

## Example: Task 1.4.3: Specification of Minimum Information Content (MIC) for a Household Travel Survey

### MIC

We define a concept of Minimum Information Content (MIC), which identifies data which we cannot do without. In the following tables:

- MIC: if Yes (Y) then this data is essential; if No (N) then omission of this information in the questionnaire will not lead to rejection;
- Action: states what actions are needed on each question if the data is missing.

Questions classified as MIC=Y are emboldened in the tables.

Italicised questions are optional in this survey design.

#### ■ Household Data

Question	Responses	MIC	Action
<i>Dwelling structure</i>		Y	<i>Y If it is decided to use this attribute in sampling bias correction, then the interview should be rejected if it is not answered.</i>
<i>Household structure (social)</i>		N	-
<b>Household Size</b>	<b>Number of people who are usually resident</b> <b>Number of visitors</b>	Y	<b>Reject interview. Required for sample expansion.</b>
Phone	Presence of telephone Number	N	-
<b>Number of vehicles / bicycles</b>	bicycles <b>passenger vehicles</b> motor cycles commercial vehicles other vehicles	N Y N N N	<b>Reject interview if number of cars is not given, as this is needed possibly for bias correction but also in modelling.</b>
<i>Ownership status of home</i>		N	-
Household income		N	Synthesise if needed.

#### ■ Household Vehicle Data

Question	Responses	MIC	Issues
<i>For all registered vehicles</i>	<i>Year of manufacture</i> <i>Make</i> <i>Model</i> <i>Number of cylinders</i> <i>Private or company ownership</i>	N	-

■ **Person Data**

Because information for the person data part of the questionnaire can be obtained from a single household member for all persons in the household, it is expected that all persons in the household will be recorded.

Question	Responses	MIC	Issues
Relationship to head of household		N	-
Sex		N	-
Age		Y	<b>Reject interview. Needed for modelling.</b>
Resident or Visitor	Resident Visitor Address	N	-
Country of birth	Country of Birth	N	-
Primary language	Language primarily spoken	N	-
Employment status	Fulltime Casual Part-time	Y	<b>Reject interview. Needed for bias correction and modelling.</b>
Occupation	Occupation (show card?)	N	-
Employer type	Wages Self employed no employees Self employed and employees Family business – no pay Unpaid voluntary	N	May need to synthesise.
Work time	Fixed Flexi Variable Rostered shifts From home	N	May need to synthesise.
Work address		Y	<b>Reject interview as much of travel diary will be of no value.</b>
Study status	Preschool Primary school Secondary school University or polytechnic – fulltime University or polytechnic – parttime University or polytechnic – offcampus	N	May need to synthesise
Study address		Y	<b>Reject interview as much of travel diary will be of no value.</b>
Other status	Not yet at school At home Unemployed Retired Pensioner Other Unable to work	N	-
Licences held	Car Motorcycle None HCV Bus	N N N N N	May need to synthesise car licences.

■ **Trip Diary**

Households with some missing diaries will be accepted and the expansion of the survey data adjusted to compensate.

<b>Question</b>	<b>Responses</b>	<b>MIC</b>	<b>Issues</b>
<b>Location of day start</b>	Survey address Work address Different address – address???	Y	Reject trip
<b>Time start</b>	Time leave Did not leave house	Y	Reject trip
<b>What / where next stop</b>	Home address – no address details Work address - no address details Study address - no address details Train station – name Ferry stop Bus stop Other address inside study region Other address outside study area	Y	Reject trip
<b>Address</b>		Y	Reject trip
<b>Why travel to stop</b>		Y	Reject trip
<b>Mode</b>		Y	Reject trip
<i>Private vehicle</i>	<i>Was car listed on form</i> <i>Vehicle number</i> <i>Company / private / rental car</i>	N	-
Occupancy	Number of people in vehicle Number from household in vehicle	N	-
Car parking		N	-
Fee paid		N	-
PT ticket type		N	-
<b>Arrival time</b>	<b>Time of arrival at next stop</b>	Y	Reject trip
<b>Further trips</b>		Y	Reject trip