DEPARTMENT OF TRANSPORT

TECHNICAL REPORT

The First South African National Household Travel Survey 2003

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The full National Household Travel Survey (NHTS) dataset will be available from the DoT after the Cabinet approved the release thereof. Please direct your enquiries to the office of the Chief Director: Transport Policy and Impact Monitoring.

SYNOPSIS:

The first national survey of the travel habits of individuals and households is the subject of this report. It describes the process of developing and executing the First National Household Travel Survey, the methods and sample size of the survey and the main descriptive results. The report includes detailed descriptions of the methodology and the results broken down in terms of households and persons in each household. The main emphasis is on workers and commuter trips and trips to various educational institutions. The information provided includes the modes of travel, periods of travel, travel times and travel costs.

MINISTERIAL FOREWORD

I am pleased to release the Technical Report on the *First South African National Household Travel Survey 2003 (NHTS)* to all stakeholders. The Ministry and Department of Transport look forward to the discussions and feedback that this report, as well as the ongoing NHTS-related research programme, will stimulate. The main objective of the NHTS is to understand the domestic travel behaviour and needs of individuals and households in South Africa. As such, it places the spotlight squarely on the users of transport services, in the spirit of *Batho Pele*. For far too long in the course of our history, the users of transport have either been ignored, or they have been listened to, but not really heard. This applies especially to the majority, who (the NHTS shows) are dependent on walking and public transport.

Ordinary South Africans from all corners of our land have spoken through the NHTS, which was based on a representative sample that covered approximately 50 000 households. Over 45 000 successful household interviews were held that covered all nine provinces as well as every metropolitan and district municipality. From the initial results, South Africans are telling us as a transport sector that they need transport services to be safer, more available, more affordable and more secure. We have heard this message and plan to move swiftly to make significant improvements in public transport services. Already, I have asked the Department to work towards: increasing investment in public transport infrastructure, to restructure current subsidies in order to promote integrated settlements and to develop public transport projects that will improve access to opportunities for the urban and rural poor.

The NHTS promises to be a rich resource for Government in its quest to accelerate the improvement of transport services, in line with the mandate the electorate has given us, as we enter the second decade of our freedom.

Immediately following the release of the Technical Report and Key Results, the DoT will engage in a process of further analysis and consultation that will cover all provinces as well as the transport sector more broadly. I would like to encourage all stakeholders to make their inputs. Last but not least, I would like to acknowledge the sterling work of *Statistics South Africa*, who were our partners and who contributed massively to ensuring that the sampling, fieldwork and data capturing were of the highest quality.

Jeff T. Radebe, MP
Minister of Transport

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ABBREVIATIONS

AMPS	All Media Products Survey	NTS	National Travel Survey
CAPI	Computer Assisted Personal Interview	OHS	October Household Survey
		PSU	Primary Sampling Unit
CATI	Computer Assisted Telephone Interviews	RSA	Republic of South Africa
		SAS	Statistical Analysis Software
CTS	Canadian Travel Survey	Stats SA	Statistics South Africa
DLL	Dynamic Library Link	TAZ	Transport Analysis Zone
DOT	Department of Transport	USA	United States of America
EA	Enumerator Area		
IES	Income and Expenditure Survey		
KPI	Key Performance Indicator		
MSA	Moving South Africa		
MTA	Metropolitan Transport Area		
NHTS	National Household Travel Survey		
NKD	New Kondiv Design		
NPP	National Passenger Panel		
NHTS	National Household Travel Survey		

1. INTRODUCTION

1.1 The nature and scope of a National Household Travel Survey

A National Household Travel Survey (NHTS) is generally a representative survey of the travel habits of individuals within households during a given period, such as a week or one day during the course of a week. A NHTS is usually carried out by means of a Home Interview Survey (HIS) at a sample of households across the nation. The sample of households is drawn so as to be representative of the variable characteristics of the population of the nation as well as specific geographic units within it, such as provinces or major metropolitan regions. The size of the sample generally determines the level of analysis and the inferences, which may be drawn about the travel characteristics of the population within the specific geographic unit. Details of the sample for the South African NHTS are provided later in the report.

A National Household Travel Survey involves personal interviews with individual members of the household to ascertain information about their travel purposes, times, costs and travel modes. Generally, it is common practice to ask individuals to recall the travel activities, which they undertook on the day before the interview. In some cases, individuals are asked to keep a diary of all activities, which they undertook during a given day (usually the previous day), or over a specified period such as a week. Travel between the activities is recorded in the diary. The latter type of survey "diary" is extremely expensive.

The NHTS in South Africa relied on selected household members (worker and learner) recalling all trips taken on the day prior to the survey.

1.2 Purpose of the NHTS

The South African National Household Travel Survey was undertaken because the Department of Transport and Planning Authorities throughout the country, particularly at the provincial sphere of government, were experiencing difficulties in obtaining information to assist them in fulfilling their research, planning and policy development needs.

The purpose of an NHTS varies from country to country. In some cases, the NHTS is used purely to determine the characteristics of travel between cities or between the nation and other parts of the world. In others, the intention is to track the details of the travel of households and individuals to help governments understand the reasons for travelling and the characteristics of trips and journeys. In the latter case, a National Household Travel Survey may be fairly detailed and may include aspects which determine peoples' propensity to travel, including income and the ownership or availability of various forms of transport, from bicycles to motor cars.

In most cases, an NHTS is used for monitoring purposes to understand trends, which are taking place in the use of transport infrastructure and services. These trends provide an indication of the adequacy of local or national transport systems and services. The information is used by governments to determine the relevance of their policies, the need for policy adjustments and to justify interventions.

The specific purpose of the South African NHTS will be dealt with in the next section.

1.3 Structure of the report

The preliminary chapters provide background on the history and evolution of the South African NHTS. They also provide a description of the management and execution of the survey and the results of a literature review which preceded it.

The geographic basis of the survey is discussed in Chapter 5. The survey methodology is dealt with in Chapter 6 and provides the necessary technical information. Chapter 7 contains demographic information in order to provide a context for understanding the results.

Chapters 8 to 13 detail the main national and provincial results of the survey pertaining to households, individuals, consumer perceptions, trips to education, worker characteristics and trips to work.

2. BACKGROUND TO A NATIONAL HOUSEHOLD TRAVEL SURVEY

2.1 The recent history of travel and transport surveys in South Africa

In 1994, the Central Statistical Services, now called Statistics South Africa (Stats SA), introduced a national household survey known as the October Household Survey (OHS), whose intention was to ascertain household needs in order to better identify priorities for the Reconstruction and Development Programme (RDP). The OHS was an annual survey, usually of 30 000 households. It contained 4 transport questions which could be used for strategic analysis, mostly at national, provincial and metropolitan levels. It was, however, possible to obtain information for magisterial districts in South Africa, but the samples were too small to be reliable for transport analysis. The OHS contained four questions on transport relating to work destinations (magisterial district), mode of travel, travel times and costs. The OHS was also supplemented by a five-yearly Income and Expenditure Survey (IES) on the same sample of 30 000 households. The IES contained information on household travel expenditure. In the absence of any other information, the combination of the OHS and the IES was extremely useful to the DoT for strategic analysis of transport trends and potential problems.

After 1994, the Department of Transport remained mindful of the need for travel information of a more detailed nature. This came about as a result of its experience with the *"Moving South Africa: Action Agenda"* (MSA) which took place between 1997 and 1998. This was a large-scale exercise aimed at providing strategies for the implementation of the 1996 White Paper on National Transport Policy. The MSA experience showed the need for comprehensive and statistically valid transport information for policy formulation.

An important thrust on both the White Paper on National Transport Policy and *"Moving South Africa"* was to make the customer the main focus of transport policy and the delivery of infrastructure and services. For this to happen, it was necessary for the DoT to have valid and up-to-date information about passenger transport users.

As a result of MSA and the innovative work undertaken on customer market segmentation, the DoT undertook further work on transport customers in 1999. The main objective of the research was to provide customer-based information on the performance of the land passenger transport system in South Africa and to assist the DoT in respect of *ad hoc* information on customers. The source of information was to be the October Household Survey undertaken between 1994 and 1999, which was to be used to identify trends. One of the other objectives was to identify gaps in customer-based information.

The study concluded that the OHS, although useful, had a number of limitations, not the least of which was ongoing boundary changes and changes to the questions over time. This limited its usefulness for transport monitoring. Its other limitation was that the scope of data was narrow. The report concluded by recommending that the DoT should continue to monitor the results of both the OHS and the IES, while at the same time using other surveys such as the All Media Products Survey (AMPS) to track car ownership and usage. Arising from the strategic customer-based passenger transport information project, and as a result of the discontinuance of the OHS, it was recommended that the idea of a National Household Travel Survey should be revisited (DoT, 2000).

In August 2000, the Department of Transport released a tender for undertaking a feasibility and a scoping study for a regular National Household Travel Survey. The study produced two reports in October 2000 and January 2001. Report 1 was a literature study of international experience with national travel surveys, while Report 2 was the evaluation of survey options and levels of analysis for the National Household Travel Survey (DoT, October 2000 and January 2001).

The literature survey concluded that there was a strong case for instituting a National Household Travel Survey in South Africa. It suggested that the United Kingdom provides the most comprehensive and best-documented survey over the past 15 years and that it should be used as a departure point for the preparation of a South African National Household Travel Survey. It recommended that, in the second stage of the project, namely the scoping study, a table of options of different types of survey, sample size and fieldwork strategy should be prepared and costed, to guide the decision by the DoT to undertake an NHTS.

The Phase 2 report made an evaluation of five levels of analysis, explaining the implications for survey content and sample size. These five levels would extend from national, where 5 000 households would be sufficient for strategic analysis of travel characteristics by population group and settlement type (urban or rural). At the other end of the scale, (municipal strategic planning zone) a sample of 50 000 households would be necessary. The other three levels included provincial, metropolitan and district, and local municipal. The scoping study made a detailed investigation of the contents and costs of each level of analysis and evaluated the benefits of having an NHTS. Recommendations were made with regard to funding and implementation strategies.

The recommendations of the scoping study for a regular National Household Travel Survey were accepted and the DoT proceeded with the study, calling for tenders in May 2002.

2.2 Planning for a National Household Travel Survey

The aim of the NHTS would be to gain strategic insight into the travel patterns and transport problems of the people of South Africa by collecting information to achieve the following purposes:

1. to serve as a basis for the DoT research, planning and policy formulation;
2. to assist transport authorities to effectively target subsidies; and
3. to 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 (No. 22 of 2000).

The brief also specified the following requirements:

1. a sample of approximately 50 000 households should be selected to be representative of the population and transport characteristics of around 350 transport analysis zones (TAZ) throughout the urban and rural areas of South Africa;
2. personal interviews should be conducted with the members of these households to collect information about the household, its members, their vehicles and their travel habits; and
3. the interview should include a one-day recall trip diary for all members of the household.

2.3 Objectives of the National Household Travel Survey

The NHTS Steering Committee approved the following objectives:

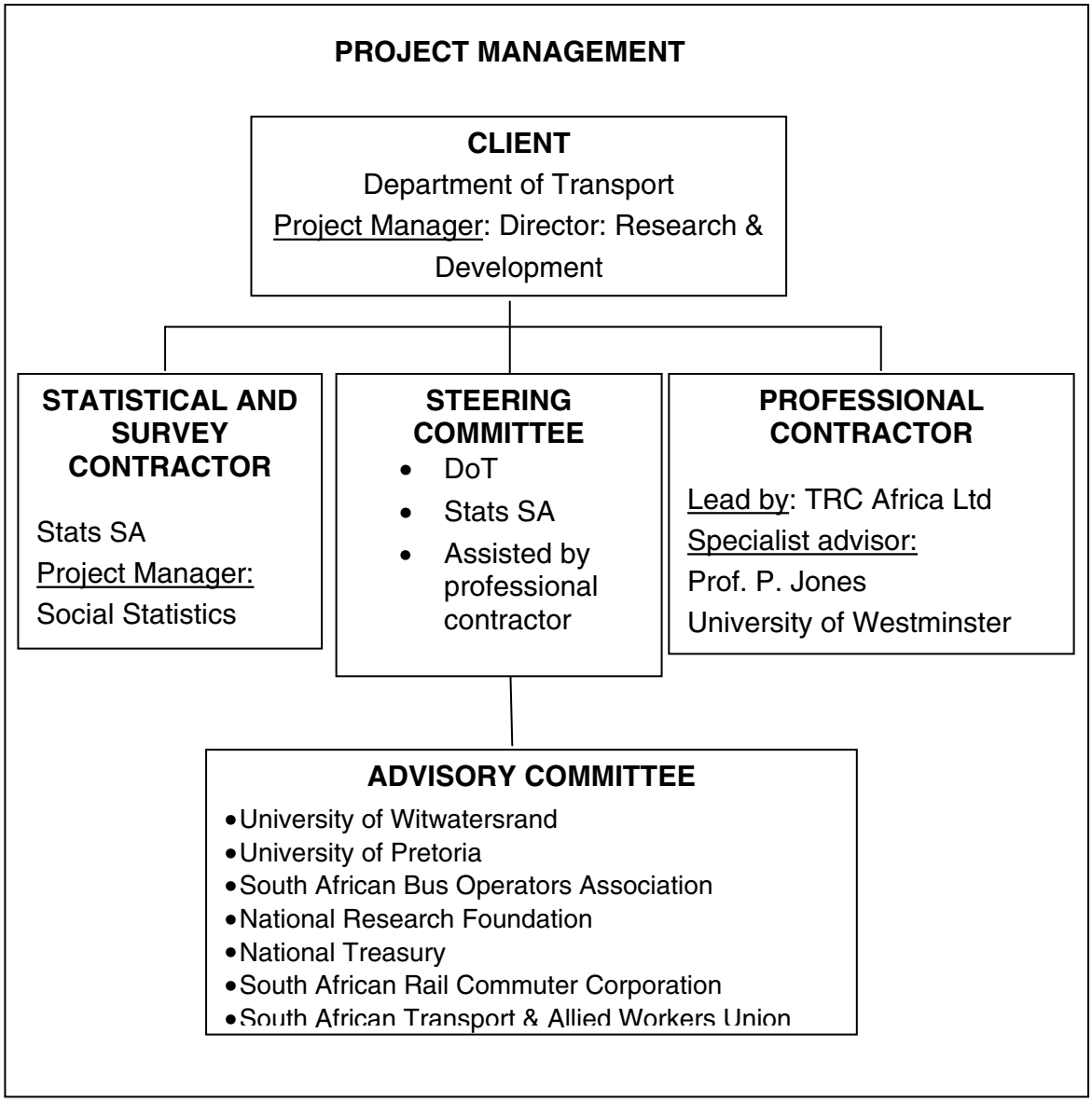
1. to assist with the effective targeting of subsidies for public transport;
2. to assist in identifying disadvantaged regions for investment in transport infrastructure;
3. to measure the Key Performance Indicators (KPIs) for land passenger transport as required by the National Land Transport Transition Act (Act No. 22 of 2000) and the National Land Transport Strategic Framework;
4. to understand the transport needs and habits and/or behaviour of all household members at all times of day and for all purposes;
5. to ascertain the cost of transport for individuals and households and to assess the extent to which they can afford to pay for the mobility which is essential for their survival;
6. to assess customer attitudes towards transport services, service providers and the quality of transport facilities which they are required to use;

7. to measure existing car ownership and uses;
8. to understand the travel choices of different market segments;
9. to determine the extent of accessibility to opportunities such as work, health facilities, education and markets for social interaction and all other social needs.

3. PROJECT MANAGEMENT

Figure 3.1 shows the management of the project. The Director: Research and Development of the DoT was the project manager and was supported by the Stats SA project leader and a Steering Committee consisting of the DoT and Stats SA officials, assisted by the contracted professional consultants. A committee comprising academics, experts and representatives of stakeholder organisations was established to advise the DoT on the survey content, procedure and analysis of results.

Figure 3.1: Participants in the management and execution of the National Household Travel Survey



4. INTERNATIONAL SURVEYS CONSULTED

All readily available publications on recent international household travel surveys were consulted prior to the design of the South African National Household Travel Survey. The aim was principally to access details of their tried and tested approaches, methodologies and techniques which could provide valuable input into the local survey design and, subject obviously to adaptation to local conditions where necessary, to assist in ensuring the validity and reliability of the current survey. The most important national surveys consulted were those of Britain, Finland, the Netherlands and the USA, while regional surveys in Australia, Belgium, Canada, Germany, Switzerland and Uganda also provided valuable insights into methodology. Useful information gleaned from these publications is summarised in **Appendix 1**. In addition a Bibliography of sources can be found on Page 145.

4.1 Overall summary of trends

The international literature revealed that in transport surveys:

1. samples are mostly random, stratified by geographic region;
2. sample sizes cover between 0.02 – 0.6 per cent of the population;
3. surveys tend to be continuous, covering every day of the year in order to identify daily, weekly, monthly and seasonal differences in travel patterns. This approach also has the advantage that relatively few, highly selected, well-trained interviewers can be used on a more or less permanent basis, rather than having to use a large number of ad hoc interviewers. It means too, that any problems can be identified and corrected before the survey has progressed too far, and that there is also less stress on the interviewers to meet overly strict time limits. A disadvantage is that the survey does not present a "snapshot" of travel behaviour at a particular point in time, and therefore changes to the transport system, or the environment in which it operates, could have occurred between the various "waves" of the survey;
4. the tendency is to collect travel data on all members of the household, even babies and children under five years of age. Proxies are used to varying degrees, but are normally permitted for children under 16 years of age;
5. data are collected mostly through the use of one-day activity-based travel diaries, although Britain maintains a seven-day diary;
6. most use computer-assisted telephone interviewing, while computer-assisted personal interviewing is being used in Britain; and
7. response rates vary considerably (from 40% to 70%, or even 90% with an additional non-response survey) and many countries are paying special attention to making their methodology more encouraging, user-friendly and flexible.

5. DETERMINATION OF ANALYSIS ZONES

The South African NHTS was initiated by means of a workshop held at the DoT during September 2002. The workshop was attended by members of the DoT, as well as representatives of each of the nine provinces and some of the metropolitan municipalities. The workshop dealt with the following topics:

1. the purpose of the workshop;
2. aims and objectives of the National Household Travel Survey;
3. international experience with National Household Travel Surveys and examples of the results from abroad;
4. background to the South African NHTS;
5. the content of the proposed South African NHTS; and
6. the determination of transport analysis zones (TAZ) for the NHTS.

The purpose of the workshop was to obtain input from provinces, particularly with regard to the analysis zones to be used for the survey. The attendees were also expected to comment on the content of the NHTS.

It was explained that at provincial level, the NHTS would fulfil the following purposes:

1. assessment of the comparative performance of the main transport and/or planning authorities in each of the provinces;
2. monitoring changes in trip purposes, the frequency of trips and the length or duration of trips; and
3. assessment of the extent of weekly and other periodic migration between urban and rural areas.

At the municipal level, the NHTS would fulfil the following purposes:

1. to assess the ongoing spatial and/or land use changes and their impact on household travel behaviour; and
2. to track changes in transport market segments and the impact of socio-economic changes on the demand for, and patterns of, travel.

In the light of the foregoing, it was evident that it was important that there should be a geographic base for the NHTS to enable comparison between different geographic entities, and to understand the interaction between different parts of a province, metropolitan or district municipality.

In the determination of analysis zones, the departure point was information from the 1996 census relating to the population of the RSA and the different categories of local government structure.

In the presentation on the determination of analysis zones, it was explained that the NHTS sample would comprise 50 000 households. In view of the fact that there are some 10 million households in South Africa, this would comprise a sample of about 0.5 per cent of all households.

Using metropolitan and district municipal boundaries, as determined by the Demarcation Board in 2000, as the basis for the determination of the analysis zones, it was explained that if the sample was spread evenly across the 53 metropolitan and district municipalities, the sample would be between 950 and 1 000 households in each of these municipalities. Obviously, however, the municipalities with larger populations would require a larger sample. Accordingly, the sample was to be made proportional to the population of each of the municipalities. In order to measure movements between different parts of a metropolitan or district municipality, each municipality would be divided into a number of transport analysis zones (TAZ). It was explained that the minimum number of households per analysis zone would be 100 households. On the basis of this information, a decision was taken to have around 350 analysis zones.

Table 5.1 shows the distribution of the NHTS sample, showing that the sample is proportional to the population in each of the provinces. The sample was drawn by Stats SA and the sampling method is described in Chapter 6.

Table 5.1: The distribution of population in South Africa

Province	Households	Population*	NHTS Sampled Households
Western Cape	1 306 000	4 733 000	5 912
Eastern Cape	1 594 000	6 485 000	8 509
Northern Cape	248 000	888 000	1 640
Free State	772 000	2 737 000	4 219
KwaZulu-Natal	2 224 000	9 806 000	10 051
North West	1 185 000	4 217 000	4 279
Gauteng	2 921 000	8 926 000	9 507
Mpumalanga	865 000	3 326 000	3 826
Limpopo	1 317 000	5 283 000	4 433
Total	**12 432 000**	**46 401 000**	**52 376**

* Stats SA Census 2003 mid-year estimates

Each of the provincial representatives was provided with a map of the province showing the district and municipal boundaries. A table was provided to each province containing the population figures for each of the municipalities. The table

also contained a guideline on the maximum number of analysis zones suggested for each district and local municipality within the district.

In the presentation dealing with the tasks which were required, a number of principles were listed for the determination of analysis areas. These were as follows:

1. boundaries should not bisect census suburbs or magisterial districts or municipal boundaries; and
2. areas should be homogeneous with respect to density and/or broad income group.

The following should be considered:

1. the total size of the population in each TAZ;
2. structural features such as rivers, railway lines, freeways or major arterial roads;
3. the boundaries of service delivery areas; and
4. any political boundaries.

The provinces were requested to send maps to the DoT showing boundaries of the proposed transport analysis zones.

Appendix 2 contains the tables which were provided to the provinces as well as the base maps which were used for determining the transport analysis zones.

Table 5.2 shows the provincial distribution of the number of metropolitan and district municipalities, local municipalities and transport analysis zones which comprise the geographic base of the NHTS. Please note that sampling was done at the TAZ level.

Table 5.2: The geographic base of the NHTS

Province	Population*	Metropolitan Municipalities	District Municipalities	Local Municipalities	TAZ
Western Cape	4 733 000	1	5	24	37
Eastern Cape	6 485 000	1	6	38	56
Northern Cape	888 000	0	5	26	13
Free State	2 737 000	0	5	20	30
KwaZulu-Natal	9 806 000	1	10	50	69
North West	4 217 000	0	4	21	27
Gauteng	8 926 000	3	3	9	58
Mpumalanga	3 326 000	0	3	17	25
Limpopo	5 283 000	0	6	26	27
Total	**46 401 000**	**6**	**47**	**231**	**342**

* Stats SA Census 2003 mid-year estimates

It is evident from the table that in provinces with a large population, there are many more analysis zones. For example, in Gauteng where there are three metropolitan and three district municipalities and nine local municipalities, there are 58 analysis zones. In contrast, in the sparsely populated Northern Cape where there are 26 local municipalities, there are only 13 TAZs.

Appendix 3 contains the final maps of each province with the numbers and names of each of the selected analysis zones.

Appendix 4 contains a table listing the names and numbers of the transport analysis zones in each of the provinces and district municipalities.

The geographic areas need to be used judiciously in analysing specific aspects of the survey. For example, the TAZ samples are relatively small, so the results at TAZ level should not be used to make inferences about variables which have a number of classes. Thus, it would be unwise to infer that the number of trips by taxi from one TAZ to another had any statistical validity. On the other hand, where the sample sizes are larger, such as at municipal level, it may be appropriate to use the results to estimate the number of trips by car between Johannesburg and Tshwane. The sample should definitely not be disaggregated to show inter-zone movements by population group or modes or any other such disaggregate level of detail.

6. METHODOLOGY

6.1 Questionnaire design

Four considerations were taken into account in the design of the questionnaire:

1. that it should elicit valid and reliable data to satisfy DoT objectives (the primary consideration);
2. that it should collect data in Stats SA standard format, to facilitate weighting of the data to reflect the universe (SA population);
3. that it should include Stats SA standardised administrative procedures, familiar to the fieldworkers who would be conducting the interviews; and
4. that the data should be comparable with earlier travel surveys, especially with respect to travel patterns, travel time and income categories, and attitudinal information.

6.2 Questionnaire development process

The questionnaire development process was accomplished in ten distinct phases:

1. Initial consultation and planning, involving DoT, Stats SA, the professional contractors and the specialist advisor from the University of Westminster in London The expertise of the latter, gained in the design and management of the UK National Travel Survey, was invaluable. This phase resulted in the design of a draft questionnaire.
2. First behind-glass observation of two interviews on 16 November 2002;
3. Second behind-glass observation of two interviews on 10 December 2002;
4. Third behind-glass observation of two interviews on 22 January 2003;
5. Pre-pilot field test of 14 households (7 urban and 7 rural) from 29 January – 3 February 2003;
6. Fourth behind-glass observation of three interviews on 27 February 2003;
7. First pilot test of 42 interviewed households in the Johannesburg, Alberton and Pretoria areas from 4 – 10 March 2003;
8. First Advisory Committee meeting on 14 March 2003 which, apart from DoT, Stats SA, TRC Consortium and Dr Peter Jones, included representatives from research organisations, local authorities and trade unions;
9. Second pilot test of 58 interviewed households in Mpumalanga (at three urban and five rural primary sampling points) from 25 – 31 March 2003; and
10. Second Advisory Committee meeting on 3 April 2003, which resulted in the final version of the questionnaire.

6.3 Questionnaire amendments

As a result of all the above-mentioned phases in the questionnaire development process, the questionnaire was amended iteratively in a number of ways. Aspects that particularly required attention were:

- the length of the questionnaire;
- the use of proxies;
- the ordering of the questions within the questionnaire;
- the use of open-ended questions;
- the terminology used;
- the response categories;
- the level of detail required; and
- probing to obtain complete information.

6.3.1 Length of the questionnaire

The questionnaire length and the fact that it comprised two parts – the main questionnaire and the diary – presented a major problem. The average time taken to complete the interview was 47 minutes; 27 minutes for the questionnaire and 20 minutes for the diary. Interviewers reported that many respondents thought they had finished the interview after completing the main questionnaire and were dismayed when the diary was produced. This had the effect that they either rushed through the diary without giving it their full attention, or they admitted to making very few, if any, trips. Some refused to complete the diary, citing lack of time to do so, while in other cases the diary was not completed for all the members of the household who should have done so. It was obviously necessary to consider ways in which the length of the interview could be shortened. These included:

- Eliminating the diary.
  The problem with the diary was, however, not only the time taken to complete it but also its complexity and the number of recalls to the household needed for all members of 15 years and older to complete it. The number of recalls to the household was particularly problematic as the interviewer had to return on the same day of the week as that on which the initial interview had taken place. The main disadvantage of excluding the diary would be the loss of daily trip generation data but, on the other hand, if the mode and frequency of mode usage were included in the main questionnaire, a sense of the intensity of mode usage could still be obtained. It was finally decided that the most important parts of the diary needed to meet DoT objectives would be incorporated into the main questionnaire. These were principally travel times, modes, costs and destinations for work-related trips (including business and migrant trips) and educational trips.

- Omitting non-essential, “nice to know” questions.
  Questions which were not vital for the satisfaction of DoT objectives were deleted. Thus, for example, detailed questions relating to the work situation (such as whether respondents had tried to look for work during the past month and full details of the type of work they did) were omitted as not of prime concern to the DoT. Other omissions for similar reasons included attitudes towards car travel.
- Introducing screening questions.
  Interview time was also lessened by streamlining some of the questions. For example, a screening question was inserted asking whether any household members currently attended an educational institution (university, college, school, pre-school or day care). This avoided having to ask, for each member in turn, whether they attended each of the institutions listed. In a similar way, screening questions were introduced to identify those workers who travelled to work (as opposed to working from home).
- Making use of show-cards.
  Show-cards were introduced to save the interviewer time in having to read out all the alternative responses to questions such as those covering monthly household income and expenditure categories, the list of most important factors in the choice of transport mode, and the satisfaction levels to be considered in the attitudinal questions. Using show-cards also meant that respondents did not have to memorise all the categories as they were read out, which certainly improved the efficiency and accuracy of the data collection. Unfortunately, less-educated respondents still needed all the alternatives to be read out, but at least the interviewer could then devote more time to these respondents while saving time on the literates.

The interview time for the final questionnaire averaged 22 minutes, which was generally acceptable to most respondents.

6.3.2 Use of proxies

To avoid proxy interviews biasing the data, clear instructions on when proxies could, or could not, be used were found to be essential. It was agreed that proxies would be permitted for the household structure, personal disability, general travel and educational information sections, but that proxies would not be permitted for the work activity, personal income, business travel, migrant travel and detailed commuting trip questions. The attitudinal questions would be answered in person by one selected adult (15 years or over) per household.

6.3.3 Ordering of questions within questionnaire

Two aspects were found to be of concern as regards the order in which the questions were asked:

- Firstly, questions should be grouped and positioned to facilitate the efficient use of proxies and specific household members. Most sections, such as those providing details of the household, their proximity to facilities and their educational levels, could be answered by any responsible adult selected as the main respondent. These sections were placed at the beginning of the questionnaire. Some questions had, however, to be asked personally of all household members aged 15 or above who were working, such as journeys to work and business trips. On the other hand, the section covering attitudes towards the three public transport modes had to be asked of one person only. It made sense, therefore to order the sections to avoid frequent interruptions to the main respondent.
- Secondly, individual questions should be ordered by content, so that the respondents' thought processes and responses could flow naturally and easily. This implied starting with simple, easy-to-answer questions and building up to the more complicated or sensitive ones. Straightforward questions on the members of the household (their names, ages and gender) were placed at the start of the questionnaire, followed by the household's general transport problems and their access to facilities (such as shops, medical services and local authorities), all of which would be familiar and easy to answer, thus encouraging good rapport between the interviewer and respondent. The ordering of the questions in the "Work activities" section was changed during the developmental process to one in which questions would more logically and naturally be asked in conversation.

6.3.4 Use of open-ended questions

Although it was generally agreed that questions should be pre-coded as far as possible to facilitate analysis, it was eventually decided that the question on the most important transport problems experienced by the household would be left open-ended. Interviewers had reported that many of the problems identified by the respondents could not be fitted into the pre-coded categories and were therefore all listed under "other". Attempting to fit them into a pre-coded category would have lost much of the richness and diversity of the individual answers. The open-ended version worked well, did not cause coding problems, and elicited valuable information.

6.3.5 Terminology used

Care was taken to avoid terms which are part of transport researchers' jargon but which were found to be unfamiliar or confusing to many respondents, especially the less-educated. Such terms included "mode" of transport (replaced by the more familiar "type"), "transfer" (to which "have to change transport" was added), and "congestion" (to which "flow of traffic" was added). The term "employed" was replaced by "working" because it was noted that the informal sector does not generally regard itself as employed.

6.3.6 Response categories

The categories presented in the questionnaire were of two main types:

- Listing of alternative pre-coded responses.
  Pre-coded answers to questions such as the reasons for choosing a particular mode and the reasons for not using a certain mode were based, in the final instance, on the frequency with which they were mentioned by respondents in the various behind-glass observations and pilot surveys. For example, in the question asking the reasons for choosing a particular mode "comfort" was removed as it was very rarely mentioned, while "closeness of transport to home", "driver attitude" and "flexibility (you can travel wherever you want whenever you want)" were added as obviously important. In similar fashion, the list of possible reasons for not using a certain mode was extended through the addition of "mode not available", "don't travel much", and "can walk there". The categories "not easily accessible", "inconvenient timing" and "long waiting period" were scrapped because they were very rarely mentioned.
- Rating scales.
  Consideration had to be given to the number of scale categories normally differentiated by respondents, especially those of lower educational level. Three levels have generally been found to be appropriate for less-educated respondents, but it was decided to extend these to four because this could more usefully permit a comparative evaluation (in subsequent surveys) of attitudes before and after policy implementation. The terminology of the scale categories used to rate satisfaction levels with the various attributes of the different modes was also changed from "To a great extent, To some extent, Not at all, No opinion" to "Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied" because the latter was more familiar to respondents.

6.3.7 Level of detail required

It became evident that some questions needed to be amended or extended to satisfy DoT objectives fully.

For example:

- the list of alternative modes was expanded to include the various types of taxi which had emerged in the pilot surveys – metered, minibus, sedan and “bakkie-taxis” (the latter are common in rural areas) and to differentiate between drivers and passengers;
- because it was sometimes difficult to obtain information on migrant workers, or those who regard somewhere else as “home” rather than where they were interviewed, a question was included asking if there was another place which they regarded as "home" and to which they “regularly made an overnight visit”. This was an attempt to identify migrant workers more successfully;
- the household expenditure question was changed to differentiate between expenditure on the three public transport modes (rather than that on getting to work, education and looking for work) because this was of greater relevance to the DoT; and
- the list of mode attributes to be rated for satisfaction was extended to cover “security on the walk to or from the boarding point” and “behaviour of drivers towards passengers”. On the other hand, “the level of crime prevention” had to be excluded because rating a negatively expressed attribute caused confusion, some respondents answering in terms of “the level of crime” instead of “crime prevention”.

On the other hand, it was found that very few respondents were able to answer the detailed questions pertaining to vehicle ownership, such as the engine size, age of vehicle, annual distance travelled and annual costs of fuel, maintenance, insurance and licences, so only relatively poor information was gained from these questions. In addition, some respondents were embarrassed at their inability to answer these questions, while others were irritated by them. Both emotions could have negatively affected their attitude towards the rest of the interview. As a result, these questions were omitted and only those asking for the number and type of vehicles owned (including bicycles) were retained.

6.3.8 Probing to uncover precise information

Four questions have been found to elicit incomplete responses, or answers which were not precisely what was wanted. These cases required questions to be more specifically stated, additional questions to be added, or interviewer instructions to be amended:

- Household income

  The question had ultimately to be expressed as “What is the total monthly income (before deductions) of all the persons in this household, from all sources?” There was initially confusion as to whether the income required was

before or after deductions i.e. “take home pay”. It was also noted that the income of informal workers or those who rented out rooms, looked after neighbours’ children etc. was often omitted. In addition, when the initial question was asked for “household income” some respondents confused this with “housekeeping money” and included only their contribution to the housekeeping money, not their full salary.

- Work status

  Because of considerable confusion about the term “employed” it was found that those who were in the informal sector, or who were entrepreneurs in their own small or one-person businesses, or who undertook work on farms or in private houses very often maintained that they were not employed. Apart from using the term “working” instead of “employed”, it was found necessary to include additional questions that would more accurately gauge the work status of the household members. The additional questions asked, for each member of the household:

  - If he/she had a job or did any work in the past seven days, even if he/she was absent from work? The alternative responses were “Yes, formal”, “Yes, informal” or “No”;
  - For both formal and informal work, the name and nature of the business; and
  - More probing, “What is your main occupation in this workplace?” At least two-word answers were requested, and examples provided to the interviewer included ”street trader”, “ fruit seller”, “cattle farmer”, “domestic worker” and “primary school teacher”.

- Main transport problems

  To elicit more precise and useful information on the household’s two main transport problems, an additional instruction asked interviewers to probe. In instances where respondents gave too general a reply, the interviewers had to probe for more specific mode-related responses to this question. For example, the response “taxis are expensive” was acceptable in preference to the less useful “transport is expensive”.

- Mode used to access facilities

  It was found sometimes that more than one person in the household accessed a particular facility listed (especially shops) and that they used different modes (and sometimes more than one mode) of transport to get to the same facility. It was agreed that confusion would be avoided by adding the interviewer instruction “If more than one member of the household travels to a facility, record the type of transport used by the person who goes there most often. If more than one type of transport is used, mark the one used over the longest distance.”

The final questionnaire (contained in **Appendix 5**) was assessed as appropriate to:

- satisfy DoT objectives;
- meet Stats SA weighting and administrative procedure requirements;
- permit comparisons with earlier transport surveys; and
- reduce respondent and interviewer burden as much as possible.

6.4 Sample design

The explicit strata were the 342 Travel Analysis Zones (TAZ). A sample of 5 000 Enumerator Areas (EAs) was allocated using the power allocation method. The first step was to take out vacant, industrial, institution, and recreational EAs.

EAs were selected with probability proportional to size, using the total number of households as enumerated during census 2001 as a measure of size (MOS). EAs which had less than 80 dwelling units were pooled together with another EA with similar characteristics to form primary sampling units (PSU). An EA with 80 or more dwellings automatically qualified to become a PSU.

Census listings of the selected PSUs were updated where necessary and then a systematic sample of 10 dwellings units was selected in each PSU. Because there is sometimes more than one household at each dwelling unit, the sample of 50 000 dwelling units produced a sample of 52 376 households.

Section 7 of the questionnaire required the selection of one person aged 15 years and above to answer the attitude questions. This person was randomly selected using a grid.

The distribution of TAZs, PSUs and selected households across the nine provinces is shown in **Table 6.1**.

Table 6.1: Distribution of TAZs, PSUs and sampled households per province

Province	Number of TAZs	Number of PSUs	Sampled Households
Western Cape	37	575	5 912
Eastern Cape	56	814	8 509
Northern Cape	13	174	1 640
Free State	30	413	4 219
KwaZulu-Natal	69	946	10 051
North West	27	382	4 279
Gauteng	58	934	9 507
Mpumalanga	25	355	3 826
Limpopo	27	448	4 433
RSA	**342**	**5 041**	**52 376**

6.5 Training

In order to complete the fieldwork requirements, a staff of 1 499 was needed. These included 1 026 fieldworkers, 295 supervisors, 134 managers (provincial, regional and assistant regional managers), nine survey clerks and 35 data capturers. Training was undertaken by specialist Stats SA staff together with the professional contractor.

Training took place at three levels: national, provincial and regional, with each following a similar procedure. The five-day national training programme, held at Stats SA Head Office, took place first and was a detailed training programme for the trainers who would subsequently be responsible for training the provincial and regional managers, supervisors and fieldworkers. The course comprised:

- the background to the National Household Travel Survey and its purpose;
- the sampling procedure and use of the orientation maps, of the listed sampled dwelling units and of the sample grid for the selection of the household member to respond to the attitudinal questions; and
- the questionnaire design: its concepts, definitions, ordering, response formats, use of proxies, handling of the open-ended question, and general interviewer-respondent relations.

Apart from lectures and discussions, practical exercises were conducted both in-house and out in the field in order to provide trainees with practical experience, as well as to assess their ability to conduct the interview to the required high quality standards. Debriefing sessions and further in-depth training on an individual basis were added as and when necessary.

The data capturers were given a separate week-long training programme on the intricacies of the questionnaire and the manner in which the data were to be captured.

6.6 Fieldwork procedure

Fieldwork was preceded by publicity for the National Household Travel Survey, in the form of both a poster and an approach letter explaining the purpose of the NHTS and providing details as to when and how it would be conducted, as well as a contact address where further information could be obtained.

The fieldwork took place from 20 May to 26 June 2003. The trained fieldworkers conducted face-to-face interviews in the respondents' homes using the approved final version of the questionnaire. All members of the household over 15 years of age had to be interviewed separately, which meant that fieldworkers often had to return to the address subsequently to collect data on persons who were not present on the first visit. Fieldworkers were instructed to return to the address on up to three occasions. These occasions had to be on different days and at different times of the day to ensure the best effort at obtaining data from all those employed, as well as from the highly mobile.

Supervisors maintained close contact with fieldworkers during the interviewing process, checking on the correct completion of the questionnaires by all household members and also that only the selected addresses had been visited. It was their responsibility to ensure that the data had been properly collected. They reported to the Regional Managers on a regular basis in order to iron out any difficulties that might have cropped up and to obtain a ruling from Head Office if necessary. The Regional Managers in turn reported to the Provincial Managers, who also kept a watch on the progress of the survey over the whole province.

In order to ensure a high level of representation, 56 PSUs from four TAZs had to be revisited. These areas had been found to have an unacceptably high level of non-contacts and refusals. They were in the Western Cape, Mpumalanga (2) and Limpopo. These revisits provided an average response rate of 95 per cent.

After perusal by the supervisors, regional and provincial managers, the questionnaires were sent to the Stats SA Head Office.

6.7 Data processing

The development of the Capturing/Updating and Scanning programmes commenced as soon as database layout, including the tables needed and the fieldnames for

every variable in the database, and the Form Definitions had been provided to the Database Administrator. This was completed during the fieldwork process.

Fictitious data were scanned to check the verification programme's handling of the data. Any necessary changes were made to the Form Definitions or the Output file and the process was repeated iteratively until there was complete satisfaction with the programme's performance.

When the questionnaires were received at Head Office they were finally checked for correctness in terms of the Dwelling Unit Number and household address, and certain key questions. The coding of the open-ended question on the main transport problems experienced by the household was then undertaken, using a list developed on the basis of an examination of the first hundred questionnaires that became available from the field.

Questionnaires were then scanned, interpreted, verified and the data transferred to the Output File. Some questionnaires were found to be unsuitable for scanning. This was because of imprecise writing, or where the household comprised more than ten members. These questionnaires were captured manually but simultaneously with the scanning process. The Output Files were then transferred to Sybase using the Dynamic Library Link (DLL).

In order to check and edit the data, SAS downloading/editing programmes were developed to download the data from Sybase to SAS and then to run editing programmes through the data. As soon as a province had completed its interviewing and returned its questionnaires, editing began. SAS produced printouts which were used to check the information on the database with that in the questionnaires.

When this process had been satisfactorily completed, the database was cleaned and transferred to the NT Production Server.

6.8 Response rates

The response rates per province and the reasons for non-response are shown in detail in **Table 6.2**.

Table 6.2: Response rates and reasons for non-response, by province.

Response rates									
Province	**Completed**	**Non-contact**	**Refused**	**Incomplete**	**Vacant**	**Listing Error**	**Worker Section Missing**	**Attitude Section Missing**	**All**
Western Province	4 984	222	226	9	156	300	5	10	5 912
	84.3%	3.8%	3.8%	0.2%	2.6%	5.1%	0.1%	0.2%	100.0%
Eastern Cape	7 265	344	43	10	516	292	15	24	8 509
	85.4%	4.0%	0.5%	0.1%	6.1%	3.4%	0.2%	0.3%	100.0%
Northern Cape	1 419	10	4	2	151	48	0	6	1 640
	86.5%	0.6%	0.2%	0.1%	9.2%	2.9%	0.0%	0.4%	100.0%
Free State	3 574	77	50	8	323	173	2	12	4 219
	84.7%	1.8%	1.2%	0.2%	7.7%	4.1%	0.0%	0.3%	100.0%
KwaZulu Natal	9 110	133	165	10	348	273	5	7	10 051
	90.6%	1.3%	1.6%	0.1%	3.5%	2.7%	0.0%	0.1%	100.0%
North West	3 808	70	41	6	238	97	1	18	4 279
	89.0%	1.6%	1.0%	0.1%	5.6%	2.3%	0.0%	0.4%	100.0%
Gauteng	7 906	460	524	42	186	367	16	6	9 507
	83.2%	4.8%	5.5%	0.4%	2.0%	3.9%	0.2%	0.1%	100.0%
Mpumalanga	3 347	89	82	7	204	88	2	7	3 826
	87.5%	2.3%	2.1%	0.2%	5.3%	2.3%	0.1%	0.2%	100.0%
Limpopo	3 933	61	36	8	273	96	2	24	4 433
	88.7%	1.4%	0.8%	0.2%	6.2%	2.2%	0.0%	0.5%	100.0%
RSA	**45 346**	**1 466**	**1 171**	**102**	**2 395**	**1 734**	**48**	**114**	**52 376**
	86.6%	**2.8%**	**2.2%**	**0.2%**	**4.6%**	**3.3%**	**0.1%**	**0.2%**	**100.0%**

The table reveals that the response rates were acceptable in all the provinces, with KwaZulu-Natal the highest (90.6%) and Gauteng the lowest (83.2%). A very satisfactory observation is that the incidence of incomplete questionnaires and missing worker data was exceptionally low in all the provinces (less than 0.5%). Refusals to co-operate with the survey were also relatively rare, being highest in Gauteng (5.5%) and the Western Province (3.8%). Vacant properties and listing errors occurred in all provinces and together formed 7.9 per cent of the total sample. One TAZ in Mpumalanga had a very low response rate on account of the controlled entry into the area (Kruger National Park). As a result, it was decided to remove the one successful interview from the data set and thus the TAZ. Accordingly, the number of TAZs in Mpumalanga decreased to 24 and the total to 341.

In general, these findings indicate a high quality of fieldworker performance.

Although the response rate obtained in the National Household Travel Survey is not strictly comparable with that of the UK 2000 National Travel Survey because the

latter employed a seven-day travel diary, some comparison is worthwhile and is shown in **Table 6.3**.

Table 6.3: Comparison of response rates between UK and SA National (Household) Travel Surveys

Comparison with UK NTS				
	UK NTS 2000		RSA NHTS	
	Number	%	Number	%
Set sample	5 796		50 000	
Additional households	81		2 376	
Total dealt with	5 877	100	52 376	100
Ineligible	574	9.8	4 129	7.9
Eligible households	5 303		48 247	
Non-contact	208	3.5	1 466	2.8
Refusal to co-operate	1 352	23.0	1 171	2.2
Partially co-operating	371	6.3	264	0.5
Fully co-operating	3 372	57.4	45 346	86.6

This table reveals not only that the response rate obtained in the SA survey was markedly higher than that in the UK, but also that refusals to co-operate were markedly lower. This could, to some extent at least, probably be attributed to the fact that UK respondents had the more onerous task of completing a seven-day diary, but it does none-the-less reveal a very satisfactory level of response in the SA survey.

6.9 Weighting of data

A two-stage weighting procedure was applied

The PSU inclusion probability is given by

$$P_{PSU} = \frac{n_{PSU}}{N_{PSU}}.n_S ,$$

where n_{PSU} is the number of households constituting the selected PSU during census fieldwork, n_S is the number of PSUs per stratum, in this case the TAZ and N_{PSU} is the number of households constituting the selected stratum during census fieldwork.

The household inclusion probability per PSU is given by

$$P_{HH} = \frac{n_{HH}}{H_{HH}} ,$$

where n_{HH} is the number of selected dwelling units per PSU. H_{HH} is the current number of dwelling units in the PSU.

The non-response adjustment factor is given by $\frac{1}{r_{HH}}$, where r_{HH} is the response rate and is given by $r_{HH} = \frac{n_{RESP}}{n_T}$ where n_{RESP} is the number of responding households and n_T is the total number of visited households (in the sampled dwelling units) per PSU. The design weights adjusted for non-response are now given by

$$W_{HH} = \frac{1}{P_{PSU}.P_{HH}.r_{HH}}$$

After adjusting for non-response benchmarking was done using a Statistical Analysis Software (SAS) macro called CALMAR. During benchmarking, population totals were adjusted at municipality level and gender, five-year age group and race were taken into consideration at national level.

6.10 Data analysis

The Statistical Package for Social Sciences (SPSS) Version 12 was used to produce the tabulations contained in this report.

6.11 Quality of data

Every effort had been made to ensure a high level of data quality through close supervision in the field and subsequent data checking and editing. As is usual in even the best-controlled surveys, however, a few anomalies became apparent as the analysis proceeded. In such cases, for example, where there were negative travel times or a child of seven drove himself to school, the data values were set to "missing".

The only variables which caused some concern were travel cost to work and personal income. Doubtful values were set to "missing" in the dataset and excluded from the tables in this report.

The proportion of missing values is shown in **Table 6.4**.

Table 6.4: Missing values on important variables

Variable	% Missing or doubtful
Cost of travel to work	11.4
Personal income	10.7
Cost of travel to education	3.2
Household Income	5.7
Travel time to education	2.0
Travel time to work	1.3
Mode to education	0.2

Missing values were largely confined to cost of travel to work, personal income, cost of travel to education and household income. Income data is almost always problematic to obtain in any social survey and can result in a negative attitude on the part of the respondent towards the remainder of the survey.

Similarly, questions on travel costs are also often problematic. Two main causes were identified for the missing and doubtful cost values. These were apparently incorrect recording of costs either in Rands rather than in cents as instructed, or in the wrong units e.g. per trip instead of per month. The first was probably a fieldworker error, while the second was more likely to have been a respondent error.

In any event, the incidence of missing data in the National Household Travel Survey can be regarded as very low, due to the stringent checking procedures followed, and the quality of the data is of a high standard.

7. DEMOGRAPHICS

7.1 Demographics

Demographic characteristics of the population of the RSA provide a context for the results of the National Household Travel Survey. In some instances, the context desired by the reader or analyst will be the income of the households or individuals making trips, whereas in others it may be gender or the education of the respondents. The following section is intended to provide the context for the travel parts of the survey. The information was obtained from the survey and Statistics South Africa who provided weighting factors for the NHTS sample households, to scale them to the RSA population, as measured by Census 2001.

Table 7.1 provides a breakdown of the NHTS sample, the number of households, the population and household income in each of the settlement types which have been used for strategic analysis in this report.

Table 7.1: NHTS sample, number of households, population and household income by settlement type*

Settlement type	NHTS Sample	Weighted number of households	Population	Monthly household income (% of households)					
				Up to R500	R501 - R1000	R1001 - R3000	R3001 - R6000	> R6000	Missing
Metropolitan	13 024	4 560 000	15 440 000	15.0	15.3	29.7	13.8	16.6	9.6
Urban	15 495	3 483 000	11 971 000	20.0	20.5	27.5	12.8	13.0	6.1
Rural	17 037	4 389 000	18 990 000	32.1	34.9	23.8	5.0	2.8	1.4
RSA	**45 556**	**12 432 000**	**46 401 000**	**22.4**	**23.7**	**27.0**	**10.0**	**10.7**	**5.7**

* Reported data weighted to Stats SA 2003 population mid-year estimates

It is evident from the table that the sample was split fairly evenly between the three settlement types. There were about 13 000 households in the metropolitan sample, rising to about 17 000 in the rural. Because of the different characteristics of the population in the various settlement types, the ratio of population to households in each of these settlement types is different. **Table 7.1** indicates that in the metropolitan areas there are around 4.6 million households and 4.4 million in the rural areas, while in the urban areas there are 3.5 million. Rural households average 4.3 persons per household, compared with only 3.4 in metropolitan areas.

The total population is 46.4 million. The rural population of nearly 19 million is almost double that found in the small urban areas.

Table 7.1 also shows the household incomes by settlement type. A notable feature in the table is the fact that in metropolitan areas a fairly large proportion (almost 10%)

of households refused to provide information about income. The table reveals that, generally, the more affluent population is found in the metropolitan areas, for example, 17 per cent of households in metropolitan areas earn more than R6 000 per month, compared with only 3 per cent in the rural areas. A significant fact relating to the rural households is that over two-thirds have incomes of R1 000 or less per month (67.0%).

Table 7.2 shows a similar breakdown of completed sample size, number of households, population and household income by RSA and province.

Table 7.2: Households, population and household income by province

Province	Sample	Weighted number of households	Population	Monthly household income (% of households)*					
				Up to R500	R501 - R1000	R1001 - R3000	R3001 - R6000	> R6000	Missing
Western Cape	5 008	1 306 000	4 733 000	7.4	13.3	30.0	16.9	17.0	15.5
Eastern Cape	7 309	1 594 000	6 485 000	30.2	31.8	21.9	7.1	5.6	3.6
Northern Cape	1 427	248 000	888 000	19.3	30.2	26.5	10.9	11.2	2.0
Free State	3 593	772 000	2 737 000	27.6	27.2	26.0	7.9	8.8	2.4
KwaZulu-Natal	9 127	2 224 000	9 806 000	23.3	26.7	26.8	9.9	9.2	4.2
North West	3 817	1 185 000	4 217 000	25.1	22.9	29.4	11.0	6.8	4.9
Gauteng	7 946	2 921 000	8 926 000	16.8	15.6	30.0	12.5	17.1	8.1
Mpumalanga	3 363	865 000	3 326 000	28.4	27.1	24.8	9.1	7.9	2.7
Limpopo	3 966	1 317 000	5 283 000	30.3	32.5	23.9	6.1	5.8	1.4
RSA	**45 556**	**12 432 000**	**46 401 000**	**22.4**	**23.7**	**27.0**	**10.4**	**10.7**	**5.7**

* Reported data weighted to Stats SA 2003 population mid-year estimates

Taken as a whole, there are 12.4 million households in the RSA, the largest number residing in Gauteng. When undertaking any analysis on the basis of income, it is necessary to note that 6 per cent of the household sample refused to provide information about income. The worst case is in the Western Cape where 16 per cent of households did not provide information about income. A noteworthy feature of **Table 7.2** is the relative poverty of those provinces with a large rural population, such as Eastern Cape and Limpopo. In the Eastern Cape, 30 per cent of households earn less than R500 per month and the equivalent figure in Limpopo is 30 per cent. The Western Cape is in stark contrast to these two, having seven per cent of households earning less than R500 per month.

The provinces with the largest number of households earning in excess of R6 000 per month are Western Cape (17 %) and Gauteng (17%).

Because demographic and socio-economic factors influence travel needs and habits, it is worth noting that there are 10 million commuters in the RSA. On a geographic basis these break down as follows:

Commuters in metropolitan areas	-	4.8 million;
Urban areas	-	3.0 million; and
Rural settlements	-	2.2 million.

7.2 Gender and race of respondents

Table 7.3 shows the gender and the race of the survey respondents, broken down by province. Because of the weighting process, the proportions reflect those of the 2003 population estimates. If, however, the sample ratios are considered (bottom row in the table), it is evident that they are very similar to those of the population. This is particularly applicable to gender. In the case of race, it is evident that the sample produced a slight under-representation of Blacks.

Table 7.3: Gender and race of the respondents*

Province	Percentage of people							
	Gender		Race					Total Population*
	Male	Female	Black	Coloured	Asian	White	Other	
Western Cape	48.3	51.7	28.5	52.9	1.0	17.4	0.2	4 733 000
Eastern Cape	46.3	53.7	87.7	7.4	0.3	4.6	0.0	6 485 000
Northern Cape	48.6	51.4	36.4	51.2	0.3	12.0	0.1	888 000
Free State	47.5	52.5	88.8	3.1	0.1	7.9	0.1	2 737 000
KwaZulu-Natal	46.7	53.3	85.6	1.5	8.1	4.7	0.0	9 806 000
North West	49.8	50.2	91.5	1.6	0.3	6.6	0.0	4 217 000
Gauteng	50.0	50.0	74.7	3.8	2.6	18.8	0.1	8 926 000
Mpumalanga	47.7	52.3	93.1	0.7	0.3	5.8	0.1	3 326 000
Limpopo	45.3	54.7	97.2	0.2	0.2	2.4	0.0	5 283 000
RSA	**47.7**	**52.3**	**79.6**	**8.9**	**2.4**	**9.0**	**0.1**	**46 401 000**
Metropolitan	48.8	51.2	65.8	13.3	5.9	14.9	0.1	15 440 000
Urban	48.0	52.0	72.1	12.9	1.7	13.3	0.1	11 971 000
Rural	46.7	53.3	95.6	2.8	0.1	1.6	0.0	18 990 000
Sample	**47.0**	**53.0**	**76.5**	**10.7**	**2.6**	**10.1**	**0.1**	**171 519**

* Reported data weighted to Stats SA 2003 population mid-year estimates

In all provinces the ratio of males to females is very similar with females exceeding males in all cases. The usual ratio is around 48 males to 52 females.

There are some stark differences in the distribution of the population by race between various provinces.

The following specific cases are worthy of mention:

- the Coloured population is largely concentrated in the Western Cape where it comprises 53 per cent of the total and the Northern Cape where it accounts for 51 per cent of the total population;
- the much smaller Asian component of the RSA population also tends to be concentrated in two areas, namely KwaZulu-Natal where it comprises eight per cent of the population and Gauteng almost three per cent;
- the Black population is well represented throughout, forming the overwhelming majority in seven out of the nine provinces;
- only in the Western Cape does the Black population form a minority (29%) and in the Northern Cape where Blacks account for 36 per cent of the total provincial population; and
- for South Africa as a whole, almost 80 per cent of the population is Black with the other main groups comprising Coloureds (9%) and Whites (9%). The Asians form a minority of less than three per cent of the total population.

With regard to the settlement types, it is worth noting that Blacks make up 96 per cent of the population of rural areas. Blacks are less well represented in the metropolitan areas where they comprise about two-thirds of the population.

7.3 Age structure

Table 7.4 shows the age of the survey population by province and by settlement type. There are minor differences between the provinces and some of the more noteworthy differences are highlighted for interest.

Table 7.4: Age of the survey population by province and settlement type*

Province	Percentage of people							
	0 – 6 years	7 - 14 years	15 - 19 years	20 - 25 years	26 - 40 years	41 - 65 years	> 65 years	Total Population
Western Cape	12.0	14.7	10.2	11.4	25.6	21.5	4.6	4 733 000
Eastern Cape	14.1	21.8	12.9	9.7	17.5	18.3	5.7	6 485 000
Northern Cape	14.1	15.6	10.3	9.9	23.4	21.8	5.0	888 000
Free State	12.9	17.5	11.6	11.0	22.9	19.6	4.6	2 737 000
KwaZulu-Natal	14.8	19.5	12.3	11.1	20.9	17.2	4.2	9 806 000
North West	13.3	17.0	10.6	10.6	23.6	20.2	4.6	4 217 000
Gauteng	10.9	12.1	8.7	13.4	30.3	21.1	3.5	8 926 000
Mpumalanga	15.2	19.3	12.2	11.0	21.6	16.7	3.9	3 326 000
Limpopo	15.6	22.7	13.5	10.5	17.6	14.8	5.4	5 283 000
RSA	**13.5**	**17.8**	**11.4**	**11.2**	**22.8**	**18.7**	**4.5**	**46 401 000**
Metropolitan	11.5	13.6	9.6	12.7	28.4	20.7	3.5	15 440 000
Urban	12.5	16.1	10.8	11.0	24.8	20.5	4.4	11 971 000
Rural	15.9	22.4	13.1	10.2	17.1	16.0	5.4	18 990 000
Sample	**12.7**	**19.0**	**11.6**	**10.9**	**21.0**	**19.9**	**5.0**	**171 519**

* Reported data weighted to Stats SA 2003 population mid-year estimates

For the RSA as a whole, almost 43 per cent of the population is under the age of 20. This proportion is much lower in the more urbanised provinces of the Western Cape where it is 37 per cent and Gauteng where it is even lower. Urbanisation tends to be associated with lower birth rates and an ageing of population. In less developed areas, for example, typically 50 per cent of the population will be under the age of 20. The table also reveals differences in the working age population. The following examples come to mind:

- for South Africa as a whole, 41 per cent of the population lies in the productive age group of 26 to 65;
- this figure is much higher in the Western Cape at 47 per cent of the total population;
- it is even higher in Gauteng where 51 per cent of the population are between 26 and 65.

It is also interesting to contrast the age structure between the settlement types. The metropolitan population generally has a lower proportion of persons under the age of 20 than the rural areas. Likewise, the metropolitan and urban areas tend to have a larger proportion of working age population.

7.4 Education

Table 7.5 shows the distribution of educational levels by province and by settlement type.

Table 7.5: Highest education level attained (all ages)*

Province	Percentage of people						
	None	Below Grade 6	Below Grade 9	Below Grade 12	Grade 12 (Matric)	Post-matric	Population
Western Cape	13.4	18.0	21.5	21.0	16.2	10.0	4 733 000
Eastern Cape	19.3	31.4	21.5	16.2	7.8	3.8	6 485 000
Northern Cape	22.5	24.2	21.4	16.0	10.5	5.5	888 000
Free State	17.6	25.5	21.0	19.3	11.0	5.6	2 737 000
KwaZulu-Natal	20.1	25.9	18.8	18.6	12.0	4.6	9 806 000
North West	20.0	23.5	19.8	18.5	12.7	5.5	4 217 000
Gauteng	12.8	15.2	17.0	22.4	21.5	10.9	8 926 000
Mpumalanga	24.0	24.8	17.6	17.4	11.5	4.7	3 326 000
Limpopo	24.7	26.0	19.4	18.6	7.1	4.1	5 283 000
RSA	**18.6**	**23.5**	**19.4**	**19.1**	**13.1**	**6.4**	**46 401 000**
Metropolitan	12.8	16.1	18.4	22.2	20.2	10.4	15 440 000
Urban	15.9	21.0	19.6	20.4	15.2	8.0	11 971 000
Rural	25.0	31.0	20.0	15.9	6.0	2.1	18 990 000
Sample	**18.4**	**24.8**	**19.7**	**18.4**	**12.3**	**6.3**	**171 519**

* Reported data weighted to Stats SA 2003 population mid-year estimates

As might be expected, the more rural provinces have the highest proportion of persons with no formal education. The figure of 18.6 per cent for the RSA as a whole is relatively high, particularly when considering the additional component of people with only primary education which comprises another 23.5 per cent. In Limpopo province more than 50 per cent of people have either no education or only primary education. The Eastern Cape also exceeds the 50 per cent mark in this area. At the other end of the spectrum, Gauteng has the highest proportion of people with post-matric qualifications at 11 per cent compared to the national average of 6 per cent.

The table also shows the education levels in the different settlement types. Metropolitan areas have the fewest people with no education, as well as the most with matric and post-matric qualifications. The latter amounts to nearly 31 per cent in metropolitan areas compared with 2 per cent of persons in rural areas having education up to matric or post-matric level.

All the foregoing demographic and socio-economic information will be useful as the basis for segmenting the population to understand relationships between travel and trip-making on the one hand and the personal characteristics of the RSA population or particular provinces, metropolitan and municipal areas on the other.

8. RESULTS: HOUSEHOLDS

8.1 Access to public transport

In the household section of the NHTS questionnaire, a responsible adult was selected to represent the household and was asked questions relating to their access to public transport. The specific question asked was "How long, in minutes, do you think it will take me (the interviewer) to walk from here (the NHTS respondent's home) to the nearest train station?" and, then the same question was asked regarding taxi (which could be a minibus, a sedan or bakkie-taxi) and bus stop or service. The results were collected in actual minutes, but for the purposes of simplicity have been coded into 15 and 30 minute time bands. It should be noted that each household respondent was allowed the opportunity of saying either that there was no service or it was too far away, or that he or she did not know the answer.

Table 8.1 shows the reported walking times to the nearest train station in time intervals for both provinces and the different settlement types.

Table 8.1: Access to train stations for households in the RSA

Province	Walking time to nearest station			
	Percentage of households			
	1 - 15 mins	16 - 30 mins	> 30 mins	No service
Western Cape	22.6	22.1	11.2	44.1
Eastern Cape	2.8	2.8	2.0	92.4
Northern Cape	5.0	6.3	8.4	80.2
Free State	3.7	7.8	13.2	75.2
KwaZulu-Natal	6.7	5.3	1.4	86.5
North West	2.1	4.8	5.3	87.8
Gauteng	20.4	16.9	8.5	54.2
Mpumalanga	1.6	2.4	4.2	91.8
Limpopo	3.1	3.2	1.8	91.8
RSA	**9.5**	**9.1**	**5.6**	**75.7**
Metro	20.9	17.7	8.2	53.2
Urban	6.4	8.5	8.1	77.0
Rural	0.9	1.1	1.2	96.8

When considering the table, the reader should note that if a household has access to a station, it does not imply that any member of the household either makes use of or intends to make use of the particular service in question. It is also worth noting that the mere presence of a station or a bus stop does not imply that there is a valid

service available. For example, the bus stop may be served by fewer than one or two buses per day, or the buses passing the stop may not be travelling to the desired destination. It is necessary to understand that the question relates purely to the physical proximity to train stations, bus stops and taxi services.

The following points are pertinent regarding access to train stations:

- for the RSA as a whole, only ten per cent of households can access a train station within a 15 minute walk;
- for 76 per cent of the population, there is no perceived train service available;
- the extent of train accessibility is highest in the Western Cape and Gauteng; In both of these provinces, over 20 per cent of households can access a train station within a 15 minute walk;
- even in the metropolitan areas, only 21 per cent of people can access the train station within 15 minutes of their home. For over half (53%) of metropolitan households, there is no available train station or it is considered too far away; and
- train stations are entirely absent in the perception of rural households, 97 per cent of whom reported that there is no train service or, if there is, it is too far away.

Table 8.2 shows access to bus stops for households in the RSA, broken down by province and by settlement type.

Table 8.2: Access to bus stops for households in the RSA

Province	Walking time to nearest bus stop			
	Percentage of households			
	1 - 15 mins	16 - 30 mins	> 30 mins	No service
Western Cape	49.8	5.1	5.1	40.1
Eastern Cape	34.7	6.8	4.9	53.6
Northern Cape	18.8	2.5	3.7	75.0
Free State	34.0	9.3	6.5	50.3
KwaZulu-Natal	52.8	11.5	6.6	29.1
North West	56.0	11.5	2.9	29.6
Gauteng	44.2	4.7	12.3	38.8
Mpumalanga	43.9	12.1	6.5	37.5
Limpopo	62.5	12.4	4.1	21.0
RSA	**47.0**	**8.4**	**6.9**	**37.7**
Metropolitan	61.0	7.0	8.0	24.0
Urban	32.1	5.6	7.0	55.4
Rural	44.4	12.2	5.6	37.8

An interesting result is that it appears that for the majority of households, bus stops are either within relatively close proximity (15 minutes or less) or do not exist in the vicinity of households (no service). In the case of the former, 47 per cent of all households can access a bus stop within 15 minutes of their home. In the latter case, 38 per cent claim that there is no accessible bus stop.

The services appear to be far better developed in some areas than in others. The provinces with the greatest proportion of households living within 15 minutes of a bus stop include Limpopo (63%), North West (56%), KwaZulu-Natal (53%) and Western Cape (50%).

Provinces where there are a high proportion of households who claim that there is no available bus service are the Eastern Cape (54%), the Northern Cape (75%) and Free State (50%).

Considering the differences between settlement types, metropolitan areas have the best access to bus stops with 61 per cent of households claiming to be able to reach a bus stop within 15 minutes. It appears, however, that the bus services are less in evidence in smaller urban settlements. In urban areas, 55 per cent of households claim that there is no service.

The fact that a household has access to a bus stop, does not imply that any member of the household makes use of the service, nor does it imply anything about the frequency of bus services.

Table 8.3 shows the access times to taxi services in provinces and in the different settlement types.

Table 8.3: Access to taxi services for households in the RSA

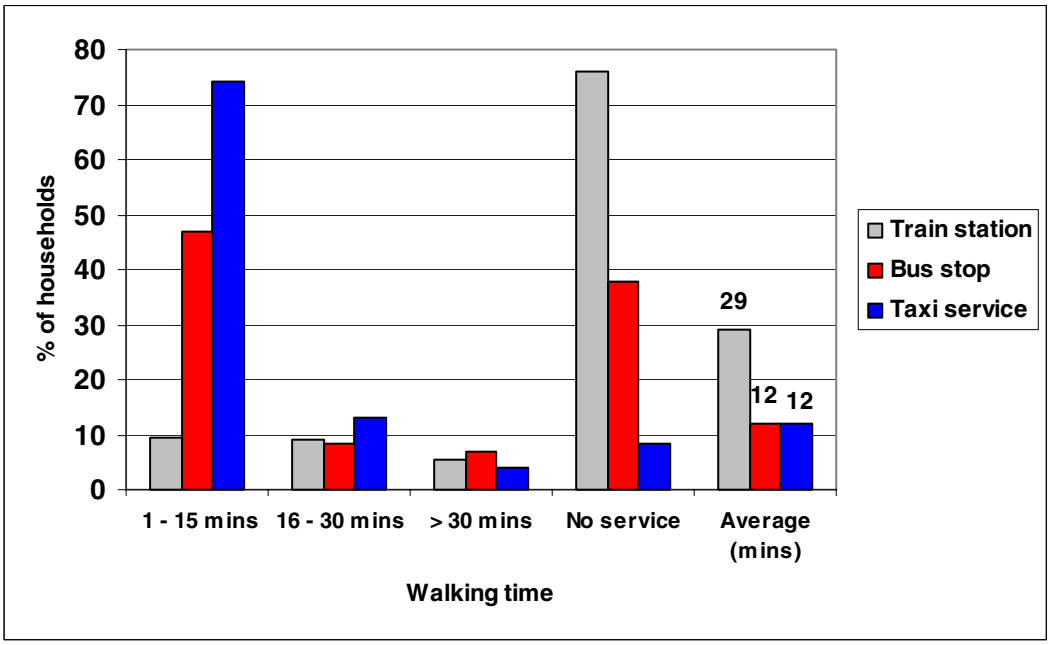
Province	Walking time to nearest taxi			
	Percentage of households			
	1 - 15 mins	16 - 30 mins	> 30 mins	No service
Western Cape	77.6	7.9	1.5	13.0
Eastern Cape	69.9	15.1	6.5	8.6
Northern Cape	58.1	7.1	1.7	33.1
Free State	74.6	12.2	3.5	9.6
KwaZulu-Natal	70.8	16.0	6.1	7.1
North West	74.5	12.9	3.3	9.3
Gauteng	81.3	10.5	1.8	6.4
Mpumalanga	65.6	18.1	7.2	9.2
Limpopo	75.1	15.6	4.3	5.0
RSA	**74.2**	**13.2**	**4.0**	**8.6**
Metropolitan	84.8	9.7	1.3	4.2
Urban	77.8	10.7	1.8	9.7
Rural	60.8	18.6	8.5	12.1

Only 8.6 per cent of households indicated that they do not have access to a taxi service. This figure still represents a fairly large number of people when one considers that there are over 12 million households in South Africa. The province with the worst general access to minibus-taxi services is the Northern Cape where 33 per cent of households claim that they have no access to taxi services. The table reveals that where, however, there are minibus-taxi services, a large proportion of the population can access the services within 15 minutes of their households. For the RSA as a whole, 74 per cent of households can reach a taxi within 15 minutes. The province with the highest general taxi accessibility is Gauteng where 81 per cent can reach a taxi service within 15 minutes.

Considering the relationship between accessibility and settlement type, it is evident that the best general accessibility exists in metropolitan areas (85% of households are within 15 minutes of a taxi service). Rural areas have 61 per cent of households which can reach a taxi service within 15 minutes. The rural households, however, do have problems. Some 12 per cent of them claim that there is no available minibus-taxi service. Considering that 12 per cent of 4.5 million rural households represents 540 000 families and possibly as many as two million individuals with no services, this represents a major challenge to transport authorities.

Figure 8.1 shows the reported walking times to all public transport modes and highlights the characteristics of the preceding tables.

Figure 8.1: Reported walking times to all public transport modes



It is evident that, taken together with the perceived non-accessibility of train services, only ten per cent of households in South Africa can access a train station within 15 minutes of their home and slightly less than that number (9.5%) within 16 to 30 minutes of their homes. Although bus stops are more accessible, with 47 per cent being able to reach a bus stop within 15 minutes, a large proportion of South Africans perceive that they have no access to bus stops. Considering the good access to minibus-taxi services revealed by the figure, it is obvious why minibus-taxis have advantages over all other transport modes. It is worth noting that the average access times to train services, for those who claim they could reach a train station, was 29 minutes; for the road-based modes, the average walking time is far less, averaging at around 12 minutes for both bus stops and minibus-taxi services.

8.2 Access to activities and services

In the household section of the questionnaire, a question was posed to a responsible adult about how members of the household get to the nearest one of a named set of facilities. At the same time, they were asked how long it would take to get there from the household door to the facility entrance. **Table 8.4** shows the access times to services and amenities by households. Those indicating that they did not need or desire accessibility were excluded from the analysis.

Table 8.4: Travel time to various services

Facility	Percentage of households				
	1 - 15 mins	16 - 30 mins	31 - 60 mins	> 60 mins	Cannot get there
Food shop	81.6	12.3	4.6	1.3	0.1
Other shop	33.2	35.1	22.9	8.3	0.3
Traditional healer	25.8	23.4	18.6	9.7	22.5
Medical service	44.2	34.1	16.1	5.2	0.5
Post office	45.9	33.8	14.4	4.5	1.4
Welfare office	31.9	36.3	21.1	6.9	3.8
Police station	40.2	35.3	17.7	5.7	1.0
Municipal office	38.1	35.8	17.0	5.3	3.8
Tribal authority	27.2	24.0	16.9	7.5	24.5

The following are the main points revealed about household accessibility to services:

- the majority (well over 50% of households) can get to most of the services within half an hour;
- the only services which a significant proportion of households claim are inaccessible are traditional healers and tribal authorities; these would not be expected to be generally accessible to people living in metropolitan and urban areas and commercial farmland. Thus it is surprising that only 23 per cent of households claim that they cannot get to these services;
- access to medical services (this includes doctors, clinics and hospitals) appears to be a minor problem as less than 1 per cent of people indicated not being able to get there. 78 per cent of all households can reach medical services within half an hour;
- the most accessible services appear to be food shops: for the RSA as a whole, 82 per cent of households claim they can access a food shop within 15 minutes of their homes.

Table 8.5 shows the mode of travel used to gain access to the services and facilities. A significant proportion of households can walk to most of the facilities. This proportion ranges from 81 per cent who can walk to food shops, down to 15 per cent who can walk to other shops.

Table 8.5: Modes of travel used to access services

Facility	Percentage of households						
	Train	Bus	Taxi	Car	Walk	Other	Cannot get there
Food shop	0.1	0.4	5.9	11.8	81.0	0.6	0.1
Other shop	0.8	5.4	58.0	19.0	15.2	1.3	0.3
Traditional healer	0.5	2.5	26.3	4.6	43.0	0.7	22.4
Medical service	0.3	3.5	35.4	18.8	40.7	0.9	0.4
Post office	0.2	3.3	37.3	18.5	38.4	1.0	1.4
Welfare office	0.3	4.8	50.5	14.7	24.9	1.0	3.8
Police station	0.2	4.1	43.9	18.8	30.9	1.1	1.0
Municipal office	0.3	3.5	43.8	20.2	27.5	0.9	3.8
Tribal authority	0.1	3.2	19.7	2.0	49.9	0.6	24.5

The second most common mode of travel to the facilities is the minibus-taxi. This is used by 58 per cent of households to get to shops other than food shops. Taxis are also a significant mode of travel to welfare services (51%). It can be gauged from the table that the car is also a mode that is commonly used by between 10 and 20 per cent of households (except in accessing traditional healers and tribal authorities which would not be services generally visited by car-owning households). A few households (less than 6%) use buses to gain access to the facilities.

The following two sections illustrate how the NHTS can be used to identify specific problem areas in access to services or facilities.

Table 8.6 shows the travel mode to medical services by province.

Table 8.6: Travel mode to medical services by province

Province	Percentage of households						
	Train	Bus	Taxi	Car	Walk	Other	Cannot get there
Western Cape	0.6	0.6	19.4	35.2	42.6	1.5	0.2
Eastern Cape	0.1	6.1	45.5	11.1	36.6	0.4	0.2
Northern Cape	0.0	0.3	21.4	23.5	52.7	2.1	0.0
Free State	0.0	0.7	22.2	15.7	59.7	1.5	0.3
KwaZulu-Natal	0.2	9.5	46.9	16.6	25.1	1.1	0.5
North West	0.1	1.9	36.4	13.0	46.8	1.3	0.5
Gauteng	0.5	0.7	30.4	26.2	41.3	0.5	0.4
Mpumalanga	0.1	1.7	40.1	13.7	41.7	1.2	1.6
Limpopo	0.0	4.2	37.6	8.4	49.2	0.6	0.0
RSA	**0.3**	**3.5**	**35.4**	**18.8**	**40.7**	**0.9**	**0.4**

Generally, the provincial breakdown reveals the impact of the level of urbanisation, wealth and car ownership on the use of modes. In the highly urbanised provinces, car use tends to be greater, for example in the Western Cape (35%) and Gauteng (26%). The high use of cars in Northern Cape may be surprising, but there is a relatively small rural population in that region and there is also an absence of bus and train services. The use of walking as a mode to medical services is highest in the Northern Cape and the Free State where, in both instances, more than half the number of people seeking access to medical services, walk. The minibus-taxi does assume an important role in most provinces.

Table 8.7 shows the travel time to medical services by province.

Table 8.7: Travel time to medical services by province

Province	Percentage of households				
	1 - 15 mins	16 - 30 mins	31 - 60 mins	> 60 mins	Cannot get there
Western Cape	68.2	25.3	5.7	0.6	0.3
Eastern Cape	29.7	30.0	24.4	15.7	0.2
Northern Cape	50.8	30.9	13.4	4.9	0.0
Free State	48.8	33.7	13.8	3.3	0.3
KwaZulu-Natal	33.5	37.8	20.4	7.8	0.5
North West	41.3	34.6	20.2	3.5	0.5
Gauteng	53.5	35.3	9.6	1.2	0.5
Mpumalanga	38.1	36.4	19.9	3.9	1.7
Limpopo	37.8	37.4	19.6	5.0	0.2
RSA	**44.2**	**34.1**	**16.1**	**5.2**	**0.5**

There are some provinces where some investigation may need to be made regarding the distribution of medical services or means of transporting people to them. In the Eastern Cape for example, 16 per cent of persons take longer than an hour to get to medical services. Other areas where a large number travel more than an hour are KwaZulu-Natal (8%) and Limpopo (5%).

As with the preceding tables which illustrated the travel mode and times to medical services, **Tables 8.8 and 8.9** depict the travel modes and travel times to welfare services. In each of the provinces, there is a similar result although generally fewer people can walk to welfare than to medical services. Accordingly, far more people use minibus-taxis to get access to welfare offices. Likewise, a larger proportion of people use cars. In the case of welfare services in comparison to medical services, a larger proportion of household respondents indicated that they cannot get to them. In KwaZulu-Natal, 5.6 per cent of households indicated that they cannot get to welfare services and the problem is even more pronounced in Gauteng (6.2%) and in Mpumalanga (6.3%).

Table 8.8: Travel modes used to travel to welfare services by province

Province	Percentage of households						
	Train	Bus	Taxi	Car	Walk	Other	Cannot get there
Western Cape	0.7	1.4	34.2	25.4	34.8	2.1	1.3
Eastern Cape	0.1	6.3	55.8	8.3	27.0	0.3	2.2
Northern Cape	0.0	0.8	30.0	22.7	43.0	2.7	0.8
Free State	0.0	1.0	45.7	13.5	35.0	1.6	3.1
KwaZulu-Natal	0.3	11.5	57.1	13.1	11.3	1.2	5.6
North West	0.1	3.8	57.0	8.6	27.1	0.9	2.4
Gauteng	0.5	0.7	44.2	22.1	25.5	0.7	6.2
Mpumalanga	0.0	1.5	52.7	11.5	27.0	1.0	6.3
Limpopo	0.0	8.2	57.9	9.2	23.2	0.5	1.1
RSA	**0.3**	**4.8**	**50.5**	**14.7**	**24.9**	**1.0**	**3.8**

Table 8.9 shows the travel times to welfare services by province.

Table 8.9: Travel time to welfare services by province

Province	Percentage of households				
	1 - 15 mins	16 - 30 mins	31 - 60 mins	> 60 mins	Cannot get there
Western Cape	54.0	34.9	9.0	0.8	1.3
Eastern Cape	23.1	30.3	27.7	16.7	2.2
Northern Cape	42.2	35.7	15.1	6.1	0.8
Free State	38.9	38.1	15.8	4.1	3.1
KwaZulu-Natal	25.0	34.6	23.8	11.0	5.6
North West	27.6	37.8	26.5	5.7	2.4
Gauteng	37.0	41.4	14.2	1.1	6.2
Mpumalanga	29.8	35.8	23.3	4.8	6.3
Limpopo	25.4	35.3	29.2	9.0	1.1
RSA	**31.9**	**36.3**	**21.1**	**6.9**	**3.8**

It appears that there are access problems in two of the provinces which have large rural populations, namely Eastern Cape and KwaZulu-Natal. In the former, 16.7 per cent of households claim that it takes them more than an hour to get to welfare services with the equivalent figure is 11 per cent for KwaZulu-Natal. The NHTS can be used to devise and cost strategies for delivery of welfare services to people, rather than for transporting people to welfare services.

The foregoing are the types of issues which need to be investigated in a development context rather than by following a singular transport approach.

8.3 Monthly household expenditure on public transport

Table 8.10 shows the monthly household expenditure on public transport by province and settlement type.

Table 8.10: Monthly household expenditure on public transport by province and settlement type

Province	Percentage of households					
	Nothing	R1 - R50	R51 - R100	R101 - R150	R151 - R200	> R200
Western Cape	43.0	12.0	9.3	7.2	7.5	21.0
Eastern Cape	15.8	35.4	20.4	8.9	6.4	13.1
Northern Cape	53.2	23.6	7.9	5.5	3.5	6.3
Free State	27.7	31.7	12.8	8.7	5.8	13.3
KwaZulu-Natal	18.0	22.1	18.7	10.5	9.6	21.2
North West	26.0	23.3	12.5	8.8	6.7	22.7
Gauteng	33.8	12.6	9.6	7.6	8.3	28.0
Mpumalanga	18.2	24.3	19.4	10.1	8.6	19.4
Limpopo	10.4	37.3	25.0	10.1	6.6	10.6
RSA	**25.3**	**23.0**	**15.4**	**8.8**	**7.6**	**19.8**
Metropolitan	31.2	11.6	10.0	8.1	9.1	29.9
Urban	31.7	22.9	12.4	8.8	7.0	17.3
Rural	14.2	34.9	23.2	9.6	6.6	11.4

The following points are noteworthy:

- in the RSA as a whole, 25 per cent of households spend nothing on public transport;
- there is an interesting relationship between settlement type and the number of people who spend nothing on public transport. For example, nearly a third of metropolitan and urban households spend nothing on transport. In the rural areas, however, only 14 per cent of households spend nothing. This is an indication of rural dependency on public transport;
- a further indication of the dependency of rural populations on public transport is reflected in the fact that the provinces with large rural populations, such as the Eastern Cape, KwaZulu-Natal, North West Province, Mpumalanga and Limpopo have far fewer households which spend nothing on transport than in the highly urbanised provinces such as Western Cape, Northern Cape and Gauteng.

Table 8.11 shows the relationship between the monthly household income and the expenditure on public transport. Obviously, the higher the income, the less spent on public transport.

Table 8.11: Household expenditure on public transport by income group

Monthly household income	Percentage of households					
	Nothing	R1 - R50	R51 - R100	R101 - R150	R151 - R200	> R200
Up to R 500	18.3	40.5	22.3	7.8	5.1	5.9
R 501 - R1000	14.1	33.4	20.9	10.5	7.9	13.3
R1001 - R3000	15.1	16.9	14.4	11.9	11.2	30.5
R3001 - R6000	30.4	7.0	8.7	7.5	8.8	37.6
> R6000	64.3	3.8	3.4	3.0	4.0	21.4
Access to car	59.9	8.1	6.6	4.7	4.7	16.0
No access to car	13.0	28.3	18.5	10.3	8.7	21.2

It can be gauged from the table that households in the income category of R500 per month or less are mostly restricted to spending less than R100 per month on transport. As can be seen from the table, almost two-thirds of households in this category spend less than R100 per month.

Also in the table is an indication of the effect of access to cars on expenditure on public transport. A large proportion of households who have access to cars spend nothing on public transport (60%). Households without access to a car (public transport captives) mostly spend less than R50 per month on public transport. Mobility is therefore constrained by the low availability of funds for transport expenditure. From this result, it seems that expenditure is being made only on essential trips. Many households in South Africa are relatively immobile because they have insufficient disposable income for expenditure on other forms of travel such as recreational, visiting and holidays.

Table 8.12 shows the breakdown of monthly household expenditure on public transport by public transport mode.

Table 8.12: Expenditure on public transport by mode

Expenditure on:	Percentage of households					
	Nothing	R1 - R50	R51 - R100	R101 - R150	R151 - R200	> R200
Train	93.3	1.6	2.6	1.2	0.7	0.7
Bus	80.3	8.7	3.4	2.2	2.1	3.3
Taxi	32.3	27.5	13.0	7.8	6.3	13.1
Public transport	**25.3**	**23.3**	**15.4**	**8.8**	**7.6**	**19.8**

Because of the inaccessibility of train stations and other factors mentioned elsewhere in this report about inappropriate destinations, the vast majority of South Africans spend nothing on train services (93%). The large majority of households also spend nothing on bus services (80%). The most noteworthy result is that only a third of the total population spends nothing on minibus-taxi services (32.3%). This shows the preference of the population of the RSA for minibus-taxi services. It also highlights the fact that the bus and train modes are serving a relatively small proportion of households.

8.4 Percentage of household income spent on public transport

Table 8.13 shows the percentage of household income spent on public transport by province.

Table 8.13: Percentage of household income spent on public transport

Province	Percentage of households				
	0%	1 - 5%	6 - 10%	11 - 20%	> 20%
Western Cape	45.7	21.8	14.5	9.5	8.5
Eastern Cape	16.9	25.6	25.1	9.9	22.5
Northern Cape	57.2	21.9	10.8	2.6	7.5
Free State	28.8	27.6	17.9	8.5	17.1
KwaZulu-Natal	19.7	22.9	23.1	14.5	19.9
North West	28.5	23.9	17.4	11.7	18.5
Gauteng	37.0	16.3	15.0	15.2	16.4
Mpumalanga	19.8	23.1	21.1	12.1	23.8
Limpopo	11.4	31.7	26.4	11.0	19.6
RSA	**27.3**	**23.0**	**19.7**	**12.1**	**17.9**

The first fact which stands out relates to those households who spend nothing on public transport. These tend to be the most highly urbanised provinces, namely Western Cape, Gauteng and Northern Cape. In the Northern Cape, 57 per cent of

households spend nothing on public transport, while in the Western Cape the figure is 46 per cent and in Gauteng 37 per cent. The reason why there is low expenditure on public transport in Western Cape and Gauteng is that household income in these provinces is much higher than average (**Table 7.2**). As a result, car availability is higher (**Table 8.15**) and, accordingly, use of public transport is lower. In Northern Cape, where public transport is not well developed, many people walk (**Table 13.1**) or use a car, which explains the low expenditure on public transport.

Table 8.13 also shows which provinces have households spending more than 10 per cent of income on public transport. Those which are particularly high are the Eastern Cape, where 32 per cent of the households spend more than 10 per cent on public transport and, in the case of the Eastern Cape, the group that spends more than 20 per cent comprises 23 per cent of all households. Other provinces which have a large proportion of their households spending in excess of 10 per cent of income on public transport are KwaZulu-Natal (34% of households), North West Province (30% of households), Mpumalanga (36% of households) and Limpopo (31% of households).

Table 8.14 shows the percentage of household income spent in relation to monthly household income.

Table 8.14: Percentage of household income spent on public transport in relation to monthly household income

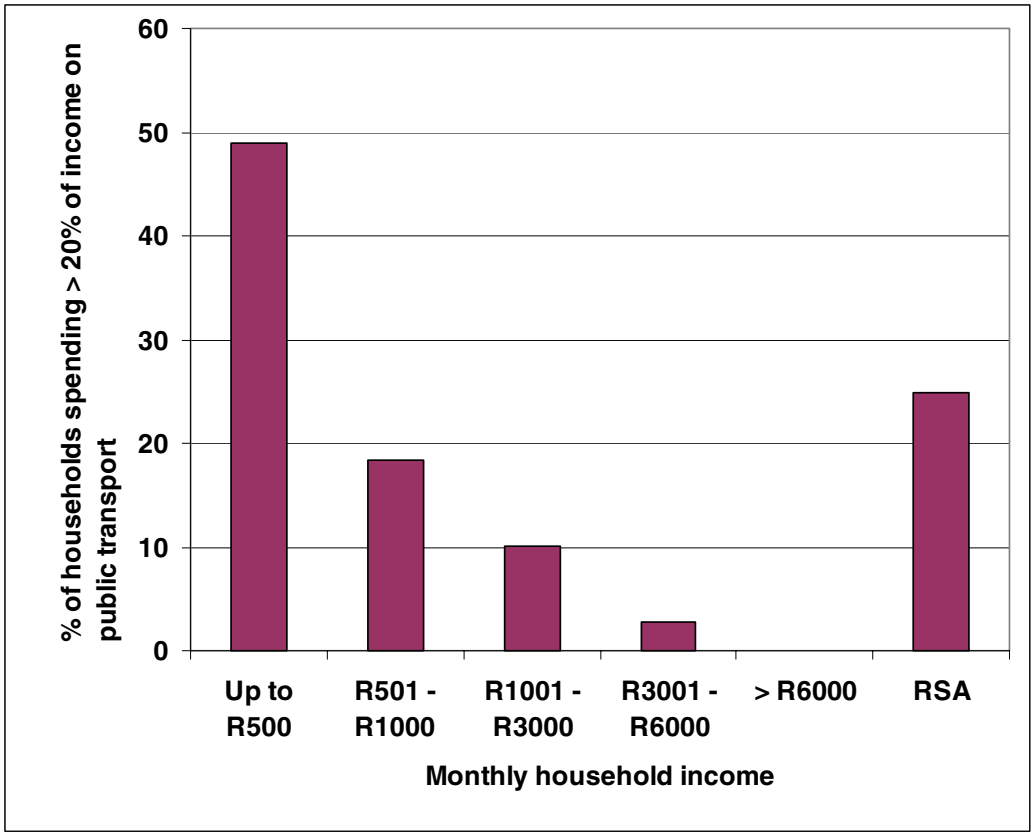
Monthly household income	Percentage of households				
	0%	1 - 5%	6 - 10%	11 - 20%	> 20%
Up to R500	20.8	0.0	24.5	5.8	49.0
R501 - R1000	14.1	33.5	20.9	13.2	18.3
R1001 - R3000	15.1	28.8	24.0	22.0	10.1
R3001- R6000	32.5	35.4	18.6	10.7	2.8
> R6000	68.8	23.8	5.4	1.9	0.0

Table 8.14 shows that of households earning R500 or less, almost 50 per cent spend more than 20 per cent of their household income on public transport. A large proportion of this group (21 per cent) spend nothing on public transport. This is because they live in rural areas with no public transport, or cannot afford to use public transport and walk instead, or choose to walk.

At the other end of the scale, almost 70 per cent of households earning in excess of R6 000 per month spend nothing on public transport.

Figure 8.2 shows the relationship between monthly household income and the group of households who spend more than 20 per cent of income on public transport.

Figure 8.2: Households spending more than 20 per cent of income on public transport



The graph shows the dramatic effect of the relative cost of transport on low income groups in respect of the proportion of household income consumed on travel. For the RSA as a whole 18 per cent of households spend 20 per cent or more per month on transport. The range is between 49 per cent for those earning less than R500 per month and none for those earning R6 001 or more.

8.5 Vehicle ownership by households

Table 8.15 shows the average number of vehicles owned by households in each of the provinces.

Table 8.15: Average number of vehicles per household

Province	Bicycles	Motor-cycles	Company cars	Cars	Combis	Trucks	Other
Western Cape	0.35	0.02	0.07	0.60	0.02	0.01	0.00
Eastern Cape	0.10	0.01	0.04	0.18	0.01	0.01	0.00
Northern Cape	0.39	0.02	0.07	0.32	0.01	0.01	0.03
Free State	0.25	0.02	0.03	0.28	0.02	0.01	0.00
KwaZulu-Natal	0.14	0.01	0.05	0.28	0.01	0.01	0.00
North West	0.18	0.01	0.06	0.26	0.01	0.01	0.01
Gauteng	0.21	0.02	0.08	0.46	0.02	0.01	0.00
Mpumalanga	0.20	0.01	0.07	0.29	0.02	0.01	0.00
Limpopo	0.16	0.01	0.02	0.20	0.01	0.01	0.00
RSA	**0.19**	**0.02**	**0.06**	**0.33**	**0.02**	**0.01**	**0.00**

The vehicles include bicycles, motorcycles, company cars, cars and other vehicles. Perusal of the figure indicates that motorcycle, company car, combi and truck ownership is negligible. The two forms of vehicle ownership which reflect some interesting patterns are bicycles and motor cars. Ownership of bicycles ranges from as high as 0.39 bicycles per household in the Northern Cape (0.35 in the Western Cape) down to 0.1 vehicles per household in the Eastern Cape.

Household car ownership is highest in the Western Cape at 0.6 cars per household, followed by Gauteng at 0.46 cars per household. Lowest levels of car ownership occur in the Eastern Cape (0.18 cars per household) and Limpopo Province (0.20 cars per household).

There is a significant difference in the ownership of cars between metropolitan and rural settlement types as indicated in the ownership rates listed below:

car ownership in metropolitan settlements - 0.48
car ownership in urban settlements - 0.39
car ownership in rural settlements - 0.14

Bicycle ownership is highest in metropolitan and urban areas (over 0.26 bicycles per household) and lowest in rural areas (0.14). Both bicycle and car ownership are strongly correlated with monthly household income as indicated in **Figure 8.3**.

Figure 8.3: Ownership of bicycles and cars per household

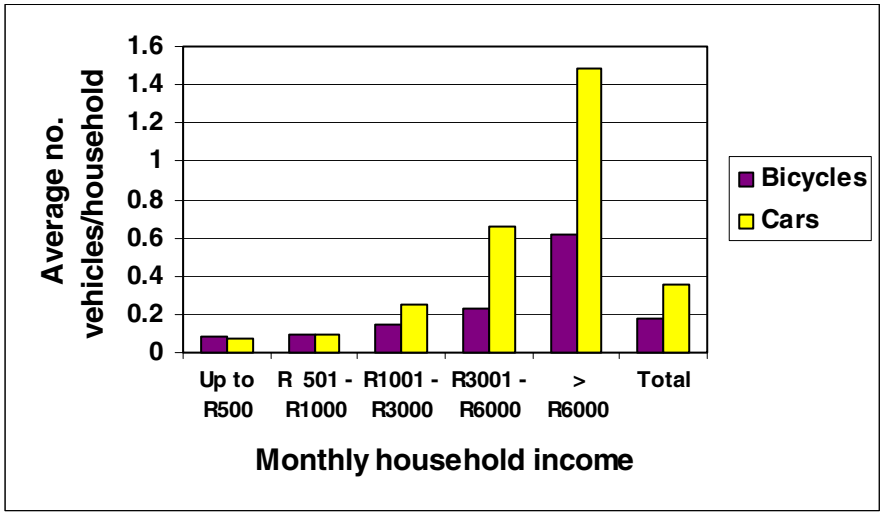


Table 8.16 shows car availability which combines household car ownership with company car use. The data are also illustrated in **Figure 8.4**.

Table 8.16: Access to cars (household- and company-owned cars, bakkies, station wagons & combis)

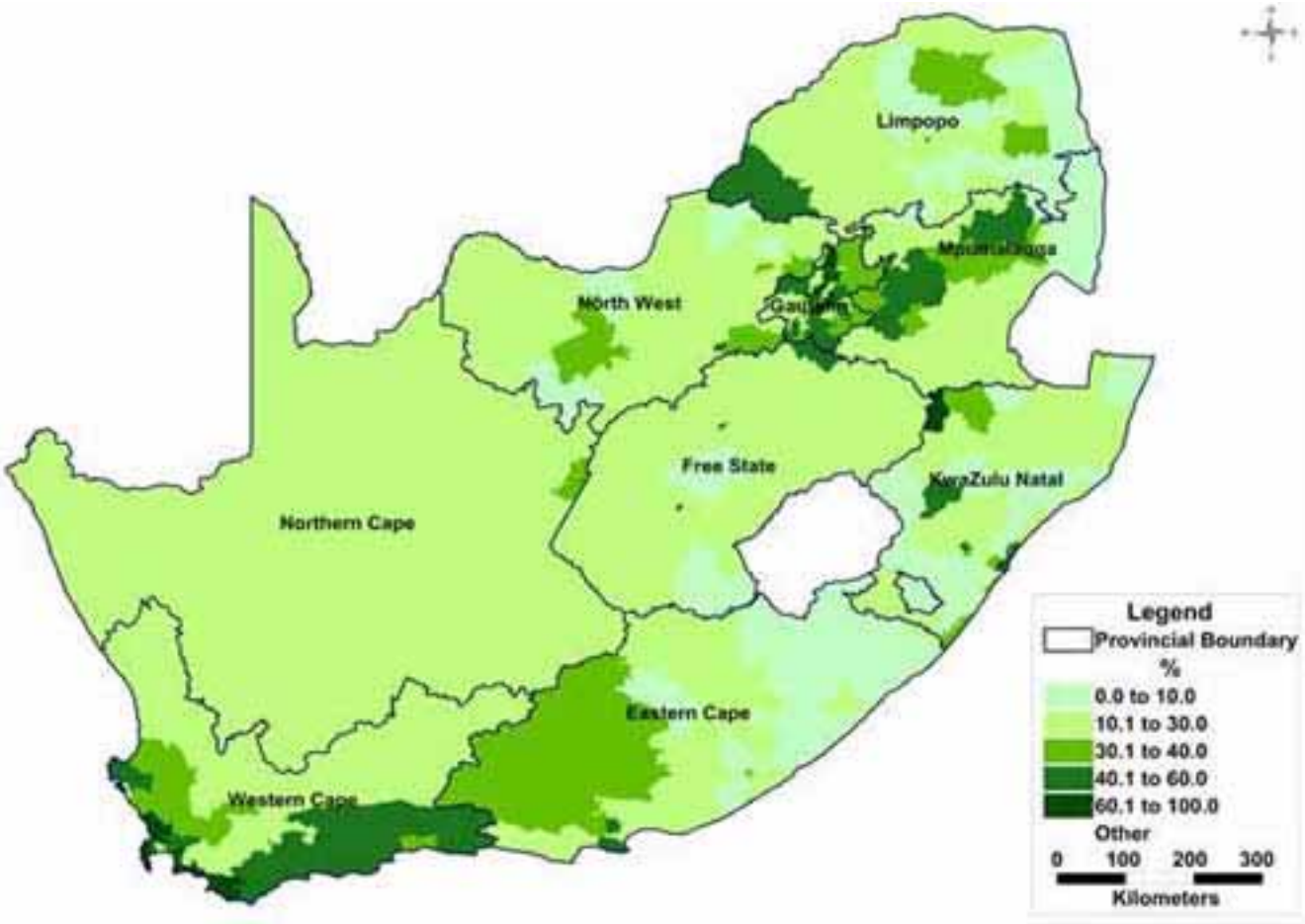
Province	% of households with one or more cars	Number of cars per household	Number of cars per '000 population
Western Cape	45.5	0.68	187.5
Eastern Cape	15.5	0.23	55.6
Northern Cape	25.4	0.41	113.2
Free State	21.8	0.32	91.1
KwaZulu-Natal	23.2	0.34	77.5
North West	22.4	0.33	92.2
Gauteng	33.0	0.56	183.7
Mpumalanga	23.5	0.37	97.5
Limpopo	17.2	0.24	59.8
RSA	**26.1**	**0.40**	**108.3**

On a provincial basis, the highest number of households with one or more cars occurs in the Western Cape with 46 per cent of households having access to one or more vehicles. The lowest is the Eastern Cape with only 15.5 households having access to one or more cars. The table also provides information on the number of cars per household and the number of cars per 1 000 population. Generally, the areas where car ownership is highest are metropolitan areas where 36 per cent of

households own or have access to one or more car(s), compared with only 12 per cent in rural areas.

Figure 8.4 portrays the percentage of households with access to at least one car (household and company-owned cars).

Figure 8.4: Percentage of households with access to at least one car (household and company-owned cars)



9. RESULTS: ALL PERSONS IN THE HOUSEHOLD

All members of the household provided information on whether they had made trips on the travel day. Because the NHTS defined travel day for household members as any weekday between (and including) Monday to Friday, travel day can be considered to be a "typical weekday". A typical weekday for most household members would include regular daily activities such as working and going to school, and some irregular activities such as visiting or going to the doctor. Activities generate travel and understanding the amount and type of trip-making by households was an important objective of the NHTS.

Household members were also asked if they had undertaken a holiday trip of at least 24 hours during the past year. Their purposes for making the weekday trips, and the destinations of holiday trips, were recorded as was the modes of transport used. Potential influences on trip-making were examined. These included income, age whether the household resided in a metropolitan, urban or rural area, and the province of residence. The monthly household income, gender, occupational status, possession of a driver's licence and the presence of any disabilities that might influence people's trip-making, were also noted.

9.1 Weekday trip-making

Table 9.1 reveals that 76 per cent of the household members (or 35.2 million people in the population as a whole) travelled from their homes on the travel day. While a somewhat higher proportion of metropolitan and urban residents undertook a trip, the actual number of rural people doing so was greater.

Table 9.1: Proportion and number of household members who made one or more trips on weekdays, by settlement type

Settlement type	% of people making a trip	No. making a trip
Metropolitan	80.5	12 410 000
Urban	78.7	9 417 000
Rural	70.4	13 376 000
RSA	**75.9**	**35 203 000**

Analysis by province, shown in **Table 9.2**, indicates that trip-making was undertaken by at least 70 per cent of household members in all the provinces. It can be noted that two of the provinces with the lowest trip-making rates (the Eastern Cape and KwaZulu-Natal) had amongst the highest numbers of travellers, because of the size of their population. Only Gauteng, with the highest percentage of trip-makers, had more persons making trips on a typical weekday

Table 9.2: Proportion and number of household members who made one or more trips on weekdays, by province

Province	% of people making a trip	No. Making a trip
Western Cape	80.1	3 791 000
Eastern Cape	70.5	4 569 000
Northern Cape	72.3	641 000
Free State	79.7	2 182 000
KwaZulu-Natal	70.3	6 892 000
North West	71.4	2 999 000
Gauteng	81.2	7 247 000
Mpumalanga	80.0	2 661 000
Limpopo	79.9	4 221 000

No marked gender differences in trip-making were noted, but the age of the household member was a determining factor. This is reflected in **Table 9.3.**

Table 9.3: Weekday trip-making, by age group of household members

Age	% of people making a trip	No. Making a trip
0 - 6 years	52.4	3 281 000
7 - 14 years	92.4	7 638 000
15 - 19 years	86.8	4 571 000
20 - 25 years	76.5	3 979 000
26 - 40 years	78.5	8 301 000
41 - 65 years	73.5	6 381 000
> 65 years	49.6	1 035 000

A very high proportion of household members in the 7-19 years age group made weekday trips, while fewer (but still about half) of the youngest and oldest groups made trips. The greatest number of trip-makers was, however, among the economically active age group (26-65 years) and the school-going age group (7-19 years).

9.2 Purpose of trips made by household members

Table 9.4 indicates that, in the RSA as a whole and for all age groups, the main reasons for undertaking weekday trips were to attend educational institutions, to go shopping, to visit friends and relatives, or to go to work. The importance of trips to educational institutions is apparent, particularly in the rural areas, where education is

the main trip purpose. This is also the case in urban areas. Only in metropolitan areas did trips to work predominate.

Table 9.4: Main trip purposes on weekdays, by settlement type

Settlement type	% of household members naming trip purpose			
	Education	Shopping	Visiting	Work
Metropolitan	32.8	35.8	28.3	36.6
Urban	37.1	31.5	31.0	31.0
Rural	51.0	23.4	27.0	15.9
RSA	**40.9**	**29.9**	**28.6**	**27.2**

These tendencies are also reflected in the remarkable provincial differences in work trips made by household members shown in **Table 9.5**. Trips to work, often considered the main purpose for weekday trips, only predominated in the Western Cape where 41 per cent of all household members made a work trip on a typical weekday. The incidence of trips to work was lowest in the Eastern Cape (14%) and Limpopo, where only 16 per cent of household members made a work trip on a typical weekday. Trips to educational institutions were the major purpose in five provinces; KwaZulu-Natal, the North West, Mpumalanga and, most notably, in Limpopo and the Eastern Cape. Shopping trips predominated in Gauteng, while visiting friends and relatives was the most frequent weekday trip purpose in both the Northern Cape and the Free State.

Table 9.5: Main purposes of trips made by household members, by province

Province	% of household members naming purpose			
	Education	Shopping	Visiting	Work
Western Cape	33.4	26.0	19.8	41.0
Eastern Cape	49.2	26.9	27.7	14.0
Northern Cape	34.3	28.3	39.7	30.9
Free State	38.2	33.3	42.9	26.6
KwaZulu-Natal	46.4	24.4	20.1	22.7
North West	39.6	23.7	29.5	26.7
Gauteng	29.9	44.1	33.9	39.3
Mpumalanga	41.4	34.0	36.7	23.7
Limpopo	51.2	22.0	27.0	15.9

Gender differences were not marked, although somewhat more males travelled to work (32%) than females (23%). The main factor in determining trip purpose appeared to be the age of the household member, illustrated in **Table 9.6**.

Table 9.6: Trip purpose, by age group of household member

Age	% of household members naming purpose			
	Education	Shopping	Visiting	Work
0 - 6 years	58.5	19.5	32.1	0.5
7 - 14 years	95.9	17.5	16.4	0.4
15 - 19 years	82.8	25.3	23.2	3.3
20 - 25 years	25.7	37.7	36.0	28.1
26 - 40 years	2.6	37.9	32.4	57.5
41 - 65 years	1.3	35.9	32.7	53.9
> 65 years	0.9	45.3	45.5	6.0

Travelling to educational institutions was the principal reason for weekday trip-making by all age groups up to 19 years of age. From 26 - 65 years of age, work trips predominated. Among the elderly and retired, visiting and shopping were the most common trip purposes.

9.3 Transport modes used during the seven days prior to survey day

Table 9.7 shows that the most commonly used travel mode in the RSA is the minibus-taxi.

Table 9.7: Transport modes used by all household members in the week (7 days) prior to survey day, by province and settlement type

Province	Percentage of all people												
	Train	Bus	Metered taxi	Minibus-taxi	Sedan taxi	Bakkie taxi	Car	Truck	Motor-cycle	Cycle	Animal transport	Air	Other
Western Cape	7.6	4.6	1.2	19.6	0.8	1.2	29.9	1.5	0.3	1.0	0.1	0.1	2.8
Eastern Cape	0.7	3.3	0.5	15.9	1.2	4.9	8.6	0.3	0.1	0.4	0.2	0.0	0.2
Northern Cape	0.3	2.2	0.4	12.7	0.4	0.9	16.1	1.0	0.4	2.9	0.6	0.1	0.3
Free State	0.2	3.3	0.9	22.5	1.5	0.6	12.6	0.8	0.2	1.5	0.2	0.1	0.4
KwaZulu Natal	1.1	8.7	1.6	20.5	0.9	2.8	11.2	0.4	0.1	0.4	0.1	0.1	1.8
North West	1.1	6.7	1.0	22.7	0.4	0.7	11.9	0.6	0.1	1.3	0.6	0.0	1.2
Gauteng	5.7	3.7	1.6	31.8	0.7	1.1	25.0	0.3	0.2	0.9	0.1	0.1	2.2
Mpumalanga	0.2	8.1	1.0	19.7	1.0	1.1	11.8	1.2	0.1	1.3	0.1	0.2	0.4
Limpopo	0.1	5.6	0.6	17.7	0.3	0.7	7.7	0.6	0.1	1.5	0.5	0.0	0.0
RSA	**2.3**	**5.5**	**1.1**	**21.7**	**0.8**	**1.9**	**15.3**	**0.6**	**0.1**	**0.9**	**0.2**	**0.1**	**1.3**
Metropolitan	5.9	6.3	1.8	29.3	0.8	1.2	24.5	0.4	0.2	0.6	0.1	0.1	1.6
Urban	1.0	3.9	0.9	24.4	1.4	1.2	19.8	0.5	0.2	1.5	0.1	0.1	1.4
Rural	0.3	5.7	0.7	14.0	0.5	2.9	5.0	0.8	0.1	0.9	0.4	0.0	0.9

Some 22 per cent of the population made use of a minibus-taxi at least once in the week prior to the survey day. (The table excludes walking as a travel mode because the NHTS wanted to ascertain the extent of the use of public transport, motorised and mechanical modes of travel, during the course of a typical week. It should be borne in mind that walking is the most commonly used mode of travel. Most persons, bar those with walking disabilities, walk at least once per week, for example for recreation, or to get to public transport, visit a friend or go shopping.)

Use of the minibus-taxi as a travel mode was higher in metropolitan areas (29%) than in rural areas (14%). Amongst the provinces, minibus-taxi use was highest in Gauteng where 32 per cent of all household members used the mode at least once in the week prior to survey day, and lowest in the Northern Cape where 13 per cent used a minibus-taxi.

The second most frequently used travel mode was the motor car. In the Western Cape, 30 per cent of all household members used a motor car in the 7 days prior to survey day. The lowest incidence of motor car use was in the provinces with more rural settlements, particularly Limpopo and Eastern Cape, where less than 10 per cent of the population made use of a car at least once during the week prior to survey

day. The only other modes which experienced significant use were trains and buses. Train and bus usage was highest in metropolitan areas, but the use of buses was also significant in rural areas (5.7% of people used a bus during the week before the survey). The provinces with the highest use of bus services by household members were KwaZulu-Natal (9%), Mpumalanga (8%) and North West Province (7%). Metered taxi and sedan taxi use was not significant, with only 1 per cent of the population having used metered taxis and roughly the same number having used sedan taxis in the week before the survey. It should be noted, however, that 1 per cent of 46 million is a large number and both modes obviously provide a livelihood for operators. The use of metered taxis was highest in metropolitan areas, as might be expected. The use of sedan taxis was higher in the Eastern Cape and in the Free State. The use of bakkie taxis was also highest in the Eastern Cape (4.9% of all persons).

Table 9.8 shows the use of transport modes by the age group of household members.

Table 9.8: Use of transport modes by age group

Age	Percentage of all people												
	Train	Bus	Metered taxi	Minibus-taxi	Sedan taxi	Bakkie taxi	Car	Truck	Motor-cycle	Cycle	Animal transport	Air	Other
0 - 6 years	0.2	1.3	0.4	6.9	0.3	0.8	8.9	0.2	0.1	0.5	0.1	0.1	1.1
7 - 14 years	0.4	3.4	0.6	7.8	0.4	1.1	8.6	0.2	0.1	1.4	0.2	0.0	2.4
15 - 19 years	1.8	5.5	1.1	17.4	0.5	1.7	9.0	0.3	0.2	1.4	0.3	0.0	2.0
20 - 25 years	3.9	6.4	1.4	31.6	1.1	2.0	12.0	0.8	0.1	0.8	0.2	0.1	0.9
26 - 40 years	4.3	7.4	1.7	35.2	1.3	2.3	21.0	1.1	0.2	0.8	0.2	0.1	0.8
41 - 65 years	3.0	8.0	1.5	27.7	1.0	2.7	24.0	0.9	0.2	0.8	0.3	0.1	0.9
> 65 years	0.7	4.9	0.8	15.1	0.7	2.8	19.9	0.3	0.1	0.5	0.3	0.1	0.4

In all cases, the working age population made the greatest use of all travel modes with the peak being in the 26 to 40 year age group where 35 per cent of all persons made use of a minibus-taxi and 21 per cent made use of a motor car at least once during the seven days prior to the survey. The use of motorised and other modes was lowest amongst those persons of 14 years or less. This is because most people in this age group could walk to school or to visit their friends. The use of public transport modes was relatively low for the 66 and over age group.

Table 9.9 shows the use of transport modes by income group.

Table 9.9: Use of transport modes by income group

Monthly household income	Percentage of all people												
	Train	Bus	Metered taxi	Minibus-taxi	Sedan taxi	Bakkie taxi	Car	Truck	Motor-cycle	Cycle	Animal transport	Air	Other
Up to R500	1.5	4.4	1.0	18.9	0.7	1.7	2.3	0.4	0.1	0.8	0.4	0.0	1.6
R501 - R1000	1.6	5.0	0.8	19.8	0.7	2.1	3.3	0.6	0.1	0.7	0.2	0.1	1.2
R1001 - R3000	3.2	6.6	1.3	26.3	0.9	1.6	8.0	0.8	0.1	0.8	0.2	0.1	1.3
R3000 – R6000	3.5	7.5	1.7	28.7	1.1	1.8	25.6	0.7	0.2	1.1	0.2	0.1	1.5
> R6000	2.1	4.6	1.0	15.3	0.8	2.8	60.2	0.5	0.6	2.1	0.1	0.2	0.7

As would be expected, car usage was relatively insignificant by household members living in households with an income of R3 000 per month or less. In households earning between R3 001 and R6 000 per month, 26 per cent, and in households earning more than R6 000 per month, 60 per cent of all household members made use of a motor car at least once during the week prior to the survey.

Minibus-taxi use was most common amongst those earning R3 000 or less. The percentage of household members using the mode was slightly lower amongst the lower income group. The range of household members who used minibus-taxis at least once in the week prior to the survey was from 29 per cent in the income group R3 001 to R6 000, down to 19 per cent amongst members of households earning less than R500 per month. Train and bus usage was highest in households earning between R1 001 and R6 000 per month.

Table 9.10 shows the frequency of the use of cars and public transport by the population of the RSA as a whole.

Table 9.10: Frequency of the use of cars and public transport in the RSA

Days used	% of people that used mode in past 7 days			
	Train	Bus	Minibus-taxi	Car
1	12.1	23.8	27.4	9.7
2	9.2	12.0	17.8	8.2
3	7.4	6.5	10.4	5.9
4	5.1	4.4	5.8	4.3
5	49.8	40.7	26.1	28.0
6	8.7	8.1	6.4	8.1
7	7.8	4.5	6.1	35.9
Number of users	**1 083 000**	**2 566 000**	**10 080 000**	**7 088 000**

One striking result is that 10 million people made use of a minibus-taxi at least once per week. Of the 10 million, roughly a quarter (26%), made use of a minibus-taxi on at least 5 days of the week.

The next most commonly used travel mode was the motor car in which some seven million people travelled at least once every week. It is interesting to note that amongst car users, the largest proportion made use of a car on all seven days of the week (36%). Some 28 per cent used a car for five days per week.

Train use amounted to a little over one million people and bus usage some 2.6 million. In both cases, the biggest group of people used the modes at least 5 days per week (50% in the case of trains and 41% in the case of buses). It is of interest to note that occasional use of modes was highest for buses and minibus-taxis, with roughly a quarter of all persons having used them on only 1 day per week.

The National Household Travel Survey did not aim to collect information on household trip generation or for other purposes associated with modelling of household or person travel demand. There was, however, a question which was applied to all household members relating to their trip purposes on a typical weekday. Results from this question enabled an approximation to be made of household trip generation. The approximation assumed that each person who nominated a trip purpose made an outward and inward home-based trip for the nominated trip purpose (2 trips). Because each person either answered “yes” or “no” to each of the nominated trip purposes (including “other”), and was not asked how many times they made trips for each purpose, it had to be assumed that each household member made only one return journey for each purpose. That is, for a single trip from home, there was a corresponding trip from the destination back to the home.

Table 9.11: An approximation of household trip generation in the RSA

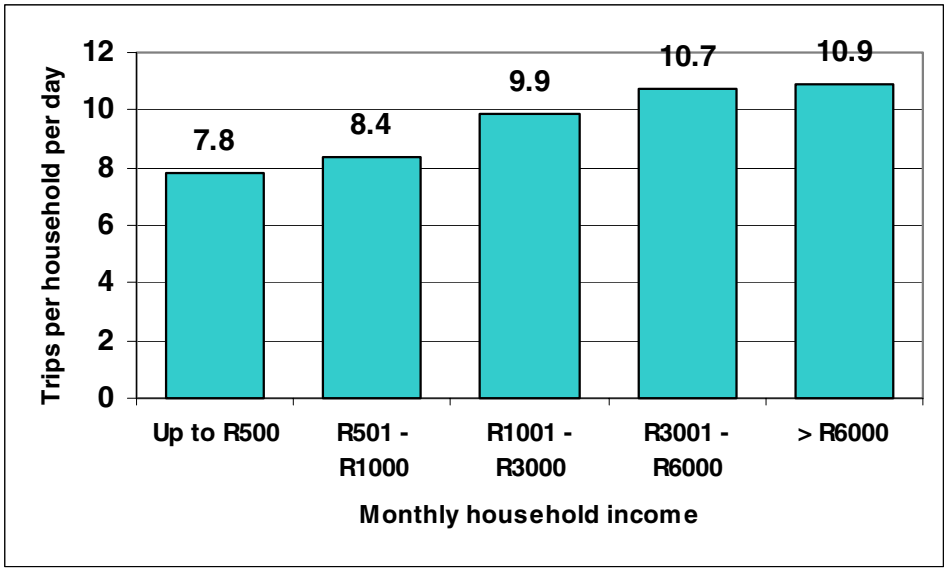
Settlement type	% of all persons				Average no of trips per person[1]	Average no of trips per household[1]
	One-way trips					
	0	1	2	3+		
Metropolitan	20.1	51.1	13.4	15.4	2.80	9.51
Urban	21.7	50.4	15.4	12.6	2.60	8.92
Rural	29.8	51.1	11.2	7.9	2.08	8.98
RSA	**24.5**	**50.9**	**13.0**	**11.6**	**2.46**	**9.15**
Monthly household income	**% of all persons**				**Average no of trips per person[1]**	**Average no of trips per household[1]**
	0	**1**	**2**	**3+**		
Up to R500	28.8	47.4	12.4	11.4	2.34	7.79
R501 - R1000	30.0	48.8	11.7	9.6	2.18	8.41
R1001 - R3000	24.5	51.1	13.0	11.4	2.44	9.89
R3001 - R6000	17.8	54.2	14.3	13.7	2.74	10.74
> R6000	12.5	56.0	15.5	16.0	3.06	10.88

1. It was assumed that each trip from home generated a return trip.

Table 9.11 shows the percentage of all persons in the household who made three or more trips per day.

As would be expected, the highest number of individuals who made trips for many different purposes was found in metropolitan areas (15%) and amongst those earning more than R6 000 (16%). The table shows the average number of trips per person per household and this measure, taken together with the average household size, provided an indication of the average number of trips per household. "Trip generation" is highest amongst households in which the average income exceeds R6 000 (10.88 trips) and as indicated in **Figure 9.1**, there is a clear relationship between income and "trip generation".

Figure 9.1: Relationship between household income and household "trip generation"



There is no significant difference between these "approximate trip generation rates" in the different settlement types.

9.4 Main reasons given for not making trips

Table 9.12 indicates that one reason given by people for not travelling far outweighed all others, that is, that they had no need to travel anywhere. The only other reasons mentioned to any significant extent were either that they were not well enough to travel, had family and household duties to attend to, or did not have the money for the fare even had they wished to travel.

Table 9.12: Main reasons given for not travelling on the travel day

Reason given	% of household members who did not travel
Had no need to travel	75.9
Not well enough to travel	7.9
Had family responsibilities	7.5
Had no money for fares	6.0
Other	2.7
No. who did not travel	**11 089 000**

No marked differences were observed in the reasons given by households in the various settlement areas or provinces, or by males and females, although more females (10%) had family responsibilities than had males (3%).

9.5 Incidence of disabilities

Many forms of disability could restrict individuals' mobility and consequently their ability to use certain modes of transport. **Table 9.13** reveals the extent and main forms of disability reported by province.

Table 9.13: Incidence of disabilities, by province

Province	% disabled	No disabled	Main disabilities (% of disabled)			
			Physical	Intellectual	Sight	Hearing
Western Cape	2.2	102 000	53.9	13.3	9.8	7.8
Eastern Cape	2.6	170 000	38.9	20.5	12.8	13.3
Northern Cape	4.0	35 000	40.3	10.6	32.3	21.9
Free State	3.2	87 000	46.6	17.0	22.9	13.1
KwaZulu-Natal	2.0	195 000	46.8	18.2	15.8	9.5
North West	1.8	77 000	47.4	12.8	18.3	10.9
Gauteng	2.2	196 000	39.5	13.9	24.2	12.5
Mpumalanga	2.5	82 000	44.2	17.4	22.5	9.8
Limpopo	2.0	104 000	42.1	25.4	18.5	11.7
RSA	**2.3**	**1 048 000**	**44.0**	**17.2**	**18.4**	**11.6**

More than a million South Africans are affected by some form of disability. The incidence of disability is fairly uniform over the provinces. By far the most frequent form of disability is physical, although intellectual, sight and hearing defects are also significant. Age has a considerable influence on disability, as **Table 9.14** shows. For example, the elderly are disproportionately affected by physical, sight and hearing problems.

The NHTS result is about half that of the national Census total of disabled persons. The reasons for this are that the NHTS sample did not include institutions and the question was phrased in such a manner as to identify only those individuals whose disability could restrict their mobility.

Table 9.14: Incidence of disability, by age

Age	% disabled	No. disabled	Main disability (% of disabled)			
			Physical	Intellectual	Sight	Hearing
0 - 6 years	0.5	29 000	49.6	15.3	14.5	10.8
7 - 14 years	1.0	83 000	28.8	32.2	17.7	18.4
15 - 19 years	1.1	60 000	23.4	34.9	18.3	13.8
20 - 25 years	1.5	77 000	34.4	36.7	8.5	7.0
26 - 40 years	2.1	219 000	38.1	25.0	8.7	8.3
41 - 65 years	4.3	374 000	49.8	11.0	17.5	7.7
> 66 years	9.8	205 000	54.2	2.4	34.6	20.4

The proportion of the disabled clearly increases with age after 25 and involves as many as ten per cent of the oldest age group. The greatest number of disabled (about 600 000) are found among the economically active age groups, 26-65 years. This presents a challenge for commuter transport to and from work.

9.6 Occupational status

The occupational status of individuals of 15 years of age or older, whether working or not, affects their need and ability to travel. **Table 9.15** reveals that only about one-third of adults were working (35 per cent) at the time of the survey. It should be noted that Census 2001 recorded that 34 per cent of adults were employed.

Table 9.15: Occupational status of those 15 years or older, by province

Province	Occupational status (% of people 15 years or over)						
	Working	Could not find work	Learner/ student	Retired	Home-maker	Unwell/ disabled	Chose not work
Western Cape	49.8	15.4	12.0	10.1	8.8	2.8	1.1
Eastern Cape	22.0	29.4	20.5	13.8	8.0	4.8	1.6
Northern Cape	35.9	23.4	11.8	12.7	11.0	4.4	0.7
Free State	35.4	26.7	17.6	11.2	4.1	4.0	1.1
KwaZulu-Natal	27.6	31.1	18.4	11.2	7.9	2.6	1.2
North West	32.0	31.0	15.8	10.7	5.5	3.2	1.8
Gauteng	46.9	25.8	13.0	7.7	4.1	1.7	0.9
Mpumalanga	33.2	27.6	20.4	9.7	5.2	2.9	1.0
Limpopo	23.9	32.9	22.8	12.6	4.4	2.5	0.9
RSA	**34.5**	**27.5**	**17.0**	**10.7**	**6.3**	**2.9**	**1.2**

Considering the low incomes of households in the RSA[1] and that only 35 per cent of adults of 15 years of age or older had jobs, the combination of high dependency ratios and low incomes indicate one of the significant dimensions of poverty. The provinces with the highest proportion of working adults at the time of the NHTS were the Western Cape and Gauteng. Particularly low incidences of employment were evident in the Eastern Cape and Limpopo.

Table 9.16 reveals that the proportion of adults working was highest amongst Whites (59%) and lowest amongst the Black population (29%).

Table 9.16: Occupational status of adults in the RSA, by race group

Occupational status	% of racial group			
	Black	Coloured	Asian	White
Working	29.3	45.7	50.5	58.4
Could not find work	32.4	18.5	11.0	4.6
Learner/student	18.9	10.5	12.9	9.4
Retired	9.9	9.8	10.3	17.4
Homemaker	5.4	10.1	12.2	7.8
Unwell/disabled	3.0	4.2	1.7	1.1
Chose not to work	1.1	1.2	1.3	1.3

The high proportion of retired people among the White population is noteworthy.

9.7 Possession of a driver's licence

The ability to drive a vehicle could well influence trip-making and modal choice if the household owns a vehicle. **Table 9.17** indicated that one-fifth of all household members of 18 years or older had drivers' licences. Ownership was much higher in the metropolitan and urban areas than in the rural settlements. Almost a third of metropolitan residents had licences, compared with a quarter of urban residents and less than a tenth of rural people.

[1] Monthly incomes of 46 per cent of households in the RSA are R1 000 or less

Table 9.17: Possession of a driver's licence among those 18 years and older

Settlement	% with driver's licence
Metropolitan	29.5
Urban	24.5
Rural	8.1
RSA	**20.3**

The incidence of drivers' licences varied considerably between the provinces as is shown in **Table 9.18**. The highest proportion of people with licences was found in the Western Cape and Gauteng, while the Eastern Cape and Limpopo had the lowest proportion of adults in possession of licences.

Table 9.18: Possession of a driver's licence, by province

Province	% with driver's licence
Western Cape	31.2
Eastern Cape	11.1
Northern Cape	21.1
Free State	18.2
KwaZulu-Natal	16.2
North West	17.8
Gauteng	31.3
Mpumalanga	17.1
Limpopo	10.6

Possession of a driver's licence was principally related to the monthly household income.

Table 9.19 indicates that more than half those in the highest income group had drivers' licences, compared with six per cent or less in the lower income groups.

Table 9.19: Possession of a driver's licence, by income group

Monthly household income	% with driver's licence
Up to R500	5.0
R501 - R1000	6.0
R1001 - R3000	13.4
R3001 - R6000	32.1
> R6000	63.0

There is a wide discrepancy between the race groups in the ownership of driver's licences. This is reflected in **Table 9.20**.

Table 9.20: Possession of a driver's licence, by race group

Racial group	% with driver's licence
Black	10.2
Coloured	21.2
Asian	55.6
White	82.8

The vast majority of White individuals had drivers' licences, as did most Asians, nearly a quarter of Coloureds, but only ten per cent of Blacks. With Blacks representing some 80 per cent of the population, however, and with the possession of drivers' licences and ownership of cars increasing, it is evident that the number of vehicles on the road can be expected to increase dramatically. This could markedly affect trip-making and the use of modes in future.

9.7 Holiday trip-making

The number of individuals undertaking holiday trips within South Africa during the past year, and the main modes which they used to reach their destinations, are shown in **Table 9.21**. More than four million people went on holiday, mostly from metropolitan and urban areas. Even from the rural areas, however, more than a million holiday trips were generated.

Table 9.21: Main mode used for last holiday trip

Settlement type	No. of people	No. of trips per year	% using mode on last holiday trip				
			Car	Taxi	Bus	Train	Aircraft
Metropolitan	1 476 000	2 944 000	61.1	19.5	9.8	2.9	6.1
Urban	1 442 000	2 918 000	50.1	33.6	8.9	4.9	1.6
Rural	1 159 000	2 067 000	21.9	46.8	26.6	1.4	0.7
RSA	**4 077 000**	**7 929 000**	**46.1**	**32.3**	**14.3**	**3.2**	**3.0**

Private transport was by far the most frequent mode used by metropolitan and urban residents, followed by taxi. In the rural areas, however, the principal method of travel to holiday destinations was the taxi. Buses and cars were also relatively frequently used. Trains and aircraft were less seldom used. Nevertheless, three per cent of all trips taken by air indicates an annual demand for at least 122 000 air tickets for holiday trips by domestic consumers.

Although the pattern of holiday mode usage was fairly similar between the provinces, some differences were evident. These are shown in **Table 9.22**.

Table 9.22: Main mode used for last holiday trip, by province

Province	No. of people	No of trips per year	% using mode on last holiday trip				
			Car	Taxi	Bus	Train	Aircraft
Western Cape	562 000	1 202 000	78.7	7.3	5.0	2.8	5.2
Eastern Cape	496 000	817 000	28.5	40.7	23.0	3.6	1.7
Northern Cape	104 000	164 000	59.1	17.8	2.6	16.9	0.2
Free State	323 000	718 000	43.3	37.7	9.4	5.5	1.7
KwaZulu-Natal	424 000	827 000	43.3	40.4	8.8	2.2	5.1
North West	331 000	646 000	40.2	38.5	13.5	4.5	1.8
Gauteng	887 000	1 657 000	55.9	22.5	13.1	3.1	5.3
Mpumalanga	396 000	886 000	39.8	47.6	10.5	1.6	0.4
Limpopo	554 000	1 012 000	22.6	44.4	30.1	0.4	0.1

Private transport was the major carrier of holidaymakers in most of the provinces but especially in the Western Cape, where few other modes were significant. In three provinces the taxi was the main transport mode for holidaymakers: the Eastern Cape, Mpumalanga and Limpopo. Bus usage was also relatively important in these three provinces.

The household income level was a major factor in the choice of holiday mode of travel. This is shown in **Table 9.23**.

Table 9.23: Main mode used for last holiday trip, by household income level

Monthly household income	No. of people	% using mode on last holiday trip				
		Car/bakkie	Taxi	Bus	Train	Aeroplane
Up to R500	546 000	10.5	57.6	24.1	4.8	0.4
R501 - R1000	584 000	12.7	56.5	23.6	4.3	0.5
R1001 - R3000	849 000	25.2	50.2	19.2	3.8	0.4
R3001 - R6000	600 000	55.0	25.3	12.9	3.5	2.8
> R6000	1 117 000	79.7	6.6	5.4	1.7	6.0

As would be expected, holidaymakers in the upper income group were far more numerous than were those in the lower income categories. They also predominantly used private transport to reach their destinations. Lower income households mostly

used taxis for holiday travel, while in the lowest two categories, bus patronage was greater than private transport usage.

The distribution of holiday origins and destinations in the nine provinces is shown in **Table 9.24**.

Table 9.24: Holiday destination on last trip, by province of origin

Origin	% travelling to destination on last holiday trip								
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo
Western Cape	69.2	12.0	3.0	1.9	4.2	0.6	6.7	1.3	0.9
Eastern Cape	17.9	55.7	0.6	3.2	7.3	1.7	12.8	0.6	0.1
Northern Cape	29.7	6.4	29.0	11.3	5.8	6.1	9.7	1.5	0.5
Free State	11.3	8.7	3.6	44.6	10.3	5.4	12.0	1.6	2.5
KwaZulu-Natal	5.3	5.1	0.1	1.9	64.9	0.9	16.6	3.2	2.0
North West	11.0	4.0	3.6	5.9	13.3	31.0	23.6	2.4	5.2
Gauteng	10.3	9.7	1.4	4.0	34.5	6.5	6.8	8.5	18.3
Mpumalanga	2.2	2.7	0.4	2.4	16.5	2.0	22.4	41.0	10.3
Limpopo	1.8	0.4	0.1	0.4	6.9	2.7	26.6	3.9	57.2
RSA	**17.5**	**12.6**	**2.2**	**6.3**	**20.2**	**5.5**	**14.6**	**7.3**	**13.7**

Most holiday trips originated from Gauteng where nearly a million people left on holiday each year. The least number of holiday trips originated in the Northern Cape. Holiday destinations were spread throughout the provinces, with the most popular being KwaZulu-Natal, and the Western Cape. The least visited was the Northern Cape. It is apparent that most holidays were spent in the province of origin, the only exception being Gauteng, where households favoured KwaZulu-Natal and Limpopo. After the home province, nearby provinces tend to be favoured above those further away and involving long trips. An interesting observation is that Gauteng, although not perceived as being a major tourist destination, receives a fair amount of holiday-makers from all the provinces except the Western Cape.

This chapter has identified some of the factors associated with trip-making and modal choice. These factors were largely geographical and demographic and included the settlement type, monthly household income, age and the incidence of disabilities. Provincial differences tended to reflect the extent of development, urbanisation and economic activity within the province. The next chapter will consider the attitudinal factors which are important in travel choices.

10. RESULTS: CONSUMER PERCEPTIONS OF CURRENT PUBLIC TRANSPORT SERVICES

Respondents' perceptions of, and attitudes towards, public transport services were assessed in four different ways:

At household level:

(i) An open-ended question asked respondents for the two most important problems their household experienced. This question was positioned very near the start of the interview in order to obtain spontaneous, top-of-the-mind attitudes which were in no way influenced by subsequent transport-related questions. Respondents were prompted only if their answers were not specifically mode-related and therefore less useful.

(ii) A structured question was asked later in the interview about the most important aspect considered when travelling. Pre-coded answers were presented to respondents on a show-card (and read out to illiterates). These were travel time, travel cost, safety from accidents, security from crime, flexibility (you can travel wherever you want, whenever you want), drivers' attitudes and the proximity of transport to the home. In the pilot surveys these had been found to be the most important aspects to consider when travelling. Respondents were, however, also permitted to name an aspect other than the pre-coded answers if they wished.

At person level (adults of 15 years or over):

(i) There were three unprompted questions (but with pre-coded answers supplied to the interviewer) for each of train, bus and minibus-taxi, which asked those respondents who had not used that particular mode within the past month to give up to two reasons why they had not done so.

(ii) There were three questions, accompanied by a show-card listing four satisfaction levels (very satisfied, satisfied, dissatisfied and very dissatisfied) and a "don't know" option, which asked respondents to rate each of a list of the attributes of the mode. Each mode had slightly different attributes and respondents were questioned about their satisfaction separately on a mode-by-mode basis. This focused respondents' attention on attributes which they may have inadvertently overlooked in their responses to the previous questions.

The findings in response to the attitudinal questions are discussed in this chapter.

10.1 Most important public transport problems experienced by households

Table 10.1 reveals that by far the most important general problem mentioned by nearly half the households in South Africa was the lack of readily accessible public

transport. This was the primary concern in every province. It was particularly related to:

- train and bus services in the Western Cape and Gauteng;
- bus services in the Eastern Cape;
- buses and minibus-taxis in KwaZulu Natal, North West and Limpopo; and
- minibus-taxi services in Mpumalanga, Northern Cape and Free State.

Table 10.1: Most important transport problems experienced by households in each province

Province	None	Percentage of households naming problems*			
		Problems (mode specific)	%	Problems (all modes)	%
Western Cape	30%	Taxi safety/driver behaviour	24	Not available/too far	38
		Bus not available/too far	13	Safety/driver behaviour	26
		Train not available/too far	12	Crime	14
Eastern Cape	27%	Taxi too expensive	21	Not available/too far	40
		Taxi safety/driver behaviour	18	Too expensive	29
		Bus not available/too far	17	Safety/driver behaviour	25
Northern Cape	46%	Taxi not available/too far	24	Not available/too far	40
		Taxi safety/driver behaviour	16	Safety/driver behaviour	17
		Taxi too expensive	12	Too expensive	13
Free State	42%	Taxi safety/driver behaviour	25	Not available/too far	30
		Taxi not available/too far	20	Safety/driver behaviour	26
		Taxi too expensive	14	Too expensive	15
KwaZulu-Natal	19%	Bus not available/too far	27	Not available/too far	61
		Taxi not available/too far	25	Too expensive	27
		Taxi safety/driver behaviour	24	Safety/driver behaviour	27
North West	30%	Taxi not available/too far	26	Not available/too far	54
		Taxi safety/driver behaviour	25	Safety/driver behaviour	27
		Bus not available/too far	23	Too expensive	19
Gauteng	30%	Taxi safety/driver behaviour	31	Not available/too far	46
		Bus not available/too far	16	Safety/driver behaviour	33
		Train not available/too far	15	Too expensive	17
Mpumalanga	28%	Taxi not available/too far	28	Not available/too far	51
		Taxi too expensive	26	Too expensive	30
		Taxi safety/driver behaviour	19	Safety/driver behaviour	20
Limpopo	22%	Taxi too expensive	32	Not available/too far	57
		Bus not available/too far	32	Too expensive	34
		Taxi not available/too far	23	Safety/driver behaviour	24
RSA	**28%**	**Taxi safety/driver behaviour**	**24**	**Not available/too far**	**48**
		Bus not available/too far	**19**	**Safety/driver behaviour**	**27**
		Taxi too expensive	**19**	**Too expensive**	**23**

*Households could name up to two problems

Table 10.2: Most important problems experienced by households, by settlement type

Province	None	Percentage of households naming problems*			
		Problems (mode specific)	%	Problems (all modes)	%
Metropolitan	27%	Taxi safety/driver behaviour	30	Not available/too far	47
		Bus not available/too far	19	Safety/driver behaviour	32
		Train not available/too far	14	Too expensive	15
Urban	41%	Taxi safety/driver behaviour	26	Not available/too far	30
		Taxi too expensive	18	Safety/driver behaviour	27
		Taxi not available/too far	16	Too expensive	20
Rural	18%	Bus not available/too far	28	Not available/too far	63
		Taxi not available/too far	28	Too expensive	33
		Taxi too expensive	26	Safety/driver behaviour	22

*Households could name up to two problems

Table 10.2 shows the mode specific and general (all modes) problems reported in the different settlement types. Problems related to train availability only featured in the metropolitan areas (14% of households).

There are marked differences between urban and rural households. Households in the former mostly complained about taxi safety and driver behaviour (metropolitan: 30% and urban: 26%). Households in rural areas mostly complained about the unavailability of public transport (bus: 28% and taxi: 28%).

The other major problems mentioned by the households all concerned the minibus-taxi services. Poor minibus-taxi driver behaviour and lack of safety from accidents were cited as particular problems in the urban areas (notably Gauteng and Free State), while minibus-taxi fares were a greater concern in the rural areas (especially Limpopo and Mpumalanga).

10.2 Most important transport factors considered when travelling

Table 10.3 shows the main factors which respondents' said they took into consideration when travelling.

Table 10.3: Important factors to be considered when travelling by province

Province	Factors	% of respondents
Western Cape	Safety from accidents	46.5
	Security from crime	20.3
	Travel cost	10.7
Eastern Cape	Safety from accidents	52.3
	Travel time	12.1
	Closeness of transport to home	10.9
Northern Cape	Safety from accidents	59.8
	Travel cost	14.9
	Travel time	12.9
Free State	Safety from accidents	45.1
	Travel time	18.7
	Travel cost	12.2
KwaZulu-Natal	Safety from accidents	53.5
	Travel cost	14.7
	Travel time	13.2
North West	Safety from accidents	49.0
	Travel time	18.0
	Travel cost	16.6
Gauteng	Safety from accidents	45.4
	Travel time	18.8
	Travel cost	15.4
Mpumalanga	Safety from accidents	48.7
	Travel cost	21.3
	Travel time	13.1
Limpopo	Safety from accidents	40.7
	Travel cost	20.7
	Travel time	19.8
RSA	**Safety from accidents**	**48.4**
	Travel time	**15.3**
	Travel cost	**14.9**

The major factor to be considered when travelling was the mode's perceived safety from accidents. This was consistently the case in every province and among metropolitan, urban and rural communities. Considering the mode choices of household members reported in Section 8, however, it would appear that neither the concerns about safety from accidents nor problems expressed about taxi safety are affecting people's choice of minibus-taxi for all trip purposes. After safety from accidents in the order of importance (but far less frequently mentioned) came the two traditional mode choice factors of travel time and cost. This was so in all provinces except the Western and Eastern Cape. In the Western Cape security from crime was

reported to be a significant factor, while in the Eastern Cape closeness of the boarding point to the home was chosen as an important travel factor.

There was no difference between men and women in the factors regarded as important. Both genders rated safety from accidents as most important, with travel time and cost next in importance. There was, however, a difference in the importance attributed to travel cost by the different income groups. The importance of travel cost as a factor in mode choice declined with increasing household income. This is reflected in **Table 10.4**.

Table 10.4: Identifying travel cost as one of the most important factors, by income group

Household income group	% naming travel cost
Up to R500	19
R501 – R1000	18
R1001 – R3000	15
R3001 – R6000	12
> R6000	8

10.3 Reasons for not using public transport modes

Table 10.5 shows the proportion of respondents who had used each mode of travel at least once during the previous month.

Table 10.5: Use of modes by adults, 15 years or over

Province	Train		Bus		Taxi	
	%	Number	%	Number	%	Number
Western Cape	15.5	536 00	9.4	325 000	47.1	1 623 000
Eastern Cape	1.7	69 000	18.1	750 000	54.5	2 253 000
Northern Cape	3.2	20 000	5.7	35 000	38.0	236 000
Free State	1.0	18 000	10.0	189 000	61.6	1 165 000
KwaZulu-Natal	2.3	149 000	28.1	1 802 000	64.4	4 129 000
North West	3.0	87 000	15.2	444 000	59.3	1 736 000
Gauteng	13.9	951 000	7.1	481 000	63.1	4 302 000
Mpumalanga	0.7	15 000	22.5	489 000	66.4	1 442 000
Limpopo	0.3	9 000	23.0	746 000	63.3	2 053 000
RSA	**5.8**	**1 854 114**	**16.6**	**5 261 101**	**59.8**	**18 939 457**
Metropolitan	13.2	1 517 000	13.7	1 574 000	61.0	7 002 000
Urban	2.9	251 000	9.1	774 000	60.6	5 149 000
Rural	0.7	86 000	24.9	2 913 000	58.1	6 789 000

The majority of respondents countrywide (60%) had used a minibus-taxi during the previous month, while only a small minority had made use of bus services (17%) and very few had travelled by train (6%). The minibus-taxi was the favoured mode in all provinces. Buses were used by a quarter of rural passengers, mainly by those in KwaZulu-Natal, Limpopo and Mpumalanga. Trains were only used to any extent in the metropolitan areas of the Western Cape and Gauteng.

Tables 10.6, 10.7 and **10.8** list the main reasons given by these respondents for not having used trains, buses or minibus-taxis respectively, during the past month.

10.3.1 Main reasons for not using trains

Table 10.6 reveals that the very low train usage was primarily due to their non-availability. This was the major reason in all but Gauteng and the Western Cape, which have the most extensive commuter rail networks and train services.

Table 10.6: Most important reasons for not having used trains in the past month, by province and settlement type

Province	Percentage of non-users						
	Not available	Prefer bus	Prefer taxi	Prefer private transport	Can walk	Don't travel much	Reasons relating to service attributes [1]
Western Cape	35	1	10	30	5	11	59
Eastern Cape	78	1	6	7	2	5	15
Northern Cape	59	2	15	19	7	33	19
Free State	65	<1	10	11	5	17	13
KwaZulu-Natal	76	3	8	9	1	3	23
North West	60	5	22	12	3	13	21
Gauteng	27	2	25	30	4	10	54
Mpumalanga	82	4	10	6	2	7	12
Limpopo	90	<1	2	3	<1	3	10
RSA	**62**	**2**	**12**	**15**	**2**	**8**	**28**
Metropolitan	28	3	19	27	4	9	59
Urban	62	1	14	17	3	12	22
Rural	92	2	5	3	1	5	7

1. This result relates only to the reasons not listed in columns to the left.

Apart from non-availability, the other main reason for not using trains is preference for cars (15%) and minibus-taxis (12%). Only 28 per cent of non-users gave train service deficiencies as a reason. Amongst these, the main reasons which are shown in **Table 10.7** are the following:

- stations are too far from home (32%);
- crime on trains (16%); and
- trains do not go to the destinations required (12%).

The foregoing reasons are largely common to all settlement types.

Table 10.7: Most important service-related reasons for not using train

Province	Percentage of service-related reasons	
Western Cape	Too much crime	40
Eastern Cape	Station too far from home	58
Northern Cape	Too expensive	19
Free State	Station too far from home	35
KwaZulu-Natal	Station too far from home	48
North West	Station too far from home	32
Gauteng	Station too far from home	28
Mpumalanga	Not available often enough	27
Limpopo	Station too far from home	36
RSA	**Station too far from home**	**32**
	Too much crime	**16**
	Trains do not go where needed	**12**
Metropolitan	Station too far from home	33
	Too much crime	18
	Trains do not go where needed	11
Urban	Station too far from home	27
	Trains do not go where needed	15
	Travel time too long	12
Rural	Station too far from home	40
	Trains do not go where needed	12
	Not available often enough	10

Secondary reasons, specific to certain provinces, were that:

- train routes did not serve respondents' particular destination needs, which was mentioned in all the provinces except Limpopo;
- train travel times were generally longer than by other modes (reported especially in the Northern Cape, Free State, KwaZulu-Natal, North West, Gauteng and Limpopo);
- the stations were situated too far from their homes (Eastern Cape, KwaZulu-Natal and Limpopo);
- there was too much crime associated with train travel (Western Cape and Gauteng);
- train services were not frequent enough (Mpumalanga and Limpopo);
- train fares were expensive (Northern Cape); and
- train timetables and routes were not well known (Eastern Cape).

10.3.2 Main reasons for not using buses

Table 10.8 reveals the main reasons why respondents did not travel by bus.

Table 10.8: Most important reasons for not having used buses in the past month, by province and settlement type

Province	Percentage of non-users						
	Not available	Prefer train	Prefer taxi	Prefer private transport	Can walk	Don't travel much	Reasons relating to service attributes
Western Cape	38	4	14	0	6	10	51
Eastern Cape	59	<1	11	9	3	11	25
Northern Cape	57	1	14	20	7	25	29
Free State	49	<1	18	12	6	17	19
KwaZulu-Natal	37	1	19	15	2	9	54
North West	30	1	33	16	4	18	39
Gauteng	33	5	29	28	4	9	45
Mpumalanga	38	<1	23	11	3	21	35
Limpopo	23	0	17	8	5	16	76
RSA	**38**	**2**	**21**	**18**	**4**	**13**	**43**
Metropolitan	22	5	25	28	4	9	56
Urban	51	1	20	20	4	12	27
Rural	46	<1	17	5	3	16	42

A major reason for not having used a bus in the past month was also because of its unavailability (38%). This was not, however, such a dominant reason as was the case with train services and 43 per cent of the reasons related to deficiencies in the bus services. Non-availability of bus services applied particularly to the Eastern and Northern Cape and Free State. Preference for cars (18%) and minibus-taxis (21%) were also important factors.

The bus service attributes (or lack of) which were nominated as the greatest negative factors, were low frequencies (practically everywhere) and unavailability at appropriate times (**Table 10.9**).

Table 10.9: Most important service-related reasons for not using bus

Province	Percentage of service-related reasons	
Western Cape	Too expensive	16
Eastern Cape	Not available often enough; Not at the right times	22
Northern Cape	Not available often enough	33
Free State	Not available often enough	25
KwaZulu-Natal	Not available often enough	19
North West	Not available often enough	21
Gauteng	Not available often enough	15
Mpumalanga	Not available often enough	25
Limpopo	Not available often enough	30
RSA	**Not available often enough**	**21**
	No buses at the right times	**16**
	Travel time too long	**11**
Metropolitan	Too expensive	14
	Not available often enough	13
	Buses do not go where needed	12
Urban	Not available often enough	24
	No buses at the right times	16
	Buses do not go where needed	14
Rural	Not available often enough	30
	No buses at the right times	21
	Travel time too long	12

Secondary factors in bus non-usage in most provinces were that:

- buses were not available at all the times they were needed (especially in Limpopo); and
- bus routes did not serve respondents' destination needs.

Other secondary factors mentioned less frequently were that:

- bus travel times were too long, noted in the Western Cape, Eastern Cape, Gauteng and Limpopo;
- bus fares were too expensive, recorded only in the Western Cape and Northern Cape,
- bus timetables and routes were not well known in the Northern Cape and Gauteng; and
- buses were too crowded, in KwaZulu-Natal.

In general it can be noted that bus frequencies, departure times and destinations were not meeting traveller needs and that, even where buses were available, these were the main reasons for their non-usage. In Limpopo, low bus frequencies and inappropriate departure times were a particular source of concern.

10.3.3 Main reasons for not using minibus-taxis

Table 10.10 indicates that, unlike the case with trains and buses, non-availability was not the reason for minibus-taxi non-usage except Eastern and Northern Cape. Preference for private transport was a very significant factor in all but Limpopo and Eastern Cape.

Table 10.10: Most important reasons for not having used a minibus-taxi in the past month

Province	Percentage of non-users						
	Not available	Prefer train	Prefer bus	Prefer private transport	Can walk	Don't travel much	Reasons relating to service attributes
Western Cape	9	4	3	52	8	13	68
Eastern Cape	49	<1	5	18	6	15	28
Northern Cape	28	1	4	32	16	22	53
Free State	15	<1	3	36	19	20	30
KwaZulu-Natal	19	1	13	32	2	16	51
North West	14	1	10	32	7	28	43
Gauteng	5	5	4	67	4	12	50
Mpumalanga	14	<1	11	32	5	30	42
Limpopo	9	0	12	17	8	39	72
RSA	**18**	**2**	**7**	**39**	**7**	**19**	**49**
Metropolitan	3	4	6	59	4	12	61
Urban	9	1	4	53	12	17	41
Rural	37	<1	10	10	5	28	44

Table 10.11 shows the service-related reasons for not using minibus-taxis by province and settlement type. The main concerns were:

- minibus-taxi fares were too expensive; and
- minibus-taxi crime (Western Cape and Gauteng).

Table 10.11: Most important service-related reasons for not using minibus-taxis

Province	Percentage of service-related reasons	
Western Cape	Too much crime	32
Eastern Cape	Too expensive	32
Northern Cape	Too many accidents;	22
Free State	Too expensive	30
KwaZulu-Natal	Too expensive	28
North West	Too expensive	25
Gauteng	Too expensive; Drivers are rude: Too much crime	14
Mpumalanga	Too expensive	34
Limpopo	Too expensive	43
RSA	**Too expensive**	**25**
	Too much crime	**14**
	Too many accidents	**11**
Metropolitan	Too much crime	24
	Too expensive	14
	Too many accidents	11
Urban	Too expensive	23
	Too many accidents	18
	Taxi not available often enough	10
Rural	Too expensive	40
	Not available often enough	17
	Too many accidents; Have to pay cash	8

Secondary reasons for minibus-taxi non-usage were similar in most provinces, being largely related to:

- too many minibus-taxi accidents; and
- insufficiently frequent minibus-taxi services.

Secondary reasons named in only a few provinces included:

- the level of crime associated with minibus-taxis;
- minibus-taxi drivers being ill-mannered and rude (Gauteng and Mpumalanga);
- passengers having to pay cash in minibus-taxis (Limpopo and North West); and
- minibus-taxis not going to the required destinations (Northern Cape).

In general, where minibus-taxis were available, the major reason for travellers not making use of them was their cost. The level of crime and accidents associated with them were also important inhibiting factors.

10.4 Levels of dissatisfaction with attributes of the public transport system

Tables 10.12 to **10.17** reveal the extent of dissatisfaction with the listed modal attributes. Only respondents who had used the mode within the past month, and could therefore be considered to have valid opinions based on personal experience, were included.

10.4.1 Train users' dissatisfaction with attributes of the train services

Table 10.12 shows the levels of dissatisfaction with train services among metropolitan, urban and rural consumers.

Table 10.12: Dissatisfaction with attributes of train services in metropolitan, urban and rural regions

Attributes of the train services	% of train users who are dissatisfied			
	Metropolitan	Urban	Rural	RSA
The distance between the train station and your home	59	57	72	60
The travel time by train	46	44	56	46
Security on the walk to/from the station	65	60	52	64
Security at the stations	46	34	45	44
Security on the train	67	44	37	63
The level of crowding on the train	75	60	42	71
Safety from accidents	25	25	24	25
The frequency of trains during peak period	41	36	41	40
The frequency of trains during off-peak period	52	48	58	52
The punctuality of trains	54	50	38	52
The train fares	25	18	13	23
The facilities at the station e.g. toilets, offices	55	47	34	53
The train service overall	45	33	25	42

The level of dissatisfaction with the train service overall was relatively high, 42 per cent of train users being dissatisfied with it. Dissatisfaction was highest in the metropolitan areas and lowest in the rural areas. The main cause of dissatisfaction in the metropolitan areas was the crowding in trains. Secondary complaints concerned security, both on the trains and on the walk to and from stations.

In the urban areas, dissatisfaction was almost equally high with three aspects:

- the level of crowding on the trains;
- security on the walk to and from the station; and
- the walking distance between their homes and the nearest station.

The rural areas presented a somewhat different picture. Dissatisfaction centred on the long distances they had to walk from home to reach the nearest station, while also of considerable concern was:

- the infrequency of trains in the off-peak periods; and
- the long travel times by train.

Table 10.13 covers provincial differences in dissatisfaction with train services.

Table 10.13: Dissatisfaction with attributes of the train service, by province

Attributes of the train services	% of train users who are dissatisfied									
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	RSA
The distance between the train station and your home	57	60	47	39	66	60	61	75	61	60
The travel time by train	38	35	31	35	46	41	52	40	39	46
Security on the walk to/from the station	74	67	32	59	76	30	60	54	66	64
Security at the stations	58	32	10	23	51	30	39	29	50	44
Security on the train	81	32	22	10	62	43	59	42	48	63
The level of crowding on the train	84	43	40	73	51	62	72	60	23	71
Safety from accidents	31	3	14	18	31	11	24	17	38	25
The frequency of trains during peak period	33	24	24	45	37	30	47	10	39	40
The frequency of trains during off-peak period	39	60	25	36	46	61	61	15	55	52
The punctuality of trains	44	33	52	70	43	28	63	21	18	52
The train fares	33	10	9	3	27	15	20	9	27	23
The facilities at the station e.g. toilets, offices	64	34	30	34	37	37	53	24	35	53
The train service overall	49	14	20	31	27	34	45	14	31	42

Most noticeable was the high level of dissatisfaction with the train service overall in the Western Cape and Gauteng. In the Western Cape there were exceptionally high levels of dissatisfaction with crowding and security on the trains, as well as with security on the walk to and from the station, inadequate facilities and security at stations, and the distance between homes and the nearest station. In Gauteng it was

likewise, the crowding on trains being the main cause for concern, but this was followed by the lack of punctuality of the train services, their infrequency in off-peak periods, the distance of the nearest station from their homes, security on trains and on the walk to and from the station, lack of facilities at stations, and long travel times, all of which were regarded as unsatisfactory by more than half the train users.

In the other provinces, relatively high levels of dissatisfaction (more than 50% dissatisfied) were noted in:

- the Eastern Cape (as regards security on the walk to and from the stations, the infrequency of trains in off-peak periods, and the distance between homes and a station);
- the Free State (crowding in trains, lack of punctuality, and security on the walk to and from stations);
- KwaZulu-Natal (security on walk to and from stations, distance between homes and stations, security on trains and at stations, and level of crowding on trains);
- the North West (infrequency of trains off-peak, distance between homes and stations, and crowding on trains);
- Mpumalanga (distance between homes and stations, crowding on trains and security on walk to and from stations);
- Limpopo (security on walk to and from stations, distance of homes from stations, security on trains and at stations, and infrequency of trains off-peak); and
- the Northern Cape (lack of punctuality of the train service).

In summary, current train services left a lot to be desired in terms of their accessibility, crowding levels and security. Fares, infrequent accidents, and train frequency in peak periods were, however, in their favour and were generally considered satisfactory.

10.4.2 Bus users' dissatisfaction with attributes of the bus service

Table 10.14 shows the general distribution of dissatisfaction with buses among metropolitan, urban and rural consumers.

Table 10.14: Dissatisfaction with attributes of bus services in metropolitan, urban and rural regions

Attributes of bus services	% of bus users who are dissatisfied			
	Metropolitan	Urban	Rural	RSA
The distance between the bus stop and your home	24	28	40	33
The travel time by bus	29	26	40	35
Security on the walk to/from the bus stop	47	36	38	41
Security at the bus stops	52	38	41	44
Security on the buses	34	25	31	31
The level of crowding in the bus	48	40	61	54
Safety from accidents	27	26	38	33
The frequency of buses during peak period	35	32	46	41
The frequency of buses during off-peak period	46	38	58	51
The punctuality of buses	34	26	42	37
The bus fares	37	30	37	36
The facilities at the stops e.g. shelters	65	65	82	74
Behaviour of the bus drivers towards passengers	19	21	24	22
The bus service overall	27	24	37	32

There was considerably less dissatisfaction overall with the current bus services than was the case with train services. The only high level of dissatisfaction common to all the groups, and especially high among rural communities, was the lack of facilities at bus stops, particularly shelters. Other attributes with which more than half were dissatisfied were:

- in the metropolitan areas, security at the bus stops; and
- in the rural areas, crowding in the buses and the infrequency of buses in off-peak periods.

Table 10.15 reflects dissatisfaction with bus services at provincial level.

Table 10.15: Dissatisfaction with attributes of bus services, by province

Attributes of bus services	% of bus users who are dissatisfied									
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	RSA
The distance between the bus stop and your home	15	37	34	31	42	24	21	37	29	33
The travel time by bus	32	38	18	20	44	29	21	30	31	35
Security on the walk to/from the bus stop	49	38	21	34	47	44	35	51	20	41
Security at the bus stops	54	41	25	41	50	48	40	51	24	44
Security on the buses	34	28	18	23	40	30	27	32	18	31
The level of crowding in the bus	40	56	22	34	63	48	43	57	52	54
Safety from accidents	26	42	27	19	35	35	33	36	25	33
The frequency of buses during peak period	32	40	36	24	51	41	32	39	32	41
The frequency of buses during off-peak period	41	54	30	30	60	64	45	44	42	51
The punctuality of buses	36	38	29	20	44	46	27	30	31	37
The bus fares	44	25	27	38	41	49	35	41	20	36
The facilities at the stops e.g. shelters	63	78	53	67	78	83	59	76	72	74
Behaviour of the bus drivers towards passengers	19	18	18	24	27	26	17	27	14	22
The bus service overall	24	31	17	17	39	38	23	37	23	32

Lack of facilities at bus stops was the major complaint in all provinces. The only other serious sources of dissatisfaction were:

- in the Western Cape, security at bus stops;
- in the Eastern Cape, crowding on the buses and their infrequency in off-peak periods;
- in KwaZulu-Natal, crowding in the buses and the infrequency of buses both in peak and off-peak periods;
- in Mpumalanga and Limpopo, crowding in the buses; and
- in the North West, the infrequency of buses during off-peak hours.

Bus driver behaviour, security on the buses, safety from accidents, accessibility from homes and fares and travel times were generally regarded as the most satisfactory attributes of bus travel.

10.4.3 Minibus-taxi users' dissatisfaction with attributes of minibus-taxi services

Table 10.16 gives the levels of dissatisfaction with current minibus-taxi services in metropolitan, urban and rural communities.

Table 10.16: Dissatisfaction with attributes of minibus-taxi services in metropolitan, urban and rural regions

Attributes of the minibus-taxi services	% of minibus-taxi users who are dissatisfied			
	Metropolitan	Urban	Rural	RSA
The distance between the taxi rank/route and your home	23	27	44	32
The travel time by taxi	20	23	31	25
Security on the walk to/from the taxi	49	37	41	43
Security at the taxi ranks	52	46	46	48
Security on taxis	54	41	42	46
Safety from accidents	78	59	62	67
Roadworthiness of taxis	63	56	59	60
The waiting time for taxis	29	40	57	42
The frequency of taxis during peak periods	29	34	45	36
The frequency of taxis during off-peak periods	37	42	54	44
The level of crowding in the taxis	60	48	53	55
The taxi fares	48	46	64	53
The facilities at the taxi ranks	67	60	65	64
The behaviour of the taxi drivers towards passengers	68	48	43	54
The taxi service overall	52	41	50	48

There was a relatively high overall level of dissatisfaction with minibus-taxi services, higher among all settlement types and the RSA as a whole, than for either train or bus services. It was particularly the frequency of accidents, the poor state of roadworthiness of vehicles, and the lack of facilities at taxi ranks that were marked sources of dissatisfaction. Other important concerns were the crowding in the vehicles, the fares and the behaviour of the drivers towards the passengers.

Dissatisfaction was greatest in the metropolitan and rural areas, but with some notable differences between them. While in both groups the majority were dissatisfied with the accident rate, vehicle roadworthiness, crowding and facilities at ranks, differences included:

- in the metropolitan areas, the majority also expressed dissatisfaction with security at the taxi ranks and aboard taxis and, very notably, with the behaviour of drivers towards passengers; while

- in the rural areas, the other main concerns were expensive fares, the waiting time for taxis, and their infrequency in off-peak periods; and
- in the urban areas, no other attributes were major sources of dissatisfaction apart from the three already mentioned as common to all areas, i.e. accidents, roadworthiness and rank facilities.

Table 10.17 reveals the dissatisfaction levels with each minibus-taxi attribute in each province.

Table 10.17: Dissatisfaction with attributes of the minibus-taxi services, by province

Attributes of the minibus-taxi services	% of minibus-taxi users who are dissatisfied									
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	RSA
The distance between the taxi rank/route and your home	18	39	21	31	42	32	21	42	33	32
The travel time by taxi	21	28	24	23	31	23	19	31	25	25
Security on the walk to/from the taxi	42	44	26	36	48	44	46	46	26	43
Security at the taxi ranks	44	54	37	43	54	51	52	42	32	48
Security on taxis	48	46	30	36	52	44	54	39	30	46
Safety from accidents	67	68	53	48	69	65	79	64	55	67
Roadworthiness of taxis	58	64	56	52	57	64	65	61	53	60
The waiting time for taxis	30	44	39	41	55	44	29	50	45	42
The frequency of taxis during peak periods	23	34	39	31	52	33	29	46	31	36
The frequency of taxis during off-peak periods	32	41	46	39	58	49	38	54	38	44
The level of crowding in the taxis	54	57	54	36	64	52	60	49	38	55
The taxi fares	40	60	31	36	63	45	48	60	60	53
The facilities at the taxi ranks	60	68	52	58	70	68	65	57	58	64
The behaviour of the taxi drivers towards passengers	49	49	42	36	54	52	73	54	33	54
The taxi service overall	38	50	33	34	56	50	53	49	38	48

Major dissatisfaction with minibus-taxi services occurred in KwaZulu-Natal and the Eastern Cape. In KwaZulu-Natal, the majority of respondents were dissatisfied with most of the fifteen listed attributes, the exceptions being travel time, the distance from home to a boarding point, and security on the walk between home and the boarding point. Particular concerns were the lack of facilities at ranks, the incidence of accidents, crowding and fares. In the Eastern Cape the situation was similar, the

major concerns being rank facilities, the accident rate, roadworthiness of vehicles and fares. In Gauteng, minibus-taxi users' main sources of dissatisfaction were the lack of safety from accidents, the roadworthiness of taxis, the lack of facilities at taxi ranks and the behaviour of taxi drivers towards passengers.

The majority in all provinces was dissatisfied with the lack of rank facilities, the roadworthiness of the vehicles and, apart from the Free State, with the incidence of accidents involving minibus-taxis. Concerns specific to some provinces were:

- in the Western Cape, crowding in the vehicles;
- in the Eastern Cape, taxi fares, crowding and security at the ranks;
- in the Northern Cape, crowding in the vehicles;
- in the North West, security at the ranks;
- in Gauteng, the behaviour of taxi drivers towards passengers;
- in Mpumalanga, taxi fares, the behaviour of drivers towards passengers and the infrequency of minibus-taxis in off-peak periods; and
- in Limpopo, taxi fares.

10.5 Summary of the findings

The great majority of the respondents (94%) had not travelled by train within the past month, while 83 per cent had not used a bus service. Most people (59%) had made use of minibus-taxis.

The major reason for not travelling by train was that a train service was not available, or that the station was too far from their homes. The main sources of dissatisfaction with the current train service were the high levels of crowding experienced and the inadequate security, both on trains and on the walk to and from the station. On the other hand, their relatively low fares, good safety record as regards accidents, and frequency in off-peak periods were positively viewed. The highest levels of dissatisfaction with trains were found in the Western Cape.

The major reason for not travelling by bus was also its non-availability. Although the image of the bus services was generally much more positive than for either train or minibus-taxi services, dissatisfaction was expressed by the majority of people with the lack of shelters at bus stops, the crowding in the vehicles and the inadequate frequency of buses in off-peak periods. The most positive aspects were the generally good treatment of passengers by bus drivers, the security aboard buses and the good accident safety record. The most negative attitudes towards buses were found in KwaZulu-Natal.

The major reason for not travelling by minibus-taxi was the perceived unaffordably high fares. Although it was the most frequently used mode, its image was also the most negative. This suggests that the non-availability of another mode has made many consumers captive to the minibus-taxi against their better judgement. Dissatisfaction was expressed particularly with poor roadworthiness and accident records, the crowding in the vehicles and the lack of facilities at the ranks. Minibus-taxi advantages were its fast travel time, its ready accessibility and its frequency during peak periods. Dissatisfaction with minibus-taxi services was found to be particularly strong in KwaZulu-Natal.

Strong levels of dissatisfaction (more than two-thirds dissatisfied) were expressed in the following provinces:

- Western Cape: trains crowded (84%), train security (81%), security on walk to train station (74%), taxi accidents (67%);
- Eastern Cape: facilities at bus stops (78%) and taxi ranks (68%), taxi accidents (68%), security on walk to station (67%);
- Free State: trains crowded (73%) and unpunctual (70%), facilities at bus stops (67%);
- KwaZulu-Natal: facilities at bus stops (78%) and taxi ranks (70%), security on walk to station (76%) and taxi accidents (69%);
- North West: facilities at bus stops (83%) and taxi ranks (68%);
- Gauteng: taxi accidents (79%) and train crowding (72%);
- Mpumalanga: distance to station (75%), facilities at bus stops (75%); and
- Limpopo: facilities at bus stops (72%), security on walk to station (66%).

11. RESULTS: TRIP MAKING TO EDUCATIONAL CENTRES

Chapter 9 revealed that trips to educational centres were undertaken by more household members than were trips to any other type of destination. Trips made by learners and students form, therefore, a very important part of the national travel environment. This chapter provides details of the trips undertaken to educational centres by all those household members who attended one of the following types of educational establishment:

- Pre-school, including a crèche or day care;
- Primary school;
- Secondary or High school;
- Post-matriculation, including a university, college or technikon; or
- other educational entities, such as adult education and literacy classes.

The travel characteristics covered were:

- main mode of travel usually used to reach the educational destination;
- total travel time usually taken from home departure to arrival at the educational establishment; and
- monthly cost of the trip.

These travel characteristics were examined at national, settlement type and provincial level, as well as by the type of educational establishment.

11.1 Attendance at educational centres

Table 11.1 reveals that, in the country as a whole, 16 million individuals attended an educational establishment. Nearly half resided in rural areas, with the rest fairly equally divided between metropolitan and urban areas.

Table 11.1: Attendance at an educational establishment, by settlement type

Settlement type	No. attending establishment
Metropolitan	4 595 000
Urban	3 939 000
Rural	7 535 000
RSA	**16 069 000**

The provincial distribution of learners and students is given in **Table 11.2**.

Table 11.2: Attendance at an educational establishment, by province

Province	No. attending establishment
Western Cape	1 384 000
Eastern Cape	2 611 000
Northern Cape	245 000
Free State	955 000
KwaZulu-Natal	3 513 000
North West	1 369 000
Gauteng	2 498 000
Mpumalanga	1 247 000
Limpopo	2 247 000
RSA	**16 069 000**

The greatest number of learners and students resided in KwaZulu-Natal and the Eastern Cape, whilst the fewest were in the Northern Cape and the Free State. There were almost twelve times as many learners and students in KwaZulu-Natal as in the Northern Cape.

The type of educational centre attended by these learners and students is shown in **Table 11.3**.

Table 11.3: Attendance at an educational centre, by type of establishment

Type of establishment	No. attending establishment
Pre-school	1 506 000
Primary school	8 297 000
High school	5 172 000
Post-matriculation	914 000
Other	164 000

More than half were learners in primary school and a further third were in secondary school. There were relatively few individuals at tertiary or other educational centres. It is evident that most travel to educational centres was undertaken by learners travelling to school.

11.2 Main mode of travel to educational centres

Table 11.4 reveals that, in the country as a whole, the vast majority of learners and students usually walked to their place of education. Considerable differences exist,

however, between the settlement types. While almost all learners and students walked to their destinations in the rural areas, little more than half of those in metropolitan areas walked there.

Table 11.4: Main mode of travel to educational centres, by settlement type

Settlement Type	Number travelling	Usual main mode (% of trips within settlement type)					
		Train	Bus	Taxi	Car	Walk	Other
Metropolitan	4 448 000	2.8	6.3	15.6	16.8	56.9	1.6
Urban	3 823 000	0.4	4.2	11.8	10.4	70.8	2.4
Rural	7 470 000	0.1	2.0	3.7	1.8	90.6	1.7
RSA	**15 741 000**	**0.9**	**3.8**	**9.0**	**8.1**	**76.3**	**1.9**

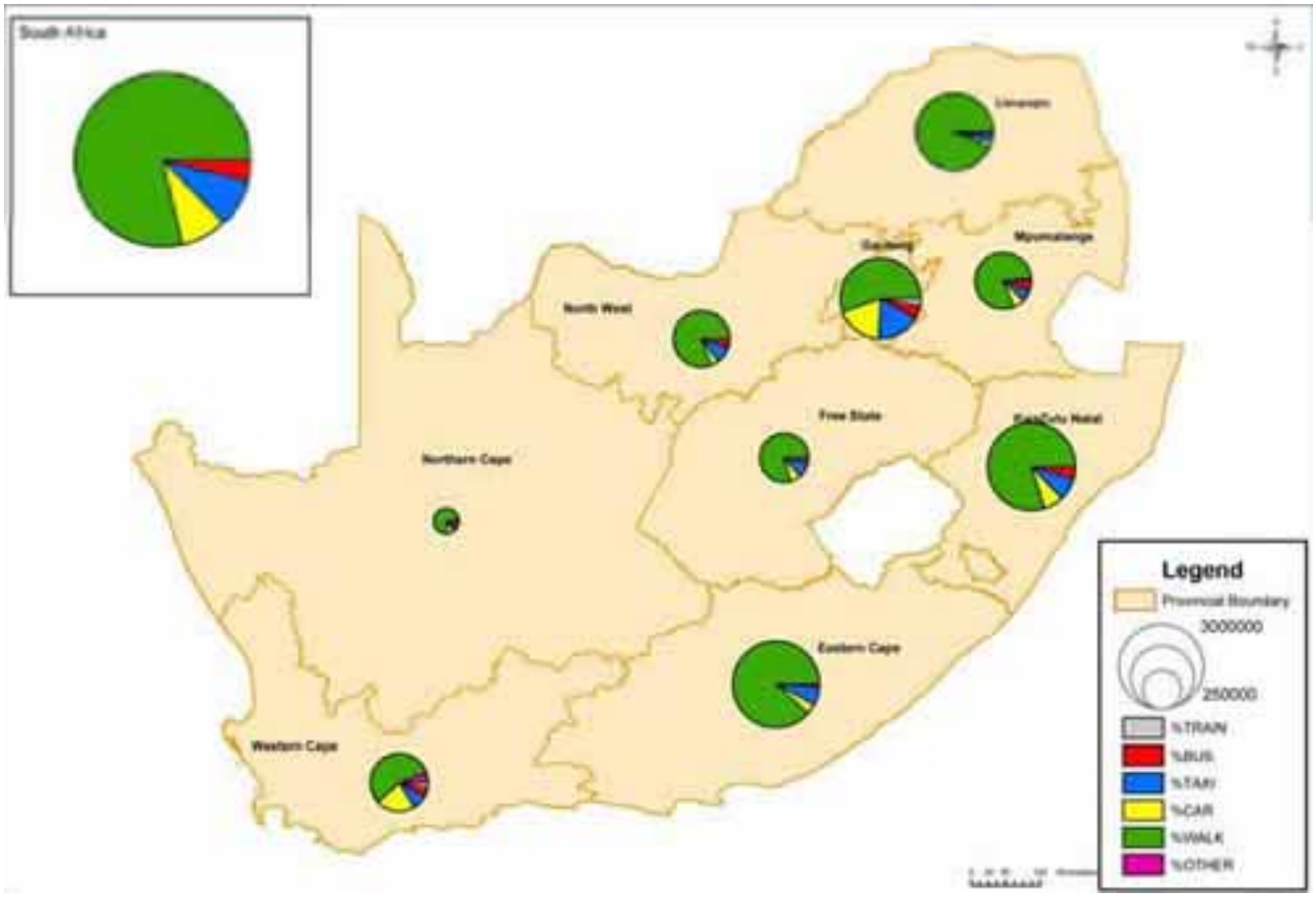
Car travel (as a driver or passenger) and taxis (either minibus, bakkie or sedan taxis) were the modes of transport most frequently used by those who did not walk to their destination. A third of the learners and students in metropolitan areas travelled by either car or taxi, while a fifth of those in urban areas did. Buses had some patronage in metropolitan and urban areas but trains were very seldom used. Other forms of transport (bicycles, motorcycles, metered taxis, trucks, tractor-trailers or animal transport) were also rarely used.

The provincial distribution of mode usage is shown in **Table 11.5** and illustrated in **Figure 11.1**.

Table 11.5: Main mode of travel to educational centres, by province

Province	Number travelling	Usual main mode (% of trips within province)					
		Train	Bus	Taxi	Car	Walk	Other
Western Cape	1 351 000	3.4	4.7	9.0	20.0	56.3	6.6
Eastern Cape	2 583 000	0.3	1.3	6.9	4.2	86.3	0.9
Northern Cape	237 000	0.0	5.5	6.8	8.3	77.4	1.9
Free State	934 000	0.0	3.3	9.7	6.0	79.1	1.9
KwaZulu-Natal	3 472 000	0.4	4.5	8.4	6.8	79.0	1.0
North West	1 333 000	0.7	6.0	10.6	5.5	75.0	2.3
Gauteng	2 396 000	3.0	4.8	17.9	17.1	55.3	1.9
Mpumalanga	1 218 000	0.0	5.8	6.3	4.7	80.3	2.8
Limpopo	2 218 000	0.0	1.3	3.5	2.2	92.3	0.6

Figure 11.1: Provincial distribution of mode usage



Both the map and the table, indicate that walking was the primary method of reaching their place of education in all nine provinces. This was particularly the case in Limpopo and the Eastern Cape, where motorised means of transport were infrequently used. Motorised modes (primarily cars and taxis) were mainly used in Gauteng and the Western Cape, which were also the only two areas where use was made of the train service to any, albeit limited, extent. A usable train service for travel to educational establishments was apparently not available in the other provinces. Buses enjoyed almost equal patronage with cars and taxis in the Northern Cape and Mpumalanga and were occasionally used in the other provinces, except for the Eastern Cape and Limpopo, where they were rarely used.

The modes used by learners and students to travel to the various types of educational establishment is summarised in **Table 11.6**.

Table 11.6: Main mode of travel to educational centres, by type of establishment

Establishment type	Number travelling	Usual main mode (% of trips to establishment)					
		Train	Bus	Taxi	Car	Walk	Other
Pre-School	1 506 000	0.1	1.2	9.7	18.4	68.5	2.0
Primary School	8 291 000	0.2	2.7	5.5	6.2	83.8	1.6
High School	5 161 000	1.1	5.3	10.9	6.2	74.3	2.2
Post-matric	626 000	10.8	9.9	36.1	25.0	16.4	1.9
Other	147 000	1.9	9.0	16.2	8.2	60.1	4.5

A notable exception to the general finding that the majority of learners and students walked to their destinations is that students at tertiary places of education seldom walked. They more typically made use of taxis or private cars. Learners at Primary and High schools, on the other hand, very predominantly walked to school. Pre-school children also mainly walked to their schools, although a fair proportion of them were driven by car. Individuals involved in adult education and literacy classes could mostly walk to their destinations, although some used taxis, cars or even buses to get there.

11.3 Travel time to educational centres

Table 11.7 reveals that for the great majority of learners and students (70%) the total door-to-door travel time to reach their destination was 30 minutes or less. However, seven per cent took longer than an hour to reach their place of education. There were no marked differences between the settlement types, although somewhat more urban dwellers could reach their places of education within 15 minutes than was the case with either metropolitan or rural dwellers.

Table 11.7: Travel time to educational centres, by settlement type

Settlement Type	Number travelling	Travel time (% of trips within settlement type)				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Metropolitan	4 448 000	34.6	35.9	12.1	9.6	7.8
Urban	3 823 000	44.4	35.5	9.9	6.4	3.8
Rural	7 470 000	31.1	34.3	13.6	12.8	8.2
RSA	**15 741 000**	**35.3**	**35.0**	**12.3**	**10.3**	**7.0**

Table 11.8 reveals that in three provinces (Western Cape, Northern Cape and Free State) about half the learners and students could reach their destination within 15 minutes. In KwaZulu-Natal, however, the opposite was the case, with no fewer

than 42 per cent having to travel for longer than 30 minutes to get to their place of education. In Gauteng and the North West, the situation was also relatively unfavourable: just over 30 per cent spending more than 30 minutes travelling.

Table 11.8: Travel time to educational centres, by province

Province	Number travelling	Travel time (% of trips within province)				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Western Cape	1 351 000	49.5	30.8	8.4	6.5	4.7
Eastern Cape	2 583 000	37.6	33.3	11.3	11.5	6.3
Northern Cape	237 000	48.1	37.1	9.9	3.1	1.8
Free State	934 000	46.4	33.3	9.1	6.6	4.6
KwaZulu-Natal	3 472 000	22.8	35.5	16.6	14.6	10.4
North West	1 333 000	33.0	35.6	12.2	9.8	9.4
Gauteng	2 396 000	32.8	35.5	13.7	9.9	8.1
Mpumalanga	1 218 000	34.8	36.9	11.6	10.0	6.7
Limpopo	2 218 000	41.6	37.7	9.6	7.8	3.2

Table 11.9 clearly illustrates that, apart from the "other" types of educational establishment (which mainly involved non-formal education) travel time to the destination increases as the level of education rises. The majority of pre-school children could reach their schools within 15 minutes, while at the opposite end of the scale, the majority at tertiary establishments travelled for longer than 30 minutes.

Table 11.9: Travel time to educational centres, by type of establishment

Establishment type	Number travelling	Travel time (% of trips to establishment type)				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Pre-school	1 506 000	53.3	33.3	5.4	5.3	2.7
Primary school	8 291 000	37.3	35.8	12.1	9.7	5.2
High school	5 161 000	29.5	34.8	14.2	11.6	9.8
Post-matric	626 000	14.1	31.6	15.7	20.5	18.1
Other	147 000	37.4	33.9	8.8	10.9	8.8

Because of the high proportion of walking trips undertaken by learners and students, these were examined more closely.

11.4 Walking times to educational centres

The walking times to educational establishments in the various settlement areas are given in **Table 11.10**.

Table 11.10: Walking time to educational centres, by settlement type

Settlement type	Number walking	Percentage of walking trips				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Metropolitan	2 505 000	43.3	40.2	9.6	5.1	1.8
Urban	2 692 000	48.9	36.5	8.3	4.4	1.9
Rural	6 766 000	32.9	34.6	13.3	12.2	7.0
RSA	**11 963 000**	**38.7**	**36.2**	**11.4**	**9.0**	**4.8**

The only real difference between the travel times for all trips (in **Table 11.7**) and those given here specifically for walks is that, for all three settlement types, a higher proportion of walking trips were completed in less than 30 minutes. There were more long walks in rural areas than in metropolitan or urban areas.

Table 11.11 shows the walking time to education centres by province. The provinces with a high proportion of learners walking for longer than 30 minutes are KwaZulu-Natal and, to a lesser degree, the Eastern Cape, Mpumalanga and North West Province. Most learners in the Western and Northern Cape and Gauteng have good access to education centres.

Table 11.11: Walking time to educational centre, by province

Province	Number walking	Percentage of walking trips				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Western Cape	759 000	62.8	30.6	3.7	2.1	0.8
Eastern Cape	2 226 000	39.8	33.6	10.5	10.9	5.2
Northern Cape	182 000	49.6	38.7	9.3	2.0	0.4
Free State	736 000	49.7	33.3	7.7	5.6	3.7
KwaZulu-Natal	2 731 000	23.7	36.4	16.8	13.9	9.2
North West	996 000	36.3	38.3	12.1	8.6	4.7
Gauteng	1 305 000	41.6	40.3	10.8	5.4	1.9
Mpumalanga	973 000	37.6	36.8	11.8	8.8	5.0
Limpopo	2 045 000	43.1	37.7	9.3	7.3	2.6

Table 11.12 shows walking times to educational centres by type of establishment. Some 25 percent of Primary school children who walk to school (1.7 million) walk for longer than 30 minutes in one direction. Considering all children who walk to school, there are 560 000 who spend more than two hours per day walking to and from school.

Table 11.12: Walking time to educational centres, by type of establishment

Establishment type	Number walking	Percentage of walking trips				
		1-15 mins	16-30 mins	31-45 mins	46-60 mins	> 60 mins
Pre-school	1 018 000	55.6	34.6	4.2	4.3	1.2
Primary school	6 912 000	39.0	36.5	11.4	9.0	4.1
High school	3 824 000	33.5	36.0	13.2	10.2	7.1
Post-matric	103 000	29.1	41.6	17.9	9.0	2.4
Other	88 000	53.6	32.0	5.1	7.1	2.2
Total	**11 945 000**	**38.7**	**36.2**	**11.4**	**9.0**	**4.8**

11.5 Cost of travel to educational centres

The monthly cost of trips to educational establishments by public transport (train, bus or taxi) in each province is shown in **Table 11.13**.

Table 11.13: Cost of public transport trips to educational centres, by province

Province	Public transport trips		Cost (% of public transport trips within province)					
	Number	% of all trips	Nothing	R1-50	R51-100	R101-200	> R200	Missing
Western Cape	231 000	17.1	9.5	4.4	21.6	44.2	12.2	8.1
Eastern Cape	220 000	8.5	1.3	6.7	25.3	43.1	19.7	3.9
Northern Cape	29 000	12.3	35.4	5.9	18.2	27.8	4.3	8.4
Free State	122 000	13.0	4.4	5.5	22.4	47.5	17.0	3.1
KwaZulu-Natal	460 000	13.2	1.4	11.3	28.2	36.1	12.7	10.3
North West	230 000	17.2	0.8	4.8	29.8	44.1	15.7	4.8
Gauteng	616 000	25.7	1.6	4.7	20.3	43.2	25.7	4.6
Mpumalanga	148 000	12.1	15.9	9.6	24.6	32.6	10.6	6.6
Limpopo	108 000	4.9	2.3	11.7	43.8	32.7	7.8	1.8
RSA	**2 164 000**	**13.7**	**3.9**	**7.0**	**25.2**	**40.7**	**17.1**	**6.1**

In the country as a whole, only 13 per cent of all the trips to educational establishments (or a little more than 2 million trips) were made by public transport. The monthly cost for these trips varied considerably, ranging from nothing (for trips by school buses) to more than R200 per month. For the largest group of learners and students the cost was between R101-R200 per month.

There were some notable differences between the provinces in their use of public transport and its cost:

- Gauteng had the highest incidence of public transport usage for educational purposes, by far the largest number of people travelling for this purpose, and

also the highest percentage paying R200 or more per month to reach their destinations;

- Limpopo had the lowest proportion of trips by public transport, but also the lowest monthly cost, the majority paying less than R100 per month for their trips to educational centres;
- Northern Cape, with the fewest learners and students using public transport, appears to be supported by a subsidised bus service for 35 per cent of public transport users, and therefore has relatively low monthly transport costs to educational centres; and
- Mpumalanga and the Western Cape offer a limited subsidised bus service to some 17 per cent and 12 per cent of learners and students respectively, which also helps to keep their travel costs down.

Table 11.14 shows the relative cost to learners and students of using the different public transport modes.

Table 11.14: Cost of public transport trips to educational centres, by mode

Main Mode	Number	% of all trips	Cost (% of main mode trips)					
			Nothing	R1-50	R51-100	R101-200	> R200	Missing
Train	147 651	0.9	0.0	6.7	49.2	27.5	10.4	6.3
Bus	593 024	3.8	11.2	9.9	23.9	37.2	10.9	6.9
Taxi	1 423 469	9.0	1.3	5.9	23.3	43.5	20.3	5.7

The highest proportion of these trips was made by taxi, and by far the largest number or learners and students used taxis to reach their destination. This was despite the fact that taxis were the most expensive means of travel of the three public transport modes, with a relatively high number of taxi users paying more than R200 per month for their travel. The cheapest mode, the train, which cost less than R100 per month for the majority of train users, accounted for only one per cent of public transport trips and attracted far fewer passengers. The bus was intermediate between the taxi and train, in both the number of passengers carried, and the cost to the learners and students.

It is self-evident that cost alone did not determine patronage of public transport by these learners and students, but that other factors, such as availability, accessibility, travel time, safety and comfort certainly played a role in their mode choice, as was discussed in the previous chapter.

12. RESULTS: WORKERS

12.1 Introduction

The section which follows provides a context for the National Household Travel Survey, indicating the extent of travel generated by employment activity in South Africa. This work-generated travel has several different dimensions, including the regular daily worker trips referred to as commuting and the less frequent trips, made from the districts in which persons are employed to their home districts, that is, the district in which their families reside. The latter are referred to as migrant labour trips.

The extent of commuting and migrant labour travel is an indication of the level of economic activity within the country. Commuting is an important component of economic activity and currently offers numerous employment opportunities for small and medium-sized public transport operators, as well as within parastatals such as MetroRail and in large private bus companies.

12.2 Employment in the formal and informal sectors

Refer to the glossary for a definition of the difference between formal and informal sector employment.

Table 12.1 shows employment in the RSA by province and by settlement type.

Table 12.1: Survey respondents in the formal and informal sectors

Province	Formal	%	Informal	%	Total
Western Cape	1 418 000	82.3	306 000	17.7	1 724 000
Eastern Cape	632 000	69.2	281 000	30.8	913 000
Northern Cape	155 000	69.3	68 000	30.7	223 000
Free State	488 000	72.7	184 000	27.3	672 000
KwaZulu-Natal	1 160 000	65.6	608 000	34.4	1 768 000
North West	692 000	74.2	241 000	25.8	933 000
Gauteng	2 523 000	78.6	687 000	21.4	3 210 000
Mpumalanga	480 000	66.4	243 000	33.6	723 000
Limpopo	494 000	63.3	286 000	36.7	780 000
RSA	**8 042 000**	**73.5**	**2 904 000**	**26.5**	**10 946 000**
Metropolitan	4 004 000	78.6	1 090 000	21.4	5 094 000
Urban	2 544 000	76.5	782 000	23.5	3 326 000
Rural	1 494 000	59.1	1 032 000	40.9	2 526 000

*This information applies to people who had a job in the 7 days prior to the survey.

For the RSA as a whole, 74 per cent of persons who had a job in the seven days prior to the survey were classified as working in the formal sector. The total number of workers amounted to 10.9 million, of whom 27 per cent were employed in the informal sector.

In respect of the distribution of formal and informal jobs and the distribution of employment as a whole, the following points are noteworthy:

- Gauteng has 3.2 million employed residents which accounts for 29 per cent of all jobs in South Africa;
- the other large employment concentrations are found in the Western Cape (1.7 million jobs) and KwaZulu-Natal (1.8 million jobs);
- the highest level of formal economic activity occurs in the Western Cape where 82 per cent of all the jobs are in the formal sector;
- the lowest formal sector representation and conversely the highest informal sector involvement occurs in Limpopo, where 37 per cent of the jobs are in the informal sector; and
- the incidence of informal sector jobs is far higher in rural than in urban areas, as 41 per cent of all jobs in rural areas are in the informal sector compared to only 21 per cent in the metropolitan areas.

12.3 Employment sectors in the RSA economy

Table 12.2 shows the employment sectors in the RSA by province and by settlement type. These sectors comply with the Standard Industrial Classification (SIC) which is normally used by Stats SA for the classification of economic activity.

Table 12.2: Employment sectors in the RSA by province and settlement type

Province	Percentage of workers									
	Agriculture	Mining	Manufacture	Electricity, Gas & Water Services	Construction	Wholesale & Retail Trade	Transport & tele-communications	Financial Services	Community, social and personal services	Private household employment
Western Cape	11.2	0.2	16.9	0.5	8.1	19.6	4.7	12.2	17.5	9.1
Eastern Cape	8.5	0.3	16.6	0.4	5.6	19.3	4.3	6.5	25.3	13.1
Northern Cape	24.7	7.1	5.7	0.9	2.5	16.2	2.7	3.9	23.8	12.4
Free State	15.4	6.0	12.0	0.6	4.6	18.0	4.0	4.6	21.4	13.5
KwaZulu-Natal	8.7	0.2	21.3	0.6	5.0	17.7	6.2	8.9	21.0	10.3
North West	9.5	17.0	10.7	1.0	3.7	16.2	3.9	6.1	21.7	10.2
Gauteng	1.3	3.6	18.2	0.8	5.2	20.0	7.6	16.9	16.4	9.9
Mpumalanga	19.1	6.3	10.4	2.1	4.8	19.2	3.8	6.1	18.3	10.1
Limpopo	15.0	5.6	6.0	1.2	6.6	22.7	2.9	5.0	24.3	10.6
RSA	**8.9**	**3.9**	**15.7**	**0.8**	**5.5**	**19.1**	**5.4**	**10.5**	**19.7**	**10.5**
Metropolitan	1.0	0.4	20.0	0.8	5.8	20.3	7.4	16.2	18.5	9.5
Urban	4.2	8.6	14.4	0.9	5.3	20.3	4.3	7.3	24.4	10.3
Rural	30.8	4.8	8.9	0.7	5.2	15.2	2.9	3.0	15.8	12.7

The following are noteworthy points relating to the distribution of economic activities:

- wholesale and retail trade comprises the largest sector in the Western Cape, followed by community, social and personal services (20% and 18% of jobs respectively);
- in the Eastern Cape, the community, social and personal services sector is by far the largest, having 25 per cent of all the jobs;
- in the Northern Cape, the economy is focused on agriculture (25%) and community, social and personal services (24%); and
- in many of the provinces, the largest sector is community, social and personal services, for example, in the Free State (21%), in KwaZulu-Natal (21%), in North West Province (22%). This sector includes government at national, provincial and municipal levels, indicating the significance of public service employment in South Africa.

Specific sectors are fairly strong in some provinces and less so in others. The following stand out:

- the mining sector in North West Province accounts for 17 per cent of all the jobs;

- electricity, gas and water services are disproportionately high in Mpumalanga;
- financial services are dominated by Gauteng (17%) and the Western Cape (12%), with the others lagging far behind; and
- private household employment (domestic service) is on average around 11 per cent of all jobs, ranging from a high of 13 per cent in the Eastern Cape to a low of 9 per cent in the Western Cape.

There are stark differences between settlement types. For example, wholesale and retail trade and manufacturing are strong employment sectors in the metropolitan areas, whereas in the urban areas, wholesale and retail trade and community, social and personal services are the strongest employment sectors. As can be expected, in rural areas, 31 per cent of jobs are in agriculture.

12.4 The number of working days

This variable gives an indication of the total weekly demand for travel for work purposes and is, therefore, of importance for the planning of commuter services.

Table 12.3 shows the number of days worked by employee, by province and by settlement type.

Table 12.3: Number of days worked by province and settlement type

Province	Percentage of workers			
	1 - 4 days	5 days	6 days	7 days
Western Cape	9.2	67.8	15.0	8.0
Eastern Cape	9.4	56.3	19.2	15.1
Northern Cape	8.0	65.1	14.8	12.1
Free State	9.8	50.3	26.4	13.5
KwaZulu-Natal	6.3	55.5	24.4	13.8
North West	8.0	46.9	31.0	14.0
Gauteng	6.8	58.7	21.4	13.0
Mpumalanga	7.0	51.9	25.0	16.1
Limpopo	6.8	49.0	25.0	19.2
RSA	**7.6**	**56.9**	**22.2**	**13.3**
Metropolitan	7.8	61.4	19.0	11.7
Urban	7.9	56.4	22.7	13.0
Rural	7.0	48.6	27.8	16.7

There is a marked difference between the number of days worked in metropolitan and urban areas as compared with rural areas. The majority of employees in the

metropolitan areas work a five-day week (61%) compared with only 49 per cent working a five-day week in the rural areas. In the rural areas, 45 per cent of workers work for much longer, either six or seven days, with 17 per cent reporting that they work every day.

It is evident from **Table 12.3** that amongst those employed in the RSA, the vast majority work five days or more, in other words, are in full-time employment. For the RSA as a whole, only 8 per cent work less than five days, that is, between one and four days per week.

The provinces where a large proportion of workers have a six or seven day working week are the Free State, KwaZulu-Natal, North West Province, Limpopo and Mpumalanga. In the more urbanised provinces such as the Western and Northern Cape and Gauteng, the tendency is for the working week to be limited to five days.

12.5 Worker income in the RSA

Table 12.4 shows the monthly income of workers in the RSA by province and by settlement type.

Table 12.4: Monthly income of workers by province and settlement type

Province	Percentage of workers				
	Up to R500	R501-R1000	R1001-R3000	> R3000	Income not disclosed
Western Cape	4.8	20.2	36.4	21.9	16.8
Eastern Cape	21.1	20.3	27.4	21.3	9.8
Northern Cape	17.0	29.2	23.8	26.5	3.5
Free State	27.4	24.3	25.1	19.4	3.8
KwaZulu-Natal	13.7	21.7	32.6	25.4	6.5
North West	14.2	18.0	38.2	20.7	8.9
Gauteng	5.9	14.4	36.6	30.5	12.6
Mpumalanga	21.7	26.8	26.6	20.9	4.1
Limpopo	27.8	28.2	19.8	20.2	4.0
RSA	**13.1**	**20.0**	**32.5**	**24.6**	**9.8**
Metropolitan	5.4	14.5	37.2	29.4	13.5
Urban	13.0	18.3	33.0	26.9	8.9
Rural	28.8	33.4	22.2	12.0	3.6

There are a number of significant points, including the following:

- over a third of rural employees earn less than R500 per month;
- roughly one-twentieth of metropolitan workers earn less than R500 per month;

- the provinces with the largest number of persons earning low salaries, that is under R500 per month, are Limpopo and the Free State;
- the greatest concentration of workers earning more than R3 000 per month is in Gauteng where nearly one-third of all workers earn more than R3 000 per month; and
- generally, earnings are higher in metropolitan areas than urban and rural areas.

Table 12.4 also shows the proportion of workers who resisted providing information about income. This was highest in the Western Cape and Gauteng.

12.6 Business trips

Table 12.5 shows the number of business trips taken in the month prior to the survey, by province and settlement type. The vast majority of people do not make business trips. In some provinces, between one and three per cent of the population took at least one business trip during the course of the previous month. The highest incidence of business trips appears to be amongst residents of the Northern Cape, where 3.6 per cent took one trip and 4.4 per cent took two trips or more during the course of the previous month.

Table 12.5: Business trips taken in the month prior to the survey by province and settlement type

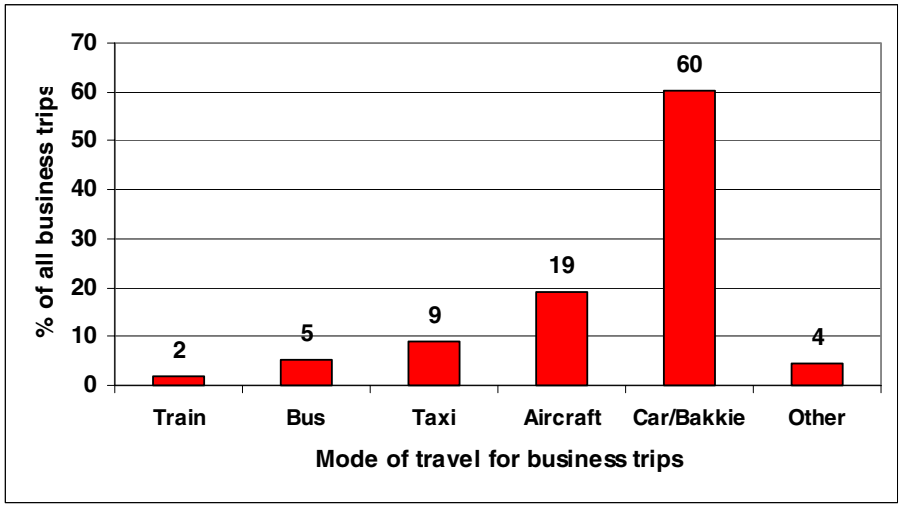
Province	Number of business trips per month			Total number per month
	0	1	2 +	
	Percentage of workers			
Western Cape	97.5	1.6	0.9	80 000
Eastern Cape	96.0	2.6	1.4	84 000
Northern Cape	92.0	3.6	4.4	52 000
Free State	95.9	2.7	1.4	67 000
KwaZulu-Natal	97.5	1.5	1.0	100 000
North West	97.0	1.4	1.6	68 000
Gauteng	97.8	1.3	0.9	172 000
Mpumalanga	96.9	1.4	1.7	56 000
Limpopo	96.5	2.0	1.5	71 000
RSA	**97.1**	**1.7**	**1.2**	**750 000**
Metropolitan	97.4	1.4	1.1	294 000
Urban	95.8	2.4	1.8	359 000
Rural	98.1	1.2	0.7	97 000

Table 12.6 shows the travel modes used for the most recent business trip. The market share for the various modes is shown in **Figure 12.1**.

Table 12.6 Travel mode used for most recent business trip by province and settlement type

Province	Percentage of trips					
	Train	Bus	Taxi	Air	Car	Other
Western Cape	1.3	4.2	0.8	58.9	33.2	1.6
Eastern Cape	0.0	11.5	21.3	2.3	58.8	6.1
Northern Cape	3.2	0.7	3.8	12.1	70.3	9.9
Free State	1.1	7.3	10.3	5.3	69.9	6.0
KwaZulu-Natal	1.7	6.2	8.3	22.5	57.3	4.0
North West	1.0	7.2	6.5	3.2	78.9	3.2
Gauteng	2.7	3.6	7.4	26.6	57.6	2.0
Mpumalanga	0.0	0.3	16.5	4.2	69.6	9.4
Limpopo	4.5	5.9	10.0	2.1	72.0	5.4
RSA	**1.8**	**5.3**	**9.1**	**19.1**	**60.3**	**4.4**
Metropolitan	2.1	4.2	3.9	35.8	52.3	1.7
Urban	1.5	3.9	9.8	9.4	69.9	5.6
Rural	1.7	12.7	21.4	0.6	55.0	8.6

Figure 12.1: Travel modes used for the most recent business trip



5

The following points are noteworthy:

- in the RSA as a whole, the number of business trips undertaken in the past month amounts to around 750 000;
- of the business trips made in the last month, 60 per cent were made by car and 19 per cent by air; and

- the use of air travel for business trips is highest in the Western Cape (59%) and Gauteng (27%).

The use of trains and buses for business trips is not extensive. Apart from car and air travel, the other mode which is fairly commonly used for business trips is the minibus-taxi, but this applies mostly to trips in the Eastern Cape and Mpumalanga.

Table 12.7 shows the origin and destination of business trips.

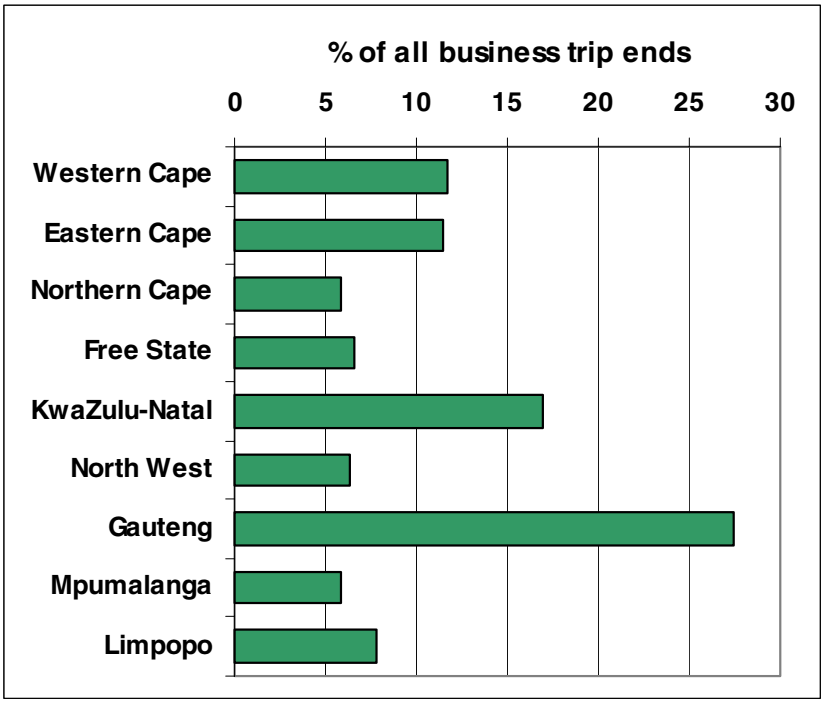
Table 12.7: Origin and destination of business trips

Province	Destination province								
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo
	Percentage of trips								
Western Cape	29.2	6.8	7.7	2.5	12.1	0.6	41.1	0.0	0.0
Eastern Cape	8.8	69.9	0.0	1.9	11.5	1.2	6.3	0.5	0.0
Northern Cape	14.7	3.8	41.6	13.3	2.0	3.8	19.0	0.3	1.5
Free State	6.6	3.3	9.8	35.2	6.8	6.6	25.8	2.9	3.1
KwaZulu-Natal	8.1	5.0	0.0	4.5	50.4	0.6	28.4	2.4	0.5
North West	3.1	1.3	4.9	3.2	0.0	28.4	39.1	0.7	19.3
Gauteng	16.6	6.5	5.2	4.7	21.1	9.5	17.3	9.7	9.4
Mpumalanga	1.6	0.9	0.0	3.5	18.1	1.6	34.5	29.6	10.2
Limpopo	1.8	1.2	1.3	1.6	2.7	5.0	47.8	7.5	31.1
RSA	**11.7**	**11.5**	**5.8**	**6.6**	**17.0**	**6.3**	**27.4**	**5.8**	**7.9**

In many cases, the business trips have destinations in the province of residence. This applies particularly to the Eastern Cape where 70 per cent of all business trips start and end within the province. Likewise, the majority of business trips in KwaZulu-Natal (50%) begin and end in the province. The importance of Gauteng as the major business destination is evident.

Figure 12.2 shows the provincial destination of business trips made most recently by employees/workers in the RSA.

Figure 12.2: Province of destination of business trips



Taken as a whole, the most common destination for business trips from throughout the country is Gauteng, which accounts for almost 27 per cent of all business trips. The second most popular destination is KwaZulu-Natal (17%) followed by the Western and Eastern Cape each at 12 per cent.

12.7 Migrant trips

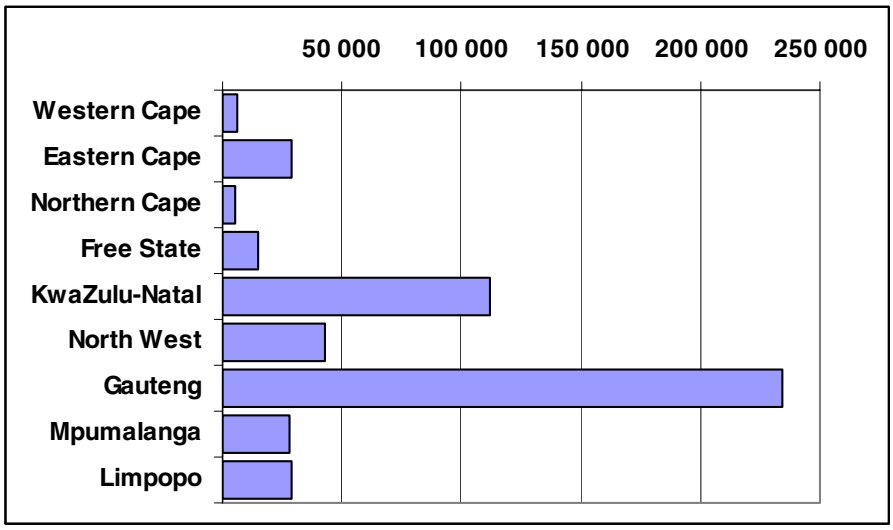
During the course of the NHTS, workers were asked whether they had visited another home during the course of the previous month. **Table 12.8** shows the workers who visited another home in another district by public transport during the previous month. The total amounts to just over of 500 000 workers of whom two-thirds (67%) made at least one visit to another home during the course of the previous month.

Table 12.8: Workers who visited another "home" in another district by public transport during the previous month

Province	Number	Number of visits during previous month			
		1	2	3 - 4	>4
		Percentage of migrants			
Western Cape	6 000	48.7	46.3	5.0	0.0
Eastern Cape	29 000	67.9	19.8	9.1	3.2
Northern Cape	5 000	70.6	13.7	15.6	0.0
Free State	15 000	72.1	18.7	3.3	5.9
KwaZulu-Natal	112 000	62.4	19.3	16.0	2.2
North West	43 000	68.1	18.5	10.9	2.5
Gauteng	234 000	70.4	17.0	9.3	3.4
Mpumalanga	28 000	63.4	22.4	12.0	2.1
Limpopo	29 000	59.8	20.6	17.2	2.4
RSA	**501 000**	**67.1**	**18.6**	**11.4**	**2.9**
Metropolitan	275 000	66.7	17.3	13.2	2.8
Urban	129 000	66.5	23.2	7.8	2.6
Rural	97 000	68.8	16.3	11.2	3.7

Figure 12.3 shows the origins of the monthly trips home by migrants. Nearly half of all the reported "migrants" are resident in Gauteng (244 000). Another 23 per cent are resident in KwaZulu-Natal (117 000).

Figure 12.3: Number of migrant trips originating in each province



Most of the "migrants" made one visit per month, but there are fairly substantial proportions in all provinces who made two trips per month (19% on average) rising to 46 per cent of those resident in the Western Cape. Nearly 12 per cent made three to four trips home to another district every month.

Table 12.9: Mode of last migrant trip

Province	Percentage of trips				
	Train	Bus	Taxi	Aircraft	Other
Western Cape	6.1	23.0	49.3	21.6	0.0
Eastern Cape	0.9	16.2	80.4	0.1	2.4
Northern Cape	3.1	20.1	46.8	2.6	27.4
Free State	10.6	24.0	58.4	0.0	6.9
KwaZulu-Natal	0.3	16.1	80.2	0.9	2.6
North West	7.7	11.0	76.3	0.0	4.9
Gauteng	4.4	22.0	67.3	1.0	5.3
Mpumalanga	0.0	11.5	83.3	0.0	5.2
Limpopo	1.4	4.9	93.5	0.0	0.1
RSA	**3.4**	**17.8**	**73.5**	**0.9**	**4.4**
Metropolitan	4.0	18.4	71.2	1.6	4.8
Urban	3.5	18.2	74.7	0.1	3.4
Rural	1.4	15.7	78.2	0.1	4.6

Table 12.9 shows the mode of travel used for the last migrant trip by province and by settlement type. The vast majority of the "migrants" make use of minibus-taxis for their trips to a second home. For the RSA as a whole, 74 per cent travelled by taxi and 18 per cent by bus. It is of interest to note that 22 per cent of the migrants resident in the Western Cape used an aircraft to travel to their second home.

Table 12.10 shows the provincial origins and destinations of migrant trips.

Table 12.10: The provincial origins and destinations of migrant trips

Province	Destination province								
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo
	Percentage of trips								
Western Cape	61.3	0.0	8.5	0.0	7.5	0.0	22.7	0.0	0.0
Eastern Cape	1.2	87.9	0.0	2.8	5.7	0.0	2.4	0.0	0.0
Northern Cape	0.0	11.3	43.9	2.3	0.0	40.0	2.6	0.0	0.0
Free State	4.2	22.0	3.7	43.8	2.6	2.6	18.7	0.0	2.5
KwaZulu-Natal	0.0	15.5	0.0	1.3	78.8	0.0	3.9	0.6	0.0
North West	0.6	6.8	8.2	7.4	0.0	52.4	10.5	7.1	7.0
Gauteng	0.6	6.7	0.3	5.1	17.8	8.8	20.7	7.3	32.7
Mpumalanga	0.0	1.8	0.4	1.1	7.3	0.0	13.3	24.1	52.0
Limpopo	0.0	3.0	2.7	1.0	0.3	10.5	4.5	19.2	58.8
RSA	**1.2**	**13.4**	**1.7**	**4.9**	**27.0**	**9.7**	**13.4**	**6.5**	**22.1**

Taking the RSA as a whole, the two provinces which attract the most trips home by migrants are KwaZulu-Natal (27%) and Limpopo (22%). It should be noted, however, that a large proportion of the so-called migrant trips take place within the same province, that is, the trips start and end in the same province. With reference to the table, there appears to be a fairly strong interaction between the Northern Cape and the North West Province, with 40 per cent of all trips that originate in the Northern Cape ending in North West Province. Other strong interactions are between the Western Cape and Gauteng (23%) and between Gauteng and Limpopo (33%) and KwaZulu-Natal (18%).

12.8 The proportion of people who work from home

Table 12.11 shows the proportion of people who work from home. For the RSA as a whole, 9 per cent of workers work from home, which varies from a low of 7 per cent in urban areas to a high of 13 per cent in rural areas. The provinces with the highest incidence of persons working from home are the Northern Cape (13%) and the Eastern Cape (12%).

Table 12.11: The proportion of people who work from home by province and settlement type

Province	Percentage of workers	
	At home	Somewhere else
Western Cape	7.5	92.5
Eastern Cape	12.4	87.6
Northern Cape	13.4	86.6
Free State	6.4	93.6
KwaZulu-Natal	8.0	92.0
North West	9.9	90.1
Gauteng	8.6	91.4
Mpumalanga	8.6	91.4
Limpopo	9.7	90.3
RSA	**8.8**	**91.2**
Metropolitan	8.2	91.8
Urban	6.6	93.4
Rural	12.9	87.1

13. RESULTS: TRIPS TO WORK

13.1 Modes of travel for work trips

Figure 13.1 shows the main mode of travel for people who regularly travel to work. For the RSA as a whole, the mode which carries the largest share of commuters is the motor car which accounts for roughly one-third of all commuters (32%). Minibus-taxis account for a quarter of all trips to work (25.1%).

Figure 13.1: Main mode of travel to work in the RSA

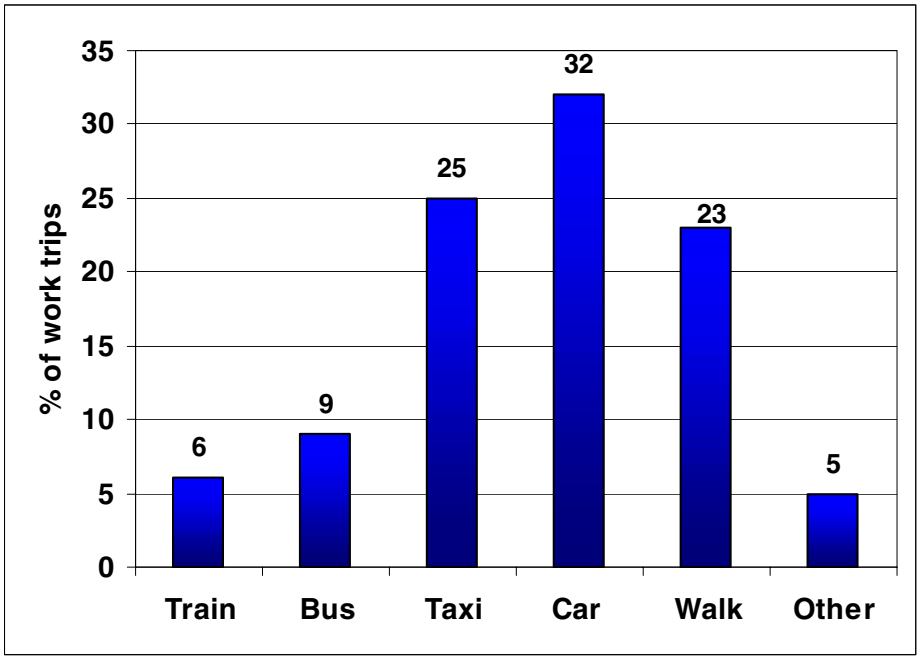


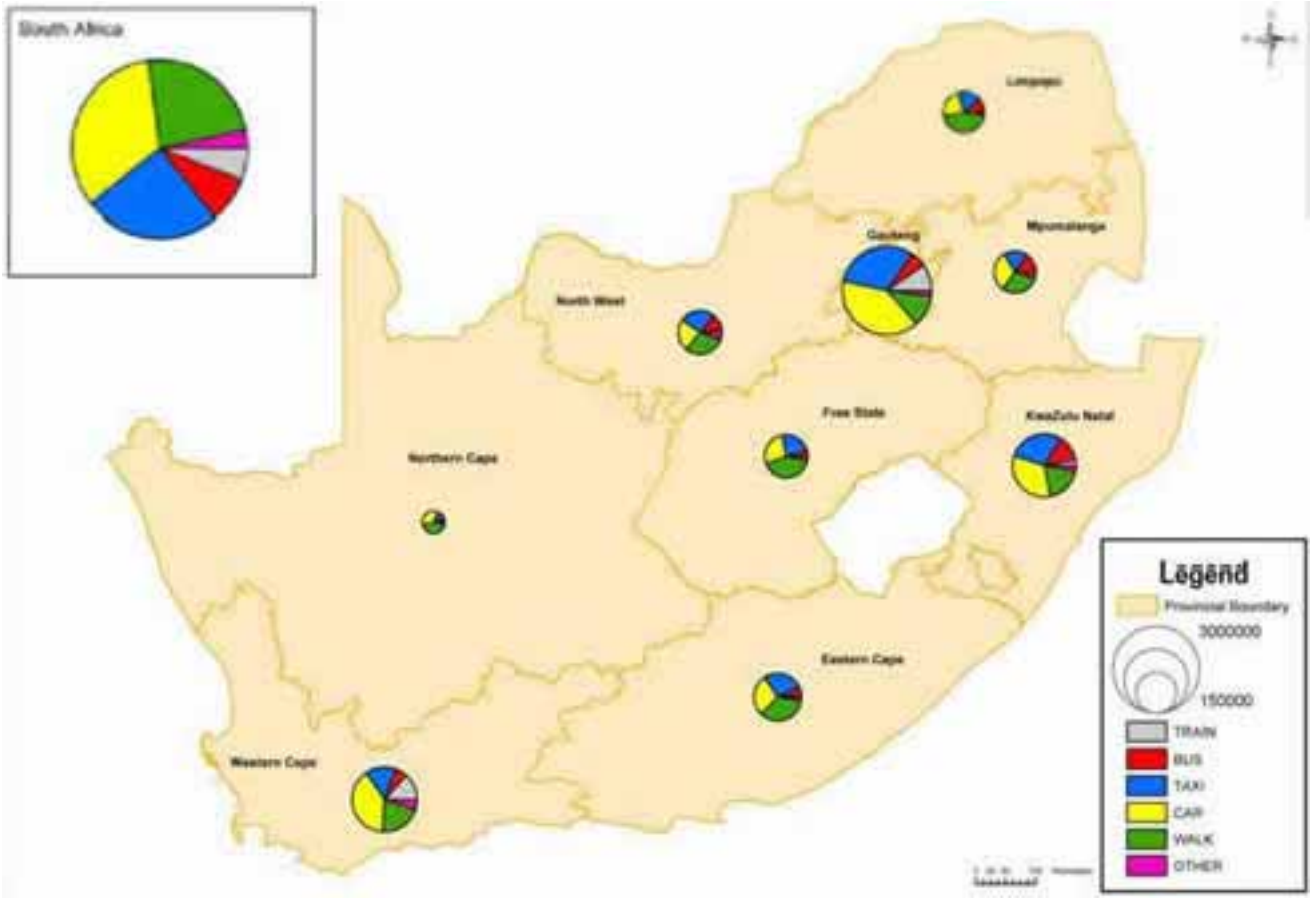
Table 13.1 and **Figure 13.2** illustrate modes used for work trips in the different provinces.

Table 13.1: Main mode of travel for people who regularly travel to work, by province and settlement type

Province	Number	Main mode to work (Percentage of work trips)					
		Train	Bus	Taxi	Car [1]	Walk	Other [2]
Western Cape	1 592 000	14.0	6.1	15.9	35.6	20.5	7.9
Eastern Cape	796 000	1.8	5.7	27.7	28.2	32.3	4.2
Northern Cape	194 000	0.0	3.4	11.2	34.2	41.4	9.7
Free State	628 000	0.0	4.9	24.1	23.3	41.1	6.6
KwaZulu-Natal	1 622 000	2.8	14.2	30.4	30.3	18.0	4.4
North West	839 000	3.2	12.7	26.1	24.4	25.6	8.0
Gauteng	2 924 000	9.5	5.6	31.4	39.6	11.5	2.4
Mpumalanga	660 000	0.1	15.8	18.3	24.0	31.5	10.4
Limpopo	702 000	0.0	10.1	16.1	19.7	48.3	5.7
RSA	**9 957 000**	**5.9**	**8.6**	**25.2**	**31.7**	**23.2**	**5.4**
Number		**589 000**	**856 000**	**2 509 000**	**3 157 000**	**2 310 000**	**536 000**
Metropolitan	4 664 000	11.3	8.7	29.1	39.4	8.9	2.7
Urban	3 098 000	1.7	6.4	26.8	34.1	24.0	7.1
Rural	2 195 000	0.5	11.6	14.5	12.1	52.5	8.8

1. Car = car driver and passenger
2. Other includes bicycle, metered taxi, truck driver, motorcycle, company transport, truck, tractor, animal transport

Figure 13.2: Main mode to work



The table reveals that there are almost 10 million daily commuters in the RSA, roughly half of which are found in metropolitan areas. Most commuters are found in Gauteng (roughly 3 million).

Considering the different regional patterns, the incidence of car use is highest in the metropolitan areas (39.4%) and lowest in the rural areas (12.1%). In the rural areas, the most common means of getting to work is walking (52.5 %). The train and bus modes tend to be concentrated in specific areas. For example, most train trips to work are made in metropolitan areas. Buses are an important component of the travel to work in rural areas (11.6%).

Table 13.2 shows the breakdown of work trips according to public, private and non-motorised market shares.

Table 13.2: Public, private and non-motorised market shares for work trips by province and settlement type

Province	Percentage of work trips		
	Public transport	Private transport	Non-motorised transport
Western Cape	36.0	42.5	45.9
Eastern Cape	35.3	31.7	57.7
Northern Cape	14.6	39.2	27.1
Free State	28.9	28.0	50.7
KwaZulu-Natal	47.4	34.3	58.0
North West	42.0	31.3	57.3
Gauteng	46.5	41.6	52.8
Mpumalanga	34.1	32.8	51.0
Limpopo	26.2	24.2	52.0
RSA	**39.7**	**36.2**	**52.3**
Metropolitan	49.1	41.7	54.1
Urban	34.9	39.5	46.9
Rural	26.6	19.9	57.2

The provinces which have the largest number of non-motorised travel are those with the highest rural populations. This applies particularly in the case of Limpopo (49.6%), Northern Cape (46.3%) and Free State (43.1%). Fewest trips by non-motorised means are found in Gauteng (11.9%).

Public and private transport use is highest in the metropolitan areas. In these areas, 49.1 per cent of all trips are made by public transport and 41.7 per cent by private transport modes. The highest incidence of travel to work by private transport is found in the Western Cape, where 42.5 per cent of all trips are made by private transport. Public transport use is highest in KwaZulu-Natal and Gauteng where almost half of all trips to work are made by public transport. The lowest incidence of public transport use for work trips is found in the Free State (28.9%).

Table 13.3 shows the public transport commuters in the RSA by province and by settlement type.

Table 13.3: Public transport commuters in the RSA by province and settlement type

Province	Number	% of all commuters	Main mode - public transport		
			% of public transport commuters		
			Train	Bus	Taxi
Western Cape	574 000	36.0	39.0	17.0	44.0
Eastern Cape	281 000	35.3	5.2	16.2	78.7
Northern Cape	28 000	14.6	0.0	23.1	76.9
Free State	182 000	28.9	0.0	16.9	83.1
KwaZulu-Natal	768 000	47.4	5.9	30.0	64.1
North West	352 000	42.0	7.5	30.2	62.3
Gauteng	1 360 000	46.5	20.5	12.0	67.5
Mpumalanga	225 000	34.1	0.2	46.2	53.6
Limpopo	184 000	26.2	0.0	38.5	61.5
RSA	**3 954 000**	**39.7**	**14.9**	**21.6**	**63.5**
Metropolitan	2 289 000	49.1	23.0	17.6	59.4
Urban	1 081 000	34.9	4.8	18.3	76.9
Rural	584 000	26.6	1.9	43.5	54.6

It is evident from the table that there are almost 4 million workers who daily commute to work by public transport. Of these, the greatest proportion, namely 2.2 million, are found in the metropolitan areas. Overall, in the RSA, 39.7 per cent of all commuters make use of public transport. Of these, the most commonly used travel mode is the minibus-taxi which transports 63.5 per cent of all public transport commuters. In the urban areas, taxis transport as many as 77 per cent of public transport commuters.

Train usage is highest in the Western Cape (39%) and in Gauteng (21%). Train use is fairly significant in the metropolitan areas where it accounts for 23 per cent of the commuter market.

The 1.4 million public transport commuters in Gauteng amount to 33 per cent of all public transport commuters in the RSA. The numbers of public transport commuters are low in provinces such as Northern Cape, Limpopo, Free State and Mpumalanga because a large proportion of the commuting population travels to work on foot.

13.2 Public transport trips involving transfers between travel modes

Table 13.4 shows the number of transfers made by public transport commuters. It is evident that the need to transfer affects train passengers more than others.

Table 13.4: Number of transfers made by public transport commuters

Main mode	No transfers (Percentage of trips)			
	0	1	2	3
Train	45.4	47.9	6.5	0.3
Bus	78.2	21.0	0.6	0.1
Taxi	78.7	19.8	1.3	0.2
All	**73.6**	**24.3**	**2.0**	**0.2**

For public transport users as a whole, roughly three-quarters do not need to make a transfer (74%), whereas 24 per cent make one transfer and 2 per cent make two or more. In the case of train commuters, nearly half (48%) make at least one transfer and seven per cent make two or more. At the other extreme, only 20 per cent of minibus-taxi users are forced to make a transfer in order to get to their work destinations.

Table 13.5 shows the feeder and distributor modes to public transport main modes. It is evident from the table that the minibus-taxi plays a significant role as both a feeder and a distributor mode to both trains and buses. In the case of trains, 39 per cent of the users make use of a taxi as either a feeder or a distributor mode. In the case of buses, some 12 per cent of bus main mode passengers make use of a taxi, either as a feeder to or a distributor from the bus service.

Table 13.5: Feeder and distributor modes to public transport main modes

Main mode	Other modes used		
	% of main mode users		
	Bus	Taxi	Other
Train	7.2	39.4	3.5
Bus	-	12.2	2.9
Taxi	-	-	7.2

Table 13.6 shows the main mode combinations used for work trips in the RSA.

Table 13.6: Mode combinations used for work trips in the RSA

Mode combination	% of main mode users		
	Train	Bus	Taxi
Train	45.4	-	-
Minibus taxi - Train	20.7	-	-
Train - Minibus taxi	12.1	-	-
Train - Train	6.8	-	-
Bus - Train	3.7	-	-
Minibus taxi – Train - Minibus taxi	3.2	-	-
Train - Bus	2.1	-	-
Bus	-	78.5	-
Bus - Bus	-	7.2	-
Bus - Minibus taxi	-	6.3	-
Minibus taxi - Bus	-	4.8	-
Minibus taxi	-	-	74.4
Minibus taxi - Minibus taxi	-	-	17.1
Bakkie taxi	-	-	2.2
Sedan taxi	-	-	2.1
Minibus taxi - Minibus taxi - Minibus taxi	-	-	½
Other combinations	6.1	3.5	3.0
Total	100	100	100
% of public transport	**14.9**	**21.6**	**63.5**
Number	**589 000**	**856 000**	**2 509 000**

The table reflects the fact that most bus and taxi passengers use a single mode whereas there is a lot of transference between the road-based and rail modes. The most common feeder mode to trains is minibus-taxi which accounts for 21 per cent of

all main mode train passengers. Likewise, some 12 per cent of main mode train users use a minibus-taxi as a distributor mode at the work end.

A similar pattern is evident with respect to feeder and distributor modes to bus services. The minibus-taxi is the most commonly used mode for these purposes. It is of interest to note from **Table 13.6** that there are a large number of passengers who are forced to use two trains or two buses or two minibus-taxis in order to arrive at work destinations. Overall, the table reveals that 64 per cent of all public transport users make use of minibus-taxis.

Table 13.7 shows the total number of trips to work by public transport by province in the RSA. The total number of daily commuting trips amounts to 3.4 million by taxi, nearly a million by bus (964 000), and 637 000 by train. This total includes feeder and distributor trips. If the latter are included with main mode minibus-taxi use, the taxi market share of all public transport trips increases to 67.9 per cent of all trips made by public transport.

Table 13.7: Total number of trips to work by public transport by province in the RSA

Province	Total number of trips			
	Train	Bus	Taxi	Public transport
Western Cape	255 000	106 000	398 000	759 000
Eastern Cape	14 000	49 000	276 000	339 000
Northern Cape	-	7 000	23 000	30 000
Free State	-	37 000	177 000	214 000
KwaZulu-Natal	48 000	241 000	641 000	930 000
North West	27 000	132 000	288 000	447 000
Gauteng	292 000	192 000	1 328 000	1 812 000
Mpumalanga	1 000	126 000	131 000	258 000
Limpopo	-	74 000	127 000	201 000
RSA	637 000	964 000	3 389 000	4 990 000
% of all public transport trips	12.8	19.3	67.9	100.0

The minibus-taxi is the dominant mode to work in Gauteng. Gauteng province accounts for 39 per cent of all the trips to work by minibus-taxi. The mode is relatively under-represented and insignificant in the Northern Cape. The other main concentrations of minibus-taxi commuting are KwaZulu-Natal (641 000), Western Cape (398 000) and Eastern Cape (276 000).

Table 13.7 shows that most train users are found in Gauteng (292 000) and Western Cape (255 000). The province with the most bus commuters is KwaZulu-Natal with 241 000, followed by Gauteng with 192 000.

13.3 Departure times for work trips

Table 13.8 shows the work trip starting times by province and by settlement type.

Table 13.8: Work trip starting times by province and settlement type

Province	Percentage of work trips				
	Before 0600	0600 to 0629	0630 to 0659	0700 to 0759	0800 or later
Western Cape	11.2	13.4	20.9	40.8	13.8
Eastern Cape	12.3	11.9	17.7	45.6	12.6
Northern Cape	8.7	9.1	22.2	49.4	10.6
Free State	13.8	14.1	19.2	40.7	12.2
KwaZulu-Natal	25.0	18.5	19.7	28.9	8.0
North West	29.2	17.6	15.8	27.3	10.2
Gauteng	20.8	17.8	17.8	31.3	12.2
Mpumalanga	28.6	14.3	19.8	26.7	10.6
Limpopo	18.9	17.4	24.4	30.3	9.0
RSA	**19.7**	**16.1**	**19.2**	**33.8**	**11.3**
Metropolitan	18.9	18.0	18.6	32.2	12.3
Urban	17.9	13.4	18.7	38.5	11.6
Rural	23.9	15.6	21.0	30.7	8.7

The table reveals that there is an extended peak period for commuting in the RSA. Many trips commence before 0600 while some even take place after 0800. The largest proportion of trips, however, takes place in the peak hour between 0700 and 0759. For the RSA as a whole, this amounts to 34 per cent of all trips to work.

In most areas, a fairly substantial number of trips commence before 0600. The incidence of early starting times is highest in rural areas (24% of all trips), but also in Mpumalanga and North West (more than 28%) from where many workers commute to work places in Gauteng.

Table 13.9 shows the work trip starting time by main mode of travel.

Table 13.9: Work trip starting times by main mode of travel

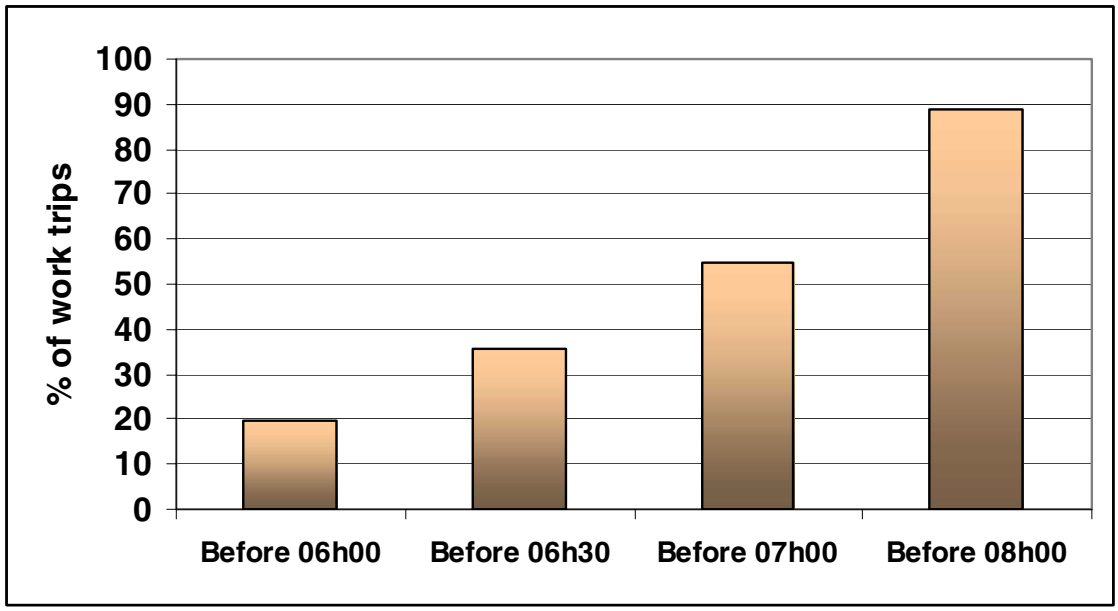
Main mode	Percentage of work trips				
	Before 0600	0600 to 0629	0630 to 0659	0700 to 0759	0800 or later
Train	47.5	21.4	13.7	10.7	6.7
Bus	44.6	21.5	14.5	11.9	7.6
Taxi	21.6	20.6	19.9	28.0	9.9
Car	9.4	11.5	19.3	47.3	12.4
Walk	12.6	13.3	21.6	38.6	13.9
Other	31.6	19.2	17.7	21.4	10.2

It is evident from the table that train and bus passengers are required to make earlier starts than most others. For example, 48 per cent of all trips by train commence before 0600. Likewise, 45 per cent of all trips made by bus also start before 0600.

The convenience of cars and minibus-taxis is revealed by the fact that, in the case of cars, 47 per cent of trips to work start between 0700 and 0800. For minibus-taxis, the equivalent proportion is 28 per cent. It should be noted that most walk trips (around 60%) commence between 0630 and 0800.

Figure 13.3 shows the starting time of work trips in the RSA.

Figure 13.3: Starting time of work trips in the RSA



13.4 Travel times to work

Table 13.10 shows the total travel times to work by province and by settlement type.

Table 13.10: Total travel times by province and settlement type

Province	Percentage of work trips				
	Up to 15 mins	16 - 30 mins	31 - 60 mins	61 - 90 mins	> 90 mins
Western Cape	27.8	27.8	27.1	11.2	6.1
Eastern Cape	28.4	34.1	27.7	6.7	3.1
Northern Cape	47.5	29.9	16.3	4.4	1.9
Free State	32.1	33.9	24.5	6.5	3.0
KwaZulu-Natal	17.7	31.8	33.8	11.3	5.5
North West	26.7	30.0	23.2	9.1	11.0
Gauteng	14.1	25.9	36.4	14.0	9.7
Mpumalanga	24.7	33.0	27.2	8.1	6.9
Limpopo	37.6	26.8	24.2	6.6	4.9
RSA	**23.2**	**29.3**	**30.1**	**10.6**	**6.9**
Metropolitan	13.3	27.6	35.8	14.4	9.0
Urban	28.9	34.4	25.9	6.6	4.2
Rural	36.3	25.6	23.8	8.0	6.3

The longest travel times are generally found in the metropolitan areas where 14 per cent of trips are between 60 and 90 minutes and 9 per cent are more than 90 minutes. Gauteng is the province which experiences the greatest proportion of trips in excess of one hour. This amounts to roughly a quarter of all trips.

Reference to **Table 13.10** reveals that the shortest travel times are generally found in the provinces with relatively few commuters. For example, in the Northern Cape, 48 per cent of commuters can get to work within 15 minutes.

Table 13.11 shows the total travel time by main mode of travel.

Table 13.11: Total travel time by main mode of travel

Main mode	Percentage of work trips				
	Up to 15 min	16 - 30 min	31 - 60 min	61 - 90 min	> 90 min
Train	0.7	5.2	29.3	29.3	35.5
Bus	3.0	15.2	40.2	22.7	18.8
Taxi	6.9	30.9	40.8	14.1	7.3
Car	28.6	35.2	28.2	5.9	2.1
Walk	48.0	29.3	17.6	3.6	1.5
Other	19.0	35.6	28.2	10.5	6.6

It is evident from **Table 13.11** that some of the modes are severely penalised by long travel times. Examples are trains and buses. In the case of trains, 65 per cent of train commuters take longer than 60 minutes to get to work. The equivalent figure for bus commuters is 42 per cent taking more than 60 minutes for the journey to work.

Table 13.11 also highlights the advantages of minibus-taxis and cars. Some 79 per cent of minibus-taxi passengers and 92 percent of car commuters get to work in less than an hour. Considering those who walk to work, 77 per cent get to work within a walk of 30 minutes.

Figure 13.4: Travel times by public transport modes

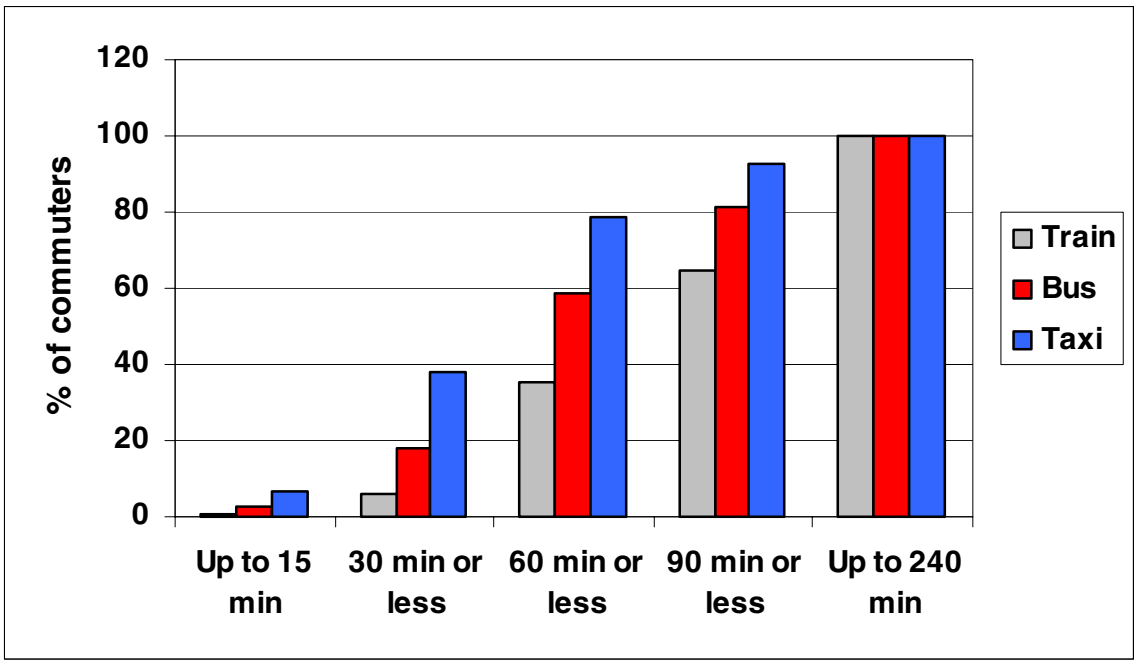


Figure 13.4 illustrates the total travel time by main mode of travel. It is evident that a larger proportion of train users than users of other public transport modes travel for more than one hour to get to work.

13.5 Walking and waiting times

Table 13.12 shows the walking times to the first public transport mode by province and by settlement type.

Table 13.12: Walking time to first mode (train, bus and taxi) by province and settlement type

Province	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Western Cape	48.1	25.9	12.4	13.5
Eastern Cape	55.0	21.3	14.1	9.6
Northern Cape	71.0	20.9	4.1	4.0
Free State	65.4	19.2	9.2	6.1
KwaZulu-Natal	50.0	23.0	13.0	14.0
North West	52.9	24.6	13.9	8.6
Gauteng	53.4	21.1	13.8	11.7
Mpumalanga	55.5	18.5	13.1	12.8
Limpopo	53.7	24.5	13.8	8.0
RSA	**52.9**	**22.4**	**13.2**	**11.6**
Metropolitan	51.5	23.0	13.3	12.2
Urban	60.3	21.3	11.2	7.1
Rural	44.3	22.3	16.4	17.1

For the RSA as a whole, only 11.6 per cent of people take more than 15 minutes to reach the first travel mode. This figure is highest in the rural areas where 17.1 per cent of people making use of public transport take more than 15 minutes to access the vehicles.

The distribution of walking times is very similar throughout the RSA. In most cases, the majority (more than 50%) can reach public transport within a walk of 5 minutes or less. Another 22 per cent on average can reach public transport within 6 to 10 minutes and another 13 per cent within 11 to 15 minutes on average.

Table 13.13 shows the walking time to the first public transport mode.

Table 13.13: Walking time to first public transport mode

First mode	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Train	19.2	20.8	22.9	37.1
Bus	50.7	26.1	11.7	11.5
Taxi	58.6	21.5	12.2	7.7

This clearly indicates the disadvantages of train travel, in that, 37 per cent of persons who use trains, take more than 15 minutes to get to the station. Conversely, only 8 per cent of people who use minibus-taxis take more than 15 minutes to get to the minibus-taxi services. Some 59 per cent of minibus-taxi users can access the vehicles in 5 minutes or less.

Table 13.14 shows the waiting times for the first public transport mode of travel by province and by settlement type.

Table 13.14: Waiting times for first mode (train, bus and taxi) by province and settlement type

Province	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Western Cape	70.4	20.0	6.3	3.3
Eastern Cape	69.3	22.8	3.4	4.5
Northern Cape	66.8	25.5	4.6	3.1
Free State	61.4	18.7	10.7	9.1
KwaZulu-Natal	66.4	20.5	5.8	7.3
North West	53.5	27.8	10.9	7.8
Gauteng	65.9	20.0	6.4	7.7
Mpumalanga	67.4	21.6	6.3	4.7
Limpopo	65.3	18.6	5.5	10.6
RSA	**65.6**	**21.0**	**6.6**	**6.8**
Metropolitan	66.9	20.9	6.2	6.1
Urban	67.9	19.4	6.9	5.8
Rural	56.7	24.5	7.6	11.2

On average, two-thirds of public transport commuters only have to wait for up to five minutes. Another 21 per cent wait for between six and ten minutes and 7 per cent for

between 11 and 15 minutes. For the RSA as a whole, only 7 per cent of commuters have to wait for more than 15 minutes to pick up a public transport service. The provinces where the waiting times appear to be longest are Limpopo, Free State and North West Province.

Table 13.15 shows the waiting times for the first public transport mode and indicate the disadvantages of trains.

Table 13.15: Waiting time for first public transport mode

First mode	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Train	54.5	28.6	7.1	9.9
Bus	61.3	25.8	7.4	5.6
Taxi	68.7	18.4	6.3	6.6

The figures, however, are not extreme as only around 10 per cent of commuters wait for more than 15 minutes for their train to depart. Best service is obviously provided by minibus-taxis. Some 69 per cent of minibus-taxi commuters only have to wait for five minutes or less to catch a minibus-taxi to work.

Table 13.16 shows the walking time at the end of the work trip by province and by settlement type.

Table 13.16: Walking time at the end of the work trip (from train, bus and taxi) by province and settlement type

Province	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Western Cape	43.8	28.5	14.5	13.2
Eastern Cape	66.8	18.0	9.3	5.8
Northern Cape	68.4	15.9	6.5	9.2
Free State	58.9	17.7	11.9	11.6
KwaZulu-Natal	58.8	24.0	8.2	9.0
North West	61.7	20.9	8.2	9.2
Gauteng	48.2	26.2	12.9	12.7
Mpumalanga	59.5	21.6	8.5	10.4
Limpopo	61.6	19.4	8.5	10.5
RSA	**54.0**	**24.0**	**11.0**	**10.9**
Metropolitan	49.5	26.4	12.4	11.7
Urban	63.1	19.2	8.8	8.8
Rural	55.2	23.5	9.4	11.9

The walking times on disembarkation from public transport are longer generally than the walking times to public transport. Nevertheless, on average, only 11 per cent of commuters have to walk for more than 15 minutes from their point of disembarkation to their work location. Overall, people in metropolitan areas have slightly longer walks than those in either urban or rural settlements. Considering the walking times revealed in **Table 13.16**, there are not large differences, apart from the observation that the walking times are lowest in the areas with relatively few commuters, such as the Northern Cape, North West and Limpopo.

Table 13.17 shows the walking time from the last public transport mode to the work place.

Table 13.17: Walking time from the last public transport mode to the work place

Last mode	Percentage of trips			
	Up to 5 min	6 - 10 min	11 - 15 min	> 15 min
Train	24.9	29.6	20.7	24.8
Bus	52.4	25.5	11.2	11.0
Taxi	59.7	22.6	9.2	8.5

This table also shows the disadvantages of train services, in that over 45 per cent of train users have to walk for 11 minutes or more to arrive at their work destinations after disembarking from the trains. The convenience of minibus-taxis is illustrated by the fact that 60 per cent of minibus-taxi passengers only walk for up to five minutes from their points of disembarkation to their work destinations.

13.6 Car Captivity

A measure of car captivity is the need for the use of the motor car at work for work purposes or the use of the car to provide other passengers with transport to their destinations (whether work, education or other destinations) during the course of work trips. The extent of the use of motor cars for work and other purposes is shown in **Table 13.18.**

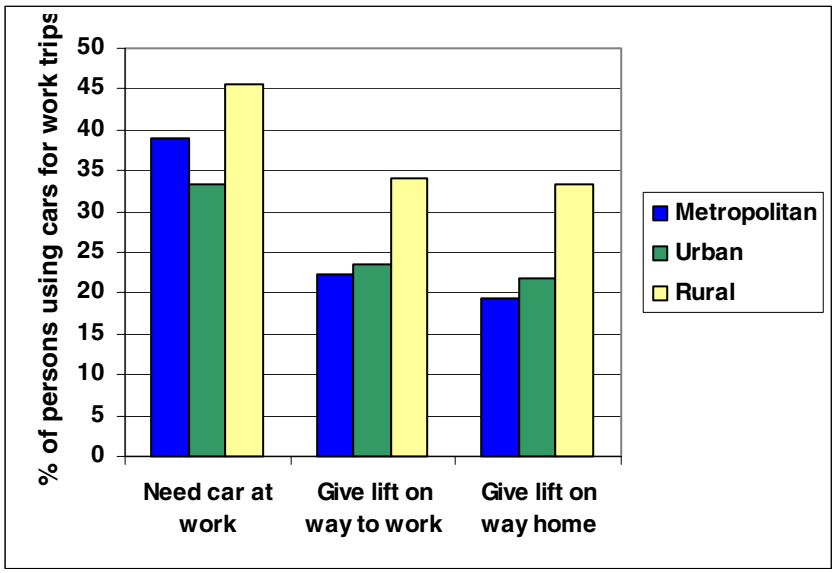
Table 13.18: Use of motor cars for work and other purposes

Settlement type	Number of car drivers	Percentage of car drivers			
		Need car at work	Lift on way to work	Lift on way home	None
Metropolitan	1 536 000	39.0	22.3	19.3	48.6
Urban	827 000	33.3	23.5	21.7	53.3
Rural	163 000	45.7	34.0	33.4	40.5
RSA	**2 526 000**	**37.6**	**23.4**	**21.0**	**49.6**

Of the 2.5 million people who use cars to drive to work, 1.5 million reside in metropolitan areas. For the RSA as a whole, well over one-third of car drivers indicated that they need to use their cars at work. This figure is highest in rural areas (46%), but is also significant in metropolitan and urban areas (39% and 33% respectively). Between one-fifth and one-third of all respondents indicated that they also use their cars because they give lifts to other people, either on the way to work or on the way home. The lowest incidence of the use of cars for transporting passengers is in metropolitan areas and the highest in the rural areas. Roughly half of the car users indicated that they do not need to use their car for any purposes between the times of leaving home for work and returning home in the evening. Thus, around half the commuters who travel by car can be considered to be captives to the car mode, while another half could make use of other modes of travel were they to be available.

Figure 13.5 shows the use of motor cars at work and for transporting passengers for other purposes in the course of work journeys. The figure provides an interesting contrast between the various settlement types. Gauged by the figure, it appears that more rural car commuters have need of their car for other purposes.

Figure 13.5: The use of motor cars at work and for transporting passengers for other purposes in the course of work journeys



13.7 Costs of travel to work by public transport

Table 13.19 shows the monthly costs of public transport for travel to work by province and by settlement type.

Table 13.19: Monthly cost of public transport travel to work by province and settlement type

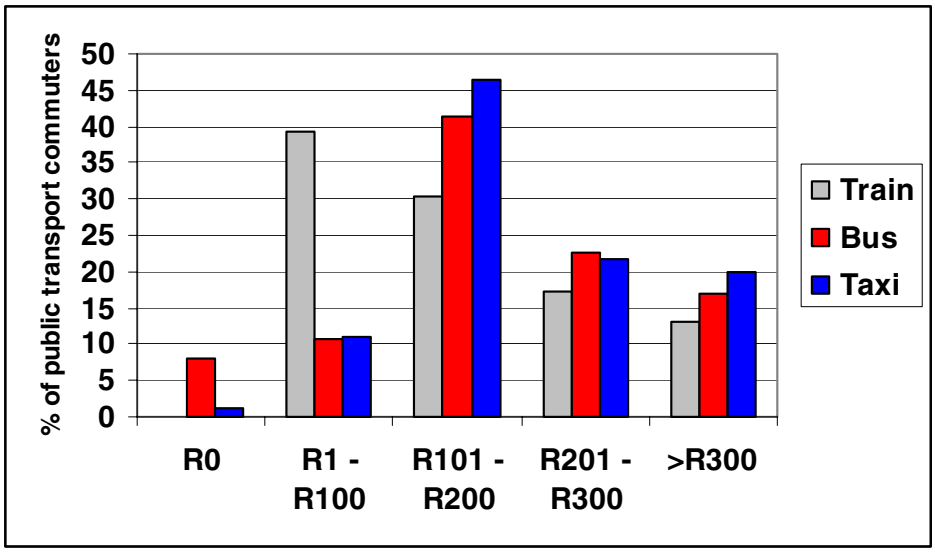
Province	% of public transport commuters					Number
	Nothing	R1 - R100	R101 - R200	R201 - R300	> R300	
Western Cape	0.9	24.0	44.6	18.4	12.1	574 000
Eastern Cape	1.5	15.7	47.2	19.9	15.6	281 000
Northern Cape	10.9	13.7	61.2	8.5	5.7	28 000
Free State	1.6	14.5	56.8	20.1	7.1	182 000
KwaZulu-Natal	0.9	15.5	47.5	22.7	13.4	768 000
North West	3.0	11.4	37.8	22.6	25.2	352 000
Gauteng	3.6	12.8	35.2	23.9	24.4	1 360 000
Mpumalanga	4.2	7.8	52.6	14.5	20.8	225 000
Limpopo	2.3	19.0	49.7	16.3	12.8	184 000
RSA	**2.4**	**15.2**	**42.8**	**21.3**	**18.3**	**3 954 000**
Metropolitan	0.7	15.7	38.3	23.6	21.6	2 289 000
Urban	5.8	13.7	50.5	18.0	12.0	1 081 000
Rural	2.9	16.0	46.5	18.2	16.4	584 000

Generally speaking, the costs of travel to work are higher in metropolitan areas than in urban or rural areas. The lowest costs of commuting are found in urban areas where only 30 per cent of urban public transport commuters pay more than R200 per month for their transport to work. For the RSA as a whole, 60 per cent of all public transport commuters pay R200 or less for their monthly travel to work.

The highest costs are found in Gauteng where 24 per cent of public transport commuters spend more than R300 per month on commuting and 48 per cent spend R200 or more. The next highest is North West Province where 47 per cent spend R200 per month or more. The lowest commuting costs are found in the Northern Cape, where 86 per cent spend R200 or less on the cost of travelling to work and 11 per cent do not pay for public transport. Another interesting result relates to the Western Cape where 70 per cent spend R200 or less. This is a surprising result, considering that a lot of the travel in the Western Cape occurs within the City of Cape Town metropolitan area and generally, metropolitan areas have higher transport costs. The reasons for the lower costs in the Western Cape are the high proportion of persons travelling by train which is heavily subsidised, and the fact that travelling distances are lower in the City of Cape Town metropolitan area than in other metropolitan areas in South Africa, which generally have lower densities of development than those found in Cape Town.

Figure 13.6 shows the monthly costs of travel to work by the main public transport modes.

Figure 13.6: Monthly cost of travel to work by main public transport mode



The effects of train and bus subsidies are apparent in the figure. Some 40 per cent of train users spend less than R100 per month on commuting. In the case of bus commuters, around 60 per cent spend R200 or less and eight per cent do not spend anything. A notable feature of **Figure 13.6** is the close correspondence between the costs of commuting for bus users and minibus-taxi users. It should be borne in mind, however, that commuting distances and travel times are considerably lower on average for minibus-taxi users than for bus users.

13.8 Travel allowances and/or subsidies

Table 13.20 shows the monthly travel allowances made to public transport commuters.

Table 13.20: Monthly travel allowances made to public transport commuters

Allowance	Public transport commuters	
	Number	%
Nothing	3 793 000	96.4
R1 - R100	56 000	1.4
R101 - R200	43 000	1.1
R201 - R300	22 000	0.6
> R300	22 000	0.6

These allowances are over and above the ticket subsidies provided for many bus commuters, as well as the deficit support subsidy for commuter train services. The vast majority (96%) of commuters receive no travel allowances for transport to work. The table shows the numbers who receive amounts of up to R100; between R100 and R200; between R200 and R300; and more than R300 per month. The total number of persons who are subsidised amounts to around 140 000 persons, the majority of whom receive less than R100 per month on transport allowances.

13.9 The percentage of income spent on transport to work

Table 13.21 shows the percentage of personal income which workers spend on public transport to work.

Table 13.21: Percentage of personal income spent on public transport to work

Province	% of public transport commuters				
	< 5%	6 - 10%	11 - 15%	16 - 20%	> 20%
Western Cape	21.1	28.4	19.8	13.3	17.4
Eastern Cape	19.2	23.7	18.0	13.5	25.6
Northern Cape	37.3	21.9	16.5	10.9	13.3
Free State	19.2	20.7	16.5	15.9	27.6
KwaZulu-Natal	18.7	25.0	18.8	13.4	24.1
North West	18.4	24.8	16.1	11.5	29.3
Gauteng	19.7	23.0	18.9	13.3	25.0
Mpumalanga	16.9	16.0	19.0	13.2	35.0
Limpopo	25.4	16.9	19.5	10.3	28.0
RSA	**19.8**	**23.6**	**18.6**	**13.1**	**24.9**
Metropolitan	18.1	25.3	19.3	13.3	24.0
Urban	24.5	21.7	18.3	13.1	22.4
Rural	17.6	20.2	16.5	12.7	33.1

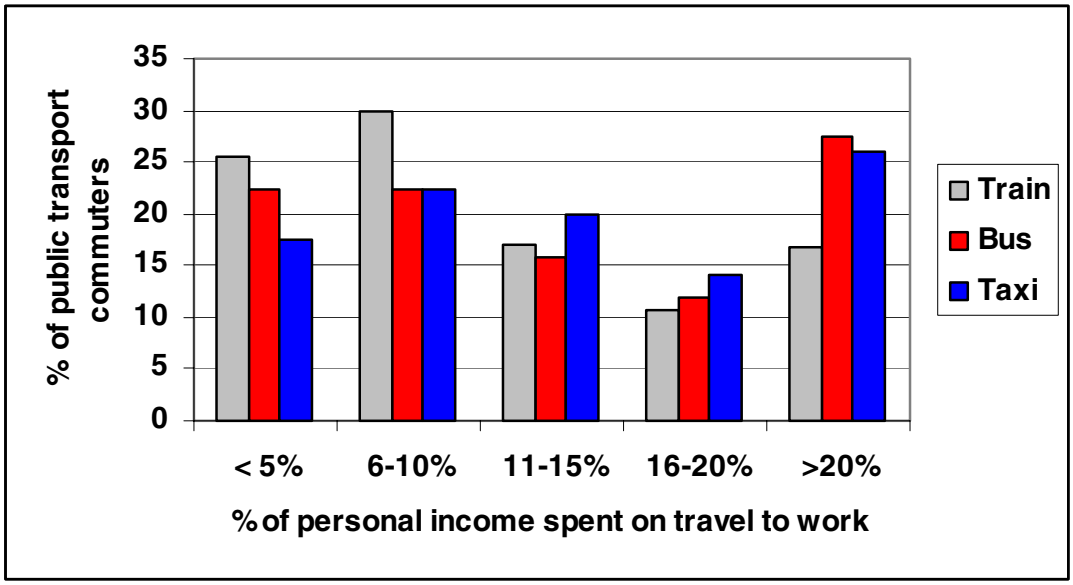
The metropolitan and urban areas are fairly similar in respect of the proportion of persons who spend ten per cent or less of their income on public transport to get to work. In both metropolitan and urban areas, around 45 per cent of public transport commuters spend ten per cent or less. This figure is lower in rural areas where only 38 per cent of commuters spend ten per cent or less of their income on travelling to work. The rural results are of interest, however, in that another 33 per cent of rural public transport commuters spend more than 20 per cent of their personal income getting to work.

The provinces with the highest incidence of hardship caused by the costs of transport are Mpumalanga, where 35 per cent of public transport commuters spend more than 20 per cent of their income travelling to work.

The Northern Cape has the largest proportion of public transport commuters spending less than ten per cent of their income on transport to work.

Figure 13.7 shows the percentage of personal income spent on transport to work by public transport commuters by travel mode.

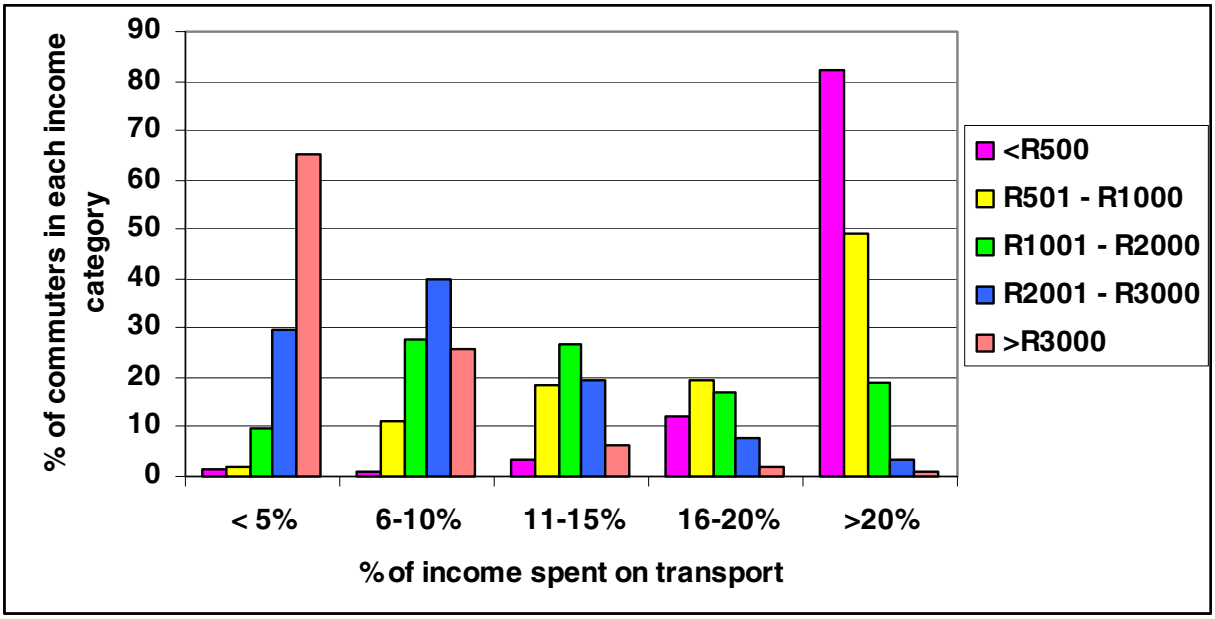
Figure 13.7: Percentage of personal income spent on transport to work by public transport commuters



It is evident from the figure that the highest costs and the largest proportion of income are expended by those workers using buses and minibus-taxis. The effects of the subsidy for train services are apparent in the relatively large numbers of train users who spend less than ten per cent of their personal income travelling to work. A fairly large proportion (26%) spends less than five per cent of their personal income travelling to work by train.

Figure 13.8 shows the percentage of personal income which is spent on transport, based on the monthly income of the transport commuters.

Figure 13.8: Percentage of personal income spent on transport by monthly income of transport commuters



It is evident from the figure that severe hardship is experienced by the lower income workers. Amongst those earning less than R500 per month, the vast majority spend more than 20 per cent of their income on travelling. Even amongst those earning between R501 and R1 000 per month, around half spend more than 20 per cent of their income on commuting. Transport costs are not a severe hardship for those persons earning R2 000 or more per month.

14. THE WAY FORWARD FOR THE NHTS

14.1 General remarks

This report has described the background, methodology and initial descriptive results of the first South African National Household Travel Survey which was undertaken in 2003.

The NHTS contains a wealth of information, which can be analysed from multiple perspectives depending on objectives of the end users. In addition to the types of analyses intended by the NHTS objectives, for example, profiling the recipients of the current public transport subsidy and identifying deserving target groups, the results can be used to:

- compare transport indicators in the metropolitan areas;
- supplement bus contract monitoring;
- validate the Current Public Transport Records; and
- a host of other investigations.

14.2 The release of the NHTS data and further research

The following process will be undertaken:

- the Minister of Transport will launch the NHTS into the public domain through the release of the initial set of descriptive results (contained in this Draft Technical Report), along with the dataset on compact disc (available after January 2005);
- the DoT will embark on a broad-ranging consultative process to discuss the initial descriptive results, shortly after the NHTS is launched by the Minister;
- within a timeframe of 6 months after the NHTS launch, the DoT should have collaborated with provinces and municipalities to finalise a further set of descriptive NHTS results for each province, municipality and transport mode; and
- the DoT shall also conduct further research on the NHTS, in line with key policy needs.

EXPLANATORY NOTES

Introduction

1. This publication contains results of the 2003 National Household Travel Survey of households and household members in the RSA which is designed to obtain information about:
   - the travel needs and habits of citizens;
   - the conditions under which they travel;

     their choices, preferences, problems and attitudes towards the facilities and services offered.

Scope of the survey

2. The survey was undertaken in 2003 and covered a sample of 52 376 dwellings throughout the RSA, selected to represent households at transport analysis zone level.

Data Files

3. There are 6 data files in the NHTS data set as follows:
   - house;
   - person;
   - working;
   - workers;
   - attitudes; and
   - general

Statistical units

4. The statistical unit for the collection of information is a household. A household is a person or group of people who live in the same dwelling unit for at least 4 nights per week and share food and resources.
   - the sample was 52 376 households; and
   - 45 556 household interviews were successfully concluded.

Disaggregation

5. The sample can be disaggregated as follows:
   - settlement types;
   - transport analysis zones;
   - municipalities; and
   - provinces.

6. Not all variables can be analysed in disaggregate form because of the number of classes applicable in particular variables. A cautionary note will be included with the data sets when they are distributed to users.

Reliability of estimates

7. Inaccuracies may occur because of imperfections in reporting and errors made with the collection and processing of the data. Inaccuracies of this kind are called non-sampling errors. Every effort has been made to reduce non-sampling errors to a minimum by designing the questionnaire carefully, undertaking pilot studies, editing the data, efficient operating procedures and data cleaning and validation.

Standard errors

8. The estimates in this publication are based on a sample drawn from statistical units in the surveyed population. As a result of the entire population not being surveyed, the published estimates, which are weighted by Stats SA according to the population census, are subject to sampling error. The most common way of quantifying such sampling error is to calculate the standard error for the published estimate or statistic.

Revisions

9. Revised estimates and figures will be published if users and respondents can provide well- motivated and statistically-validated evidence of non-sampling errors.

Related publications

10. Users may wish to refer to the following publications which are available from Stats SA:
    - Bulletin of Statistics
    - Labour Force Survey
    - S A Statistics

Data release policy

11. The Department of Transport will make the NHTS dataset available to the public.

GLOSSARY

Definition of the terms used in the National Household Travel Survey accord with everyday language usage in the RSA. For example, a small truck is called a “bakkie”, which when used to carry passengers is called a “bakkie taxi”. In some cases, there are technical reasons for the use of terms such as “main mode of travel”. Descriptions and definitions do not always accord with legal definitions. This is because colloquial language is not observant of legal niceties. An example is the legal use of seat capacity to define the difference between a bus and a minibus or between a minibus and a midibus (National Land Transport Transition Act). Because the NHTS involves laypersons, it is necessary to use terms which are understood by the “ordinary person in the street”.

Access
This term was used to describe the spatial proximity of households (homes) to transport services as defined by train stations, bus stops and taxi services.

Access time
Access time is the estimated or actual time in minutes that it would take to walk from home to a train station, bus stop or a taxi service.

Bakkie
A light delivery vehicle (LDV), which is a truck of one ton or less, is called a “bakkie” in South Africa.

Bakkie taxi
In some parts of South Africa, bakkies are used for the conveyance of passengers for reward. Bakkie taxis are fairly common in rural areas where they are used to transport passengers to the main modes of travel or to transport children to school. Bakkies often have canopies when used to transport passengers.

Bus
A bus is a road-based public transport vehicle which can carry more than about 18 passengers. Thus, any public service vehicle which is larger than a minibus-taxi is called a bus. Generally, however, in the NHTS when the term bus is used it applies to larger vehicles of 60 or more seats offering scheduled or unscheduled services. It should be noted, however, that the relatively few midibus services (35 seater vehicles) are included in the NHTS as buses or bus services.

Car
A car is a passenger motor vehicle operated by a private individual for his/her own convenience. A motor car may convey passengers (termed car passengers) but not as a commercial venture for reward. In terms of this definition the type of vehicles used included a sedan car, a station wagon, a twin-cab truck (2- or 4 by 4), a bakkie, a combi or other minibus but generally this vehicle type would be of 10 seats or less.

Commuter
According to the Concise Oxford Dictionary, a commuter "travels daily, especially by train or car to or from work in the city". This definition does not clarify the position of those who walk to work. Furthermore, in South Africa, common usage associates the word commuter with those who travel to work by public transport. For the purposes of the NHTS a "commuter" is defined as any person who regularly travels to and from work whether on foot or by motorised transport.

Destination
The end point of a trip.

Distributor mode
The mode of travel (excluding walking) used to get from the main mode of travel to the destination of the trip.

Facility
For the purposes of the NHTS a facility is associated with a function, activity or service to which passengers are attracted. Facilities included food and other shops, traditional healers and tribal authorities, municipal, welfare and post offices, police stations and medical services.

Feeder mode
The mode of travel (excluding walking) used to get from home, or the origin of a trip, to the main mode of travel.

Formal work (job)
This involves work for an employer who is registered for Value Added Tax (VAT).

Home
A home is the residential base of a household. In some circumstances individuals may have a second home (migrant labour).

Home-based trip
This is any trip where either the origin or the destination is home.

Household
A household was defined as a person or group of persons, who occupy a common dwelling unit, or part of it, for at least four days in a week on average, during the four weeks prior to the interview. The household shares food and resources. (Stats SA).

Household income
Household income was defined as the total monthly income (before deductions) of all of the persons in the household from all sources.

Holiday travel
Holiday travel was defined as a holiday trip lasting 24 hours or more, taken within the RSA during the year before the survey. It included all holiday trips taken during the course of the year.

Income
This refers to the personal salary or pay of employed individuals before deductions, expressed as a weekly, monthly or annual amount.

Informal work (job)
This applied where a worker was employed by an entity which is not registered for VAT. An example is domestic service or a street vendor.

Journey
A journey is a travel episode with a common origin and destination. It may be a round trip, for example, from home to work and back or a multiple trip episode, taking in one or more additional destinations. An example would be a journey involving trips between home, a shop, the office and a return home.

Learner
A learner is a person who regularly attends a pre-school institution, a school, a college, a technikon, a university or any other tertiary education or training institution.

Main mode of travel

The main mode of travel is the highest mode of travel used in the following hierarchy of travel modes:

1. Train
2. Bus
3. Taxi
4. Private motor car/bakkie/combi/truck/tractor/trailer
5. Other
6. Walking

If a person walks to a taxi service and is transferred to a train station where he or she catches a train to work, the MAIN MODE OF TRAVEL to work is train.

Metered taxi

A metered taxi is a sedan, a cab or minibus which contains a meter which enables the operator to charge a passenger a rate per kilometre travelled.

Metropolitan

Covers the six metropolitan municipalities defined by the Municipal Structures Act namely the entire jurisdictions of Cape Town, Ekurhuleni (East Rand), eThekwini (Durban), Nelson Mandela (Port Elizabeth), Johannesburg and Tshwane (Pretoria). The Metropolitan sub-sample included the cross-border population of the Tshwane municipality.

Migrant

A migrant was defined as a person living in a household for at least four days per week, who regarded another place in South Africa as their home and regularly made an overnight visit to that home.

Minibus-taxi

A minibus-taxi is a 10 to 16 seater vehicle which operates an unscheduled public transport service for reward. Most minibus-taxis operate to or from a rank.

Mode combinations

These were the combinations of travel modes used for trips between origins and destinations in the sequence of use. Thus, a mode combination could be taxi-train-taxi, or taxi-bus, or taxi-taxi, or even taxi-taxi-taxi. Analysis of mode combinations revealed the extent to which commuters or other travellers had to make transfers to get to their destinations.

Mode of travel
This is a generic term which describes all methods of travel.

Non-motorised transport
This is any mode of travel without a motor to provide the motive force for the movement of the vehicle.

Origin
The starting point of a trip or journey.

Population group
This is the race of individual members of the household. Thus, households were not classified on the basis of population group.

Personal income
See income.

Private transport
This refers to all forms of motorised transport which were made by individuals in travel modes other than public transport. Thus, private transport included car drivers and non-paying car passengers and motor cyclists.

Public transport
This included all transport services for which passengers made payment and included trains, buses and taxis.

Round trip
A round trip is a trip from an origin to a destination and back

Rural
A geographic classification applied by Stats SA for the population census, to differentiate the settlement type applicable to households. In this case the settlement type is associated with farming areas, traditional land and other non-urban dwelling places.

Settlement type
Three distinct settlement types were identified to analyse the travel needs of the population. These were metropolitan, urban and rural. Metropolitan areas were those designated as category A municipalities in terms of the Municipal Structures Act. The urban and rural areas were differentiated according to the Stats SA definitions (see "urban" and "rural" defined in this glossary).

Sedan taxi
A sedan taxi is an unmetered two- or four-door sedan car, which offers a public transport service to paying customers, often as a feeder or distributor service to trains, buses and minibus-taxis.

Survey day
Survey day was the day of the week on which the household interview was conducted.

Taxi
This is a generic term which applied to all unscheduled services including minibus-taxis, bakkie and sedan taxis.

Transfer
A transfer is a movement from one mode to another or from one vehicle to another, if the transfer is between one train and another or any similar movement.

Travel analysis zone (TAZ)
These are the smallest geographic units of analysis for the NHTS. In metropolitan municipalities there are between 10 and 20 TAZ. In District Municipalities, the constituent Local Municipal boundaries were used to define the TAZ. Thus every local municipality in the RSA forms a TAZ. Where there are large population concentrations such as in Mangaung (Bloemfontein) the local municipality was divided into between 3 and 5 TAZs.

Travel day
All household members were questioned about their trips for all purposes on a specific day which is referred to as "travel day". The travel day was usually the day before the survey day, except when the latter was a Sunday or Monday in which case travel day would be the most recent weekday (Friday). Accordingly, for the sample as a whole travel days were weekdays (Monday to Friday).

Travel time
This is the time between departure from home and arrival at the destination, in other words the door-to-door travel time.

Trip
A trip is a one-way movement from an origin to a destination, to fulfil a purpose or undertake an activity. An example would be a trip from home (origin) to school (destination) in order to be educated. Such a trip can be classified as an education trip.

Trip purpose
For the purpose of the NHTS, trip purposes were only ascribed to non-home activities. The purposes used in the survey were work, education, shopping, looking for work, visiting medical and welfare services, a combination of sport, recreation and entertainment which were classified as recreational, church and visiting.

Urban
A geographic classification applied by Stats SA for the population census, to differentiate the settlement type applicable to households. In this case the settlement type is associated with built-up areas, containing relatively dense human settlements which have engineering and community services which are maintained by a city, town or village administration.

Worker
In the case of the NHTS, this term applies to any person who works. No distinction is made between occupational categories or classes.

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APPENDIX 1

INTERNATIONAL SURVEYS CONSULTED

(refer to Bibliography on Page 144)

1. Australia

The New South Wales Household Travel Survey, covering the Greater Sydney Metropolitan Region, was conducted in three annual waves; June 1997-June 1998, June 1998 - June 1999 and June 1999 - June 2000. It was a continuous survey, over the full calendar year, of 3 500 households (about 9 000 individuals, including children of all ages) selected annually on a probability basis. Respondents were notified by mail prior to the survey. Data were collected through a 24-hour travel diary in a face-to-face interview. The response rate was 72 per cent. In the analysis, data from the most recent three years was pooled, and weighted to represent the latest population estimates. This minimised the influence of sampling variability from one wave to the next and so maximised the reliability of the data.

The Perth and Regions Travel Survey ran for four years continuously covering every day of the year. The sample was selected on a probability basis and data was collected for all household members of five years and older. A one-day self-completion diary was used.

2. Britain

Since 1988 the UK National Travel Survey has been conducted continuously over the whole of every year, so that weekly, monthly and seasonal variations in travel patterns are fully covered. A sample of 5 796 households was drawn randomly each year, stratified by region. Most analyses are carried out on three years' data combined, the total sample representing 0.072 per cent of the 24 million addresses available for possible selection.

Data were collected in two ways:

(i) face-to-face interviews which, since 1994, made use of computer-assisted personal interviewing (CAPI); and

(ii) seven-day travel diary-keeping, together with a chart to enter fuel and mileage details for each vehicle owned and for long distance travel, where appropriate.

An initial placement call was set up to conduct the interview and to explain the diary, which each member of the household had to complete. This was followed by a reminder call just before the specified travel week, a mid-week checking call, and a subsequent pick-up call. The latest available reported survey (2001) had a response rate of 65 per cent.

The questionnaire covered travel patterns (purposes, destinations, modes, frequencies, travel times, ticketing), accessibility to facilities and transport, vehicle

ownership details, transport difficulties experienced, satisfaction levels with transport services and demographic information. All trips over 50 yards in distance were included and, to ease respondent burden, walks of under a mile (but over 50 yards) were only included on the seventh day.

Consultation meetings with users were conducted annually to assess whether any changes were needed to the upcoming survey.

3. Belgium

Belgium's National Travel Survey used a mixture of postal and telephonic one-day diaries to collect data on household mobility, including modal choices, activity patterns, temporal organisation of trips, associated purposes, distances and travel times. The survey lasted for 365 consecutive days.

4. Canada

The Canadian Travel Survey (CTS) is conducted annually as a supplement to the Labour Force Survey. It uses a probability sample of about 180 000 (0.6 % of the population) and includes all adults (15 years or older). It is conducted throughout the year and covers overnight trips, or trips of more than 80 kilometres, made during the previous month. Variables include mode, origin, destination, distance, purpose and various activity and spending indicators.

In 1996 the Passenger Travel Survey was added to the CTS. This comprised a standard one-day activity questionnaire completed through computer assisted telephone interviews (CATI).

5. Finland

National Passenger Transport Surveys are conducted every six years in Finland. The 1998-1999 National Passenger Transport Survey (the most recent) covered 18 250 individuals (0.38% of the population) aged six and over, selected on a probability basis.

Contrary to earlier surveys, in which questionnaires were sent by mail, the latest survey was conducted by means of a telephone-interview. This was regarded as a more accurate method of collecting detailed data on the different stages of journeys, especially trips to gain access to public transport facilities and trip chains. Non-vehicular traffic and the mobility of children and the elderly were also covered more extensively than before.

Considerable effort was expended on trying to contact every selected respondent. If a respondent could not be reached on the survey day, contact was attempted on the subsequent seven successive days, five times per day.

6. Germany

The basic survey tool, the New Kondiv Design (NKD), is a one-day (favoured over earlier 2-3 day versions) self-administered, activity-based mail-back diary, using both open-ended and closed questioning techniques. It is kept as user-friendly and as simple as possible in order to encourage response. A response rate of 70 per cent was obtained through advance postal notice of the survey and, after mailing of the diary, three telephone calls and two postal reminders being sent to encourage response. Respondents could elect to respond either through CATI or the mail mode. It was found preferable to access attitudinal data through an in-depth personal interview.

The most recent survey (2000) obtained data on all children whereas previous surveys had been limited to children of six years or older (1989) and to those of ten years or older (1976 and 1982). The data on children under six years were clearly recognised as important, and were obtained from telephone interviews with parents.

Probability sampling was used for the survey with no quotas or proxies permitted. The data collected included accessibility to transport, modes used, purposes, distances, travel times, vehicle ownership and usage, odometer readings and demographics. Validation of the data comprised corrections for the non-response effect and non-reported trips, a socio-demographic weighting and correction of seasonal effects.

Further interesting aspects were:

(i) the use of questions specifically asking whether the respondent “stopped on the way” in order to identify trips more clearly. This resulted in 0.5 trips more per person; and

(ii) the addition of a special survey of non-respondents. This involved a combination of written, telephone and verbal approaches and, though clearly time-consuming and expensive, improved the response rate to 90% of the sample.

7. Netherlands

Primarily in order to increase response rates (but also to reduce costs, improve the quality of data and create a more flexible design), the Netherlands has improved their

transport survey methodology through adapting the NKD to their circumstances. Significant changes in their survey procedure over the years include:

(i) face-to-face household interviews were replaced in 1985 by CATI and one-day diaries for each member of the household, sent by mail. This was done mainly to reduce survey costs. If no response was forthcoming from the household, two recalls with new diaries were made;

(ii) because of declining accessibility (more unlisted telephones), increasing resistance to participating in surveys, and the over-representation of the elderly and non-mobile in telephone surveys, CATI was replaced by NKD in 1998;

(iii) a self-completion, one-day, out-of-home activity-based, written questionnaire was provided for each member of the household six years of age and older. This type of mail-back questionnaire was found to be favoured by respondents;

(iv) the survey is continuous, running every day of the year;

(v) subsequent "satellite" surveys are conducted for specific purposes (e.g. children less than six years old, or public transport users). These are usually telephone surveys;

(vi) an introductory letter precedes the mailed questionnaire, which is followed in turn by up to four telephone or mail recalls. These have been found to greatly improve response rates;

(vii) the questionnaire is as simple, clear and user-friendly as possible, avoiding definitions and questions which apply to only a few respondents; and

(viii) apart from pre-coded response categories, an open space allows respondents to answer each question in their own words. This reduces the burden on the respondent to try to fit answers into restricted categories and, in turn, provides responses which more accurately reflect the individual's travel behaviour and attitudes.

8. Switzerland

Swiss travel surveys, undertaken every five years, adopted the Kondiv design in 1984, replacing the earlier (and far more expensive) time-budget surveys, which used written questionnaires among all household members above 14 years of age and required two face-to-face interviews. The 1989 survey covered household members of ten years or older.

In 1994 the methodology was changed, still using the Kondiv design but with CATI. It was found that this approach provided a higher response rate, a higher mobility rate, and better data quality. Children of six years or older were included in the survey. The higher mobility rate could be due to a better recording of very short trips, or to

the many telephone calls made by interviewers (if necessary, more than 20 calls) to reach highly mobile individuals.

Another important change was that the concept of a “trip” was divided into “stages”, each of which involved only one transport mode. It was found that the concept of a “stage” was better handled by CATI than through a self-completion questionnaire. This was said to be because interviewers had greater control over the correctness of responses. They could steer the process on the basis of previous responses, and could ask for details and clarity as the interview progressed.

9. Uganda

A regional survey of rural mobility in Uganda, sponsored by the World Bank, revealed adaptations sometimes found necessary in transport surveys in Africa, notably:

(i) interviews were conducted with groups rather than individuals. These included district officials, teachers, health officers, church leaders and women’s groups. Individuals were often reluctant to participate in surveys, especially if illiterate, and expected their representatives to speak on their behalf;

(ii) the questionnaire was designed as a checklist for discussions rather than as a structured interview; and

(iii) the large number of ethnic groups with very different languages meant that particular attention had to be paid to the language of the interview. A common language, such as Swahili, could sometimes be used, but it was necessary to ascertain at the outset which was the preferred language of the group, and to ensure that at least one of the interviewing team could speak the preferred local language.

10. USA

Travel surveys are conducted in the USA every five to six years, the latest being the USA National Household Travel Survey in 2001. The sample for the 2001 survey was a list-assisted random digit dialling telephone number sample of 26 038 households (60 282 individuals, or about 0.02 % of the population). Data were collected in three phases:

(i) a household interview to collect demographics and vehicle ownership data;

(ii) a personal interview, using CATI, collected daily trip data in a one-day travel diary from each household member 16 years or older, with adult proxies for those under 16. Proxies were also permitted for those with some impairment, those unwilling to participate, or those absent for the whole six-day recall period after the assigned diary day. Daily trip data included modes, purposes and trip lengths, but not costs of travel. The designated

travel day started at 04h00 and ended at 03h59 the next day. Additional data were collected on long-distance trips of 50 miles or more made during a four-week travel period;

(iii) for the first time, travel data were collected for household members under five years of age. Previous surveys had included only those aged five or older; and

(iv) odometer readings were collected twice for each vehicle; once around the time of the personal interviews and again two months later.

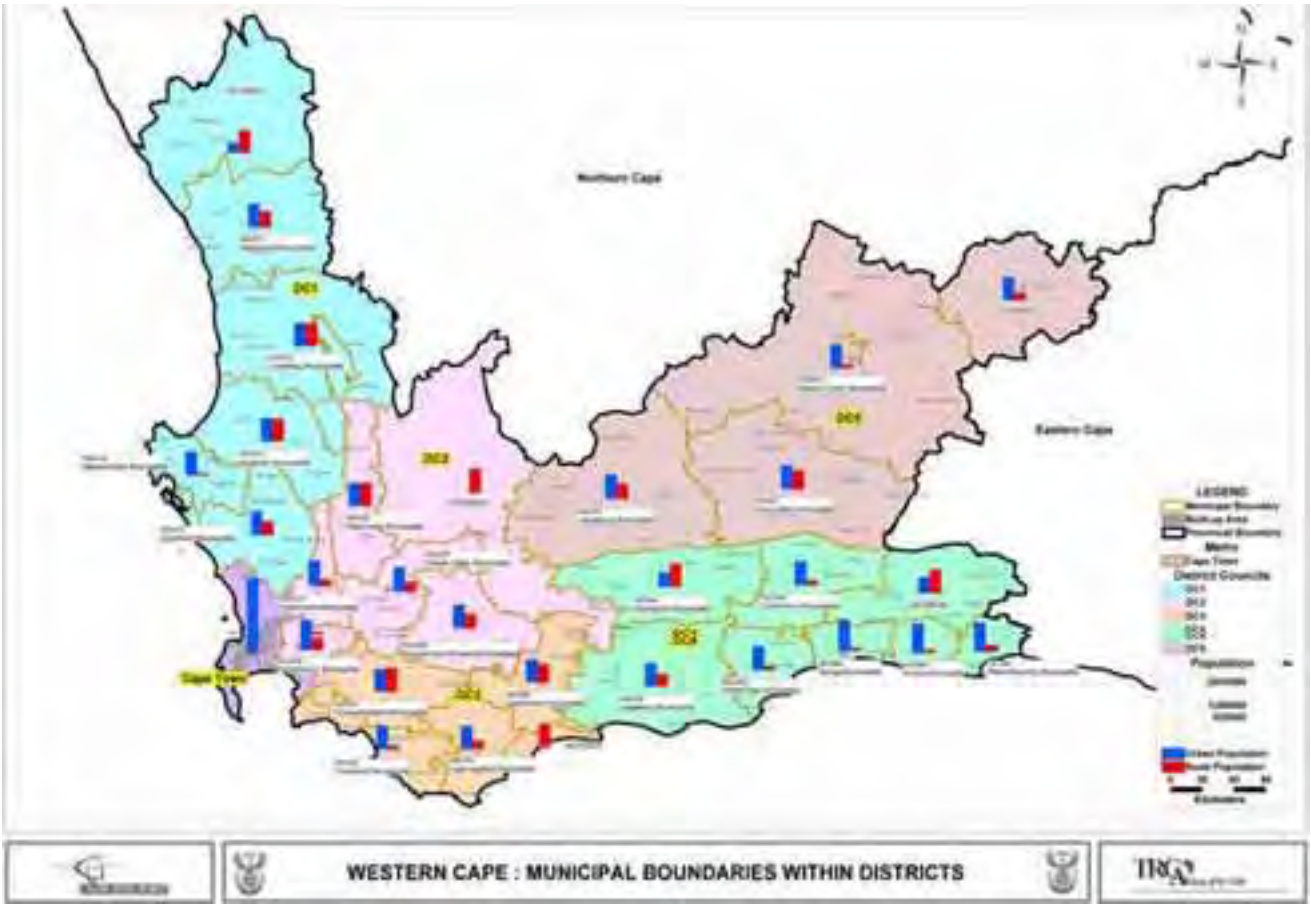
Although cash incentives were used with both the pre-interview letter ($5) and the travel diary mailing ($2), the response rate was only 41 per cent.

APPENDIX 2

TABLES AND MAPS PROVIDED TO THE PROVINCES FOR DETERMINING TAZs

Western Cape Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population Urban	Rural	Total	Analysis Zones
Western Cape		**Cape Town**	**Cape Town**	**City of Cape Town**	**2 473 220**	**33 837**	**2 507 057**	**20**
Western Cape	DC1	WC011	Vredendal	Matzikama Municipality	22 346	15 531	37 877	
Western Cape	DC1	WC012	Citrusdal	Cederberg Municipality	15 104	15 023	30 127	
Western Cape	DC1	WC013	Velddrif	Bergrivier Municipality	18 072	17 623	35 695	
Western Cape	DC1	WC014	West Coast Peninsula	Saldanha Bay Municipality	49 621	4 681	54 302	
Western Cape	DC1	WC015	Malmesbury	Swartland Municipality	40 024	23 241	63 265	
Western Cape	DC1	WCDMA01	West Coast DC		1 374	3 101	4 475	
Total DC1					**146 541**	**79 200**	**225 741**	**5**
Western Cape	DC2	WC022	Ceres	Witzenberg Municipality	34 642	35 148	69 790	
Western Cape	DC2	WC023	Paarl	Drakenstein Municipality	140 043	35 522	175 565	
Western Cape	DC2	WC024	Stellenbosch	Stellenbosch Municipality	63 195	32 448	95 643	
Western Cape	DC2	WC025	Worcester	Breede River Municipality	87 388	35 455	122 843	
Western Cape	DC2	WC026	Robertson	Breede River/Winelands Municipality	38 976	23 713	62 689	
Western Cape	DC2	WCDMA02	Brede River DC		0	6 293	6 293	
Total DC2					**364 244**	**168 579**	**532 823**	**6**
Western Cape	DC3	WC031	Caledon	Theewaterskloof Municipality	34 759	36 651	71 410	
Western Cape	DC3	WC032	Greater Hermanus	Overstrand Municipality	30 899	5 430	36 329	
Western Cape	DC3	WC033	Bredasdorp	Cape Agulhas Municipality	15 630	5 733	21 363	
Western Cape	DC3	WC034	Barrydale/Swellendam	Swellendam Municipality	12 576	10 029	22 605	
Western Cape	DC3	WCDMA03	Overberg DC		0	184	184	
Total DC3					**93 864**	**58 027**	**151 891**	**2**
Western Cape	DC4	WC041	Ladismith	Kannaland Municipality	7 710	12 351	20 061	
Western Cape	DC4	WC042	Heidelberg/Riversdale	Langeberg Municipality	24 309	12 681	36 990	
Western Cape	DC4	WC043	Mossel Bay	Mossel Bay Municipality	49 172	8 720	57 892	
Western Cape	DC4	WC044	George	George Municipality	93 431	10 006	103 437	
Western Cape	DC4	WC045	Oudtshoorn	Oudtshoorn Municipality	60 943	12 983	73 926	
Western Cape	DC4	WC047	Greater Plettenberg Bay	Plettenberg Bay Municipality	14 148	3 974	18 122	
Western Cape	DC4	WC048	Knysna	Knysna Municipality	37 003	5 560	42 563	
Western Cape	DC4	WCDMA04	South Cape DC		4 861	7 116	11 977	
Total DC4					**291 577**	**73 391**	**364 968**	**4**
Western Cape	DC5	WC051	Laingsburg	Laingsburg Municipality	3 536	2 253	5 789	
Western Cape	DC5	WC052	Prins Albert	Prince Albert Municipality	5 062	3 849	8 911	
Western Cape	DC5	WC053	Beaufort West	Beaufort West Muncipality	28 016	4 922	32 938	
Western Cape	DC5	WCDMA05	Central Karoo DC		4 954	1 609	6 563	
Total DC5					**41 568**	**12 633**	**54 201**	**1**
					3 411 014	**425 667**	**3 836 681**	**38**


WESTERN CAPE : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

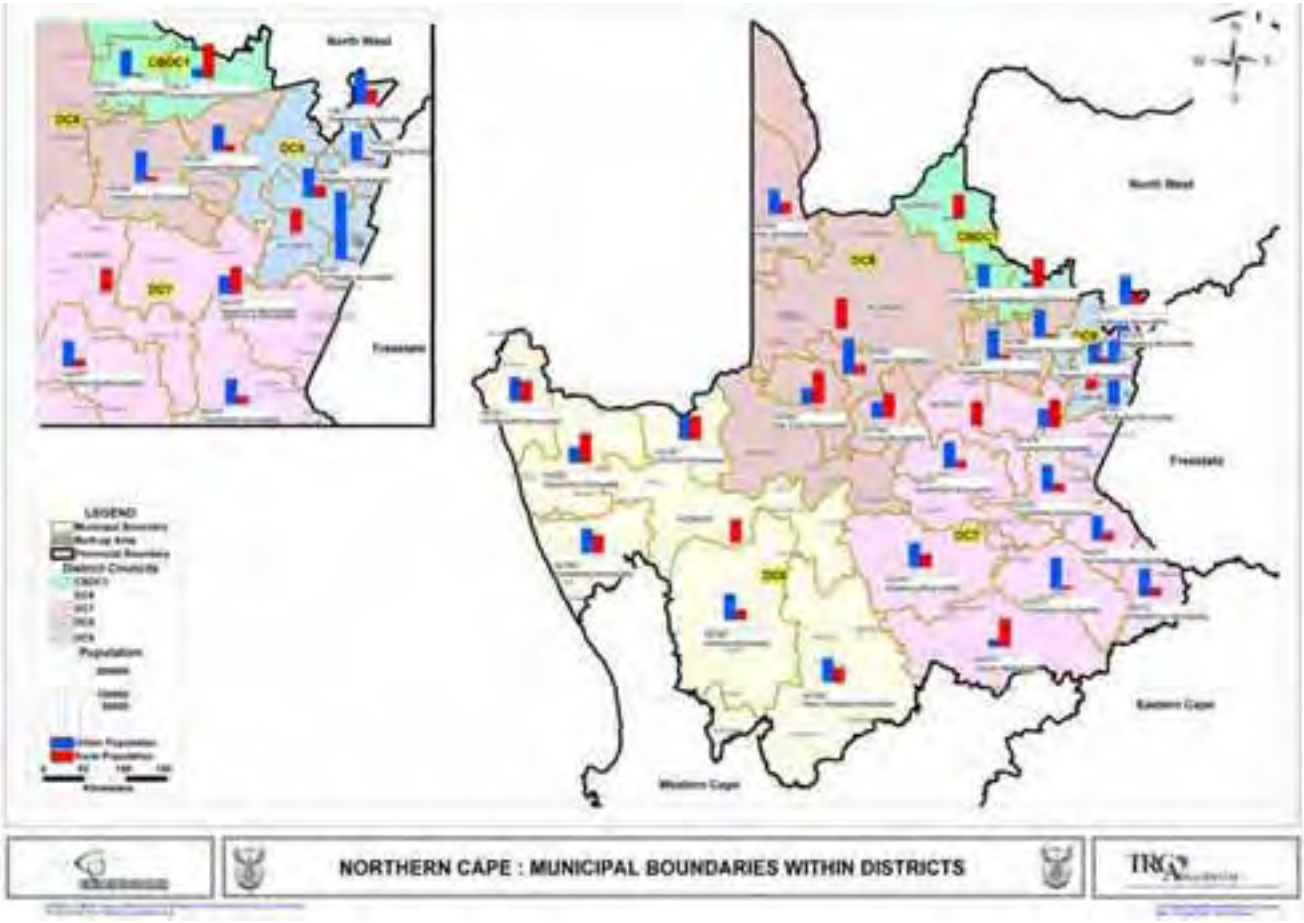
Eastern Cape Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones
					Urban	Rural	Total	
Eastern Cape		**Port Elizabeth**	**Port Elizabeth**	**Nelson Mandela**	**922 324**	**22 811**	**945 135**	**6**
Eastern Cape	DC10	EC101	Graaff-Reinet	Camdeboo (EC101)	38 524	3 584	42 108	
Eastern Cape	DC10	EC102	Somerset East	Blue Crane Route	24 657	9 024	33 681	
Eastern Cape	DC10	EC103	Jansenville	Ikwezi	7 598	2 481	10 079	
Eastern Cape	DC10	EC104	Grahamstown	Makana	64 754	10 380	75 134	
Eastern Cape	DC10	EC105	Port Alfred	Ndlambe	36 021	11 080	47 101	
Eastern Cape	DC10	EC106	Kirkwood	Sunday's River Valley	21 574	19 868	41 442	
Eastern Cape	DC10	EC107	Willowmore	Baviaans	10 441	4 314	14 755	
Eastern Cape	DC10	EC108	Humansdorp	Kouga	46 812	14 462	61 274	
Eastern Cape	DC10	EC109	Kareedouw	Kou-Kamma	7 558	19 456	27 014	
Eastern Cape	DC10	ECDMA10	Aberdeen Plain		899	5 375	6 274	
Total DC10					**258 838**	**100 024**	**358 862**	**5**
Eastern Cape	DC12	EC121	Idutywa	Mbhashe	5 229	233 021	238 250	
Eastern Cape	DC12	EC122	Butterworth	Mnquma	38 408	244 834	283 242	
Eastern Cape	DC12	EC123	Komga	Great Kei	7 644	31 638	39 282	
Eastern Cape	DC12	EC124	Stutterheim	Amahlati	22 215	113 165	135 380	
Eastern Cape	DC12	EC125	East London	Buffalo City	495 542	180 495	676 037	
Eastern Cape	DC12	EC126	Peddie	Ngqushwa	4 777	88 347	93 124	
Eastern Cape	DC12	EC127	Alice	Nkonkobe	35 548	104 189	139 737	
Eastern Cape	DC12	EC128	Adelaide	Nxuba	20 101	4 453	24 554	
Total DC12					**629 464**	**1 000 142**	**1 629 606**	**14**
Eastern Cape	DC13	EC131	Cradock	Inxuba Yethemba	44 874	10 666	55 540	
Eastern Cape	DC13	EC132	Tarkastad	Tsolwana	8 228	26 186	34 414	
Eastern Cape	DC13	EC133	Molteno	Inkwanca	15 262	3 587	18 849	
Eastern Cape	DC13	EC134	Queenstown	Lukanji	119 981	54 739	174 720	
Eastern Cape	DC13	EC135	Cofimvaba	Intsika Yethu	3 909	198 623	202 532	
Eastern Cape	DC13	EC136	Lady Frere	Emalahleni	19 855	101 758	121 613	
Eastern Cape	DC13	EC137	Engcobo	Engcobo	4 215	140 060	144 275	
Eastern Cape	DC13	EC138	Elliot	Sakhisizwe	19 828	29 177	49 005	
Eastern Cape	DC13	ECDMA13	Mount Zebra NP		0	148	148	
Total DC13					**236 152**	**564 944**	**801 096**	**8**
Eastern Cape	DC14	EC141	Mount Fletcher	Elundini	17 720	114 575	132 295	
Eastern Cape	DC14	EC142	Barkly East	Senqu	13 468	114 865	128 333	
Eastern Cape	DC14	EC143	Aliwal North	Maletswai	25 594	6 091	31 685	
Eastern Cape	DC14	EC144	Burgersdorp	Gariep	22 200	6 770	28 970	
Total DC14					**78 982**	**242 301**	**321 283**	**3**
Eastern Cape	DC15	EC151	Bizana	Mbizana	1 809	211 501	213 310	
Eastern Cape	DC15	EC152	Ntabankulu	Ntabankulu	1 627	114 083	115 710	
Eastern Cape	DC15	EC153	Flagstaff	Ingquza	5 183	216 044	221 227	
Eastern Cape	DC15	EC154	Port St. Johns	Port St. Johns (EC154)	3 532	125 007	128 539	
Eastern Cape	DC15	EC155	Libode	Nyandeni	2 975	240 636	243 611	
Eastern Cape	DC15	EC156	Qumbu	Mhlontlo	7 794	176 963	184 757	
Eastern Cape	DC15	EC157	Umtata	King Sabata Dalindyebo	78 800	293 915	372 715	
Total DC15					**101 720**	**1 378 149**	**1 479 869**	**12**
Eastern Cape	DC44	EC05b1	Umzinkulu	Umzinkulu (EC05b1)	7 999	149 244	157 243	
Eastern Cape	DC44	EC05b2	Mount Ayliff	Umzimvubu (EC05b2)	8 713	357 683	366 396	
Total DC44					**16 712**	**506 927**	**523 639**	**5**
Total Province					**2 244 192**	**3 815 298**	**6 059 490**	**53**


EASTERN CAPE : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

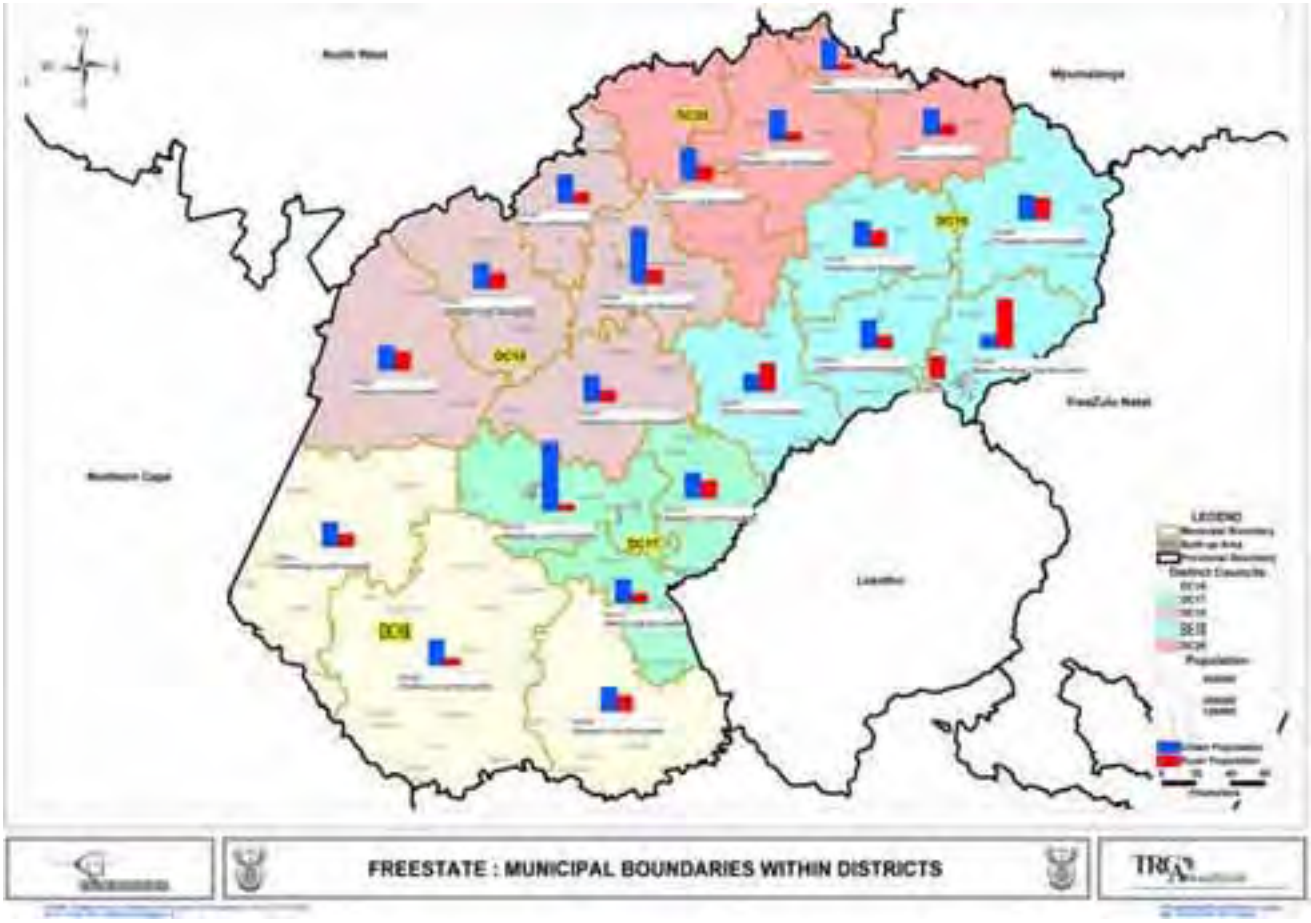
Northern Cape Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population Urban	Rural	Total	Analysis Zones
Northern Cape	CBDC1	CBLC1	Kuruman	Ga-Segonyana Municipality	9 811	3 301	13 112	
Northern Cape	CBDC1	NC01B1	Kathu	Gamagara Municipality	13 297	1 397	14 694	
Northern Cape	CBDC1	NCDMACB1	Kalahari CBDC		385	7 560	7 945	
Total CBDC1					**23 493**	**12 258**	**35 751**	**1**
Northern Cape	DC6	NC061	Port Nolloth	Richtersveld Municipality	6 176	5 260	11 436	
Northern Cape	DC6	NC062	Springbok	Nama Khoi Municipality	15 239	27 958	43 197	
Northern Cape	DC6	NC064	Garies	Kamiesberg Municipality	6 199	4 558	10 757	
Northern Cape	DC6	NC065	Calvinia	Hantam Municipality	12 962	4 981	17 943	
Northern Cape	DC6	NC066	Fraserburg	Karoo Hoogland Municipality	7 409	4 488	11 897	
Northern Cape	DC6	NC067	Pofadder	KHâl-MA Municipality	4 530	4 573	9 103	
Northern Cape	DC6	NCDMA06	Namaqualand		0	1 469	1 469	
Total DC6					**52 515**	**53 287**	**105 802**	**1**
Northern Cape	DC7	NC071	Victoria West	Ubuntu Municipality	4 051	14 463	18 514	
Northern Cape	DC7	NC072	Colesberg	Umsobomvu Municipality	18 963	5 756	24 719	
Northern Cape	DC7	NC073	De Aar	Emthanjeni Municipality	36 018	3 967	39 985	
Northern Cape	DC7	NC064	Carnavon	Kareeberg Municipality	7 189	3 938	11 127	
Northern Cape	DC7	NC075	Phillipstown	Renosterberg Municipality	6 920	2 326	9 246	
Northern Cape	DC7	NC076	Hopetown	Thembelihle Municipality	9 687	3 032	12 719	
Northern Cape	DC7	NC077	Prieska	Siyathemba Municipality	14 593	4 192	18 785	
Northern Cape	DC7	NC078	Griekwastad	Siyancuma Municipality	12 616	18 771	31 387	
Northern Cape	DC7	NCDMA07	Bo Karoo		6	4 532	4 538	
Total DC7					**110 043**	**60 977**	**171 020**	**2**
Northern Cape	DC8	NC081	Mier	Mier Municipality	4 063	1 890	5 953	
Northern Cape	DC8	NC082	Keimoes	Kai !Garib Municipality	17 148	35 483	52 631	
Northern Cape	DC8	NC083	Upington	Gariep Municipality	55 839	14 399	70 238	
Northern Cape	DC8	NC084	Groblershoop	!Kheis Municipality	5 175	8 109	13 284	
Northern Cape	DC8	NC085	Postmasburg	Tsantsabane Municipality	26 362	3 793	30 155	
Northern Cape	DC8	NC086	Danielskuil	Kgatelopele Municipality	13 202	3 171	16 373	
Northern Cape	DC8	NCDMA08	Benede		0	8 484	8 484	
Total DC8					**121 789**	**75 329**	**197 118**	**2**
Northern Cape	DC9	CBLC7	Hartswater	Phokwane Municipality	20 398	16 821	37 219	
Northern Cape	DC9	NC091	Kimberley	Sol Plaatjie Municipality	196 605	4 640	201 245	
Northern Cape	DC9	NC092	Barkley West	Dikgatlong Municipality	25 716	10 135	35 851	
Northern Cape	DC9	NC093	Warrenton	Magareng Municipality	20 176	1 696	21 872	
Northern Cape	DC9	NCDMA09	Diamondfields		0	4 503	4 503	
Total DC9					**262 895**	**37 795**	**300 690**	**3**
Total Province					**570 735**	**239 646**	**810 381**	**9**


North West
Freestate
Western Cape
Eastern Cape
LEGEND
NORTHERN CAPE : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

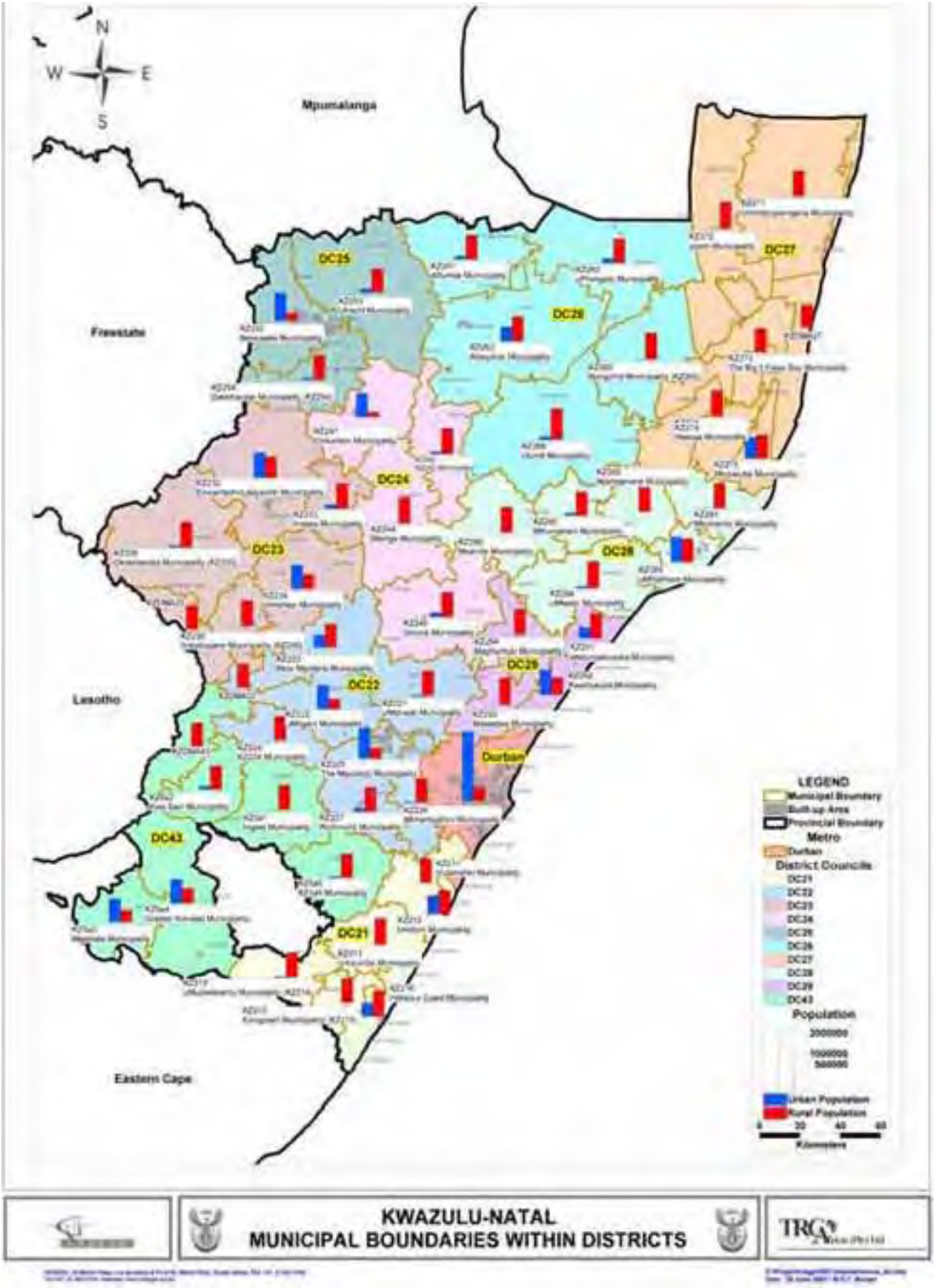
Free State Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones
					Urban	Rural	Total	
Free State	DC16	FS161	Koffiefontein	Letsemeng LM	23 027	12 121	35 148	1
Free State	DC16	FS162	Trompsburg	Kopanong LM	38 745	11 070	49 815	1
Free State	DC16	FS163	Zastron	Mohokare LM	21 776	13 999	35 775	1
Total DC16					**83 548**	**37 190**	**120 738**	**3**
Free State	DC17	FS171	Dewetsdorp	Naledi LM	17 258	7 337	24 595	1
Free State	DC17	FS172	Bloemfontein	Mangaung LM	540 933	55 078	596 011	5
Free State	DC17	FS173	Ladybrand	Mantsopa LM	28 609	20 291	48 900	1
Total DC17					**586 800**	**82 706**	**669 506**	**7**
Free State	DC18	FS181	Theunissen	Masilonyana LM	46 660	20 112	66 772	1
Free State	DC18	FS182	Dealesville	Tokologo LM	15 000	11 553	26 553	1
Free State	DC18	FS183	Hoopstad	Tswelopele LM	31 480	19 664	51 144	1
Free State	DC18	FS184	Welkom	Matjhabeng LM	378 784	94 401	473 185	4
Free State	DC18	FS185	Bothaville	Nala LM	58 844	21 918	80 762	1
Total DC18					**530 768**	**167 648**	**698 416**	**8**
Free State	DC19	FS191	Senekal	Setsoto LM	41 007	65 729	106 736	1
Free State	DC19	FS192	Bethlehem	Dihlabeng LM	71 125	32 882	104 007	1
Free State	DC19	FS193	Reitz	Nketoana LM	38 607	24 955	63 562	1
Free State	DC19	FS194	Qwa Qwa	Maluti a Phofung LM	78 620	273 070	351 690	3
Free State	DC19	FS195	Vrede	Phumelela LM	23 812	20 891	44 703	1
Free State	DC19	FSDMA19	Golden Gate NP		0	621	621	0
Total DC19					**253 171**	**418 148**	**671 319**	**7**
Free State	DC20	FS201	Kroonstad	Moqhaka LM	114 316	52 003	166 319	1
Free State	DC20	FS203	Parys	Ngwathe LM	92 867	26 064	118 931	1
Free State	DC20	FS204	Sasolburg	Metsimaholo LM	88 141	18 087	106 228	1
Free State	DC20	FS205	Frankfort	Mafube LM	36 968	16 034	53 002	1
Total DC20					**332 292**	**112 188**	**444 480**	**4**
Total Province					**1 786 579**	**817 880**	**2 604 459**	**29**


FREESTATE : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

KwaZulu-Natal Province

Province	District Council	Cat B	Common Name	Proclaimed Name	Population Urban	Rural	Total	Analysis Zones
KwaZulu Natal		**Durban**	**Durban Metro**	**Ethekwini Municipality**	**2 222 878**	**445 431**	**2 668 309**	**20**
KwaZulu Natal	DC21	KZ211	Dududu	Vulamehlo Municipality	0	88 741	88 741	
KwaZulu Natal	DC21	KZ212	Scottburgh	Umdoni Municipality	22 451	29 006	51 457	
KwaZulu Natal	DC21	KZ213	Uzumbe	Umzumbe Municipality	0	149 589	149 589	
KwaZulu Natal	DC21	KZ214	Harding	uMuziwabantu Municipality (KZ214)	3 392	69 526	72 918	
KwaZulu Natal	DC21	KZ215	Izingolweni	Ezingoleni Municipality (KZ215)	0	42 309	42 309	
KwaZulu Natal	DC21	KZ216	Port Shepstone	Hibiscus Coast Municipality	63 126	117 593	180 719	
Total DC21					**88 969**	**496 764**	**585 733**	**8**
KwaZulu Natal	DC22	KZ221	Wartburg	uMshwati Municipality	4 806	101 033	105 839	
KwaZulu Natal	DC22	KZ222	Howick	uMengeni Municipality	46 970	19 540	66 510	
KwaZulu Natal	DC22	KZ223	Mooirivier	Mooi Mpofana Muncipality	8 141	15 449	23 590	
KwaZulu Natal	DC22	KZ224	Impendle	KZ224 Municipality	0	31 126	31 126	
KwaZulu Natal	DC22	KZ225	Pietermaritzburg	The Msunduzi Municipality	378 734	124 164	502 898	
KwaZulu Natal	DC22	KZ226	Camperdown	Mkhambathini Municipality	1 353	40 830	42 183	
KwaZulu Natal	DC22	KZ227	Richmond	Richmond Municipality	7 290	51 010	58 300	
KwaZulu Natal	DC22	KZDMA22	Highmoor/Kamberg Park		0	718	718	
Total DC22					**447 294**	**383 870**	**831 164**	**8**
KwaZulu Natal	DC23	KZ232	Ladysmith	Emnambithi/Ladysmith Municipality	91 365	76 948	168 313	
KwaZulu Natal	DC23	KZ233	Waaihoek	Indaka Municipality	11 496	73 981	85 477	
KwaZulu Natal	DC23	KZ234	Estcourt	Umtshezi Municipality	28 591	17 531	46 122	
KwaZulu Natal	DC23	KZ235	Bergville	Okhahlamba Municipality (KZ235)	6 278	94 628	100 906	
KwaZulu Natal	DC23	KZ236	Loskop	Imbabazane Municipality (KZ236)	0	94 495	94 495	
KwaZulu Natal	DC23	KZDMA23	Giants Castle		0	569	569	
Total DC23					**137 730**	**358 152**	**495 882**	**5**
KwaZulu Natal	DC24	KZ241	Dundee	Endumeni Municipality	35 627	7 401	43 028	
KwaZulu Natal	DC24	KZ242	Nqutu	KZ242 Municipality	8 407	108 000	116 407	
KwaZulu Natal	DC24	KZ244	Pomeroy	Msinga Municipality	418	139 233	139 651	
KwaZulu Natal	DC24	KZ245	Greytown	Umvoti Municipality	12 071	69 592	81 663	
Total DC24					**56 523**	**324 226**	**380 749**	**4**
KwaZulu Natal	DC25	KZ252	Newcastle	Newcastle Municipality	213 965	58 943	272 908	
KwaZulu Natal	DC25	KZ253	Utrecht	Utrecht Municipality	2 866	19 192	22 058	
KwaZulu Natal	DC25	KZ254	Durnacol	Dannhauser Municipality (KZ254)	7 035	84 033	91 068	
Total DC25					**223 866**	**162 168**	**386 034**	**4**
KwaZulu Natal	DC26	KZ261	Paulpietersburg	eDumbe Municipality	7 086	53 603	60 689	
KwaZulu Natal	DC26	KZ262	Pongola	uPhongolo Municipality	13 435	71 272	84 707	
KwaZulu Natal	DC26	KZ263	Vryheid	Abaqulusi Municipality	56 247	97 237	153 484	
KwaZulu Natal	DC26	KZ265	Nongoma	Nongoma Municipality (KZ265)	1 824	155 500	157 324	
KwaZulu Natal	DC26	KZ266	Ulundi	Ulundi Municipality	15 953	146 805	162 758	
Total DC26					**94 545**	**524 417**	**618 962**	**6**
KwaZulu Natal	DC27	KZ271	Emangusi	Umhlabuyalingana Municipality	484	99 101	99 585	
KwaZulu Natal	DC27	KZ272	Mkuze	Jozini Municipality	2 645	126 027	128 672	
KwaZulu Natal	DC27	KZ273	Hluhluwe	The Big 5 False Bay Municipality	760	21 753	22 513	
KwaZulu Natal	DC27	KZ274	Somkele	Hlabisa Municipality	1 871	138 670	140 541	
KwaZulu Natal	DC27	KZ275	Mtubatuba	Mtubatuba Municipality	10 076	11 113	21 189	
KwaZulu Natal	DC27	KZDMA27	St Lucia Park		0	10 271	10 271	
Total DC27					**15 836**	**406 935**	**422 771**	**4**
KwaZulu Natal	DC28	KZ281	KwaMbonambi	Mbonambi Municipality	1 480	83 869	85 349	
KwaZulu Natal	DC28	KZ282	Richards Bay	uMhlathuze Municipality	92 525	85 844	178 369	
KwaZulu Natal	DC28	KZ283	Ntambanana	Ntambanana Municipality	0	61 565	61 565	
KwaZulu Natal	DC28	KZ284	Eshowe	uMlalazi Municipality	14 471	184 265	198 736	
KwaZulu Natal	DC28	KZ285	Melmoth	Mthonjaneni Municipality	3 151	28 316	31 467	
KwaZulu Natal	DC28	KZ286	Nkandla	Nkandla Municipality	0	108 152	108 152	
Total DC28					**111 627**	**552 011**	**663 638**	**6**
KwaZulu Natal	DC29	KZ291	Mandeni	eNdondakusuka Municipality	29 607	70 190	99 797	
KwaZulu Natal	DC29	KZ292	Stanger	KwaDukuza Municipality	74 751	51 558	126 309	
KwaZulu Natal	DC29	KZ293	Ndwedwe	Ndwedwe Municipality	85	157 867	157 952	
KwaZulu Natal	DC29	KZ294	Maphumulo	Maphumulo Municipality	0	110 790	110 790	
Total DC29					**104 443**	**390 405**	**494 848**	**5**
KwaZulu Natal	DC43	KZ5a1	Creighton	Ingwe Municipality	1 018	84 434	85 452	
KwaZulu Natal	DC43	KZ5a2	Underberg	Kwa Sani Municipality	1 696	12 394	14 090	
KwaZulu Natal	DC43	KZ5a3	Matatiele	Matatiele Municipality	6 521	3 453	9 974	
KwaZulu Natal	DC43	KZ5a4	Kokstad	Greater Kokstad Municipality	20 426	12 643	33 069	
KwaZulu Natal	DC43	KZ5a5	Ixopo	KZ5a5 Municipality	3 333	66 571	69 904	
KwaZulu Natal	DC43	KZDMA43	Mkhomazi Wilderness		0	1 353	1 353	
Total DC43					**32 994**	**180 848**	**213 842**	**2**
Total Province					**3 536 705**	**4 225 227**	**7 761 932**	**72**



KWAZULU-NATAL
MUNICIPAL BOUNDARIES WITHIN DISTRICTS

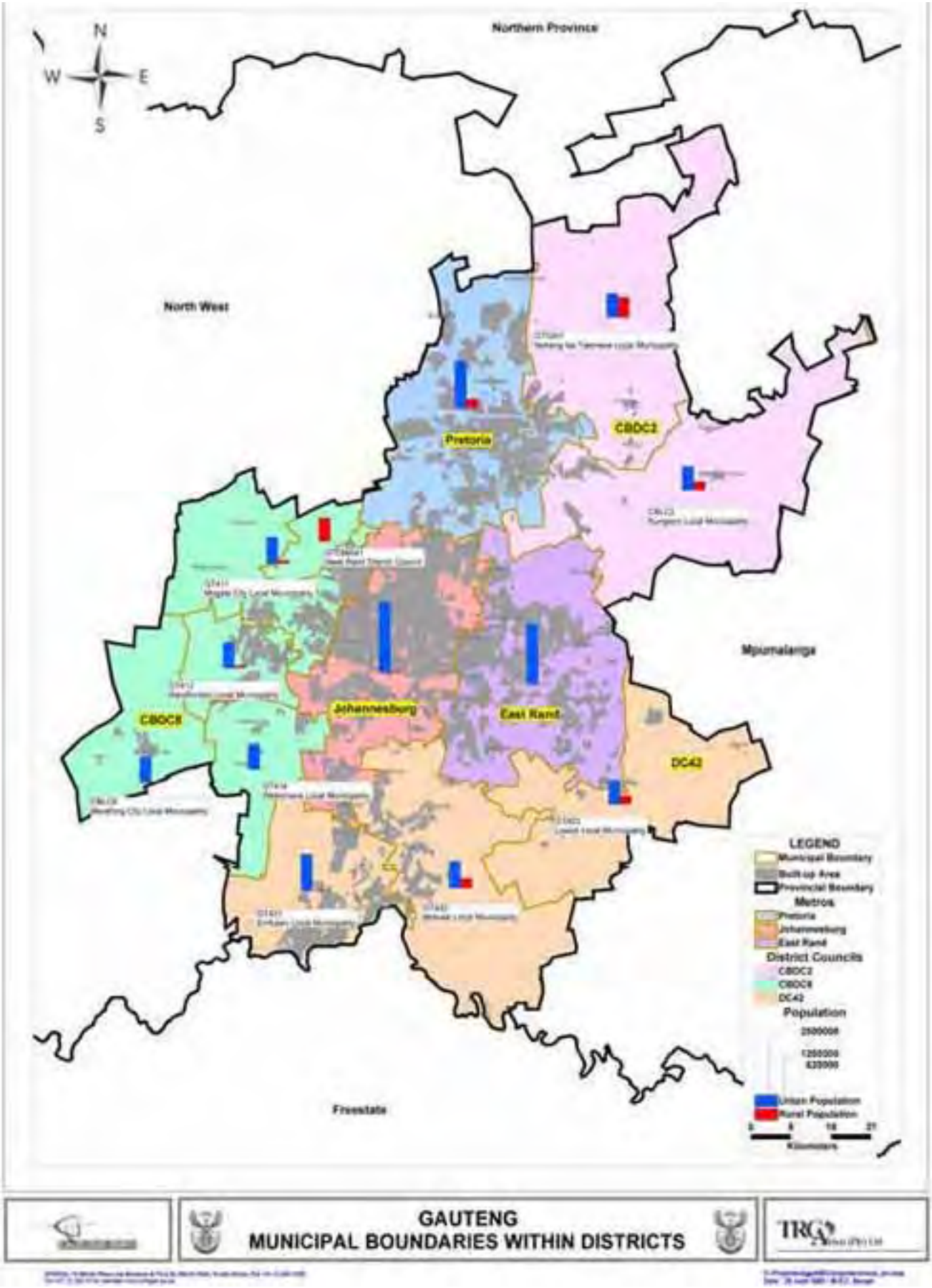
North West Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones
					Urban	Rural	Total	
North West	**Cross B**	**Pretoria**	**Pretoria**	**City of Tshwane Metropolitan M**	**176 283**	**237 253**	**413 536**	**2**
North West	CBDC1	CBLC1	Kuruman	Ga-Segonyana Municipality	3 573	44 061	47 634	
North West	CBDC1	NW1a1	Kgalagadi	Moshaweng Municipality	0	92 207	92 207	
Total CBDC1					**3 573**	**136 268**	**139 841**	**1**
North West	CBDC8	CBLC8	Carletonville	Merafong City Local Municipality	37 010	4 504	41 514	1
North West	CBDC8	GTDMA41	Sterkfontein	West Rand District Council	0	547	547	
Total CBDC8					**37 010**	**5 051**	**42 061**	**1**
North West	DC37	NW371	Temba	Moretele Local Municipality	234	167 772	168 006	
North West	DC37	NW372	Brits	Local Municipality of Madibeng	72 854	243 819	316 673	
North West	DC37	NW373	Rustenburg	Rustenburg Local Municipality	146 432	164 438	310 870	
North West	DC37	NW374	Koster	Kgetlengrivier Local Municipality	13 801	18 714	32 515	
North West	DC37	NW375	Mogwase	Moses Kotane Local Municipality	15 842	209 862	225 704	
North West	DC37	NWDMA37	Pilanesburg National Park		0	271	271	
Total DC37					**249 163**	**804 876**	**1 054 039**	**10**
North West	DC38	NW381	Setlagole	Setla-Kgobi Local Municipality	0	91 170	91 170	1
North West	DC38	NW382	Delareyville	Tswaing Local Municipality	23 421	63 271	86 692	1
North West	DC38	NW383	Mafikeng	Mafikeng Local Municipality	43 764	187 352	231 116	2
North West	DC38	NW384	Lichtenburg	Lichtenburg Local Municipality	63 329	62 959	126 288	1
North West	DC38	NW385	Zeerust	Zeerust Local Municipality	15 676	106 440	122 116	1
Totaal DC38					**146 190**	**511 192**	**657 382**	**6**
North West	DC39	NW391	Ganyesa	Kagisano Local Municipality	0	87 506	87 506	1
North West	DC39	NW392	Vryburg	Naledi Local Municipality	33 470	19 168	52 638	1
North West	DC39	NW393	Schweizer-Reneke	Schweizer-Reneke Local Municipality	28 621	12 777	41 398	1
North West	DC39	NW394	Reivilo	Greater Taung Local Municipality	6 730	170 579	177 309	1
North West	DC39	NW395	Pomfret	Molopo Local Municipality	0	12 225	12 225	
North West	DC39	NW396	Christiana	Lekwa-Teemane Local Municipality	29 505	6 607	36 112	
Total DC39					**98 326**	**308 862**	**407 188**	**5**
North West	DC40	NW401	Ventersdorp	Ventersdorp Local Municipality	16 841	14 994	31 835	1
North West	DC40	NW402	Potchefstroom	Potchefstroom Local Municipality	101 113	21 436	122 549	1
North West	DC40	NW403	Klerksdorp	Klerksdorp Local Municipality	276 964	55 033	331 997	3
North West	DC40	NW404	Wolmaransstad	Maquassi Hills Local Municipality	41 508	18 747	60 255	1
Total DC40					**436 426**	**110 210**	**546 636**	**6**
North West	**DC9**	**CBLC7**	**Hartswater**	**Phokwane Municipality**	**18 372**	**464**	**18 836**	**1**
Total Province					**1 165 343**	**2 114 176**	**3 279 519**	**32**


NORTH WEST : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

Gauteng Municipalities

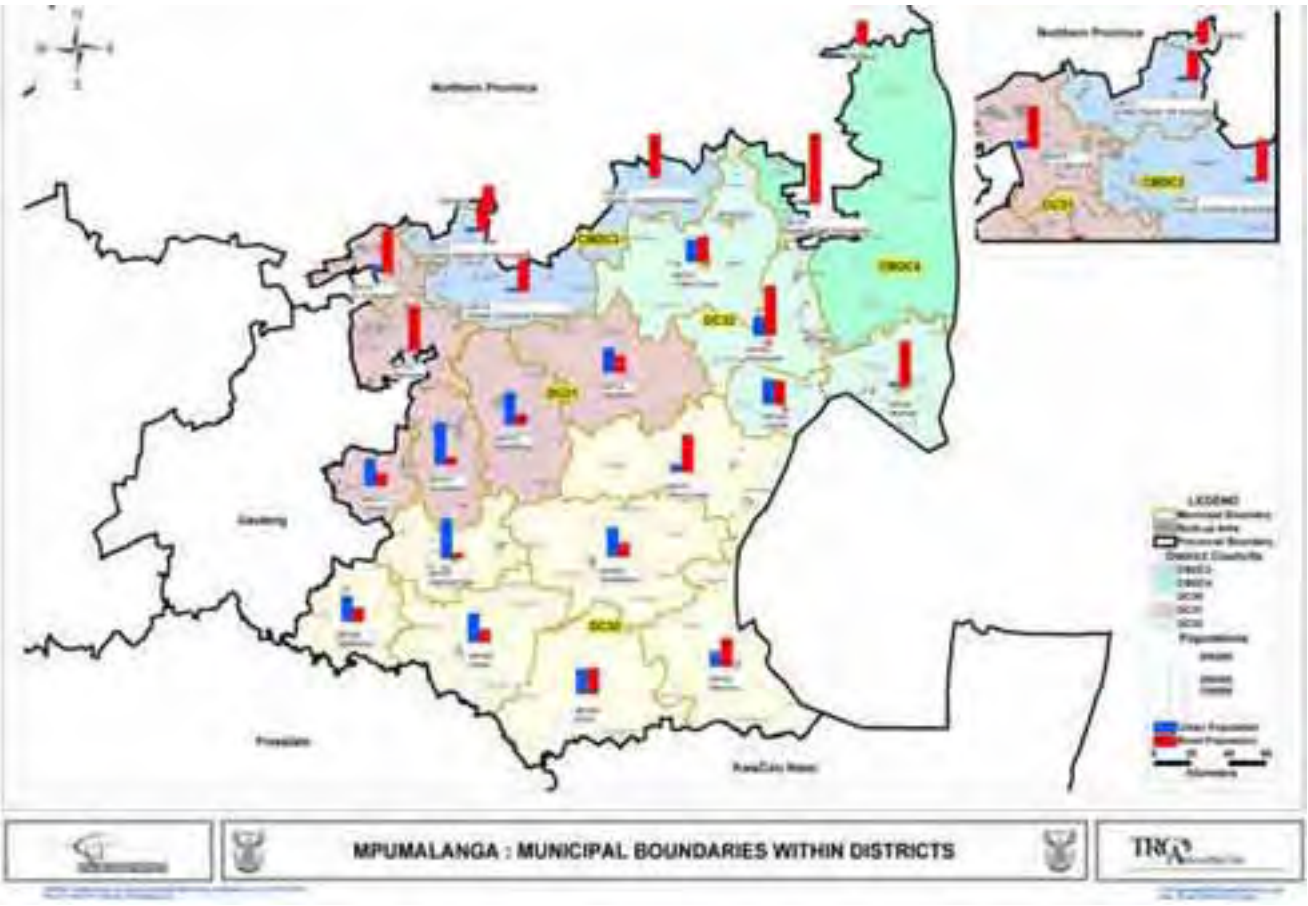
Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones
					Urban	Rural	Total	
Gauteng		**East Rand**	**East Rand**	**Ekurhuleni Metropolitan Municipality**	**2 010 802**	**9 333**	**2 020 135**	**15**
Gauteng		**Johannesburg**	**Johannesburg**	**City of Johannesburg Metropolitan Municipality**	**2 585 812**	**42 408**	**2 628 220**	**20**
Gauteng		**Pretoria**	**Pretoria**	**City of Tshwane Metropolitan Municipality**	**1 217 563**	**40 589**	**1 258 152**	**12**
Gauteng	CBDC2	CBLC2	Bronkhorstspruit	Kungwini Local Municipality	21 770	18 772	40 542	1
Gauteng	CBDC2	GT02b1	Cullinan	Nokeng tsa Taemane Local Municipality	22 769	19 000	41 769	1
Total CBDC2					**44 539**	**37 772**	**82 311**	**2**
Gauteng	CBDC8	CBLC8	Carltonville	Merafong City Local Municipality	146 538	3 302	149 840	1
Gauteng	CBDC8	GT411	Krugersdorp	Mogale City Local Municipality	199 831	22 625	222 456	2
Gauteng	CBDC8	GT412	Randfontein	Randfontein Local Municipality	96 900	10 043	106 943	1
Gauteng	CBDC8	GT414	Westonaria	Westonaria Local Municipality	112 535	1 131	113 666	1
Gauteng	CBDC8	GTDMA41	Sterkfontein	West Rand District Council	0	2 292	2 292	
Total CBDC8					**555 804**	**39 393**	**595 197**	**5**
Gauteng	DC42	GT421	Vereeniging	Emfuleni Local Municipality	581 692	13 672	595 364	4
Gauteng	DC42	GT422	Meyerton	Midvaal Local Municipality	38 345	15 532	53 877	1
Gauteng	DC42	GT423	Heidelberg	Lesedi Local Municipality	48 161	16 827	64 988	1
Total DC42					**668 198**	**46 031**	**714 229**	**6**
Total Province					**7 082 718**	**215 526**	**7 298 244**	**60**



GAUTENG
MUNICIPAL BOUNDARIES WITHIN DISTRICTS

Mpumalanga Municipalities

Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones
					Urban	Rural	Total	
Mpumalanga	CBDC2	CBLC2	Bronkhorstspruit	Kungwini Local Municipality	30 900	0	30 900	
Mpumalanga	CBDC2	GT02b1	Cullinan	Nokeng tsa Taemane LM	0	296	296	
Total CBDC2					**30 900**	**296**	**31 196**	**1**
Mpumalanga	CBDC3	CBDMA3	Schuinsdraai Nature Reserve		0	29	29	
Mpumalanga	CBDC3	CBLC3	Marble Hall	Greater Marble Hall Municipality	1 515	42 300	43 815	
Mpumalanga	CBDC3	CBLC4	Groblersdal	Greater Groblersdal Municipality	12 621	125 223	137 844	
Mpumalanga	CBDC3	CBLC5	Burgersfort/Ohrigstad/Eastern Tubatese	Greater Tubatse Municipality	709	9 521	10 230	
Total CBDC3					**14 845**	**177 073**	**191 918**	**2**
Mpumalanga	CBDC4	CBDMA4	Kruger Park		0	1 882	1 882	
Mpumalanga	CBDC4	CBLC6	Bushbuckridge	Bushbuckridge Municipality	0	476	476	
Total CBDC4					**0**	**2 358**	**2 358**	**0**
Mpumalanga	DC30	MP301	Elukwatini/Carolina	Albert Luthuli	31 153	148 157	179 310	
Mpumalanga	DC30	MP302	Ermelo	Msukaligwa	69 536	32 552	102 088	
Mpumalanga	DC30	MP303	Piet Retief	Mkhondo	32 420	61 805	94 225	
Mpumalanga	DC30	MP304	Volksrust	Seme	33 059	33 990	67 049	
Mpumalanga	DC30	MP305	Standerton	Lekwa	60 849	27 556	88 405	
Mpumalanga	DC30	MP306	Balfour	Dipaleseng	25 179	13 579	38 758	
Mpumalanga	DC30	MP307	Highveld Ridge	Highveld East	181 447	26 430	207 877	
Total DC30					**433 643**	**344 069**	**777 712**	**7**
Mpumalanga	DC31	MP311	Delmas	Delmas	35 722	17 307	53 029	
Mpumalanga	DC31	MP312	Witbank	Emalahleni	200 785	32 031	232 816	
Mpumalanga	DC31	MP313	Middelburg	Middelburg	103 254	32 596	135 850	
Mpumalanga	DC31	MP314	Belfast	Highlands	21 803	15 464	37 267	
Mpumalanga	DC31	MP315	KwaMhlanga	Thembisile	8 793	233 796	242 589	
Mpumalanga	DC31	MP316	Mdutjana	Dr JS Moroka	40 553	215 435	255 988	
Mpumalanga	DC31	MPDMA31	Mdala Nature Reserve		0	21	21	
Total DC31					**410 910**	**546 650**	**957 560**	**9**
Mpumalanga	DC32	MP321	Sabie	Thana Chweu	30 062	35 234	65 296	1
Mpumalanga	DC32	MP322	Nelspruit	Mbombela	113 773	295 934	409 707	3
Mpumalanga	DC32	MP323	Barberton	Umjindi	24 600	23 434	48 034	2
Mpumalanga	DC32	MP324	Nkomazi	Nkomazi	19 410	241 651	261 061	2
Total DC32					**187 845**	**596 253**	**784 098**	**8**
Total Province					**1 078 143**	**1 666 699**	**2 744 842**	**27**


MPUMALANGA : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

Limpopo

Province	District Council	Cat B	Common Name	Proclaimed Name	Population Urban	Rural	Total	Analysis Zones
Northern Province	CBDC3	CBLC3	Marble Hall	Greater Marble Hall Municipality	9 471	40 437	49 908	1
Northern Province	CBDC3	CBLC4	Groblersdal	Greater Groblersdal Municipality	6 652	75 918	82 570	1
Northern Province	CBDC3	CBLC5	Burgersfort/Ohrigstad/Eastern Tubat	Greater Tubatse Municipality	872	206 080	206 952	2
Northern Province	CBDC3	NP03A2	Ngwaritsi	Makhuduthamaga Municipality	9 346	247 086	256 432	2
Northern Province	CBDC3	NP03A3	Fetakgomo	Fetakgomo Municipality	0	92 505	92 505	1
Total CBDC3					**26 341**	**662 026**	**688 367**	**7**
Northern Province	CBDC4	CBDMA4	Kruger Park		0	1 683	1 683	
Northern Province	CBDC4	CBLC6	Bushbuckridge	Bushbuckridge Municipality	21 559	505 879	527 438	
Northern Province	CBDC4	NP04A1	Hoedspruit	Drakensberg Municipality	358	81 839	82 197	
Total CBDC4					**21 917**	**589 401**	**611 318**	**6**
Northern Province	DC33	NP331	Giyani	Greater Giyani Municipality	21 052	186 245	207 297	2
Northern Province	DC33	NP332	Duiwelskloof	Greater Letaba Municipality	10 561	185 934	196 495	2
Northern Province	DC33	NP333	Tzaneen	Greater Tzaneen Municipality	33 347	307 445	340 792	3
Northern Province	DC33	NP334	Phalaborwa	Ba-Phalaborwa	60 766	44 202	104 968	1
Total DC33					**125 726**	**723 826**	**849 552**	**8**
Northern Province	DC34	NP341	Messina	Messina	16 373	12 998	29 371	
Northern Province	DC34	NP342	Mutale/Masisi	Mutale	675	64 224	64 899	1
Northern Province	DC34	NP343	Thohoyandou	Thohoyandou-Malamulele	44 613	449 837	494 450	4
Northern Province	DC34	NP344	Louis Trichardt	Makhado	22 310	409 993	432 303	4
Total DC34					**83 971**	**937 052**	**1 021 023**	**10**
Northern Province	DC35	NP351	Bochum/My Darling	Blouberg Municipality	0	144 674	144 674	1
Northern Province	DC35	NP352	Moletje/Matlala	Aganang Municipality	1 395	139 660	141 055	1
Northern Province	DC35	NP353	Dendron/Dikgale	Molemole Municipality	3 759	99 893	103 652	1
Northern Province	DC35	NP354	Pietersburg	Polokwane Municipality	101 484	309 727	411 211	3
Northern Province	DC35	NP355	Lebowakgomo	Lepelle-Nkumpi Municipality	27 546	198 433	225 979	2
Total DC35					**134 184**	**892 387**	**1 026 571**	**10**
Northern Province	DC36	NP361	Thabazimbi	Thabazimbi Municipality	20 444	40 127	60 571	
Northern Province	DC36	NP362	Ellisras	Lephalale Municipality	14 027	70 998	85 025	
Northern Province	DC36	NP364	Naboomspruit	Mookgopong Municipality	0	13 991	13 991	
Northern Province	DC36	NP365	Nylstroom	Modimolle Municipality	22 752	25 901	48 653	
Northern Province	DC36	NP366	Warmbaths	Bela Bela Municipality	28 608	17 606	46 214	
Northern Province	DC36	NP367	Potgietersrus	Mogalakwena Municipality	42 022	231 619	273 641	
Total DC36					**127 853**	**400 242**	**528 095**	**5**
Total Province					**519 992**	**4 204 934**	**4 724 926**	**46**


NORTHERN PROVINCE : MUNICIPAL BOUNDARIES WITHIN DISTRICTS

Cross-Border Municipalities

Home Province	Cross-Border Province	District Council	Cat B	Common Name	Proclaimed Name	Population			Analysis Zones (HP)
						Urban	Rural	Total	
Northwest	**Gauteng**		**Tshwane**	**Tshwane**	**City of Tshwane Metroploitan Municipality**	**176 283**	**237 253**	**413 456**	**2**
Gauteng	**Northwest**	**CBDC8**	**CBLC8**	**Carltonville**	**Merafong City Local Municipality**	**146 538**	**3 302**	**149 840**	**1**
Northern Cape	**Northwest**	**CBDC1**	**CBLC1**	**Kuruman**	**Ga-Segonyana Municipalty**	**9 811**	**3 301**	**13 112**	**0**
Gauteng	**Mpumalanga**	**CBDC2**	**CBLC2**	**Bronkhorstspruit**	**Kungwini Local Municipality**	**21 770**	**18 772**	**40 542**	**1**
Mpumalanga	Northern Province	CBDC8	CBLC8	Carltonville	Merafong City Local Municipality	146 538	3 302	149 840	1
Gauteng		CBDC8	GT411	Krugersdorp	Mogale City Local Municipality	199 831	22 625	222 456	2
Gauteng		CBDC8	GT412	Randfontein	Randfontein Local Municipality	96 900	10 043	106 943	1
Gauteng		CBDC8	GT414	Westonaria	Westonaria Local Municipality	112 535	1 131	113 666	1
Gauteng		CBDC8	GTDMA41	Sterkfontein	West Rand District Council	0	2 292	2 292	
Total CBDC8						**555 804**	**39 393**	**595 197**	**5**
Gauteng		DC42	GT421	Vereeniging	Emfuleni Local Municipality	581 692	13 672	595 364	4
Gauteng		DC42	GT422	Meyerton	Midvaal Local Municipality	38 345	15 532	53 877	1
Gauteng		DC42	GT423	Heidelberg	Lesedi Local Municipality	48 161	16 827	64 988	1
Total DC42						**668 198**	**46 031**	**714 229**	**6**

APPENDIX 3

FINAL MAPS OF TRANSPORT ANALYSIS ZONES IN PROVINCES AND METROPOLITAN AREAS

Western Cape

- **City of Cape Town**

Eastern Cape

- **Nelson Mandela Metropolitan Municipality**

Northern Cape

Free State

KwaZulu-Natal

- **Ethekwini**

North West

Gauteng

- **City of Johannesburg**
- **City of Tshwane**
- **Ekurhuleni**

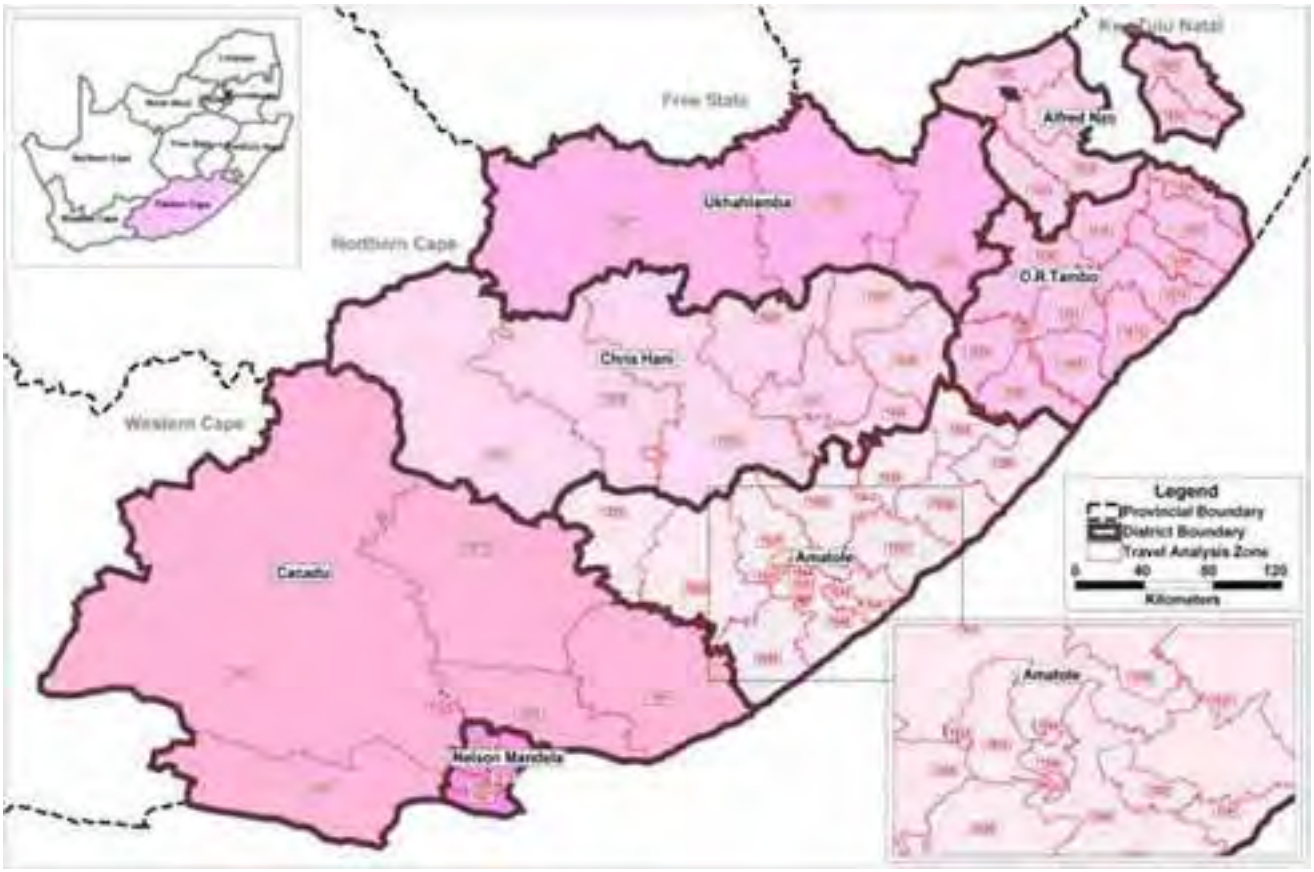
Mpumalanga

Limpopo

WESTERN CAPE PROVINCE

CAPE TOWN METRO

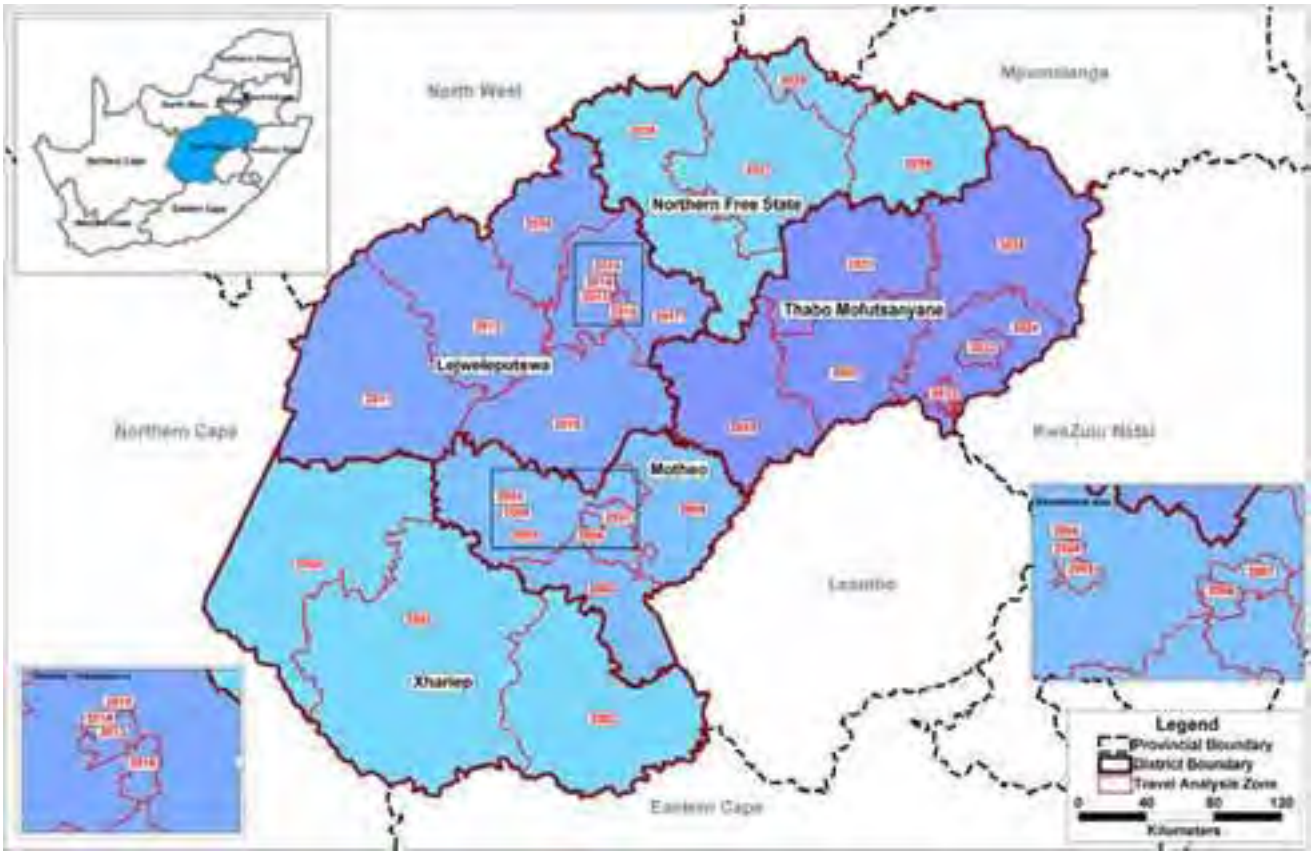
EASTERN CAPE PROVINCE



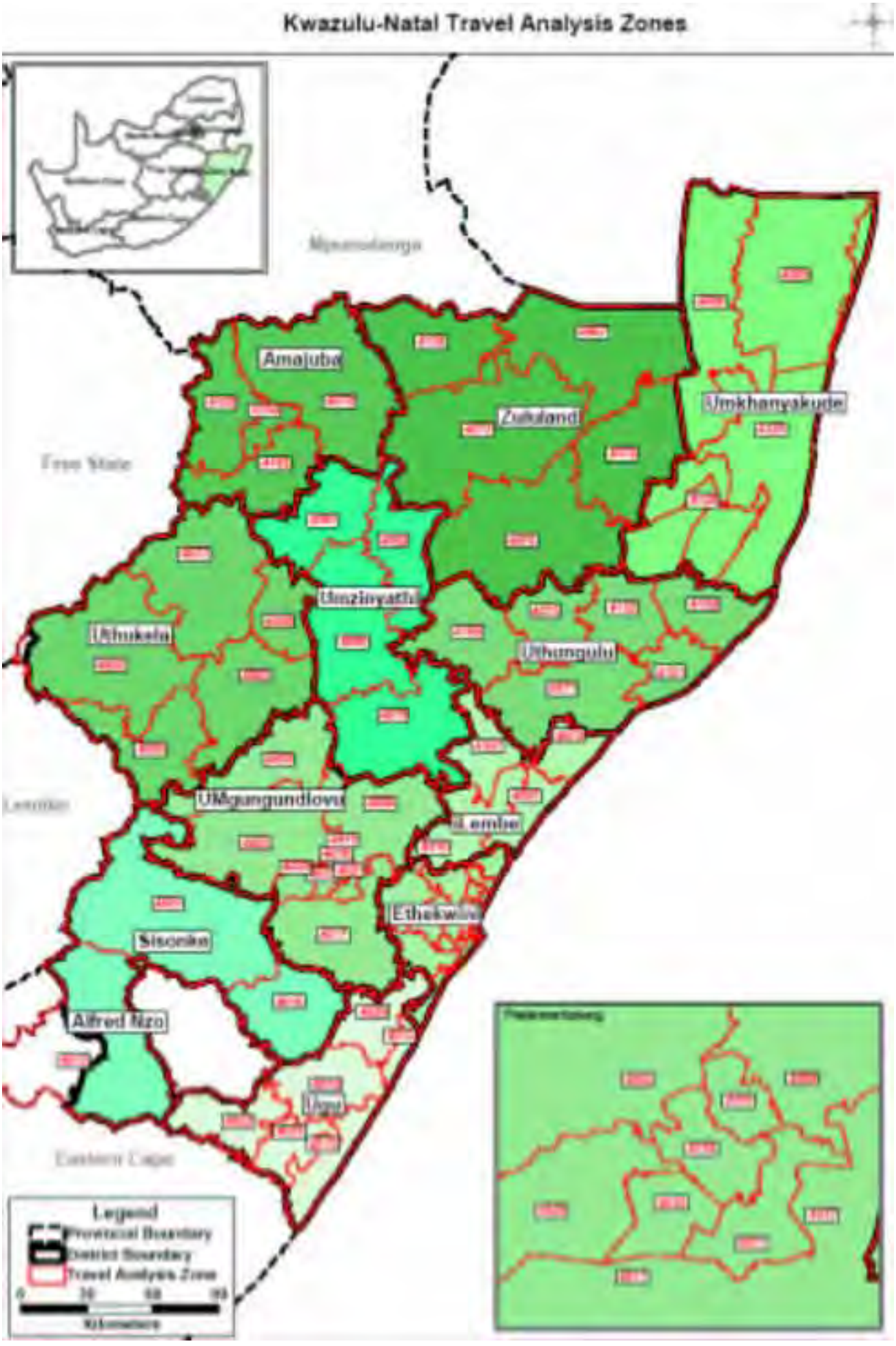
NELSON MANDELA METRO

NORTHERN CAPE PROVINCE

FREE STATE PROVINCE



KWAZULU-NATAL PROVINCE



ETHEKWINI METRO

NORTH WEST PROVINCE

GAUTENG PROVINCE

JOHANNESBURG METRO

EKURHULENI METRO

TSHWANE METRO

MPUMALANGA PROVINCE

LIMPOPO PROVINCE

APPENDIX 5

QUESTIONNAIRE

Statistics South Africa

National Travel Survey 2003

Particulars of the household

PSU number

Dwelling unit number

Physical identification of the dwelling unit/household

.....

.....

Travel Analysis Zone Number

Telephone number of enumerated household (if any)

Total number of persons in the household

Questionnaire no. for this household (for persons no. 01 - 10 = 1, etc.)

Households at the selected dwelling unit

Household number for this household

Total number of households at the selected dwelling unit

Field staff

Interviewer	.....	Number	Interview date	.....
Supervisor	.....	Number	Date checked	.....
RSM	.....	Number	Date checked	.....

For office use

Response details

Visit no	Date (actual)	Time of interview	Result code	Next visit (planned)
1				
2				
3				
4				

FINAL RESULT

Comments and full details of all non-response / unusual circumstances

.....

.....

.....

RESULT CODES (for response details)

1	Completed	
2	Non-contact	**Comment and give full details above of all non-response**
3	Refused	
4	Partly complete	
5	No usable information	
6	Vacant dwelling	
7	Listing error	
8	Other	
9	Incomplete (Section 6)	
0	Incomplete (Section 7)	

FLAP **This section covers particulars of each person in the household**

The following information must be obtained for every person who has stayed in this household for at least four nights on average per week during the last four weeks.
Do not forget babies. *If there are more than 10 persons in the household, use a second questionnaire.*

		Person (respondent) number									
	Ask to speak to an adult, if he/she is the one to respond to the questionnaire, record that person in column 01.	01	02	03	04	05	06	07	08	09	10
A	**First name and surname** **First name:** *Write down first name and surname of each member of the household, starting with the respondent.*										
	Surname:										
B	**Has ..... stayed in this household for at least four nights on average per week during the last four weeks?**										
	1 = YES	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = NO →***End of questions for this person***	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
C	**Is ..... a male or a female?**										
	1 = MALE	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = FEMALE	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
D	**How old is .....?** *(In completed years - In figures only)* *Less than 1 year = 00*										
E	**What population group does ..... belong to?**										
	1 = AFRICAN/BLACK	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = COLOURED	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
	3 = INDIAN/ASIAN	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	4 = WHITE	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4
	5 = OTHER, *specify*	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5
F	**Is there any other person residing in this household, than those already mentioned, who is not presently here?**	☐ YES ☐ NO	→***If "YES", Go back to A***								

SECTION 1 This section covers information regarding the household.

Interviewer to answer

1.1	**Indicate the type of main dwelling and other dwelling that the household occupies?** ***Verify if there are any other dwellings on this property***	**Main dwelling**	**Other dwelling**
	01 = Dwelling or brick structure on a separate stand or yard or on farm	☐ 01	☐ 01
	02 = Hut/Structure made of traditional materials	☐ 02	☐ 02
	03 = Flat or apartment in a block of flats	☐ 03	☐ 03
	04 = Town/Cluster/Semi-detached house (Simplex, Duplex or Triplex)	☐ 04	☐ 04
	05 = Unit in retirement village	☐ 05	☐ 05
	06 = Dwelling/Flat/room in backyard	☐ 06	☐ 06
	07 = Informal dwelling/Shack in backyard	☐ 07	☐ 07
	08 = Informal dwelling/Shack not in backyard, e.g. in an informal/squatter settlement or on farm	☐ 08	☐ 08
	09 = Room/Flatlet	☐ 09	☐ 09
	10 = Caravan/Tent	☐ 10	☐ 10
	11 = Hostel room /unit/apartment	☐ 11	☐ 11
	12 = Other, specify	☐ 12	☐ 12

Ask a responsible adult in the household

1.2	**What are the two most important transport problems experienced by this household?** *(Probe to make the answer mode specific) e.g Taxis very expensive instead of transport very expensive.*	
a	**CODE BOX FOR OFFICIAL USE ONLY**	
b	**CODE BOX FOR OFFICIAL USE ONLY**	

1.3	**How long, in minutes, do you think it will take me (the interviewer) to walk from here to the nearest.....?** **(N.B. One answer per category is required)**			
		Actual Minutes	**Too far/ no service**	**Do not know**
a	Train station		☐ 1	☐ 2
b	Taxi (minibus, sedan and bakkie)		☐ 1	☐ 2
c	Bus stop		☐ 1	☐ 2

1.4	• **How do members of your household get to the nearest of each of the following facilities?** • **And how long does it take to get there in minutes from this household to the facility (door to door)?** **(***If more than one member of the household travels to a facility, record the type of transport used by the person who goes there most often. If more than one type of transport is used, mark the one used over the longest distance) (Mark one only)*	

Facility		Walk	Train	Bus	Minibus taxi/ bakkie taxi/ sedan taxi	Metered Taxi	Car/ Bakkie	Truck/ Lorry	Tractor/ Trailer	Motorcycle/ Scooter	Bicycle	Animal Transport	Don't need to go there	Can't get there	Minutes If code 12,or13 enter 999
a	**Food shop**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
b	**Other shops**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
c	**Traditional healer**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
d	**Medical Services**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
e	**Post office/ agent**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
f	**Welfare office**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
g	**Police station**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
h	**Municipal office**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	
i	**Tribal authority**	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13	

1.5	What is the total monthly household expenditure on train, bus and taxi for all members of the household (Show card)	Train	Bus	Taxi
	01 = NOTHING	☐ 01	☐ 01	☐ 01
	02 = R 1 – R 50	☐ 02	☐ 02	☐ 02
	03 = R 51 – R 100	☐ 03	☐ 03	☐ 03
	04 = R 101 –R 150	☐ 04	☐ 04	☐ 04
	05 = R 151 –R 200	☐ 05	☐ 05	☐ 05
	06 = R 201 –R 250	☐ 06	☐ 06	☐ 06
	07 = R 251 –R 300	☐ 07	☐ 07	☐ 07
	08 = R 301 –R 400	☐ 08	☐ 08	☐ 08
	09 = R 401 –R 500	☐ 09	☐ 09	☐ 09
	10 = R 501 –R 750	☐ 10	☐ 10	☐ 10
	11 = R 751 –R1000	☐ 11	☐ 11	☐ 11
	12 = R1001 OR MORE	☐ 12	☐ 12	☐ 12

1.6	What is the total monthly income (before deductions) of <u>all the persons</u> in this household, from all sources? (Show card)	
	01 = NOTHING	☐ 01
	02 = R 1 –R 200	☐ 02
	03 = R 201 –R 500	☐ 03
	04 = R 501 –R1 000	☐ 04
	05 = R1 001 –R1 500	☐ 05
	06 = R1 501 –R2 000	☐ 06
	07 = R2 001 –R3 000	☐ 07
	08 = R3 001 –R 4 500	☐ 08
	09 = R4 501 –R6 000	☐ 09
	10 = R6 001 –R8 000	☐ 10
	11 = R8 001 –R10 000	☐ 11
	12 = R10 001 –R16 000	☐ 12
	13 = R16 001 –R30 000	☐ 13
	14 = R30 000 or more	☐ 14
	15 = DON'T KNOW	☐ 15
	16 = REFUSE	☐ 16

1.7	**How many bicycles does this household own?**	
1.8	**How many of the following motorised vehicles in running order does this household have available for private use?** *Do not include tractors*	
a	**Motorcycle/Scooter**	
b	**Car/Bakkies/Station wagons/4x4s owned by employer/company**	
c	**Car/Bakkies/Station wagons/ 4x4s owned by the household/ relatives / friends**	
d	**Minibus/Kombis**	
e	**Trucks**	
f	**Other, Specify……..**	

SECTION 2 This section covers particulars of each person in the household

Travel day	Mon	Tue	Wed	Thur	Fri
	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

		01	02	03	04	05	06	07	08	09	10
2.1	**Is ..limited in his/her daily travelling activities because of any disability lasting six months or more?** 1 = YES *CONTINUE* 2 = NO *GO TO Q2.3*	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
2.2	**What difficulty or difficulties does …… have? Is it……** 1 = Sight (blind/severe visual limitations) 2 = Hearing (deaf, profoundly hard of hearing) 3 = Communicating (speech impairment) 4 = Physical (e.g. needs wheel chair, crutches or prosthesis; limb or hand usage limitation) 5 = Intellectual (serious difficulties in learning, mental retardation) 6 = Emotional (behavioural, psychological problems) 7 = Other, specify in column	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2
2.3	**Thinking of ……….. (*travel day, see above*) did …… leave the premises to go anywhere, such as going to work, visiting a friend or going to the shops?** 1 = YES *GO TO Q2.5* 2 = NO	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2

		01	02	03	04	05	06	07	08	09	10
2.4	**What was the reason for…….. not going anywhere ?**										
	1 = DID NOT NEED TO TRAVEL	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = NOT WELL ENOUGH TO TRAVEL	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
	3 = FAMILY RESPONSIBILITIES	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	4 = USUAL CAR NOT AVAILABLE	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4
	5 = PUBLIC TRANSPORT TOO EXPENSIVE FOR ME	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5
	6 = NO AVAILABLE PUBLIC TRANSPORT	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6
	7 = I HAD NO MONEY	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7	☐ 7
	8 = NO SUITABLE TRANSPORT FOR DISABLED	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8	☐ 8
	9 = OTHER, SPECIFY IN SPACE UNDER COLUMN	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9	☐ 9
	GO TO Q2.6										
2.5	**Thinking of …… *(travel day)*, to which of the following did ….go?**	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
	a) = Work	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	b) = Education	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	c) = Shops	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	d) = Looking for work	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	e) = Medical services	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	f) = Welfare offices	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	g) = Visiting	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	h) = Sport, recreation and entertainment	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	i) = Church	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
	j) = Other, specify in space under column	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2

		01	02	03	04	05	06	07	08	09	10
2.6	**In the last 7 days, how many days has ……used:**										
a	A train										
b	A bus										
c	A metered taxi										
d	A minibus taxi										
e	A sedan taxi										
f	A bakkie taxi										
g	A car/bakkie /station wagon/kombi/4x4										
h	A truck/lorry										
i	A motor cycle/scooter										
j	A bicycle										
k	Animal transport										
l	An aircraft										
m	Other, specify in column										
2.7	**Has …….undertaken a holiday trip of at least 24 hours within RSA in the past year?** 1 = YES 2 = NO ***Go to Section 3***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
2.8	**On how many occasions did……..undertake a holiday trip?**										

		01	02	03	04	05	06	07	08	09	10
2.9	**Thinking about the most recent holiday trip, where did…………..go?**										
a	Suburb/place name …..										
b	Town/Municipality/District ……										
c	Province ……….										
	CODE BOX FOR OFFICIAL USE ONLY										
2.10	**What type of transport did……… use for the longest part of the trip?** ***Mark one only*** 1 = TRAIN 2 = BUS 3 = TAXI 4 = AIRCRAFT 5 = CAR / BAKKIE 6 = OTHER, SPECIFY IN COLUMN	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

SECTION 3 This section covers educational information for each person in the household

		01	02	03	04	05	06	07	08	09	10
3.1	**What is the highest level of education that ...has <u>completed</u>?**										
	00 = NO SCHOOLING	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00	☐ 00
	01 = GRADE R/0	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01
	02 = SUB A/GRADE 1	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02
	03 = SUB B/GRADE 2	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03
	04 = GRADE 3/STANDARD 1	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04
	05 = GRADE 4/STANDARD 2	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05
	06 = GRADE 5/STANDARD 3	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06
	07 = GRADE 6/STANDARD 4	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07
	08 = GRADE 7/STANDARD 5	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08
	09 = GRADE 8/STANDARD 6/FORM 1	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09
	10 = GRADE 9/STANDARD 7/FORM 2	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10
	11 = GRADE 10/STANDARD 8/FORM 3	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11
	12 = GRADE 11/STANDARD 9/FORM 4	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12
	13 = GRADE 12/STANDARD 10/FORM 5/MATRIC	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13
	14 = NTC I	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14
	15 = NTC II	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15
	16 = NTC III	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16
	17 = DIPLOMA/CERTIFICATE WITH LESS THAN GRADE 12/STD 10	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17	☐ 17
	18 = DIPLOMA/CERTIFICATE WITH GRADE 12/STD 10	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18	☐ 18
	19 = DEGREE	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19	☐ 19
	20 = POSTGRADUATE DEGREE OR DIPLOMA	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20	☐ 20
	21 = OTHER, *specify in column*	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21	☐ 21
	22 = DON'T KNOW	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22	☐ 22
	Diplomas or certificates should be of at least six months study duration full time (or equivalent).										

		01	02	03	04	05	06	07	08	09	10
3.2	**Does ………currently attend an educational institution including pre school and day care?** 1 = YES 2 = NO ***GO TO SECTION 4***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
3.3	**Which educational institution does……………..attend?** *Include distance and correspondence education* 1= PRE SCHOOL, CRECHE, DAY CARE 2 = PRIMARY SCHOOL 3 = SECONDARY/ HIGH SCHOOL 4 = UNIVERSITY 5 = TECHNIKON 6 = COLLEGE 7 = ADULT BASIC EDUCATION AND TRAINING OR LITERACY CLASSES 8 = OTHER ADULT EDUCATION CLASSES 9 = OTHER, *SPECIFY IN COLUMN*	☐ 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
3.4	**Is …… mainly studying through attending classes or through distance learning?** 1 = ATTENDING CLASSES 2 = DISTANCE LEARNING ***GO TO SECTION 4***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
3.5	**Where does………….attend……………………..?**										
a	Suburb/Place name										
b	Town/Municipality/District										
c	Province										
	CODE BOX FOR OFFICIAL USE ONLY										

		01	02	03	04	05	06	07	08	09	10
3.6	**At what time does……usually leave to go to ……..?**										
3.7	**At what time does……usually arrive at ……?**										
3.8	**How does ……usually get to……? *If more than one type mark the one used over the longest distance.***										
	01 = TRAIN	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01
	02 = BUS	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02
	03 = METERED TAXI	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03
	04 = MINI BUS TAXI	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04
	05 = SEDAN TAXI	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05
	06 = BAKKIE TAXI	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06
	07 = CAR/BAKKIE PASSENGER	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07
	08 = TRUCK	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08
	09 = TRACTOR/TRAILER	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09
	10 = ANIMAL TRANSPORT	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10
	11 = CAR/BAKKIE DRIVER	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11
	12 = MOTORCYCLE/SCOOTER	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12
	13 = BICYCLE	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13
	14 = WALK	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14
	15 = OTHER, SPECIFY IN COLUMN	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15
		GO TO SECTION 4									

		01	02	03	04	05	06	07	08	09	10
3.9	**How much does it cost .....to get to ... (Rand) including all modes?**										
	(cents)										
3.10	**Is that.....**										
	1 = Per single trip	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = Per return trip	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
	3 = Per week	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	4 = Per month	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4
	5 = Per term	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5
	6 = Not applicable	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6	☐ 6

SECTION 4 Questions for all members aged 15 and above

		01	02	03	04	05	06	07	08	09	10
4.1	**Does ... have a driver's licence for a ....?** 1 = Motorcycle 2 = Car 3 = Heavy vehicle	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2	YES NO ☐ 1 ☐ 2 ☐ 1 ☐ 2 ☐ 1 ☐ 2
4.2	**Does ...have a job or did ..do any ___ work in the past seven days, even if he/she was absent from work?** 1 = Yes: Formal } 2 = Yes: Informal } ***GO TO SECTION 5*** 3 = No	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3

For those who didn't work in the past seven days

4.3	**What is the main reason why…………did not have work in the past seven days.** 1 = SCHOLAR OR STUDENT 2 = HOMEMAKER OR HOUSEWIFE 3 = PENSIONER OR RETIRED PERSON/ TOO OLD TO WORK 4 = UNABLE TO WORK DUE TO ILLNESS OR DISABILITY 5 = SEASONAL WORKER NOT WORKING PRESENTLY 6 = CHOOSES NOT TO WORK 7 = CANNOT FIND WORK ***END INTERVIEW***	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

SECTION 5 This section covers details about your main work activity *(No proxies allowed in this section)*

Ask all persons 15 years and older who were working or absent from work in the last seven days.

Read out: **The next questions refer to your main job or activity. That is the one where you usually work the most hours per week, even if you were absent the last seven days.**

		01	02	03	04	05	06	07	08	09	10
5.1a	**What is the FULL name of the business/company or organisation for whom you work?** (if the person works for him/herself, and the business does not have a name, write SELF in the appropriate row. If doing PAID domestic work in a private household, write PRIVATE HOUSEHOLD)										
5.1 b	**What does the business do (main economic activity)?** Write the MAIN INDUSTRY, economic activity, product or service of (the person's) employer or company. For example, gold mining, road construction OR Write the activity of the person if self-employed. For example subsistence farming. If doing PAID domestic work in a private household, write PRIVATE HOUSEHOLD										
	CODE BOX FOR OFFICIAL USE ONLY										
5.2	**What is your main occupation in this workplace?** Occupation refers to the type of work you performed in the last seven days or you usually do at your place of work Use two or more words: For example, street trader, cattle farmer, primary school teacher, domestic worker, fruit seller, etc.										
	CODE BOX FOR OFFICIAL USE ONLY										
5.3	**How many days per week do you usually work?**										

					01	02	03	04	05	06	07	08	09	10
5.4a	**What is your total salary/pay at your <u>main</u> job before any tax or deductions?** *Include overtime, allowances and bonus* **Rand** *Give amount in whole figures, without any text or decimals* ***If "REFUSE" or "DON'T KNOW"→Go to Q 5.4c***													
5.4b	***Only if amount given in 5.4a*** **Is this** 1 = Per week 2 = Per month 3 = Annually **GO TO Q 5.5**				☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3
5.4c	***Only if "REFUSE" or "DON'T KNOW" in 5.4a*** *Show the categories. Make sure the respondent points at the correct income column (weekly, monthly, annually) on prompt card and mark the applicable code.*													
		Weekly	**Monthly**	**Annually**										
	01	NONE	NONE	NONE	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01
	02	R1 – R 46	R1 – R200	R1 - R2 400	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02
	03	R 47 – R115	R201 – R500	R2 401 - R6 000	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03
	04	R116 - R231	R501 – R1 000	R6 001 - R12 000	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04
	05	R232 - R346	R1 001 - R1 500	R12 001 - R18 000	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05
	06	R347 – R462	R1 501 - R2 000	R18 001 – R24 000	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06
	07	R463 – R692	R2 001 - R3 000	R24 001 – R36 000	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07
	08	R693 - R1 038	R3 001 - R4 500	R36 001 – R54 000	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08
	09	R1 039 - R1 385	R4 501 - R6 000	R54 001 - R72 000	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09
	10	R1 386 - R1 846	R6 001 - R8 000	R72 001 - R96 000	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10
	11	R1 847 - R2 308	R8 001 - R10 000	R96 001 - R120 000	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11
	12	R2 309 - R3 692	R10 001 - R16 000	R120 001 - R192 000	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12
	13	R3 693 - R6 923	R16 001- R30 000	R192 001 - R360 000	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13
	14	R6 924 OR MORE	R30 001 OR MORE	R360 001 OR MORE	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14
	15	DON'T KNOW	DON'T KNOW	DON'T KNOW	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15
	16	REFUSE	REFUSE	REFUSE	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16

		01	02	03	04	05	06	07	08	09	10
5.5	**Have you undertaken any business trips longer than 200km within the RSA in the past month?** 1 = YES 2 = NO *GO TO Q5.9*	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.6	**How many business trips have you undertaken in the past month?**										
5.7	**Thinking about the most recent business trip away, where did you go?**										
a	Suburb/place name …….										
b	Town/Municipality/District …..										
c	Province …..										
	CODE BOX FOR OFFICIAL USE ONLY										

		01	02	03	04	05	06	07	08	09	10
5.8	**What type of transport did you use for the longest part of the trip?** ***Mark one only*** 1 = TRAIN 2 = BUS 3 = TAXI 4 = AIRCRAFT 5 = CAR / BAKKIE 6 = OTHER, SPECIFY IN COLUMN	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

5.9	**Is there another place in the RSA which you regard as your home and to which you regularly make an overnight visit?** 1 = YES 2 = NO ***Go to Q5.16***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.10	**Have you gone there by public transport during the past month?** 1 = YES 2 = NO ***Go to Q5.16***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.11	**How many times have you gone there during the past month?**										

		01	02	03	04	05	06	07	08	09	10
5.12	**Where is this place?**										
a	Suburb/place name										
b	Town/Municipality/District										
c	Province										
	CODE BOX FOR OFFICIAL USE ONLY										

5.13	**Thinking of your last trip home, what type of transport did you use for the longest part of the trip?** **Mark one only** 1 = TRAIN 2 = BUS 3 = TAXI 4 = AIRCRAFT 5 = OTHER, SPECIFY IN COLUMN	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

		01	02	03	04	05	06	07	08	09	10
5.14	**How much did you pay for the trip there and back?** **Rand**										
5.15	**On which day of the week did you go?** 1 = MONDAY 2 = TUESDAY 3 = WEDNESDAY 4 = THURSDAY 5 = FRIDAY 6 = SATURDAY 7 = SUNDAY	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7
5.16	**Where is your main place of work?** 1 = At home (where you sleep 4 nights a week) ***End*** 2 = Somewhere else ***Go to Section 6***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2

SECTION 5 This section covers details about your main work activity *(No proxies allowed in this section)*

Ask all persons 15 years and older who were working or absent from work in the last seven days.

Read out: **The next questions refer to your main job or activity. That is the one where you usually work the most hours per week, even if you were absent the last seven days.**

		01	02	03	04	05	06	07	08	09	10
5.1a	**What is the FULL name of the business/company or organisation for whom you work?** (if the person works for him/herself, and the business does not have a name, write SELF in the appropriate row. If doing PAID domestic work in a private household, write PRIVATE HOUSEHOLD)										
5.1 b	**What does the business do (main economic activity)?** Write the MAIN INDUSTRY, economic activity, product or service of (the person's) employer or company. For example, gold mining, road construction OR Write the activity of the person if self-employed. For example subsistence farming. If doing PAID domestic work in a private household, write PRIVATE HOUSEHOLD										
	CODE BOX FOR OFFICIAL USE ONLY										
5.2	**What is your main occupation in this workplace?** Occupation refers to the type of work you performed in the last seven days or you usually do at your place of work Use two or more words: For example, street trader, cattle farmer, primary school teacher, domestic worker, fruit seller, etc.										
	CODE BOX FOR OFFICIAL USE ONLY										

5.3	**How many days per week do you usually work?**										

		01	02	03	04	05	06	07	08	09	10
5.4a	**What is your total salary/pay at your <u>main</u> job before any tax or deductions?** *Include overtime, allowances and bonus* **Rand** *Give amount in whole figures, without any text or decimals* ***If "REFUSE" or "DON'T KNOW"→Go to Q 5.4c***										
5.4b	***Only if amount given in 5.4a*** **Is this** 1 = Per week 2 = Per month 3 = Annually **GO TO Q 5.5**	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3
5.4c	***Only if "REFUSE" or "DON'T KNOW" in 5.4a*** *Show the categories. Make sure the respondent points at the correct income column (weekly, monthly, annually) on prompt card and mark the applicable code.*										
	Weekly / **Monthly** / **Annually**										
	01 NONE / NONE / NONE	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01	☐ 01
	02 R1 – R 46 / R1 – R200 / R1 - R2 400	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02	☐ 02
	03 R 47 – R115 / R201 – R500 / R2 401 - R6 000	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03	☐ 03
	04 R116 - R231 / R501 – R1 000 / R6 001 - R12 000	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04	☐ 04
	05 R232 - R346 / R1 001 - R1 500 / R12 001 - R18 000	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05	☐ 05
	06 R347 – R462 / R1 501 - R2 000 / R18 001 – R24 000	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06	☐ 06
	07 R463 – R692 / R2 001 - R3 000 / R24 001 – R36 000	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07	☐ 07
	08 R693 - R1 038 / R3 001 - R4 500 / R36 001 – R54 000	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08	☐ 08
	09 R1 039 - R1 385 / R4 501 - R6 000 / R54 001 - R72 000	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09	☐ 09
	10 R1 386 - R1 846 / R6 001 - R8 000 / R72 001 - R96 000	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10	☐ 10
	11 R1 847 - R2 308 / R8 001 - R10 000 / R96 001 - R120 000	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11	☐ 11
	12 R2 309 - R3 692 / R10 001 - R16 000 / R120 001 - R192 000	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12	☐ 12
	13 R3 693 - R6 923 / R16 001- R30 000 / R192 001 - R360 000	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13	☐ 13
	14 R6 924 OR MORE / R30 001 OR MORE / R360 001 OR MORE	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14	☐ 14
	15 DON'T KNOW / DON'T KNOW / DON'T KNOW	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15	☐ 15
	16 REFUSE / REFUSE / REFUSE	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16	☐ 16

		01	02	03	04	05	06	07	08	09	10
5.5	**Have you undertaken any business trips longer than 200km within the RSA in the past month?** 1 = YES 2 = NO *GO TO Q5.9*	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.6	**How many business trips have you undertaken in the past month?**										
5.7	**Thinking about the most recent business trip away, where did you go?**										
a	Suburb/place name …….										
b	Town/Municipality/District …..										
c	Province …..										
	CODE BOX FOR OFFICIAL USE ONLY										

		01	02	03	04	05	06	07	08	09	10
5.8	**What type of transport did you use for the longest part of the trip?** ***Mark one only*** 1 = TRAIN 2 = BUS 3 = TAXI 4 = AIRCRAFT 5 = CAR / BAKKIE 6 = OTHER, SPECIFY IN COLUMN	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

5.9	**Is there another place in the RSA which you regard as your home and to which you regularly make an overnight visit?** 1 = YES 2 = NO ***Go to Q5.16***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.10	**Have you gone there by public transport during the past month?** 1 = YES 2 = NO ***Go to Q5.16***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2
5.11	**How many times have you gone there during the past month?**										

		01	02	03	04	05	06	07	08	09	10
5.12	**Where is this place?**										
a	Suburb/place name										
b	Town/Municipality/District										
c	Province										
	CODE BOX FOR OFFICIAL USE ONLY										

5.13	**Thinking of your last trip home, what type of transport did you use for the longest part of the trip?** **Mark one only**										
	1 = TRAIN	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
	2 = BUS	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
	3 = TAXI	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	4 = AIRCRAFT	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4
	5 = OTHER, SPECIFY IN COLUMN	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5	☐ 5

		01	02	03	04	05	06	07	08	09	10
5.14	**How much did you pay for the trip there and back?** **Rand**										
5.15	**On which day of the week did you go?** 1 = MONDAY 2 = TUESDAY 3 = WEDNESDAY 4 = THURSDAY 5 = FRIDAY 6 = SATURDAY 7 = SUNDAY	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7
5.16	**Where is your main place of work?** 1 = At home (where you sleep 4 nights a week) ***End*** 2 = Somewhere else ***Go to Section 6***	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2	☐ 1 ☐ 2

Section 6 This section covers information about workers who travel to work (worker 1)

6.0	**Person number**	
6.1	**Where is your main place of work**	
a	Suburb/place name…	
b	Town/municipality/district……	
c	Province……	
	CODE BOX FOR OFFICE USE ONLY	

6.2	**At what time do you usually leave to go there?**	
6.3	**At what time do you usually get there?**	
6.4	**Do you usually walk all the way?** 1 =YES ***END*** 2 = NO	☐ 1 ☐ 2
6.5	**Do you usually cycle all the way?** 1 = YES ***End*** 2 = NO	☐ 1 ☐ 2

6.6	**Do you usually drive all the way to work? (***Not as a passenger)* 1 = YES 2 = NO ***GO TO Q6.11***	☐ 1 ☐ 2
6.7	**Which of the following vehicles do you usually drive to work? *Mark one*** 1 = Truck/Lorry 2 = Car/Bakkie 3 = Motorcycle/Scooter	☐ 1 ☐ 2 ☐ 3
6.8	**Do you regularly need your vehicle at work for work purposes?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.9	**Do you have to drop/pick up passengers on your way to work?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.10	**Do you have to drop/pick up passengers on your way back home?** 1 = YES 2 = NO ***GO TO Q6.20***	☐ 1 ☐ 2
6.11	**Do you change transport on the way to work?** 1 = YES 2 = NO ***(E.G. TRAIN-TO-TRAIN, BUS-TO-TRAIN)***	☐ 1 ☐ 2

(worker 1)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
6.12	**How do you usually get there?** ***Mark all types of transport in the order in which they were taken, but exclude walks***				
	01 = TRAIN	☐ 01	☐ 01	☐ 01	☐ 01
	02 = BUS	☐ 02	☐ 02	☐ 02	☐ 02
	03 = METERED TAXI	☐ 03	☐ 03	☐ 03	☐ 03
	04 = MINI BUS TAXI	☐ 04	☐ 04	☐ 04	☐ 04
	05 = SEDAN TAXI	☐ 05	☐ 05	☐ 05	☐ 05
	06 = BAKKIE TAXI	☐ 06	☐ 06	☐ 06	☐ 06
	07 = CAR/BAKKIE PASSENGER	☐ 07	☐ 07	☐ 07	☐ 07
	08 = TRUCK/LORRY PASSENGER	☐ 08	☐ 08	☐ 08	☐ 08
	09 = COMPANY TRANSPORT	☐ 09	☐ 09	☐ 09	☐ 09
	10 = TRUCK/LORRY DRIVER	☐ 10	☐ 10	☐ 10	☐ 10
	11 = CAR/BAKKIE DRIVER	☐ 11	☐ 11	☐ 11	☐ 11
	12 = MOTORCYCLE/SCOOTER	☐ 12	☐ 12	☐ 12	☐ 12
	13 = TRACTOR/TRAILER	☐ 13	☐ 13	☐ 13	☐ 13
	14 = BICYCLE	☐ 14	☐ 14	☐ 14	☐ 14
	15 = ANIMAL TRANSPORT	☐ 15	☐ 15	☐ 15	☐ 15
	16 = OTHER, SPECIFY IN COLUMN	☐ 16	☐ 16	☐ 16	☐ 16

(worker 1)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
		R R R C C	R R R C C	R R R C C	R R R C C
6.13	**How much does it cost you for the……..(mode)?**				
6.14	**Is that….?** 1 = Per single trip	☐ 1	☐ 1	☐ 1	☐ 1
	2 = Per return trip	☐ 2	☐ 2	☐ 2	☐ 2
	3 = Per week	☐ 3	☐ 3	☐ 3	☐ 3
	4 = Per Month	☐ 4	☐ 4	☐ 4	☐ 4
	5 = Not applicable (I do not pay)	☐ 5	☐ 5	☐ 5	☐ 5

6.15	**Does your employer give you cash or public transport tickets for your travel to and from work?** 1 = YES 2 = NO *Go to Q6.17*	☐ 1 ☐ 2
6.16	**How much is this worth to you per month?** **RAND**	
6.17	**How many minutes do you usually walk from here to your first transport?**	
6.18	**How many minutes do you usually wait for the first transport?**	
6.19	**How many minutes do you usually walk at the end of the trip to reach your work place?**	

6.20	**Are there any other workers in the household?** 1 = YES *GO TO NEXT WORKER* 2 = NO *GO TO SECTION 7*	☐ 1 ☐ 2

Section 6 This section covers information about workers who travel to work (worker 2)

6.0	**Person number**	
6.1	**Where is your main place of work**	
a	Suburb/place name…	
b	Town/municipality/district……	
c	Province……	
	CODE BOX FOR OFFICE USE ONLY	

6.2	**At what time do you usually leave to go there?**	
6.3	**At what time do you usually get there?**	
6.4	**Do you usually walk all the way?** 1 =YES ***END*** 2 = NO	☐ 1 ☐ 2
6.5	**Do you usually cycle all the way?** 1 = YES ***End*** 2 = NO	☐ 1 ☐ 2

6.6	**Do you usually drive all the way to work? (***Not as a passenger)* 1 = YES 2 = NO ***GO TO Q6.11***	☐ 1 ☐ 2
6.7	**Which of the following vehicles do you usually drive to work? *Mark one*** 1 = Truck/Lorry 2 = Car/Bakkie 3 = Motorcycle/Scooter	☐ 1 ☐ 2 ☐ 3
6.8	**Do you regularly need your vehicle at work for work purposes?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.9	**Do you have to drop/pick up passengers on your way to work?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.10	**Do you have to drop/pick up passengers on your way back home?** 1 = YES 2 = NO ***GO TO Q6.20***	☐ 1 ☐ 2
6.11	**Do you change transport on the way to work?** 1 = YES 2 = NO ***(E.G. TRAIN-TO TRAIN, BUS-TO-TRAIN)***	☐ 1 ☐ 2

(worker 2)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
6.12	**How do you usually get there?** ***Mark all types of transport in the order in which they were taken, but exclude walks***				
	01 = TRAIN	☐ 01	☐ 01	☐ 01	☐ 01
	02 = BUS	☐ 02	☐ 02	☐ 02	☐ 02
	03 = METERED TAXI	☐ 03	☐ 03	☐ 03	☐ 03
	04 = MINI BUS TAXI	☐ 04	☐ 04	☐ 04	☐ 04
	05 = SEDAN TAXI	☐ 05	☐ 05	☐ 05	☐ 05
	06 = BAKKIE TAXI	☐ 06	☐ 06	☐ 06	☐ 06
	07 = CAR/BAKKIE PASSENGER	☐ 07	☐ 07	☐ 07	☐ 07
	08 = TRUCK/LORRY PASSENGER	☐ 08	☐ 08	☐ 08	☐ 08
	09 = COMPANY TRANSPORT	☐ 09	☐ 09	☐ 09	☐ 09
	10 = TRUCK/LORRY DRIVER	☐ 10	☐ 10	☐ 10	☐ 10
	11 = CAR/BAKKIE DRIVER	☐ 11	☐ 11	☐ 11	☐ 11
	12 = MOTORCYCLE/SCOOTER	☐ 12	☐ 12	☐ 12	☐ 12
	13 = TRACTOR/TRAILER	☐ 13	☐ 13	☐ 13	☐ 13
	14 = BICYCLE	☐ 14	☐ 14	☐ 14	☐ 14
	15 = ANIMAL TRANSPORT	☐ 15	☐ 15	☐ 15	☐ 15
	16 = OTHER, SPECIFY IN COLUMN	☐ 16	☐ 16	☐ 16	☐ 16

(worker 2)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
		R R R C C	R R R C C	R R R C C	R R R C C
6.13	**How much does it cost you for the……..(mode)?**				
6.14	**Is that….?** 1 = Per single trip	☐ 1	☐ 1	☐ 1	☐ 1
	2 = Per return trip	☐ 2	☐ 2	☐ 2	☐ 2
	3 = Per week	☐ 3	☐ 3	☐ 3	☐ 3
	4 = Per Month	☐ 4	☐ 4	☐ 4	☐ 4
	5 = Not applicable (I do not pay)	☐ 5	☐ 5	☐ 5	☐ 5

6.15	**Does your employer give you cash or public transport tickets for your travel to and from work?** 1 = YES 2 = NO *Go to Q6.17*	☐ 1 ☐ 2
6.16	**How much is this worth to you per month?** **RAND**	
6.17	**How many minutes do you usually walk from here to your first transport?**	
6.18	**How many minutes do you usually wait for the first transport?**	
6.19	**How many minutes do you usually walk at the end of the trip to reach your work place?**	

6.20	**Are there any other workers in the household?** 1 = YES *GO TO NEXT WORKER* 2 = NO *GO TO SECTION 7*	☐ 1 ☐ 2

Section 6 This section covers information about workers who travel to work (worker 3)

6.0	**Person number**	
6.1	**Where is your main place of work**	
a	Suburb/place name…	
b	Town/municipality/district……	
c	Province……	
	CODE BOX FOR OFFICE USE ONLY	

6.2	**At what time do you usually leave to go there?**	
6.3	**At what time do you usually get there?**	
6.4	**Do you usually walk all the way?** 1 =YES ***END*** 2 = NO	☐ 1 ☐ 2
6.5	**Do you usually cycle all the way?** 1 = YES ***End*** 2 = NO	☐ 1 ☐ 2

6.6	**Do you usually drive all the way to work? (***Not as a passenger)* 1 = YES 2 = NO ***GO TO Q6.11***	☐ 1 ☐ 2
6.7	**Which of the following vehicles do you usually drive to work? *Mark one*** 1 = Truck/Lorry 2 = Car/Bakkie 3 = Motorcycle/Scooter	☐ 1 ☐ 2 ☐ 3
6.8	**Do you regularly need your vehicle at work for work purposes?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.9	**Do you have to drop/pick up passengers on your way to work?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.10	**Do you have to drop/pick up passengers on your way back home?** 1 = YES 2 = NO ***GO TO Q6.20***	☐ 1 ☐ 2
6.11	**Do you change transport on the way to work?** 1 = YES 2 = NO ***(E.G. TRAIN-TO-TRAIN, BUS-TO-TRAIN)***	☐ 1 ☐ 2

(worker 3)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
6.12	**How do you usually get there?** ***Mark all types of transport in the order in which they were taken, but exclude walks***				
	01 = TRAIN	☐ 01	☐ 01	☐ 01	☐ 01
	02 = BUS	☐ 02	☐ 02	☐ 02	☐ 02
	03 = METERED TAXI	☐ 03	☐ 03	☐ 03	☐ 03
	04 = MINI BUS TAXI	☐ 04	☐ 04	☐ 04	☐ 04
	05 = SEDAN TAXI	☐ 05	☐ 05	☐ 05	☐ 05
	06 = BAKKIE TAXI	☐ 06	☐ 06	☐ 06	☐ 06
	07 = CAR/BAKKIE PASSENGER	☐ 07	☐ 07	☐ 07	☐ 07
	08 = TRUCK/LORRY PASSENGER	☐ 08	☐ 08	☐ 08	☐ 08
	09 = COMPANY TRANSPORT	☐ 09	☐ 09	☐ 09	☐ 09
	10 = TRUCK/LORRY DRIVER	☐ 10	☐ 10	☐ 10	☐ 10
	11 = CAR/BAKKIE DRIVER	☐ 11	☐ 11	☐ 11	☐ 11
	12 = MOTORCYCLE/SCOOTER	☐ 12	☐ 12	☐ 12	☐ 12
	13 = TRACTOR/TRAILER	☐ 13	☐ 13	☐ 13	☐ 13
	14 = BICYCLE	☐ 14	☐ 14	☐ 14	☐ 14
	15 = ANIMAL TRANSPORT	☐ 15	☐ 15	☐ 15	☐ 15
	16 = OTHER, SPECIFY IN COLUMN	☐ 16	☐ 16	☐ 16	☐ 16

(worker 3)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
		R R R C C	R R R C C	R R R C C	R R R C C
6.13	**How much does it cost you for the……..(mode)?**				
6.14	**Is that….?** 1 = Per single trip	☐ 1	☐ 1	☐ 1	☐ 1
	2 = Per return trip	☐ 2	☐ 2	☐ 2	☐ 2
	3 = Per week	☐ 3	☐ 3	☐ 3	☐ 3
	4 = Per Month	☐ 4	☐ 4	☐ 4	☐ 4
	5 = Not applicable (I do not pay)	☐ 5	☐ 5	☐ 5	☐ 5

6.15	**Does your employer give you cash or public transport tickets for your travel to and from work?** 1 = YES 2 = NO *Go to Q6.17*	☐ 1 ☐ 2
6.16	**How much is this worth to you per month?** **RAND**	
6.17	**How many minutes do you usually walk from here to your first transport?**	
6.18	**How many minutes do you usually wait for the first transport?**	
6.19	**How many minutes do you usually walk at the end of the trip to reach your work place?**	

6.20	**Are there any other workers in the household?** 1 = YES *GO TO NEXT WORKER* 2 = NO *GO TO SECTION 7*	☐ 1 ☐ 2

Section 6 This section covers information about workers who travel to work (worker 4)

6.0	**Person number**	
6.1	**Where is your main place of work**	
a	Suburb/place name…	
b	Town/municipality/district……	
c	Province……	
	CODE BOX FOR OFFICE USE ONLY	

6.2	**At what time do you usually leave to go there?**	
6.3	**At what time do you usually get there?**	
6.4	**Do you usually walk all the way?** 1 =YES ***END*** 2 = NO	☐ 1 ☐ 2
6.5	**Do you usually cycle all the way?** 1 = YES ***End*** 2 = NO	☐ 1 ☐ 2

6.6	**Do you usually drive all the way to work? (***Not as a passenger)* 1 = YES 2 = NO ***GO TO Q6.11***	☐ 1 ☐ 2
6.7	**Which of the following vehicles do you usually drive to work? *Mark one*** 1 = Truck/Lorry 2 = Car/Bakkie 3 = Motorcycle/Scooter	☐ 1 ☐ 2 ☐ 3
6.8	**Do you regularly need your vehicle at work for work purposes?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.9	**Do you have to drop/pick up passengers on your way to work?** 1 = YES 2 = NO	☐ 1 ☐ 2
6.10	**Do you have to drop/pick up passengers on your way back home?** 1 = YES 2 = NO ***GO TO Q6.20***	☐ 1 ☐ 2
6.11	**Do you change transport on the way to work?** 1 = YES 2 = NO ***(E.G. TRAIN-TO-TRAIN BUS-TO-TRAIN),***	☐ 1 ☐ 2

(worker 4)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
6.12	**How do you usually get there?** ***Mark all types of transport in the order in which they were taken, but exclude walks***				
	01 = TRAIN	☐ 01	☐ 01	☐ 01	☐ 01
	02 = BUS	☐ 02	☐ 02	☐ 02	☐ 02
	03 = METERED TAXI	☐ 03	☐ 03	☐ 03	☐ 03
	04 = MINI BUS TAXI	☐ 04	☐ 04	☐ 04	☐ 04
	05 = SEDAN TAXI	☐ 05	☐ 05	☐ 05	☐ 05
	06 = BAKKIE TAXI	☐ 06	☐ 06	☐ 06	☐ 06
	07 = CAR/BAKKIE PASSENGER	☐ 07	☐ 07	☐ 07	☐ 07
	08 = TRUCK/LORRY PASSENGER	☐ 08	☐ 08	☐ 08	☐ 08
	09 = COMPANY TRANSPORT	☐ 09	☐ 09	☐ 09	☐ 09
	10 = TRUCK/LORRY DRIVER	☐ 10	☐ 10	☐ 10	☐ 10
	11 = CAR/BAKKIE DRIVER	☐ 11	☐ 11	☐ 11	☐ 11
	12 = MOTORCYCLE/SCOOTER	☐ 12	☐ 12	☐ 12	☐ 12
	13 = TRACTOR/TRAILER	☐ 13	☐ 13	☐ 13	☐ 13
	14 = BICYCLE	☐ 14	☐ 14	☐ 14	☐ 14
	15 = ANIMAL TRANSPORT	☐ 15	☐ 15	☐ 15	☐ 15
	16 = OTHER, SPECIFY IN COLUMN	☐ 16	☐ 16	☐ 16	☐ 16

(worker 4)

	Types of transport	FIRST TRANSPORT	SECOND TRANSPORT	THIRD TRANSPORT	FOURTH TRANSPORT
		R R R C C	R R R C C	R R R C C	R R R C C
6.13	**How much does it cost you for the……..(mode)?**				
6.14	**Is that….?** 1 = Per single trip	☐ 1	☐ 1	☐ 1	☐ 1
	2 = Per return trip	☐ 2	☐ 2	☐ 2	☐ 2
	3 = Per week	☐ 3	☐ 3	☐ 3	☐ 3
	4 = Per Month	☐ 4	☐ 4	☐ 4	☐ 4
	5 = Not applicable (I do not pay)	☐ 5	☐ 5	☐ 5	☐ 5

6.15	**Does your employer give you cash or public transport tickets for your travel to and from work?** 1 = YES 2 = NO *Go to Q6.17*	☐ 1 ☐ 2
6.16	**How much is this worth to you per month?** **RAND**	
6.17	**How many minutes do you usually walk from here to your first transport?**	
6.18	**How many minutes do you usually wait for the first transport?**	
6.19	**How many minutes do you usually walk at the end of the trip to reach your work place?**	

6.20	**Are there any other workers in the household?** 1 = YES *GO TO NEXT WORKER* 2 = NO *GO TO SECTION 7*	☐ 1 ☐ 2

SECTION 7 This section covers information on your attitudes towards transport services.

7.0	**Enter the person number of the selected adult**	
7.1	**When traveling, what is most important to you?** ***(Showcard)*** 1 = Travel time 2 = Travel cost 3 = Safety from accidents 4 = Security from crime 5 = Flexibility (you can travel wherever you want, whenever you want) 6 = Driver's attitude 7 = Closeness of transport to home 8 = Something else, specify ……	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8
7.2	**Have you used a train in the past month?** 1 = YES ***GO TO Q7.4*** 2 = NO	☐ 1 ☐ 2

7.3	**Why did you not use the train in the past month?**	First	Second
	01 = NO TRAIN AVAILABLE AT ALL	☐ 01	☐ 01
	02 = TRAIN NOT AVAILABLE OFTEN ENOUGH	☐ 02	☐ 02
	03 = TRAIN NOT AVAILABLE AT THE RIGHT TIMES	☐ 03	☐ 03
	04 = TRAIN TOO EXPENSIVE	☐ 04	☐ 04
	05 = TOO MUCH CRIME (TOO DANGEROUS)	☐ 05	☐ 05
	06 = TRAVEL TIME TOO LONG/ TOO SLOW	☐ 06	☐ 06
	07 = TRAINS TOO CROWDED	☐ 07	☐ 07
	08 = TRAINS ALWAYS LATE	☐ 08	☐ 08
	09 = TRAINS DON'T GO WHERE NEEDED	☐ 09	☐ 09
	10= STATION TOO FAR FROM HOME	☐ 10	☐ 10
	11 = STATION TOO FAR FROM DESTINATION	☐ 11	☐ 11
	12 = HAVE TO CHANGE TRANSPORT (TRANSFER)	☐ 12	☐ 12
	13 = NO KNOWLEDGE OF TIMETABLE AND ROUTES	☐ 13	☐ 13
	14 = PREFER PRIVATE TRANSPORT	☐ 14	☐ 14
	15 = PREFER TAXI	☐ 15	☐ 15
	16 = PREFER BUS	☐ 16	☐ 16
	17 = CAN WALK	☐ 17	☐ 17
	18 = DON'T TRAVEL MUCH	☐ 18	☐ 18
	19 = OTHER, SPECIFY…… …… ***GO TO Q7.5***	☐ 19	☐ 19

7.4	How satisfied or dissatisfied are you with the following aspects of the train service? (Use Showcard)					
		VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	DON'T KNOW
a) The distance between the train station and your home		☐ 1	☐ 2	☐ 3	☐ 4	
b) The travel time by train		☐ 1	☐ 2	☐ 3	☐ 4	
c) Security on the walk to/from the station		☐ 1	☐ 2	☐ 3	☐ 4	
d) Security at stations		☐ 1	☐ 2	☐ 3	☐ 4	
e) Security on the train		☐ 1	☐ 2	☐ 3	☐ 4	
f) The level of crowding in the train		☐ 1	☐ 2	☐ 3	☐ 4	
g) Safety from accidents		☐ 1	☐ 2	☐ 3	☐ 4	
h) The frequency of trains during peak period		☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
i) The frequency of trains during off-peak period		☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
j) The punctuality of trains		☐ 1	☐ 2	☐ 3	☐ 4	
k) The train fares		☐ 1	☐ 2	☐ 3	☐ 4	
l) The facilities at the stations e.g toilets, offices		☐ 1	☐ 2	☐ 3	☐ 4	
m) The train service overall		☐ 1	☐ 2	☐ 3	☐ 4	

7.5	**Have you used the bus in the past month?** 1 = YES *GO TO Q 7.7* 2 = NO	☐ 1 ☐ 2

7.6	**Why did you not use the bus in the past month?**	First	Second
	01 = NO BUS AVAILABLE AT ALL	☐ 01	☐ 01
	02 = BUS NOT AVAILABLE OFTEN ENOUGH	☐ 02	☐ 02
	03 = BUS NOT AVAILABLE AT THE RIGHT TIMES	☐ 03	☐ 03
	04 = BUS TOO EXPENSIVE	☐ 04	☐ 04
	05 = TOO MUCH CRIME (TOO DANGEROUS)	☐ 05	☐ 05
	06 = TRAVEL TIME TOO LONG /TOO SLOW	☐ 06	☐ 06
	07 = BUSES TOO CROWDED	☐ 07	☐ 07
	08 = BUSES ALWAYS LATE	☐ 08	☐ 08
	09 = BUSES DO NOT GO WHERE NEEDED	☐ 09	☐ 09
	10 = BUS STOP TOO FR FROM HOME	☐ 10	☐ 10
	11 = BUS STOP TOO FAR FROM DESTINATION	☐ 11	☐ 11
	12 = HAVE TO CHANGE TRANSPORT	☐ 12	☐ 12
	13 = NO KNOWLEDGE OF TIMETABLE AND ROUTES	☐ 13	☐ 13
	14 = PREFER PRIVATE TRANSPORT	☐ 14	☐ 14
	15 = PREFER TAXI	☐ 15	☐ 15
	16 = PREFER TRAIN	☐ 16	☐ 16
	17 = CAN WALK	☐ 17	☐ 17
	18 = DON'T TRAVEL MUCH	☐ 18	☐ 18
	19 = TOO MANY ACCIDENTS	☐ 19	☐ 19
	20 = OTHER , SPECIFY…… …….. …….. ***GO TO Q7.8***	☐ 20	☐ 20

7.7 How satisfied or dissatisfied are you with the following aspects of the bus service? (Use Showcard)

	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	DON'T KNOW
a) The distance between the bus stop and your home	☐ 1	☐ 2	☐ 3	☐ 4	
b) The travel time by bus	☐ 1	☐ 2	☐ 3	☐ 4	
c) Security on walk to/from the bus stop	☐ 1	☐ 2	☐ 3	☐ 4	
d) Security at the bus stops	☐ 1	☐ 2	☐ 3	☐ 4	
e) Security on the buses	☐ 1	☐ 2	☐ 3	☐ 4	
f) The level of crowding in the bus	☐ 1	☐ 2	☐ 3	☐ 4	
g) Safety from accidents	☐ 1	☐ 2	☐ 3	☐ 4	
h) The frequency of buses during peak period	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
i) The frequency of buses during off-peak period	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
j) The punctuality of buses	☐ 1	☐ 2	☐ 3	☐ 4	
k) The bus fares	☐ 1	☐ 2	☐ 3	☐ 4	
l) Facilities at bus stops e.g. shelters	☐ 1	☐ 2	☐ 3	☐ 4	
m) Behaviour of the bus drivers towards passengers	☐ 1	☐ 2	☐ 3	☐ 4	
n) The bus service overall	☐ 1	☐ 2	☐ 3	☐ 4	

7.8	**Have you used a minibus taxi in the past month?** 1 = YES *GO TO Q 7.10* 2 = NO	☐ 1 ☐ 2

7.9	**Why did you not use minibus taxis in the past month?**	First	Second
	01 = TAXIS NOT AVAILABLE AT ALL	☐ 01	☐ 01
	02 = TAXIS NOT AVAILABLE OFTEN ENOUGH	☐ 02	☐ 02
	03 = TAXIS NOT AVAILABLE AT THE RIGHT TIMES	☐ 03	☐ 03
	04 = TAXIS TOO EXPENSIVE	☐ 04	☐ 04
	05 = TOO MUCH CRIME (TOO DANGEROUS)	☐ 05	☐ 05
	06 = TAXIS TOO CROWDED	☐ 06	☐ 06
	07 = TAXIS DO NOT GO WHERE NEEDED	☐ 07	☐ 07
	08 = PREFER PRIVATE TRANSPORT	☐ 08	☐ 08
	09 = PREFER TRAIN	☐ 09	☐ 09
	10 = PREFER BUS	☐ 10	☐ 10
	11 = CAN WALK	☐ 11	☐ 11
	12 = DON'T TRAVEL MUCH	☐ 12	☐ 12
	13 = CAN WALK	☐ 13	☐ 13
	14 = TOO MUCH VIOLENCE/WARS	☐ 14	☐ 14
	15 = HAVE TO PAY CASH	☐ 15	☐ 15
	16 = DRIVERS ARE RUDE	☐ 16	☐ 16
	17 = TAXIS NOT ROADWORTHY	☐ 17	☐ 17
	18 = OTHER , SPECIFY……..	☐ 18	☐ 18
	……..		
	……..		
	END OF INTERVIEW		

7.10 How satisfied or dissatisfied are you with the following aspects of the minibus taxi service? (Use Showcard)

	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	DON'T KNOW
a) The distance between the taxi rank/route and your home	☐ 1	☐ 2	☐ 3	☐ 4	
b) The travel time by taxi	☐ 1	☐ 2	☐ 3	☐ 4	
c) Security on the walk to/from the taxi	☐ 1	☐ 2	☐ 3	☐ 4	
d) Security at the taxi ranks	☐ 1	☐ 2	☐ 3	☐ 4	
e) Security on taxis	☐ 1	☐ 2	☐ 3	☐ 4	
f) Safety from accidents	☐ 1	☐ 2	☐ 3	☐ 4	
g) Roadworthiness of taxis	☐ 1	☐ 2	☐ 3	☐ 4	
h) The waiting time for taxis	☐ 1	☐ 2	☐ 3	☐ 4	
i) The frequency of taxis during peak periods	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
j) The frequency of taxis during off-peak periods	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
k) The level of crowding in the taxis	☐ 1	☐ 2	☐ 3	☐ 4	
l) The taxi fares	☐ 1	☐ 2	☐ 3	☐ 4	
m) The facilities at the taxi ranks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
n) The behaviour of the taxi drivers towards passengers	☐ 1	☐ 2	☐ 3	☐ 4	
o) The minibus taxi service overall	☐ 1	☐ 2	☐ 3	☐ 4	

FOR PROCESSING

	NAME	NUMBER	DATE
QUALITY ASSURER			
HQ CHECK			
CODING			
SCAN VERIFY ID			
DATA ENTRY ID			