn to day 7 of the diary. Please fill in this day of the diary, this time thinking about the day before yesterday. Again, please fill this in as you would do if I were not here **and please take as much time as you need**".

Again, encourage the respondent to think aloud as they fill in the diary.

Depending on the amount of time you have and the number of journeys the respondent made you may wish to ask the respondent to stop before they have filled in all their journeys. Please allow the respondent to fill in at least two or three.

Stage Five - Retrospective probing

Start off by asking the respondent to tell you about what they did yesterday (or the last day on which they travelled). Ask them to tell you in detail about the journeys they made.

Next, ask some **general questions**:

- What did you think when you first saw the diary? What was your first reaction?
- How did you find the task?/ What did you think of the diary task?

Get the respondent to **talk you through how they filled in the diary**:

- How did you go about filling it in?
- How easy or difficult was it? Why?
- Which parts were easy and which parts were difficult to fill in? Why?
- Were there any boxes/columns you were unsure about? Which ones? How did you decide what to do?

Example pages

- Did you refer to the example pages? Which one did you look at? Why?
- How helpful did you find the filled in example?
- Was there anything confusing about the example? What? Why?
- Is there anything we could do to the example page to improve it?

Instructions/Side flaps

- Did you refer to the side flaps for more information? Why?
 - If used: How did you find what you were looking for on the instruction flaps?
- Were any of the instructions on these flaps confusing? Which ones? Why? How could this be improved?
- What do you think of the amount of information there is on the side flaps? Too much? Not enough?
- Did you know where to look for help in filling the diary in?
- Were the (A) (B) (C) instructions helpful? Did you know what they were referring to? Did you need to use these at all?
- Did you find any of the instructions at the top of the page helpful/confusing? Which ones? Why?
- How do you think this could be improved?
- What do you think of the amount of information at the top of the page? Too much? Not enough?

Now go through each column of day 1:

(A) Purpose of journey

- How did you decide on the purpose of each journey?
- Were there any journeys that you were unsure about? (if more than one purpose)

(B) Time left

- How did you remember when you left?

(C) Time arrived

- How easy or difficult was it to remember each time you arrived?
- How did you remember when you arrived?
- How accurate do you think your answer is? Was it a 'guess'?

(D) From &

(E) To

- How did you decide what to write in the From box and the To box?
- What did you think was meant by Village/Town/Local Area?
- Would you use any other word to describe this? If so, what?

(F) Method of travel

- How did you go about filling in these columns?
- How did you find filling in these columns?
- Was there anything you were unsure about or found confusing? If so, what?
- Was it clear when you should use a new line?
- How did you decide on each method of travel?

Walks of a mile or more

- How did you go about deciding when to include a walk? Why?
- Did you do any walks that you weren't sure whether to include? Did you think about this when you were filling it in?
- What kinds of walks did you do?

If respondent has entered a 'round trip'

- Why did you decide to enter a walk from home to home? Were you unsure about how to enter this?

(G) Distance (miles)

- How did you go about entering the number of miles?
- Was this easy or difficult to work out? Why?
- How accurate do you think your answer is? Is it a 'guess'?
- Which journeys were particularly easy/difficult to work out the number of miles for?

(H) Number in party

- How easy or difficult was it to fill in this column? Why?

(I) Time travelling (mins)

- Can you tell me how you arrived at your answer?
- How easy or difficult did you find working out the travelling time?

- Did you include the time you spent waiting? Why? (if used public transport)

(If respondent has used) Public transport

(J) Ticket type

- Please can you tell me how you went about filling in this column?
- What kind of tickets do you use?
- Were you unsure whether to include any types of ticket?

(K) Cost

- How did you go about answering this? How did you decide what to record here?
- Was it easy or difficult to remember the cost of each ticket?
- (If respondent mentions Oyster card) How did you decide to enter these ticket costs?

(L) Number of boardings

- What did you think you were being asked to enter into these boxes? Why?
- How easy or difficult was it to remember the number of boardings for each journey stage?
- Did you have any other problems with this box?

(If respondent has used) Motor vehicles

(M) Which car/motorbike

- How did you decide to fill in this column?
- Were you confident about what to write in?
- Did you record journeys in friends/family members cars as well as your own?

(N) Driver/Passenger

- What did you think you were being asked to write in this column? Why?
- How did you decide on what to put? Why?
- Was it easy to remember where you sat in the car? Why?

(O) Where parked and cost

- Can you tell me how you decided what you write in this box? Why?
- Where do you think the main places to park would be?
- How easy or difficult was it to remember how much it cost?

(P) Road tolls/congestion charges

- What did you think you were being asked to write in this column? Why?

Day 7

General

- How did you find filling in this page?
- Did you read the instruction? How easy or difficult was it to understand?

Postcode

- How easy or difficult was it to enter the postcode for each place? Why?
- Did you feel you could write 'H' for home rather than your home postcode?

- How would you feel about recording addresses of friends or clients here?

All walks (of more than 50 yards)

- Did you remember to include all walks? How did you find changing this rule? Was it at all confusing? Why?
- Did you do any short walks that you weren't sure whether to include? Can you tell me a bit more about this?

Order

- Do you think it would have been helpful to have been asked about things in a different order? Why?

End

- What do you think of the way the diary looks? Size, shape, colour?
 - Is there anything you would change about it to make it more user friendly?
 - What would make you want to fill in this diary?
 - Can you think of any reasons why you wouldn't fill in the diary?
 - Do you have any suggestions for how we could improve the diary?
-
- Probe for suggestions of how the layout of the diary could be improved and the content of the diary. Ask for examples

APPENDIX F LETTER TO COGNITIVE INTERVIEW PARTICIPANTS



Date:
Our Ref. P2556

Dear

Testing a travel diary

Thank you for agreeing to take part in this study. We are looking into **re-designing a travel diary** which covers the journeys a person makes over a week. We are interested in how people understand the task of filling in the diary and how they go about completing it.

Your help is greatly appreciated. This letter confirms the time, date and name of the interviewer who will be coming to see you. It also provides some more information about the study and who to contact if you have any questions or concerns.

Information about the study

This study is being carried out by the National Centre for Social Research (NatCen), an independent research institute, on behalf of the Department for Transport (DfT). The Department currently use the information collected in the travel diary as part of the National Travel Survey.

We will ask you to complete the diary and discuss how you found this task to see whether the diary is clear and easy to fill in, so that we can decide whether it is working properly. Your help is very important and we hope that you will enjoy taking part.

You do not need any specific knowledge to take part and everything you say will be treated in strict confidence and no information will be shared with Department of Transport. This research will be written up as a report, but you will not be identified in it and what you say will not be linked with your name and address. The interview will last between an hour and an hour and a half and will be recorded.

As a token of our appreciation you will receive a £20 gift voucher for taking part in the research.

We very much look forward to meeting you. If you have any questions before the interview please contact Michelle Gray on 020 7549 8537 or email m.gray@natcen.ac.uk or alternatively contact Alice McGee on 020 7549 9526 or email a.mcgee@natcen.ac.uk .

Thank you again,

<p>The Interview will take place at your home on:</p> <p>Date:.....</p> <p>Time:.....</p> <p>Interviewer:.....</p>

APPENDIX G CURRENT ADULT TRAVEL RECORD

APPENDIX H CURRENT CHILD TRAVEL RECORD

Please see the accompanying folder containing these two documents in .pdf format.