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Statistics South Africa
Private bag X44 Pretoria 0001
South Africa
170 Thabo Sehume Street
Pretoria 0002

User information service: 0123108600
Fax: 0123108500 Main switchboard: 0123108911

Fax: 0123217381
Website: www.statssa.gov.za
Email: info@statssa.gov.za

# National Household Travel Survey 2013 

## Technical Report

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Tel: (012) 3108358
(012) 3108093

Email: magdaj@statssa.gov.za
inadp@statssa.gov.za

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## 1. Introduction

The first National Household Travel Survey (NHTS) was conducted in 2003, and the second survey was executed by Statistics South Africa (Stats SA) from February to March 2013. The aim of the NHTS is to gain strategic insight into the travel patterns and transport problems in the country, and the collected information will serve as the basis for DoT research, planning and policy formulation. The information will further assist transport authorities to effectively target subsidies. This information will also serve as a data source for the definition and measurement of Key Performance Indicators for land passenger transport, as required in terms of the National Land Transport Transition Act (Act No. 22 of 2000).

The survey primarily covers land transport travel. Land transport focuses on public and private transport and includes non-motorised transport such as walking all the way, cycling or making use of animal-drawn vehicles. It encompasses travel related to education, work, business and leisure and migration for individuals. Most of the work and education related questions are associated with a randomly selected travel day (Monday to Friday). In addition to these themes, household-level information was also collected about the demographic profiles of individuals, socio-economic circumstances of households and general attitudes and perceptions about transport. Air and water transport are included as options when travellers were asked about the mode of travel used, but not as specific areas of enquiry.

The specific objectives of the study were:

* To assist in the evaluation and effective targeting of public transport subsidies;
* To identify transport needs in disadvantaged regions and communities;
* To understand the transport needs of households and travellers;
* To ascertain the cost of transport and assess whether households can afford to pay for the mobility which is essential for their survival;
* To assess attitudes towards transport services and facilities;
* To measure the availability and use of motor cars;
* To measure the availability and use of non-motorised transport;
* To understand the travel choices of different market segments;
* To assess the provision of accessibility to opportunities such as work, education, markets, medical, police and welfare services; and
* To measure key performance indicators (KPIs) as required by the National Land Transport Transition Act and the National Land Transport Strategic Framework.

This report provides a synopsis of the technical details of the NHTS 2013. It starts by describing the questionnaire design process and the contents of the questionnaire. Section 3 considers the sampling frame, listing, sample design and weighting process. This is followed by a section that recaps the procedures used during data collection. The final two sections deal with the response rates and indicators of quality, as well as highlighting the limitations of the study.

## 2. Questionnaire design

The NHTS 2013 questionnaire was largely based on the one used in 2003, but there was a need for some revision, recognising changes in the information needs of the Department of Transport (DoT) and stakeholders. The revision process also had to consider the need to standardise certain questions from a Stats SA perspective and the technological requirements for scanning and processing. The design process started with stakeholder consultation and progressed through a number of internal and external consultative workshops in which DoT played a key role.

The first draft of the questionnaire was subjected to behind-the-glass testing. This resulted in further modifications which were then tested in the field during the pilot survey. The pilot survey had three main objectives in addition to the testing of the questionnaire and its contents:

* To test the duration of interviews;
* To evaluate the methodologies around training, publicity and fieldwork; and
* To conduct trials on vehicle allocation, material distribution in the selected provinces and airtime allocation.

The impact of these additional objectives of the pilot survey on the ultimate execution of the survey will be discussed in more detail in Section 4 which deals with data collection. The final questionnaire consisted of 8 sections in addition to the cover page and demographic section. Its contents is summarised in Table 2.1. A copy of the questionnaire is also included in Annexure A and a comparative analysis of the 2013 and 2003 questionnaires is provided in Annexure B.

Table 2.1: Contents of the questionnaire

| Section | Theme | Content | Number of <br> questions |
| :--- | :--- | :--- | :---: |
| Cover page | General household, <br> sample and data <br> collection information | The cover page of the NHTS questionnaire contains information for <br> use by the fieldworker (FW). It also contains details that enable the <br> tracking of the questionnaires by Head Office as well as the provincial <br> and district offices. | 17 |
| Demography <br> section | Demographic <br> characteristics | Demographic questions (e.g. gender, age, education) which are <br> completed for all individual household members regardless of age. | 8 |
| Section 1 | General <br> characteristics | Household characteristics, social grants and general functioning for <br> each individual in the household. | 4 |
| Section 2 | General travel <br> patterns | General travel patterns and modes of transport used by the <br> household. | 6 |
| Section 3 | Education related <br> travel | Education and education related travel patterns of individuals. | 14 |
| Section 4 | Work related travel | Work related travel patterns. | 28 |
| Section 5 | Business related <br> travel | Business trips as applicable to individuals 15 years and older who <br> indicated that they are economically active in Section 4 of individuals. | 5 |
| Section 6 | Other travel patterns | Other travel patterns including migrant labour and vacation trips of <br> individuals. | 11 |
| Section 7 | Life circumstances of <br> households | General household information such as dwelling type, income and <br> income sources, ownership of vehicles, etc. | 11 |
| Section 8 | Household attitudes <br> and perceptions | Attitudes and perceptions about transport and levels of satisfaction <br> with the different public transportation modes. Language used during <br> interview. | 16 |
| Back page | Official use | The final page is for office use. A table for general comments is also <br> supplied. Here the question number, person number, and the general <br> comments are recorded. | 2 |

Even though care was taken during the design phase to make the questionnaire as clear and userfriendly as possible, it was found during training that it was necessary to draft standardised responses to queries raised during training on issues related to the phrasing of some questions and printing errors. The following points of clarification were identified during training and sent to the field to be used during provincial training and data collection.

Table 2.2: Problems/queries and clarifications/modifications made to questionnaire during training and fieldwork
$\begin{array}{|l|l|l|l|}\hline \text { Section } & \text { Question } & \text { Problem/query } & \text { Resolution/clarification } \\ \hline \text { Cover page } & \begin{array}{l}\text { D2: } \\ \text { Survey } \\ \text { Period }\end{array} & \begin{array}{l}\text { This field was supposed to } \\ \text { have 7 blocks for 7 digits; one } \\ \text { extra block was printed, making } \\ \text { it 8 blocks in total. }\end{array} & \begin{array}{l}\text { Define all three blocks as 2 digits. Fieldworker to } \\ \text { record the month code (2 digits) in any of the two } \\ \text { blocks leaving the one block empty. }\end{array} \\ \hline \text { Section 3 } & \begin{array}{l}\text { Q3.5d, } \\ \text { Q4.4d and } \\ \text { Q5.5d }\end{array} & \begin{array}{l}\text { What should be done with the } \\ \text { TAZ travelling code block? }\end{array} & \begin{array}{l}\text { The TAZ (Travelling Analysis Zone) code must be left } \\ \text { blank. This will be recorded at DPC. }\end{array} \\$\cline { 2 - 5 } \& Q3.11 \& $\left.\begin{array}{l}\text { What happens if the travel day } \\ \text { falls under school holidays or } \\ \text { the person is sick? }\end{array} & \begin{array}{l}\text { Record a single zero in the far right block. } \\ \text { SUPERVISORS WERE REQUESTED TO MONITOR } \\ \text { RESPONSES TO THIS QUESTION AND TO } \\ \text { STRICTLY SEND BACK ANY QUESTIONNAIRES } \\ \text { IN WHICH THERE ARE NO RESPONSES FOR } \\ \text { HOUSEHOLD MEMBERS WHO ATTEND } \\ \text { EDUCATIONAL INSTITUTIONS. }\end{array} \\ \hline \text { Section 4 } & \text { Q4.9 } & \begin{array}{l}\text { What happens if the travel day } \\ \text { falls under leave/sick leave for } \\ \text { a person? }\end{array} & \begin{array}{l}\text { Record a single zero in the far right block. } \\ \text { SUPERVISORS WERE REQUESTED TO MONITOR } \\ \text { RESPONSES TO THIS QUESTION AND TO } \\ \text { STRICTLY SEND BACK ANY QUESTIONNAIRES }\end{array} \\ \text { IN WHICH THERE ARE NO RESPONSES FOR } \\ \text { HOUSEHOLD MEMBERS WHO ARE EMPLOYED. }\end{array}\right\}$

During debriefing, some of the general comments about the questionnaire included that quality assurance prior to printing needs to be improved so that there is no need for an addendum. Generally, addendums are displaced easily. The use of leading zeros was confusing and had been applied inconsistently.

Normally, for household surveys, the sample is available well in advance of the survey and the unique number, PSU number and sampled dwelling unit (DU) number can be pre-printed on the questionnaires. However, since the first census results were released only at the end of October 2012 and a sampling frame based on the data only became available well into November, it was not possible to pre-print this information onto the questionnaires for NHTS 2013. This introduced some errors in the field which had to be resolved during data processing. It is advisable that all efforts be made to pre-print the sample information on the questionnaires for future surveys. Skips are needed for Q2.2 and Q4.9 for those who did not travel, and the incorrect skip instruction in Q5.1 needs to be corrected for future surveys.

In addition to the issues highlighted in Table 2.2, the following suggestions were made during the debriefing:

* Question E tended to be left blank by survey officers because it was not emphasised enough during training.
* In the case of Q1.1, a general guideline has to be provided as to what to do for children younger than 2 years.
* Section 8 does not make adequate provision for persons using private vehicles.

During the pilot survey it was decided to centralise coding of the Transport Analysis Zones (TAZs) where educational institutions, place of work, and destinations for business and other travel are located. However, it was found that fieldworkers did not provide detailed enough information to enable the coding to be done correctly, especially in metropolitan areas, where suburbs or subplace names were required. Future surveys should carefully consider both layout and training interventions to improve on this.

## 3. Sample design

### 3.1 Design of the sampling frame

During 2010, the Department of Transport contracted TRC Africa to update the NHTS 2003 TAZs according to the most recent boundaries of the Municipal Demarcation Board (MDB) for NHTS 2013. The findings and data of this assignment were presented in 2011 to the Department of Transport and Stats SA. These updated TAZ zones, in combination with the Census 2011 enumeration areas (EA) eventually formed the basis of the sampling frame that was developed.

This document describes how the sampling frame was derived from the Census 2011 database as well as the decision rules that were used to link the Transport Analysis Zones (TAZs) with the Census 2011 EAs.

## Creation of TAZ EA link

The Geography division within Stats SA then set out to create a link between these TAZs and the enumeration areas as demarcated for Census 2011.

The biggest part of the linking process was automated, using the intersection method and ArcGIS 9.3 software.

The following datasets were used:

1. TAZ 2011 (as obtained from TRC Africa)
2. EA 2011
3. Dwelling frame
4. Imagery (aerial photo, SPOT 5)

The 80/20\% decision rule was used. This means that all the polygons with areas greater than or equal to $80 \%$, or less than or equal to $20 \%$ were to remain with the TAZ ID of greater than or equal to $80 \%$. Areas between $20 \%$ and $80 \%$ were manually investigated and the TAZ ID was assigned based on dwelling unit (DU) distribution and the size of the TAZ. During this process the following rules were applied:

1. The EA with the most dwellings was assigned to the TAZ ID.
2. In the case of the same number of dwellings, the TAZ area/size was used (the biggest EA was assigned the TAZ ID).

Table 3.1 contains the analysis zone inconsistencies that were identified during the testing of the sampling frame. Two kinds of issues were identified, namely problems related to boundaries that were cut by a TAZ link, and situations where more than one municipality were included in one TAZ. In the case of the former, the situation was corrected manually by re-assigning the TAZ EA link so that the boundary was not violated. The only exception where no corrective action was taken, is the Kruger National Park, which has a low population and was not considered for sampling. These changes are reflected in the variable TAZ_ADJ in Version 2 of the sampling frame.

The TAZs that included more than one municipality did not represent examples of boundary violations. Given that one of the reporting domains is the municipality, it was decided to separate each municipality into its own TAZ. New codes were created for each 'new' TAZ, starting from the highest number already allocated within that province. These changes as well as the changes already described for the TAZ_ADJ variable above are contained in a new variable called TAZ_EXP.

## Table 3.1: Analysis zones inconsistencies

|  |  |  |  | TAZs cutting across boundaries | More than one municipality in one TAZ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Province/district/ municipality/ | PR_CODE | TAZ ID | EAs <br> per <br> TAZ | Resolution <br> Move to existing TAZ_ID within correct geographical boundary | Resolution New ID |
| Eastern Cape | 2 | 1045 | 362 | Unchanged |  |
| KwaZulu-Natal | 5 | 1045 | 1 | 4045 |  |
| Mpumalanga | 8 | 5025 | 44 | Kruger NP leave as is |  |
| Limpopo | 9 | 5025 | 10 | Kruger NP leave as is |  |
| Chris Hani(DC13) | 2 | 1045 | 362 | Unchanged |  |
| eThekwini(ETH) | 5 | 1045 | 1 | 4045 |  |
| City of Johannesburg(JHB) | 7 | 3000 | 1 | 3008 |  |
| West Rand(DC48) | 7 | 3000 | 348 | Unchanged |  |
| Sisonke(DC43) | 5 | 4001 | 268 | Unchanged |  |
| UMgungundlovu(DC22) | 5 | 4001 | 6 | 4003 |  |
| Ehlanzeni(DC32) | 8 | 5025 | 44 | Kruger NP leave as is |  |
| Vhembe(DC34) | 9 | 5025 | 4 | Kruger NP leave as is |  |
| Makana | 2 | 1001 | 173 |  | 1059 |
| Ndlambe | 2 | 1001 | 176 |  | 1060 |
| Baviaans | 2 | 1003 | 60 |  | 1061 |
| Ikwezi | 2 | 1003 | 43 |  | 1062 |
| Camdeboo | 2 | 1003 | - |  | 1062 |
| Kou-Kamma | 2 | 1005 | 92 |  | 1064 |
| Kouga | 2 | 1005 | 211 |  | 1065 |
| Gariep | 2 | 1017 | 100 |  | 1066 |
| Maletswai | 2 | 1017 | 113 |  | 1067 |
| Inkwanca | 2 | 1019 | 75 |  | 1068 |
| Lukanji | 2 | 1019 | 493 |  | 1069 |
| eThekwini | 5 | 1045 | 1 | 4045 |  |
| IntsikaYethu | 5 | 1045 | 362 | Unchanged |  |
| City of Johannesburg | 7 | 3000 | 1 | 3008 |  |
| Westonaria | 7 | 3000 | 348 | Unchanged |  |
| Impendle | 5 | 4001 | 6 |  | 4143 |
| Kwa Sani | 5 | 4001 | 35 |  | 4145 |
| Impendle | 5 | 4003 | 88 |  | 4143 |
| uMngeni | 5 | 4003 | 168 |  | 4144 |
| The Msunduzi | 5 | 4008 | 1 | 4019 |  |
| uMshwathi | 5 | 4008 | 178 | Unchanged |  |
| Mkhambathini | 5 | 4017 | 119 |  | 4146 |
| Richmond | 5 | 4017 | 108 |  | 4147 |


| Province/district/ municipality/ | PR_CODE | TAZ ID | EAs per TAZ | TAZs cutting across boundaries <br> Resolution <br> Move to existing TAZ_ID within correct geographical boundary | More than one municipality in one TAZ <br> Resolution New ID |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Hlabisa | 5 | 4129 | 90 |  | 4148 |
| The Big 5 False Bay | 5 | 4129 | 55 |  | 4149 |
| Dipaleseng | 8 | 5004 | 88 |  | 5026 |
| Lekwa | 8 | 5004 | 225 |  | 5027 |
| Ba-Phalaborwa | 8 | 5025 | 5 | Kruger NP leave as is |  |
| Thulamela | 8 | 5025 | 1 | Kruger NP leave as is |  |
| Ga-Segonyana | 3 | 6000 | 192 |  | 6013 |
| Gamagara | 3 | 6000 | 79 |  | 6014 |
| Joe Morolong | 3 | 6000 | 275 |  | 6015 |
| NamaKhoi | 3 | 6001 | 141 |  | 6016 |
| Richtersveld | 3 | 6001 | 59 |  | 6017 |
| Hantam | 3 | 6002 | 167 |  | 6018 |
| Khâi-Ma | 3 | 6002 | 60 |  | 6019 |
| Kamiesberg | 3 | 6002 |  |  | 6031 |
| Karoo Hoogland | 3 | 6002 |  |  | 6032 |
| Emthanjeni | 3 | 6003 | 123 |  | 6020 |
| Umsobomvu | 3 | 6003 | 86 |  | 6021 |
| Kareeberg | 3 | 6004 | 47 |  | 6022 |
| Thembelihle | 3 | 6004 | 36 |  | 6023 |
| Renosterberg | 3 | 6004 |  |  | 6028 |
| Siyathemba | 3 | 6004 |  |  | 6029 |
| Siyancuma | 3 | 6004 |  |  | 6030 |
| Khara Hais | 3 | 6007 | 196 |  | 6024 |
| Tsantsabane | 3 | 6007 | 97 |  | 6025 |
| Dikgatlong | 3 | 6012 | 104 |  | 6026 |
| Magareng | 3 | 6012 | 50 |  | 6027 |
| Musina | 9 | 7011 | 125 |  | 7027 |
| Mutale | 9 | 7011 | 304 |  | 7028 |
| Modimolle | 9 | 7024 | 173 |  | 7029 |
| Mookgopong | 9 | 7024 | 106 |  | 7030 |
| Lekwa-Teemane | 6 | 8018 | 106 |  | 7031 |
| Mamusa | 6 | 8018 | 107 |  | 7032 |
| Cape Agulhas | 1 | 9013 | 109 |  | 9041 |
| Swellendam | 1 | 9013 | 81 |  | 9042 |
| Hessequa | 1 | 9014 | 180 |  | 9043 |
| Kannaland | 1 | 9014 | 59 |  | 9044 |
| Bitou | 1 | 9018 | 119 |  | 9045 |
| Knysna | 1 | 9018 | 172 |  | 9046 |
| Beaufort West | 1 | 9019 | 152 |  | 9047 |
| Prince Albert | 1 | 9019 | 60 |  | 9048 |

Once all EAs could be accurately associated with TAZs, a sampling frame consisting of primary sampling units (PSUs) was constructed. PSUs use EAs as their building blocks, and in most cases, one PSU is equal to an EA. However, for sampling purposes, small EAs were combined to form new PSUs and large EAs were conceptually split into smaller units.

### 3.2 Variable composition of the frame

The actual sampling frame was based on the Census 2011 data Version 10 and was analysed using SuperCross. The variables included in the frame were per EA:

* EA_Code
* TAZ_ID: TAZ code
* Number of persons
* Number of households (defined as options 1 and 2 of H 01 in the census questionnaire)
* Number of males and number of females
* Number of persons per each 5-year age category
* Number of persons per each population group category
* Number of people aged 15 to 64 years in each EA who fall into the following annual income categories: No income; R1-19 600; R19 601-38 200; R38 201-76 400; R76 401-153 800; R153 801-307 600; R307 601 PLUS

Subsequent to the revision, two more variables were added:
TAZ_ADJ - which contains corrected TAZ codes for boundary violations; and
TAZ_EXP - which contains corrected TAZ codes for boundary violations as well as all municipalities that used to share a TAZ each with their own TAZ code.

### 3.3 EA and PSU sample

The NHTS 2013 sample is based on a stratified two-stage sample design with probabilityproportional to size (PPS) sampling of PSUs from within strata at the first stage, and systematic sampling of dwelling units (DUs) from the sampled primary sampling units (PSUs) at the second stage. The sample population consisted of all non-institutionalised private dwellings and workers' hostels in the Republic of South Africa. Institutions and military quarters were excluded. In addition, EAs in the sparsely populated areas with very few dwelling units (number of DUs fewer than 25) were also excluded. Since the population in these sparsely populated areas is part of the target population, a weight adjustment factor was applied to account for the excluded population (see the subsequent subsection 3.6 on weighting).

### 3.3.1 Stratification and sample allocation to strata

Stratification was done on two levels; firstly explicit stratification based on the Travel Analysis Zones within the provinces, and then implicit stratification based on the Geographic Area Type (Urban, Traditional and Farms). These were primarily selected for their importance within a transport survey context, administrative convenience and flexibility, and also to ensure that the sample of PSUs is spread across all the categories of the stratification variable(s).

Considering the required sample size, square root allocation was used to allocate PSUs across strata based on the weighted DU count as measure of size. The procedure ensures that the allocation considers the size of the Travel Analysis Zones, i.e. the sample is redistributed from
larger Travel Analysis Zones to smaller Travel Analysis Zones to ensure efficient estimates at both national and Travel Analysis Zone levels. The specified sample was adjusted for $10 \%$ non-response which resulted in a national sample size of the required sample size plus $10 \%$. The fact that on average 10 DUs were to be sampled per PSU, was also taken into consideration.

Prior to PSU sample selection, there were two constraints that needed to be satisfied for the flexibility of weighting and estimation processes:

* At least two PSUs are selected from the stratum; and
* The stratum must comprise an even number of PSUs.

This resulted in an expected sample of 5034 PSUs across the strata. Since the PSU size has an impact on the sampling selection method, large PSUs were then conceptually split into manageable sized PSUs, based on the probability of selection of these PSUs.

### 3.3.2 Sampling of PSUs with probability proportional to size

A Randomised Probability Proportional to Size (RPPS) systematic sample of PSUs was drawn in each of the constructed strata, with the measure of size being the number of households in the PSU.

This method is described below:
Let $N$ be the total number of PSUs in the stratum, and the number of PSUs to be selected from the stratum is denoted by $n$. Also, let ${ }^{x_{i}}$ denote the size measure of the PSU $i$ within the stratum, where $i=1,2,3, \ldots, N$. Then, the method for selecting the sample of $n$ PSUs with the RPPS systematic sampling method can be described as follows:

## Step 1: Randomise the PSUs within the stratum

The list of $N$ PSUs within the stratum can be randomised by generating uniform random numbers between 0 and 1 , and then by sorting the $N$ PSUs in ascending or descending order of these random numbers. Once the PSUs have been randomised, we can generate permanent sequence numbers for the PSUs.

Step 2: Define normalised measures of size for the PSUs
We denote by $x_{i}$ the measure of size (MOS) of PSU $i$ within the design stratum. Then, the measure of size for the stratum is given by $\quad X=\sum_{i=1}^{N} x_{i}$. We define the normalised size measure $p_{i}$ of PSU $i$ as $p_{i}=\frac{x_{i}}{X} ; \quad i=1,2,3,--N$, where $N$ is the total number of PSUs in the design stratum. Then, $p_{i}$ is the relative size of the PSU $i$ in the stratum, and $\sum_{i=1}^{N} p_{i}=1$ for all strata. It should be noted that the value of $n \times p_{i}$, which is the selection probability of PSU ${ }^{i}$ must be less than one.

Step 3: Obtain inverse sampling rates (ISRs)
Let $R$ be the stratum inverse sampling rate (ISR). The stratum ISR is the same as the corresponding provincial ISR because of the proportional allocation within the province. It should also be noted that the proportional allocation within the province also results in a self-weighting design.

Then, the PSU inverse sampling rates (ISRs) are obtained as follows:
First, define N real numbers $Z_{i}=n \times p_{i} \times R ; i=1,2,3,---, N$. It is easy to verify that $\sum_{i=1}^{N} Z_{i}=n \times R$. Next, round the N real numbers $Z_{i} ; i=1,2,3, \ldots, N_{\text {to integer values }} R_{i} ; i=1,2,3, \ldots, N$ such that each $R_{i}$ is as close as possible to the corresponding $Z_{i}$ value and the $R_{i}$ values add up to $n \times R$ within the stratum. In other words, the sum of the absolute differences between the $R_{i}$ and the corresponding $Z_{i}$ values is minimised, subject to the constraint that the $R_{i}$ values add up to $n \times R$ within the stratum. Drew, Choudhry and Gray (1978) provide a simple algorithm to obtain the integer $R_{i}$ values as follows:
Let " $d$ " be the difference between the value $n \times R$ and the sum $S=\sum_{i=1}^{N}\left[Z_{i}\right]$, where $[$.$] is the integer$ function, then $R_{i}$ values can be obtained by rounding up the " $d " Z_{i}$ values with the largest fraction parts, and by rounding down the remaining $(N-d)$ of them. It should be noted that the integer sizes $R_{i} ; i=1,2,3, \ldots, N$ are also the PSU inverse sampling rates (ISRs) for systematic sampling of dwelling units.

## Step 4: Obtain cumulative ISR values

We denote by $C_{i} ; i=1,2,3, \ldots, N$ the cumulative ISRs of the PSUs within the stratum. It should be noted that the PSUs within the stratum have been sorted according to the sequence numbers that were assigned after the randomisation. Then, the cumulative ISRs are defined as follows:

$$
\begin{aligned}
& C_{1}=R_{1}, \\
& C_{j}=C_{(j-1)}+R_{j} ; \quad j=2,3,---, N .
\end{aligned}
$$

It should be noted that the value $C_{N}$ will be equal to $n \times R$, which is also the total number of systematic samples of dwelling units that can be selected from the stratum.

Step 5: Generate an integer random number $r$ between 1 and $R$, and compute
$n_{\text {integers }} r_{1}, r_{2},---, r_{n}$ as follows:
$r_{1}=r$
$r_{2}=r_{1}+R$
$r_{3}=r_{2}+R$

$$
r_{i}=r_{(i-1)}+R
$$

$$
r_{n}=r_{(n-1)}+R .
$$

Step 6: Select $n$ PSUs out of the $N$ PSUs in the stratum with the labels (sequence numbers) number ${ }^{i_{1}, i_{2}}, \ldots, i_{n}$ such that:

$$
\begin{aligned}
& C_{i_{1}-1}<r_{1} \leq C_{i_{1}} \\
& C_{i_{2}-1}<r_{2} \leq C_{i_{2}}
\end{aligned}
$$

$$
C_{i_{n}-1}<r_{n} \leq C_{i_{n}} .
$$

Then, the $n$ PSUs with the labels $i_{1}, i_{2}, \ldots, i_{n}$ would get selected with probabilities proportional to size, and the selection probability of the PSU $i$ will be given by $R_{i} / R$.

### 3.4 Listing verification

### 3.4.1 Introduction

As indicated in the previous section, the NHTS sampling frame was based on the Census 2011 EAs and population data. Census 2011 was also preceded by a listing process. However, this process used a different methodology than what is needed for household surveys. These differences and the fact that census listing was executed between August and September 2011, made it necessary to do listing verification prior to the finalisation of the NHTS 2013 sample.

The methodologists used the Census 2011 sampling frame to draw an initial sample of PSUs for the purpose of the NHTS, and these PSUs all had to be verified. Listing verification was primarily aimed at identifying new dwelling units that may have been constructed since 2011, as well as structures of which the use or function may have been changed since then. This information was then used to update and create a database of the number of dwelling units in each PSU so that sampling could be applied. Recruitment of contract workers took place in December 2012 when 267 listers and 52 supervisors were contracted. Listing verification training was then executed from 7 to 11 January 2013 in three locations, namely Cape Town, Gauteng and eThekwini.

Listing was conducted from 21 January until the end of February 2013. A team of Head Office monitors from Household Survey Operations and Census Field Operations covered all provinces for the duration of the listing exercise. The team constantly interacted with project management on all issues pertaining to listing.

### 3.4.2 Verification methodology

Listing verification was done on the original Census listing books in two phases. Firstly, EA verification was done, and during Phase 2, the actual listing entries were checked, corrected and/or amended where necessary.

## Phase 1 - EA verification

Listing - HH3 entries


| 1. Formal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. Informal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Traditional |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Farm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Collective (workers' <br> hostels) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.Smallholdings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Required entry

## Phase 2 - Updating

## Listing updates during verification

1. Name Change ->Scratch 'old' name; add 'new' name;
2. Structure Description Change -> Scratch 'old' description; add 'new';
3. Where there is missed $\operatorname{DU}(\mathrm{s})$ on the ground, you should:

- Add the additional structure onto the last record on the HH3 form. The DU numbering will be continuous from the last DU number that was verified as mentioned above.

4. Where there are duplicates:

- Structures recorded that were duplicated - erase the entire record and in column T do not allocate a DU number.
- Records duplicated - erase the entire record and in column T do not allocate a DU number.
- Comment on the HHQ form.

5. Structure not classified as DU, but has DU \# ->Verify; if DU changes Feature Code, if not, erase DU \#.
6. Structure classified as DU, but no DU \# -> Verify; allocate a DU number in column T.
7. Growth -> Record structure from last record \#, enter feature code, assign DU \# if applicable from last DU \#.
8. Missed DU -> Record structure from last record \#, enter feature code, assign DU \# from last DU \#.

All corrections had to be made in pencil.

### 3.4.3 DU frame

The drawn sample with a total of 5034 PSUs had to be verified across all provinces. The verification teams worked with the original copies of the census listing books where available. In the case of informal settlements, new listings had to be done, as the required listing methodologies were completely different from that needed for the census.

Listing and listing updates were based on the PSU sample frame and were done in all nine provinces between mid-January and mid-February 2013. The NHTS DU frame received from listing verification was in Excel format. The consolidated DU frame contained 5038 records and 2 variables, namely Psuno (PSU number) and Total private dwelling units (Total Pds) per PSU. KwaZulu-Natal (KZN) province had four duplicated PSUs on the provisional frame. The duplicated PSUs were removed before DU sample selection and a final frame with 5034 PSUs was used for sampling the DUs. The distribution of the PSUs that was sent to the field for listing verification and the PSUs received by methodology after listing verification are summarised in the Table 3.2 below.

Table 3.2: Distribution of the PSUs within provinces before and after verification

| Province | Number of PSUs <br> sampled <br> (before verification) | Number of PSUs <br> received from the field <br> (after verification) |
| :--- | :--- | :--- |
| WC | 570 | 570 |
| EC | 710 | 710 |
| NC | 206 | 206 |
| FS | 350 | 350 |
| KZN | 970 | 974 (extra 4, duplicates) |
| NW | 390 | 390 |
| GP | 1028 | 1028 |
| MP | 366 | 366 |
| LP | 444 | 444 |
| National | $\mathbf{5 0 3 4}$ | $\mathbf{5 0 3 8}$ |

Table 3.3 below illustrates the 22 PSUs which had DUs during Census 2011, but were reported as having no private dwellings during listing verification. Reasons for these changes include change of status of dwellings in areas such as, for example, the clearance of informal settlements for other developments, or permission to list was not granted and/or the area was too dangerous to enter. No sample was drawn from these PSUs.

Table 3.3: PSUs without private dwellings or inaccessible PSUs in the frame

| Obs | EA_CODE | PSUNO | TOTALPDS |
| :--- | ---: | ---: | ---: |
| 1 | 16110001 | 161100012 | 0 |
| 2 | 16910063 | 169100631 | 0 |
| 3 | 17610242 | 176102421 | 0 |
| 4 | 17710252 | 177102521 | 0 |
| 5 | 17910070 | 179100701 | 0 |
| 6 | 19912191 | 199121911 | 0 |
| 7 | 19912197 | 199121971 | 0 |
| 8 | 19914803 | 199148031 | 0 |
| 9 | 19915580 | 199155801 | 0 |
| 10 | 19915759 | 199157591 | 0 |
| 11 | 19916108 | 199161081 | 0 |
| 12 | 59911339 | 599113391 | 0 |
| 13 | 59913798 | 599137981 | 0 |
| 14 | 59914486 | 599144861 | 0 |
| 15 | 59914489 | 599144891 | 0 |
| 16 | 59914490 | 599144901 | 0 |
| 17 | 66210100 | 662101001 | 0 |
| 18 | 66510106 | 665101061 | 0 |
| 19 | 79710263 | 797102631 | 0 |
| 20 | 79814987 | 798149871 | 0 |
| 21 | 79913082 | 799130821 | 0 |
| 22 | 97410981 | 974109811 |  |

Once an updated measure of the number of private dwelling units and workers' hostels in each PSU was available, the final sample was selected. Section 3.5 provides more details about this process.

### 3.5 DU sample

After the selection of the PSUs and the construction of the dwelling unit frame, a procedure on the second stage of the sample design (which is the selection of dwelling units) was carried out. The number of DUs selected per PSU varied from PSU to PSU and depended on the Inverse Sampling Ratios (ISR) of each PSU. A sample of 5034 primary sampling units was selected from the census dwelling frame, with stratification at TAZ and provincial levels. Twenty-two of these PSUs were vacant and 51341 dwelling units (DUs) were sampled from the remaining 5012 PSUs.

Table 3.4 summarises the sample distribution per province. The number of dwelling units sampled per PSU ranged from 1 to 14 .

Table 3.4: Distribution of the sample

| Province | Number of <br> TAZs <br> unadjusted | Number of TAZs <br> adjusted | Number of PSUs | Average <br> dwelling units <br> per PSU | Total number <br> of dwelling <br> units |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Western Cape | 37 | 43 | 559 | 10 | 5528 |
| Eastern Cape | 54 | 60 | 710 | 11 | 7497 |
| Northern Cape | 13 | 29 | 206 | 10 | 2103 |
| Free State | 30 | 30 | 350 | 10 | 3601 |
| KwaZulu-Natal | 74 | 78 | 965 | 10 | 9806 |
| North West | 27 | 28 | 388 | 9 | 3628 |
| Gauteng | 58 | 58 | 1025 | 10 | 10683 |
| Mpumalanga | 25 | 26 | 366 | 10 | 3794 |
| Limpopo | 26 | 28 | 443 | 11 | 4701 |
| RSA | 344 | $\mathbf{3 8 0}$ | $\mathbf{5 0 1 2}$ | $\mathbf{1 0}$ | 51341 |

### 3.6 Weighting

The sampling weights for the data collected from the sampled households were constructed so that the responses could be properly expanded to represent the entire civilian population of South Africa. The sampling weights, also called design weights, for the NHTS 2013 are the inverse sampling rate (ISR) for the TAZ and are assigned to each of the households in a TAZ.

The adjusted weights for the NHTS 2013 full sample were obtained by applying three adjustments to the design weights. The first adjustment was applied to account for PSU natural growth; the adjustment factors were truncated at the $99^{\text {th }}$ percentile (which was 2.32432) in an attempt to minimise the sample variation. The second adjustment was applied to account for the EAs with fewer than 25 households excluded during the survey design, and the third was the non-response adjustment. There were two types of non-response adjustments: PSU non-response adjustment and household non-response adjustment. The PSU non-response adjustment was applied at stratum (TAZ) level, whereas the household non-response adjustment was applied at PSU level.

The final calibrated weights were constructed by calibrating (benchmarking) the adjusted design weights to the known population estimates as control totals using the 'Integrated Household Weighting' method. The lower bound of the calibrated weights was set equal to 50 when computing the calibrated weights with StatMx software.

The population estimates of mid-February 2013 were used for benchmarking. These estimates were produced by the Demographic Analysis division and were based on the mid-year population series published in 2013. The population estimates used were cross-classified by age group by race by gender population groups at national level, and by age groups at province level. The age groups at national level were the five-year age groups: $0-4,5-9,10-14,15-19,20-24,25-29,30-34,35-39$, $40-44,45-49,50-54,55-59,60-64,65-69,70-74$, and 75 and over, and those at province level were the four broad age groups: $0-14,15-34,35-64$, and 65 and over. The race categories were black African, coloured, Indian/Asian, and white. The calibrated weights were constructed such that all persons in a household would have the same final weight.

It is important to note that, since the calibrated weights were constructed using the known national and provincial level population estimates, this then posed limitations to the use of these weights:

1. The lower level (any geographic level except province) estimates cannot be produced using the constructed weights; and
2. The weights can only produce meaningful aggregates at provincial and national levels.

## 4. Data collection

Data collection consisted of three phases: pre-enumeration, enumeration and post-enumeration, as depicted in Figure 4.1. The primary activities during pre-enumeration were planning, publicity, listing, quality assurance and training. The main purpose of publicity was to inform potential respondents and stakeholders of the upcoming survey and its purpose. This process was planned to be conducted a week before data collection commenced and was eventually implemented to run parallel with data collection, as it was deemed to be more time and cost-efficient. Posters, pamphlets and approach letters were used. The latter were given to gatekeepers, whilst the publicity pamphlets were distributed to selected dwelling units informing respondents about the purpose and objectives of the survey. During this phase, appointments were also arranged with households who could not be interviewed at the time that publicity was conducted.

Data collection training was divided into two phases: national and provincial. Different modules (competencies) were covered during training, which included, amongst others:

* Map reading and PSU/DU identification
* Listing verification
* Publicity procedures
* Questionnaire completion
* Quality assurance
* Progress reporting

Figure 4.1: Phases of data collection


## POST-

ENUMERATION
Reverse logistics
Data processing
Analysis
Compilation of metadata
Data and report dissemination

National training was executed from 28 January to 01 February 2013 in Pretoria and was attended by 65 trainers representing all nine provinces. They were responsible for provincial training which took place from 5 to 10 February 2013. Each training venue had sub-training venues, comprising 40 to 50 trainees per venue.

Different quality measures were utilised to assess the understanding and competency of the trainees. The following measures were used:

* Evaluation exercises
* Role play
* Group discussions and feedback
* Field practice (questionnaire completion exercise)

Data collection took place from 18 February to 20 March 2013. The data collection structure consisted of four levels, as summarised in Table 4.1.

A number of quality assurance procedures were implemented by different survey teams. The process was conducted by provincial Quality Assurers (QAs), Head Office Quality Assurers, Fieldwork Coordinators (FWCs)/District Survey Coordinators (DSCs) and District Managers (DMs) in certain districts. The main role of the quality assurance team was to check the quality of all questionnaires and verify non-responses. The roles of Quality Assurers were highlighted in the QA manual with all the reporting forms attached and explained.

## The following were the key roles of Quality Assurers:

* Checking that the correct PSUs and dwelling units have been visited.
* Checking that survey instruments are correctly completed.
* Checking that fieldwork procedures are correctly followed, including ensuring the confidentiality of completed survey instruments.
* Support by sharing information about the problems encountered by other field teams and solutions that they adopted to avoid recurrence of similar situations, and giving feedback to other members of the field team on issues that concern them.
* Checking that all other survey related documents are correctly completed, including administrative documents.
* Reinforcing the training of field staff and retraining if the need arises during fieldwork.

Table 4.1: Data collection staffing framework with roles and responsibilities

| Level | Responsibilities |
| :--- | :--- |
| Provincial Survey <br> Coordinator (PSC) | The Provincial Survey Coordinator is responsible for the administration and management of <br> NHTS activities at provincial level. |
| Fieldwork Coordinator <br> (FWC) | The Fieldwork Coordinator reports to the Provincial Survey Coordinator for NHTS-related <br> content matters, and to the District Manager on administrative matters. He/she is also in <br> charge of the overall administration, management and implementation of NHTS activities at <br> district level. |
| Fieldwork Supervisor <br> (FWS) | The Fieldwork Supervisor reports to the District Survey Coordinator and is responsible for the <br> supervision of the publicity, listing and enumeration processes. The Fieldwork Supervisor will <br> be in charge of approximately four Fieldworkers specifically assigned under his/her <br> supervision. |
| Fieldworker (FW) | The Fieldworker is responsible for publicity, listing and enumeration in the assigned EA. |

Copies of job descriptions of the contract workers can be found in Annexure B.
As can be seen in Table 4.2, a total of 800 Fieldworkers, 267 Supervisors and 52 District Fieldwork Coordinators were contracted for the survey. Their numbers and distribution per province were primarily determined by the distribution of the sampled dwelling units.

Table 4.2: Contract fieldwork force

| Province | No of Fieldworkers | No. of Supervisors | No. of Fieldworker <br> Coordinators |
| :--- | ---: | ---: | ---: |
| Western Cape | 79 | 26 | 8 |
| Eastern cape | 46 | 15 | 5 |
| Northern Cape | 211 | 70 | 5 |
| Free State | 159 | 53 | 11 |
| KwaZulu-Natal | 59 | 20 | 5 |
| North West | 54 | 18 | 3 |
| Gauteng | 65 | 22 | 4 |
| Mpumalanga | 30 | 10 | 5 |
| Limpopo | 97 | $\mathbf{8 0 0}$ | $\mathbf{3 6}$ |
| RSA |  | $\mathbf{2 6 7}$ | 6 |

The number of people found in a particular household and their travel patterns influenced the amount of time needed to complete a questionnaire. On average, most interviews took between thirty and sixty minutes to complete. Several PSUs in KwaZulu-Natal and Gauteng had problems related to service delivery protests and instability, which made it difficult for the enumerators to work in those areas.

## 5. Data collection debriefing

The NHTS debriefing sessions were held at provincial and national levels. The national debriefing took place on 03 April 2013 in Pretoria. Three general recommendations emerged from this session. Firstly, that provincial staff be part of project planning; secondly, that it is necessary to decentralise some logistical arrangements to district level; and thirdly, that the project log template should be used to communicate quality issues. More specific successes and shortcomings are summarised in subsequent sections.

### 5.1 Planning (survey methodology and sampling)

### 5.1.1 Successes

* The involvement of the provincial and district office staff during the planning stage gave districts the power to be part of the decision-making process.
* Decentralisation of signing powers on certain budget items to provinces made the logistical processes run much smoother.
* The budget allocated for the project was sufficient to cover the requirements.


### 5.1.2 Shortcomings

* The decision to pay field staff the equivalent of the census stipend led to challenges in the field as staff was demoralised by the big differences between their salaries and that of the permanent staff.
* The work plans submitted by the provincial staff were not considered in certain cases, leading to shortfalls in planning.
* The timelines allocated for field operations were too short.
* The workload for the Fieldwork Coordinators (FWCs) was unrealistic when compared with the number of staff under their supervision, i.e. each coordinating 8 Fieldwork Supervisors (FWSs) and 38 Fieldworkers (FWs).
* Terrain conditions were not adequately considered when vehicle allocations were done, and some inaccessible areas initially did not have adequate transportation means.


### 5.1.3 Changes made to baseline plan/scope

District office staff had to resort to pairing NHTS staff with staff involved in other surveys where the following issues arose:

* Lack of maps;
* Vehicles not suitable for terrain; and/or
* Extensive publicity done at gatekeeper level.


### 5.1.4 Recommendations

* Field staff should not be paid on a stipend method.
* There should be frequent project review meetings.
* Sufficient time should be allocated to the project to execute all the required processes.


### 5.2 Recruitment

### 5.2.1 Successes

* Decentralisation of the recruitment process to provinces and support for recruitment from provincial Human Resources (HR).
* Recruiting from the Census 2011 database made the process smoother.


### 5.2.2 Shortcomings

* Recruitment period (December) was not ideal.
* Recruiting without sample analysis.
* Ratio of FWC: FWS: FW was unrealistic.
* Absence of the supervisor layer during verification resulted in quality issues.
* Appointment of FWSs before training.
* Lack of appointment of the Survey Administrator.


### 5.2.3 Changes made to baseline plan/scope

* Some of the recruited supervisors did not have a driver's licence, in spite of this being included as one of the criteria for recruitment.
* In some provinces, the contracts were administered by the District Office Administrators (DOAs).


### 5.2.4 Recommendations

* Training results should be used for the final appointment of field staff.


### 5.3 Geography and listing

### 5.3.1 Successes

* Summary books were made available on time.
* Screening of the 'out-of-scope' structures minimised the duration of the verification process.
* Integrating field operations with the other survey staff members assisted with the listing verification process.


### 5.3.2 Shortcomings

* Time frame allocated for listing verification was not sufficient.
* Not all summary books were received by provinces.
* Utilisation of the census listings compromised quality.
* Most listings did not have maps attached.
* In some cases there was an incorrect report/indication of the total number of occupied dwelling units (DUs), leading to re-sampling.


### 5.3.3 Changes made to baseline plan/scope

* A number of enumeration areas (EAs) had to be re-listed since DUs could not be identified.
* In some cases, listing and verification was conducted in the office since access was denied in some high-walled areas, leading to unverified DU totals given.


### 5.3.4 Recommendations

* At least a month should be allocated for listing verification (if it is to be done).
* Listing needs to be conducted from scratch for projects such as the NHTS.


### 5.4 Training

### 5.4.1 Successes

* Conducting training at provincial level allowed for proper logistics arrangements.
* Training material was supplied on time.
* Facilitators knew and understood the training content.
* Trainees were allowed active participation, and feedback was given daily.


### 5.4.2 Shortcomings

* In some cases, training venues were too small to accommodate all trainees comfortably (GP).
* Training material had a lot of addendums.
* The evaluation exercises had too many open-ended questions, which were timeconsuming to complete and mark.
* Field exercise was not sufficient for proper questionnaire completion practice.


### 5.4.3 Changes made to baseline plan/scope

* In some cases, the trainees who had dropped out during training could not be replaced.
* Some trainees who could not achieve the expected pass rate were recruited after being retrained since the exact number of recruits were trained and there were no replacements available.


### 5.4.4 Recommendations

* Training duration should be at least two weeks to accommodate a sufficient questionnaire completion exercise.


### 5.5 Publicity

### 5.5.1 Successes

* Publicity material was received on time.
* Assistance by other survey staff with gatekeeper publicity reduced refusals.


### 5.5.2 Shortcomings

* Time frame allocated for publicity was too short.
* Non-translation of pamphlets to other languages led to difficulties, especially in Afrikaans-speaking areas.
* Incorrect contact numbers indicated on some publicity documents resulted in refusals.
* A lack of information on the posters reduced the impact on the community and, in some cases, resulted in their being removed by community members.


### 5.5.3 Changes made to baseline plan/scope

* Publicity was conducted at the same time as data collection due to the short publicity timeframe.
* Publicity was not conducted in some DUs due to the short publicity timeframe.


### 5.5.4 Recommendations

* A separate team of publicity officers should be appointed to conduct publicity, a month before data collection takes place.
* Corporate Communications should assist with high-level publicity (print, visual, vocal, etc.) to decrease the high refusal rate in difficult areas.


### 5.6 Data collection

### 5.6.1 Successes

* Questionnaires and vehicles were received on time.
* Primary sampling unit (PSU) identification went smoothly with the assistance from other survey staff.
* Conducting spot-checks and retraining on the ground helped with the improvement of data quality.
* The sweeping method used for collection assisted in sample execution.
* Daily submission of reports assisted with quality assurance.
* Utilisation of guides in difficult areas was helpful (GP).


### 5.6.2 Shortcomings

* Insufficient time allocated for revisits in the case of non-contacts.
* Incorrect DU counts on some of the listings led to delays in data collection because of the need to resample, whilst already in the field.
* The completion of questionnaires using pens contributed to high error rates and untidy questionnaires; in some cases questionnaires had to be replaced and rewritten completely.
* There is a shortage of monitors to cover all areas.


### 5.6.3 Changes made to baseline plan/scope

* Some FWCs and District Managers had to do some of the follow-up visits of the noncontacts due to the workload and short time frame available for data collection.
* Other survey staff, e.g. dwelling frame, were used to conduct fieldwork due to the resignation of contract NHTS staff.


### 5.6.4 Recommendations

* Allocate at least a monitor for each and every district.
* More emphasis should be placed on the questionnaire completion exercise/practice to minimise the error rate on questionnaire completion using pens.


### 5.7 Logistics

### 5.7.1 Successes

* Conducting driving tests for drivers before fieldwork is undertaken.
* Sufficient allocation of vehicles.
* Field material available on time.
* Allocation of petrol funds whilst awaiting petrol cards.
* Petrol cards received on time.
* Accommodation provided for teams that had to travel long distances to their working areas.
* Collection of material (reverse logistics) from a central point minimised a lot of risks.


### 5.7.2 Shortcomings

* Late/non-loading of airtime for field staff.
* Delivery of vehicles in areas that were too far by service providers (NW).
* Faulty vehicles received from service providers (EC).
* Ever-changing of the reporting templates.
* Allocation of one data capturer per province and sharing them with other surveys was insufficient.


### 5.7.3 Changes made to baseline plan/scope

* Field staff used own or permanent staff's airtime to make calls to respondents and for reporting.
* Overloaded vehicles unable to accommodate staff and materials.
* Walking in areas where vehicles could not reach.


### 5.7.4 Recommendations

* Decentralise airtime loading to provinces.
* Include provincial and district staff on logistics planning.
* Hire correct/sufficient size of vehicles for field, considering the terrain.
* Include provincial staff contact details on communication tools.


## 6. Response rates and measures of quality

There was one household record that was from a PSU not found in the sample. The record was from PSU '798153240' which was incorrectly coded and it was excluded from the household file. Further, three household records with no sampled dwelling units (DUs) were excluded. There were 437 sampled DUs that were not enumerated, these records were added onto the household file as non-responding households with the assumption that each DU contained a single household. Ultimately the household file contained 52762 records. Table 6.1 shows the distribution of the response codes in the household file.

The mapping of the 'final result' to the three response status categories is provided in Table 6.1, where response code $1=$ Respondent, 2 = Non-respondent, and $3=$ Out-of-scope. The table also shows the percentage of households in each category.

Table 6.1: Response code categories and percentage of households in each category

| Response <br> code | Label | Frequency | Per cent | Cumulative <br> frequency | Cumulative <br> per cent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | Response | 43462 | 82,37 | 43462 | 82,37 |
| 2 | Non-response | 5314 | 10,07 | 48776 | 92,45 |
| 3 | Out-of-scope | 3986 | 7,55 | 52762 | 100,00 |

For the purpose of weighting, the out-of-scope households were excluded from the final household file. That is, the final household file used for weighting contained 48776 eligible household records.

Table 6.2 summarises the response rates obtained nationally and in each province. The national response rate of $89,1 \%$ is higher than that of the NHTS 2003, which was $86,6 \%$. This increase has been noted in spite of a general decrease in response rates for household surveys noted over the same time period.

Table 6.2: National and provincial response rates

| Province | NHTS 2013 |
| :--- | ---: |
| Western Cape | $85, \mathbf{1}$ |
| Eastern Cape | 90,4 |
| Northern Cape | 91,5 |
| Free State | 90,4 |
| KwaZulu-Natal | 90,3 |
| North West | 92,8 |
| Gauteng | 85,7 |
| Mpumalanga | 88,4 |
| Limpopo | $\mathbf{9 2 , 7}$ |
| RSA | $\mathbf{8 9 , 1}$ |

## Table 6.3: Slippage rates

| Province | Design weight | Final calibrated weight | Slippage rate |
| :---: | :---: | :---: | :---: |
| Slippage rates by province |  |  |  |
| National | 44678089,09 | 52714819,33 | 15,2457 |
| Western Cape | 5022957,76 | 5974389,27 | 15,9252 |
| Eastern Cape | 5655879,50 | 6607118,13 | 14,3972 |
| Northern Cape | 1023673,37 | 1159217,17 | 11,6927 |
| Free State | 2420953,94 | 2751344,46 | 12,0083 |
| KwaZulu-Natal | 8747042,82 | 10414946,60 | 16,0145 |
| North West | 2840203,64 | 3578424,18 | 20,6298 |
| Gauteng | 10786543,78 | 12628445,62 | 14,5853 |
| Mpumalanga | 3392393,91 | 4107903,11 | 17,4179 |
| Limpopo | 4788440,36 | 5493030,79 | 12,8270 |
| Slippage rates by race |  |  |  |
| National | 44678089,09 | 52714819,33 | 15,2457 |
| Black African | 35654392,43 | 42035260,57 | 15,1798 |
| Coloured | 4108842,35 | 4747365,90 | 13,4501 |
| Indian/Asian | 1146995,28 | 1322563,30 | 13,2748 |
| White | 3767859,04 | 4609629,57 | 18,2611 |
| Slippage rates by age and sex |  |  |  |
| Total male | 21283534,88 | 25683416,91 | 17,1312 |
| 0-14 | 6707976,22 | 7761753,43 | 13,5765 |
| 15-34 | 7736601,77 | 9713757,41 | 20,3542 |
| 35-64 | 5723052,06 | 7248021,32 | 21,0398 |
| 65+ | 1115904,82 | 959884,75 | -16,254 |
| Total female | 23394554,21 | 27031402,43 | 13,4542 |
| 0-14 | 6612202,74 | 7694889,71 | 14,0702 |
| 15-34 | 8000681,19 | 9569053,66 | 16,39 |
| 35-64 | 7002690,82 | 8027062,65 | 12,7615 |
| 65+ | 1778979,46 | 1740396,41 | -2,2169 |
| Total national | 44678089,09 | 52714819,33 | 15,2457 |
| 0-14 | 13320178,96 | 15456643,13 | 13,8223 |
| 15-34 | 15737282,96 | 19282811,07 | 18,387 |
| 35-64 | 12725742,88 | 15275083,97 | 16,6895 |
| 65+ | 2894884,28 | 2700281,16 | -7,2068 |

## 7. Limitations of the study

The sample design is such that households and individuals who live in institutions such as boarding houses, residential hotels, military barracks and hospital accommodation were excluded from the sample. The study was executed within a limited time frame and with contract survey officers. Training had to start after the December holidays and fieldwork had to be completed before travel patterns changed for the Easter school holidays at the end of March. Given that the Stats SA provincial offices are occupied with other surveys throughout the course of the year, executing an ad hoc survey - albeit with contract workers - placed additional strain on their organisational skills. Even though care was taken to train the survey officers and monitor the implementation of the survey, its sheer scope made it difficult to ensure that the survey was implemented in exactly the same way in all districts. A number of questionnaire printing errors resulted in an addendum being distributed during training in order for errors to be corrected. This may also not have been applied consistently across all provinces.

## 8. Comparability with previous surveys

Even though the importance of maintaining a time series was recognised, advances in technology and questionnaire design, as well as the need to reduce respondent burden made it necessary to modify some of the questions in the 2013 questionnaire. Since the last survey was executed in 2003, it was decided to build a new time series with the survey being done at five-year intervals using the 2013 questionnaire as the base. Where possible, analysis did refer back to 2003. However, if the comparisons were not completely valid, explanatory notes on differences are also provided. A comparative analysis of the questions contained in the 2003 and 2013 questionnaires is contained in Annexure B.

## Annexure A: Questionnaire

## National Household Travel Survey 2013



## Aim and use of the survey

The National Household Travel Survey will provide information to help the National Department of Transport (NDOT) to understand how and why people travel and to gain strategic insight into the transport problems and travel patterns of people of South Africa. The aim of the survey is to understand the transport needs and behaviour of households at all times of the day, to assess the effectiveness of the existing public transport subsidy mechanism, to assess attitudes towards transport services and transport facilities and to ascertain the cost of transport and assess level of affordability.

## Write figures very carefully

Close the zeros (0) so that they will not be mistaken for the sixes (6).
When there is more than one zero (0), as for instance in the value 1000 , do not connect the zeros on top, which is very common. Don't write the figures sideways or diagonally.
Never use decimal points (or decimal commas).

Your figures should be made like this:
Your crosses should not touch the sides:


## X

FLAP This section covers particulars of each person in the household
The following information must be obtained for every person who is considered to be a member of the household. Do not forget babies. If there are more than 10 persons in the household, use a second questionnaire

A First name and surname First name:
Write down first name and surname of each
member of the household, starting with the
head or acting head. If more than one head or
acting head take the oldest
Surname:

B Has ...... stayed here (in this household) for at least four nights on average per week during the last four weeks?
$\begin{aligned} 1 & =\mathrm{Yes} \\ 2 & =\mathrm{No} \longrightarrow \text { End of interview for this person }\end{aligned}$

C Is ...... a male or a female? $1=$ Male
Person (respondent) num
03

 10
$2=$ Female

|  |  | 01 | 02 | ${ }^{03}$ | 04 | 05 | 06 | 07 | ${ }^{08}$ | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | Does...have a driver's licence? For persons who are aged 15 years and less should answer "No". $\begin{aligned} & 1=\mathrm{Yes} \\ & 2=\mathrm{No} \longrightarrow \text { Go to } H \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $1$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| c | Does ... have a driver's licence for a ...? <br> Read all options. <br> $1=$ Motorcycle (Code A1, A) <br> 3 = Heavy vehicle (Code C, C1, EC, EC1) |  |  |  |  |  |  |  |  |  |  |
| H | Is there any other person residing in this household, other than those already | $\begin{aligned} & \text { Yes } \\ & \text { No } \end{aligned}$ | $\text { oto } A$ |  |  |  |  |  |  |  |  |

Section 1: Household characteristics
GENERAL FUNCTIONING

SOCIAL GRANTS AND SOCIAL RELIEF

|  |  |  | 01 |  | 02 |  | 03 |  | 04 |  | 05 |  | 06 |  | 07 |  | 8 |  | 9 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.3 | Does anyone in this household receive a social grant, a pension or social relief assistance from the Government? Exclude those persons who receive a pension from previous employment. $\begin{array}{ll} 1=\text { Yes } \\ 2 & =\text { No } \\ 3 & =\text { Do not know } \end{array} \quad \longrightarrow \text { Go to Section2 }$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |
| 1.4 | Does ... receive ......? Answer for each person who qualified for the grant and NOT for the person who applied on behalf of/physically receives the money. Someone who used to work for the Government and receives a pension does not get an old age grant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Read all the options | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
|  | 1 = Old-age grant (60-74;R1200; 75+; R1220) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | $2=$ Disability grant (<60;R1200) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | 3 Child support grant (0-16;R280) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | $4=$ Care dependency grant (0-17;R1200) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | 5 = Foster child grant (<22; R770) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | $6=$ War veterans grant ( $60+$; R1220) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | 7 = Grant-in-aid (R250 and should have another grant) | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | 8 = Social relief of distress | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |



| Travel Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square 1$ | $\square 2$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 6$ | $\square 7$ |




If option 21, continue with the questions, otherwise, Go to Section 3.



|  |  | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3.5 | Where is the educational institution? Place where educational institution is situated. |  |  |  |  |  |  |  |  |  |  |
| a | Suburb/Town/place name |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| b | Province <br> 1 = Western Cape <br> 2 = Eastern Cape <br> 3 = Northern Cape <br> $4=$ Free State <br> $5=$ KwaZulu-Natal <br> $6=$ North West <br> 7 = Gauteng <br> 8 = Mpumalanga <br> 9 = Limpopo | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 | 1 2 3 4 5 6 7 8 9 |
| c | District Code (Refer to back of the questionnaire) |  |  |  |  |  |  |  |  |  |  |
| d | Travel Analysis Zone (Taz) code |  |  |  |  |  |  |  |  |  |  |
| 3.6 | How many days per week does...usually travel to the educational institution? <br> Write the number of days |  |  |  |  |  |  |  |  |  |  |

$\square \otimes \mathbf{O}$

SECTION 4: WORK RELATED TRAVEL PATTERNS (Ask people aged 15 years and above) ${ }_{\text {Q4. }}$ ( 4 .8 ARE NOT BASED ON THE TRAVEL DAY.



| Travel Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square 1$ | $\square 2$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 6$ | $\square 7$ |


|  |  | 01 |  |  | 02 |  |  | 03 |  |  |  | 04 |  |  | 05 |  |  | 06 |  |  | 07 |  |  | 08 |  |  | 09 |  |  | 10 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4.9 | At what time did ...leave to go to work on the travel day? <br> Write the time using the 24 hour clock: <br> e.g. 1930 or 0520 |  | н M | M | н | н | M |  | H | H M | M | H | H N | M | H | H M | M | H | H M | M | H | M | м | H | H M | M M | H |  |  | H |  |  |
| 4.10 | At what time did ... get to the place of work on the travel day? Write the time using the 24 hour clock: <br> e.g. 1930 or 0520 | H | н | M | H | н | M |  | H | H M | м | H | H | M | H | H | M | н | M | 1 M | H | M | M | н | M | M M | H | н | M | H | H | M M |
| 4.11 | Did ... walk all the way to work on the travel day? $\begin{aligned} & 1=\text { Yes } \longrightarrow \text { Go to Section } 5 \\ & 2=\text { No } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 4.12 | Did ... cycle all the way to work on the travel day? $1=\text { Yes } \longrightarrow \text { Go to Section } 5$ $2 \text { = No }$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | 1 2 |  |  | 1 2 |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 4.13 | Did ... drive all the way to work on the travel day? (Not as a passenger) $\begin{aligned} 1 & =\text { Yes } \\ 2 & =\text { No } \longrightarrow \text { Go to Q4.20 } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  |  |  | 1 2 |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 4.14 | Which of the following vehicles did... drive to work on the travel day? <br> 1 = Truck/Lorry <br> 2 = Car/ Bakkie <br> 3 = Motor cycle/Scooter <br> 4 = Minibus (private) <br> = Other (specify) |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  | 1 2 3 4 5 |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |


| Travel Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square 1$ | $\square 2$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 6$ | $\square 7$ |



| Travel Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square 1$ | $\square 2$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 6$ | $\square 7$ |


|  | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4.21 What mode of travel did ... use to get to his/her place of employment on the travel day? Indicate all modes of travel in the order (Mode1, 2, 3,4) in which they are used. <br> $01=$ Train (Metrorail) <br> $02=$ Long distance train/Shosholoza <br> $03=$ Bus <br> $04=$ BRT bus/IRT bus <br> $05=$ Metered taxi <br> $06=$ Commuter/short-distance/ local minibus taxi <br> 07 = Long-distance minibus taxi <br> $08=$ Sedan taxil four plus one <br> 09 = Bakkie taxi/ tambai <br> $10=$ Car/ Bakkie passenger <br> 11 = Car/ Bakkie driver <br> 12 = Truck/Lorry/tractor/trailer passenger <br> 13 = Truck/Lorry tractor/trailer driver <br> $14=$ Company vehicle <br> 15 = Scooter/motorcycle <br> $16=$ Bicycle <br> 17 = Animal drawn transport/vehicle <br> $18=$ Boat/ship <br> 19 = Aircraft <br> $20=$ Gautrain <br> $21=$ Walking all the way <br> $22=$ Other (specify) | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 Mode 2 Mode 3 Mode 4 | Mode 1 <br> Mode 2 <br> Mode 3 <br> Mode 4 | Mode 1 Mode 2 Mode 3 Mode 4 | Mode 1 Mode 2 Mode 3 Mode 4 |


| Q4.22ano Ca.23arenot baseo | 01 | 02 | ${ }_{0}$ | 04 | ${ }_{0}$ | ${ }_{0}$ | 07 | ${ }_{0}$ | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | nase 1 | maso 1 | Noba 1 | mose 1 | nosen 1 | Nota 1 | nost | masa | mase 1 | nasa 1 |
|  | masa 2 | nowa | mase 2 | Nose 2 | mata 2 | 40at | $1{ }_{\text {ase }}$ | mose 2 | Nata 2 | Wear 2 |
|  | Nose 3 | nama | masa | masa | masa | mases | Nases | masa | masa | masa |
|  | nome 4 | masea | masa | masa | masa | mase 4 | noses | mosa | masa | masa |
| 4.23 For the modes of travel used, did ... make a $1=$ Per single trip $3=$ Per week $\substack{5=\text { Not topnicable } / / \text { do not pay } \\ 6=\text { Do not thow }}$ | Mase 1 | nasa 1 | Masea 1 | nosa 1 | Mosat | mase 1 | nase 1 | nosat | nosat | nosat |
|  | Nose 2 | masa | nosa 2 | nosa 2 | Nosa 2 | ${ }^{\text {nasa } 2}$ | \#sasa | nosa 2 | ${ }^{\text {nosas } 2}$ | ${ }^{\text {noma } 2}$ |
|  | neas 3 | masa | nomas | Noses | noeas | masa | neas | neas 3 | Noces 3 | nota 3 |
|  | Mosas | mase | nosas | Nosa 4 | nosa | masat | Masat | Natas | Noses | nomat |



```
SECTION 5: BUSINESS TRIPS (Ask people aged 15 years and above) Business trips can be a day or overnight trip(s) or both.
SECTION 5 IS NOT BASED ON THE TRAVEL DAY.
\(\begin{array}{ll}\text { 5.1 } & \text { Has } \ldots \text { undertaken any business trip(s) longer } \\ \text { than } 20 \mathrm{~km} \text { away from his/her usual place of wor } \\ \text { within the RSA in the past calendar month? }\end{array}\)
5.2 How many business trips has ... undertaken in
the past calendar month?
5.3 Thinking of ... 's last business trip what mode of
travel did ... use for the longest part of the trip?
\(01=\) Train (Metrorail)
\(02=\) Long distance train/Shosholoza
\(03=\) Bus
\(04=\) BRT bus/IRT
\(05=\) Metered taxi
\(06=\) Commus
06 minibusutarishort-distance/ local
\(07=\) Long-disistance minibus taxi
\(08=\) Sedan taxil four plus one
\(09=\) Bakkie taxii tambai
\(10=\) Car/ Bakkie passenger
\(11=\) Car// Bakkie driver
\(12=\) Truck/Lorry/tractor/trailer
passenger
\(13=\) Truck/Lorry tractor/trailer driver
\(13=\) TruckLo
\(14=\) Company vehicle
\(15=\) Scooter/motorcycle
\(16=\) Bicycle
\(17=\) Animal drawn transport/vehicle
\(18=\) Anoat/ ship
\(19=\) Alircaft
\(20=\) Gautrain
\(21=\) Walk
\(22=\) Other (specify
\(22=0\) ther (specifly
Write 88 if not applicab
```

SECTION 6: OTHER TRAVEL PATTERNS (Ask people aged 15 years and above)
SECTION 6 IS BASED ON THE MOST RECENT DAY AND OVERNIGHT TRIPS


|  |  | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Overnight trips |  |  |  |  |  |  |  |  |  |  |
| 6.5 | Has... undertaken any overnight trip/s away from this home in the past twelve months? $\begin{aligned} & 1=\text { Yes } \\ & 2=\text { No } \end{aligned} \quad \longrightarrow \text { Go to Section } 7$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 6.6 | How often did ...undertake overnight trip/s in the past twelve months? (Mark one option) <br> 1 = Weekly (four or more times in a month) <br> 2 = One to three times in a month <br> 3 = Every two to three months (4 to 6 times in a year) <br> $4=$ One to three times in a year | $\begin{aligned} & 01 \\ & 02 \\ & 03 \\ & 04 \end{aligned}$ | $\begin{aligned} & 01 \\ & 02 \\ & 03 \\ & 04 \end{aligned}$ | 01 02 03 04 | 01 02 03 04 | 01 02 03 04 | $\begin{aligned} & 01 \\ & 02 \\ & 03 \\ & 04 \end{aligned}$ | $\begin{aligned} & 01 \\ & 02 \\ & 03 \\ & 04 \end{aligned}$ | 01 02 03 04 | 01 02 03 04 | 01 02 03 04 |
| 6.7 | What was the main purpose of the trip? (recent trip) Mark ONE response only <br> 01 = Home for leisure/holiday <br> 02 = Leisure/ holiday <br> $03=$ Shopping - business <br> 04 = Shopping - personal <br> $05=$ Sporting - spectator <br> $06=$ Sporting - participant <br> $07=$ Home to visit friends and/or family <br> $08=$ Visit friends and/or family <br> 09 = Funeral <br> $10=$ Medical <br> 11 = Wellness (e.g. spa, health farm) <br> $12=$ Religious <br> 13 = Wedding <br> 14 = Other, (Specify) | 01 02 03 04 05 06 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 07 08 08 09 10 11 12 13 14 | 01 02 02 03 04 05 06 07 08 09 10 11 12 13 14 | 01 02 03 04 05 06 06 07 08 09 10 11 12 13 14 |




| 7.3 | What are the sources of income for this household? Read all the options $\begin{aligned} & 1 \text { = Salaries/wages/commission } \\ & 2=\text { Income from a business } \\ & 3=\text { Remittances/ including child maintenance } \\ & 4=\text { Pensions } \\ & 5=\text { Grants } \\ & 6=\text { Sales of farming products and services } \\ & 7=\text { Income from UIF } \\ & 8=\text { Other income sources e.g. rental income, interest } \\ & 9=\text { No income } \longrightarrow \text { Go to } Q 7.7 \end{aligned}$ | Yes 1 1 1 1 1 1 1 1 1 1 | No 2 2 2 2 2 2 2 2 2 2 |
| :---: | :---: | :---: | :---: |
| 7.4 | Which one of the above income sources usually provides the most money for the household? (choose only one source) Write the option number in the block provided |  |  |
| 7.5 | If the household receives an income from remittances please specify how much they get per month. |  |  |
| 7.6 | If the household receives an income from pensions or retirement annuities (Not old age grant) please specify how much they get per month. |  |  |
| 7.7 | How many bicycles that are in working order does this household own and use for transport? |  |  |
| 7.8 | How many animal drawn vehicles that are in working order does this household own and use for transport? |  |  |
| 7.9 | Do you own animals that can pull animal drawn vehicles? $\begin{aligned} & 1=\mathrm{Yes} \\ & 2=\mathrm{No} \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |

SECTION 7: GENERAL HOUSEHOLD INFORMATION

| 7.10 | How many of the following motor vehicles in working order does this household have available for private use (exclude tractors) <br> (Read out all options) |
| :---: | :---: |
|  | Motorcycle/Scooter |
|  | Car/Bakkies/Station wagons/4x4s owned by employer/company |
|  | Car/Bakkies/Station wagons/ 4x4s owned by the household |
|  | Car/Bakkies/Station wagons/ $4 \times 4 \mathrm{~s}$ owned by relatives / friends |
|  | Minibus/Kombis |
|  | Trucks |
|  | Other, specify ................................... |

SECTION 7: GENERAL HOUSEHOLD INFORMATION

SECTION 8: ATTITUDES AND PERCEPTIONS ABOUT TRANSPORT


| 8.7 | How satisfied or dissatisfied are you with the following aspects of the passenger train service? <br> (Read out all options) | Metrorail | Shosholoza | Bluetrain | Gautrain |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $a=$ The distance between the train station \& your home | a | a | a | a |
|  | $\mathrm{b}=$ The travel time by train | b | b | b | b |
|  | $c=$ Security on the walk toffrom the station | c | c | c | c |
|  | $d=$ Security at stations | d | d | d | d |
|  | e $=$ Security on the train | e | e | e | e |
|  | $f=$ The level of crowding in the train | f | f | f | f |
|  | $\mathrm{g}=$ Safety from accidents | g | g | g | g |
|  | $h=$ The frequency of trains during peak period | h | h | h | h |
|  | $i=$ The frequency of trains during off-peak period | i | i | i | i |
|  | $\mathrm{j}=$ The punctuality of trains | j | j | j | j |
|  | $\mathrm{k}=$ The train fares | k | k | k | k |
|  | I = The facilities at the stations e.g. toilets, offices | 1 | 1 | 1 | 1 |
|  | $\mathrm{m}=$ The train service overall | m | m | m | m |
|  | $\begin{aligned} & 1=\text { Very Satisfied } \\ & 2=\text { Satisfied } \\ & 3=\text { Dissatisfied } \\ & 4=\text { Very Dissatisfied } \\ & 8=\text { Not applicable } \end{aligned}$ |  |  |  |  |


| 8.5 | Have you used a passenger train in the past calendar month? $\begin{aligned} & 1=\text { Yes } \\ & 2=\text { No } \end{aligned} \quad \longrightarrow \text { Go to Q8.7 }$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| :---: | :---: | :---: |
| 8.6 | Give two reasons why you did not use a passenger train in the past calendar month? <br> $01=$ No Train available at all <br> $02=$ Train Not available often enough <br> $03=$ Train Not available at the right times <br> 04 = Train too expensive <br> $05=$ Too much crime (Too dangerous) <br> 06= Travel time too long/Too slow <br> 07 = Trains too crowded <br> 08 = Trains always late <br> 09= Trains don't go where needed <br> 10= Station too far from home <br> 11= Station too far from destination <br> 12 = Have to change transport (transfer) <br> $13=$ No knowledge of timetable and routes <br> 14 = Prefer private transport <br> 15 = Prefer taxi <br> 16 = Prefer bus <br> 17 = Can walk <br> 18 = Don't travel much <br> 19 = Other (specify in the block) | Reason 1 <br> Reason 2 |





Annexure B: Comparison of the 2013 and 2003 questionnaires
Comparative analysis: National Household Travel Survey questionnaires 2003 and 2013

| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| A | First name and surname | Equivalent |  |
| B | Four-by-four rule | Equivalent |  |
| C | Sex | Equivalent |  |
| D | Date of birth |  | New question |
| E | Population group | Equivalent |  |
| F | Driver's licence (Age >=16) |  | New question |
| G | Type of driver's licence | Equivalent Q4.1 |  |
| H | Other person residing in the household but not presently here? | Equivalent QF |  |

Section 1: Household characteristics

| No. | Question | 2003 | 2013 |
| :--- | :--- | :--- | :--- |
| General functioning | Difficulty in seeing, hearing, walking/climbing, remembering and <br> concentrating, self-care, communicating | Equivalent Q2.2 | New response <br> categories |
| 1.1 | Use of assistive devices |  | New question |
| 1.2 | Social grants and social relief |  | New question |
| 1.3 | Receive social grant, pension or social relief |  | New question |
| 1.4 | Type of grant |  |  |


| No. | Questions | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{2 . 1}$ | On which day does ... usually travel/leave the house? |  | New question |
| $\mathbf{2 . 2}$ | Did ... take any trip/travel in the past seven days? | Equivalent Q2.3 | Q2.2 |
| $\mathbf{2 . 3}$ | Main reasons for not making any trip/travel. Ask if 'No' to Q2.2 | Equivalent Q2.4 | Q2.3 <br> The question is <br> rephrased and more <br> response categories are <br> added |
| $\mathbf{2 . 4}$ | Number of trips made | Equivalent Q2.5 | Q2.4 |
| $\mathbf{2 . 5}$ | Modes of travel used | Equivalent Q2.6 | Q2.5 <br> More response <br> categories are added |
| $\mathbf{2 . 6}$ | Main reasons why ... walked all the way to the destination? |  | New question |

Section 3: Education and education related patterns

| No. | Questions | 2003 | 2013 |
| :---: | :---: | :---: | :---: |
| 3.1 | Highest level of education | Equivalent |  |
| 3.2 | Is ... currently attending an educational institution? | Equivalent |  |
| 3.3 | Type of educational institution | Equivalent |  |
| 3.4 | Is ... mainly studying through attending classes or distance learning? | Equivalent |  |
| 3.5 | Where is the educational institution? <br> a. Suburb <br> b. Province <br> c. District code <br> d. Travel Analysis Zone (TAZ) code | Equivalent | TAZ code has been added to the response categories |
| 3.6 | Number of days per week a person travels to an educational institution |  | New question |
| 3.7 | At what time did ... leave to go to the educational institution on the travel day? | Equivalent Q3.6 | Q3.7 |
| 3.8 | How long did ... walk to get from here to his/her first transport? |  | New question |
| 3.9 | How long did ... wait for his/her first transport to arrive? |  | New question |
| 3.10 | How long did ... have to walk at the end of the trip to reach his/her the educational institution? |  | New question |
| 3.11 | At what time did ... arrive at the educational institution he/she attends on the travel day? | Equivalent Q3.7 | Q3.11 |
| 3.12 | Mode of transport used to get to the educational institution | Equivalent Q3.8 | Q3.12 |
| 3.13 | For the mode/s selected in Q3.12, is the payment made per single trip, per return trip, per week, per month? | Equivalent Q3. 10 | Q3.13 |
| 3.14 | How much did it cost? If payment made in Q3.14 | Equivalent Q3.9 | Q3.14 |

Statistics South Africa
Section 4: Work related travel patterns (Ask people aged 15 years and above)
2003 questions: Are not based on the travel day whereas
2013 questions: Are based on the travel day

| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 . 1}$ | Does ... have a job/run a business or did he/she do any work in the <br> last seven days, even if he/she was absent from work due to <br> leave/illness? | Equivalent Q4.2 |  |
| $\mathbf{4 . 2}$ | Reason for not working in the last seven days? Ask if 'No' in 4.1 | Equivalent Q4.3 |  |
| $\mathbf{4 . 3}$ | If ... is currently not working or running his/her business, is he/she <br> willing to work? |  |  |
| $\mathbf{4 . 4}$ | Workplace(Place where the workplace is situated) <br> a. Suburb <br> b. Province <br> c. District code <br> d. Travel Analysis Zone (TAZ) code | Equivalent Q6.1 |  |
| $\mathbf{4 . 5}$ | Number of days per week a person travels to work | Equivalent Q5.4a |  |
| $\mathbf{4 . 6}$ | Total salary at the main job | New question |  |
| $\mathbf{4 . 7}$ | Is the amount per week, per month or annually? Ask only if amount <br> is given in Q4.6 | Equivalent Q5.4ab |  |
| $\mathbf{4 . 8}$ | If 'None' 'refuse' or 'do not know' in Q4.6, show prompt card 3 and <br> mark the applicable code | Equivalent Q5.4ac |  |
| $\mathbf{4 . 9}$ | At what time did ... leave to go to the work on the travel day? | Not equivalent Q6.2 |  |
| $\mathbf{4 . 1 0}$ | At what time did ... get to the place of work on that travel day? | Not equivalent Q6.3 |  |
| $\mathbf{4 . 1 1}$ | Did ... walk all the way to work on the travel day? | Not equivalent Q6.4 |  |
| $\mathbf{4 . 1 2}$ | Did ... cycle all the way to work on the travel day? | Not equivalent Q6.5 |  |
| $\mathbf{4 . 1 3}$ | Did ... drive all the way to work on the travel day? | Not equivalent Q6.6 |  |
| $\mathbf{4 . 1 4}$ | Type of vehicle driven to work on the travel day | Not equivalent Q6.7 |  |
| $\mathbf{4 . 1 5}$ | Did ... need his/her vehicle at work for work purposes on the travel <br> day? | Not equivalent Q6.8 |  |
| $\mathbf{4 . 1 6}$ | Did ... have to drop/pick up passengers on his/her way to work on the <br> travel day? | Not equivalent Q6.9 |  |


| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 . 1 7}$ | Did ... have to drop/pick up passengers on his/her way back home on <br> the travel day? | Not equivalent Q6.10 |  |
| $\mathbf{4 . 1 8}$ | For the vehicle used to drive to work, how much does it cost ... to <br> travel to work? |  | New question |
| $\mathbf{4 . 1 9}$ | Was the payment in Q4.18 made per single trip, per return trip, per <br> week, per month? | New question |  |
| $\mathbf{4 . 2 0}$ | Did ... change transport on the way to work on the travel day? (e.g. <br> train to train, bus to train) | Not equivalent Q6.11 |  |
| $\mathbf{4 . 2 1}$ | Mode of transport used to get to work on the travel day | Not equivalent Q6.12 |  |
| $\mathbf{4 . 2 2}$ | For the modes of travel used, how much did it cost ... to travel to <br> work? | Equivalent Q6.13 |  |
| $\mathbf{4 . 2 3}$ | Was the payment in Q4.22 made: per single trip, per return trip, <br> per week, per month? | Equivalent Q6.14 |  |
| $\mathbf{4 . 2 4}$ | Does ...s employer give him/her cash for public transport to travel to <br> and from work? | Not equivalent Q6.15 |  |
| $\mathbf{4 . 2 5}$ | How much is this worth per month? | Not equivalent Q6.16 |  |
| $\mathbf{4 . 2 6}$ | How long did ... walk to get from here to his/her first transport on the <br> travel day? | Not equivalent Q6.17 |  |
| $\mathbf{4 . 2 7}$ | How long did ... wait for his/her first transport to arrive on the travel <br> day? | Not equivalent Q6.18 |  |
| $\mathbf{4 . 2 8}$ | How long did ... walk at the end of the trip to reach his/her place of <br> work on the travel day? | Not equivalent Q6.19 |  |


Section 5: Business trips (Ask people aged 15 years and above)

| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{5 . 1}$ | Has ... undertaken any business trip(s) longer than 20 km <br> away from her place of work within the RSA in the past <br> calendar month? | Not equivalent Q5.5 | The trip distance changed <br> from 200 km to 20 km and <br> the question is slightly <br> rephrased |
| $\mathbf{5 . 2}$ | Number of trips taken in the past calendar month | Equivalent Q5.6 |  |
| $\mathbf{5 . 3}$ | Mode of transport used for the longest part of the trip | Equivalent Q5.8 |  |
| $\mathbf{5 . 4}$ | How much did it cost for the trip there and back? | Equivalent Q5.7 | New question |
| $\mathbf{5 . 5}$ | Main destination of the trip <br> a. Suburb <br> b. Province <br> c. District code <br> d. Travel Analysis Zone (TAZ) code |  |  |

## Section 6: Other travel patterns (Ask people aged 15 years and above)

| No. | Question | 2003 | 2013 |  |
| :--- | :--- | :--- | :--- | :---: |
| Day trips |  |  |  |  |
| 6.1 | Has ... undertaken any day trip/s away from home in the past <br> twelve months? | Day trips are not <br> covered in this <br> section | New questions |  |
| 6.2 | Main purpose of the trip |  |  |  |
| 6.3 | Main mode of travel used for the trip |  |  |  |
| 6.4 | How much did it cost ... to reach the main destination? |  |  |  |

[^0]| 6.5 | Has $\ldots$ undertaken any overnight trip/s away from home in the <br> past twelve months? | Not equivalent Q5.9 |  |
| :--- | :--- | :--- | :--- |
| 6.6 | How often did ... undertake overnight trip/s in the past twelve <br> months? | Not equivalent Q5.11 |  |
| 6.7 | Main purpose of the trip | Not equivalent Q5.13 question |  |
| 6.8 | Main mode of travel used for the trip | Not equivalent Q5.14 |  |
| 6.9 | How much did it cost ... to reach the main destination? | New question |  |
| 6.10 | Main mode of travel used to return to the usual place of <br> residence | How much did it cost $\ldots$ to return to his/her usual place of <br> residence? | New question |
| 6.11 |  |  |  |

Section 7: General Household Information

| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{7 . 1}$ | Type of main dwelling | Equivalent Q1.1 |  |
| $\mathbf{7 . 2}$ | Total household expenditure in the last month | Equivalent Q1.5 |  |
| $\mathbf{7 . 3}$ | Source of income for the household |  | New question |
| 7.4 | Income source that usually provides the most money for the <br> household | New question |  |
| 7.5 | Income from remittances; specify how much they get per month |  | New question |
| $\mathbf{7 . 6}$ | Income from pensions or retirement annuities; specify how much <br> they get per month |  | New question |
| $\mathbf{7 . 7}$ | Number of bicycles in working order a household owns and uses <br> for transport | Equivalent Q1.7 | Question slightly <br> rephrased |
| $\mathbf{7 . 8}$ | Number of animal-drawn vehicles in working order a household <br> owns and uses for transport | New question |  |
| $\mathbf{7 . 9}$ | Do you own animals that can pull animal-drawn vehicles? | New question |  |
| $\mathbf{7 . 1 0}$ | Number of motor vehicles in working order a household has <br> available for private use | Equivalent Q1.4 <br> $\mathbf{7 . 1 1}$How do members of the household get to the nearest facility of |  |

## Section 8: Attitudes and perceptions about transport

Section 8: Attitudes and perceptions about transport

| No. | Question | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{8 . 1}$ | Transport related problems experienced by the household | Equivalent Q1.2 | Response categories <br> are added |
| $\mathbf{8 . 2}$ | Factors influencing households' choice of mode of travel |  | New question |
| $\mathbf{8 . 3}$ | How long does it take in minutes to walk to the nearest taxi <br> rank/route, bus stop/station? | Equivalent Q1.3 |  |
| $\mathbf{8 . 4}$ | Main modes of travel used by the household | Equivalent Q7.2 | New question |
| $\mathbf{8 . 5}$ | Have you used a passenger train in the past calendar month? | Equivalent Q7.3 |  |
| $\mathbf{8 . 6}$ | Reasons why you did not use a passenger train in the past <br> calendar month | Equivalent Q7.4 | Types of trains are <br> added on the response <br> categories |
| $\mathbf{8 . 7}$ | Satisfaction about the passenger train service | Equivalent Q7.5 |  |
| $\mathbf{8 . 8}$ | Have you used a bus in the past calendar month? | Equivalent Q7.6 |  |
| $\mathbf{8 . 9}$ | Reasons why you did not use bus in the past calendar month | Equivalent Q7.7 |  |
| $\mathbf{8 . 1 0}$ | Satisfaction about the bus service | Equivalent Q7.8 |  |
| $\mathbf{8 . 1 1}$ | Have you used a minibus taxi in the past calendar month? | Equivalent Q7.10 |  |
| $\mathbf{8 . 1 2}$ | Reasons why you did not use minibus taxi in the past calendar <br> month |  | New question |
| $\mathbf{8 . 1 3}$ | Satisfaction about the minibus taxi service | New question |  |
| $\mathbf{8 . 1 4}$ | Language used to conduct the interview |  |  |
| $\mathbf{8 . 1 5}$ | Type of living quarters |  |  |

Statistics South Africa
Annexure C: Job descriptions of contract staff

[^1]
## Fieldworker: National Household Travel Survey <br> (Salary Level: Stipend equal to R5000 per month) <br> (Ref. No.:)

## Key performance areas:

- Attend training when required to. If you miss one day's training without proper reason you will be excluded from continuing in the project.
- Do publicity at the sampled primary sampling units (PSUs) and the selected dwelling units (DUs).
- Facilitate cooperation from all households when conducting publicity and enumeration fieldwork.
- Collect data from sampled dwelling units by completing the relevant questionnaires for all households at the sampled dwelling units.
- Submit daily report on completed work to your Fieldwork Supervisor (FWS).
- Handle queries on the completed questionnaires referred back to your supervisor.
- Receive all the fieldwork materials (satchel with EA Summary Book, questionnaires, FW manual, bib, stationery) required from your Fieldwork Supervisor.
- Safeguard all materials issued for the purpose of conducting the survey.
- Perform quality assurance checks on all completed questionnaires before handing them over to your FWS.
- Conduct reverse logistics.


## Prerequisites:

- A matric certificate, preferably with Mathematics/Accounting
- Experience in conducting surveys and censuses
- Knowledge of data collection and geography
- Knowledge of MS Office Suite
- Valid driver's licence and clean accident record during census and the past year


## Person profile:

This position will suit a person with:

- Good interpersonal, communication, report writing, conflict-resolution, interviewing, and decision-making skills;
- The ability to understand diversity and work with people; and
- A willingness to work long hours.


# FIELDWORK COORDINATOR National Household Travel Survey 

(Salary Level: Stipend equal to R7 000 per month)
(Ref. No.:)

## Key performance areas:

- Attend training when required to. If you miss one day's training without proper reason you will be excluded from continuing in the project.
- Engage gatekeepers and seek permission to conduct fieldwork in the allocated primary sampling units (PSUs).
- Assist with training of Fieldworkers and Fieldwork Supervisors for whom you are responsible.
- Receive all the fieldwork materials (satchels with EA Summary Books, questionnaires, Fieldworker (FW) manuals, bibs, stationery) required from your Provincial Survey Coordinator (PSC) and ensure distribution to all Fieldworkers and Fieldwork Supervisors for whom you are responsible.
- Your key responsibilities in the primary sampling units (PSUs) allocated to you include the supervision of:
- Publicity done by FWs/ FWSs;
- Enumeration done by FWs and FWSs to ensure that all households that are occupying dwelling units in the primary sampling units (PSUs) allocated to them are enumerated; and
- FWs and FWSs to ensure that all information collected from all households is relevant and accurately captured on the questionnaire.
- Implement all phases of field operations, e.g. publicity, training, collection and quality assurance.
- Compile training report at the end of the training period.
- Compile closure report at the end of the fieldwork period.
- Report progress daily to your PSC.

In addition you will be required to:

- Assist FWs/FWSs with handling of refusals or difficult respondents.
- Do everything to ensure cooperation from all households when conducting publicity and enumeration fieldwork.
- Handle queries on the completed questionnaires referred back to you by the PSC.
- Do spot-checks in the field to ensure the correct PSUs and DUs are enumerated by FWs/ FWSs.
- Do spot-checks in the field to ensure/confirm vacant/unoccupied/demolished, etc. result codes recorded by FWs/FWSs.
- Observe fieldwork interviews conducted by FWs/FWSs to ensure that questionnaire is administered correctly.
- Re-train FWs and FWSs if problems are experienced with fieldwork procedures or questionnaire completion.
- Conduct detailed planning sessions with relevant stakeholders and staff.
- Develop project plans.
- Assign tasks to staff and monitor execution thereof.
- Monitor and evaluate performance of staff.
- Monitor and manage transport, budget, human resources and survey instruments.
- Attend meetings and write reports.
- Monitor the risk management plan.
- Manage risks.
- Provide administrative and technical leadership to field staff.
- Perform quality assurance checks on all questionnaires completed and handed to you by Fieldworkers and FWSs, whom you are responsible to monitor, before handing them over to your PSC.


## Prerequisites:

- A matric certificate, preferably with Mathematics/Accounting
- Experience in conducting surveys and censuses
- Knowledge of data collection and geography
- Knowledge of MS Office Suite
- Valid driver's licence and clean accident record during census and the past year


## Person profile:

This position will suit a person with:

- Good interpersonal skills, communication skills, decision-making skills, report writing skills, conflict-resolution, interviewing skills, organisational, presentation, facilitation, map reading and interpretation skills, leadership skills, language proficiency, presentation skills, strategic thinking, conflict resolution, team player;
- The ability to understand diversity and work with people; and
- A willingness to work long hours.


## LISTER

## Recruitment criteria:

- Matric certificate with Geography as one of the subjects
- Experience in survey and census fieldwork
- Driver's licence for field staff from farms and smallholdings, otherwise it is an added advantage for other EA types
- Recruited from areas where they live


## Duties and responsibilities:

- Find the physical boundaries of the allocated EA;
- Conduct publicity and listing in the allocated EA;
- Visit the allocated EA and conduct publicity and listing following the procedures and instructions in the publicity and listing manual to perform fieldwork duties;
- Conduct map annotations and make field sketches; and
- Complete the EA Summary Book.


## Annexure D: Taz zone maps

Taz zones in Western Cape

Taz zones in Cape Town Metro

Taz zones in Eastern Cape



Taz zones in Northern Cape


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## Taz zones in Ethikwini Metro


Statistics South Africa
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Statistics South Africa

Statistics South Africa

Statistics South Africa
Taz zones in Ekhureleni Metro

Taz zones in Johannesburg Metro

Taz zones in Tshwane Metro





| Province bound any: MDB;2011 Taz Zone: Statssa_2013 <br> Colour: Colour ramp $=$ Greens |
| :---: |







[^0]:    Overnight trips

[^1]:    Fieldworker
    Fieldwork Coordinator
    Fieldwork Supervisor
    Lister

