



GAUTENG PROVINCE HOUSEHOLD TRAVEL SURVEY

2014

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Abbreviations

- GTS2000 - Gauteng Transportation Study 2000
- GHTS2014 – Gauteng Household Travel Survey 2014
- NHTS2003 - National Household Travel Survey 2003
- NHTS2013 - National Household Travel Survey 2013

FOREWORD

We welcome the publication by the Department of Roads and Transport of the Gauteng Household Travel Survey (2014). The survey was conducted in partnership with the metropolitan and district municipalities and the Council for Scientific and Industrial Research (CSIR), which provided the technical support.

The survey sample consists of interviews in 29 779 households covering the following municipalities: Ekurhuleni (10 467), Johannesburg (6390), Sedibeng (2128), Tshwane (8891), and West Rand (1903).

The Gauteng Household Travel Survey (2014) provides us with a snapshot of the perceptions and travel experiences of residents in our province. How residents travel and what they think about public and other modes of transport provides critical data to government for future transport planning. Also, it highlights what is working well in the public transport system and what needs further and urgent attention.

Gauteng now has travel survey data sets for 2000 and for 2014. This allows for comparative analysis and enhances our ability to analyse trends within our public transport system. The noteworthy feature of this survey is that it presents a bird's eye view of what residents think and feel of the public transport system across the Gauteng City-Region. The survey shows that the modes of transport for daily commuting from home to work are private car (48.4 percent), minibus taxi (29.3 percent), walking all the way (11.1 percent), bus (2.9 percent), train (2.4 percent), lift club (1.7 percent), and other (4.2 percent).

Household travel surveys by their very nature provide us with a sense of the immediate and future travel needs of residents across the spectrum of issues surveyed. The current survey reveals that Gauteng residents are more reliant on private cars for daily travelling and commuting rather than public transport. It also points out that the share of public transport has not increased substantially in spite of the large investments made in the last decade in public transport infrastructure.

The fact that private car travel is on the increase in our province is a matter of concern. The principal reason why residents are not using higher capacity public transport modes is that these modes are not readily accessible across the city-region. What is equally worrying is that the average travel time for daily commuting has increased markedly in the last few years, which obviously has implications for economic productivity and personal and family time.

The Gauteng Household Travel Survey (2014) provides a composite and contextual picture of transport patterns in our province and will assist both government and transport stakeholders to make the appropriate interventions through proactive planning and allocation of resources to improve the public transport system.

I wish to thank the CSIR, the participating municipalities and the residents interviewed at their households for their active involvement in this important research project.

Dr Ismail Vadi

MEC for Department of Roads and Transport

EXECUTIVE SUMMARY

The report is the second in the series of household travel surveys carried out by the Gauteng Province to determine household-related transport needs in the province. It presents key results from the 2014 Gauteng Household Travel Survey (GHTS2014) together with some comparisons to the 2000 Gauteng Transportation Study (GTS2000). For analysis purposes, and consistent with the presentation of the GTS2000 results, the format of the report has remained the same.

The 2014 household travel survey was administered to a random stratified sample of 29 779 households in all metropolitan and district municipalities that make up the province, resulting in a weighted total number of households of 3 910 754. The datasets comprise data pertaining to (i) households, (ii) persons in households, (iii) trips undertaken by individuals in households, and (iv) commuters' attitudes towards transport service delivery.

The survey found that, at an average household size of 2.94 persons per household in the province, the average household size is gradually declining. This is consistent with findings from other surveys such as the Census administered by Statistics South Africa. From a transport perspective, reduced household sizes translate into reduced household trips rates. There are also notably large proportions of people in the age categories 21-25 and 26-30 relative to other age groups. The proportion of households without any employed person increased markedly over the years. This reduction may also have the effect of reducing household trip generation rates.

Two-thirds of households do not own or have access to a car, and these households are on the increase. Also, more than half of households have no household member with a driver's licence, and these households are also on the increase. This implies that public transport in the province is a basic necessity for the majority of households, and increasingly so.

The average number of cars per household is 0.5. Also, at household income of about R11 000 households start owning a car.

The proportion of household income spent on public transport increased significantly. This is inconsistent with both the national and provincial policies of reducing household public transport cost to less than 10% of disposable household income.

Passenger travel demand is increasingly being absorbed by low capacity transport modes. This is demonstrated by the increased proportions of private cars and minibus taxis that serve the travel demand relative to proportionately reduced demand serviced by buses and trains. The use of private car travel, in particular, increased markedly. Buses, in particular, tended to be used more for purposes of education-related trips. The main reason for not using higher capacity public transport modes is that the modes are not accessible.

Walking is still the predominant mode of travel in the province. This demands that facilities for non-motorised transport should receive priority. Walking times to access the first public

transport mode and to access the final destination have not changed significantly. However, it is not worth noting that public transport users tend to walk longer to access the first public transport mode than to access their final destination from their last public transport stop.

Bus users were generally more satisfied (satisfied/very satisfied) (63%) than dissatisfied (dissatisfied/very dissatisfied) (22%) with the available bus services. However, the main attributes of bus services with which users were dissatisfied were the following:

- Levels of crowding on the bus
- Service frequency during peak and off-peak times
- Facilities at bus stops and ranks

Minibus taxi users were slightly more satisfied (total of 41%) than dissatisfied (total of 39%) with the service. Key attributes that emerged in respect of which users expressed dissatisfaction (dissatisfied and very dissatisfied) were the following:

- Behaviour of taxi drivers
- Roadworthiness of taxis
- Safety from accidents

Train users were generally more dissatisfied (dissatisfied/very dissatisfied) (42%) than satisfied (satisfied/very satisfied) (37%) with train services. The main attributes of bus services with which train users were dissatisfied were the following:

- Levels of crowding on the trains
- Punctuality of trains
- Distance of stations from home
- Frequency of train services

Average travel times across all modes of transport have increased. The average travel time increased by 44% from 32 minutes (GTS2000) to 46 minutes (GHTS2014). This could be the result of a combination of factors that include increased congestion and location of residential areas further away from places of work.

A third of workers do not work the usual 5 days a week. This has implications on how public transport services are designed, including ticketing. Time of departure has also been changing in line with the phenomenon of peak spreading. This shows that travel demand is elastic. The predominant form of difficulty/disability was related to the use of crutches at 0.74% of the population.

The corridor between the City of Ekurhuleni and the City of Johannesburg has the largest inter-municipal travel demand. This may have implications on the prioritisation of inter-municipal public transport infrastructure and services.

The datasets are available for further in-depth analysis. Municipalities, universities, research institutions and other stakeholders are encouraged to access the datasets.

1. INTRODUCTION

The report in hand presents key results from the 2014 Gauteng Household Travel Survey (GHTS2014). Household travel surveys are carried out in Gauteng to determine household-related transport needs in the province, and subsequently to facilitate proper transport service delivery. These surveys are designed and implemented by the Gauteng Provincial Department of Roads and Transport (GPDRT), as the custodian of provincial transport service delivery and infrastructure development in partnership with municipalities in the province. The current survey is a follow-up to the household travel survey carried out in the year 2000 as part of the 2000 Gauteng Transportation Study (GTS2000).

The 2014 household travel survey was administered to a random stratified sample of 29 779 households in all metropolitan and district municipalities that make up the province, namely the City of Tshwane, City of Johannesburg, Ekurhuleni Metropolitan Municipality, West Rand District Municipality and Sedibeng District municipality. The datasets comprise data pertaining to (i) households, (ii) persons in households, (iii) trips undertaken by individuals in households, and (iv) commuters' attitudes towards transport service delivery. The survey results in the current report are presented in a similar order. The data was consolidated from surveys carried out in individual municipalities within the province. Because different municipalities implemented different survey approaches despite using a similar survey instrument, the raw data needed to be consolidated and interpreted in a manner that would allow for direct comparison across municipalities.

For analysis purposes, and consistent with the presentation of the GTS2000 results, the province was divided into 45 sub-regions, whose codes and names are listed in Table 1. The location and demarcation of the municipalities are shown in Figure 1.

Table 1: Municipalities in Gauteng Province (2014)

Municipality	Sub-region code	Sub-region name
City of Tshwane	1	Temba, Winterveld, Mabopane, Ga-rankuwa
	2	Soshanguve
	3	Akasia / Rosslyn
	4	Rooiwal
	5	Pretoria North
	6	Moot
	7	Mamelodi / Nellmapius
	8	Pretoria East
	9	Pretoria CBD
	10	Pretoria West / Atteridgeville
	11	Centurion
	12	Tshwane West Rural
46	Nokeng Tsa Taemane LM Rural	

Municipality	Sub-region code	Sub-region name
	47	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)
	48	Kungwini LM Rural West
	49	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)
	50	Kungwini LM Rural East
City of Johannesburg	13	Diepsloot
	14	Midrand
	15	Alexandra/Modderfontein
	16	Randburg
	17	Roodepoort
	18	Northcliff/Rosebank
	19	Joburg Central
	20	Joburg South
	21	Diepmeadow
	22	Soweto/Doornkop
	23	Orange Farm/Ennerdale
City of Ekurhuleni	24	Tembisa / Clayville
	25	Ekurhuleni Rural
	26	Kempton Park / JIA / Boksburg North
	27	Daveyton
	28	Brakpan / Benoni / Springs
	29	Kwatsaduza
	30	Germiston / Boksburg
	31	Alberton
	32	Katorus
Sedibeng DM	33	Lesedi LM Urban (Heidelberg / Ratanda)
	34	Lesedi LM Rural
	35	Midvaal LM Rural East
	36	Midvaal LM Rural West
	37	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)
	38	Emfuleni LM Rural
Westrand DM	39	Westonaria LM
	40	Merafong LM
	41	Randfontein LM Urban
	42	Randfontein LM Rural
	43	Mogale City LM Urban (Krugersdorp, Kagiso)
	44	Mogale City LM Rural
	45	Gauteng District Management Area (Cradle of Humankind)

GAUTENG HOUSEHOLD TRAVEL SURVEY 2014

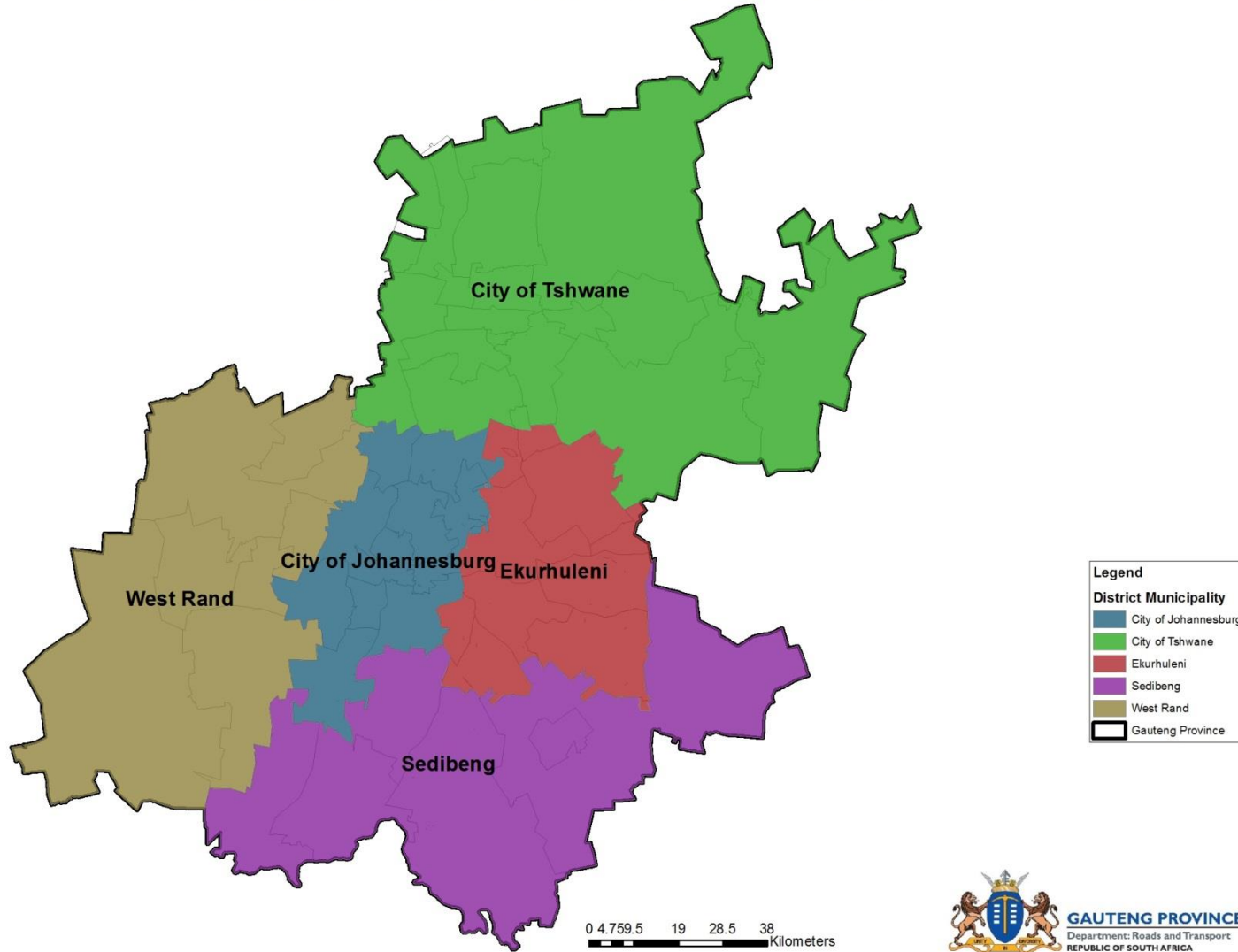




Figure 1: Municipalities in the Gauteng province

2. 2014 RESULTS: HOUSEHOLD CHARACTERISTICS

2.1. Number of households by municipality

Table 2 below shows the achieved sample and weighted number of households in each municipality in 2014. The total number of sampled households in the province was 29 779, with Ekurhuleni registering the highest sample of 10 467.

The weighted total number of households in the province was 3 910 754. This number almost doubled since GTS2000, when it stood at 2 182 285 households.

Table 2: Sample households and weighted for municipalities

Municipality	Household samples	%	Weighted number of households	%
Ekurhuleni	10 467	35.1%	1 017 965	26.0%
Johannesburg	6 390	21.5%	1 434 856	36.7%
Sedibeng	2 128	7.1%	302 712	7.7%
Tshwane	8 891	29.9%	900 736	23.0%
West Rand	1 903	6.4%	254 485	6.5%
Total GHTS2014	29 779	100.0%	3 910 754	100.0%
GTS2000	22 944		2 182 285	

2.2. Type of dwelling unit

Table 3 presents the types of dwelling units in which households resided in 2014. Close to two-thirds of households lived in “Dwelling/house or brick/concrete block structure on a separate stand”. “Shacks” accounted for 21% of dwelling unit types, and backyard shacks in turn constituted two-thirds of this number. Shacks in particular increased by 2% from GTS2000 to the 2014 survey.

Table 3: Distribution of dwelling type

Dwelling Type	Weighted number of households	Weighted % GHTS2014	Weighted % GTS 2000
Dwelling/house or brick/concrete block structure on a separate stand	2 408 478	62%	67%
Cluster house in complex	87 679	2%	3%
Dwelling/house/flat/room in backyard	25 447	1%	1%
Flat or apartment in a block of flats	232 830	6%	7%
Informal dwelling/shack in backyard	824 459	21%	17%
Informal dwelling/shack – not in backyard, e.g. in an informal settlement	57 507	1%	2%

Dwelling Type	Weighted number of households	Weighted % GHTS2014	Weighted % GTS 2000
Semi-detached house	75 682	2%	
Room/ flat to let on a property or a larger dwelling/servant's quarters	43 909	1%	
Town house (semi-detached house in complex)	91 716	2%	
Traditional dwelling/hut/structure made of traditional material	36 209	1%	
Caravan/tent	617	0%	
Formal dwelling with a shack in the yard	453	0%	
Other	25 768	1%	4%
Total	3 910 754	100%	100%

2.3. Number of people per household

Table 4 shows the distribution of the number of people in households in 2014. About 80% of households in the province consisted of four or fewer members. This figure was 10% higher when compared to the GTS2000, which implies that the average household size declined during the period between the surveys. The average number of persons per household for the province was 2.94 in 2014.

Table 4: Number of persons per household (2014)

Number of persons in household	Number of households	%
1	824 581	21.1%
2	1 029 570	26.3%
3	819 205	20.9%
4	596 267	15.2%
5	342 714	8.8%
6	155 585	4.0%
7	71 889	1.8%
8	39 055	1.0%
9	14 152	0.4%
10 +	17 736	0.5%
Average number of persons per household		2.94

2.4. Household income

Table 5 shows the income distribution for households in the province in 2014. Just more than 1% of the households indicated that they had no source of income, 79% disclosed

some level of income and 20% either refused to disclose income or did not know their total income.

Table 5: Income distribution

Income distribution	Number of households	% (rounded off)
R0	52 950	1%
R1-R200	24 009	1%
R201-R500	158 277	4%
R501-R1000	253 979	6%
R1001-R1500	440 340	11%
R1501-R2500	414 620	11%
R2501-R3500	348 606	9%
R3501-R4500	300 967	8%
R4501-R6000	268 131	7%
R6001-R8000	229 290	6%
R8001-R11000	200 599	5%
R11001-R16000	164 034	4%
R16001-R30000	169 346	4%
R30001+	104 822	3%
Refused to answer	564 461	14%
Don't know	216 324	6%
Total	3 910 754	100%

2.5. Household income by sub-region

Table 6 shows the average monthly household income by sub-region. The province had an average monthly household income of R5 767 in 2014. This figure excludes the 20% of households who did not disclose their household income. The average monthly income that was reported in 2000 was R3 247. Over the 15-year period that followed the initial survey, the actual average monthly income has not changed in real terms if an inflation rate of 4.4% per annum is used to calculate the average monthly income.

Table 6: Household income for 2014 by sub-region

Municipality	Sub-regions	Number of households	%	Average monthly household income (Rands)
City of Tshwane	Temba, Winterveld, Mabopane, Garankuwa	163 276	5.2%	4 085
	Soshanguve	136 482	4.4%	4 990
	Akasia / Rosslyn	9 170	0.3%	14 363
	Rooiwal	10 413	0.3%	3 720
	Pretoria North	15 692	0.5%	14 187
	Moot	27 424	0.9%	12 354
	Mamelodi / Nellmapius	123 319	3.9%	4 793

Municipality	Sub-regions	Number of households	%	Average monthly household income (Rands)
	Pretoria East	39 001	1.2%	14 655
	Pretoria CBD	1 751	0.1%	8 991
	Pretoria West / Atteridgeville	78 897	2.5%	6 841
	Centurion	54 083	1.7%	9 073
	Tshwane West Rural	4 713	0.2%	9 702
	Nokeng Tsa Taemane LM Rural	12 561	0.4%	3 469
	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)	12 752	0.4%	7 215
	Kungwini LM Rural West	11 600	0.4%	8 362
	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)	9 640	0.3%	5 200
	Kungwini LM Rural East	21 766	0.7%	4 184
City of Johannesburg	Diepsloot	72 066	2.3%	6 184
	Midrand	102 551	3.3%	6 307
	Alexandra/Modderfontein	65 463	2.1%	6 045
	Randburg	75 450	2.4%	10 862
	Roodepoort	95 325	3.0%	11 497
	Northcliff/Rosebank	66 293	2.1%	10 229
	Joburg Central	97 778	3.1%	6 256
	Joburg South	72 088	2.3%	10 847
	Diepmeadow	197 670	6.3%	4 735
	Soweto/Doornkop	269 278	8.6%	4 301
Ekurhuleni	Orange Farm/Ennerdale	139 305	4.5%	3 577
	Tembisa / Clayville	90 515	2.9%	5 020
	Ekurhuleni Rural	35 745	1.1%	3 813
	Kempton Park / JIA / Boksburg North	103 909	3.3%	9 480
	Daveyton	78 407	2.5%	2 236
	Brakpan / Benoni / Springs	53 782	1.7%	6 948
	Kwatsaduza	134 713	4.3%	3 292
	Germiston / Boksburg	52 937	1.7%	5 408
	Alberton	12 011	0.4%	10 787
Katorus	170 535	5.4%	2 594	
Sedibeng	Lesedi LM Urban (Heidelberg / Ratanda)	12 001	0.4%	4 036
	Lesedi LM Rural	16 726	0.5%	3 011
	Midvaal LM Rural East	8 888	0.3%	9 363
	Midvaal LM Rural West	13 101	0.4%	3 202
	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)	175 308	5.6%	4 599
	Emfuleni LM Rural	2 777	0.1%	4 954

Municipality	Sub-regions	Number of households	%	Average monthly household income (Rands)
Westrand	Westonaria LM	32 750	1.0%	3 588
	Merafong LM	39 513	1.3%	4 026
	Randfontein LM Urban	29 868	1.0%	3 974
	Randfontein LM Rural	3 327	0.1%	6 943
	Mogale City LM Urban (Krugersdorp, Kagiso)	58 856	1.9%	5 458
	Mogale City LM Rural	17 870	0.6%	3 577
	Gauteng District Management Area (Cradle of Humankind)	624	0.0%	3 068
GHTS2014	Grand total	3 129 970	100.0%	5 767
GTS2000	Grand total	2 182 285		3 247

2.6. Car ownership by income

Table 7 shows the relationship between household income and household car access. As expected, car access correlated with household income. In 2014 the average number of cars per household was 0.5, which is the same figure that had been found in GTS2000. Households who refused to disclose income had relatively high car access, which may imply that it was higher-income households who tended to refuse to answer questions on income.

Table 7: Car ownership by income and average car ownership per household (2014)

Monthly household income	Number of households	Number of households who have access to a car	Percentage of households per income group who have access to a car	Average number of cars per household	Estimated number of cars in group
Don't know	216 158	87 681	41%	0.60	130 534
Refused to answer	564 184	295 370	52%	0.83	469 023
R0	52 826	5 249	10%	0.13	6 973
R1-R200	24 009	1 042	4%	0.05	1 229
R201-R500	158 277	6 233	4%	0.05	7 435
R501-R1000	253 711	23 656	9%	0.12	29 839
R1001-R1500	440 340	45 952	10%	0.13	59 132
R1501-R2500	413 958	61 811	15%	0.18	76 527
R2501-R3500	348 589	58 764	17%	0.20	69 789
R3501-R4500	300 938	64 339	21%	0.26	79 340
R4501-R6000	268 131	86 358	32%	0.39	105 704
R6001-R8000	229 290	92 545	40%	0.51	117 678
R8001-R11000	200 599	119 290	59%	0.80	161 292
R11001-R16000	163 956	119 919	73%	1.04	171 031

R16001-R30000	169 346	144 463	85%	1.47	248 319
R30001+	104 811	100 232	96%	2.18	228 115
Gauteng	3 909 123	1 312 904	34%	0.50	1 961 961

2.7. Driver's licence

Respondents were asked if any member(s) of their household above 18 years of age had a driver's licence. Table 8 shows that in 2014 56% of the households in the province had no member with a driver's licence. Despite the fact that the absolute number of households with a driver's licence was larger in 2014, the proportion of households without a licence actually increased – from the previous 50% in GTS2000.

Table 8: Number of licensed drivers relative to households

Number of licensed drivers in household	Number of households (GHTS2014)	% (GHTS2014)	Number of households (GTS2000)	% (GTS2000)
0	2 194 890	56	1 093 595	50.1
1	1 077 947	28	566 476	26.0
2	504 506	13	389 611	17.9
3	105 925	3	92 524	4.2
4+	27 486	1	40 079	1.8
Grand Total	3 910 754	100	2 182 285	100.00

2.8. Vehicle ownership per household

Table 9 shows that the distribution of household-owned vehicles in the province (excluding motorcycles) ranged from none to four and more. In 2014 about two-thirds of households owned no vehicle, which is 2% lower than the figure that had been reported in GTS2000.

Table 9: Vehicle ownership

Number of vehicles owned per household	Number of households	%
0	2 596 219	66%
1	834 457	21%
2	354 631	9%
3	89 383	2%
4+	34 433	1%
Total	3 909 123	100%

Table 10 shows the distribution of households with employer-owned cars. In 2014 more than 95% of households did not have access to an employer-owned vehicle, and about 4% had access to one such car.

Table 10: Employer-owned vehicles

Number of employer-owned vehicles	Number of households	%
0	3 734 145	95.5%
1	147 526	3.8%
2	18 097	0.5%
3	5 615	0.1%
4+	2 890	0.1%
Total	3 908 273	100.0%

2.9. Spatial distribution of vehicle ownership

Table 11 shows the geographical distribution of vehicle ownership (excluding motorcycles) in 2014, including the average number of licensed drivers per household. The average number of licensed drivers per household, at 0.6, was marginally higher than the average of 0.5 cars per household. Alberton, at 1.5 cars per household, had the highest average number of cars per household of all the sub-regions.

Table 11: Spatial distribution of car ownership per household

Municipality	Sub-region	Number of households	%	Average car access per household	Average number of licensed drivers
Ekurhuleni	Tembisa / Clayville	118 276	3%	0.3	0.6
	Ekurhuleni Rural	41 843	1%	0.4	0.6
	Kempton Park / JIA / Boksburg North	165 112	4%	1.0	1.2
	Daveyton	79 422	2%	0.2	0.4
	Brakpan / Benoni / Springs	73 344	2%	0.7	0.9
	Kwatsaduza	160 902	4%	0.4	0.5
	Germiston / Boksburg	102 912	3%	0.6	0.8
	Alberton	27 913	1%	1.5	1.5
	Katorus	244 528	6%	0.3	0.5
Johannesburg	Diepsloot	79 357	2%	0.5	0.5
	Midrand	127 323	3%	0.4	0.7

Municipality	Sub-region	Number of households	%	Average car access per household	Average number of licensed drivers
	Alexandra/ Modderfontein	75 978	2%	0.5	0.7
	Randburg	100 354	3%	0.9	1.0
	Roodepoort	124 986	3%	1.1	1.2
	Northcliff/Rosebank	79 612	2%	0.9	1.0
	Joburg Central	107 983	3%	0.3	0.5
	Joburg South	90 476	2%	0.9	1.1
	Diepmeadow	207 807	5%	0.4	0.5
	Soweto/Doornkop	301 449	8%	0.4	0.5
	Orange Farm/ Ennerdale	143 246	4%	0.3	0.4
Sedibeng	Lesedi LM Urban (Heidelberg / Ratanda)	15 262	0%	0.4	0.7
	Lesedi LM Rural	18 840	0%	0.2	0.4
	Midvaal LM Rural East	15 909	0%	1.2	1.4
	Midvaal LM Rural West	14 381	0%	0.2	0.3
	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)	234 602	6%	0.3	0.5
	Emfuleni LM Rural	3 717	0%	0.7	1.1
Tshwane	Temba, Winterveld, Mabopane, Ga-rankuwa	183 992	5%	0.2	0.3
	Soshanguve	157 639	4%	0.3	0.4
	Akasia / Rosslyn	12 260	0%	1.4	1.3
	Rooiwal	11 314	0%	0.2	0.3
	Pretoria North	22 102	1%	1.4	1.5
	Moot	33 791	1%	1.2	1.4
	Mamelodi / Nellmapius	166 542	4%	0.3	0.4
	Pretoria East	56 222	1%	1.4	1.4
	Pretoria CBD	2 239	0%	0.5	0.8
	Pretoria West / Atteridgeville	84 291	2%	0.4	0.5

Municipality	Sub-region	Number of households	%	Average car access per household	Average number of licensed drivers
	Centurion	77 770	2%	0.8	0.9
	Tshwane West Rural	5 887	0%	0.7	0.8
	Nokeng Tsa Taemane LM Rural	15 970	0%	0.2	0.2
	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)	12 897	0%	0.3	0.5
	Kungwini LM Rural West	14 995	0%	0.7	0.7
	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)	14 029	0%	0.4	0.4
	Kungwini LM Rural East	28 796	1%	0.3	0.3
West Rand	Westonaria LM	36 948	1%	0.2	0.4
	Merafong LM	60 373	2%	0.3	0.5
	Randfontein LM Urban	38 640	1%	0.3	0.5
	Randfontein LM Rural	5 214	0%	0.9	1.1
	Mogale City LM Urban (Krugersdorp, Kagiso)	90 756	2%	0.4	0.7
	Mogale City LM Rural	21 681	1%	0.3	0.4
	Gauteng District Management Area (Cradle of Humankind)	873	0%	0.4	0.5
Grand Total		3 910 754	100%	0.5	0.6

2.10. Household expenditure on public transport

Figure 2 presents a cumulative distribution of household expenditure on public transport for 2003 and 2014 in Gauteng Province. Since GTS2000 did not measure household expenditure on public transport, the National Household Travel Survey for 2003 is used instead to provide some trend. Based on Figure 2, indications are that household expenditure on public transport is on the rise. While about 70% of households spent 10% or less on public transport in 2003, this number decreased to about 55% in 2014.

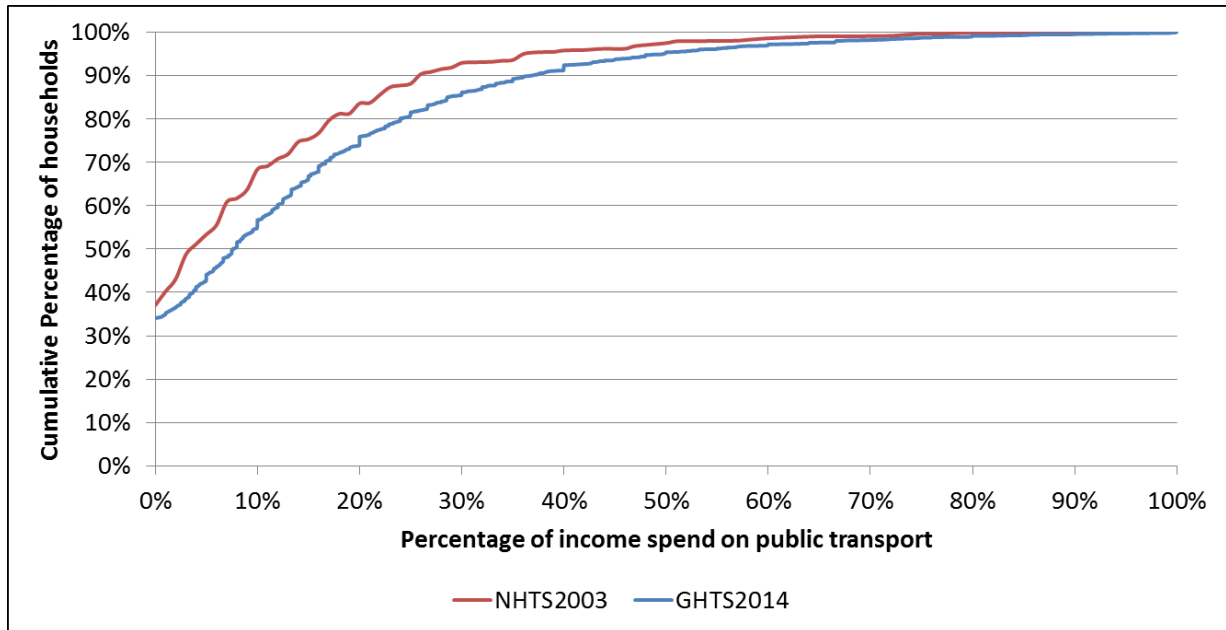


Figure 2: Household expenditure on transport (2003 and 2014)

3. 2014 RESULTS: PERSON ATTRIBUTES

3.1. Gender and race

Table 12 shows the weighted gender distribution for the different municipalities in the province. Generally, gender distribution within the province was even across municipalities in 2014.

Table 12: Gender split in Gauteng

Municipality	Female	Male
Ekurhuleni	48.7%	51.3%
Johannesburg	49.8%	50.1%
Sedibeng	50.0%	50.0%
Tshwane	50.3%	49.7%
West Rand	49.9%	50.1%
Grand Total	49.7%	50.3%

Table 13 shows the population group distribution in the province in 2014. According to the weighted survey results, blacks/Africans comprised 77.7% of the population, followed by whites at 15.7%. Asians/Indians and coloureds together accounted for less than 7% of the total population.

Table 13: Population groups per municipality

Municipality	Black/African	White	Asian/Indian	Coloured	Other	Grand Total
Ekurhuleni	79.02%	15.92%	2.16%	2.71%	0.19%	25.9%
Johannesburg	76.96%	12.33%	4.90%	5.61%	0.21%	36.3%
Sedibeng	81.54%	15.62%	1.00%	1.21%	0.64%	7.5%
Tshwane	75.57%	20.50%	1.88%	2.05%	0.00%	23.5%
West Rand	79.54%	16.58%	1.14%	2.50%	0.23%	6.9%
Grand Total	77.7%	15.7%	2.9%	3.5%	0.2%	100.0%

3.2. Age group

Table 14 shows the age distribution in the province in 2014 when the weighted population for the province was 12 254 771 people – in other words three million more people than the GTS2000 figure of 8 882 572 people. The 3-million increase in population over the 15-year period since 2000 suggests an average population growth rate of 2% per year.

Table 14: Age distribution in Gauteng population

Age (Years)	Population size	%
0 – 6	1 469 905	12.0%
7 – 17	2 131 611	17.4%
18 -25	1 866 008	15.2%
26 – 65	6 306 200	51.5%
65 +	465 413	3.8%
Refused to answer	5 566	0.0%
Don't know	10 068	0.1%
Grand Total	12 254 771	100.0%

Figure 3 depicts the graphical age distribution (in five-year intervals) for the province as reported for 2014. There are notably large proportions of people in the age categories 21-25 and 26-30 relative to other age groups.

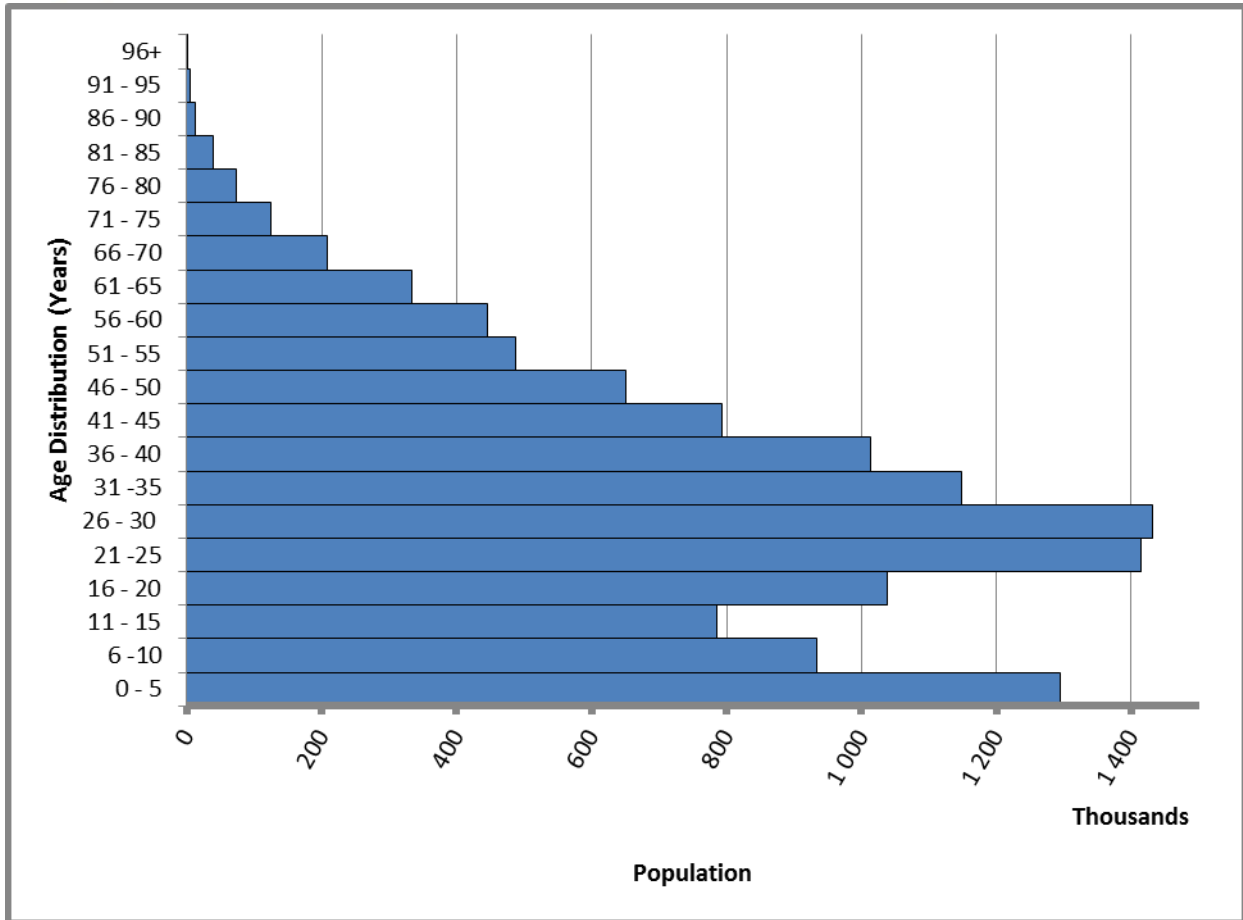


Figure 3: Age distribution of the population in Gauteng

3.3. Number of full-time employed persons

Table 15 shows the distribution of the number of employed persons per household in 2014. The figures presented in Table 15 exclude the number of people who were working part-time. In comparison to GTS2000, the proportion of households without a single full-time employed person increased markedly over the years. This reduction may have the effect of reducing household trip generation rates.

Table 15: Number of full-time employed persons

Number of full-time employed persons per household	Number of households (GHTS2014)	% (GHTS2014)	% (GTS2000)
0	1 773 543	45.4%	29.0%
1	1 580 602	40.4%	44.5%
2	473 237	12.1%	19.9%
3	67 612	1.7%	5.0%
4+	15 761	0.4%	1.6%
Grand Total	3 910 754	100.0%	100.0%

3.4. Employment by sub-region

Table 16 shows the sub-regional distribution of employed persons in Gauteng in 2014. On average, employed persons made up 53% of the population within the working age group. The percentage of persons who were employed decreased to 53% from the 57% that had been reported in GTS2000. This implies that the work-based trip generation rates over this period may have also reduced.

Table 16: Persons employed by sub-region

Municipality	Sub-Region	Total number of persons	% employed	% not employed
Tshwane	Temba, Winterveld, Mabopane, Ga-rankuwa	314 423	27%	73%
	Soshanguve	274 589	38%	62%
	Akasia / Rosslyn	24 065	65%	35%
	Rooiwal	18 088	37%	63%
	Pretoria North	49 429	73%	27%
	Moot	81 759	75%	25%
	Mamelodi / Nellmapius	274 111	43%	57%
	Pretoria East	116 709	78%	22%
	Pretoria CBD	2 698	71%	29%
	Pretoria West / Atteridgeville	147 408	46%	54%
	Centurion	150 187	64%	36%
	Tshwane West Rural	9 561	63%	37%
	Nokeng Tsa Taemane LM Rural	28 929	40%	60%
	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)	24 382	51%	49%
	Kungwini LM Rural West	24 046	71%	29%
	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)	24 179	35%	65%
Kungwini LM Rural East	47 594	33%	67%	
Johannesburg	Diepsloot	144 193	69%	31%
	Midrand	226 116	70%	30%
	Alexandra/Modderfontein	138 779	64%	36%
	Randburg	161 235	89%	11%
	Roodepoort	247 844	80%	20%
	Northcliff/Rosebank	146 011	70%	30%
	Joburg Central	171 402	69%	31%
	Joburg South	185 988	69%	31%
	Diepmeadow	337 157	48%	52%
	Soweto/Doornkop	600 475	48%	52%
	Orange Farm/Ennerdale	272 765	50%	50%
EKurhuleni	Tembisa / Clayville	201 587	51%	49%

Municipality	Sub-Region	Total number of persons	% employed	% not employed
	Ekurhuleni Rural	73 611	42%	58%
	Kempton Park / JIA / Boksburg North	291 602	74%	26%
	Daveyton	142 895	28%	72%
	Brakpan / Benoni / Springs	121 644	58%	42%
	Kwatsaduza	259 522	38%	62%
	Germiston / Boksburg	186 903	52%	48%
	Alberton	50 316	83%	17%
	Katorus	416 953	39%	61%
Sedibeng	Lesedi LM Urban (Heidelberg / Ratanda)	26 295	62%	38%
	Lesedi LM Rural	24 670	50%	50%
	Midvaal LM Rural East	22 745	82%	18%
	Midvaal LM Rural West	22 767	38%	62%
	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)	340 424	42%	58%
	Emfuleni LM Rural	5 919	68%	32%
West Rand	Westonaria LM	65 918	42%	58%
	Merafong LM	115 802	44%	56%
	Randfontein LM Urban	67 702	43%	57%
	Randfontein LM Rural	11 724	61%	39%
	Mogale City LM Urban (Krugersdorp, Kagiso)	174 954	56%	44%
	Mogale City LM Rural	39 181	62%	38%
	Gauteng District Management Area (Cradle of Humankind)	2 359	66%	34%
	Grand Total	6 909 611	53%	47%

3.5. Disability

Table 17 presents the profile of disabilities and physical difficulties disclosed by respondents in Gauteng. A total number of 230 427 persons, representing 1.88% of the population in the province, had to cope with some form of disability or difficulty. This number more than doubled from 110 646 as reported in GTS2000, which then represented 1.2% of the provincial population. The predominant form of difficulty/disability was related to the use of crutches at 0.74% of the population.

Table 17: Disability or difficulty in accessing public transport

Disability or difficulty	Number of persons	%
Blindness	25 115	0.20%
Deafness	23 947	0.20%
Having problems with stairs	17 665	0.14%
Mentally handicapped	48 130	0.39%
Needing a wheelchair	22 761	0.19%
Travelling with small children	1 685	0.01%
Using crutches	91 124	0.74%
Grand Total	230 427	1.88%

3.6. Level of education

Table 18 presents the profile relating to the level of education in the province in 2014, ranging from no formal education to tertiary education. Just over 40% of people reported that they had completed high school and tertiary education. Relative to GTS2000, the proportion of people with no education had stayed the same, but the absolute number of persons with no formal education had increased by 370 621.

Table 18: Educational level in Gauteng

Educational level	Number of persons	%
None	1 501 920	12.3%
Some primary school	1 753 106	14.3%
Primary school	378 479	3.1%
Some high school	3 436 822	28.0%
High school	3 285 868	26.8%
Some university	676 252	5.5%
Degree/Diploma/Tertiary	1 126 915	9.2%
Other	95 410	0.8%
Grand Total	12 254 771	100.0%

3.7. Occupation status

Table 19 presents the profile relating to Gauteng inhabitants' occupation status in 2014. A quarter of people in the province were in full-time employment, while about 5% were employed on a part-time basis. The percentage of unemployed people increased from 21.5% in GTS2000 to 26.3% in the current survey. This trend may also have the effect of reducing work-related trip generation rates.

Table 19: Occupational status of Gauteng inhabitants

Occupational status	Number of persons	%
Child staying at home	939 685	7.7%
Child attending pre-school/nursery school/crèche/day-mother	366 011	3.0%
Full-time worker	3 093 635	25.2%
Part-time worker	590 646	4.8%
Primary school learner	1 361 659	11.1%
High school learner	948 395	7.7%
Student at university or college (post-matric)	370 499	3.0%
Housewife/husband (homemaker)	308 026	2.5%
Pensioner/retired	830 684	6.8%
Unable to work (chronically ill/ mentally handicapped/ physically handicapped)	93 543	0.8%
Unemployed	3 225 329	26.3%
Not applicable	2 074	0.0%
Other	124 252	1.0%
Not given	331	0.0%
Grand Total	12 254 771	100.0%

4. 2014 RESULTS: TRIP MAKING

4.1. Intra- and inter-municipal travel

Table 20 shows spatial trip distribution in the province for a typical weekday during 2014 on the basis of weighted survey data. The majority of trips were intra-municipal trips, the highest being in the City of Johannesburg with about 3.9 million trips per day. Inter-municipal trips were highest between City of Johannesburg and Ekurhuleni. Trips originating from Ekurhuleni destined to the City of Johannesburg amounted to 153 842 trips per day, while trips to Ekurhuleni from the City of Johannesburg amounted to 131 845 trips per day. The City of Johannesburg had the highest number of trips originating from outside Gauteng, followed by the City of Tshwane.

Table 20: Daily trip distribution ¹

Origin \ Destination	City of Johannesburg	City of Tshwane	Ekurhuleni	West Rand	Sedibeng
City of Johannesburg	3 985 785	48 892	131 845	30 047	22 651
City of Tshwane	33 203	1 911 613	9 325		1507
Ekurhuleni	153 842	24 198	2 543 914		9265
West Rand	23 310	1 537	1 686	505 221	422

¹ Disaggregation of weighted household survey data into an origin-destination matrix is very sensitive to sampling strategy. For transport modelling purposes, other datasets would be required to further refine this matrix.

Origin \ Destination	City of Johannesburg	City of Tshwane	Ekurhuleni	West Rand	Sedibeng
Sedibeng	17 369	544	6 118	1 046	523 123
From outside Gauteng	38 428	18 284	10 050	2 011	2 011

4.2. Morning peak-period trips according to purpose

Table 21 shows morning peak-period trips (from 06:00 to 09:00) according to trip purpose for GHTS2014, the 2013 National Household Travel Survey (NHTS2013), and GTS2000. Close to 90% of the morning peak-period trips reported in GHTS2014 were for work and education purposes. In percentage terms, the split of trip purposes did not change significantly from the GTS2000 proportions. It is however worth noting that the NHTS2013 reported a larger number of education and work trips for Gauteng than the GHTS2014. It is further worth noting that the total number of peak-period trips reduced from 4 700 000 in GTS2000 to 3 817 751 in GHTS2014.

Table 21: Morning peak-period trips according to purpose

Trip purpose	GHTS2014 Number of trips	NHTS2013 Number of trips	GHTS2014 Percentage of trips	GTS2000 Percentage of trips
Education	1 821 193	2 207 189	47.7%	47.2%
Going to work at usual workplace	1 486 522	2 766 207	38.9%	31.2%
In the course of work, but not at usual workplace	9 717	-	0.3%	0.7%
Looking for work	40 861	-	1.1%	-
Medical/health purposes	27 294	-	0.7%	-
Other	47 704	-	1.2%	6.7%
Recreational	10 495	-	0.3%	-
Shopping	77 419	-	2.0%	0.2%
Dropping someone off/picking someone up	65 299	-	1.7%	-
Going home	96 720	-	2.5%	2.8%
Visiting friends/relatives	38 697	-	1.0%	-
Worship	51 294	-	1.3%	-
Visiting welfare office	8 991	-	0.2%	-
Not given	35 546	-	0.9%	-
Grand Total	3 817 751			100.0%
GTS2000	4 700 000			

Figure 4 shows the cumulative percentage of trips by trip departure time from 00:00 to 11:00. About 90% of departures reported on in GTS2000 occurred between 06:00 and 09:00. On the other hand, because whole-day travel was considered in GHTS2014, only 40% of the departures had been undertaken by 11:00 in the NHTS2014. In fact, whereas GTS2000 recorded 5.6 million trips per day, GHTS2014 recorded 10 million trips per day.

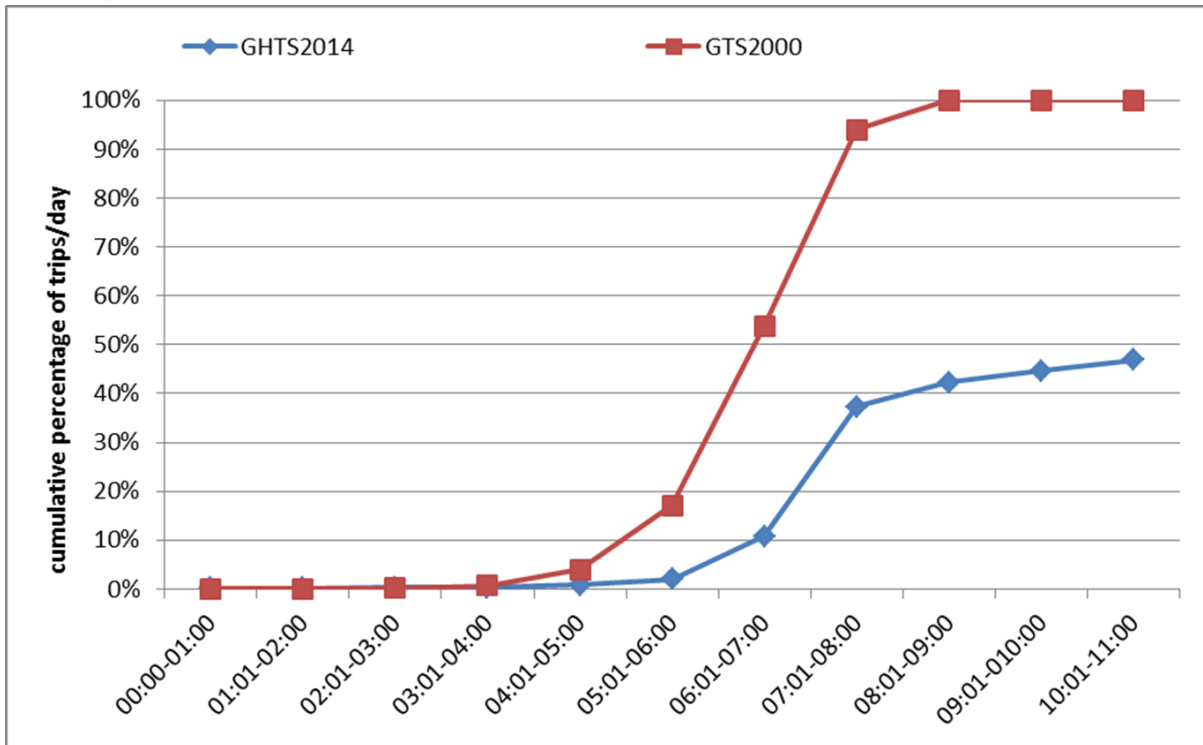


Figure 4: Cumulative percentage of trips by departure time

4.3. Morning peak-period trips according to mode of travel

Table 22 shows the morning peak period (06:00 - 09:00) trips by mode of travel in the province. While car and minibus taxis remained the dominant modes of travel for both GHTS2014 and GHS2000, it is worth noting that the proportion of those walking all the way reduced in 2014. In addition, buses tended to be used more for purposes of education-related trips. The proportion of trips taking place by private car also increased, and the proportion of trips taking place in the form of lift clubs was equivalent to the number of trips undertaken by train.

Table 22: Morning peak-period trips according to travel mode

Mode of transport	GHTS2014 Number of trips	GHTS2014 %	GTS2000 %
Walk all the way	1 299 418	34.0%	37.7%
Bicycle	12 609	0.3%	0.6%
Motorcycle	9 104	0.2%	0.1%
School bus	189 906	5.0%	-
Bus (BRT/Rea Vaya)	9 611	0.3%	-
Bus (Other)	69 151	1.8%	4.3%
Car as a passenger	330 518	8.7%	9.8%
Car, as a driver	836 717	21.9%	19.0%
Company transport	37 298	1.0%	0.9%
Commuter taxi/minibus taxi	834 388	21.9%	22.4%
Train	77 658	2.0%	3.5%
Gautrain	1 808	0.0%	-
Gautrain bus	2 017	0.1%	-

Mode of transport	GHTS2014 Number of trips	GHTS2014 %	GTS2000 %
Lift club driver	2 984	0.1%	-
Lift club passenger	59 624	1.6%	1.7%
Metered taxi	14 248	0.4%	-
Not given	1 075	0.0%	-
Other	29 615	0.8%	-
Grand Total	3 817 751	100.0%	100%

4.4. Mode of travel according to purpose of trip

Table 23 shows the mode of travel according to the purpose of the trip for a typical weekday in 2014. While the large proportion of trips in Gauteng were undertaken for work and education purposes, it is worth noting that buses, lift clubs and metered taxis were predominantly used for trips undertaken for education-related purposes.

Table 23: Mode of travel according to trip purpose

Trip purpose	Bicycle	Bus	Car	Taxi/ minibus taxi	Company transport	Train	Lift club	Metered taxi	Motorcycle	Other	Walk all the way	Not given
Education	43%	81%	21%	30%	2%	39%	52%	56%	29%	47%	78%	12%
Going to work at usual workplace	53%	16%	62%	52%	92%	45%	40%	34%	65%	35%	13%	54%
In the course of work but not at usual workplace	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Looking for work	1%	0%	0%	2%	0%	6%	2%	0%	0%	0%	1%	0%
Medical/health purposes	0%	0%	1%	1%	0%	0%	0%	2%	0%	1%	1%	0%
Other	0%	0%	1%	2%	0%	1%	1%	1%	0%	3%	1%	0%
Recreational	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shopping	0%	0%	2%	4%	0%	0%	0%	6%	5%	3%	1%	0%
Dropping someone off/ picking someone up	2%	0%	5%	0%	1%	0%	0%	0%	0%	0%	1%	0%
Going home	0%	1%	4%	3%	2%	5%	1%	1%	0%	10%	2%	5%
Visiting friends/relatives	0%	0%	1%	2%	0%	1%	1%	1%	0%	1%	1%	0%
Worship	0%	0%	2%	1%	0%	0%	2%	0%	0%	0%	1%	28%
Visiting welfare office	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Not given	0%	0%	1%	1%	3%	1%	0%	0%	0%	0%	0%	1%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

4.5. Main mode of travel to work by sub-region

Table 24 shows the main mode of travel in each sub-region for a typical weekday. There are distinct sub-regions for which above average mode use was reported in 2014. For example, while minibus taxis accounted for 24% of trips on average, almost half of the trips in the Midrand sub-region were undertaken by minibus taxi. Private cars were a popular mode of travel in sub-regions such as Pretoria East (82%), Randburg (75%) and Randfontein LM Rural (74%).

Table 24: Mode of travel by sub-region

Municipality	Sub-region	Commuter taxi/minibus taxi	Walk all the way	Car	Company transport	Lift club	Bus	Train	Bicycle	Metered taxi	Motorcycle	Other	Grand Total
Tshwane	Temba, Winterveld, Mabopane, Ga-rankuwa	28%	45%	8%	0%	2%	13%	2%	0%	1%	0%	0%	100%
	Soshanguve	33%	36%	11%	1%	1%	14%	3%	0%	1%	0%	0%	100%
	Akasia / Rosslyn	13%	7%	69%	0%	1%	8%	1%	2%	0%	0%	0%	100%
	Rooiwal	22%	40%	16%	0%	3%	19%	0%	0%	0%	0%	0%	100%
	Pretoria North	4%	12%	73%	1%	1%	6%	1%	2%	0%	1%	0%	100%
	Moot	2%	17%	70%	1%	1%	6%	0%	1%	0%	1%	0%	100%
	Mamelodi / Nellmapius	37%	33%	11%	0%	2%	8%	6%	0%	3%	0%	0%	100%
	Pretoria East	3%	9%	82%	0%	0%	4%	0%	1%	0%	1%	0%	100%
	Pretoria CBD	11%	30%	38%	1%	1%	18%	1%	1%	0%	0%	0%	100%
	Pretoria West / Atteridgeville	32%	21%	22%	1%	2%	16%	5%	0%	0%	0%	0%	100%
	Centurion	13%	18%	59%	1%	3%	4%	1%	1%	0%	1%	0%	100%
	Tshwane West Rural	17%	17%	53%	0%	1%	10%	1%	0%	1%	0%	0%	100%
	Nokeng Tsa Taemane LM Rural	10%	52%	15%	0%	2%	20%	0%	1%	0%	0%	0%	100%
	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)	15%	48%	21%	1%	1%	12%	1%	1%	0%	0%	0%	100%
	Kungwini LM Rural West	7%	15%	63%	0%	2%	12%	0%	0%	0%	0%	0%	100%
	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)	11%	58%	19%	0%	3%	7%	0%	0%	2%	0%	0%	100%
	Kungwini LM Rural	21%	47%	19%	4%	1%	8%	0%	0%	0%	0%	0%	100%

Municipality	Sub-region	Commuter taxi/minibus taxi	Walk all the way	Car	Company transport	Lift club	Bus	Train	Bicycle	Metered taxi	Motorcycle	Other	Grand Total
	East												
Johannesburg	Diepsloot	34%	30%	29%	2%	2%	2%	0%	0%	0%	0%	1%	100%
	Midrand	49%	13%	28%	1%	1%	4%	3%	0%	0%	0%	1%	100%
	Alexandra/ Modderfontein	36%	26%	31%	1%	1%	3%	1%	0%	0%	0%	0%	100%
	Randburg	6%	15%	75%	0%	1%	1%	0%	1%	1%	1%	0%	100%
	Roodepoort	11%	19%	62%	1%	2%	4%	0%	0%	0%	0%	0%	100%
	Northcliff/Rosebank	12%	25%	53%	0%	2%	5%	2%	0%	0%	0%	0%	100%
	Joburg Central	37%	36%	16%	3%	1%	3%	3%	0%	1%	0%	0%	100%
	Joburg South	14%	15%	57%	0%	3%	7%	2%	0%	0%	0%	1%	100%
	Diepmeadow	33%	35%	15%	0%	2%	9%	3%	0%	0%	0%	1%	100%
	Soweto/Doornkop	32%	39%	12%	1%	1%	10%	5%	0%	0%	0%	0%	100%
Orange Farm/Ennerdale	23%	46%	12%	1%	1%	8%	8%	0%	0%	0%	0%	100%	
Ekurhuleni	Tembisa / Clayville	24%	38%	14%	3%	1%	2%	14%	0%	0%	0%	3%	100%
	Ekurhuleni Rural	18%	37%	34%	2%	0%	6%	0%	0%	0%	0%	2%	100%
	Kempton Park / JIA / Boksburg North	9%	17%	62%	1%	2%	3%	4%	1%	0%	1%	0%	100%
	Daveyton	20%	49%	10%	2%	0%	7%	4%	1%	0%	0%	6%	100%
	Brakpan / Benoni / Springs	18%	24%	44%	1%	4%	5%	1%	0%	0%	1%	0%	100%
	Kwatsaduza	30%	43%	18%	1%	2%	3%	1%	0%	1%	0%	0%	100%
	Germiston / Boksburg	22%	25%	38%	1%	1%	8%	4%	1%	0%	0%	1%	100%
	Alberton	3%	5%	85%	0%	1%	4%	0%	0%	0%	0%	0%	100%
	Katorus	30%	39%	12%	1%	0%	9%	6%	0%	1%	0%	1%	100%
Sedibeng	Lesedi LM Urban (Heidelberg / Ratanda)	26%	31%	37%	2%	2%	2%	0%	0%	0%	0%	1%	100%
	Lesedi LM Rural	26%	52%	17%	1%	1%	3%	0%	0%	0%	0%	1%	100%
	Midvaal LM Rural East	8%	13%	69%	1%	0%	3%	1%	0%	1%	0%	3%	100%
	Midvaal LM Rural West	22%	57%	4%	0%	2%	8%	3%	1%	0%	0%	3%	100%
	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)	30%	46%	15%	1%	1%	3%	1%	0%	0%	0%	3%	100%
	Emfuleni LM Rural	2%	25%	62%	0%	0%	11%	0%	0%	0%	0%	0%	100%

Municipality	Sub-region	Commuter taxi/minibus taxi	Walk all the way	Car	Company transport	Lift club	Bus	Train	Bicycle	Metered taxi	Motorcycle	Other	Grand Total
West Rand	Westonaria LM	14%	52%	21%	2%	1%	8%	1%	0%	0%	0%	2%	100%
	Merafong LM	16%	43%	18%	7%	1%	11%	0%	0%	0%	0%	4%	100%
	Randfontein LM Urban	21%	45%	21%	2%	3%	6%	1%	0%	0%	0%	0%	100%
	Randfontein LM Rural	8%	8%	74%	3%	0%	8%	0%	0%	0%	0%	0%	100%
	Mogale City LM Urban (Krugersdorp, Kagiso)	25%	37%	24%	2%	2%	6%	1%	0%	0%	0%	2%	100%
	Mogale City LM Rural	20%	38%	18%	3%	2%	14%	0%	1%	0%	1%	3%	100%
	Gauteng District Management Area (Cradle of Humankind)	11%	50%	10%	0%	3%	27%	0%	0%	0%	0%	0%	100%
Total		24%	32%	29%	1%	1%	7%	3%	0%	0%	0%	1%	100%

4.6. Average total travel time for peak-period trips (one way)

Table 25 shows the average travel time for peak-period trips as reported in the province in 2014. Of all travel modes, trains had the highest average travel time (01:20:12), while motorcycles (00:31:40) and cars (00:45:03) had the lowest average travel times. The average travel time increased by 44% from 32 minutes (GTS2000) to 46 minutes (GHTS2014). Car travel in particular increased by 80% during the period 2000 and 2014.

Table 25: Average total travel time for peak-period trips (one way)

Mode of travel	GHTS2014 Number of trips	GHTS2014 Average travel time	GTS2000 Average travel time
Car	1 165 169	00:45:03	00:25:00
Bus	269 589	00:55:43	00:53:00
Commuter taxi/minibus taxi	832 371	00:59:21	00:49:00
Company transport	37 025	01:00:57	00:36:00
Train	81 216	01:20:12	01:13:00
Lift club	62 287	00:50:10	00:33:00
Metered taxi	14 248	00:48:24	-
Motorcycle	9 104	00:31:40	00:19:00

Bicycle	12 609	00:47:54	00:26:00
Walk all the way	1 293 569	00:33:37	00:23:00
Not applicable	481	00:15:55	-
Other	29 576	01:09:45	00:36:00
Grand Total	3 807 245	00:46:13	00:32:00

4.7. Walking time to access first mode of travel and reach final destination

Table 26 shows commuters' average walking time to access the first mode of public transport and to reach the final destination during the morning peak period. Trains had the longest access times while buses had the lowest access times.

Table 26: Walking time to and from nearest public transport

Mode of transport	Number of trips	Average walking time at start (minutes)	Average walking time from trip end to destination (minutes)
Bus	267 066	6.1	5.3
Commuter taxi/minibus taxi	789 550	8.7	7.9
Train	76 266	19.0	14.8
Grand Total	1 132 882	8.8	7.8

4.8. Public transport access times by income group

Table 27 again shows – for work trips undertaken by public transport during the morning peak period – commuters' average walking times to the first mode of public transport, as well as their average walking time to their final destination. Commuters are ranked according to the household's monthly income. Walking times as reported in 2014 tended to be lower for higher-income persons.

Table 27: Walking time before and after public transport trip by income group

Household's monthly income	Average walking time at trip start (minutes)	Average walking time at trip end (minutes)
Don't know	7.19	6.86
R0	9.54	9.67
R1-R200	3.98	3.89
R201-R500	14.26	8.73
R501-R1000	8.13	8.02
R1001-R1500	11.46	7.82
R1501-R2500	9.71	8.59
R2501-R3500	8.36	8.26
R3501-R4500	9.24	7.04
R4501-R6000	7.51	6.72
R6001-R8000	5.27	5.14

Household's monthly income	Average walking time at trip start (minutes)	Average walking time at trip end (minutes)
R8001-R11000	4.89	4.20
R11001-R16000	3.15	3.51
R16001-R30000	2.99	3.22
R30001+	1.64	2.23
Refused to answer	4.06	4.03
Average	5.37	5.06

4.9. Trips to work during peak period according to mode of public transport

Table 28 shows – for work trips during the morning peak period – access times at trip start and trip end for “branded” public transport modes. Once again people using trains (Metrorail) tended to experience the highest access times, while access times for the different brands of buses were relatively low.

Table 28: Average walking time to first mode of travel and to final destination

Mode of travel	Average walking time at trip start (minutes)	Average walking time at trip end (minutes)
Bus (BRT/Rea Vaya)	8	9
Bus (other)	9	9
Commuter taxi/minibus taxi	9	8
Company transport	5	4
Gautrain	5	6
Gautrain bus	7	6
Metered taxi	7	7
Other	12	10
School bus	6	5
Train	19	14
Tshwane bus services	7	5
Average	9	8

4.10. Access times for education-related trips on public transport according to household income

Table 29 shows – for education-related trips on public transport during peak-periods and for different household income groups – commuters' walking time to first public transport mode as well as their walking time at trip end. Once again, walking times tended to reduce with increased household income.

Table 29: Access times for education-related trips during peak period by household income

Household monthly income	Average walking time at trip start (minutes)	Average walking time from trip end to destination (minutes)
Don't know	5.9	5.7
R0	23.2	25.3
R1-R200	5.7	15.8
R201-R500	8.1	4.5

R501-R1000	5.1	5.8
R1001-R1500	6.8	5.4
R1501-R2500	5.9	5.4
R2501-R3500	5.2	4.6
R3501-R4500	4.3	4.1
R4501-R6000	4.0	3.7
R6001-R8000	3.8	3.1
R8001-R11000	4.6	3.4
R11001-R16000	3.2	3.1
R16001-R30000	3.0	2.5
R30001+	2.1	2.3
Refused to answer	4.3	4.6
Mean	4.8	4.4

4.11. Peak-period trips for education-related purposes by public transport

Table 30 shows – for education-related trips during the morning peak period – how much time it took learners and students to access “branded” public transport modes at trip start and to reach their destination at trip end. Learners using trains tended to have the longest access times.

Table 30: Walking time for peak-period trips for education-related purposes according to mode of travel

Mode of travel	Walking time to trip start (minutes)	Walking time from trip end to destination (minutes)
Train	20	17
Metered taxi	5	8
Commuter taxi/minibus taxi	7	7
School bus	5	4
Gautrain	11	11
Gautrain bus	13	6
Bus (BRT/Rea Vaya)	17	13
Tshwane bus services	5	5
Bus (other)	6	5
Other	10	7
Mean	7	7

4.12. Departure times by trip purpose

Table 31 shows the distribution of departure times for morning peak-period trips according to the purpose of the trip. For GHTS2014, 48% peak-period trips were made between 07:00 and 07:59 in contrast to 40% in GTS2000. Apart from the decrease in the proportion of trips after 08:00, all other departure time intervals increased their share of trips from GTS2000 to GHTS2014.

Table 31: Departure times according to trip purpose

GHTS2014					
Purpose of trip	Number of	Before 06:00	06:00 –	07:00 –	08:00 –

	trips		06:59	07:59	09:00
Going home	105 853	9%	28%	40%	23%
Going to work	1 867 030	20%	41%	32%	7%
Looking for work	49 221	17%	22%	32%	29%
Education	1 849 412	2%	25%	70%	3%
Shopping	78 449	1%	4%	11%	84%
Visiting friends/relatives	40 386	4%	11%	21%	64%
Medical/health purposes	32 014	15%	31%	26%	28%
Visiting welfare offices	9 523	9%	5%	54%	32%
Giving someone a ride	67 300	3%	24%	60%	13%
Other	180 280	7%	18%	28%	46%
Total	4 279 470	11%	31%	48%	10%
GTS2000					
Purpose of trip	Number of trips	Before 06:00	06:00 – 06:59	07:00 – 07:59	08:00 – 09:00
Going home	146 133	3.7%	14.7%	50.0%	31.4%
Going to work	1 988 938	20%	39.9%	33.4%	6.2%
Part of work	40 079	12.9%	20.8%	26.8%	39.2%
Education	2 415 377	1.1%	17.3%	78.6%	3.1%
Serve passenger	277 602	1.4%	27.4%	64.7%	6.5%
Going shopping	224 235	1.3%	4.9%	18.6%	75.2%
Walking, jogging, cycling	9 037	9.6%	19.0%	31.1%	40.3%
Social or recreational purposes	72 187	1.8%	9.1%	29.1%	59.8%
Other	392 275	13.1%	36.0%	29.8%	21.2%
Total	5 565 863	7.2%	21.0%	40.2%	31.4%

4.13. Trip departure times by income group

Table 32 shows morning peak-period departure times according to household income. Higher-income groups tended to travel earlier than 06:00 while lower income groups travelled later than 07:00.

Table 32: Departure time by income groups

Income group	Number of trips	Before 06:00	06:00 – 06:59	07:00 – 07:59	08:00 – 09:00
Don't know	311 437	11%	33%	49%	7%
R0	18 818	6%	18%	59%	17%
R1-R200	9 958	1%	22%	62%	15%
R201-R500	85 012	7%	27%	52%	14%
R501-R1000	209 956	5%	18%	68%	9%
R1001-R1500	308 050	6%	25%	57%	12%
R1501-R2500	344 090	9%	28%	53%	10%
R2501-R3500	330 192	16%	29%	47%	9%
R3501-R4500	302 598	15%	34%	42%	9%

Income group	Number of trips	Before 06:00	06:00 – 06:59	07:00 – 07:59	08:00 – 09:00
R4501-R6000	324 248	17%	32%	44%	8%
R6001-R8000	294 644	15%	33%	45%	8%
R8001-R11000	280 799	16%	33%	43%	9%
R11001-R16000	276 964	11%	39%	43%	8%
R16001-R30000	320 148	8%	36%	44%	11%
R30001+	232 803	4%	35%	49%	12%
Refused to answer	629 753	9%	31%	49%	10%
Grand Total	4 279 470	11%	31%	48%	10%

4.14. Days per week worked according to household income

Table 33 shows the number of days that commuters worked per week by household income. Two-thirds of the workers worked for five days a week. Generally, the number of days worked per week did not seem to be influenced greatly by household income.

Table 33: Days worked per week by household income

Household income	Number of trips	Number of days worked per week						
		1	2	3	4	5	6	7
Refused to answer	521 539	0.0%	0.8%	3.4%	4.5%	70.4%	14.7%	6.3%
Don't know	219 473	0.0%	0.8%	3.1%	2.7%	69.6%	14.3%	9.5%
R0	20 727	0.0%	0.0%	6.6%	2.6%	68.2%	13.2%	9.5%
R1-R200	7 203	0.0%	0.0%	0.0%	0.4%	83.2%	7.7%	8.8%
R201-R500	58 954	0.0%	0.1%	1.8%	8.0%	65.0%	20.4%	4.7%
R501-R1000	147 732	0.1%	0.3%	4.2%	5.0%	71.8%	13.0%	5.7%
R1001-R1500	222 700	0.4%	2.4%	3.4%	6.4%	61.8%	17.7%	7.9%
R1501-R2500	271 935	0.2%	2.3%	4.4%	4.8%	66.2%	16.0%	6.2%
R2501-R3500	255 952	0.7%	1.3%	2.3%	5.8%	67.1%	13.6%	9.3%
R3501-R4500	238 317	0.0%	1.7%	4.0%	4.0%	68.8%	16.0%	5.5%
R4501-R6000	239 198	0.3%	0.9%	5.2%	5.7%	67.7%	12.9%	7.2%
R6001-R8000	212 799	0.1%	1.5%	2.9%	5.8%	65.9%	16.6%	7.3%
R8001-R11000	199 116	1.1%	1.1%	2.6%	4.3%	68.7%	13.0%	9.1%
R11001-R16000	195 381	0.1%	0.1%	3.4%	4.3%	65.6%	15.3%	11.1%
R16001-R30000	246 439	0.8%	0.5%	1.7%	4.0%	71.0%	12.5%	9.5%
R30001+	207 991	1.1%	1.0%	2.4%	3.5%	77.6%	9.7%	4.8%
Grand Total	3 265 457	0.3%	1.1%	3.3%	4.7%	68.7%	14.5%	7.5%

4.15. Average number of trips per household by income group

Table 34 shows the average number of trips – for various purposes – that were made during the morning peak period per household and by income group. The average number of trips per household increased with increased income for all trip purposes except for educational purposes. The latter remained fairly constant with increased income.

Table 34: Average number of trips per household by income group

Household income	Average number of trips	Going home	Going to work	Going to school/education	Shopping	Other
Don't know	1.28	0.02	0.54	0.63	0.02	0.08
R0	0.33	0.00	0.04	0.23	0.01	0.05
R1-R200	0.41	0.01	0.07	0.21	0.02	0.09
R201-R500	0.50	0.01	0.04	0.34	0.02	0.09
R501-R1000	0.79	0.02	0.08	0.58	0.02	0.09
R1001-R1500	0.66	0.01	0.11	0.44	0.02	0.08
R1501-R2500	0.75	0.01	0.19	0.46	0.02	0.07
R2501-R3500	0.80	0.03	0.26	0.42	0.02	0.08
R3501-R4500	0.86	0.03	0.32	0.43	0.02	0.06
R4501-R6000	1.01	0.02	0.39	0.50	0.03	0.07
R6001-R8000	1.10	0.03	0.50	0.48	0.02	0.07
R8001-R11000	1.18	0.03	0.58	0.46	0.02	0.09
R11001-R16000	1.51	0.05	0.77	0.59	0.01	0.09
R16001-R30000	1.73	0.07	0.91	0.55	0.03	0.17
R30001+	2.14	0.04	1.31	0.58	0.03	0.17
Refused to answer	1.01	0.03	0.50	0.39	0.02	0.07
Grand Total	0.98	0.02	0.38	0.47	0.02	0.08

4.16. Average trip generation rates per household and sub-region

Table 35 shows the average household trip generation rates by sub-region in 2014. The trip generation rate for the entire province was 0.98 trips per household per day. Most of the trips were for work or education purposes.

Table 35: Average trip generation rates per household and sub-region

Municipality	Sub-region	Number of households	All trips	Going home	Work	Part of work	Educa-tion	Shop	Other
Johannesburg	Diepsloot	79 357	1.05	0.06	0.46	0.00	0.38	0.02	0.12
	Midrand	127 323	0.94	0.01	0.44	0.00	0.25	0.11	0.13
	Alexandra/Modderfontein	75 978	1.15	0.05	0.51	0.00	0.38	0.04	0.16
	Randburg	100 354	0.77	0.03	0.43	0.00	0.18	0.03	0.10
	Roodepoort	124 986	1.24	0.04	0.66	0.00	0.38	0.05	0.12
	Northcliff/Rosebank	79 612	1.11	0.05	0.52	0.00	0.35	0.03	0.15
	Joburg Central	107 983	0.65	0.04	0.35	0.00	0.18	0.02	0.07
	Joburg South	90 476	1.30	0.04	0.61	0.00	0.43	0.02	0.19

Municipality	Sub-region	Number of households	All trips	Going home	Work	Part of work	Education	Shop	Other
	Diepmeadow	207 807	0.62	0.03	0.19	0.00	0.29	0.02	0.10
	Soweto/Doornkop	301 449	1.05	0.03	0.26	0.00	0.55	0.02	0.19
	Orange Farm/Ennerdale	143 246	1.24	0.04	0.28	0.00	0.73	0.04	0.15
Tshwane	Temba, Winterveld, Mabopane, Ga-rankuwa	183 992	0.68	0.01	0.17	0.00	0.45	0.01	0.03
	Soshanguve	157 639	0.88	0.02	0.21	0.00	0.58	0.02	0.05
	Akasia / Rosslyn	12 260	1.35	0.05	0.68	0.01	0.56	0.01	0.04
	Rooiwal	11 314	0.73	0.01	0.25	0.01	0.44	0.01	0.02
	Pretoria North	22 102	1.61	0.04	0.84	0.01	0.64	0.01	0.07
	Moot	33 791	1.98	0.08	1.07	0.01	0.71	0.02	0.10
	Mamelodi / Nellmapius	166 542	0.78	0.00	0.30	0.00	0.44	0.00	0.03
	Pretoria East	56 222	1.53	0.03	0.89	0.01	0.52	0.01	0.08
	Pretoria CBD	2 239	0.95	0.03	0.56	0.00	0.36	0.00	0.00
	Pretoria West / Atteridgeville	84 291	0.97	0.01	0.41	0.00	0.51	0.00	0.03
	Centurion	77 770	1.11	0.02	0.61	0.01	0.42	0.01	0.04
	Tshwane West Rural	5 887	0.75	0.03	0.44	0.00	0.26	0.00	0.03
	Nokeng Tsa Taemane LM Rural	15 970	0.82	0.01	0.29	0.00	0.51	0.00	0.01
	Nokeng Tsa Taemane LM Urban (Cullinan / Rayton)	12 897	1.18	0.01	0.46	0.00	0.70	0.00	0.00
	Kungwini LM Rural West	14 995	0.96	0.04	0.42	0.01	0.42	0.07	0.07
	Kungwini LM Urban (Bronkhorstspuit, Zithobeni)	14 029	0.74	0.00	0.26	0.00	0.48	0.00	0.01
Kungwini LM Rural East	28 796	0.75	0.01	0.22	0.00	0.51	0.01	0.01	
Ekurhuleni	Tembisa / Clayville	118 276	1.10	0.02	0.41	0.00	0.60	0.01	0.06
	Ekurhuleni Rural	41 843	0.79	0.01	0.30	0.00	0.43	0.01	0.05
	Kempton Park / JIA / Boksburg North	165 112	1.43	0.04	0.81	0.00	0.47	0.01	0.08
	Daveyton	79 422	0.95	0.02	0.18	0.00	0.68	0.01	0.06
	Brakpan / Benoni / Springs	73 344	0.98	0.01	0.55	0.00	0.38	0.01	0.03
	Kwatsaduza	160 902	1.01	0.02	0.31	0.00	0.54	0.02	0.11
	Germiston / Boksburg	102 912	1.10	0.02	0.48	0.00	0.51	0.03	0.07
	Alberton	27 913	0.97	0.02	0.62	0.00	0.26	0.01	0.06
	Katorus	244 528	0.98	0.01	0.28	0.00	0.64	0.00	0.04

Municipality	Sub-region	Number of households	All trips	Going home	Work	Part of work	Education	Shop	Other
Sedibeng		302 712	0.75	0.02	0.24	0.01	0.41	0.02	0.05
	Lesedi LM Urban (Heidelberg / Ratanda)	15 262	0.97	0.05	0.45	0.02	0.35	0.02	0.07
	Lesedi LM Rural	18 840	1.02	0.06	0.32	0.01	0.48	0.04	0.12
	Midvaal LM Rural East	15 909	1.30	0.06	0.67	0.03	0.35	0.04	0.16
	Midvaal LM Rural West	14 381	0.96	0.06	0.21	0.02	0.54	0.05	0.09
	Emfuleni LM Urban (Evaton, VdBP, Vereeniging)	234 602	0.66	0.01	0.20	0.01	0.40	0.01	0.03
	Emfuleni LM Rural	3 717	0.56	0.00	0.35	0.00	0.14	0.02	0.05
West Rand	Westonaria LM	36 948	0.82	0.01	0.22	0.00	0.51	0.02	0.07
	Merafong LM	60 373	0.68	0.00	0.21	0.01	0.43	0.00	0.02
	Randfontein LM Urban	38 640	0.74	0.00	0.26	0.00	0.45	0.02	0.01
	Randfontein LM Rural	5 214	0.59	0.02	0.33	0.00	0.22	0.00	0.02
	Mogale City LM Urban (Krugersdorp, Kagiso)	90 756	1.06	0.01	0.44	0.02	0.52	0.01	0.05
	Mogale City LM Rural	21 681	1.13	0.02	0.54	0.03	0.46	0.01	0.07
	Gauteng District Management Area (Cradle of Humankind)	873	1.46	0.00	0.64	0.00	0.82	0.00	0.00
	Grand Total	3 910 754	0.98	0.02	0.38	0.00	0.47	0.02	0.08

5. USE OF AND ATTITUDES TOWARDS PUBLIC TRANSPORT SERVICES

5.1. Usage of buses

5.1.1. Satisfaction with buses

Table 36 shows bus users' overall levels of satisfaction with bus services in the province in 2014. Bus users were generally more satisfied (satisfied/very satisfied) (63%) than dissatisfied (dissatisfied/very dissatisfied) (22%) with the available bus services. However, the main attributes of bus services with which users were dissatisfied were the following:

- Levels of crowding on the bus
- Service frequency during peak and off-peak times
- Facilities at bus stops and ranks

Table 36: Satisfaction with bus service

Attributes of bus service	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Distance of bus stop from home	6%	15%	7%	48%	25%
Distance of bus stop from work	6%	16%	16%	43%	20%
Travel time in bus	5%	17%	12%	48%	18%
Security during walk to bus	6%	18%	13%	46%	16%
Security at bus ranks and stops	7%	20%	13%	45%	15%
Security on the bus	4%	14%	12%	53%	17%
Levels of crowding on the bus	14%	25%	9%	37%	14%
Safety from bus accidents	6%	17%	18%	45%	15%
Peak-period frequency of buses	8%	22%	16%	41%	13%
Off-peak frequency of buses	10%	22%	20%	36%	12%
Punctuality of buses	10%	22%	12%	40%	16%
Bus fares	9%	18%	10%	45%	18%
Facilities at bus stops and ranks	10%	21%	17%	37%	14%
Roadworthiness of buses	7%	14%	15%	47%	17%
Behaviour of bus drivers	6%	12%	13%	49%	20%
Overall quality of bus service	6%	16%	16%	46%	17%

5.2. Importance of attributes of bus services

Table 37 shows the importance of the bus service attributes as rated by respondents in 2014. They considered the following attributes of bus services as very important:

- Roadworthiness of buses
- Safety from bus accidents
- Levels of crowding on the bus
- Punctuality of buses
- Overall quality of bus service
- Bus fares

Table 37: Rating of attributes of bus service

Attributes of bus service	Not important	Important	Very important
Distance of bus stop from home	5.3%	36.3%	58.4%
Distance of bus stop from work	7.4%	37.5%	55.1%
Travel time in bus	3.2%	38.9%	57.9%
Security during walk to bus	4.5%	42.1%	53.4%
Security at bus ranks and stops	3.8%	38.9%	57.3%
Security on the bus	6.1%	40.4%	53.4%
Levels of crowding on the bus	4.1%	32.7%	63.3%
Safety from bus accidents	2.6%	31.8%	65.6%
Peak-period frequency of buses	4.0%	37.7%	58.3%
Off-peak frequency of buses	6.5%	43.4%	50.1%
Punctuality of buses	3.2%	33.7%	63.2%
Bus fares	3.1%	35.6%	61.3%
Facilities at stops and ranks	3.9%	40.4%	55.8%

Roadworthiness of buses	2.9%	28.9%	68.2%
Behaviour of bus drivers	3.8%	36.6%	59.6%
Overall quality of bus service	2.8%	35.5%	61.6%

5.3. Reasons for not using buses

Table 38 shows the reasons that respondents disclosed for not using bus services in the province. The reasons that they mentioned more often were the following:

- Bus is not available at all
- Prefer taxi
- Prefer private transport
- Buses do not go where needed
- Bus is not available often enough

Table 38: Reasons for not using a bus service

Reasons for not using buses	%
Prefer taxi	13%
No bus available at all	28%
Prefer private transport	11%
Buses don't go where needed	6%
No knowledge of timetable and routes	5%
Bus stop too far from home	4%
Other	4%
Bus not available often enough	6%
Bus not available at the right times	5%
Can walk	3%
Bus too crowded	2%
Travel time too long/too slow	3%
Bus stop too far from destination	2%
Bus always late	2%
Bus too expensive	2%
Prefer train	2%
Too much crime (Too dangerous)	1%
Too many accidents	1%
Have to change transport (transfer)	1%

5.4. Usage of minibus taxis

5.4.1. Satisfaction with minibus taxis

Table 39 shows minibus taxi users' levels of satisfaction with taxis in the province in 2014. Minibus taxi users were slightly more satisfied (total of 41%) than dissatisfied (total of 39%) with the service. Key attributes that emerged in respect of which users expressed dissatisfaction (dissatisfied and very dissatisfied) were the following:

- Behaviour of taxi drivers

- Roadworthiness of taxis
- Safety from accidents

Table 39: Satisfaction with taxi service

Attributes of taxi service	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Distance of taxi service from home	8%	19%	8%	45%	20%
Distance of taxi service from work	7%	18%	20%	43%	13%
Travel time in taxi	6%	18%	12%	50%	14%
Security during walk to taxi	9%	25%	15%	40%	11%
Security at taxi ranks and stops	9%	26%	16%	39%	10%
Security in the taxi	5%	12%	10%	66%	6%
Levels of crowding on the taxi	13%	25%	15%	37%	9%
Safety from taxi accidents	15%	29%	22%	27%	7%
Peak-period frequency of taxis	9%	22%	17%	41%	11%
Off-peak frequency of taxis	9%	22%	19%	40%	10%
Punctuality of taxis	12%	24%	12%	41%	11%
Taxi fares	12%	17%	6%	60%	5%
Facilities at stops and ranks	7%	16%	11%	61%	5%
Roadworthiness of taxis	17%	28%	19%	28%	8%
Behaviour of taxi drivers	21%	25%	20%	27%	7%
Taxi service overall	15%	24%	20%	33%	8%

5.4.2. Importance of attributes of taxi services

Table 40 shows the importance of service attributes as rated by minibus taxi users. The following attributes seemed to stand out:

- Roadworthiness of taxis
- Safety from taxi accidents
- Behaviour of taxi drivers
- Taxi fares

Table 40: Important attributes of a taxi service

Attributes of taxi service	Not important	Important	Very important
Distance of taxi stop from home	4.8%	40.4%	54.9%
Distance of taxi stop from work	8.6%	45.7%	45.6%
Travel time in taxi	4.3%	46.8%	48.9%
Security during walk to taxi	4.3%	43.3%	52.4%
Security at taxi ranks and stops	3.9%	41.9%	54.1%
Security on the taxi	5.8%	42.1%	52.1%
Levels of crowding on the taxi	5.3%	40.6%	54.1%

Attributes of taxi service	Not important	Important	Very important
Safety from taxi accidents	2.1%	35.7%	62.2%
Peak-period frequency of taxis	6.3%	45.9%	47.8%
Off-peak frequency of taxis	8.9%	49.6%	41.5%
Punctuality of taxis	4.3%	45.2%	50.5%
Taxi fares	3.0%	37.9%	59.1%
Facilities at stops and ranks	4.9%	44.3%	50.8%
Roadworthiness of taxis	2.0%	32.9%	65.1%
Behaviour of taxi drivers	3.0%	36.1%	60.9%
Taxi service overall	2.0%	38.2%	59.7%

5.4.3. Reasons for not using taxis

Table 41 shows the reasons that respondents disclosed for not using minibus taxis. Two reasons seemed to stand out:

- Prefer using private transport
- Taxi service too expensive

Table 41: Reasons for not using a taxi

Reasons for not using taxis	%
Prefer private transport	33.8%
Taxi too expensive	10.8%
No taxi available at all	7.9%
Other	5.7%
Drivers drive recklessly	4.6%
Too much crime (too dangerous)	3.9%
Drivers are rude	3.9%
Taxis too crowded	3.5%
Taxis not available often enough	3.2%
Have to pay cash	3.2%
Taxis don't go where needed	3.2%
Have to wait for too long for/in taxi	3.0%
Too much violence/taxi wars	2.4%
Taxis not roadworthy	2.3%
Taxis not available at the right times	2.0%
Too many accidents	1.9%
Taxis too far from home	1.9%
Travel time too long/too slow	1.8%
Prefer bus	1.3%
Grand Total	100%

5.5. Usage of trains

5.5.1. Satisfaction with trains

Table 42 presents the satisfaction rating of train services by train users in 2014. Train users were generally more dissatisfied (dissatisfied/very dissatisfied) (42%) than satisfied (satisfied/very satisfied) (37%) with train services. Users seemed to be particularly dissatisfied with the following service attributes:

- Levels of crowding on the trains
- Punctuality of trains
- Distance of stations from home
- Frequency of train services

Table 42: Satisfaction with train service

Attributes of train services	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Distance of station from home	22%	27%	7%	30%	14%
Distance of station from work	15%	27%	21%	29%	9%
Travel time in train	20%	30%	14%	29%	7%
Security during walk to station	15%	30%	13%	33%	9%
Security at stations	12%	23%	14%	41%	11%
Security on the train	18%	29%	13%	31%	8%
Levels of crowding in the train	39%	31%	11%	14%	4%
Safety from train accidents	9%	18%	19%	42%	11%
Peak-period frequency of trains	16%	29%	19%	28%	7%
Off-peak frequency of trains	18%	31%	20%	24%	7%
Punctuality of trains	30%	29%	15%	19%	6%
Train fares	7%	12%	9%	48%	25%
Facilities at stations	9%	17%	18%	45%	11%
Train service overall	16%	21%	21%	34%	8%

5.5.2. Importance of train service attributes

Table 43 shows the importance of train service attributes as expressed and rated by train users. Attributes that particularly stood out in this regard were the following:

- Punctuality of a train services
- Levels of crowding on trains
- Distance of station from home
- Security on the trains

Table 43: Important attributes for a train service

Attributes	Not important	Important	Very important
Distance of station from home	4.0%	32.8%	63.3%
Distance of station from work	6.4%	40.2%	53.4%

Attributes	Not important	Important	Very important
Travel time in train	4.3%	38.1%	57.5%
Security on walk to station	4.7%	36.2%	59.0%
Security at stations	4.8%	35.2%	60.0%
Security on the train	4.8%	32.5%	62.8%
Level of crowding in the train	5.8%	30.7%	63.5%
Safety from train accidents	4.2%	37.5%	58.2%
Peak-period frequency of trains	5.7%	41.8%	52.5%
Off-peak frequency of trains	8.1%	49.1%	42.8%
Punctuality of trains	0.9%	90.9%	8.2%
Train fares	9.8%	41.0%	49.2%
Facilities at stations	7.8%	45.6%	46.6%
Train service overall	4.6%	35.0%	60.4%

5.5.3. Reasons for not using trains

Table 44 presents reasons disclosed by respondents why they did not use trains. The following reason was found to be most important:

- No train available at all

Table 44: Reasons for not using train service

Reasons for not using trains	%
No train available at all	37.87%
Other	9.79%
Station too far from home	8.85%
Prefer private transport	7.29%
Prefer taxi	6.85%
Too much crime (too dangerous)	5.49%
Trains too crowded	5.41%
Trains don't go where needed	4.67%
Travel time too long/too slow	3.65%
Trains not available often enough	2.51%
Trains not available at the right times	1.95%
No knowledge of timetable and routes	1.67%
Station too far from destination	1.67%
Can walk	1.06%
Train too expensive	0.77%
Have to change transport (transfer)	0.49%
Grand Total	100.00%

6. CONCLUSIONS

This report provides a summary of basic information that was obtained from the 2014 Gauteng Household Travel Survey (GHTS2014). The information presented here included travel patterns, trip characteristics and attitudes of users and potential users of various transport services. Much more detailed information may be extracted from the data collected and can be used for transport planning purposes. However, future work would need to be tailored to address specific transport requirements and shortcomings, as were revealed by the 2014 survey.

The following findings are worth noting:

- Household sizes are gradually declining.
- Zero car owning households on the increase. Also, households with no driver's licence increased.
- Proportion of household income spent on public transport increased significantly.
- Low capacity modes are absorbing increased demand.
- Proportion of trips by private car is on the increase.
- Household trip generation rates reduced significantly.
- Average travel time increased markedly.
- Walking still the most predominant mode of travel.
- Access time to public transport did not change significantly.
- A third of workers do not work the usual 5 days a week.
- There is a large latent demand for public transport. The main reason for not using higher capacity public transport modes is that the modes are not accessible.
- Travel demand is travel time elastic.
- Ekurhuleni-Johannesburg corridor has the largest inter-municipal travel demand.