

# Road Traffic Management Corporation

## 2010 Traffic Offence Survey Report



Prepared by





**Road Traffic Management Corporation  
2010 Traffic Offence Survey Report**

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## 1 CHAPTER 1: INTRODUCTION

### 1.1 OVERVIEW

MicroZone was appointed in August 2007 by the Road Traffic Management Corporation to perform road traffic offence surveys on rural and urban roads in South Africa, during day and night time.

The survey forms part of the monitoring and evaluation program of the national Arrive Alive road safety program. The purpose of the survey was to determine offence rates in respect of a representative sample of important road traffic offences, per province and for the country as a whole. MicroZone was appointed for a three year period to undertake surveys during 2007, 2008 and 2009. The corporation extended MicroZone's appointment in August 2010 to conduct Traffic Offence Surveys for 2010.

The offences that were selected by the Corporation to be surveyed are deemed to be of significant importance in road traffic safety. Offence rates determined during the Arrive Alive traffic offence survey serve as indicators of the success of the Arrive Alive road safety program. By comparing the rates on an annual basis, the long term progress with regard to traffic discipline, law abidance and traffic safety can be monitored.

This report contains the results that were obtained during the 2010 survey and compares such information with that gathered during previous years. The report is divided into the following sections:

- ✚ Chapter 1: A brief overview of the report.
- ✚ Chapter 2: A summary of the main results of the survey.
- ✚ Chapter 3: A general overview of the survey
- ✚ Chapter 4: An explanation of the procedures and methods that were followed.
- ✚ Chapter 5: Information on the profiles of the drivers who were observed in the survey, and of their vehicles.

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- ✚ Chapter 6: Detailed information on the offence rates and trends that were measured during the survey.
  - ✚ Chapter 7: A relation of the traffic offence information to accident statistics.
  - ✚ Chapter 8: Calculation of contravention rates in terms of the number of driver licences, Professional Driving Permits (PrDPs) and vehicles registered in the country.
  - ✚ Chapter 9: Suggestions on ways of improving future surveys.
  - ✚ Annexure A: Development of the traffic offence indicators and indexes used in chapter 2.
  - ✚ Annexure B: Definition of offences
  - ✚ Annexure C: Location codes and descriptions
  - ✚ Annexure D: RTMC Road Traffic Offence Survey Software
  - ✚ Annexure E: Arrive Alive patrol car routes
  - ✚ Annexure F: Other road traffic related parameters used during the survey
  - ✚ Annexure G: Relation of breath and blood alcohol concentration to the stage of alcohol influence
  - ✚ Annexure H: Sample survey forms
  - ✚ Annexure I: Strategy for sample size determination

A summary of the most important results from the 2010 survey can be found in sections 2.2 and 2.3.

An executive summary that gives an overview of the main results of the traffic offence survey has also been produced.

## **1.2 NOTE ON CHANGES IN THE CALCULATION OF OFFENCE INDICATORS AND INDEXES**

In Chapter 2 the results of the traffic offence monitoring program are expressed in the form of indicators and indexes. The indicators and indexes of the 2010 survey are compared to those of previous years (2009, 2008, 2007, 2006, 2005, 2003 and 2002).

The first change relates only to speed offences. In previous reports, offence indexes were calculated on the basis of speed offences *plus 10% grace*. The

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RTMC has requested that this be changed and that the indicators be calculated without taking 10% grace into account. This has been done with the 2007, 2008, 2009 and 2010 results. All indicators of previous years were recalculated in the 2006 report. The effect of this change is that speed indicators and indexes prior to 2006 in section 2.5 are now on a higher level because the drivers who drove between 1% and 9% over the speed limit have also been counted as offenders.

The second change relates to the weight which has been assigned to the offence levels of the different vehicle categories. In previous reports, when indexes were calculated, the same weight was given to offences committed by drivers of the different vehicle categories. The results obtained were misleading because the proportion of light motor vehicles (LMVs) on the road is much higher than that of other vehicle categories. The offence indexes of drivers of the different vehicle categories should therefore be weighted in accordance with the proportion of the different vehicle categories on the road. This was done in the 2007, 2008, 2009 and 2010 reports. The indicators and indexes of all years were recalculated according to this approach in the 2006 report. The effect is that the indicators tend to be influenced more by the offence levels that were recorded for LMVs – that is because the number of LMVs on the roads are so much higher than the rest of the vehicle categories. In practical terms: *Where the offence levels of LMVs are lower than that of minibus taxis, buses and trucks, the indexes reported in the 2007, 2008, 2009 and 2010 report will be lower than in the 2005 report, and vice versa.*

Full detail on these changes can be found in Annexure A of this document.

### **1.3 PROPOSED CHANGES TO THE CALCULATION OF THE OVERALL OFFENCE INDEX**

The overall offence index is calculated by weighting the results of a subset of the offence results. Refer to Annexure A for more details on the weighting process and the calculation table in Chapter 10.3 devised to calculate the overall offence index. Some of the survey methods were changed during the 2008 survey. The barrier line survey was changed to evaluate the number of convoys of vehicles where barrier line offences were committed. The jaywalking survey was changed

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to evaluate the compliance of pedestrians at traffic signals. These changes resulted in no weights for these offences being available. The same changes were again applied during the 2010 survey. Therefore the results for the above offences are directly comparable between the 2008, 2009 and 2010 surveys.

With the launch of the AARTO pilot project in the Tshwane area, the project team investigated the possibility of implementing the AARTO demerit points associated with each offence, as the weight used in the calculation of the overall offence index. This would lead to an overall offence index that is derived directly from the seriousness of the offence according to AARTO. The success of AARTO could be monitored by means of this system and any possible future changes to the demerit point system could be recalculated for past surveys to have comparable trends.

The AARTO demerit point weights differ significantly from the weights used in previous surveys. Although it would be possible to recalculate the offence indexes for previous surveys, the ZERO weights associated with some of the AARTO demerit points, would nullify the effect of these offences on the overall offence index.

The issues raised above warrants further investigation to determine the best way forward. For the 2008, 2009 and 2010 reports it was decided to calculate the overall offence indexes using the old weighting system used in previous reports. The Corporation should however investigate the possibility of modifying the weighting system calculation for future surveys.

The table below shows the difference between the existing weight and the proposed AARTO weigh for the calculation of the overall offence index:

Offence	Previous Weight	AARTO Offence Code	AARTO Demerit Points	Comments
Speed Index-Urban	5	3743	1	AARTO Demerit Points Weight Significantly Lower
Speed Index-Rural	5	3743	1	AARTO Demerit Points Weight Significantly Lower
Alcohol Index-Driver, Night	12	5603	6	AARTO Demerit Points Weight Significantly Lower
Seatbelt Index-Driver	2	2850	0	No AARTO Demerit Points weight
Seatbelt index-Front Passenger	2	2850	0	No AARTO Demerit Points weight
Traffic Signal Index-Day	1	4093	2	
Barrier Line Index-Day	4	5003	3	
Driver Licence Index	2	1710	1	
PrDP Index	2	1900	4	Perhaps use AARTO offence code 2001 - Weight would still remain 4
Worn Tyre Index	2	2844	0	No AARTO Demerit Points weight
Light Index-Front Bright	1	2362	1	
Light Index-Tail	1	?	?	No associated AARTO Offence
Light Index-Brake	1	2535	1	
Pedestrian Compliance	NONE	4136	0	Pedestrian Compliance is a new survey replacing Jaywalking - Jaywalking was not taken into consideration in the previous index calculations

## **1.4 SOUTH AFRICAN NATIONAL WEIGHTED TOTAL**

The descriptions for the “South African National Weighted Total” in the tables and graphs have been shortened to simplify the representation of the information. The abbreviation is as follows:

RSA NWT: “South African National Weighted Total”

## **2 CHAPTER 2: SUMMARY OF RESULTS AND FINDINGS PER PROVINCE AND FOR THE COUNTRY**

### **2.1 BACKGROUND**

The Arrive Alive Offence Monitoring Program is part of the comprehensive Arrive Alive road traffic safety program which was launched by the Department of Transport on 1 October 1997. The main goal of the Arrive Alive program is to promote road traffic safety throughout South Africa. The purpose is to reduce road accidents, fatalities and injuries. A comprehensive, multi-disciplinary approach is followed in the Arrive Alive program. One of the methods to reduce accidents, fatalities and injuries is to reduce road traffic offence levels through law enforcement and education interventions. The goal of the Arrive Alive Offence Monitoring Program is to provide the RTMC with management information related to the effectiveness of law enforcement, education and communication intervention in the country. The information obtained from the monitoring program is mainly used for the following purposes:

- a. To complement existing traffic safety information and to clarify the factors that contributes to road accidents;
- b. To measure the effect and impact of road safety and law enforcement programs
- c. To determine the general level of compliance on the road network on a year to year basis.



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The information that was obtained during the survey is presented in Chapter 2 in summarised form.

- ✚ The standards for law compliance that were used in this report are listed in section 2.2.2.
- ✚ The combined national offence index and factors of change that were calculated from the observed information are reported in section 2.3.
- ✚ Summarised rates and indexes for the different offence types are shown in section 2.4 to 2.15.
- ✚ The chapter ends with general comments and recommendations in section 2.16.

## **2.2 COMBINED NATIONAL OFFENCE INDEX**

### **2.2.1 THE USE OF INDICATORS AND INDEXES**

An explanation of the concepts of indicators and indexes is provided in Annexure A. Readers who are not familiar with these concepts should read this annexure before reading the rest of chapter 2.

### **2.2.2 STANDARDS THAT WERE APPLIED**

The acceptable value (“size”) of the standards for the different offences is debatable. Whatever the considerations, it is important that offence levels should be low: Standards for the evaluation of the success of law compliance programs should therefore be strict. The following standards have been applied in this document after consultation with the RTMC:

- ✚ Exceeding the speed limit: Maximum 5% defective rate (i.e. not more than 5% offenders)
- ✚ Exceeding the legal breath alcohol limit: Maximum of 0.4% defective rate at any time of the day or night (i.e. not more than 1 offender in 250 drivers tested found over the legal limit)
- ✚ Crossing on a barrier line: Maximum of 1% barrier line offences (1 offence for every 100 convoys observed)

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- ✚ Vehicles disobeying traffic signals: Maximum of 1% of red phases with an offence
  - ✚ Wearing of seat belt: Maximum 15% offence rate
  - ✚ The use of child restraints: Maximum 15% offence rate
  - ✚ Driver licence present and valid: Maximum 1% offence rate
  - ✚ The validity of the vehicle registration discs and correlation between the registration disc and number plate: Maximum 1% offence rate
  - ✚ Public Driver Permit present and valid: Maximum 1% offence rate
  - ✚ Worn vehicle tyres: Maximum 1% defective rate
  - ✚ Vehicle lights defective: Maximum 1% defective rate
  - ✚ The use of cellular phones while driving a vehicle: Maximum 1% offence rate
  - ✚ Pedestrians disobeying traffic signals: Maximum of 1% of red phases with an offence

The indexes in the following sections have been formulated in such a way that all these standards are expressed as 1 (one) index unit. This means that when any of these standards have been reached, the index number of that offence will be equal to 1. For example: An index number of 1 for alcohol offences would mean that an offence rate of 0.4% was observed during the survey (this is exactly on the standard rate of 0.04%). An index number of 0.5 for seat belts would mean that an offence rate of 7.5% was observed during the survey (this is 0.5 times the standard rate of 15%). An index number of 2.0 for speeding offences would mean that an offence rate of 10% was observed during the survey (this is double the standard rate of 5%).

The reason for the development of these indexes is that it allows for comparison of the different types of offences on an equal basis. Without indexes it would be difficult to compare an offence which is measured in terms of, for example, “milligrams per litre” (alcohol) with an offence which is expressed in terms of “kilometres per hour” (speed) or “percentage of red phases with offence” (Disobeying traffic signals). By reducing all these offences to index numbers which relate the offence levels to their respective targets, the rates of the different offences become mutually comparable and can also be used to calculate combined (or joint) indexes for the different offences.

The levels of offences relative to these standards are shown in tabular format in the rest of section 2.4 to 2.15.

## **2.3 NOTE ON CHANGES IN THE SURVEY METHODS AND THE EFFECTS THEREOF**

### **2.3.1 BARRIER LINE SURVEYS**

Previous barrier line surveys reported on the average number of vehicles overtaking on a barrier line per 2 minute interval. The data presented with this type of analysis varied greatly from year to year, due to the random nature of the event. Despite various measures that were implemented to try and improve the data accuracy, no reliable trends could be determined for barrier line offences.

The 2008, 2009 and 2010 collection of barrier line offence data was changed to record the number of convoys of vehicles passing, and report on the number of convoys where barrier line offences were present. This percentage of convoys with offences was used as the offence rate. This type of analysis yielded results that were more in line between provinces, and should provide better statistics for multi-year comparisons.

### **2.3.2 JAYWALKING SURVEYS**

Road accidents involving pedestrians is the biggest contributor to fatalities on our roads. Approximately 40% of fatal accidents involve pedestrians. It is therefore important to obtain an indication of the extent of unlawful (which is per definition unsafe) or informal (i.e. uncontrolled) crossing of pedestrians or presence of pedestrians on roads.

During previous studies, unlawful presence of pedestrians was determined by observing pedestrian “jay-walking” in urban areas. Due to the subjective nature of this type of survey, the survey for 2008, 2009 and 2010 was changed to rather

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look at the compliance of pedestrians with pedestrian signals at controlled intersections (robots).

### **2.3.3 SEATBELT SURVEYS**

Previous surveys looked at the wearing of seatbelts recorded at road blocks. The data gathered for seatbelt wearing at road blocks are however not reliable, as most vehicle occupants that are not wearing seatbelts, will immediately put on a seatbelt when approaching a roadblock. This can clearly be seen in the 2007 report, where only 7% of drivers observed at roadblocks do not wear seat belts. During a survey done at traffic signals, where the driver and front passenger are not aware that they are being checked for seatbelt wearing, the percentage of persons not wearing seatbelts increased drastically to more than 50%.

For the reasons above, the wearing of seatbelts for drivers and front passengers was not recorded at roadblocks for the 2008, 2009 and 2010 survey. Instead the recording of seatbelt wearing data was done without the person being aware that he / she was observed.

The wearing of seatbelts by back passengers was however still recorded at road blocks.

During the 2009 and 2010 survey the use of child restraints was also recorded at road blocks.

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### 2.3.4 THE COMBINED OFFENCE INDEXES

The index numbers (indexes) reported in section 2.2.3 are called “combined offence indexes” because they represent the joint results of the national offence monitoring programs that were executed since 2002 in the different provinces and for the country as a whole. The index numbers were calculated for a representative selection of the offences that were monitored, as explained in Section 2.1 and Annexure A & F.

The detail of the offence information that lies at the background of these indexes will be found in section 2.3 and in chapter 6.

The following changes were observed in the SA averages for the different offences used to calculate the overall offence index:

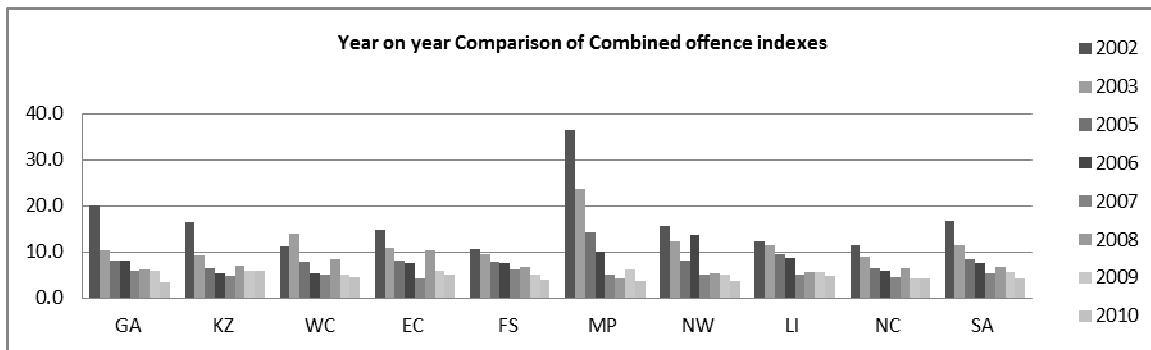
- ✚ The urban speed offence index **decreased** from 6.3 to 5.6.
- ✚ The rural speed offence index **decreased** from 7.9 to 5.6.
- ✚ The night time alcohol offence index **decreased** from 2.4 to 2.3.
- ✚ The unobserved seatbelt offence index for drivers **decreased** from 1.5 to 0.8.
- ✚ The unobserved seatbelt offence index for front passengers **increased** from 4.5 to 5.0.
- ✚ The day time traffic signal offence index **decreased** from 24.7 to 12.3.
- ✚ The day time barrier line offence index **decreased** from 16.1 to 10.3.
- ✚ The driver’s license offence index **decreased** from 1.5 to 0.8.
- ✚ The PDRP offence index **decreased** from 2.0 to 0.8.
- ✚ The worn tyres offence index **decreased** from 6.8 to 5.6.
- ✚ The front bright light offence index **decreased** from 1.1 to 1.0.
- ✚ The tail light offence index **decreased** from 0.6 to 0.5.
- ✚ The brake light offence index **increased** from 2.3 to 4.2.

The overall offence index has decreased from 5.6 to 4.2.

The combined indexes are shown below in Table 2.2-1. The indexes represent the levels of lawlessness (or traffic offence levels) on South African roads. Offence levels on rural as well as urban roads are covered in these indexes.

#### 2.3.4.1 COMPARISON OF COMBINED ROAD TRAFFIC OFFENCE INDICES FOR DIFFERENT YEARS

Combined offence indexes										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	20.0	16.5	11.3	14.9	10.7	36.6	15.6	12.2	11.6	16.7
2003	10.3	9.2	14.0	11.0	9.5	23.7	12.4	11.6	9.1	11.4
2005	8.2	6.4	7.9	8.2	7.8	14.3	8.2	9.6	6.6	8.4
2006	8.2	5.4	5.5	7.7	7.5	10.1	13.7	8.6	6.0	7.7
2007	5.8	4.7	5.2	4.3	6.3	5.2	5.1	5.1	4.5	5.3
2008	6.1	7.0	8.5	10.3	6.9	4.3	5.4	5.6	6.4	6.8
2009	5.8	6.0	5.0	5.9	5.0	6.2	5.1	5.7	4.3	5.6
2010	3.3	5.9	4.6	5.0	4.1	3.6	3.6	4.8	4.3	4.2

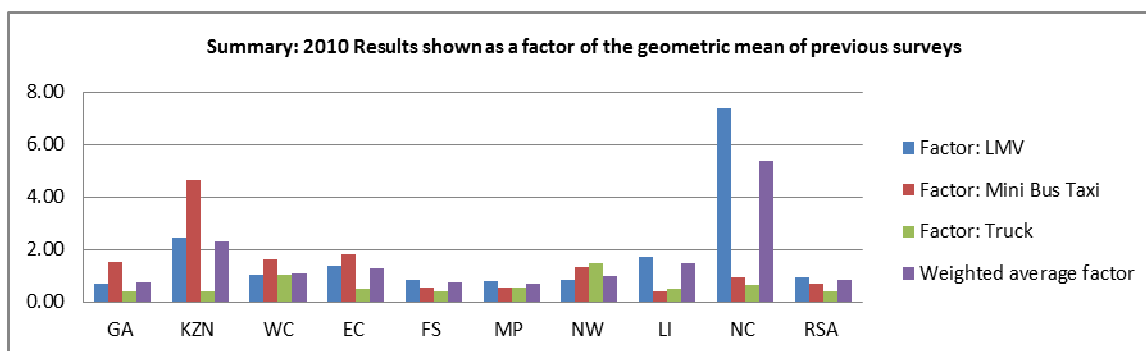


### 2.3.5 FACTORS OF CHANGE: INDICES TO COMPARE THE PERFORMANCE OF DIFFERENT VEHICLES CLASSES BETWEEN 2002 AND 2010

The index numbers (indices) reported in section 2.3.4 is called “factors of change”. These indexes are used to express the amount of change that was observed when comparing the 2010 results to previous years. The indexes are shown in Table 2.3.6.1. In this table a comparative factor of 1 means no change. Values smaller than 1 mean a reduction in the offence rates while values higher than 1 represent an increase in the offence rates.

#### 2.3.5.1 Summary: Factor of change in offence rates from 2002 to 2009 (Selection of Offences)

	Province									
	GA	KZN	WC	EC	FS	MP	NW	LI	NC	RSA
Factor: LMV	0.70	2.43	1.03	1.36	0.84	0.78	0.86	1.71	7.38	0.93
Factor: Mini Bus Taxi	1.55	4.65	1.64	1.83	0.53	0.56	1.32	0.41	0.92	0.70
Factor: Truck	0.39	0.41	1.03	0.51	0.40	0.54	1.46	0.49	0.63	0.43
Weighted average factor	0.74	2.31	1.08	1.30	0.73	0.72	0.99	1.46	5.39	0.84



The information above shows a definite improvement of traffic discipline on South African roads since the start of the survey in 2002, with the national weighted average factor of change being 0.84. This correlates with combined national offence index, which shows a definite decrease from 5.6 to 4.2 between 2002 and 2010.

The table below shows the different offence categories that were used to calculate the Factors of Change and the Combined National Offence Index.

CATEGORIES INCLUDED IN CALCULATIONS									
SURVEY CATEGORIES	WEIGHT	COMBINED OFFENCE INDEX CALCULATION				FACTORS OF CHANGE CALCULATION			
		LMV	TAXI	BUS	TRUCK	LMV	TAXI	BUS	TRUCK
Speed, Urban	5	✓	✓	✓	✓	✗	✗	✗	✗
Speed, Urban, Day	2	✗	✗	✗	✗	✓	✓	✓	✗
Speed, Urban, Night	3	✗	✗	✗	✗	✓	✗	✗	✗
Speed, Rural	5	✓	✓	✓	✓	✗	✗	✗	✗
Speed, Rural, Day	2	✗	✗	✗	✗	✓	✓	✓	✗
Speed, Rural Night	3	✗	✗	✗	✗	✓	✗	✗	✗
Alcohol, Driver, Night	12	✓	✓	✓	✓	✓	✓	✓	✗
Unobserved Seatbelts, Driver	2	✓	✓	✓	✓	✓	✗	✗	✗
Unobserved Seatbelts, Front Passenger	2	✓	✓	✓	✓	✓	✗	✗	✗
Traffic Signals, Day	1	✓	✓	✓	✓	✓	✗	✗	✗
Barrier Lines, Day	4	✓	✓	✓	✓	✓	✗	✗	✗
Driver Licences	2	✓	✓	✓	✓	✓	✓	✓	✗
PrDPs	2	✗	✓	✓	✓	✗	✓	✓	✗
Worn Tyres	2	✓	✓	✓	✓	✓	✓	✓	✗
Damaged Lights, Front Bright, LMV	1	✓	✗	✗	✗	✓	✓	✓	✗
Damaged Lights, Tail, LMV	1	✓	✗	✗	✗	✓	✓	✓	✗
Damaged Lights, Brake, LMV	1	✓	✗	✗	✗	✓	✓	✓	✗



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### 2.3.6 COMMENTS ON THE COMBINED INDICES AND FACTORS OF CHANGE

The following observations flow from these tables, figures and the related information in the rest of this report:

- a. According to the information obtained during the 2005, 2006, 2007, 2008, 2009 and 2010 offence monitoring surveys, the overall level of traffic discipline is improving on South African roads. The very high levels of lawlessness that were observed in some of the provinces during the 2002 and 2003 surveys seem to be subsiding to a certain extent. In terms of the combined offence index (Table 2.3.4.1), the offence levels in the different provinces seem to be stabilising in a narrow band between 3 and 5. Ever since 2002 the band for each successive year seems to be narrowing. 2002 had a band ranging from 10 to 37, 2004 ranged from 9 to 24, 2005 ranged from 6 to 15, 2006 ranged from 5 to 14 and 2007 ranged from 4 to 7. These developments prove that the situation on our roads is changing for the better.
- b. It is encouraging to see that the combined offence indexes of the nine provinces are moving towards relatively lower offence levels (i.e. indexes between 3 and 5).
- c. Although the downward trend in offence indexes is a positive sign, the offence levels are still far too high. Ideally these indexes should be brought down to below 1. Compared to the target, it is clear that there is still hard work to be done before the level of traffic discipline in the country will be acceptable. The weighted national average index of 4.2 which is shown in Table 2.3.4.1 means that, on average, the offence level is still 4.2 times higher than the target. In spite of the improvements that were observed, these figures actually indicate that a very dangerous situation is still prevailing on South African roads. Information on individual offence levels that are dangerously high will be found in section 2.3 and Chapter 6. The information shown throughout these sections are indicative of a very

- 
- dangerous situation on South African roads, and warrant very intensive law enforcement and education interventions in all parts of the country.
- d. Some of the individual offence levels increased. The detail in this regard can also be found in section 2.3 and in Chapter 6. Night time alcohol offences are considered the most dangerous of all the offences. When compared to the indexes of previous years, the 2010 index shows a slight improvement by decreasing from 2.4 to 2.3.
  - e. When considering the combined indexes for each province, it is clear that Gauteng has made the largest improvement since 2002 by reducing their offence index from 20 to 3.3. Gauteng also shows the lowest offence index for the 2010 survey.

## **2.4 OVERVIEW: THE STATE OF LAW COMPLIANCE ON THE ROAD**

Examination of the results of the 2010 survey indicated several major improvements. There were, however, also movements in the opposite direction. In general it must be stated that there is still reason for serious concern about the traffic offence levels in the country. The following sections discuss some of the main indicators which reflect the current situation on our roads.

## **2.5 SUMMARY SPEED OFFENCES**

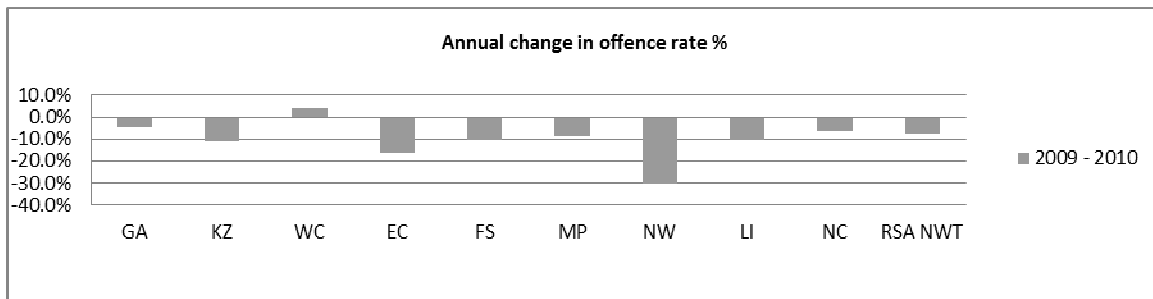
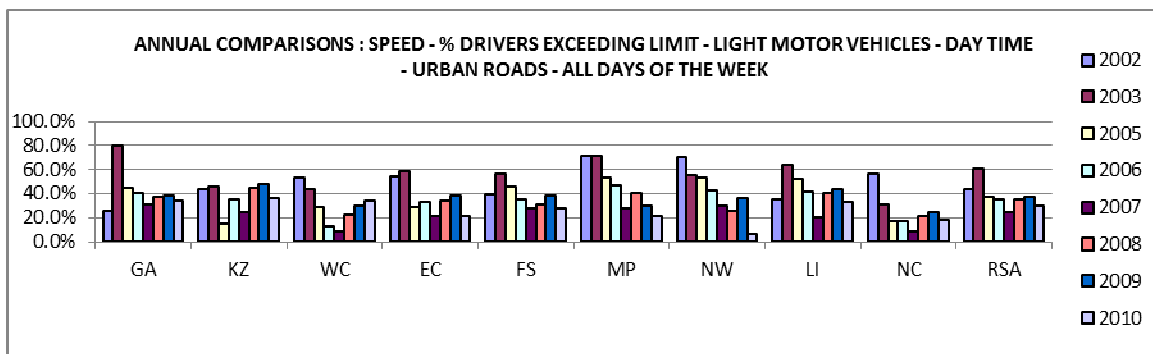
### **2.5.1 SPEED OFFENCES FOR LIGHT MOTOR VEHICLES – URBAN ROADS**

Speed offence levels for 2010 still remain very high. Figures show that night time offence rates are on average higher than those of day time. For urban speed zones, the overall offence index has decreased from 6.3 to 5.6. For rural speed zones, the overall offence index has decreased from 7.9 to 5.6. These figures are still very high and very far from reaching the desired maximum offence rate of 5%.

The following sections show the Urban Day, Urban Night, Rural Day, Rural Night, Weekday and Weekend speed offence rates applying to each of the vehicle types. Additional graphs also show the relationship between the different sub categories, including Urban Day versus Urban Night, Rural Day versus Rural Night, and Weekday versus Weekend.

### 2.5.1.1 Summary of Speed Offences: Light Motor Vehicles – Urban Roads – Day Time

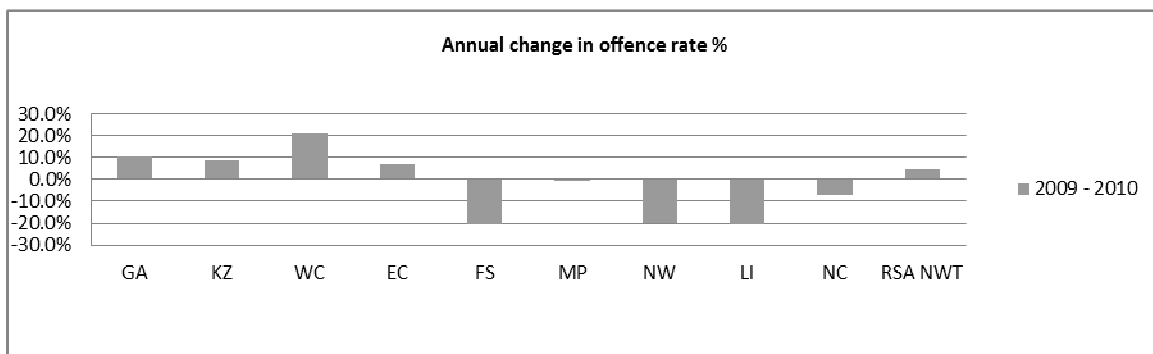
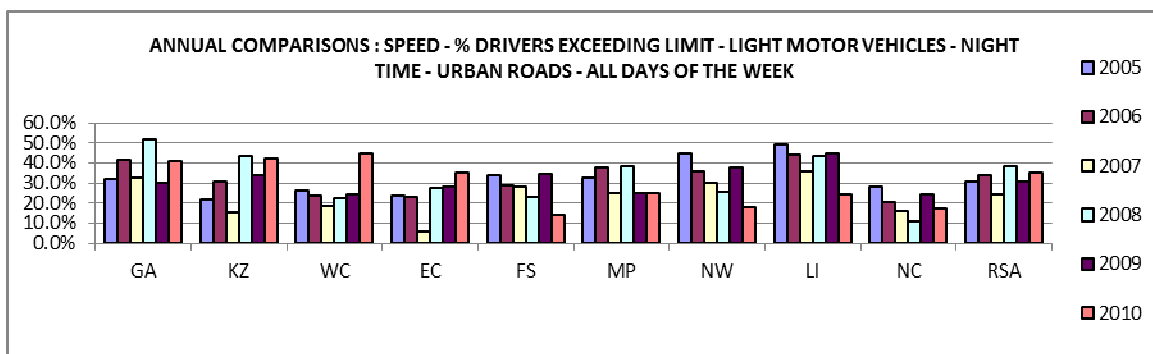
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	80.2%	45.5%	43.4%	58.2%	56.7%	71.3%	55.0%	64.2%	31.2%	61.2%
2005	45.2%	15.6%	28.6%	29.4%	46.1%	53.3%	53.4%	51.9%	17.2%	37.7%
2006	40.8%	35.4%	13.1%	33.0%	35.0%	47.3%	42.7%	41.6%	17.5%	35.0%
2007	31.0%	24.9%	9.2%	21.8%	27.7%	27.3%	29.9%	20.1%	8.9%	24.3%
2008	37.3%	45.0%	22.6%	33.8%	31.0%	40.1%	26.2%	40.9%	21.4%	35.0%
2009	38.5%	47.9%	30.3%	38.3%	38.2%	30.2%	36.6%	43.5%	24.5%	37.8%
2010	34.0%	36.7%	34.3%	21.8%	27.7%	21.3%	6.7%	32.8%	18.3%	30.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	6.3%	20.1%	13.4%	12.0%	3.3%	12.8%	-3.7%	20.8%	12.4%	10.7%
2008 - 2009	1.3%	2.9%	7.7%	4.6%	7.2%	-9.9%	10.4%	2.6%	3.1%	2.8%
2009 - 2010	-4.5%	-11.2%	4.1%	-16.5%	-10.5%	-8.9%	-30.0%	-10.7%	-6.2%	-7.8%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the day time in urban areas decreased from 37.8% in 2009 to 30.1% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 36.7%, and North West has the lowest offence rate with 6.7%. Western Cape shows the largest increase in offence rate percentage, from 30.3% to 34.3%. North West shows the largest decrease in offence rate percentage from 36.6% to 6.7%.

### 2.5.1.2 Summary of Speed Offences: Light Motor Vehicles – Urban Roads – Night Time

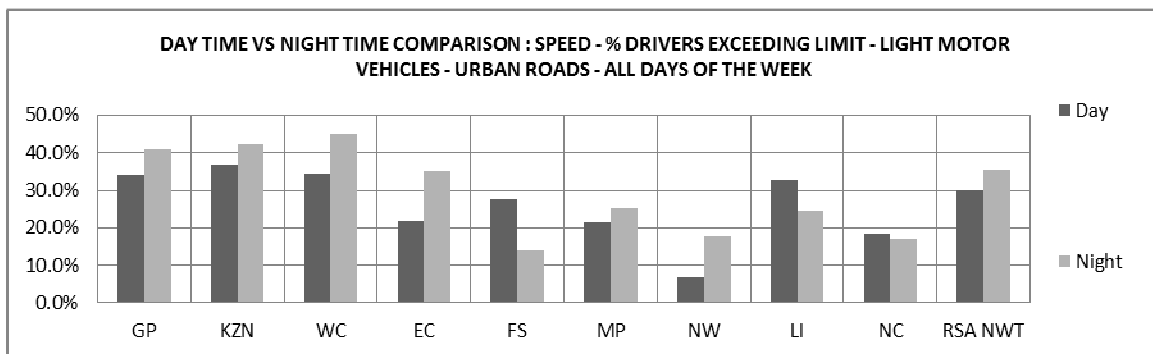
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	31.8%	21.5%	26.4%	23.4%	34.2%	32.4%	44.8%	49.0%	28.2%	30.5%
2006	41.7%	30.7%	23.4%	23.0%	28.7%	37.8%	35.5%	44.1%	20.3%	34.1%
2007	32.6%	15.3%	18.8%	5.6%	28.0%	24.7%	30.1%	35.7%	15.8%	24.4%
2008	51.5%	43.7%	22.6%	27.4%	23.3%	38.5%	25.6%	43.5%	11.3%	38.4%
2009	30.4%	33.6%	24.1%	28.3%	34.5%	25.3%	37.6%	44.9%	24.5%	30.6%
2010	40.8%	42.4%	45.0%	35.2%	14.1%	25.1%	17.8%	24.5%	17.2%	35.4%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	18.9%	28.5%	3.8%	21.8%	-4.7%	13.8%	-4.5%	7.8%	-4.5%	14.0%
2008 - 2009	-21.1%	-10.1%	1.5%	0.9%	11.3%	-13.3%	12.0%	1.4%	13.3%	-7.8%
2009 - 2010	10.5%	8.8%	20.9%	6.9%	-20.4%	-0.1%	-19.8%	-20.4%	-7.4%	4.9%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the night time in urban areas increased from 30.6% in 2009 to 35.4% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 45%, and Free State has the lowest offence rate with 14.1%. Western Cape shows the largest increase in offence rate percentage, from 24.1% to 45.0%. Limpopo shows the largest decrease in offence rate percentage from 44.9% to 24.5%.

### 2.5.1.3 Summary of Speed Offences: Light Motor Vehicles – Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	34.0%	40.8%
KZN	36.7%	42.4%
WC	34.3%	45.0%
EC	21.8%	35.2%
FS	27.7%	14.1%
MP	21.3%	25.1%
NW	6.7%	17.8%
LI	32.8%	24.5%
NC	18.3%	17.2%
RSA NWT	30.1%	35.4%

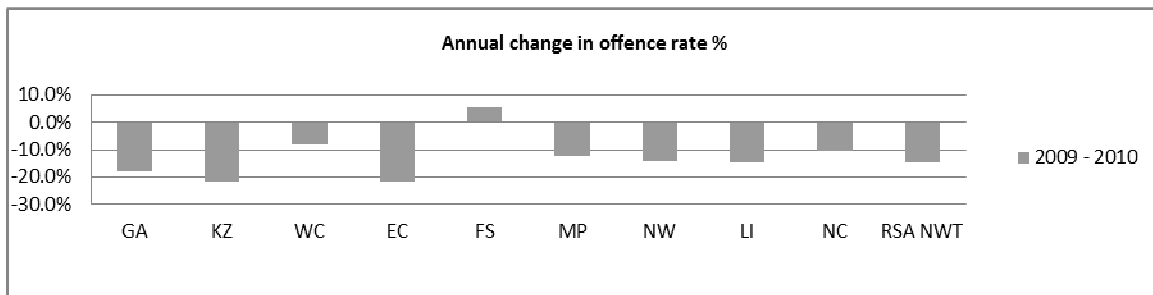
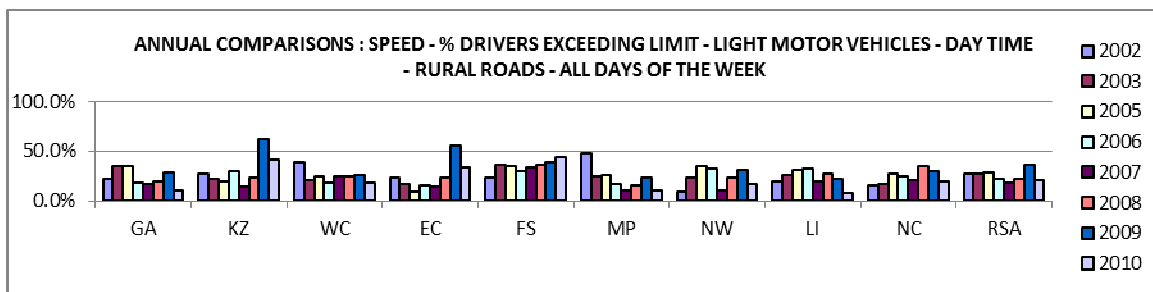


The information above shows that on a national basis the percentage speed offences for this category are lower during the day (30.1%) than during the night (35.4%). The province with the largest difference in day and night time offence rates is Free State, with 27.7% during the day, and 14.1% during the night. The province with the smallest difference in day and night time offence rates is Northern Cape, with 18.3% during the day, and 17.2% during the night.

## 2.5.2 SPEED OFFENCES FOR LIGHT MOTOR VEHICLES – RURAL ROADS

### 2.5.2.1 Summary of Speed Offences: Light Motor Vehicles – Rural Roads – Day Time

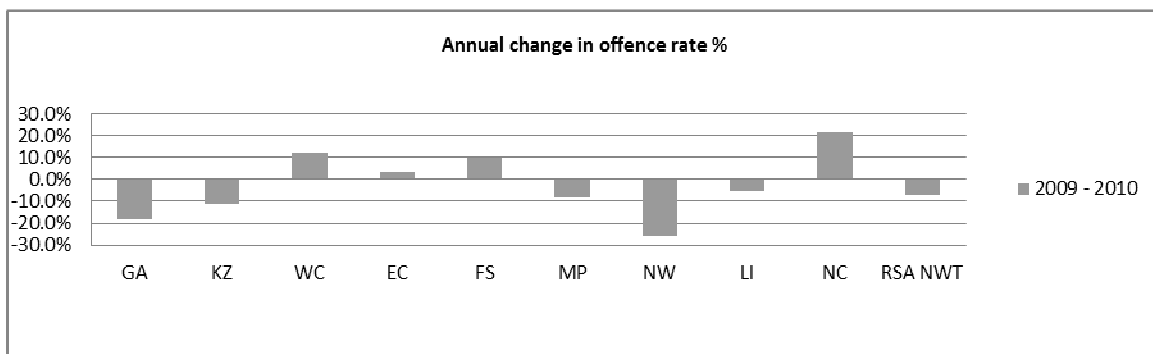
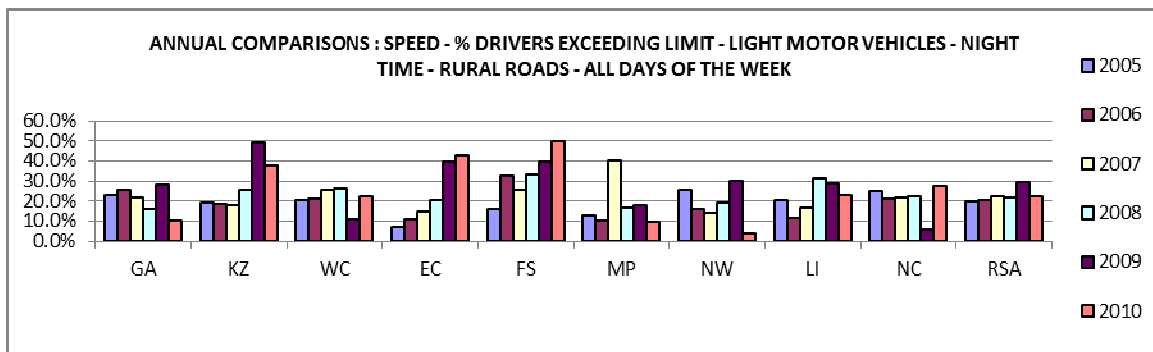
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	34.7%	22.1%	21.2%	16.8%	36.4%	25.0%	23.7%	25.5%	16.3%	26.8%
2005	34.7%	19.7%	25.0%	9.0%	35.3%	26.4%	34.8%	31.4%	26.8%	28.0%
2006	17.7%	29.3%	17.7%	15.0%	29.2%	16.9%	32.8%	32.7%	24.7%	21.7%
2007	17.0%	14.8%	24.9%	14.6%	33.4%	10.7%	10.5%	19.7%	20.7%	17.9%
2008	19.3%	23.0%	24.7%	23.3%	36.1%	16.3%	23.0%	26.6%	34.7%	22.7%
2009	28.7%	62.6%	25.8%	55.3%	38.7%	23.3%	31.7%	22.2%	29.8%	35.7%
2010	10.7%	40.9%	17.7%	33.5%	44.3%	11.0%	17.3%	7.6%	19.4%	21.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	2.3%	8.2%	-0.3%	8.7%	2.7%	5.5%	12.5%	6.9%	14.0%	4.8%
2008 - 2009	9.4%	39.6%	1.1%	32.0%	2.6%	7.0%	8.7%	-4.4%	-4.9%	13.0%
2009 - 2010	-18.0%	-21.7%	-8.1%	-21.8%	5.6%	-12.3%	-14.4%	-14.6%	-10.3%	-14.6%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the day time in rural areas decreased from 35.7% in 2009 to 21.1% in 2010. Free State has the highest offence rate in this regard for 2010 with 44.3%, and Limpopo has the lowest offence rate with 7.6%. Free State shows the largest increase in offence rate percentage, from 38.7% to 44.3%. Eastern Cape shows the largest decrease in offence rate percentage from 55.3% to 33.5%.

### 2.5.2.2 Summary of Speed Offences: Light Motor Vehicles – Rural Roads – Night Time

ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	23.1%	19.1%	20.3%	6.9%	15.9%	13.1%	25.4%	20.5%	24.9%	19.7%
2006	25.4%	18.6%	21.3%	10.7%	32.3%	10.6%	15.9%	11.3%	21.2%	20.5%
2007	21.7%	17.9%	25.4%	14.8%	25.3%	40.4%	14.2%	16.7%	21.9%	22.2%
2008	16.3%	25.3%	26.1%	20.7%	33.6%	16.6%	19.1%	31.4%	22.5%	21.7%
2009	28.2%	48.9%	10.7%	39.5%	39.9%	18.0%	29.9%	28.8%	5.6%	29.2%
2010	10.2%	37.5%	22.7%	42.9%	49.7%	9.5%	4.2%	23.4%	27.5%	22.2%
Annual change in offence rate %										
2007 - 2008	-5.4%	7.4%	0.7%	5.9%	8.3%	-23.8%	4.9%	14.8%	0.6%	-0.5%
2008 - 2009	11.9%	23.6%	-15.4%	18.7%	6.4%	1.4%	10.8%	-2.6%	-16.9%	7.5%
2009 - 2010	-18.0%	-11.4%	12.0%	3.4%	9.8%	-8.5%	-25.7%	-5.5%	21.9%	-7.1%

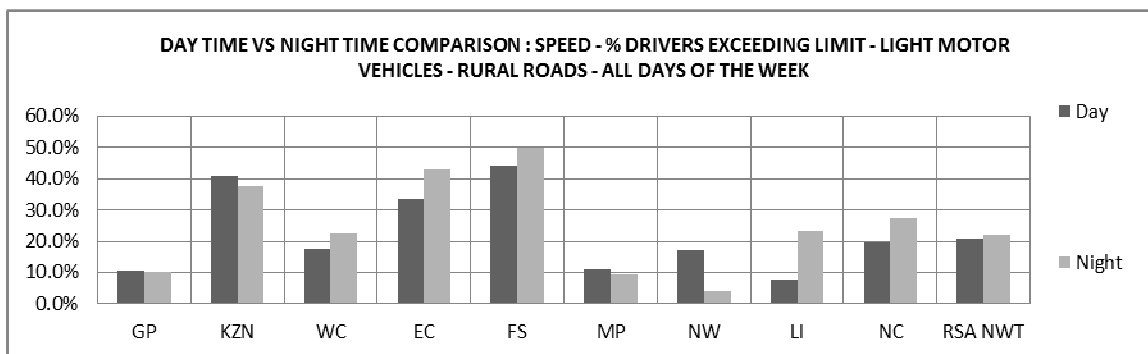


The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the night time in rural areas decreased from 29.2% in 2009 to 22.2% in 2010. Free State has the highest offence rate in this regard for 2010 with 49.7%, and North West has the lowest offence rate with 4.2%. Northern Cape shows the largest increase in offence rate percentage, from 5.6% to 27.5%. North West shows the largest decrease in offence rate percentage from 29.9% to 4.2%.



### 2.5.2.3 Summary of Speed Offences: Light Motor Vehicles – Rural Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	10.7%	10.2%
KZN	40.9%	37.5%
WC	17.7%	22.7%
EC	33.5%	42.9%
FS	44.3%	49.7%
MP	11.0%	9.5%
NW	17.3%	4.2%
LI	7.6%	23.4%
NC	19.4%	27.5%
RSA NWT	21.1%	22.2%

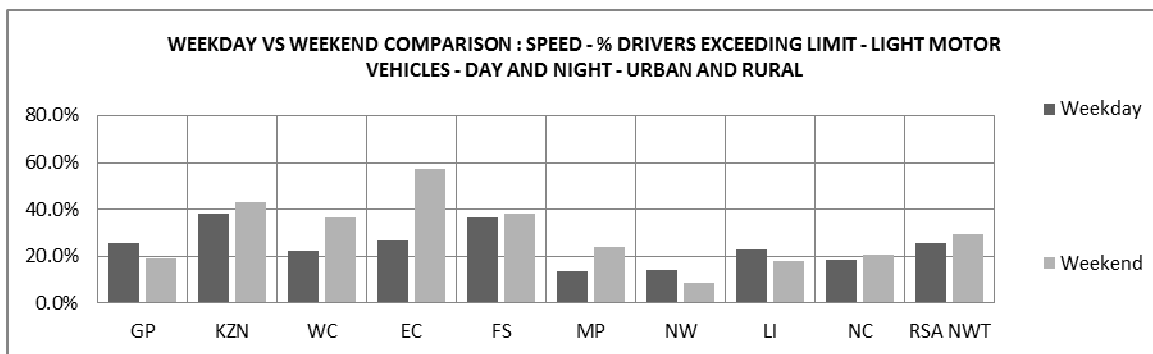


The information above shows that on a national basis the percentage speed offences for this category are lower during the day (21.1%) than during the night (22.2%). The province with the largest difference in day and night time offence rates is Limpopo, with 7.6% during the day, and 23.4% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, with 10.7% during the day, and 10.2% during the night.

## 2.5.3 SPEED OFFENCES FOR LIGHT MOTOR VEHICLES – WEEKDAY VS WEEKEND COMPARISONS

### 2.5.3.1 Summary of Speed Offences: Light Motor Vehicles – Weekday vs. Weekend

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	25.4%	19.3%
KZN	37.9%	42.8%
WC	22.6%	36.3%
EC	27.0%	57.3%
FS	36.7%	37.9%
MP	13.8%	24.1%
NW	13.9%	8.9%
LI	22.8%	18.0%
NC	18.5%	20.9%
RSA NWT	25.9%	29.5%

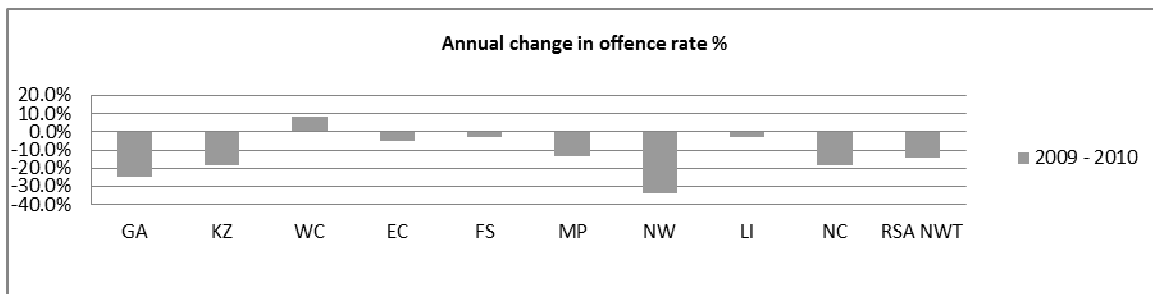
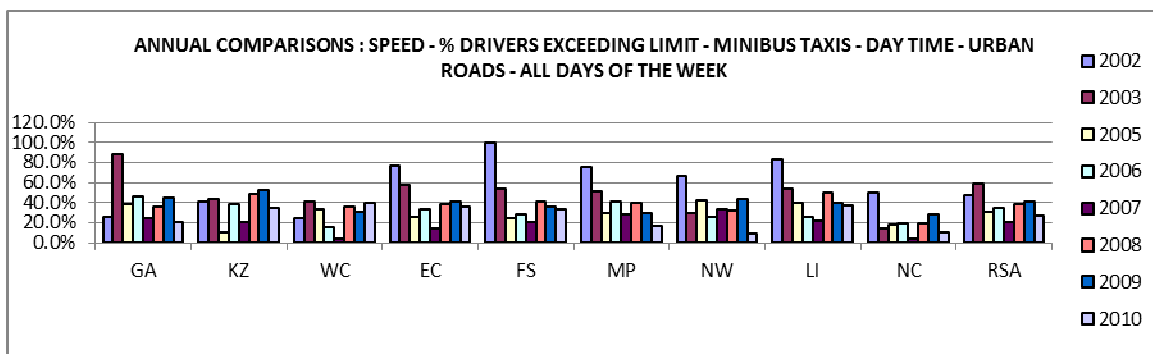


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (25.9%) than over the weekend (29.5%). The province with the largest difference in week and weekend offence rates is Eastern Cape, with 27.0% during the week, and 57.3% over the weekend. The province with the smallest difference in week and weekend offence rates is Free State, with 36.7% during the week, and 37.9% over the weekend.

## 2.5.4 SPEED OFFENCES FOR MINIBUS TAXIS – URBAN ROADS

### 2.5.4.1 Summary of Speed Offences: Minibus Taxis – Urban Roads – Day Time

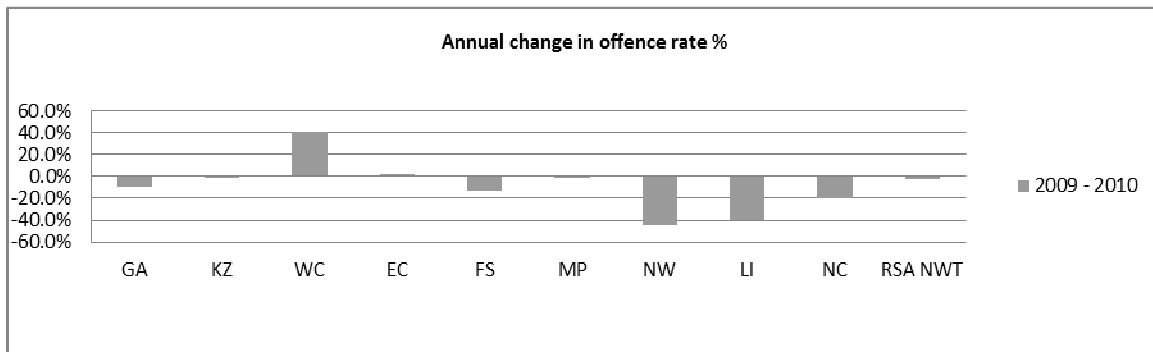
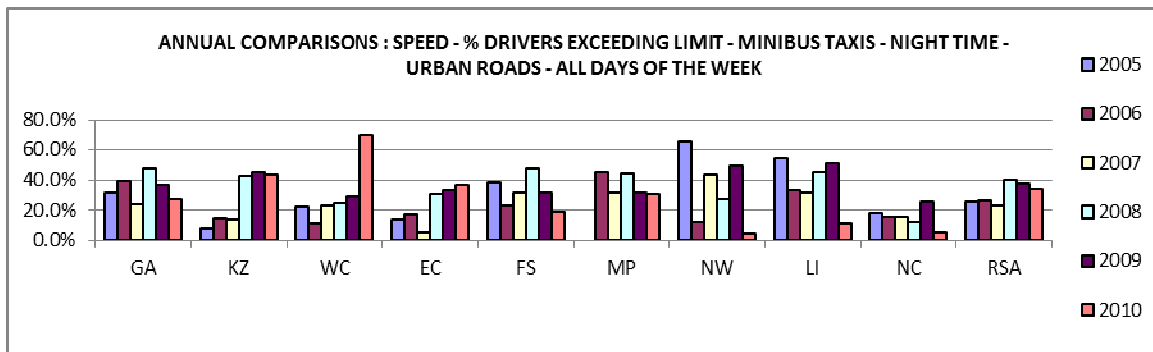
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	88.6%	43.3%	40.6%	58.1%	54.0%	50.7%	29.3%	54.4%	14.9%	58.8%
2005	38.7%	10.1%	33.5%	26.0%	25.0%	30.1%	42.6%	39.3%	17.7%	30.8%
2006	46.1%	37.9%	15.6%	32.8%	28.2%	40.5%	26.0%	25.6%	19.1%	34.9%
2007	25.1%	20.5%	4.4%	14.2%	20.8%	27.8%	33.6%	22.0%	4.3%	20.2%
2008	35.8%	48.7%	36.2%	39.1%	40.7%	40.0%	32.2%	49.4%	19.5%	38.9%
2009	45.5%	52.6%	30.5%	40.4%	35.9%	29.9%	43.2%	39.6%	28.6%	41.2%
2010	21.0%	34.3%	39.2%	35.6%	33.1%	16.5%	9.3%	36.7%	9.9%	27.2%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	10.8%	28.3%	31.7%	24.9%	19.8%	12.2%	-1.4%	27.4%	15.2%	18.8%
2008 - 2009	9.6%	3.9%	-5.6%	1.3%	-4.7%	-10.1%	11.0%	-9.8%	9.1%	2.3%
2009 - 2010	-24.5%	-18.3%	8.6%	-4.9%	-2.9%	-13.4%	-33.9%	-2.9%	-18.7%	-14.1%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the day time in urban areas decreased from 41.2% in 2009 to 27.2% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 39.2%, and North West has the lowest offence rate with 9.3%. Western Cape shows the largest increase in offence rate percentage, from 30.5% to 39.2%. North West shows the largest decrease in offence rate percentage from 43.2% to 9.3%.

### 2.5.4.2 Summary of Speed Offences: Minibus Taxis – Urban Roads – Night Time

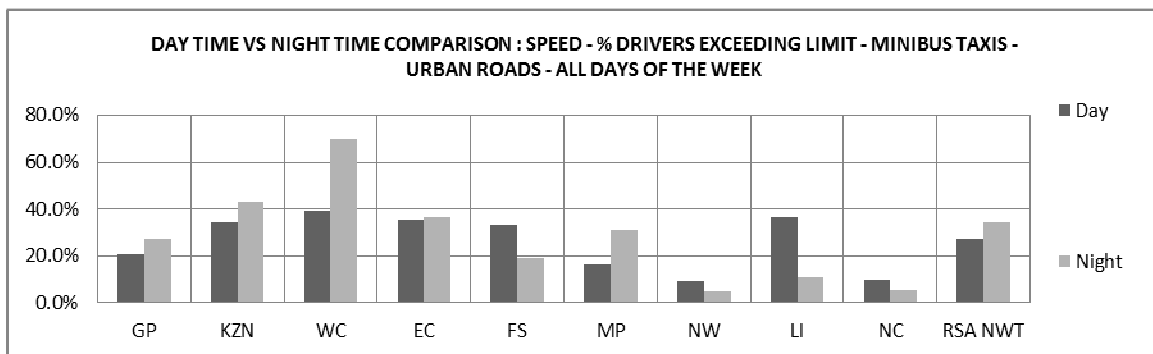
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	31.6%	7.5%	22.6%	14.0%	38.5%	0.0%	65.2%	54.2%	18.2%	25.9%
2006	39.2%	14.3%	11.5%	17.0%	23.0%	45.2%	12.3%	33.3%	15.8%	26.6%
2007	23.8%	14.1%	23.5%	4.9%	31.3%	31.3%	43.7%	31.4%	15.8%	23.1%
2008	47.8%	42.6%	24.7%	30.9%	47.6%	44.0%	27.2%	45.0%	12.0%	39.7%
2009	37.1%	44.8%	29.0%	33.5%	31.5%	31.9%	49.7%	51.1%	26.0%	37.1%
2010	27.3%	43.3%	69.8%	36.3%	18.8%	31.1%	4.8%	11.0%	5.5%	34.3%
Annual change in offence rate %										
2007 - 2008	24.0%	28.4%	1.2%	26.0%	16.2%	12.8%	-16.5%	13.5%	-3.9%	16.6%
2008 - 2009	-10.7%	2.2%	4.4%	2.6%	-16.0%	-12.1%	22.5%	6.2%	14.0%	-2.6%
2009 - 2010	-9.8%	-1.5%	40.7%	2.8%	-12.7%	-0.8%	-44.9%	-40.2%	-20.5%	-2.9%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the night time in urban areas decreased from 37.1% in 2009 to 34.3% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 69.8%, and North West has the lowest offence rate with 4.8%. Western Cape shows the largest increase in offence rate percentage, from 29.0% to 69.8%. North West shows the largest decrease in offence rate percentage from 49.7% to 4.8%.

### 2.5.4.3 Summary of Speed Offences: Minibus Taxis – Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	21.0%	27.3%
KZN	34.3%	43.3%
WC	39.2%	69.8%
EC	35.6%	36.3%
FS	33.1%	18.8%
MP	16.5%	31.1%
NW	9.3%	4.8%
LI	36.7%	11.0%
NC	9.9%	5.5%
RSA NWT	27.2%	34.3%

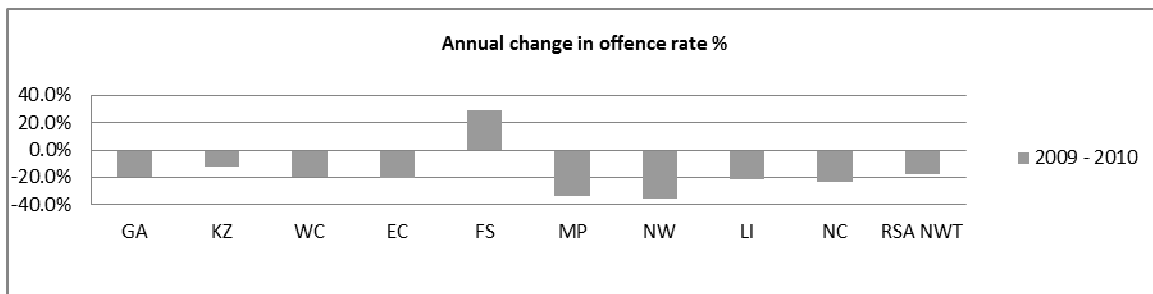
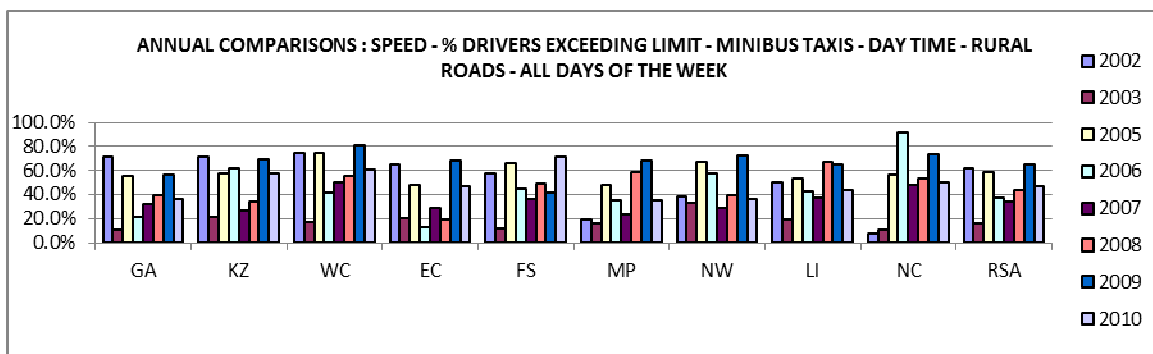


The information above shows that on a national basis the percentage speed offences for this category are lower during the day (27.2%) than during the night (34.3%). The province with the largest difference in day and night time offence rates is Western Cape, with 39.2% during the day, and 69.8% during the night. The province with the smallest difference in day and night time offence rates is Eastern Cape, with 35.6% during the day, and 36.3% during the night.

## 2.5.5 SPEED OFFENCES FOR MINIBUS TAXIS – RURAL ROADS

### 2.5.5.1 Summary of Speed Offences: Minibus Taxis – Rural Roads – Day Time

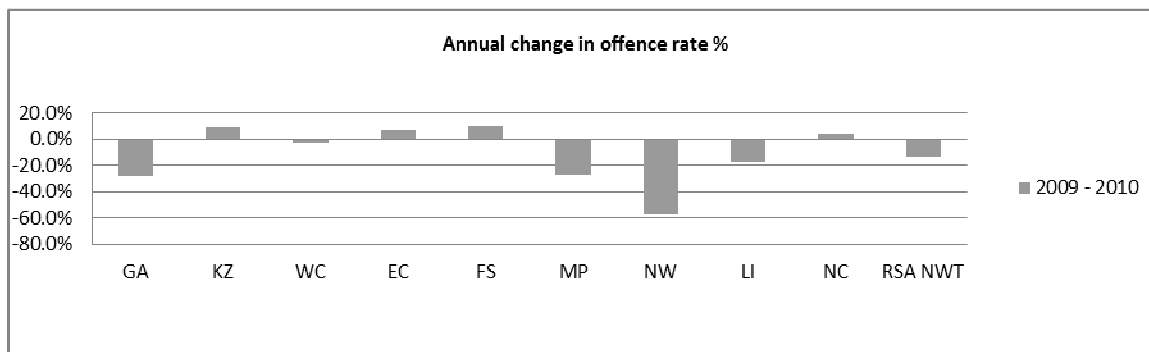
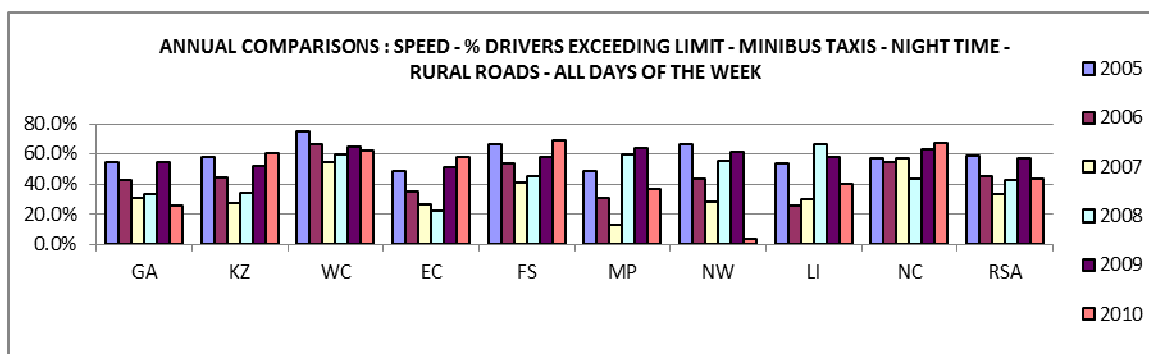
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	10.4%	21.1%	17.4%	20.3%	12.0%	15.7%	32.6%	19.3%	10.4%	16.5%
2005	54.9%	57.8%	74.6%	48.4%	66.3%	48.3%	66.7%	53.7%	56.7%	58.7%
2006	21.1%	61.4%	41.9%	12.6%	44.7%	35.6%	57.8%	42.7%	91.7%	37.2%
2007	31.7%	26.8%	50.5%	29.4%	36.6%	23.2%	29.2%	37.2%	48.2%	33.7%
2008	39.0%	33.9%	55.4%	19.5%	49.3%	59.0%	40.0%	66.8%	53.3%	43.5%
2009	56.0%	69.3%	80.6%	68.1%	42.1%	68.7%	72.0%	64.9%	73.0%	64.6%
2010	36.3%	57.3%	60.5%	47.2%	70.9%	35.3%	36.1%	43.6%	49.6%	47.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	7.3%	7.1%	5.0%	-9.9%	12.7%	35.8%	10.8%	29.6%	5.2%	9.7%
2008 - 2009	17.0%	35.4%	25.2%	48.6%	-7.1%	9.7%	32.0%	-2.0%	19.6%	21.2%
2009 - 2010	-19.7%	-12.0%	-20.1%	-20.9%	28.8%	-33.4%	-36.0%	-21.2%	-23.4%	-17.6%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the day time in rural areas decreased from 64.6% in 2009 to 47.0% in 2010. Free State has the highest offence rate in this regard for 2010 with 70.9%, and Mpumalanga has the lowest offence rate with 35.3%. Free State shows the largest increase in offence rate percentage, from 42.1% to 70.9%. North West shows the largest decrease in offence rate percentage from 72.0% to 36.1%.

### 2.5.5.2 Summary of Speed Offences: Minibus Taxis – Rural Roads – Night Time

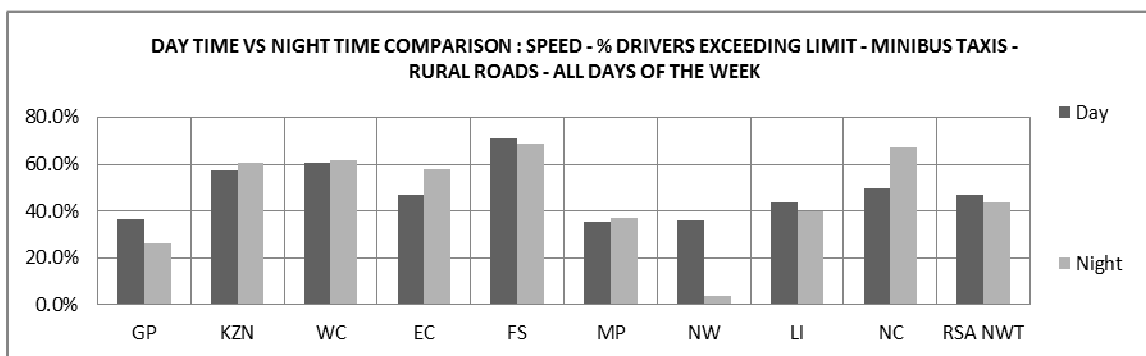
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	54.9%	57.8%	74.6%	48.4%	66.3%	48.3%	66.7%	53.7%	56.7%	58.7%
2006	42.9%	44.0%	66.7%	34.8%	53.9%	30.4%	43.2%	25.8%	54.6%	45.1%
2007	30.3%	27.3%	54.6%	26.3%	41.2%	12.5%	28.0%	30.1%	57.1%	33.0%
2008	32.9%	34.0%	59.6%	21.9%	45.4%	59.5%	55.5%	66.7%	43.8%	42.7%
2009	54.4%	51.8%	64.9%	51.4%	58.3%	63.8%	61.4%	57.9%	63.2%	57.2%
2010	26.0%	60.5%	61.9%	58.1%	68.8%	36.8%	3.7%	40.0%	67.0%	43.5%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	2.6%	6.7%	5.1%	-4.3%	4.2%	47.0%	27.5%	36.6%	-13.4%	9.8%
2008 - 2009	21.4%	17.8%	5.3%	29.5%	12.9%	4.4%	5.9%	-8.8%	19.5%	14.5%
2009 - 2010	-28.3%	8.7%	-3.0%	6.7%	10.4%	-27.0%	-57.7%	-17.9%	3.8%	-13.6%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the night time in rural areas decreased from 57.2% in 2009 to 43.5% in 2010. Free State has the highest offence rate in this regard for 2010 with 68.8%, and North West has the lowest offence rate with 3.7%. Free State shows the largest increase in offence rate percentage, from 58.3% to 68.8%. North West shows the largest decrease in offence rate percentage from 61.4% to 3.7%.

### 2.5.5.3 Summary of Speed Offences: Minibus Taxis – Rural Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	36.3%	26.0%
KZN	57.3%	60.5%
WC	60.5%	61.9%
EC	47.2%	58.1%
FS	70.9%	68.8%
MP	35.3%	36.8%
NW	36.1%	3.7%
LI	43.6%	40.0%
NC	49.6%	67.0%
RSA NWT	47.0%	43.5%



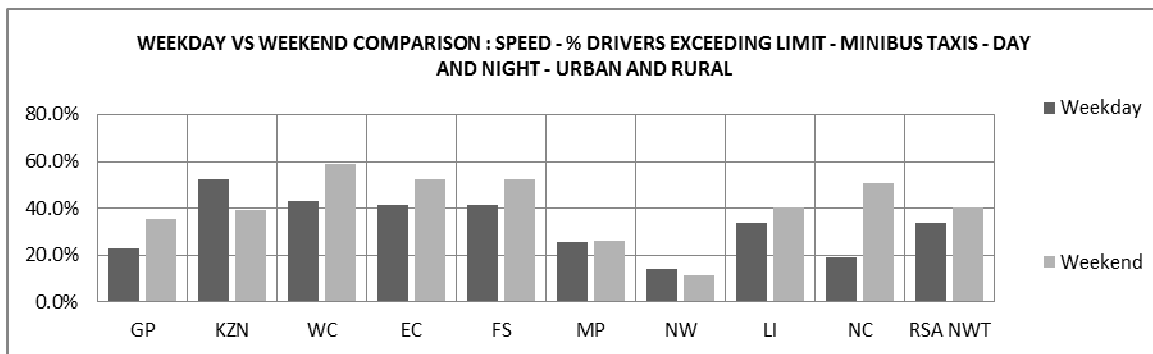
The information above shows that on a national basis the percentage speed offences for this category are higher during the day (47.0%) than during the night (43.5%). The province with the largest difference in day and night time offence rates is North West, with 36.1% during the day, and 3.7% during the night. The province with the smallest difference in day and night time offence rates is Western Cape, with 60.5% during the day, and 61.9% during the night.



## 2.5.6 SPEED OFFENCES FOR MINIBUS TAXIS – WEEKDAY VS WEEKEND COMPARISONS

### 2.5.6.1 Summary of Speed Offences: Minibus Taxis – Weekday vs. Weekend

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	23.0%	35.6%
KZN	52.3%	39.2%
WC	43.1%	58.8%
EC	41.7%	52.3%
FS	41.7%	52.5%
MP	25.6%	26.1%
NW	13.9%	11.4%
LI	34.1%	40.5%
NC	19.1%	50.8%
RSA NWT	33.6%	40.3%

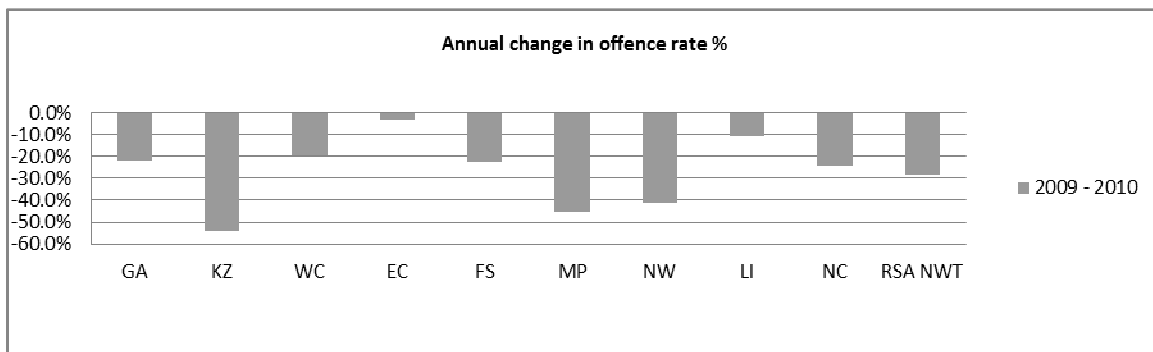
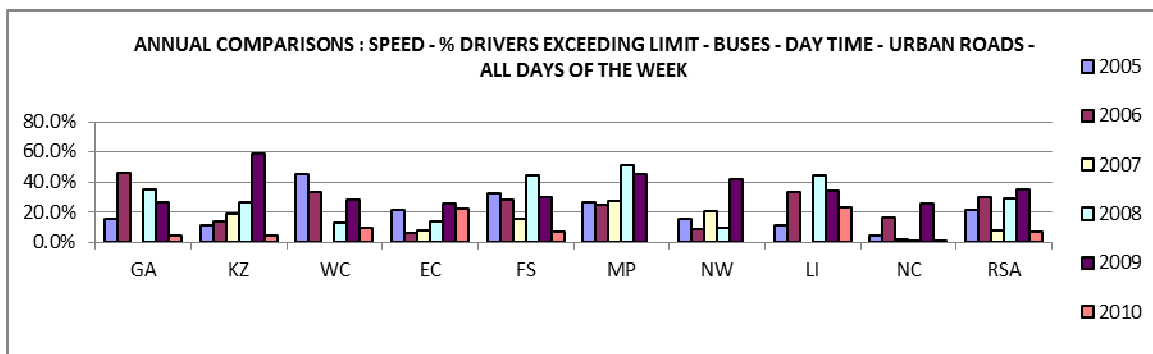


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (33.6%) than over the weekend (40.3%). The province with the largest difference in week and weekend offence rates is Northern Cape, with 19.1% during the week, and 50.8% over the weekend. The province with the smallest difference in week and weekend offence rates is Mpumalanga, with 25.6% during the week, and 26.1% over the weekend.

## 2.5.7 SPEED OFFENCES FOR BUSES – URBAN ROADS

### 2.5.7.1 Summary of Speed Offences: Buses – Urban Roads – Day Time

ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	15.6%	11.4%	45.5%	21.4%	32.4%	26.7%	15.8%	10.8%	4.8%	21.2%
2006	45.8%	13.9%	33.3%	6.3%	28.6%	25.0%	8.3%	33.3%	16.7%	29.9%
2007	0.0%	18.8%	0.0%	8.2%	15.4%	27.3%	20.5%	0.0%	2.2%	7.9%
2008	34.7%	26.7%	13.1%	13.7%	44.0%	51.5%	9.7%	44.4%	1.4%	29.0%
2009	26.7%	58.5%	28.6%	25.4%	29.7%	45.3%	41.4%	33.8%	25.4%	35.0%
2010	4.8%	4.6%	9.3%	22.5%	7.3%	0.0%	22.9%	1.4%	6.9%	
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	34.7%	7.9%	13.1%	5.5%	28.6%	24.2%	-10.8%	44.4%	-0.8%	21.1%
2008 - 2009	-8.1%	31.8%	15.5%	11.6%	-14.3%	-6.2%	31.8%	-10.6%	23.9%	6.0%
2009 - 2010	-21.8%	-53.9%	-19.2%	-2.8%	-22.4%	-45.3%	-41.4%	-11.0%	-24.0%	-28.1%

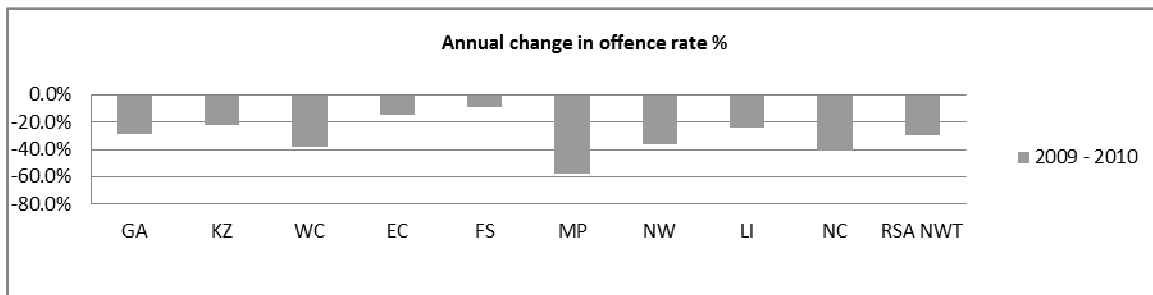
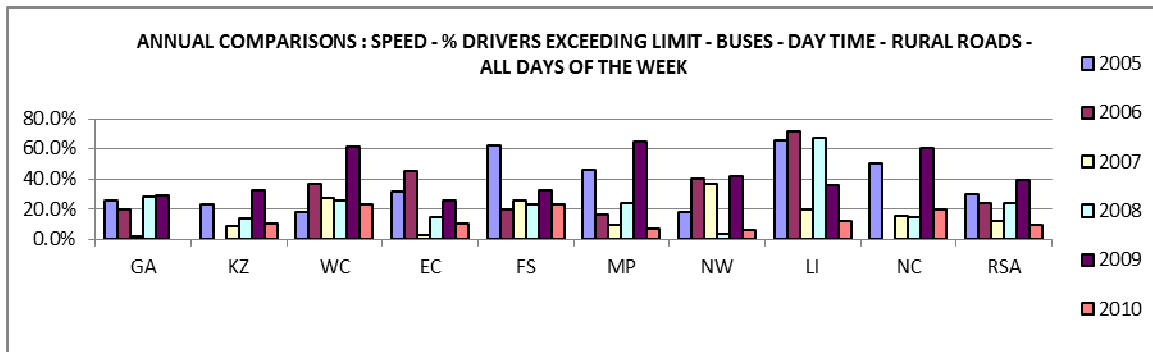


The information above shows that on a national basis the percentage speed offences for Buses during the day time in urban areas decreased from 35.0% in 2009 to 6.9% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 22.9%, and Mpumalanga has the lowest offence rate with 0.0%. All provinces show a decrease in offence rates between 2009 and 2010. KwaZulu Natal shows the largest decrease in offence rate percentage from 58.5% to 4.6%.

## 2.5.8 SPEED OFFENCES FOR BUSES – RURAL ROADS

### 2.5.8.1 Summary of Speed Offences: Buses – Rural Roads – Day Time

ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	25.7%	23.5%	17.9%	31.3%	62.5%	46.2%	17.7%	65.2%	50.0%	30.3%
2006	20.0%	0.0%	36.4%	45.5%	20.0%	16.7%	40.0%	71.4%	0.0%	24.3%
2007	1.9%	9.1%	27.5%	2.5%	25.4%	9.5%	36.8%	20.0%	15.4%	12.2%
2008	27.8%	14.1%	25.4%	14.5%	23.2%	23.7%	3.7%	67.6%	14.8%	23.8%
2009	29.2%	32.9%	61.4%	25.5%	32.7%	64.8%	42.1%	36.2%	60.4%	39.5%
2010	0.0%	10.6%	23.1%	10.3%	23.2%	7.1%	6.3%	12.3%	19.6%	9.6%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	25.9%	5.0%	-2.1%	12.0%	-2.2%	14.2%	-33.1%	47.6%	-0.6%	11.6%
2008 - 2009	1.4%	18.8%	36.0%	10.9%	9.5%	41.1%	38.4%	-31.4%	45.6%	15.7%
2009 - 2010	-29.2%	-22.3%	-38.3%	-15.1%	-9.4%	-57.7%	-35.9%	-23.9%	-40.8%	-30.0%

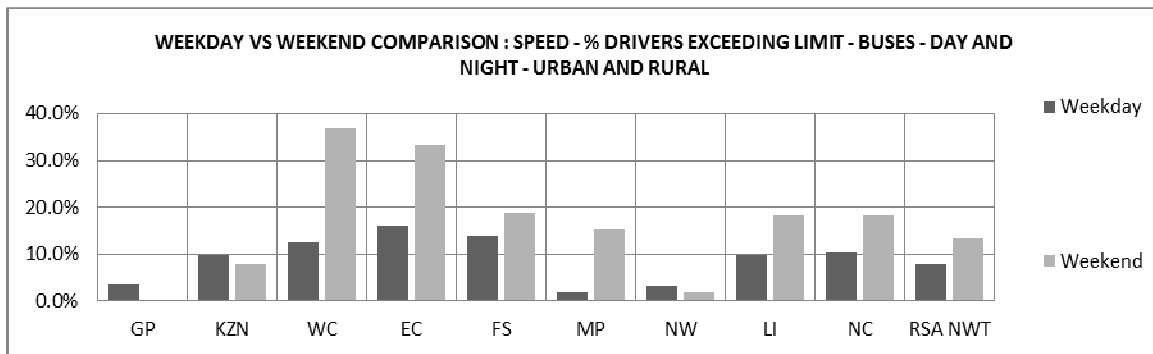


The information above shows that on a national basis the percentage speed offences for Buses during the day time in rural areas decreased from 39.5% in 2009 to 9.6% in 2010. Free State has the highest offence rate in this regard for 2010 with 23.2%, and Gauteng has the lowest offence rate with 0.0%. All provinces show a decrease in offence rates between 2009 and 2010. Mpumalanga shows the largest decrease in offence rate percentage from 64.8% to 7.1%.

## 2.5.9 SPEED OFFENCES FOR BUSES – WEEKDAY VS WEEKEND COMPARISONS

### 2.5.9.1 Summary of Speed Offences: Buses Taxis – Weekday vs. Weekend

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	3.7%	0.0%
KZN	9.8%	7.8%
WC	12.6%	36.8%
EC	16.0%	33.3%
FS	14.0%	18.8%
MP	1.9%	15.4%
NW	3.3%	1.8%
LI	9.8%	18.2%
NC	10.2%	18.2%
RSA NWT	7.8%	13.3%

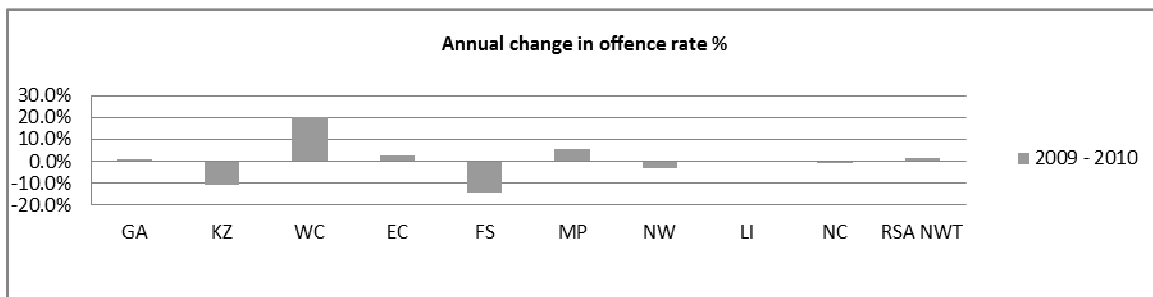
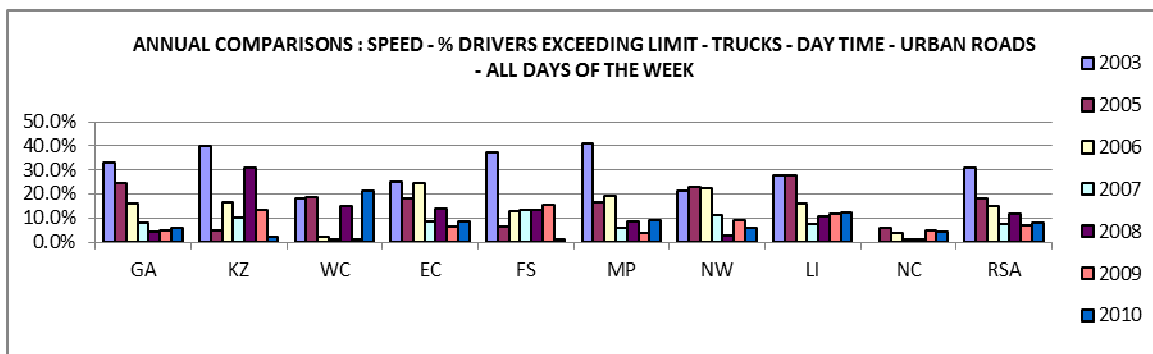


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (7.8%) than over the weekend (13.3%). The province with the largest difference in week and weekend offence rates is Western Cape, with 12.6% during the week, and 36.8% over the weekend. The province with the smallest difference in week and weekend offence rates is North West, with 3.3% during the week, and 1.8% over the weekend.

## 2.5.10 SPEED OFFENCES FOR TRUCKS – URBAN ROADS

### 2.5.10.1 Summary of Speed Offences: Trucks – Urban Roads – Day Time

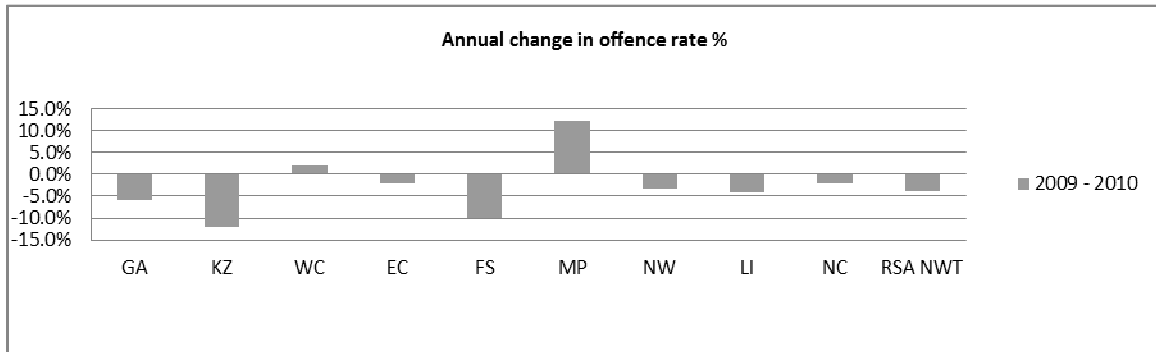
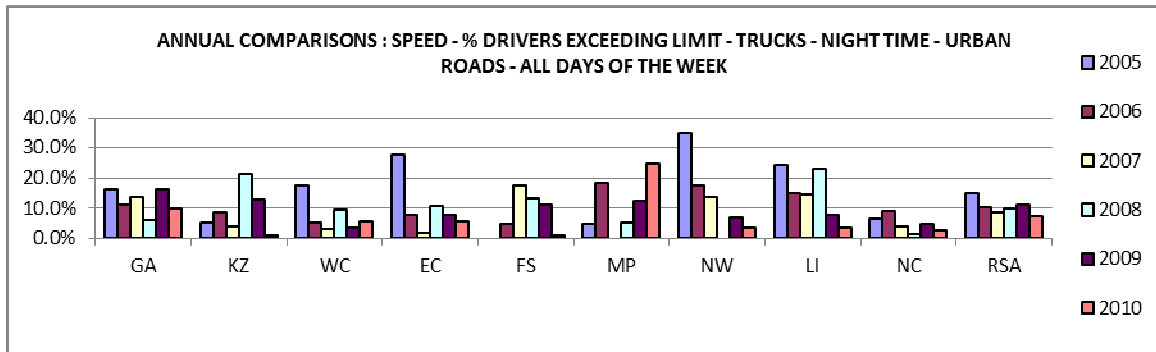
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	24.4%	5.0%	18.9%	18.1%	6.3%	16.8%	23.0%	27.5%	5.8%	18.1%
2006	15.8%	16.8%	2.3%	24.3%	13.1%	19.0%	22.6%	15.9%	3.7%	14.8%
2007	8.1%	10.0%	1.2%	8.7%	13.2%	5.7%	11.2%	7.6%	1.2%	7.4%
2008	4.3%	30.9%	15.0%	13.7%	13.5%	8.8%	2.7%	10.6%	1.2%	12.0%
2009	4.8%	13.1%	1.0%	6.4%	15.6%	3.9%	9.0%	11.7%	5.1%	6.9%
2010	5.9%	2.2%	21.5%	8.8%	1.4%	9.2%	5.8%	12.2%	4.2%	8.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-3.8%	21.0%	13.9%	5.0%	0.3%	3.1%	-8.5%	3.0%	0.0%	4.6%
2008 - 2009	0.4%	-17.8%	-14.0%	-7.3%	2.1%	-4.9%	6.3%	1.0%	3.9%	-5.1%
2009 - 2010	1.1%	-10.9%	20.5%	2.4%	-14.2%	5.4%	-3.2%	0.5%	-0.9%	1.2%



The information above shows that on a national basis the percentage speed offences for Buses during the day time in urban areas increased from 6.9% in 2009 to 8.1% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 21.5%, and Free State has the lowest offence rate with 1.4%. Western Cape shows the largest increase in offence rate percentage, from 1.0% to 21.5%. Free State shows the largest decrease in offence rate percentage from 15.6% to 1.4%.

### 2.5.10.2 Summary of Speed Offences: Trucks – Urban Roads – Night Time

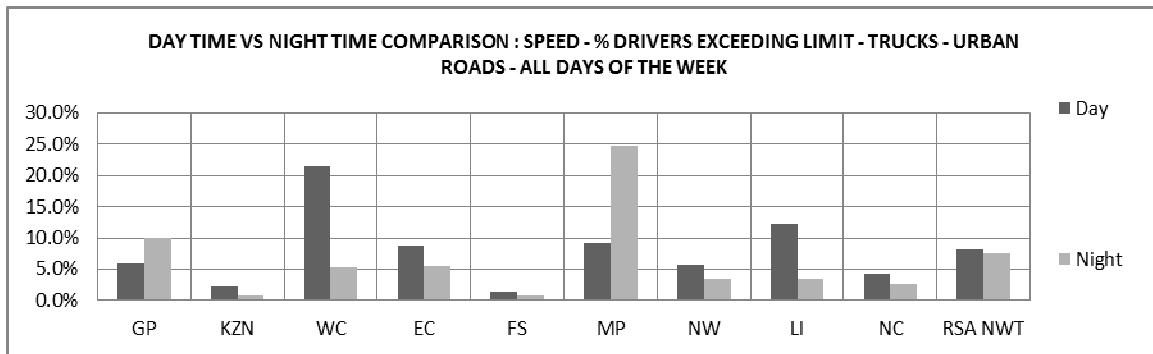
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	16.4%	5.0%	17.7%	27.7%	0.0%	4.8%	34.9%	24.1%	6.3%	15.0%
2006	11.1%	8.6%	5.2%	7.7%	4.8%	18.5%	17.3%	14.9%	8.9%	10.3%
2007	13.6%	4.1%	3.1%	1.9%	17.5%	0.0%	13.8%	14.6%	3.8%	8.5%
2008	5.9%	21.3%	9.2%	10.9%	13.3%	5.4%	0.0%	22.9%	1.2%	10.0%
2009	16.0%	13.0%	3.3%	7.7%	11.0%	12.5%	6.8%	7.8%	4.8%	11.2%
2010	10.0%	0.9%	5.4%	5.5%	0.9%	24.8%	3.5%	3.6%	2.7%	7.5%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-7.7%	17.2%	6.2%	9.0%	-4.3%	5.4%	-13.8%	8.4%	-2.6%	1.5%
2008 - 2009	10.1%	-8.3%	-5.9%	-3.2%	-2.3%	7.1%	6.8%	-15.1%	3.6%	1.2%
2009 - 2010	-6.0%	-12.0%	2.1%	-2.2%	-10.1%	12.3%	-3.3%	-4.2%	-2.1%	-3.7%



The information above shows that on a national basis the percentage speed offences for Buses during the night time in urban areas decreased from 11.2% in 2009 to 7.5% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 24.8%, and KwaZulu Natal has the lowest offence rate with 0.9%. Mpumalanga shows the largest increase in offence rate percentage, from 12.5% to 24.8%. KwaZulu Natal shows the largest decrease in offence rate percentage from 13.0% to 0.9%.

### 2.5.10.3 Summary of Speed Offences: Trucks – Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	5.9%	10.0%
KZN	2.2%	0.9%
WC	21.5%	5.4%
EC	8.8%	5.5%
FS	1.4%	0.9%
MP	9.2%	24.8%
NW	5.8%	3.5%
LI	12.2%	3.6%
NC	4.2%	2.7%
RSA NWT	8.1%	7.5%

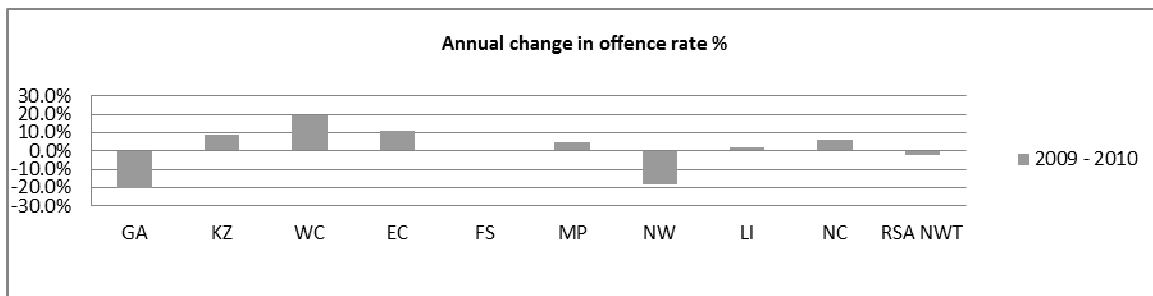
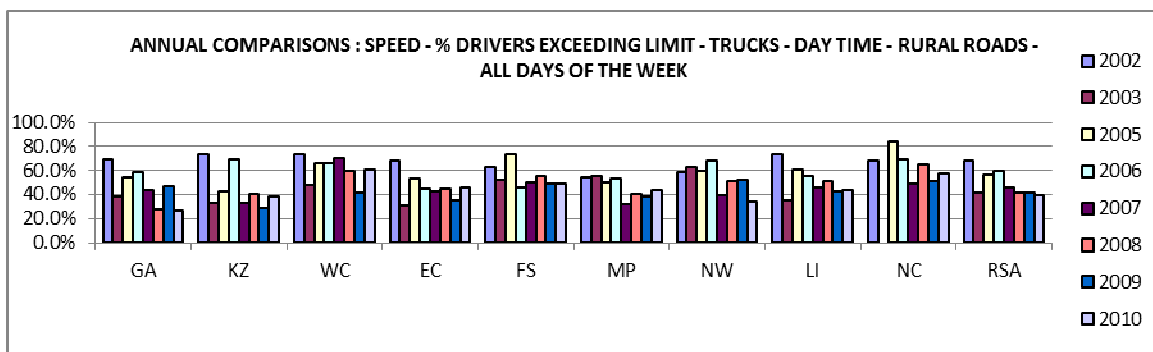


The information above shows that on a national basis the percentage speed offences for this category are higher during the day (8.1%) than during the night (7.5%). The province with the largest difference in day and night time offence rates is Western Cape, with 21.5% during the day, and 5.4% during the night. The province with the smallest difference in day and night time offence rates is Free State, with 1.4% during the day, and 0.9% during the night.

## 2.5.11 SPEED OFFENCES FOR TRUCKS – RURAL ROADS

### 2.5.11.1 Summary of Speed Offences: Trucks – Rural Roads – Day Time

ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	38.9%	33.0%	48.1%	30.9%	52.1%	55.2%	62.6%	35.5%	0.0%	41.1%
2005	54.7%	43.0%	65.9%	53.8%	73.0%	49.6%	59.2%	60.3%	83.6%	56.3%
2006	58.7%	69.0%	65.9%	45.2%	45.5%	53.4%	68.0%	55.2%	69.3%	59.9%
2007	43.7%	33.5%	70.2%	42.2%	50.0%	32.4%	39.8%	46.3%	49.4%	45.5%
2008	27.5%	40.4%	60.0%	45.2%	55.7%	40.1%	50.8%	50.8%	65.4%	42.0%
2009	46.7%	29.2%	41.9%	35.3%	48.7%	38.8%	52.6%	42.4%	51.4%	42.0%
2010	26.3%	38.4%	61.0%	46.2%	48.9%	43.5%	34.0%	44.1%	57.5%	40.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-16.2%	6.9%	-10.2%	3.0%	5.7%	7.7%	11.1%	4.5%	16.1%	-3.5%
2008 - 2009	19.1%	-11.2%	-18.1%	-9.9%	-7.0%	-1.3%	1.8%	-8.4%	-14.1%	0.0%
2009 - 2010	-20.4%	9.1%	19.1%	10.8%	0.1%	4.7%	-18.6%	1.7%	6.1%	-2.0%

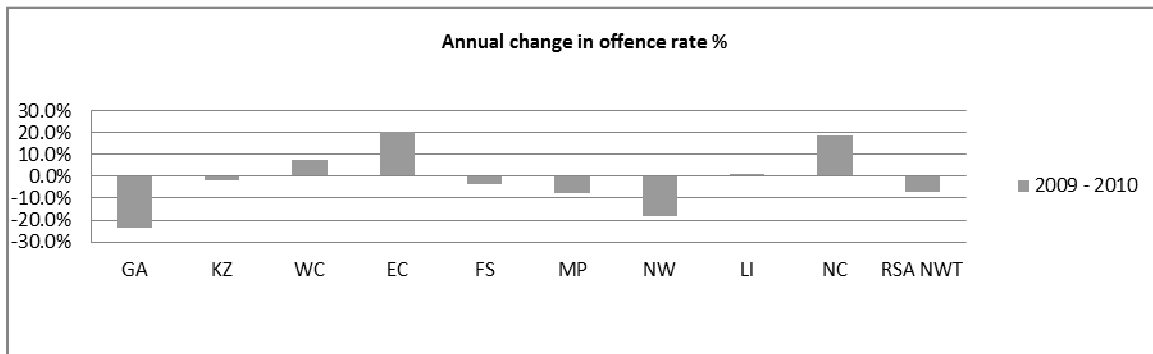
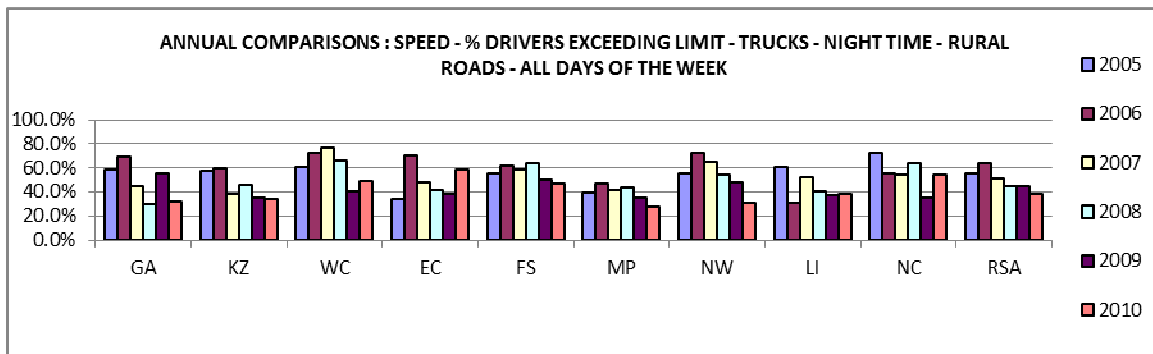


The information above shows that on a national basis the percentage speed offences for Trucks during the day time in rural areas decreased from 42.0% in 2009 to 40.0% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 61.0%, and Gauteng has the lowest offence rate with 26.3%. Western Cape shows the largest increase in offence rate percentage, from 41.9% to 61.0%. Gauteng shows the largest decrease in offence rate percentage from 46.7% to 26.3%.



### 2.5.11.2 Summary of Speed Offences: Trucks – Rural Roads – Night Time

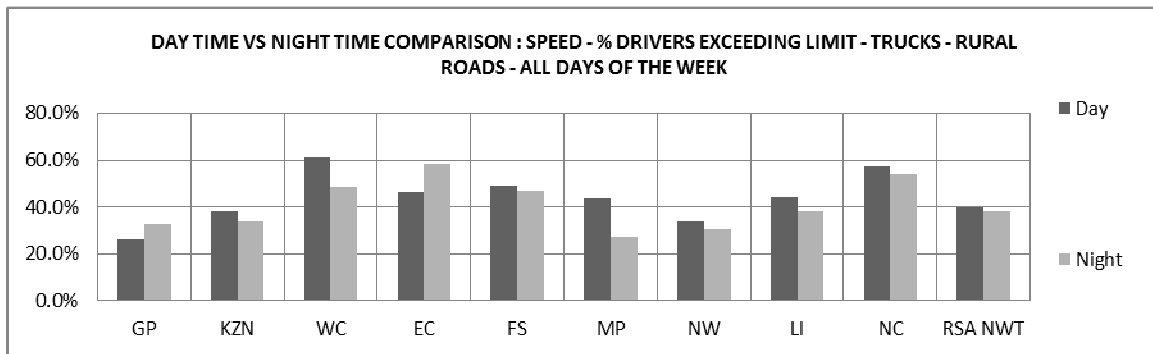
ANNUAL COMPARISONS : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	58.8%	57.4%	60.7%	34.3%	55.4%	40.0%	55.0%	61.2%	72.3%	55.6%
2006	69.2%	59.9%	72.2%	69.9%	62.0%	46.7%	72.5%	31.2%	55.4%	64.0%
2007	44.5%	38.3%	76.8%	48.0%	58.1%	41.2%	65.2%	51.8%	54.1%	51.0%
2008	30.3%	46.0%	65.8%	41.1%	63.7%	43.6%	54.3%	41.1%	63.6%	45.0%
2009	55.7%	35.6%	40.8%	38.0%	50.5%	35.1%	48.5%	37.1%	35.5%	45.1%
2010	32.5%	34.0%	48.6%	58.4%	47.0%	27.5%	30.5%	38.0%	53.9%	38.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-14.1%	7.7%	-11.0%	-6.9%	5.6%	2.4%	-10.8%	-10.7%	9.6%	-6.0%
2008 - 2009	25.3%	-10.4%	-25.0%	-3.1%	-13.3%	-8.5%	-5.8%	-4.0%	-28.1%	0.0%
2009 - 2010	-23.2%	-1.6%	7.8%	20.4%	-3.4%	-7.6%	-18.0%	0.9%	18.4%	-6.9%



The information above shows that on a national basis the percentage speed offences for Trucks during the night time in rural areas decreased from 45.1% in 2009 to 38.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 58.4%, and Mpumalanga has the lowest offence rate with 27.5%. Eastern Cape shows the largest increase in offence rate percentage, from 38.0% to 58.4%. Gauteng shows the largest decrease in offence rate percentage from 55.7% to 32.5%.

### 2.5.11.3 Summary of Speed Offences: Trucks – Rural Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	26.3%	32.5%
KZN	38.4%	34.0%
WC	61.0%	48.6%
EC	46.2%	58.4%
FS	48.9%	47.0%
MP	43.5%	27.5%
NW	34.0%	30.5%
LI	44.1%	38.0%
NC	57.5%	53.9%
RSA NWT	40.0%	38.1%

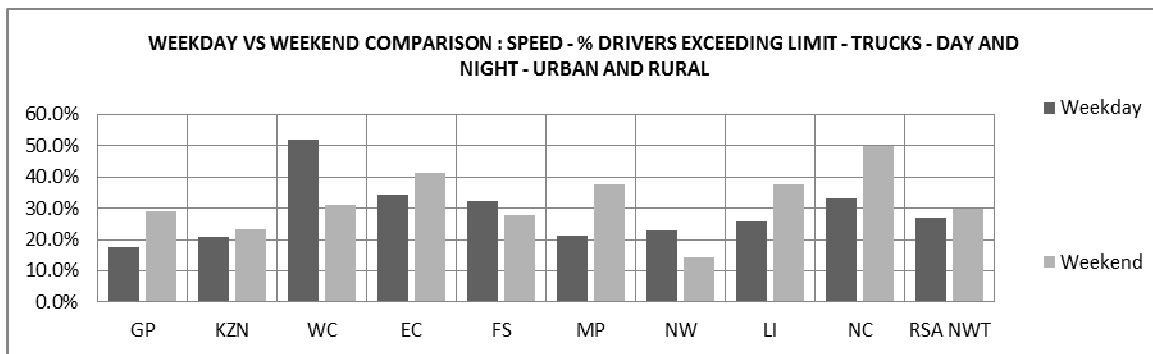


The information above shows that on a national basis the percentage speed offences for this category are higher during the day (40.0%) than during the night (38.1%). The province with the largest difference in day and night time offence rates is Mpumalanga, with 43.5% during the day, and 27.5% during the night. The province with the smallest difference in day and night time offence rates is Free State, with 48.9% during the day, and 47.0% during the night.

## 2.5.12 SPEED OFFENCES FOR TRUCKS – WEEKDAY VS WEEKEND COMPARISONS

### 2.5.12.1 Summary of Speed Offences: Trucks – Weekday vs. Weekend

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	17.6%	29.0%
KZN	21.0%	23.1%
WC	51.8%	31.0%
EC	34.3%	41.3%
FS	32.4%	27.9%
MP	21.5%	37.4%
NW	22.9%	14.3%
LI	25.6%	37.5%
NC	33.1%	50.0%
RSA NWT	26.9%	30.0%



The information above shows that on a national basis the percentage speed offences for this category are lower during the week (26.9%) than over the weekend (30.0%). The province with the largest difference in week and weekend offence rates is Western Cape with 51.8% during the week, and 31.0% over the weekend. The province with the smallest difference in week and weekend offence rates is KwaZulu Natal, with 21.0% during the week, and 23.1% over the weekend.

## 2.5.13 SPEED OFFENCES INDEXES

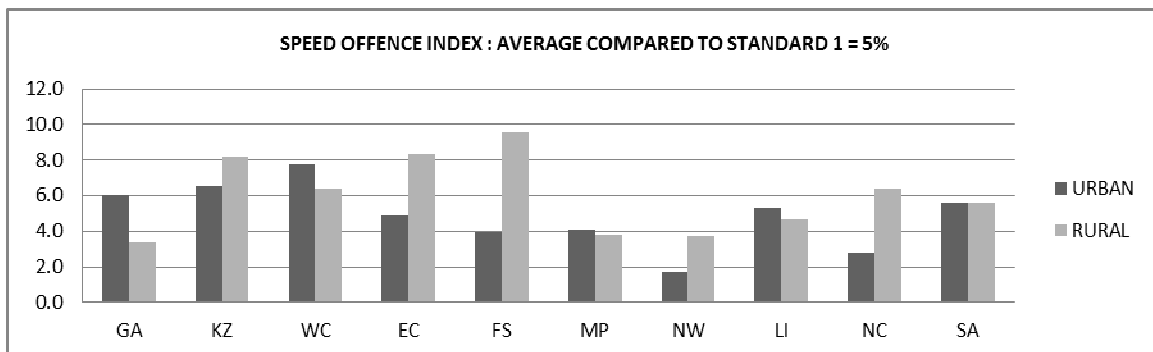
Information on speed offences for a combination of all vehicles, urban and rural areas respectively, is given in the following tables and reflected in the graphs below.

### 2.5.13.1 Average speed offence levels

AVERAGE SPEED OFFENCE RATES - STANDARD 5%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
URBAN	30.3%	32.8%	38.6%	24.4%	19.6%	20.4%	8.5%	26.8%	13.8%	28.1%
RURAL	16.9%	41.1%	32.1%	41.8%	47.9%	19.0%	18.5%	23.5%	32.0%	27.9%

### 2.5.13.2 Speed offences: comparative index

SPEED OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 5%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
URBAN	6.1	6.6	7.7	4.9	3.9	4.1	1.7	5.4	2.8	5.62
RURAL	3.4	8.2	6.4	8.4	9.6	3.8	3.7	4.7	6.4	5.59

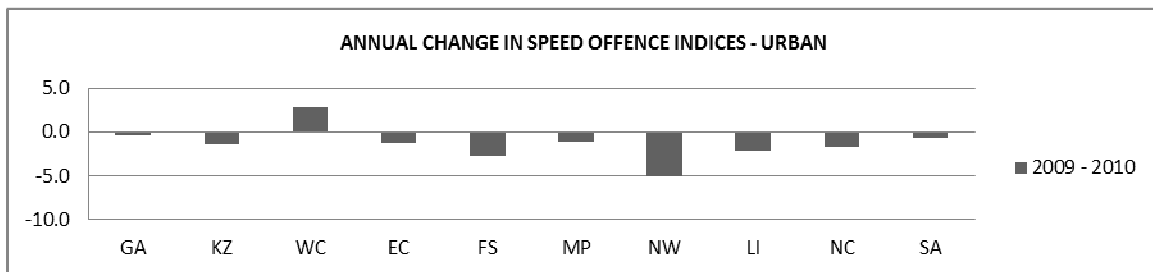
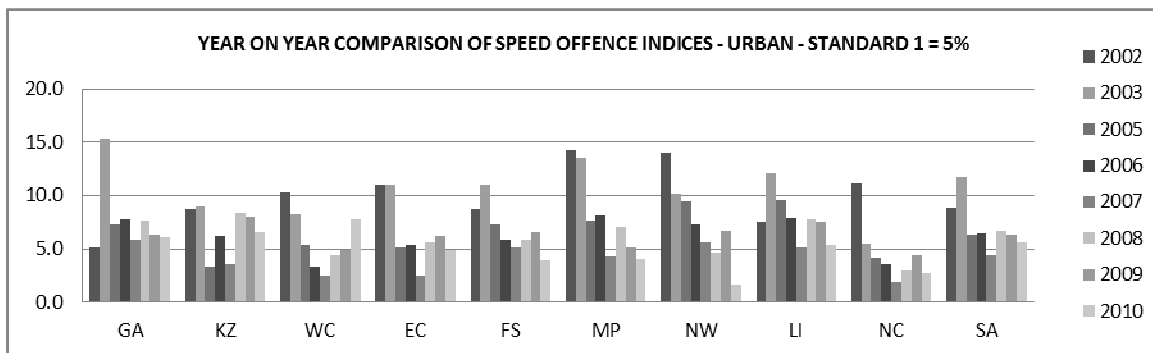


The information above shows that on a national basis the speed offence index for this category is higher in urban areas (5.62) than in rural areas (5.59). The province with the largest difference in urban and rural offence indices is Free State, with 9.6 in urban areas, and 3.9 in rural areas. The province with the smallest difference in urban and rural offence offences is Mpumalanga, with 3.8 in urban areas, and 4.1 in rural areas.

### 2.5.13.3 Year on year comparison of urban speed offence indices

Information on speed offences for a combination of all vehicles in urban areas is given in the following tables and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF SPEED OFFENCE INDICES - URBAN - STANDARD 1 = 5%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	5.2	8.8	10.3	11.1	8.7	14.3	14.0	7.6	11.1	8.9
2003	15.3	9.0	8.2	11.1	11.0	13.5	10.2	12.1	5.5	11.7
2005	7.4	3.4	5.4	5.2	7.3	7.7	9.5	9.6	4.2	6.4
2006	7.8	6.2	3.4	5.4	5.9	8.1	7.3	8.0	3.6	6.5
2007	5.8	3.6	2.5	2.5	5.1	4.3	5.6	5.1	1.9	4.4
2008	7.7	8.4	4.4	5.6	5.8	7.1	4.7	7.8	3.0	6.7
2009	6.4	8.0	4.9	6.2	6.6	5.1	6.7	7.5	4.4	6.3
2010	6.1	6.6	7.7	4.9	3.9	4.1	1.7	5.4	2.8	5.6
ANNUAL CHANGE IN SPEED OFFENCE INDICES - URBAN										
2007 - 2008	1.8	4.8	1.9	3.1	0.7	2.7	-0.9	2.7	1.0	2.3
2008 - 2009	-1.3	-0.4	0.4	0.6	0.7	-1.9	2.0	-0.2	1.4	-0.4
2009 - 2010	-0.3	-1.5	2.9	-1.3	-2.7	-1.1	-5.0	-2.2	-1.6	-0.7

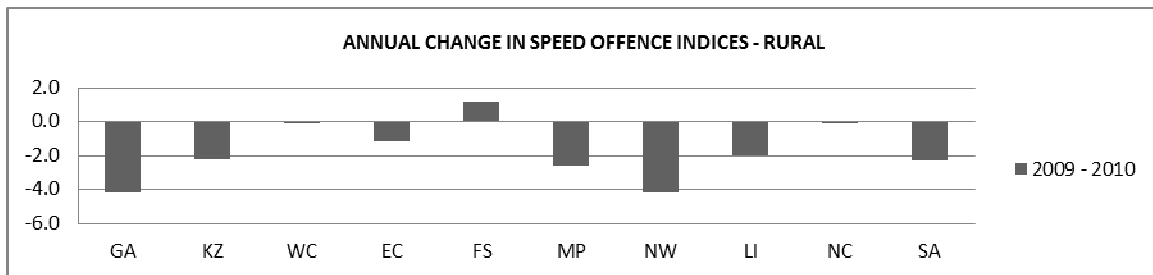
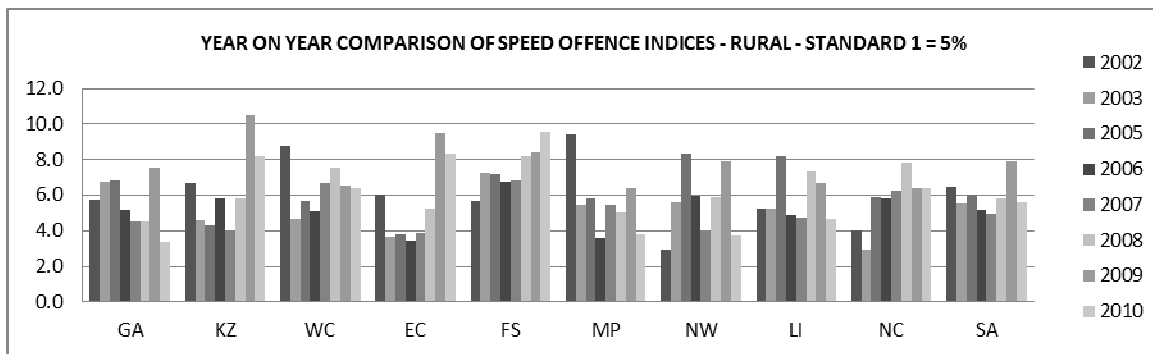


The information above shows that on a national basis the index for speed offences in this category has decreased from 6.3 in 2009 to 5.6 in 2010. Western Cape has the highest offence index in this regard for 2010 with 7.7, and North West has the lowest offence index with 1.7. Western Cape shows the largest increase in offence indices, from 4.9 to 7.7. North West shows the largest decrease in offence indices from 6.7 to 1.7.

### 2.5.13.4 Year on year comparison of rural speed offence indices

Information on speed offences for a combination of all vehicles in rural areas is given in the following tables and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF SPEED OFFENCE INDICES - RURAL - STANDARD 1 = 5%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	5.7	6.7	8.8	6.0	5.7	9.4	3.0	5.2	4.0	6.5
2003	6.8	4.6	4.7	3.6	7.3	5.4	5.6	5.2	2.9	5.5
2005	6.8	4.3	5.7	3.8	7.2	5.8	8.4	8.2	5.9	6.0
2006	5.2	5.8	5.1	3.5	6.8	3.6	5.9	4.9	5.8	5.1
2007	4.5	4.0	6.7	3.9	6.8	5.4	4.0	4.7	6.2	5.0
2008	4.6	5.8	7.5	5.2	8.2	5.1	5.9	7.3	7.8	5.8
2009	7.6	10.5	6.5	9.5	8.4	6.4	7.9	6.7	6.4	7.9
2010	3.4	8.2	6.4	8.4	9.6	3.8	3.7	4.7	6.4	5.6
ANNUAL CHANGE IN SPEED OFFENCE INDICES - RURAL										
2007 - 2008	0.0	1.8	0.8	1.3	1.4	-0.4	1.9	2.6	1.6	0.9
2008 - 2009	3.0	4.7	-1.0	4.3	0.2	1.3	2.0	-0.6	-1.4	2.1
2009 - 2010	-4.2	-2.3	-0.1	-1.2	1.2	-2.6	-4.2	-2.0	0.0	-2.3



The information above shows that on a national basis the index for speed offences in this category has decreased from 7.9 in 2009 to 5.6 in 2010. Free State has the highest offence index in this regard for 2010 with 9.6, and Gauteng has the lowest offence index with 3.4. Free State shows the largest increase in offence indices, from 8.4 to 9.6. North West shows the largest decrease in offence indices from 7.9 to 3.7.

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## 2.6 SUMMARY ALCOHOL OFFENCES

Both day time and night time national offence indices are higher than the desired standard. The day time national offence index has decreased from 1.27 to 0.68. The night time national offence index has decreased from 2.4 to 2.34.

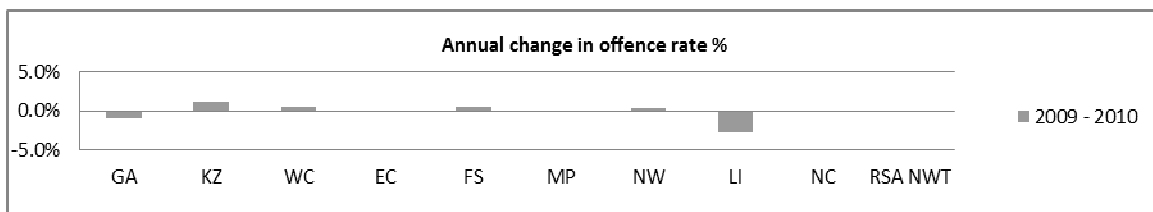
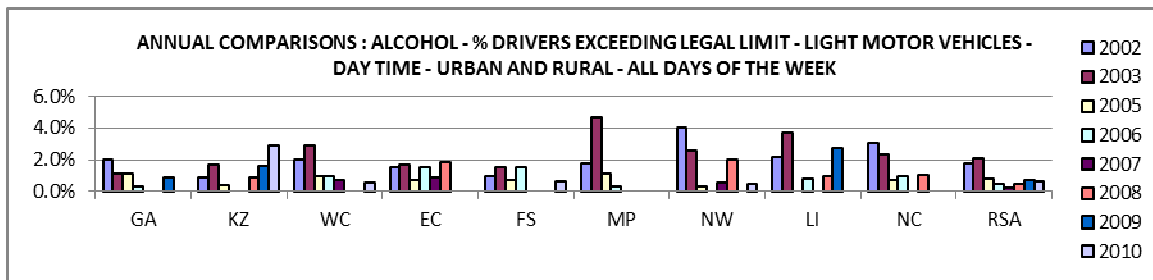
The following sections show the Day and Night offence rates and their indices applying to each of the vehicle types. Additional graphs also show the relationship between the different sub categories, including Day versus Night, and Weekday versus Weekend. As with previous reports, there is no differentiation between Urban and Rural because there is no prescribed sample size for this category.

On average the night time offence levels are higher than the day time offence level, which gives a clear indication that drivers are more likely to be under the influence of alcohol at night than during the day. Both the day and night time offence rates are higher than the desired maximum of 0.4%, once again raising some serious concerns, given the major contribution that driving under the influence of alcohol has towards road accidents and fatalities. When looking at the overall trend line since the start of the 2002 offence survey, it is clear to see a definitive decline in the overall alcohol offence rate.

## 2.6.1 ALCOHOL OFFENCES FOR LIGHT MOTOR VEHICLES – RURAL AND URBAN ROADS

### 2.6.1.1 Summary of Alcohol Offences: Light Motor Vehicles – Rural and Urban Roads – Day Time

ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.10%	1.70%	2.90%	1.70%	1.50%	4.70%	2.60%	3.70%	2.30%	2.10%
2005	1.10%	0.40%	1.00%	0.70%	0.70%	1.10%	0.30%	0.00%	0.70%	0.80%
2006	0.30%	0.00%	1.00%	1.50%	1.50%	0.30%	0.00%	0.80%	1.00%	0.50%
2007	0.00%	0.00%	0.73%	0.84%	0.00%	0.00%	0.56%	0.00%	0.00%	0.21%
2008	0.00%	0.92%	0.00%	1.85%	0.00%	0.00%	2.00%	0.96%	1.02%	0.46%
2009	0.89%	1.64%	0.00%	0.00%	0.00%	0.00%	0.00%	2.70%	0.00%	0.69%
2010	0.00%	2.88%	0.58%	0.00%	0.63%	0.00%	0.47%	0.00%	0.00%	0.62%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.00%	0.92%	-0.73%	1.01%	0.00%	0.00%	1.44%	0.96%	1.02%	0.25%
2008 - 2009	0.89%	0.72%	0.00%	-1.85%	0.00%	0.00%	-2.00%	1.74%	-1.02%	0.23%
2009 - 2010	-0.89%	1.24%	0.58%	0.00%	0.63%	0.00%	0.47%	-2.70%	0.00%	-0.07%

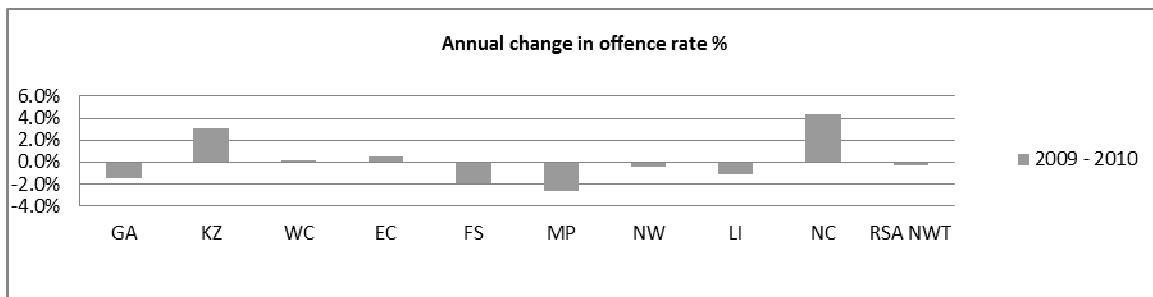
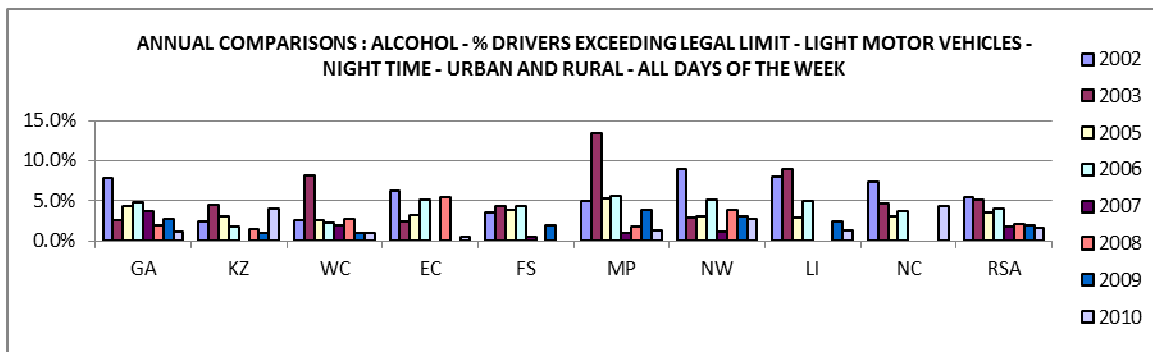


The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 0.69% in 2009 to 0.62% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 2.88%, and Gauteng, along with Eastern Cape, Mpumalanga, Limpopo and Northern Cape have the lowest offence rates with 0.00%. KwaZulu Natal shows the largest increase in offence rate percentage, from 1.64% to 2.88%. Limpopo shows the largest decrease in offence rate percentage from 2.7% to 0.0%.



### 2.6.1.2 Summary of Alcohol Offences: Light Motor Vehicles – Rural and Urban Roads –Night Time

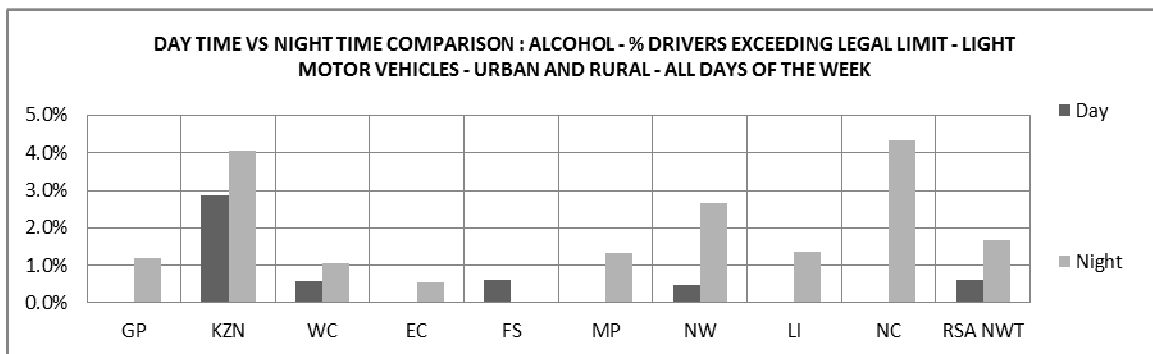
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	2.65%	4.49%	8.13%	2.48%	4.40%	13.42%	2.86%	8.90%	4.69%	5.10%
2005	4.28%	3.01%	2.51%	3.28%	3.92%	5.21%	2.99%	2.82%	3.06%	3.60%
2006	4.83%	1.84%	2.30%	5.20%	4.41%	5.57%	5.07%	4.94%	3.64%	4.02%
2007	3.64%	0.00%	1.92%	0.00%	0.58%	0.97%	1.20%	0.00%	0.00%	1.74%
2008	1.90%	1.48%	2.75%	5.41%	0.00%	1.79%	3.85%	0.00%	0.00%	2.07%
2009	2.68%	0.95%	0.96%	0.00%	1.96%	3.92%	3.08%	2.48%	0.00%	1.97%
2010	1.20%	4.05%	1.05%	0.54%	0.00%	1.34%	2.67%	1.35%	4.33%	1.67%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-1.74%	1.48%	0.83%	5.41%	-0.58%	0.82%	2.65%	0.00%	0.00%	0.33%
2008 - 2009	0.77%	-0.53%	-1.79%	-5.41%	1.96%	2.14%	-0.77%	2.48%	0.00%	-0.10%
2009 - 2010	-1.48%	3.09%	0.09%	0.54%	-1.96%	-2.58%	-0.41%	-1.13%	4.33%	-0.30%



The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 1.97% in 2009 to 1.67% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 4.33%, and Free State has the lowest offence rate with 0.0%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 4.33%. Mpumalanga shows the largest decrease in offence rate percentage from 3.92% to 1.34%.

### 2.6.1.3 Summary of Alcohol Offences: Light Motor Vehicles – Rural and Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	1.2%
KZN	2.9%	4.0%
WC	0.6%	1.0%
EC	0.0%	0.5%
FS	0.6%	0.0%
MP	0.0%	1.3%
NW	0.5%	2.7%
LI	0.0%	1.4%
NC	0.0%	4.3%
RSA NWT	0.6%	1.7%

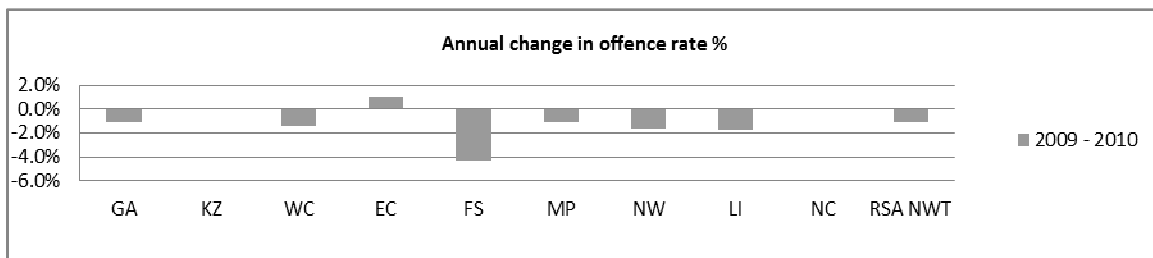
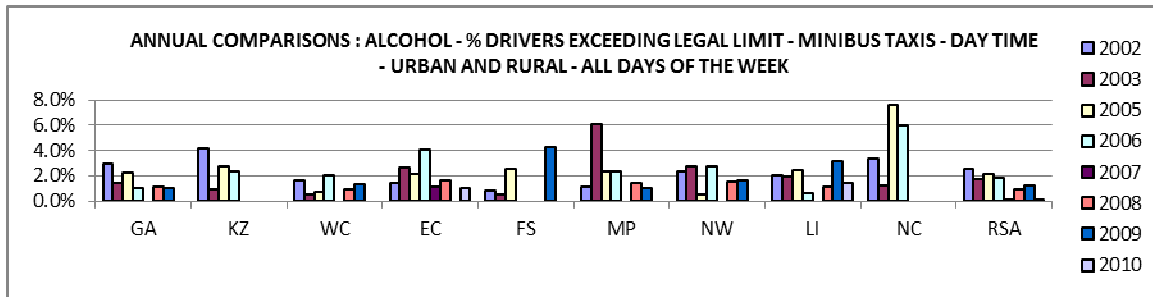


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.6%) than during the night (1.7%). The province with the largest difference in day and night time offence rates is Northern Cape, with 0.0% during the day, and 4.3% during the night. The province with the smallest difference in day and night time offence rates is Western Cape, with 0.6% during the day, and 1.0% during the night.

## 2.6.2 ALCOHOL OFFENCES FOR MINIBUS TAXIS – RURAL AND URBAN ROADS

### 2.6.2.1 Summary of Alcohol Offences: Minibus Taxis – Rural and Urban Roads – Day Time

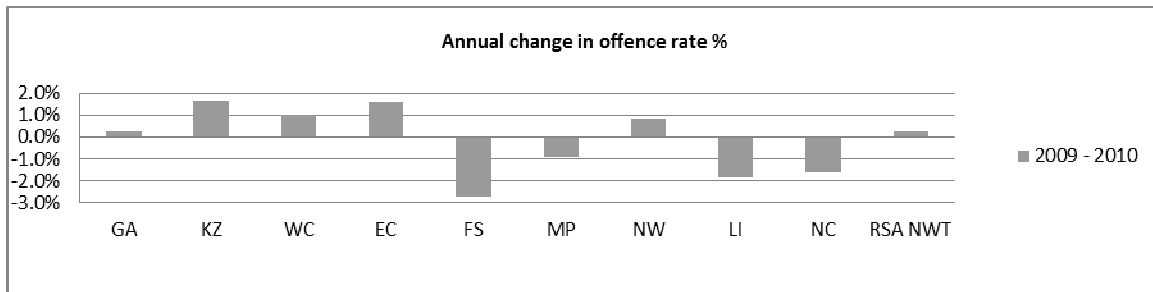
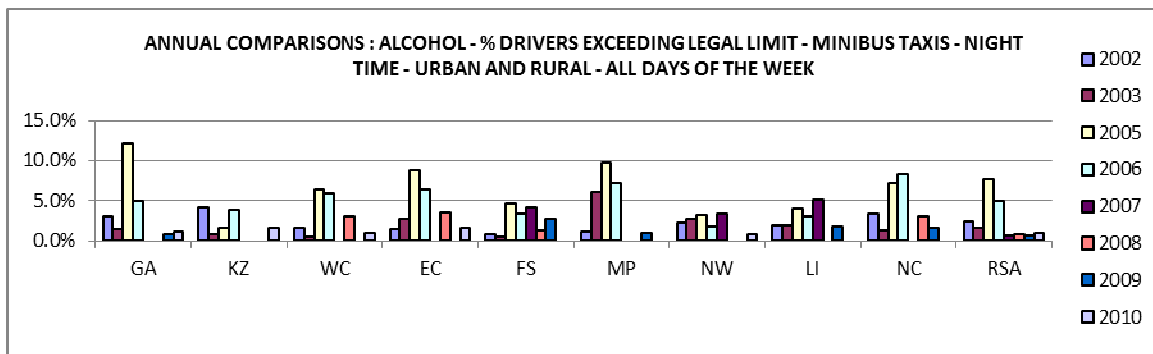
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.40%	0.90%	0.50%	2.70%	0.50%	6.10%	2.80%	1.90%	1.20%	1.70%
2005	2.20%	2.80%	0.70%	2.10%	2.50%	2.30%	0.50%	2.40%	7.60%	2.10%
2006	1.00%	2.30%	2.00%	4.10%	0.00%	2.30%	2.80%	0.60%	6.00%	1.80%
2007	0.00%	0.00%	0.00%	1.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%
2008	1.15%	0.00%	0.97%	1.67%	0.00%	1.41%	1.52%	1.14%	0.00%	0.92%
2009	1.08%	0.00%	1.37%	0.00%	4.30%	1.05%	1.64%	3.13%	0.00%	1.19%
2010	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	1.41%	0.00%	0.13%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	1.15%	0.00%	0.97%	0.49%	0.00%	1.41%	1.52%	1.14%	0.00%	0.84%
2008 - 2009	-0.07%	0.00%	0.40%	-1.67%	4.30%	-0.36%	0.12%	1.99%	0.00%	0.27%
2009 - 2010	-1.08%	0.00%	-1.37%	1.00%	-4.30%	-1.05%	-1.64%	-1.72%	0.00%	-1.06%



The information above shows that on a national basis the percentage alcohol offences for Minibus Taxis in this category have decreased from 1.19% in 2009 to 0.13% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.41%, and Gauteng, along with all other provinces except Eastern Cape and Limpopo, has the lowest offence rate with 0.00%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 1.0%. Free State shows the largest decrease in offence rate percentage from 4.3% to 0.0%.

### 2.6.2.2 Summary of Alcohol Offences: Minibus Taxis – Rural and Urban Roads –Night Time

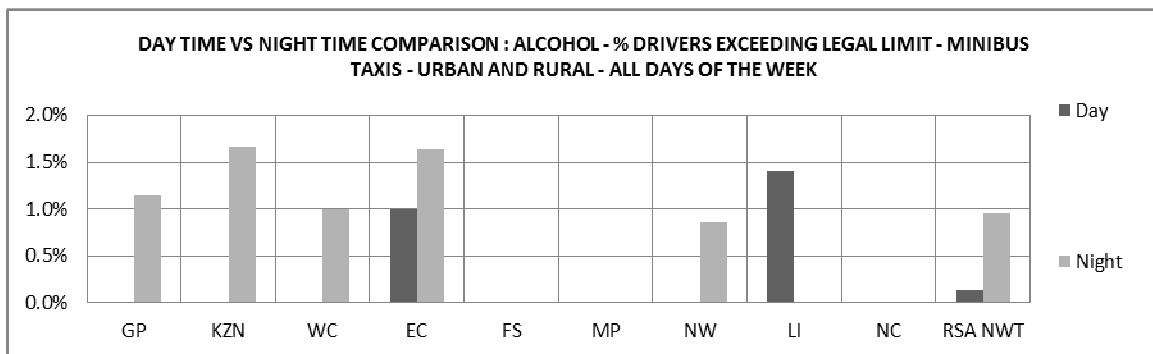
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
2005	12.12%	1.64%	6.38%	8.82%	4.58%	9.80%	3.26%	4.04%	7.14%	7.70%
2006	4.98%	3.85%	5.88%	6.35%	3.33%	7.25%	1.79%	3.08%	8.33%	4.91%
2007	0.00%	0.00%	0.00%	0.00%	4.23%	0.00%	3.37%	5.13%	0.00%	0.66%
2008	0.00%	0.00%	3.08%	3.57%	1.27%	0.00%	0.00%	0.00%	2.99%	0.87%
2009	0.88%	0.00%	0.00%	0.00%	2.74%	0.93%	0.00%	1.82%	1.59%	0.68%
2010	1.14%	1.67%	1.00%	1.64%	0.00%	0.00%	0.85%	0.00%	0.00%	0.96%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.00%	0.00%	3.08%	3.57%	-2.96%	0.00%	-3.37%	-5.13%	2.99%	0.21%
2008 - 2009	0.88%	0.00%	-3.08%	-3.57%	1.47%	0.93%	0.00%	1.82%	-1.40%	-0.20%
2009 - 2010	0.27%	1.67%	1.00%	1.64%	-2.74%	-0.93%	0.85%	-1.82%	-1.59%	0.28%



The information above shows that on a national basis the percentage alcohol offences for Minibus Taxis in this category have increased from 0.68% in 2009 to 0.96% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 1.67%, and Free State, along with Mpumalanga, Limpopo and Northern Cape, has the lowest offence rate with 0.0%. KwaZulu Natal shows the largest increase in offence rate percentage, from 0.0% to 1.67%. Free State shows the largest decrease in offence rate percentage from 2.74% to 0.0%.

### 2.6.2.3 Summary of Alcohol Offences: Minibus Taxis – Rural and Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	1.1%
KZN	0.0%	1.7%
WC	0.0%	1.0%
EC	1.0%	1.6%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.0%	0.9%
LI	1.4%	0.0%
NC	0.0%	0.0%
RSA NWT	0.1%	1.0%

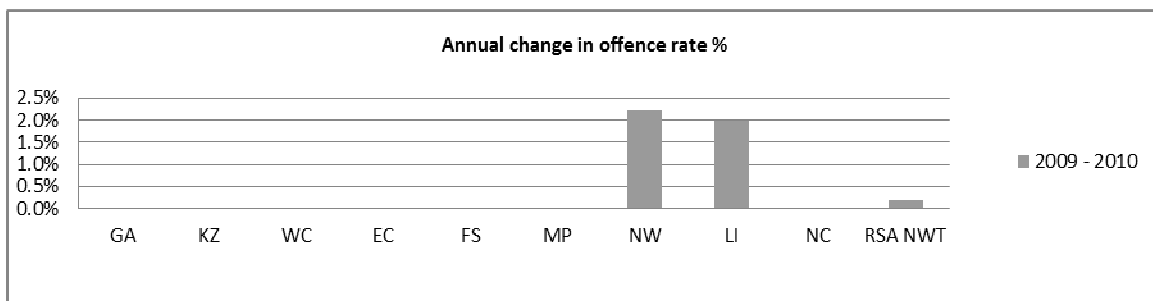
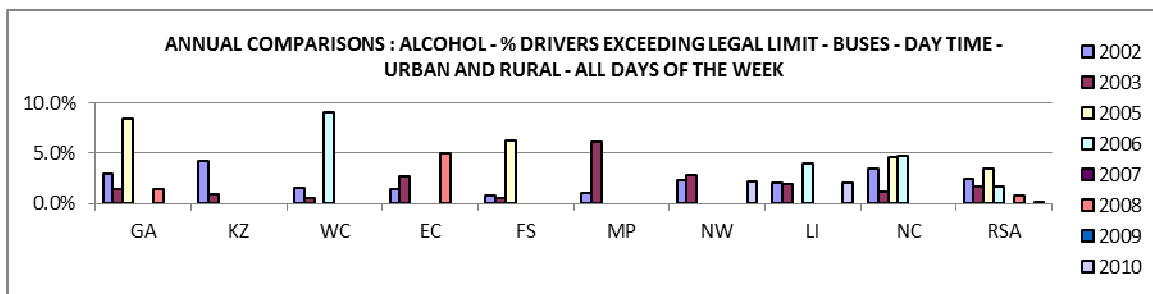


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.1%) than during the night (1.0%). The province with the largest difference in day and night time offence rates is KwaZulu Natal, with 0.0% during the day, and 1.7% during the night. The province with the smallest difference in day and night time offence rates is Free State, along with Mpumalanga and Northern Cape, with 0.0% during the day, and 0.0% during the night.

## 2.6.3 ALCOHOL OFFENCES FOR BUSES – RURAL AND URBAN ROADS

### 2.6.3.1 Summary of Alcohol Offences: Buses – Rural and Urban Roads – Day Time

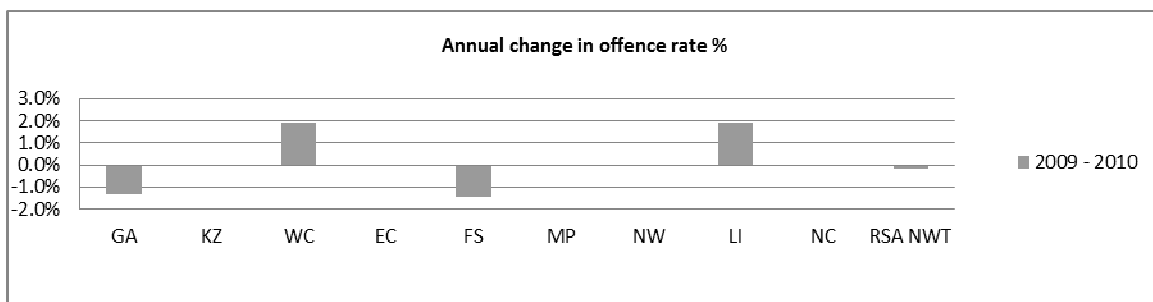
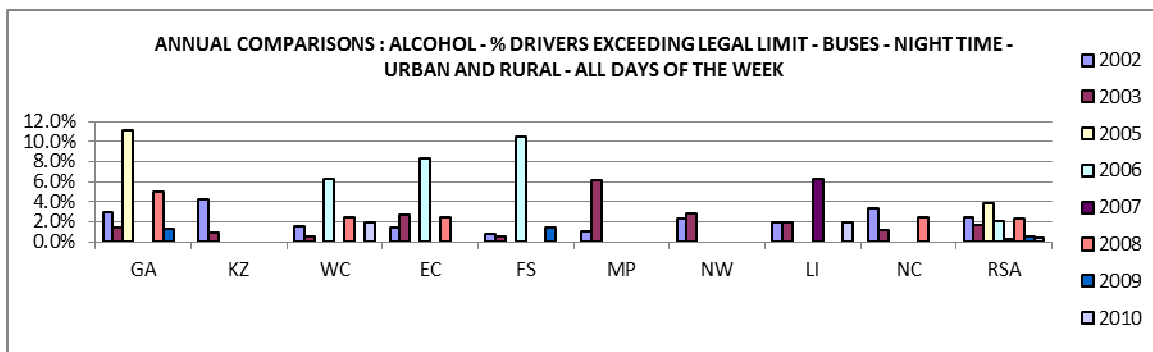
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
2005	8.36%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	4.55%	3.40%
2006	0.00%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	4.00%	4.76%	1.70%
2007	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2008	1.43%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.83%
2009	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	2.00%	0.00%	0.21%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	1.43%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.83%
2008 - 2009	-1.43%	0.00%	0.00%	-5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.83%
2009 - 2010	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	2.00%	0.00%	0.21%



The information above shows that on a national basis the percentage alcohol offences for Buses in this category have increased from 0.0% in 2009 to 0.21% in 2010. North West has the highest offence rate in this regard for 2010 with 2.22%, and Gauteng, along with all other provinces except North West and Limpopo, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 2.22%. None of the provinces show a decrease in offence rates between 2009 and 2010.

### 2.6.3.2 Summary of Alcohol Offences: Buses – Rural and Urban Roads –Night Time

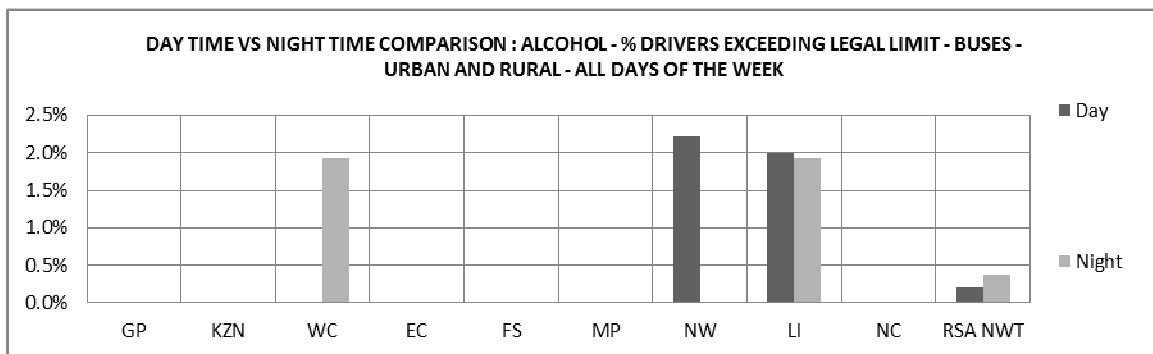
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
2005	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.90%
2006	0.00%	0.00%	6.25%	8.33%	10.53%	0.00%	0.00%	0.00%	0.00%	2.10%
2007	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%	0.29%
2008	5.00%	0.00%	2.50%	2.50%	0.00%	0.00%	0.00%	0.00%	2.44%	2.29%
2009	1.32%	0.00%	0.00%	0.00%	1.41%	0.00%	0.00%	0.00%	0.00%	0.54%
2010	0.00%	0.00%	1.92%	0.00%	0.00%	0.00%	0.00%	1.92%	0.00%	0.38%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	5.00%	0.00%	2.50%	2.50%	0.00%	0.00%	0.00%	-6.25%	2.44%	2.00%
2008 - 2009	-3.68%	0.00%	-2.50%	-2.50%	1.41%	0.00%	0.00%	0.00%	-2.44%	-1.76%
2009 - 2010	-1.32%	0.00%	1.92%	0.00%	-1.41%	0.00%	0.00%	1.92%	0.00%	-0.16%



The information above shows that on a national basis the percentage alcohol offences for Buses in this category have decreased from 0.54% in 2009 to 0.38% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 1.92%, and Gauteng, along with all other provinces except Western Cape and Limpopo, has the lowest offence rate with 0.0%. Western Cape shows the largest increase in offence rate percentage, from 0.0% to 1.92%. Free State shows the largest decrease in offence rate percentage from 1.41% to 0.0%.

### 2.6.3.3 Summary of Alcohol Offences: Buses – Rural and Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.0%
KZN	0.0%	0.0%
WC	0.0%	1.9%
EC	0.0%	0.0%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	2.2%	0.0%
LI	2.0%	1.9%
NC	0.0%	0.0%
RSA NWT	0.2%	0.4%



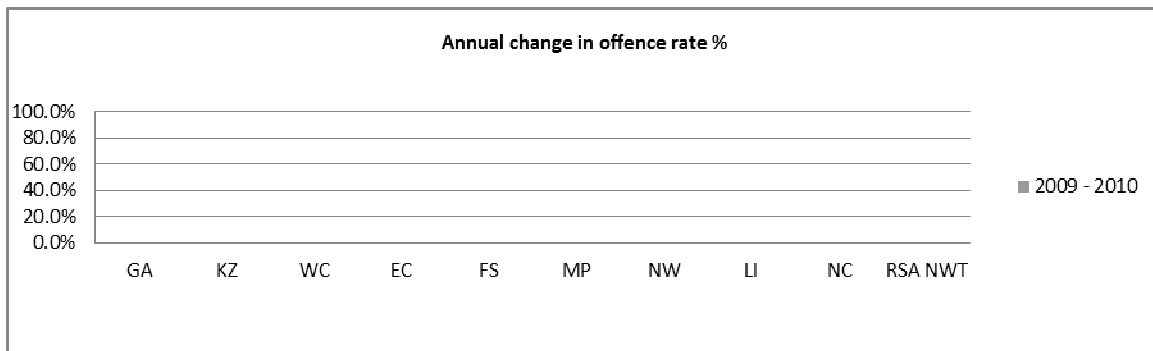
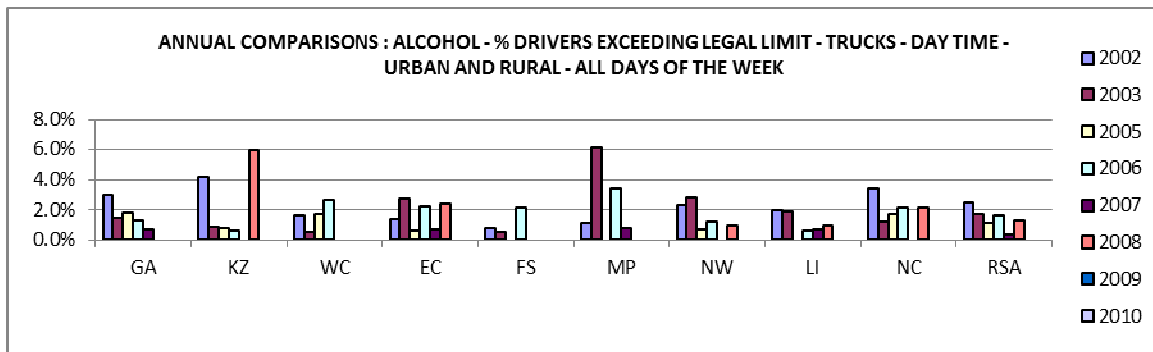
The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.2%) than during the night (0.4%). The province with the largest difference in day and night time offence rates is North West, with 2.2% during the day, and 0.0% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, along with all other provinces except Western Cape, North West and Limpopo, with 0.0% during the day, and 0.0% during the night.



## 2.6.4 ALCOHOL OFFENCES FOR TRUCKS – RURAL AND URBAN ROADS

### 2.6.4.1 Summary of Alcohol Offences: Trucks – Rural and Urban Roads – Day Time

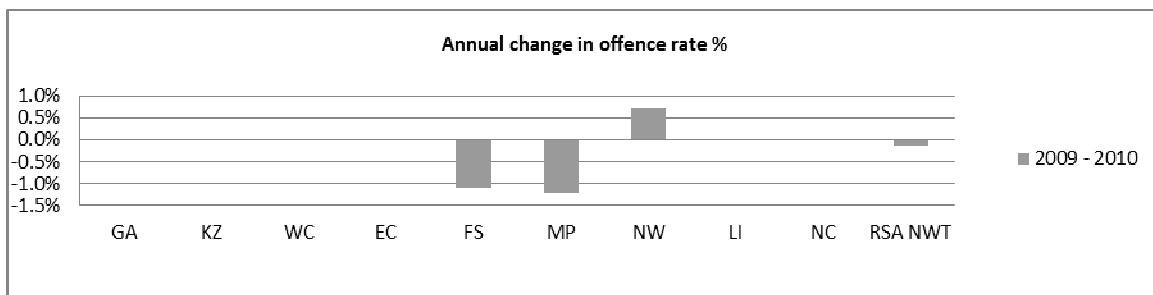
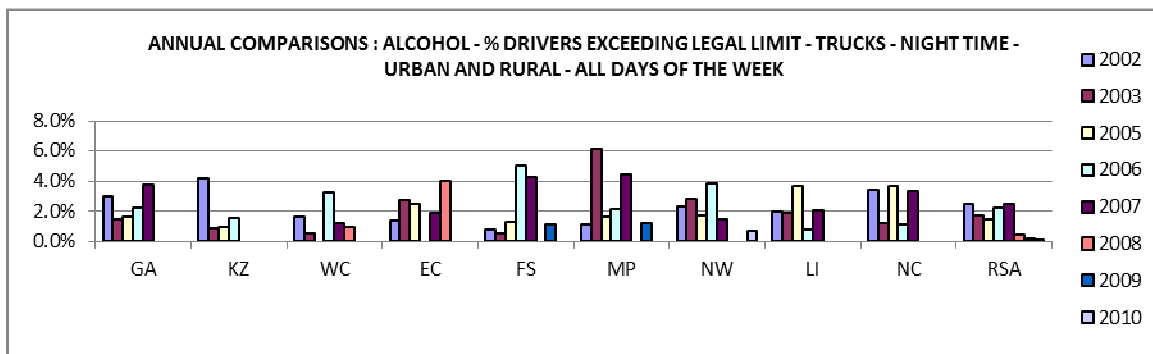
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
2005	1.76%	0.78%	1.69%	0.61%	0.00%	0.00%	0.68%	0.00%	1.71%	1.10%
2006	1.25%	0.58%	2.63%	2.22%	2.16%	3.43%	1.22%	0.60%	2.13%	1.60%
2007	0.68%	0.00%	0.00%	0.67%	0.00%	0.74%	0.00%	0.70%	0.00%	0.37%
2008	0.00%	5.92%	0.00%	2.41%	0.00%	0.00%	0.93%	0.97%	2.16%	1.26%
2009	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-0.68%	5.92%	0.00%	1.74%	0.00%	-0.74%	0.93%	0.27%	2.16%	0.89%
2008 - 2009	0.00%	-5.92%	0.00%	-2.41%	0.00%	0.00%	-0.93%	-0.97%	-2.16%	-1.26%
2009 - 2010	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



The information above shows that on a national basis the percentage alcohol offences for Trucks remained the same between 2009 and 2010. No offences were recorded for this category in 2009, as well as in 2010.

### 2.6.4.2 Summary of Alcohol Offences: Trucks – Rural and Urban Roads –Night Time

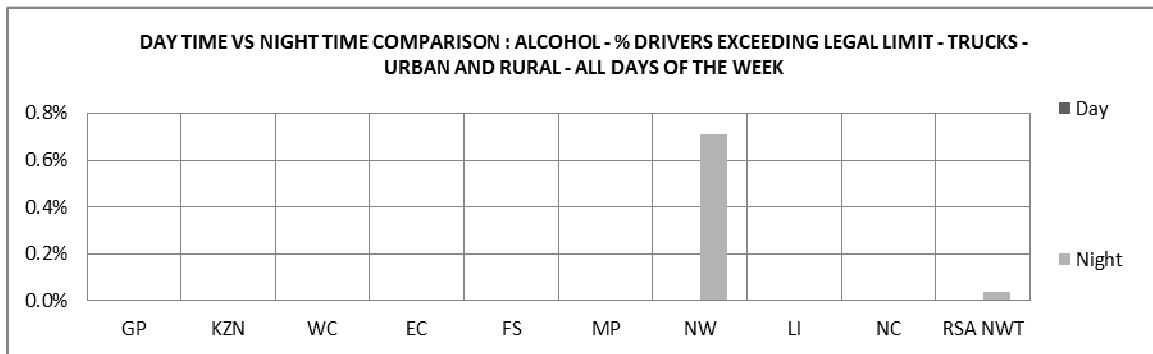
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
2005	1.64%	0.96%	0.00%	2.44%	1.31%	1.60%	1.75%	3.64%	3.64%	1.50%
2006	2.21%	1.54%	3.27%	0.00%	5.00%	2.15%	3.80%	0.79%	1.11%	2.25%
2007	3.75%	0.00%	1.17%	1.89%	4.30%	4.44%	1.48%	2.04%	3.37%	2.46%
2008	0.00%	0.00%	0.96%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43%
2009	0.00%	0.00%	0.00%	0.00%	1.11%	1.20%	0.00%	0.00%	0.00%	0.18%
2010	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.00%	0.00%	0.04%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-3.75%	0.00%	-0.21%	2.11%	-4.30%	-4.44%	-1.48%	-2.04%	-3.37%	-2.03%
2008 - 2009	0.00%	0.00%	-0.96%	-4.00%	1.11%	1.20%	0.00%	0.00%	0.00%	-0.25%
2009 - 2010	0.00%	0.00%	0.00%	0.00%	-1.11%	-1.20%	0.71%	0.00%	0.00%	-0.14%



The information above shows that on a national basis the percentage alcohol offences for Trucks in this category have decreased from 0.18% in 2009 to 0.4% in 2010. North West has the highest offence rate in this regard for 2010 with 0.71%, and Gauteng, along with all other provinces except North West, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 0.71%. Mpumalanga shows the largest decrease in offence rate percentage from 1.2% to 0.0%.

### 2.6.4.3 Summary of Alcohol Offences: Trucks – Rural and Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.0%
KZN	0.0%	0.0%
WC	0.0%	0.0%
EC	0.0%	0.0%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.0%	0.7%
LI	0.0%	0.0%
NC	0.0%	0.0%
RSA NWT	0.0%	0.0%

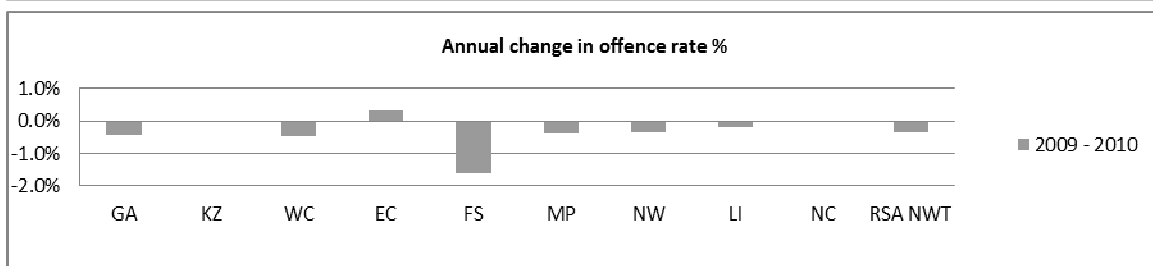
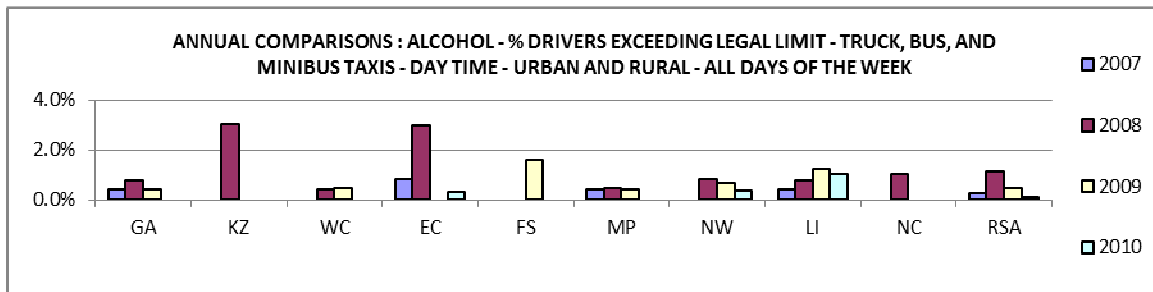


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.0%) than during the night (0.04%). The province with the largest difference in day and night time offence rates is North West, with 0.0% during the day, and 0.71% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, along with all other provinces except North West, with 0.0% during the day, and 0.0% during the night.

## 2.6.5 ALCOHOL OFFENCES FOR MINIBUS TAXIS, TRUCKS AND BUSES COMBINED – RURAL AND URBAN ROADS

### 2.6.5.1 Summary of Alcohol Offences: Minibus Taxis, Trucks and Buses Combined – Rural and Urban Roads – Day Time

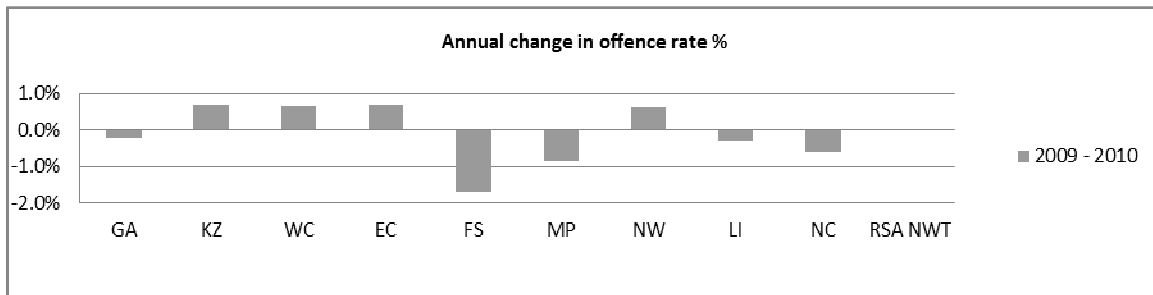
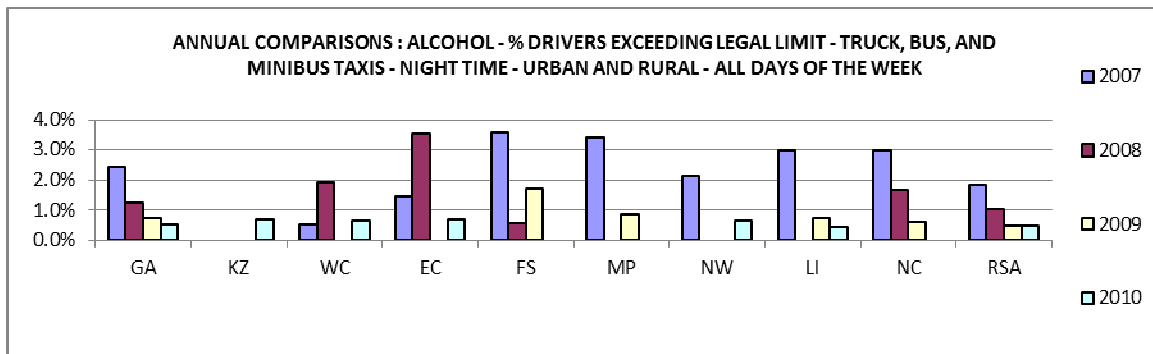
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	0.43%	0.00%	0.00%	0.81%	0.00%	0.44%	0.00%	0.40%	0.00%	0.26%
2008	0.75%	3.03%	0.42%	2.96%	0.00%	0.44%	0.83%	0.79%	1.05%	1.16%
2009	0.41%	0.00%	0.45%	0.00%	1.60%	0.40%	0.69%	1.23%	0.00%	0.44%
2010	0.00%	0.00%	0.00%	0.31%	0.00%	0.00%	0.35%	1.05%	0.00%	0.09%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.32%	3.03%	0.42%	2.15%	0.00%	0.00%	0.83%	0.39%	1.05%	0.90%
2008 - 2009	-0.34%	-3.03%	0.03%	-2.96%	1.60%	-0.04%	-0.14%	0.44%	-1.05%	-0.71%
2009 - 2010	-0.41%	0.00%	-0.45%	0.31%	-1.60%	-0.40%	-0.34%	-0.18%	0.00%	-0.35%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 0.44% in 2009 to 0.09% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.05%, and Gauteng, along with all other provinces except Eastern Cape, North West and Limpopo, has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 0.31%. Free State shows the largest decrease in offence rate percentage from 1.6% to 0.0%.

### 2.6.5.2 Summary of Alcohol Offences: Minibus Taxis, Trucks and Buses Combined – Rural and Urban Roads –Night Time

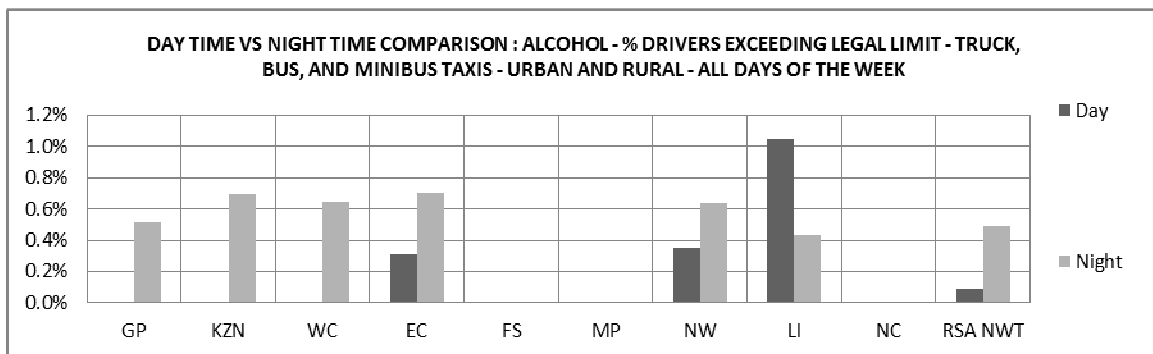
ANNUAL COMPARISONS : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	2.44%	0.00%	0.53%	1.45%	3.59%	3.39%	2.15%	2.97%	2.97%	1.83%
2008	1.25%	0.00%	1.91%	3.52%	0.56%	0.00%	0.00%	0.00%	1.65%	1.04%
2009	0.75%	0.00%	0.00%	0.00%	1.71%	0.85%	0.00%	0.72%	0.61%	0.49%
2010	0.52%	0.70%	0.65%	0.70%	0.00%	0.00%	0.64%	0.43%	0.00%	0.49%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-1.19%	0.00%	1.38%	2.07%	-3.03%	-3.39%	-2.15%	-2.97%	-1.32%	-0.79%
2008 - 2009	-0.50%	0.00%	-1.91%	-3.52%	1.15%	0.85%	0.00%	0.72%	-1.03%	-0.55%
2009 - 2010	-0.23%	0.70%	0.65%	0.70%	-1.71%	-0.85%	0.64%	-0.28%	-0.61%	0.00%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category have remained the same between 2009 and 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 0.7%, and Free State, along with Mpumalanga and Northern Cape, has the lowest offence rate with 0.0%. KwaZulu Natal shows the largest increase in offence rate percentage, from 0.0% to 0.7%. Free State shows the largest decrease in offence rate percentage from 1.71% to 0.0%.

### 2.6.5.3 Summary of Alcohol Offences: Minibus Taxis, Trucks and Buses Combined – Rural and Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.5%
KZN	0.0%	0.7%
WC	0.0%	0.6%
EC	0.3%	0.7%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.3%	0.6%
LI	1.0%	0.4%
NC	0.0%	0.0%
RSA NWT	0.1%	0.5%

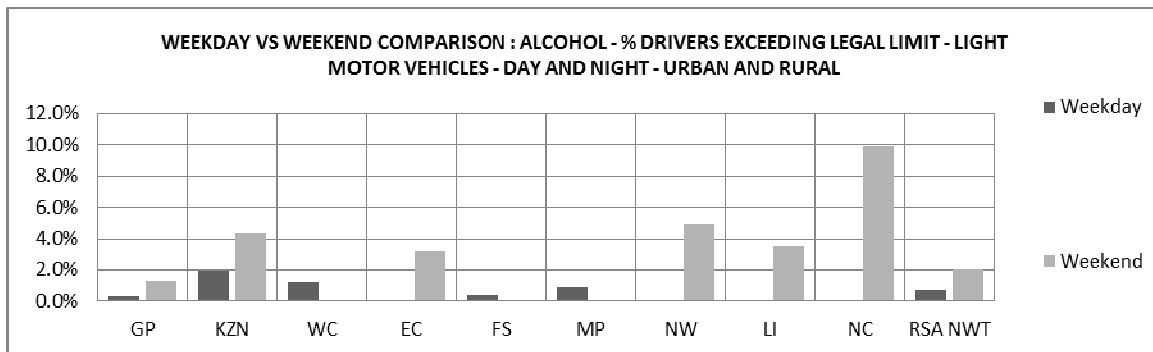


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.1%) than during the night (0.5%). The province with the largest difference in day and night time offence rates is KwaZulu Natal, with 0.0% during the day, and 0.7% during the night. The province with the smallest difference in day and night time offence rates is Free State, along with Mpumalanga and Northern Cape, with 0.0% during the day, and 0.0% during the night.

## 2.6.6 ALCOHOL - % DRIVERS EXCEEDING LEGAL – WEEKDAY VS WEEKEND COMPARISONS

### 2.6.6.1 Summary of Alcohol Offences: Light Motor Vehicles – Weekday vs. Weekend

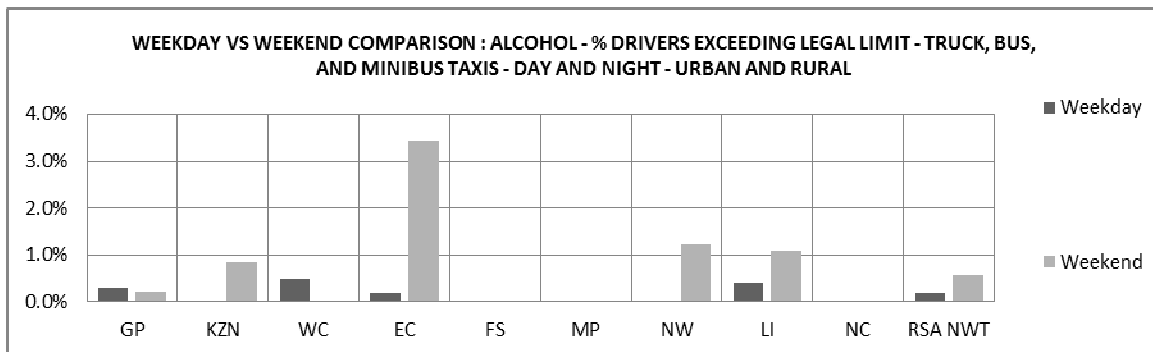
WEEKDAY VS WEEKEND COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	0.3%	1.3%
KZN	1.9%	4.3%
WC	1.3%	0.0%
EC	0.0%	3.2%
FS	0.4%	0.0%
MP	0.9%	0.0%
NW	0.0%	4.9%
LI	0.0%	3.5%
NC	0.0%	9.9%
RSA NWT	0.7%	2.0%



The information above shows that on a national basis the percentage alcohol offences for this category are lower during the week (0.7%) than over the weekend (2.0%). The province with the largest difference in week and weekend offence rates is Northern Cape, with 0.0% during the week, and 9.9% over the weekend. The province with the smallest difference in week and weekend offence rates is Free State, with 0.4% during the week, and 0.0% over the weekend.

### 2.6.6.2 Summary of Alcohol Offences: Minibus Taxis, Trucks and Buses Combined – Weekday vs. Weekend

WEEKDAY VS WEEKEND COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	0.3%	0.2%
KZN	0.0%	0.8%
WC	0.5%	0.0%
EC	0.2%	3.4%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.0%	1.2%
LI	0.4%	1.1%
NC	0.0%	0.0%
RSA NWT	0.2%	0.6%



The information above shows that on a national basis the percentage alcohol offences for this category are lower during the week (0.2%) than over the weekend (0.6%). The province with the largest difference in week and weekend offence rates is Eastern Cape, with 0.2% during the week, and 3.4% over the weekend. The province with the smallest difference in week and weekend offence rates is Free State, along with Mpumalanga and Northern Cape, with 0.0% during the week, and 0.0% over the weekend.



## 2.6.7 ALCOHOL OFFENCES INDEXES

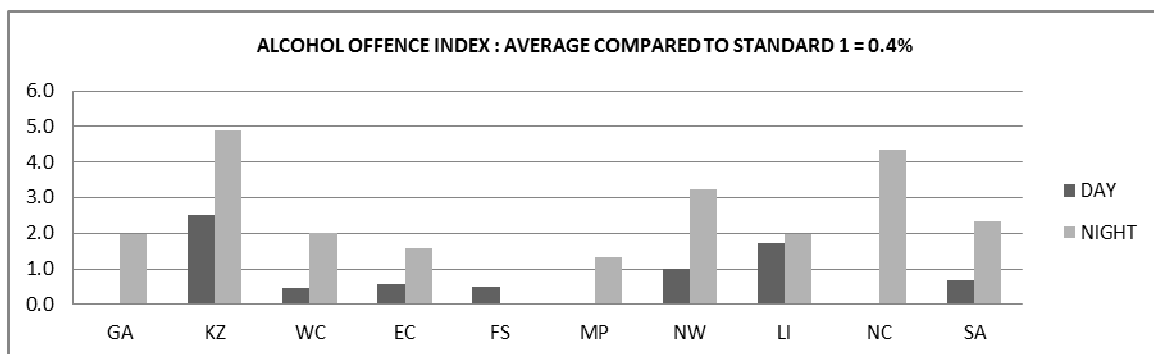
Information on alcohol offences for a combination of all vehicles, during the day and night time respectively, is given in the following tables and reflected in the graphs below.

### 2.6.7.1 Average alcohol offence levels

AVERAGE ALCOHOL OFFENCE RATES - STANDARD 0.4%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
DAY	0.00%	1.00%	0.19%	0.22%	0.20%	0.00%	0.40%	0.68%	0.00%	0.27%
NIGHT	0.78%	1.96%	0.80%	0.64%	0.00%	0.54%	1.29%	0.79%	1.74%	0.94%

### 2.6.7.2 Alcohol offences: comparative index

ALCOHOL OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 0.4%											
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA	
DAY	0.0	2.5	0.5	0.6	0.5	0.0	1.0	1.7	0.0	0.7	
NIGHT	2.0	4.9	2.0	1.6	0.0	1.3	3.2	2.0	4.4	2.3	

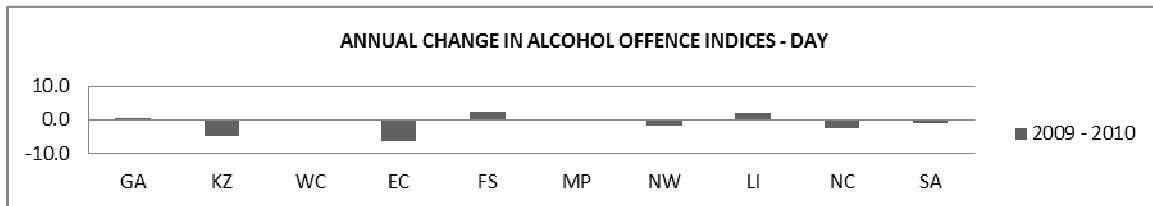
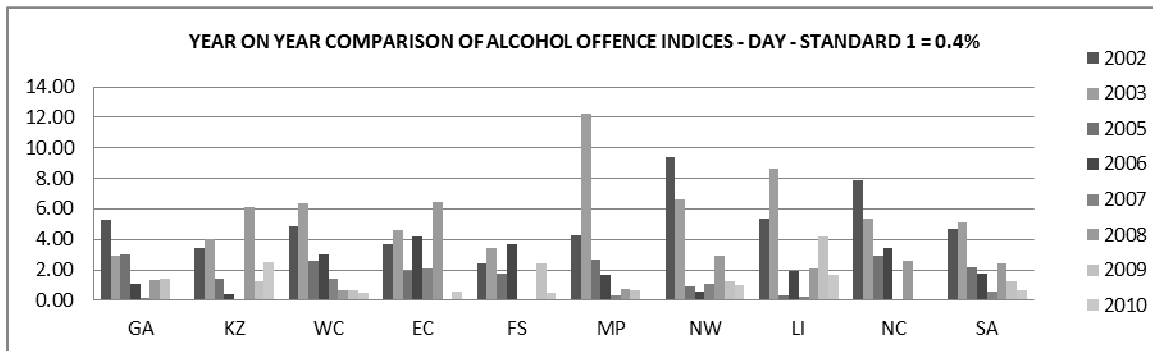


The information above shows that on a national basis the alcohol offence index for this category is lower during the day time (0.7) than during the night (2.3). The province with the largest difference in day and night time offence indices is Northern Cape, with 4.4 for the day time, and 0.0 for the night time. The province with the smallest difference in day and night time offence indices is Limpopo, with 2.0 for the day time, and 1.7 for the night time.

### 2.6.7.3 Comparison of day time alcohol offence indices

Information on alcohol offences for a combination of all vehicles, during the day time, is given in the following tables and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF ALCOHOL OFFENCE INDICES - DAY - STANDARD 1 = 0.4%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	5.30	3.40	4.90	3.70	2.40	4.30	9.40	5.40	7.90	4.70
2003	2.90	4.00	6.40	4.60	3.40	12.20	6.60	8.60	5.40	5.10
2005	3.00	1.40	2.60	1.90	1.80	2.70	0.90	0.30	2.90	2.20
2006	1.10	0.40	3.00	4.20	3.70	1.70	0.60	1.90	3.40	1.80
2007	0.16	0.00	1.44	2.12	0.00	0.36	1.09	0.24	0.00	0.55
2008	1.37	6.16	0.70	6.43	0.00	0.76	2.94	2.11	2.59	2.41
2009	1.41	1.25	0.68	0.00	2.45	0.68	1.25	4.23	0.00	1.26
2010	0.00	2.51	0.48	0.56	0.51	0.00	1.00	1.71	0.00	0.68
ANNUAL CHANGE IN ALCOHOL OFFENCE INDICES - DAY										
2007 - 2008	-0.9	-0.4	-1.6	-2.1	-3.7	-1.3	0.5	-1.7	-3.4	-1.2
2008 - 2009	1.2	6.2	-0.7	4.3	0.0	0.4	1.9	1.9	2.6	1.9
2009 - 2010	0.0	-4.9	0.0	-6.4	2.5	-0.1	-1.7	2.1	-2.6	-1.1

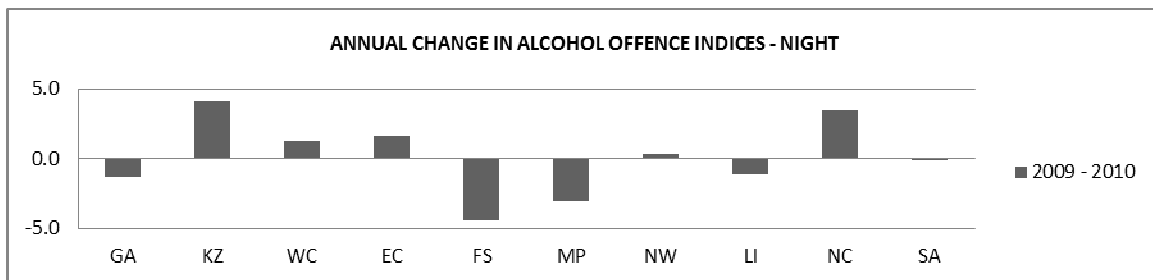
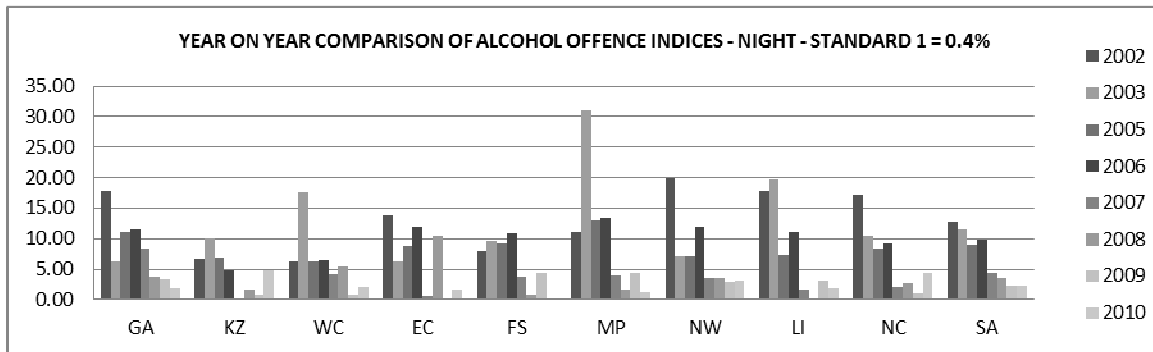


The information above shows that on a national basis the index for alcohol offences in this category has decreased from 1.26 in 2009 to 0.68 in 2010. KwaZulu Natal has the highest offence index in this regard for 2010 with 2.51, and Gauteng, along with Mpumalanga and Northern Cape, has the lowest offence index with 0.0. KwaZulu Natal shows the largest increase in offence indices, from 1.25 to 2.51. Limpopo shows the largest decrease in offence indices from 4.23 to 1.71.

### 2.6.7.4 Comparison of night time alcohol offence indices

Information on alcohol offences for a combination of all vehicles, during the night time, is given in the following tables and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF ALCOHOL OFFENCE INDICES - NIGHT - STANDARD 1 = 0.4%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	17.80	6.80	6.20	13.90	8.00	11.10	19.90	17.90	17.10	12.70
2003	6.30	10.00	17.70	6.30	9.60	31.00	7.10	19.80	10.50	11.60
2005	11.20	6.90	6.20	8.80	9.30	12.90	7.20	7.40	8.30	9.10
2006	11.50	4.80	6.40	12.00	11.00	13.40	12.00	11.20	9.20	9.80
2007	8.37	0.00	4.18	0.57	3.69	3.94	3.54	1.70	2.10	4.36
2008	3.77	1.58	5.50	10.48	0.86	1.65	3.52	0.00	2.62	3.57
2009	3.31	0.81	0.79	0.00	4.46	4.44	2.92	3.13	0.94	2.40
2010	1.96	4.90	2.00	1.60	0.00	1.34	3.23	1.98	4.35	2.34
ANNUAL CHANGE IN ALCOHOL OFFENCE INDICES - NIGHT										
2007 - 2008	-4.6	1.6	1.3	9.9	-2.8	-2.3	0.0	-1.7	0.5	-0.8
2008 - 2009	-0.5	-0.8	-4.7	-10.5	3.6	2.8	-0.6	3.1	-1.7	-1.2
2009 - 2010	-1.3	4.1	1.2	1.6	-4.5	-3.1	0.3	-1.1	3.4	-0.1



The information above shows that on a national basis the index for alcohol offences in this category has decreased from 2.4 in 2009 to 2.34 in 2010. KwaZulu Natal has the highest offence index in this regard for 2010 with 4.9, and Limpopo has the lowest offence index with 0.0. KwaZulu Natal shows the largest increase in offence indices, from 0.81 to 4.9. Free State shows the largest decrease in offence indices from 4.46 to 0.0.

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## 2.7 SUMMARY OF URBAN PEDESTRIAN COMPLIANCE

Road accidents involving pedestrians is the biggest contributor to fatalities on our roads. Approximately 40% of fatal accidents involve pedestrians. It is therefore important to obtain an indication of the extent of unlawful (which is per definition unsafe) or informal (i.e. uncontrolled) crossing of pedestrians or presence of pedestrians on roads.

During previous studies, unlawful presence of pedestrians was determined by observing pedestrian “jay-walking” in urban areas. Due to the subjective nature of this type of survey, the survey was changed in 2008 to rather look at the compliance of pedestrians with pedestrian signals at controlled intersections (robots).

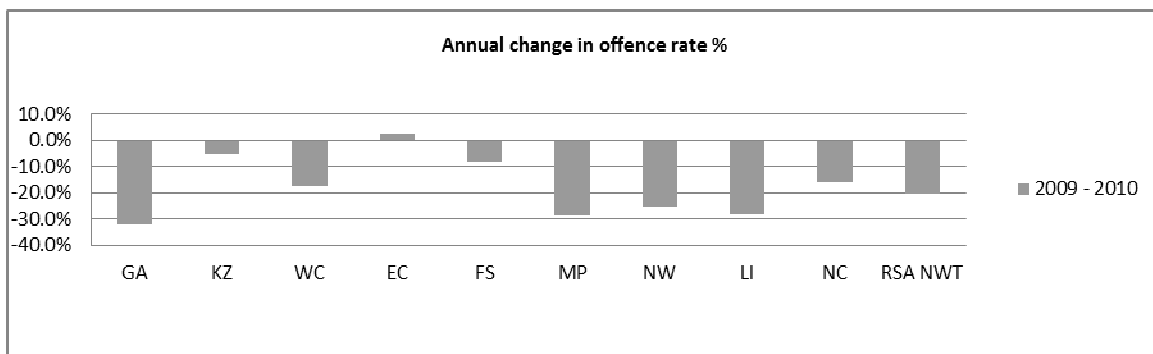
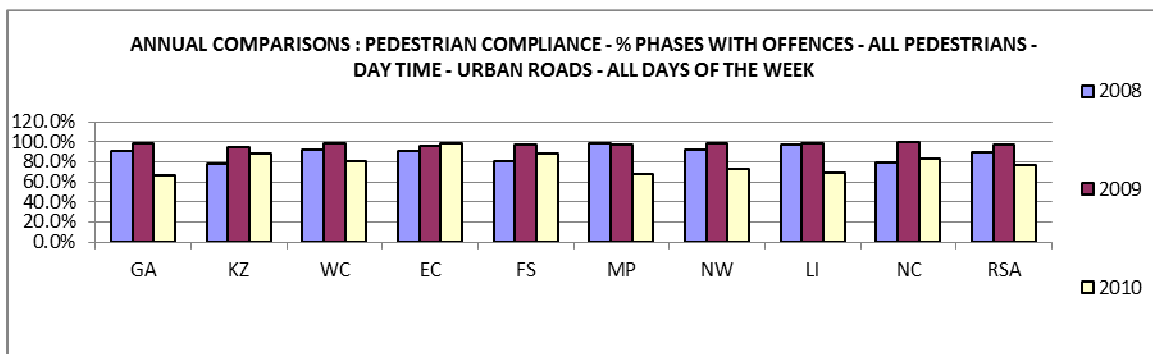
Informal or uncontrolled presence of pedestrians on roads is measured by observing the number of pedestrians on or alongside high speed rural roads. The following tables refer to the first of these, namely pedestrian compliance at traffic signals.

The following section shows the offence figures for urban pedestrian compliance with traffic signals. The graphs are broken down into Urban Day, Urban Night, and Urban Day versus Urban Night offences.

Both the urban day and the urban night categories show extremely high offence rates. This is a matter of serious concern, given the large contribution that pedestrians make towards roads fatalities. This is a clear indication that pedestrians are completely disregarding the road laws set out to govern their movements.

## 2.7.1 SUMMARY OF PEDESTRIAN COMPLIANCE: ALL PEDESTRIANS – URBAN ROADS – DAY TIME

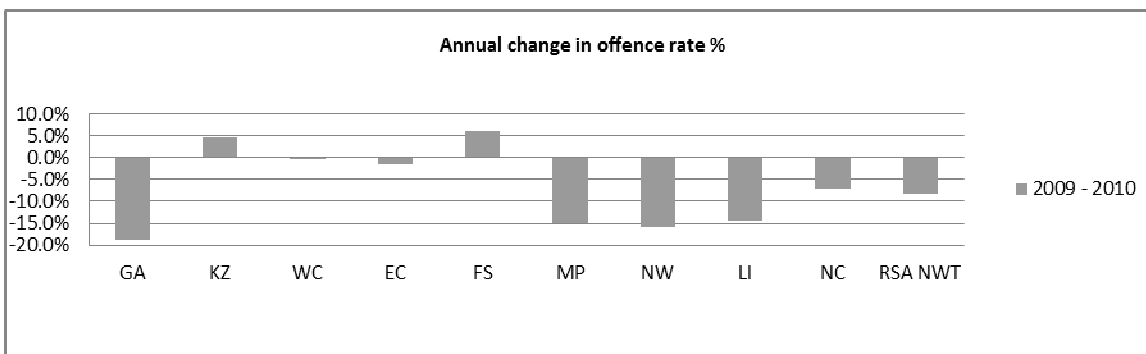
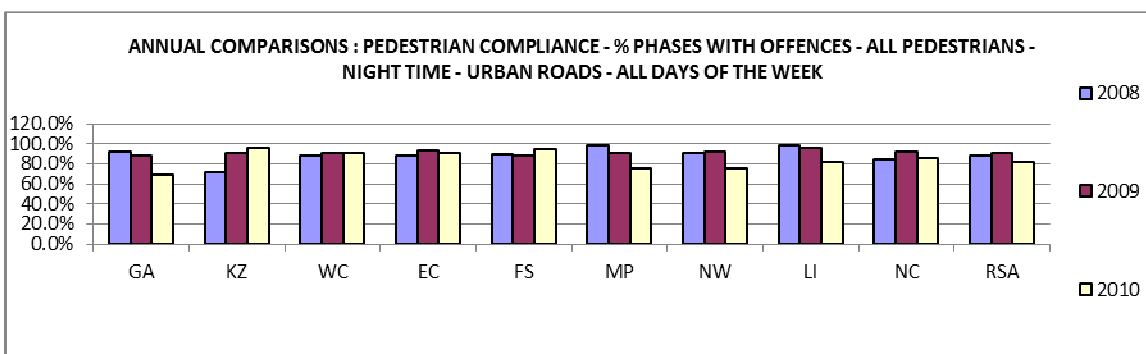
ANNUAL COMPARISONS : PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008	90.9%	78.4%	91.5%	91.0%	81.2%	98.8%	91.8%	97.2%	79.1%	89.2%
2009	98.8%	94.1%	97.8%	96.1%	96.7%	97.0%	97.8%	98.1%	99.7%	97.3%
2010	66.6%	88.8%	80.3%	98.4%	88.4%	68.3%	72.7%	69.7%	83.7%	77.0%
Annual change in offence rate %										
2008 - 2009	7.8%	15.6%	6.3%	5.1%	15.5%	-1.8%	6.1%	0.9%	20.6%	8.1%
2009 - 2010	-32.2%	-5.3%	-17.5%	2.3%	-8.3%	-28.8%	-25.1%	-28.4%	-16.0%	-20.3%



The information above shows that on a national basis the percentage pedestrian compliance offences during the day time have decreased from 97.3% in 2009 to 77.0% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 98.4%, and Gauteng has the lowest offence rate with 66.6%. Eastern Cape shows the largest increase in offence rate percentage, from 96.1% to 98.4%. Gauteng shows the largest decrease in offence rate percentage from 98.8% to 66.6%.

## 2.7.2 SUMMARY OF PEDESTRIAN COMPLIANCE: ALL PEDESTRIANS – URBAN ROADS – NIGHT TIME

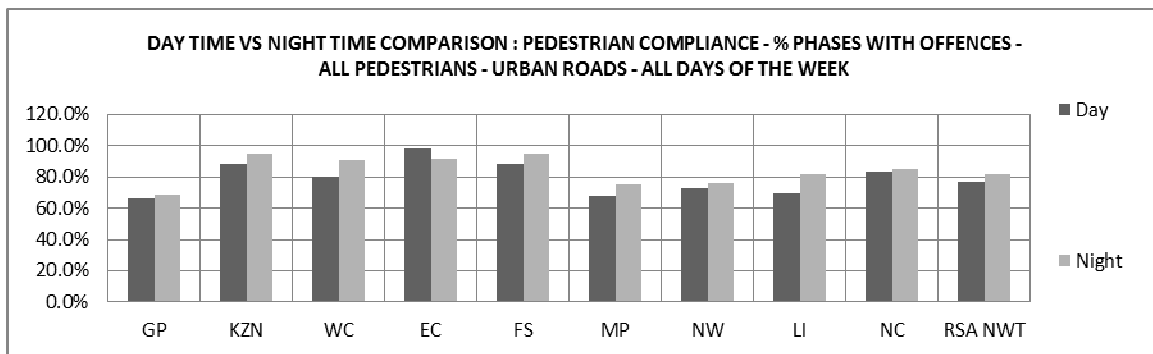
ANNUAL COMPARISONS : PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008	91.8%	71.5%	88.3%	87.9%	89.1%	98.0%	90.5%	98.1%	83.8%	88.1%
2009	87.8%	90.6%	91.3%	92.8%	88.8%	90.3%	91.9%	95.9%	92.5%	90.1%
2010	69.1%	95.3%	91.0%	91.3%	94.7%	75.3%	76.1%	81.7%	85.3%	81.9%
Annual change in offence rate %										
2008 - 2009	-4.0%	19.2%	3.0%	4.9%	-0.4%	-7.8%	1.4%	-2.2%	8.8%	2.0%
2009 - 2010	-18.7%	4.7%	-0.2%	-1.5%	6.0%	-14.9%	-15.8%	-14.3%	-7.2%	-8.2%



The information above shows that on a national basis the percentage pedestrian compliance offences during the night time have decreased from 90.1% in 2009 to 81.9% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 95.3%, and Gauteng has the lowest offence rate with 69.1%. Free State shows the largest increase in offence rate percentage, from 88.8% to 94.7%. Gauteng shows the largest decrease in offence rate percentage from 87.8% to 69.1%.

### 2.7.3 SUMMARY OF PEDESTRIAN COMPLIANCE: ALL PEDESTRIANS – URBAN ROADS – DAY TIME VS. NIGHT TIME

DAY TIME VS NIGHT TIME COMPARISON : PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	66.6%	69.1%
KZN	88.8%	95.3%
WC	80.3%	91.0%
EC	98.4%	91.3%
FS	88.4%	94.7%
MP	68.3%	75.3%
NW	72.7%	76.1%
LI	69.7%	81.7%
NC	83.7%	85.3%
RSA NWT	77.0%	81.9%



The information above shows that on a national basis the percentage pedestrian compliance offence rate for this category is lower during the day (77.0%) than during the night (81.9%). The province with the largest difference in day and night time offence rates is Limpopo, with 69.7% during the day, and 81.7% during the night. The province with the smallest difference in day and night time offence rates is Northern Cape, with 83.7% during the day, and 85.3% during the night.

## 2.8 SUMMARY OF NON-WEARING OF SEAT BELTS

The following section shows the offence figures for Unobserved Seatbelts for light motor vehicles.

Previous surveys looked at the wearing of seatbelts recorded at road blocks. The data gathered for seatbelt wearing at road blocks are however not reliable, as most vehicle occupants that are not wearing seatbelts, will immediately put on a seatbelt when approaching a roadblock. This information can clearly be seen in the 2007 report, where only 7% of drivers observed at roadblocks do not wear seat belts. During a survey done at robots, where the driver and passenger are not aware that they are being checked for seatbelt wearing, this percentage increases drastically to more than 50%.

For the reasons above, the wearing of seatbelts for the front driver and front passenger were recorded at both unobserved locations and at roadblocks during the 2010 survey.

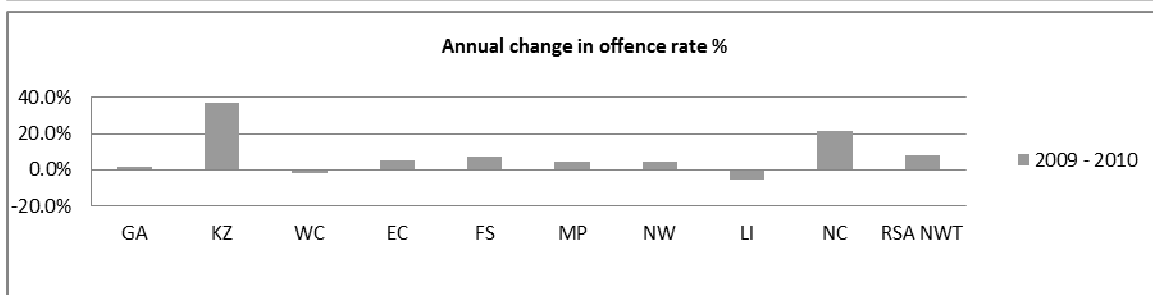
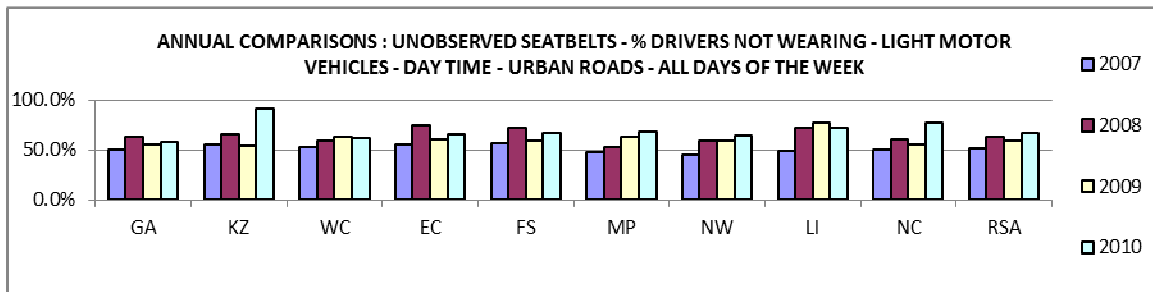
On average, the front passenger offence rates are higher than the front driver offence rates, indicating that the front passenger is much less likely to wear a seatbelt than the driver of the vehicle. Even so, the national offence rate for both these categories is more than 4 times larger than the desired maximum, indicating a serious disregard towards the wearing of seatbelts among drivers and front passengers.



## 2.8.1 SUMMARY OF NON-WEARING OF SEATBELTS: UNOBSERVED DRIVERS AND FRONT PASSENGERS

### 2.8.1.1 Summary of Non-Wearing of Seatbelts: Unobserved drivers - Light Motor Vehicles – Urban Roads– Day Time

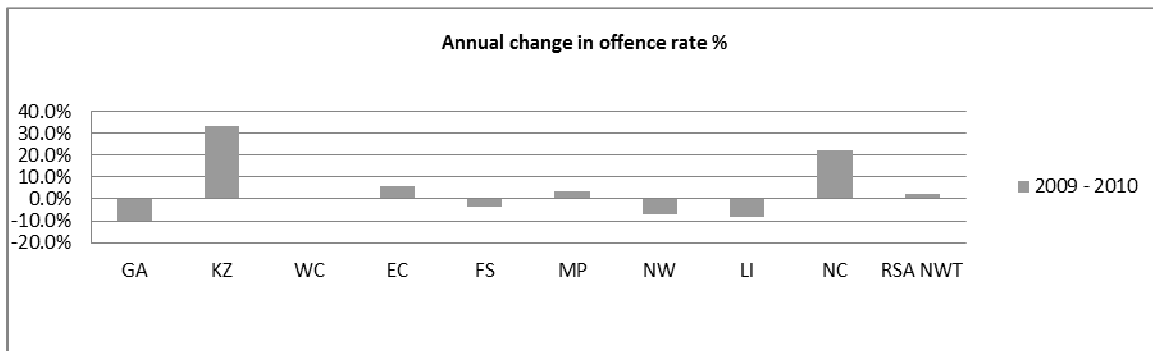
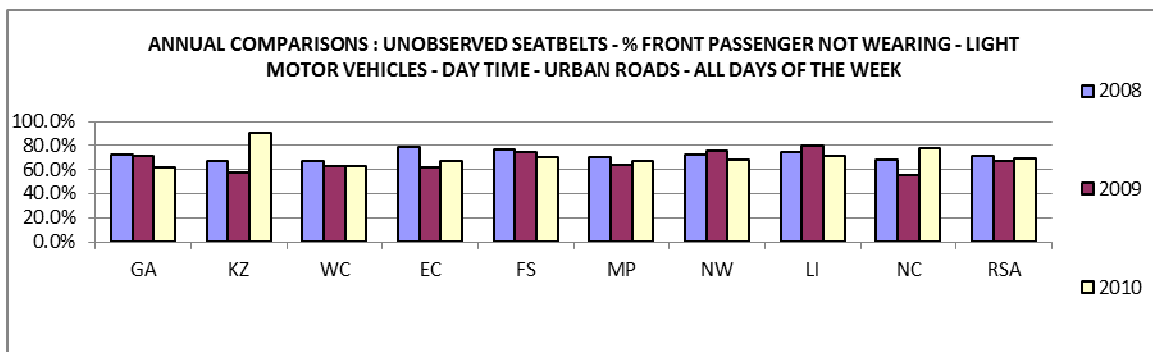
ANNUAL COMPARISONS : UNOBSERVED SEATBELTS - % DRIVERS NOT WEARING - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	50.7%	55.0%	53.2%	55.2%	56.9%	48.0%	45.0%	49.0%	49.9%	51.8%
2008	63.4%	65.3%	59.3%	74.8%	72.6%	53.0%	58.8%	71.7%	60.6%	63.6%
2009	55.4%	53.6%	62.9%	59.8%	58.8%	62.7%	59.1%	76.5%	55.5%	58.6%
2010	57.4%	90.6%	61.4%	65.3%	66.5%	67.5%	63.6%	71.3%	77.0%	66.9%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	12.7%	10.3%	6.1%	19.6%	15.7%	5.0%	13.8%	22.7%	10.8%	11.8%
2008 - 2009	-8.0%	-11.7%	3.6%	-14.9%	-13.8%	9.7%	0.4%	4.8%	-5.1%	-4.9%
2009 - 2010	1.9%	37.0%	-1.5%	5.4%	7.7%	4.8%	4.5%	-5.1%	21.6%	8.2%



The information above shows that on a national basis the percentage unobserved seatbelt offences for drivers in Light Motor Vehicles has increased from 58.6% in 2009 to 66.9% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 90.6%, and Gauteng has the lowest offence rate with 57.4%. KwaZulu Natal shows the largest increase in offence rate percentage, from 53.6% to 90.6%. Limpopo shows the largest decrease in offence rate percentage from 76.5% to 71.3%.

### 2.8.1.2 Summary of Non-Wearing of Seatbelts: Unobserved front passengers - Light Motor Vehicles – Urban Roads– Day Time

ANNUAL COMPARISONS : UNOBSERVED SEATBELTS - % FRONT PASSENGER NOT WEARING - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008	72.4%	66.7%	66.6%	79.1%	76.3%	70.4%	72.1%	75.0%	68.4%	71.1%
2009	71.3%	57.3%	63.2%	61.6%	74.0%	64.3%	75.3%	79.8%	55.8%	67.0%
2010	61.5%	90.8%	63.2%	67.5%	70.4%	67.5%	68.3%	71.6%	78.0%	69.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008 - 2009	-1.1%	-9.4%	-3.4%	-17.5%	-2.3%	-6.1%	3.2%	4.8%	-12.6%	-4.2%
2009 - 2010	-9.8%	33.5%	0.0%	5.9%	-3.6%	3.2%	-7.0%	-8.2%	22.1%	2.3%



The information above shows that on a national basis the percentage unobserved seatbelt offences for front passengers in Light Motor Vehicles has increased from 67.0% in 2009 to 69.3% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 90.8%, and Gauteng has the lowest offence rate with 61.5%. KwaZulu Natal shows the largest increase in offence rate percentage, from 57.3% to 90.8%. Gauteng shows the largest decrease in offence rate percentage from 71.3% to 61.5%.

## 2.8.2 NON-WEARING OF SEATBELTS INDEXES

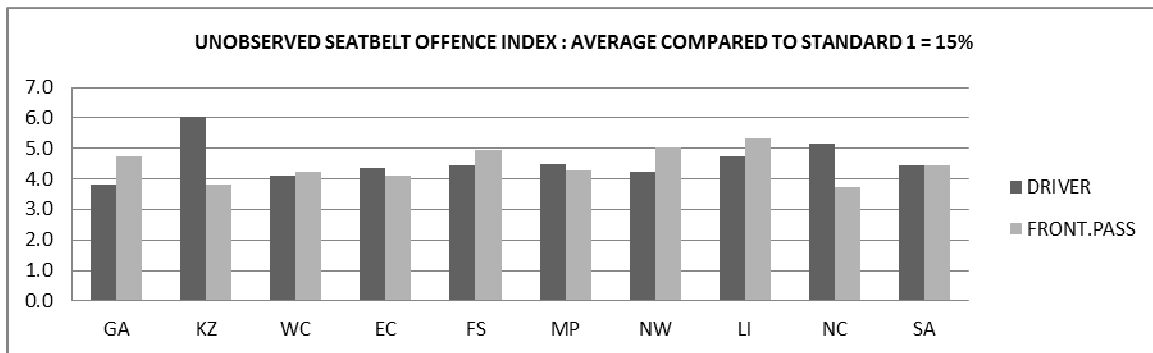
Information on unobserved seatbelts for light motor vehicles in urban areas during the day is given in the following tables and reflected in the graphs below.

### 2.8.2.1 Summary of seat belt offences: Percentage not wearing, light motor vehicles

UNOBSERVED SEATBELT OFFENCE RATES - STANDARD 15%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
DRIVER	57.4%	90.6%	61.4%	65.3%	66.5%	67.5%	63.6%	71.3%	77.0%	66.9%
FRONT.PASS	52.6%	84.1%	102.6%	68.2%	95.5%	75.5%	72.4%	83.2%	114.0%	75.3%

### 2.8.2.2 Seat belt offence index: Average compared to standard, light motor vehicles

UNOBSERVED SEATBELT OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 15%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
DRIVER	3.8	6.0	4.1	4.4	4.4	4.5	4.2	4.8	5.1	4.5
FRONT.PASS	3.5	5.6	6.8	4.5	6.4	5.0	4.8	5.5	7.6	5.0

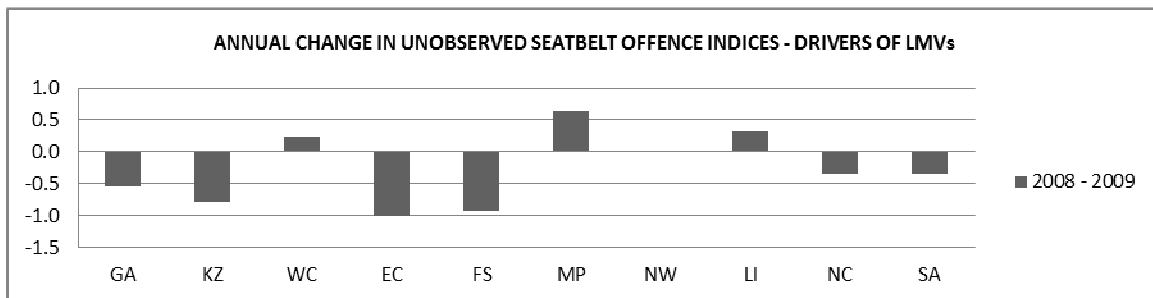
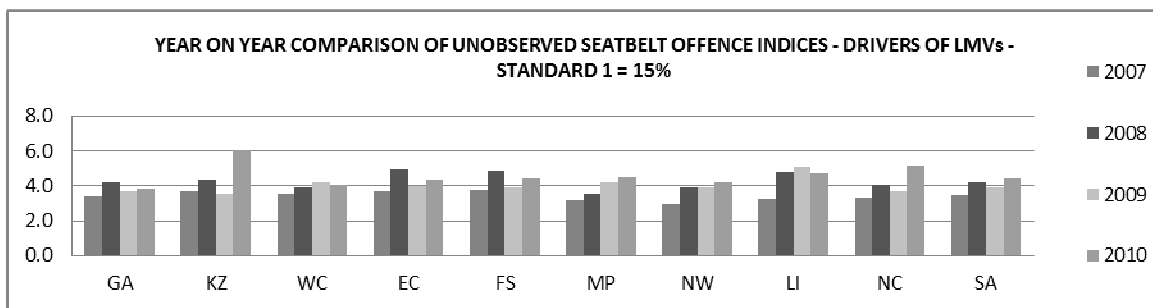


The information above shows that on a national basis the unobserved seatbelt offence index for this category is higher for drivers (5.0) than for front passengers (4.5). The province with the largest difference between driver and front passenger offence indices is Western Cape, with 6.8 for drivers, and 4.1 for front passengers. The province with the smallest difference in driver and front passenger offence indices is Eastern Cape, with 4.5 for drivers, and 4.4 for front passengers.

### 2.8.2.3 Comparison of offence indices for different years: Unobserved Seatbelt wearing rates of drivers, light motor vehicles

Information on unobserved seatbelts for drivers of light motor vehicles in urban areas during the day is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF UNOBSERVED SEATBELT OFFENCE INDICES - DRIVERS OF LMVs - STANDARD 1 = 15%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2007	3.4	3.7	3.5	3.7	3.8	3.2	3.0	3.3	3.3	3.5
2008	4.2	4.4	4.0	5.0	4.8	3.5	3.9	4.8	4.0	4.2
2009	3.7	3.6	4.2	4.0	3.92	4.2	3.9	5.10	3.7	3.9
2010	3.8	6.0	4.1	4.4	4.4	4.5	4.2	4.8	5.1	4.5
ANNUAL CHANGE IN UNOBSERVED SEATBELT OFFENCE INDICES - DRIVERS OF LMVs										
2007 - 2008	0.8	0.7	0.4	1.3	1.0	0.3	0.9	1.5	0.7	0.8
2008 - 2009	-0.5	-0.8	0.2	-1.0	-0.9	0.6	0.0	0.3	-0.3	-0.3
2009 - 2010	0.1	2.5	-0.1	0.4	0.5	0.3	0.3	-0.3	1.4	0.5

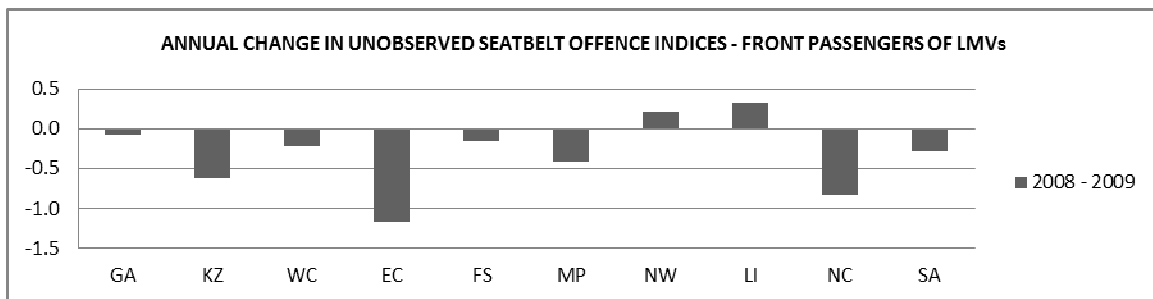
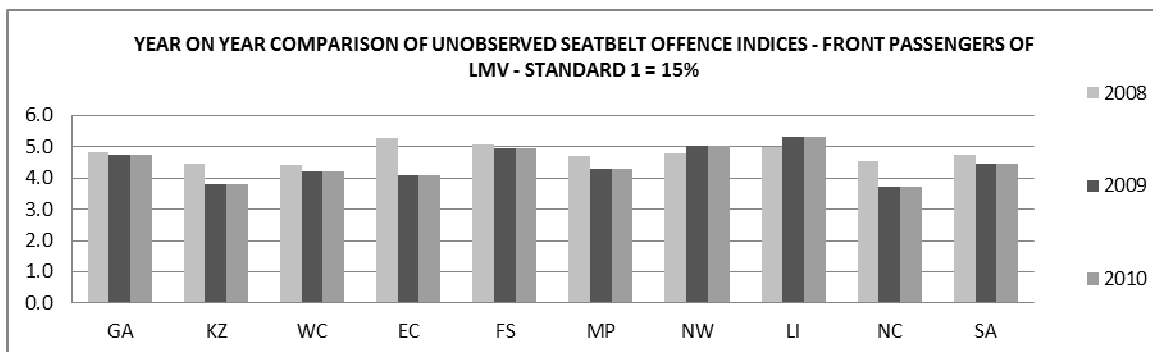


The information above shows that on a national basis the index for unobserved seatbelt offences in this category has increased from 3.9 in 2009 to 4.5 in 2010. KwaZulu Natal has the highest offence index in this regard for 2010 with 6.0, and Gauteng has the lowest offence index with 3.8. KwaZulu Natal shows the largest increase in offence indices, from 3.6 to 6.0. Limpopo shows the largest decrease in offence indices from 5.1 to 4.8.

### 2.8.2.4 Comparison of offence indices for different years: Unobserved Seatbelt wearing rates of front passengers, light motor vehicles

Information on unobserved seatbelts for front passengers of light motor vehicles in urban areas during the day is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF UNOBSERVED SEATBELT OFFENCE INDICES - FRONT PASSENGERS OF LMV - STANDARD 1 = 15%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2008	4.8	4.4	4.4	5.3	5.1	4.7	4.8	5.0	4.6	4.7
2009	4.8	3.8	4.2	4.1	4.9	4.3	5.0	5.3	3.7	4.5
2010	3.5	5.6	6.8	4.5	6.4	5.0	4.8	5.5	7.6	5.0
ANNUAL CHANGE IN UNOBSERVED SEATBELT OFFENCE INDICES - FRONT PASSENGERS OF LMVs										
2008 - 2009	-0.1	-0.6	-0.2	-1.2	-0.2	-0.4	0.2	0.3	-0.8	-0.3
2009 - 2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



The information above shows that on a national basis the index for front passenger offences in this category has increased from 4.5 in 2009 to 5.0 in 2010. Northern Cape has the highest offence index in this regard for 2010 with 7.6, and Gauteng has the lowest offence index with 3.5. Northern Cape shows the largest increase in offence indices, from 3.7 to 7.6. Gauteng shows the largest decrease in offence indices from 4.8 to 3.5.

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## 2.9 SUMMARY OF IGNORING RED TRAFFIC SIGNALS

The following tables show the figures for Urban Traffic Signal offences. The sections are broken down into Urban Day, Urban Night, and Urban Day versus Urban Night.

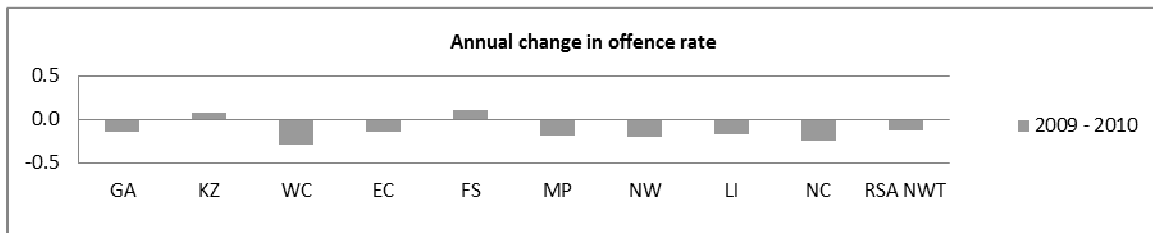
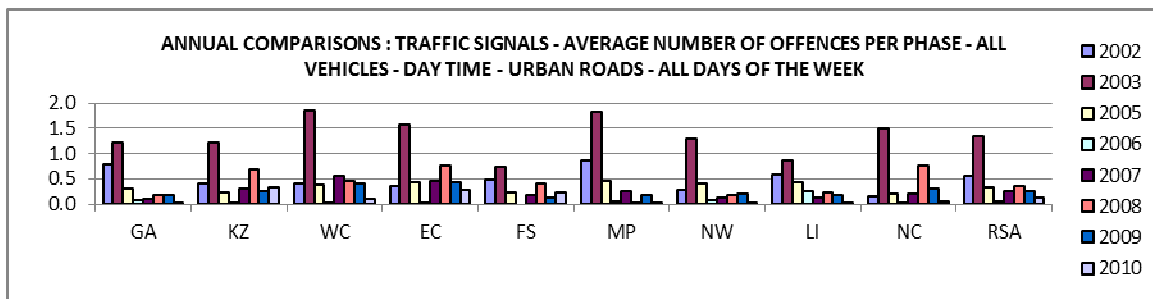
When considering the average offences per phase, the day time offence rates are on average a little higher than night time offence rates. All provinces, except for KwaZulu Natal, Eastern Cape and Free State, showed a decrease in offence rates.

When looking at the overall trend line, it is clear to see that since the 2002 survey, there is a slight decrease in the day time offence rates. The opposite is true for the night time offence rates. Even though the national night time offence rate for 2010 is lower than the 2009 index, when compared to the 2002 index, there still remains an overall increase.

## 2.9.1 SUMMARY OF IGNORING RED TRAFFIC SIGNALS – URBAN ROADS

### 2.9.1.1 Summary of Ignoring Red Traffic Signals: All Vehicles – Urban Roads – Day Time

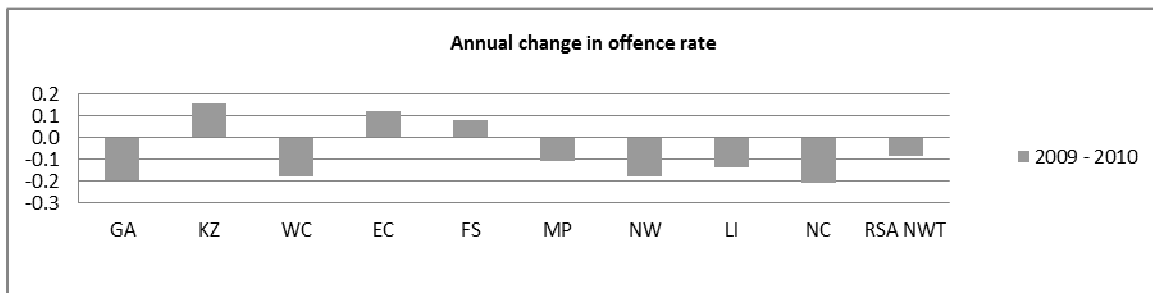
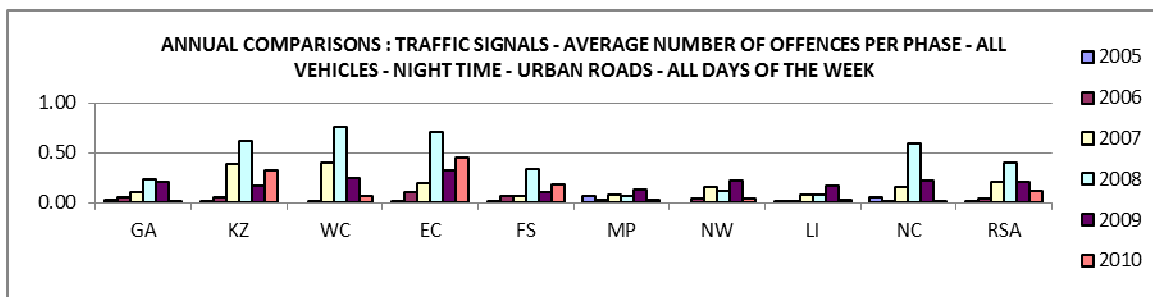
ANNUAL COMPARISONS : TRAFFIC SIGNALS - AVERAGE NUMBER OF OFFENCES PER PHASE - ALL VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	1.2	1.2	1.9	1.6	0.8	1.8	1.3	0.9	1.5	1.4
2005	0.3	0.2	0.4	0.4	0.2	0.5	0.4	0.4	0.2	0.3
2006	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.1
2007	0.1	0.3	0.6	0.5	0.2	0.3	0.1	0.1	0.2	0.3
2008	0.2	0.7	0.5	0.8	0.4	0.0	0.2	0.2	0.8	0.4
2009	0.2	0.3	0.4	0.4	0.1	0.2	0.2	0.2	0.3	0.2
2010	0.0	0.3	0.1	0.3	0.2	0.0	0.0	0.0	0.1	0.1
Annual change in offence rate										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.1	0.4	-0.1	0.3	0.2	-0.2	0.0	0.1	0.5	0.1
2008 - 2009	0.0	-0.4	-0.1	-0.3	-0.3	0.1	0.0	-0.1	-0.4	-0.1
2009 - 2010	-0.1	0.1	-0.3	-0.1	0.1	-0.2	-0.2	-0.2	-0.3	-0.1



The information above shows that on a national basis the average number of offences per traffic signal phase has decreased from 0.2 in 2009 to 0.1 in 2010. KwaZulu Natal and Eastern Cape has the highest average in this regard for 2010 with 0.3, and Gauteng, along with Mpumalanga, North West and Limpopo, has the lowest average in this regard with 0.0 offences per phase. Free State shows the largest increase in offence rate, from 0.1 to 0.2 average offences per phase. Western Cape shows the largest decrease in offence rate from 0.4 to 0.1 average offences per phase.

### 2.9.1.2 Summary of Ignoring Red Traffic Signals: All Vehicles – Urban Roads – Night Time

ANNUAL COMPARISONS : TRAFFIC SIGNALS - AVERAGE NUMBER OF OFFENCES PER PHASE - ALL VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
2006	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
2007	0.1	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.2
2008	0.2	0.6	0.8	0.7	0.3	0.1	0.1	0.1	0.6	0.4
2009	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2
2010	0.0	0.3	0.1	0.4	0.2	0.0	0.0	0.0	0.0	0.1
Annual change in offence rate										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.1	0.2	0.4	0.5	0.3	0.0	0.0	0.0	0.4	0.2
2008 - 2009	0.0	-0.4	-0.5	-0.4	-0.2	0.1	0.1	0.1	-0.4	-0.2
2009 - 2010	-0.2	0.2	-0.2	0.1	0.1	-0.1	-0.2	-0.1	-0.2	-0.1

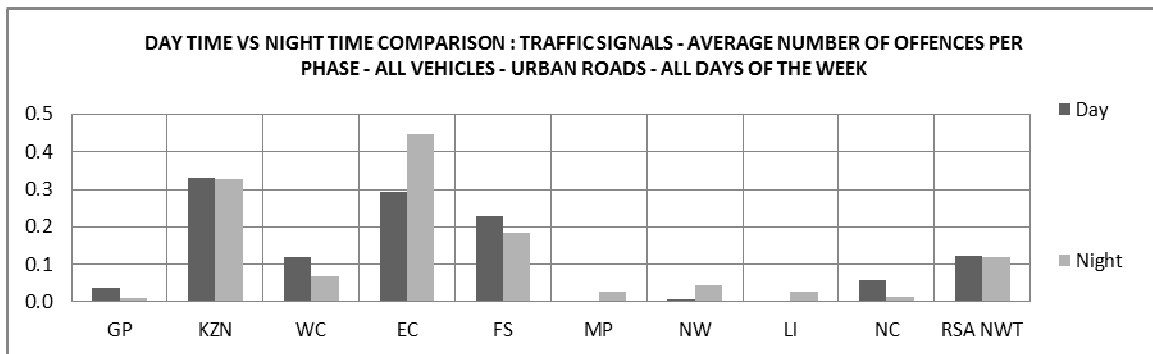


The information above shows that on a national basis the average number of offences per traffic signal phase has decreased from 0.2 in 2009 to 0.1 in 2010. Eastern Cape has the highest average in this regard for 2010 with 0.4 average offences per phases, and all provinces except KwaZulu Natal, Western Cape, Eastern Cape and Free State show an average of 0.0 offences per phase. KwaZulu Natal and Eastern Cape shows the largest increase in offence rate average, from 0.2 to 0.3, and 0.3 to 0.4 respectively. Gauteng, North West, Limpopo and Northern Cape all show a decrease in offence rate average from 0.2 to 0.0.



### 2.9.1.3 Summary of Ignoring Red Traffic Signals: All Vehicles – Urban Roads – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : TRAFFIC SIGNALS - AVERAGE NUMBER OF OFFENCES PER PHASE - ALL VEHICLES - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.04	0.01
KZN	0.33	0.33
WC	0.12	0.07
EC	0.29	0.45
FS	0.23	0.18
MP	0.00	0.03
NW	0.01	0.04
LI	0.01	0.03
NC	0.06	0.01
RSA NWT	0.12	0.12



The information above shows that on a national basis the average traffic offences per traffic signal phase for this category are the same during the day (0.12) than during the night (0.12). The province with the largest difference in day and night time offence rates is Eastern Cape, with average 0.29 traffic signal offences per phase during the day, and 0.45 during the night. The province with the smallest difference in day and night time offence rates is KwaZulu Natal, with average 0.33 traffic signal offences per phase during the day, and 0.33 during the night.

## 2.9.2 IGNORING RED TRAFFIC SIGNALS INDEXES

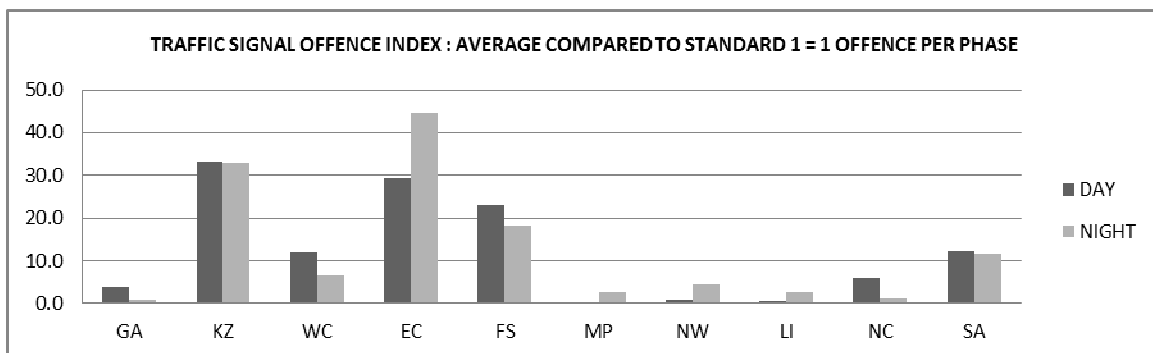
Information on red traffic signal phases with offences in urban areas during the day and night time is given in the following tables and reflected in the graphs below.

### 2.9.2.1 Summary offences at traffic signals: Percentage of red phases with offences

AVERAGE TRAFFIC SIGNAL OFFENCE RATES - STANDARD 1 OFFENCE PER PHASE										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
DAY	0.0	0.3	0.1	0.3	0.2	0.0	0.0	0.0	0.1	0.1
NIGHT	0.0	0.3	0.1	0.4	0.2	0.0	0.0	0.0	0.0	0.1

### 2.9.2.2 Traffic signal offence: Indices compared to standard

TRAFFIC SIGNAL OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 1 OFFENCE PER PHASE										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
DAY	3.8	33.1	11.9	29.4	23.0	0.2	0.8	0.5	5.8	12.3
NIGHT	1.0	32.8	6.7	44.7	18.3	2.7	4.4	2.8	1.3	11.8

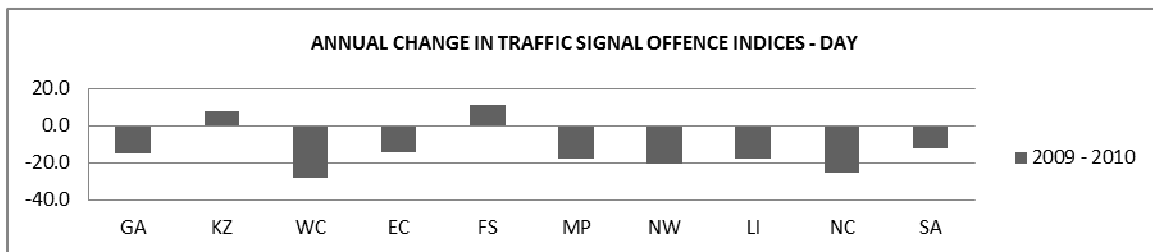
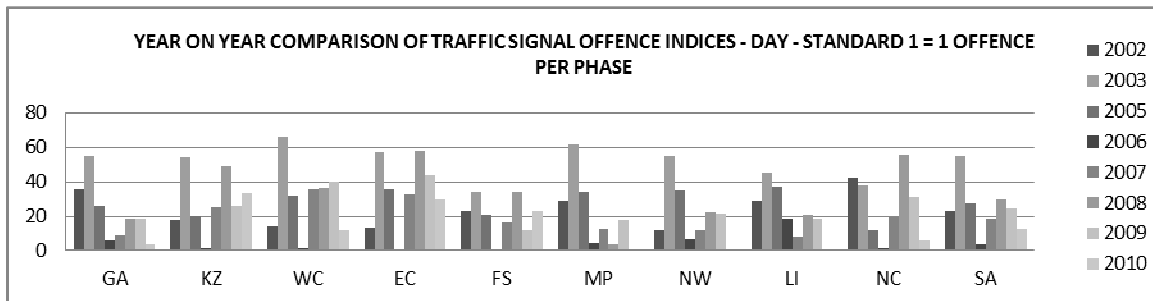


The information above shows that on a national basis the traffic signal offence index for this category is the same for both day and night time indices (0.1). The province with the largest difference in day and night time offence indices is Eastern Cape, with 44.7 for the day time, and 29.4 for the night time. The province with the smallest difference in day and night time offence indices is KwaZulu Natal, with 32.8 for the day time, and 33.1 for the night time.

### 2.9.2.3 Comparison of traffic signal offence indices for different years: Percentage of red phases with offences (Day)

Information on the percentage of red phases with offences in urban areas during the day time is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF TRAFFIC SIGNAL OFFENCE INDICES - DAY - STANDARD 1 = 1 OFFENCE PER PHASE										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	36	18	14	13	23	29	12	29	42	23
2003	55	54	66	57	34	62	55	45	38	55
2005	26	20	32	36	21	34	35	37	12	27.8
2006	6	1.2	1.7	1	0.3	4.6	6.3	18.9	1.7	4
2007	8.7	24.9	35.6	32.5	16.3	12.5	11.7	8.1	19.3	18.4
2008	18.4	49.2	36.5	58.0	34.4	4.0	22.5	20.8	55.9	29.9
2009	18.5	25.6	40.0	43.6	12.0	17.8	21.6	18.4	30.9	24.6
2010	3.8	33.1	11.9	29.4	23.0	0.2	0.8	0.5	5.8	12.3
ANNUAL CHANGE IN TRAFFIC SIGNAL OFFENCE INDICES - DAY										
2007 - 2008	9.7	24.3	0.9	25.5	18.1	-8.5	10.9	12.7	36.6	11.5
2008 - 2009	0.1	-23.6	3.5	-14.4	-22.4	13.8	-0.9	-2.4	-25.0	-5.3
2009 - 2010	-14.8	7.5	-28.1	-14.2	11.0	-17.6	-20.7	-17.9	-25.1	-12.3

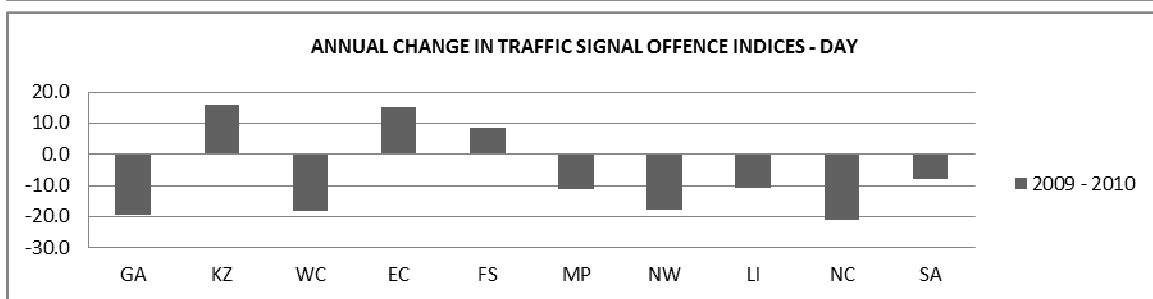
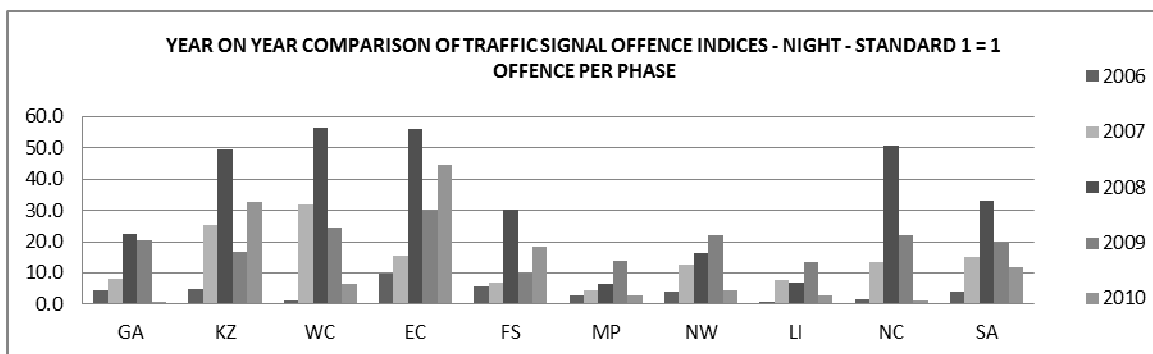


The information above shows that on a national basis the index for traffic signal offences in this category has decreased from 24.6 in 2009 to 12.3 in 2010. KwaZulu Natal has the highest offence index in this regard for 2010 with 33.1, and Mpumalanga has the lowest offence index with 0.2. Free State shows the largest increase in offence indices, from 12.0 to 23.0. Western Cape shows the largest decrease in offence indices from 40.0 to 11.9.

### 2.9.2.4 Comparison of traffic signal offence indices for different years: Percentage of red phases with offences (Night)

Information on the percentage of red phases with offences in urban areas during the night time is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF TRAFFIC SIGNAL OFFENCE INDICES - NIGHT - STANDARD 1 = 1 OFFENCE PER PHASE										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2006	4.3	5.0	1.1	10.0	5.7	3.0	4.0	0.7	1.7	4.1
2007	8.0	25.5	32.0	15.5	6.8	4.5	12.5	7.7	13.4	15.2
2008	22.5	49.7	56.5	55.9	30.1	6.5	16.3	6.9	50.9	33.1
2009	20.3	16.9	24.7	29.7	9.7	13.8	22.2	13.4	22.2	19.6
2010	1.0	32.8	6.7	44.7	18.3	2.7	4.4	2.8	1.3	11.8
ANNUAL CHANGE IN TRAFFIC SIGNAL OFFENCE INDICES - DAY										
2007 - 2008	14.5	24.2	24.5	40.4	23.3	2.0	3.8	-0.8	37.5	17.9
2008 - 2009	-2.2	-32.8	-31.8	-26.2	-20.4	7.3	5.9	6.6	-28.8	-13.5
2009 - 2010	-19.3	15.9	-18.0	14.9	8.6	-11.1	-17.8	-10.6	-20.9	-7.8



The information above shows that on a national basis the index for traffic signal offences in this category has decreased from 19.6 in 2009 to 11.8 in 2010. Eastern Cape has the highest offence index in this regard for 2010 with 44.7, and Gauteng has the lowest offence index with 1.0. KwaZulu Natal shows the largest increase in offence indices, from 16.9 to 32.8. Northern Cape shows the largest decrease in offence indices from 22.2 to 1.3.

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## 2.10 SUMMARY OF OVERTAKING ON BARRIER LINES

Previous barrier line surveys reported on the average number of vehicles overtaking on a barrier line per 2 minute interval. The data presented with this type of analysis varied greatly from year to year, due to the random nature of the event. Despite various measures that were implemented to try and improve the data accuracy, no reliable trends could be determined for barrier line offences.

The 2008, 2009 and 1020 collection of barrier line offence data was changed to record the number of convoys of vehicles passing, and report on the number of convoys where barrier line offences were present. This percentage of convoys with offences was used as the offence rate. This type of analysis yielded results that were more in line between provinces, and should provide better statistics for multi-year comparisons.

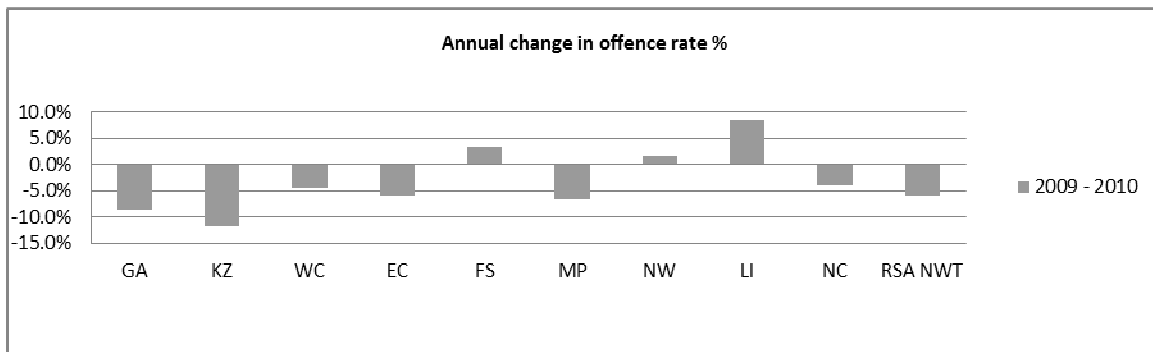
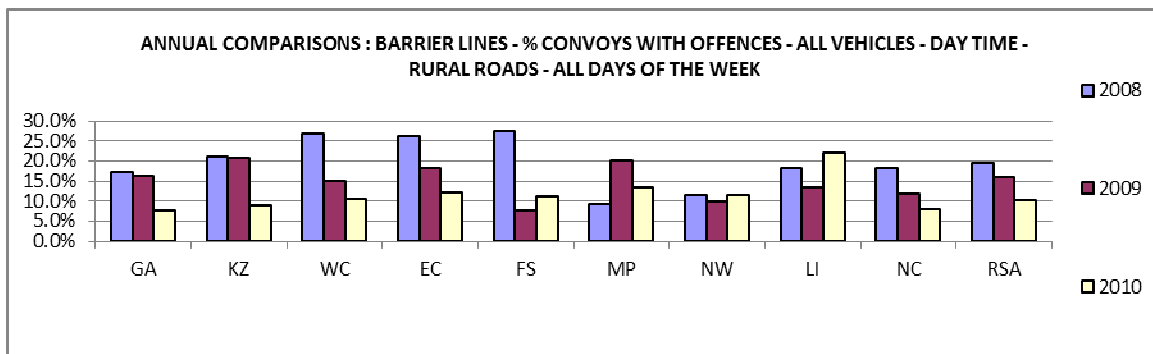
The following tables show figures for Barrier Line Offences. The tables are broken down into Day and Night categories. A graph showing the relationship between the Day and Night offence rates follows thereafter.

On average, the day time national offence rate is slightly higher than the night time national offence rate. This is a clear indication that drivers are much more cautious during the night than during the day time, resulting from the reduced visibility. Both category offence rates are much higher than the desired maximum.

This high disregard for barrier lines can most likely be attributed to drivers preferring to trust their own instincts when overtaking another vehicle, rather than obeying the barrier line as a means of safe overtaking.

## 2.10.1 SUMMARY OF OVERTAKING ON BARRIER LINES OFFENCES - RURAL ROADS – ALL VEHICLES - DAY TIME

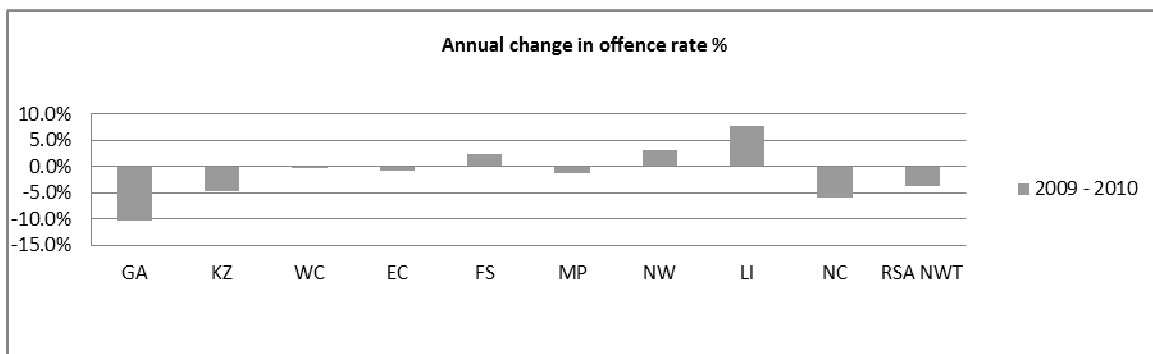
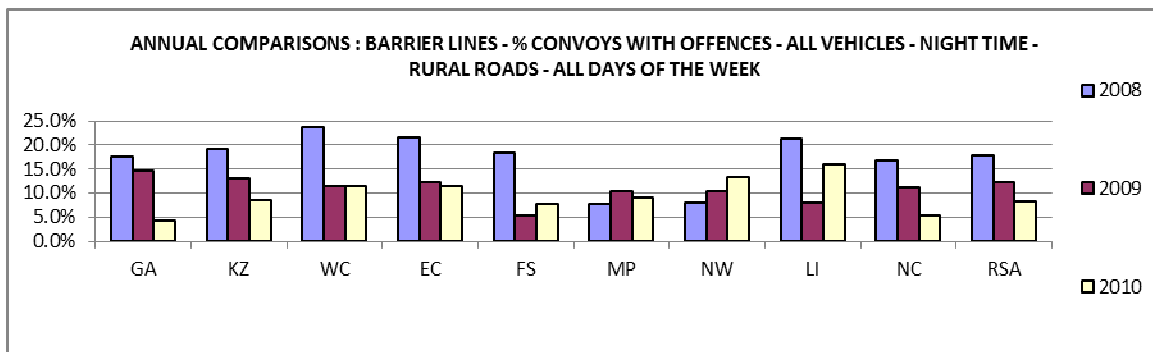
ANNUAL COMPARISONS : BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008	17.2%	21.1%	26.9%	26.1%	27.5%	9.2%	11.4%	18.3%	18.2%	19.6%
2009	16.4%	20.6%	15.0%	18.1%	7.8%	20.0%	10.0%	13.4%	11.9%	16.1%
2010	7.7%	8.9%	10.5%	12.1%	11.3%	13.3%	11.7%	22.0%	7.9%	10.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008 - 2009	-0.8%	-0.5%	-11.9%	-8.0%	-19.7%	10.8%	-1.4%	-4.9%	-6.3%	-3.5%
2009 - 2010	-8.7%	-11.7%	-4.5%	-6.0%	3.4%	-6.7%	1.7%	8.6%	-3.9%	-5.9%



The information above shows that on a national basis the percentage barrier line offences during the day time has decreased from 16.1% in 2009 to 10.3% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 22.0%, and Gauteng has the lowest offence rate with 7.7%. Limpopo shows the largest increase in offence rate percentage, from 13.4% to 22.0%. KwaZulu Natal shows the largest decrease in offence rate percentage from 20.6% to 8.9%.

## 2.10.2 SUMMARY OF OVERTAKING ON BARRIER LINES OFFENCES - RURAL ROADS – ALL VEHICLES - NIGHT TIME

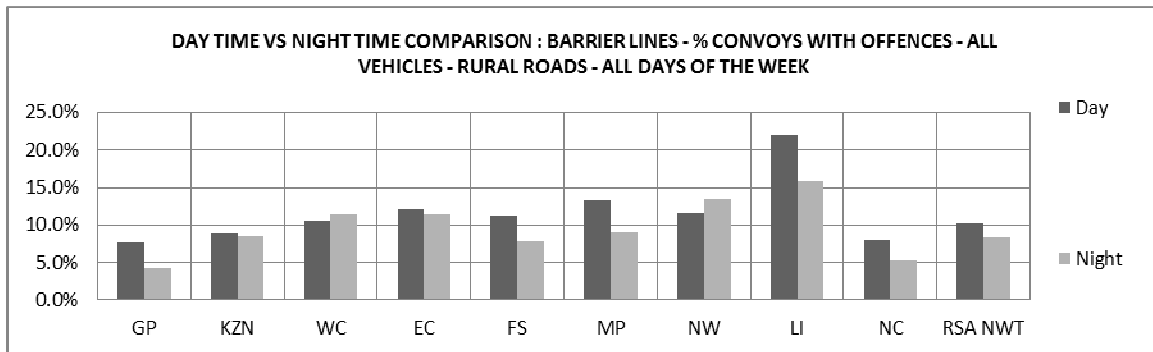
ANNUAL COMPARISONS : BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008	17.5%	19.1%	23.8%	21.6%	18.3%	7.8%	8.1%	21.3%	16.8%	17.8%
2009	14.8%	13.1%	11.6%	12.2%	5.3%	10.3%	10.3%	8.1%	11.3%	12.2%
2010	4.3%	8.4%	11.5%	11.4%	7.8%	9.0%	13.4%	15.9%	5.3%	8.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2008 - 2009	-2.8%	-5.9%	-12.2%	-9.4%	-13.0%	2.6%	2.2%	-13.1%	-5.5%	-5.6%
2009 - 2010	-10.4%	-4.7%	-0.1%	-0.8%	2.5%	-1.3%	3.2%	7.8%	-5.9%	-3.9%



The information above shows that on a national basis the percentage barrier line offences during the night time has decreased from 12.2% in 2009 to 8.3% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 15.9%, and Gauteng has the lowest offence rate with 4.3%. Limpopo shows the largest increase in offence rate percentage, from 8.1% to 15.9%. Gauteng shows the largest decrease in offence rate percentage from 14.8% to 4.3%.

### 2.10.3 SUMMARY OF OVERTAKING ON BARRIER LINES OFFENCES - RURAL ROADS – ALL VEHICLES - DAY TIME VS NIGHT TIME

DAY TIME VS NIGHT TIME COMPARISON : BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	7.7%	4.3%
KZN	8.9%	8.4%
WC	10.5%	11.5%
EC	12.1%	11.4%
FS	11.3%	7.8%
MP	13.3%	9.0%
NW	11.7%	13.4%
LI	22.0%	15.9%
NC	7.9%	5.3%
RSA NWT	10.3%	8.3%



The information above shows that on a national basis the percentage barrier line offences for this category are higher during the day (10.3%) than during the night (8.3%). The province with the largest difference in day and night time offence rates is Limpopo, with 22.0% during the day, and 15.9% during the night. The province with the smallest difference in day and night time offence rates is KwaZulu Natal, with 8.9% during the day, and 8.4% during the night.



## 2.10.4 OVERTAKING ON BARRIER LINES INDEXES

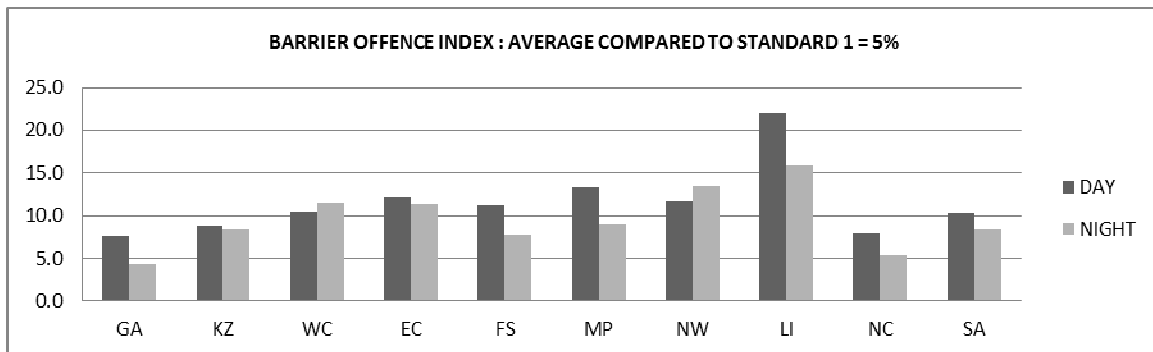
Information on vehicle convoys with barrier line offences during the day and night is given in the following table and reflected in the graph below.

### 2.10.4.1 Summary of barrier line offences: All vehicles

AVERAGE BARRIER LINE OFFENCE RATES - STANDARD 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
DAY	7.7%	8.9%	10.5%	12.1%	11.3%	13.3%	11.7%	22.0%	7.9%	10.3%
NIGHT	4.3%	8.4%	11.5%	11.4%	7.8%	9.0%	13.4%	15.9%	5.3%	8.3%

### 2.10.4.2 Barrier line offence index: Offence level compared to standard

BARRIER OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 5%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
DAY	7.7	8.9	10.5	12.1	11.3	13.3	11.7	22.0	7.9	10.3
NIGHT	4.3	8.4	11.5	11.4	7.8	9.0	13.4	15.9	5.3	8.3

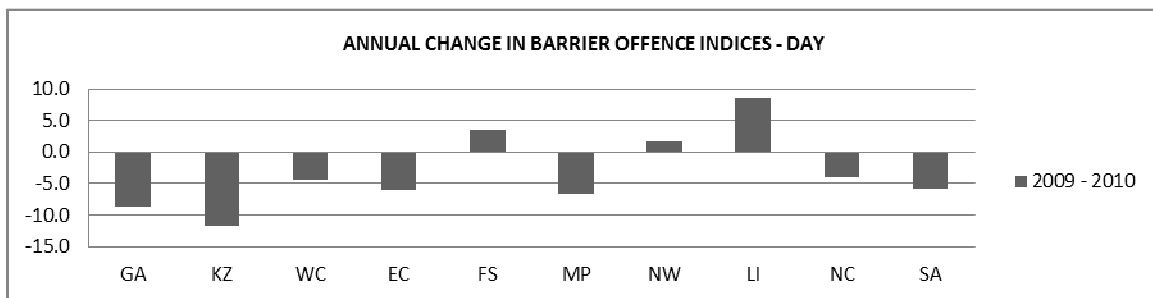
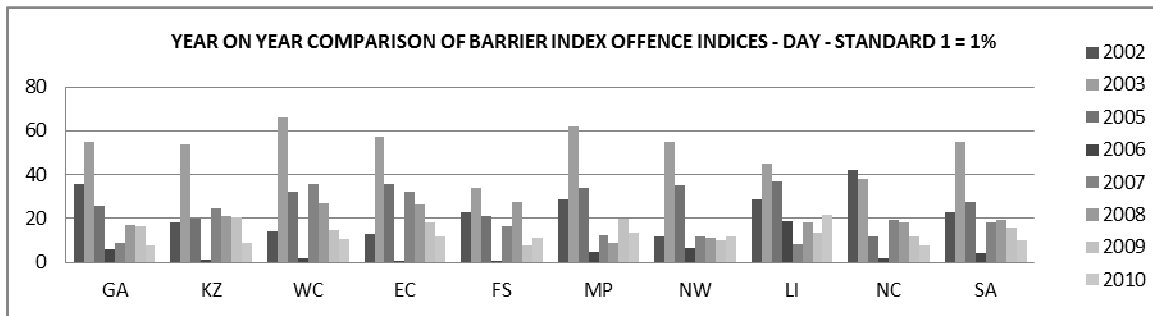


The information above shows that on a national basis the barrier line offence index for this category is higher during the day time (10.3) than during the night (8.3). The province with the largest difference in day and night time offence indices is Limpopo, with 15.9 for the day time, and 22.0 for the night time. The province with the smallest difference in day and night time offence indices is KwaZulu Natal, with 8.4 for the day time, and 8.9 for the night time.

### 2.10.4.3 Comparison of barrier line offence indices for different years – Day

Information on barrier line offences in rural areas during the day time is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF BARRIER INDEX OFFENCE INDICES - DAY - STANDARD 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	36	18	14	13	23	29	12	29	42	23
2003	55	54	66	57	34	62	55	45	38	55
2005	26	20	32	36	21	34	35	37	12	27.8
2006	6	1.2	1.7	1	0.3	4.6	6.3	18.9	1.7	4
2007	8.7	24.9	35.6	32.5	16.3	12.5	11.7	8.1	19.3	18.4
2008	17.2	21.1	26.9	26.1	27.5	9.2	11.4	18.3	18.2	19.7
2009	16.4	20.6	15.0	18.1	7.8	20.0	10.0	13.4	11.9	16.1
2010	7.7	8.9	10.5	12.1	11.3	13.3	11.7	22.0	7.9	10.3
ANNUAL CHANGE IN BARRIER OFFENCE INDICES - DAY										
2007 - 2008	8.5	-3.8	-8.8	-6.4	11.2	-3.3	-0.3	10.2	-1.1	1.3
2008 - 2009	-0.8	-0.5	-11.9	-8.0	-19.7	10.8	-1.4	-4.9	-6.3	-3.5
2009 - 2010	-8.7	-11.7	-4.5	-6.0	3.4	-6.7	1.7	8.6	-3.9	-5.9

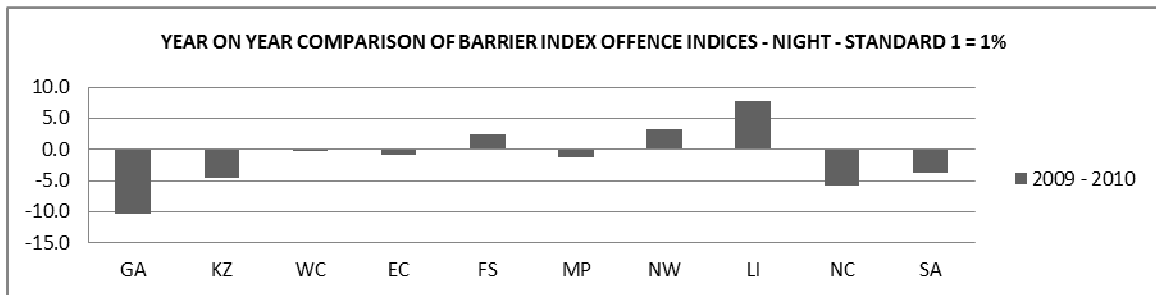
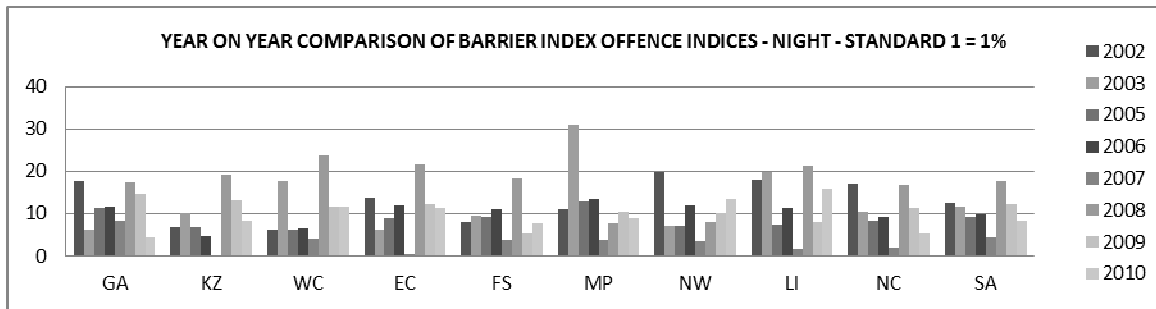


The information above shows that on a national basis the index for barrier line offences in this category has decreased from 16.1 in 2009 to 10.3 in 2010. Limpopo has the highest offence index in this regard for 2010 with 22.0, and Gauteng has the lowest offence index with 7.7. Limpopo shows the largest increase in offence indices, from 13.4 to 22.0. KwaZulu Natal shows the largest decrease in offence indices from 20.6 to 8.9.

### 2.10.4.4 Comparison of barrier line offence indices for different years – Night

Information on barrier line offences in rural areas during the night time is given in the following table and reflected in the graphs below.

YEAR ON YEAR COMPARISON OF BARRIER INDEX OFFENCE INDICES - NIGHT - STANDARD 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	17.8	6.8	6.2	13.9	8	11.1	19.9	17.9	17.1	12.7
2003	6.3	10	17.7	6.3	9.6	31	7.1	19.8	10.5	11.6
2005	11.2	6.9	6.2	8.8	9.3	12.9	7.2	7.4	8.3	9.1
2006	11.5	4.8	6.4	12	11	13.4	12	11.2	9.2	9.8
2007	8.37	0.00	4.18	0.57	3.69	3.94	3.54	1.70	2.10	4.36
2008	17.50	19.06	23.75	21.59	18.29	7.75	8.06	21.25	16.75	17.81
2009	14.75	13.13	11.56	12.19	5.31	10.31	10.28	8.13	11.25	12.12
2010	4.33	8.44	11.50	11.38	7.78	9.00	13.44	15.88	5.33	8.31
ANNUAL CHANGE IN BARRIER OFFENCE INDICES - NIGHT										
2007 - 2008	9.1	19.1	19.6	21.0	14.6	3.8	4.5	19.5	14.6	13.4
2008 - 2009	-2.8	-5.9	-12.2	-9.4	-13.0	2.6	2.2	-13.1	-5.5	-5.7
2009 - 2010	-10.4	-4.7	-0.1	-0.8	2.5	-1.3	3.2	7.8	-5.9	-3.8



The information above shows that on a national basis the index for barrier line offences in this category has decreased from 12.12 in 2009 to 8.31 in 2010. Limpopo has the highest offence index in this regard for 2010 with 15.88, and Gauteng has the lowest offence index with 4.33. Limpopo shows the largest increase in offence indices, from 8.13 to 15.88. Gauteng shows the largest decrease in offence indices from 14.75 to 4.33.

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## 2.11 SUMMARY OF ABSENCE OF DRIVER LICENCE

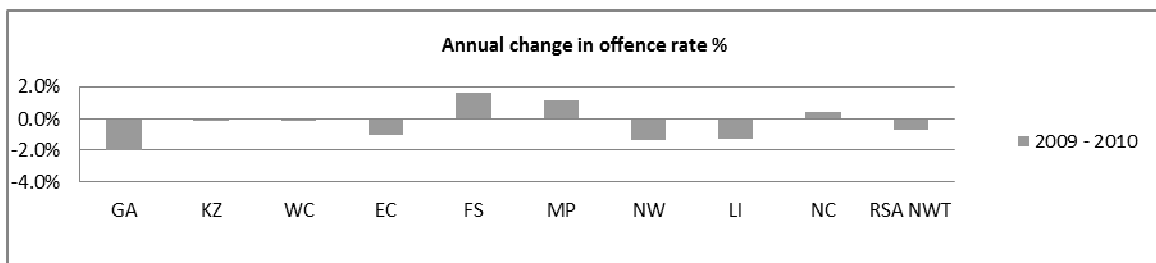
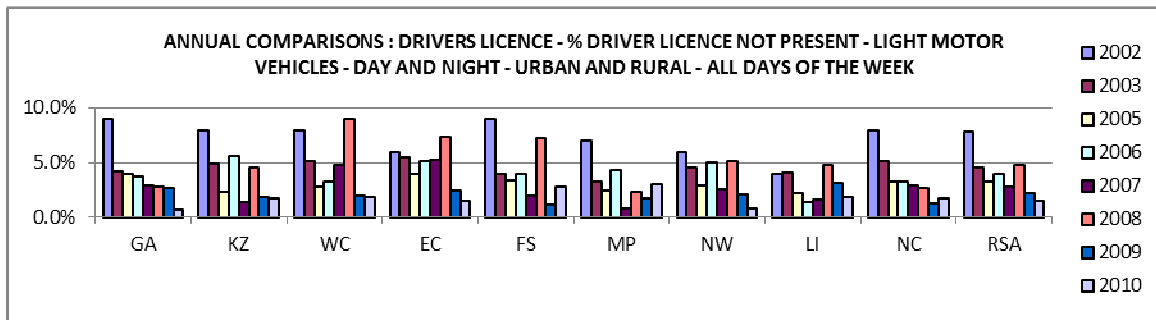
The following section shows the figures for Driver License Offences. The tables are broken down into subsections for each vehicle type.

When comparing the 2009 and 2010 results, it is clear to see a large decrease in the overall offence rate from 1.5% in 2009 to 0.8% in 2010.

Looking at the overall trend since the 2002 survey, it is clear to see a slight improvement on an annual basis.

### 2.11.1 SUMMARY OF ABSENCE OF DRIVER LICENSES: LIGHT MOTOR VEHICLES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

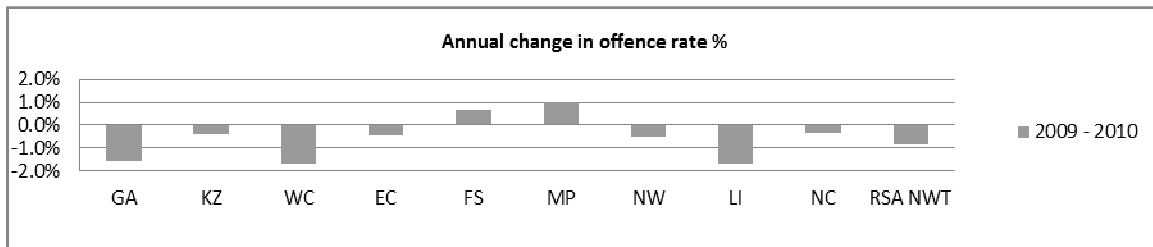
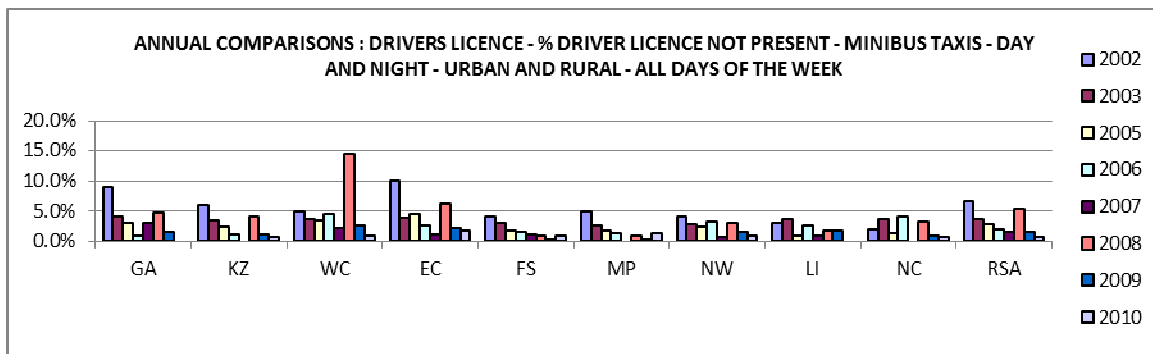
ANNUAL COMPARISONS : DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	4.2%	4.9%	5.1%	5.5%	3.9%	3.3%	4.5%	4.1%	5.1%	4.5%
2005	4.0%	2.3%	2.8%	3.9%	3.4%	2.4%	2.9%	2.2%	3.2%	3.2%
2006	3.7%	5.6%	3.2%	5.1%	3.9%	4.3%	5.0%	1.4%	3.3%	4.0%
2007	2.9%	1.4%	4.8%	5.2%	1.9%	0.7%	2.6%	1.6%	2.9%	2.8%
2008	2.8%	4.5%	9.0%	7.3%	7.3%	2.3%	5.1%	4.8%	2.6%	4.8%
2009	2.6%	1.8%	1.9%	2.5%	1.1%	1.8%	2.1%	3.2%	1.3%	2.2%
2010	0.6%	1.7%	1.8%	1.5%	2.8%	3.0%	0.7%	1.9%	1.7%	1.5%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-0.1%	3.1%	4.2%	2.1%	5.4%	1.6%	2.5%	3.3%	-0.2%	2.0%
2008 - 2009	-0.1%	-2.7%	-7.0%	-4.8%	-6.2%	-0.5%	-3.0%	-1.7%	-1.4%	-2.6%
2009 - 2010	-2.0%	-0.1%	-0.1%	-1.0%	1.7%	1.2%	-1.4%	-1.3%	0.4%	-0.7%



The information above shows that on a national basis the percentage driver licence offences for Light Motor Vehicles in this category has decreased from 2.2% in 2009 to 1.5% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 3.0%, and Gauteng has the lowest offence rate with 0.6%. Free State shows the largest increase in offence rate percentage, from 1.1% to 2.8%. Gauteng shows the largest decrease in offence rate percentage from 2.6% to 0.6%.

## 2.11.2 SUMMARY OF ABSENCE OF DRIVER LICENSES: MINIBUS TAXIS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

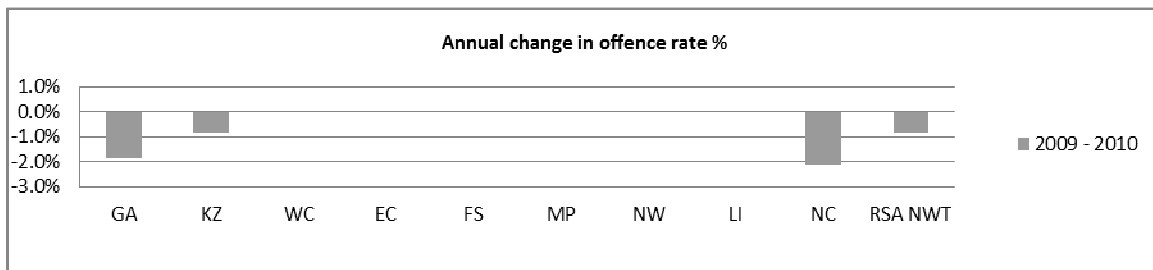
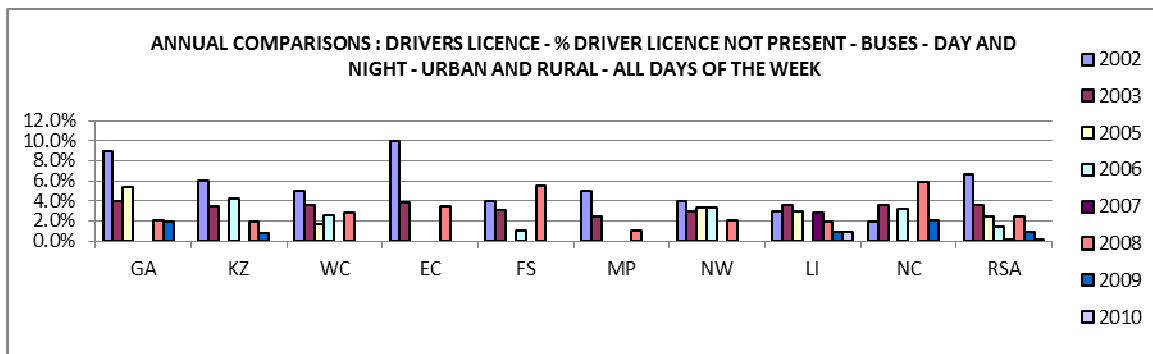
ANNUAL COMPARISONS : DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	4.0%	3.5%	3.6%	3.9%	3.1%	2.5%	2.9%	3.6%	3.6%	3.6%
2005	3.0%	2.3%	3.5%	4.6%	1.7%	1.8%	2.3%	0.8%	1.4%	2.7%
2006	0.9%	1.2%	4.6%	2.6%	1.5%	1.4%	3.3%	2.5%	4.0%	2.0%
2007	3.0%	0.0%	2.2%	1.2%	1.1%	0.0%	0.8%	1.0%	0.0%	1.6%
2008	4.7%	4.0%	14.4%	6.2%	0.9%	1.0%	3.0%	1.7%	3.3%	5.3%
2009	1.6%	1.1%	2.6%	2.1%	0.3%	0.3%	1.5%	1.7%	1.0%	1.5%
2010	0.0%	0.7%	0.9%	1.7%	1.0%	1.3%	0.9%	0.0%	0.7%	0.6%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	1.7%	4.0%	12.2%	5.0%	-0.2%	1.0%	2.2%	0.7%	3.3%	3.7%
2008 - 2009	-3.1%	-2.9%	-11.8%	-4.1%	-0.6%	-0.6%	-1.5%	0.0%	-2.3%	-3.9%
2009 - 2010	-1.6%	-0.4%	-1.7%	-0.4%	0.7%	1.0%	-0.5%	-1.7%	-0.3%	-0.8%



The information above shows that on a national basis the percentage driver licence offences for Minibus Taxis in this category has decreased from 1.5% in 2009 to 0.6% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.7%, and Gauteng, along with Limpopo, has the lowest offence rate with 0.0%. Mpumalanga shows the largest increase in offence rate percentage, from 0.3% to 1.3%. Western Cape shows the largest decrease in offence rate percentage from 2.6% to 0.9%.

### 2.11.3 SUMMARY OF ABSENCE OF DRIVER LICENSES: BUSES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

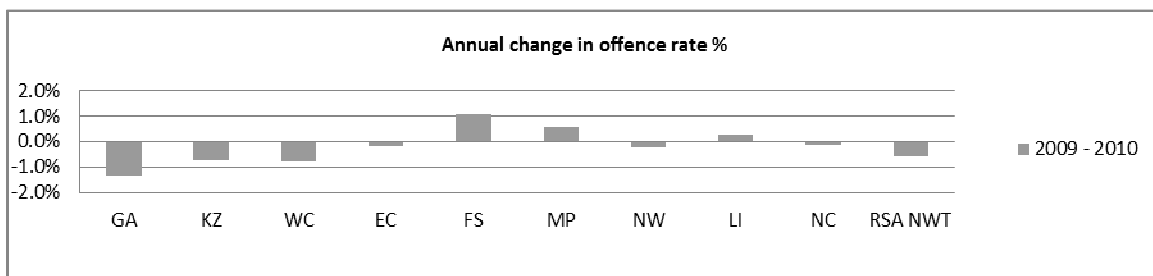
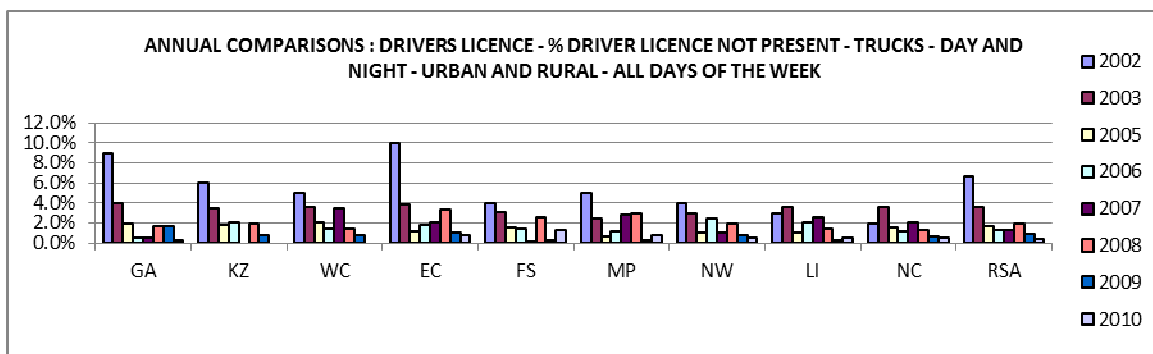
ANNUAL COMPARISONS : DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK											
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA	
2002	4.0%	3.5%	3.6%	3.9%	3.1%	2.5%	2.9%	3.6%	3.6%	3.6%	
2005	5.4%	0.0%	1.7%	0.0%	0.0%	0.0%	3.3%	2.9%	0.0%	2.5%	
2006	0.0%	4.2%	2.6%	0.0%	1.0%	0.0%	3.3%	0.0%	3.2%	1.4%	
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.1%	
2008	2.0%	1.9%	2.9%	3.4%	5.6%	1.1%	2.0%	1.9%	5.9%	2.5%	
2009	1.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	2.1%	0.9%	
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	
Annual change in offence rate %											
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA	
2007 - 2008	2.0%	1.9%	2.9%	3.4%	5.6%	1.1%	2.0%	-0.9%	5.9%	2.3%	
2008 - 2009	-0.1%	-1.1%	-2.9%	-3.4%	-5.6%	-1.1%	-2.0%	-1.0%	-3.8%	-1.6%	
2009 - 2010	-1.9%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-2.1%	-0.8%	



The information above shows that on a national basis the percentage driver licence offences for Buses in this category has decreased from 0.9% in 2009 to 0.0% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.0%, and Gauteng, along with all other provinces except Limpopo, has the lowest offence rate with 0.0%. Limpopo shows the largest increase in offence rate percentage, from 0.9% to 1.0%. Northern Cape shows the largest decrease in offence rate percentage from 2.1% to 0.0%.

## 2.11.4 SUMMARY OF ABSENCE OF DRIVER LICENSES: TRUCKS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

ANNUAL COMPARISONS : DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	4.0%	3.5%	3.6%	3.9%	3.1%	2.5%	2.9%	3.6%	3.6%	3.6%
2005	2.0%	1.8%	2.1%	1.2%	1.6%	0.7%	1.1%	1.1%	1.5%	1.7%
2006	0.5%	2.1%	1.4%	1.8%	1.4%	1.2%	2.5%	2.1%	1.2%	1.3%
2007	0.5%	0.0%	3.4%	2.0%	0.0%	2.9%	1.0%	2.5%	2.1%	1.3%
2008	1.6%	1.9%	1.4%	3.4%	2.5%	3.0%	1.9%	1.4%	1.4%	2.0%
2009	1.6%	0.7%	0.8%	1.0%	0.3%	0.3%	0.8%	0.3%	0.7%	1.0%
2010	0.3%	0.0%	0.0%	0.9%	1.3%	0.8%	0.5%	0.6%	0.6%	0.4%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	1.1%	1.9%	-2.0%	1.4%	2.5%	0.1%	0.9%	-1.2%	-0.7%	0.6%
2008 - 2009	0.0%	-1.2%	-0.6%	-2.4%	-2.3%	-2.7%	-1.1%	-1.1%	-0.7%	-1.0%
2009 - 2010	-1.4%	-0.7%	-0.8%	-0.2%	1.1%	0.6%	-0.2%	0.3%	-0.1%	-0.6%



The information above shows that on a national basis the percentage driver licence offences for Trucks in this category has decreased from 1.0% in 2009 to 0.4% in 2010. Free State has the highest offence rate in this regard for 2010 with 1.3%, and KwaZulu Natal, along with Western Cape, has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.3% to 1.3%. Gauteng shows the largest decrease in offence rate percentage from 1.6% to 0.3%.



## 2.11.5 ABSENCE OF DRIVER LICENCES OFFENCE INDEXES

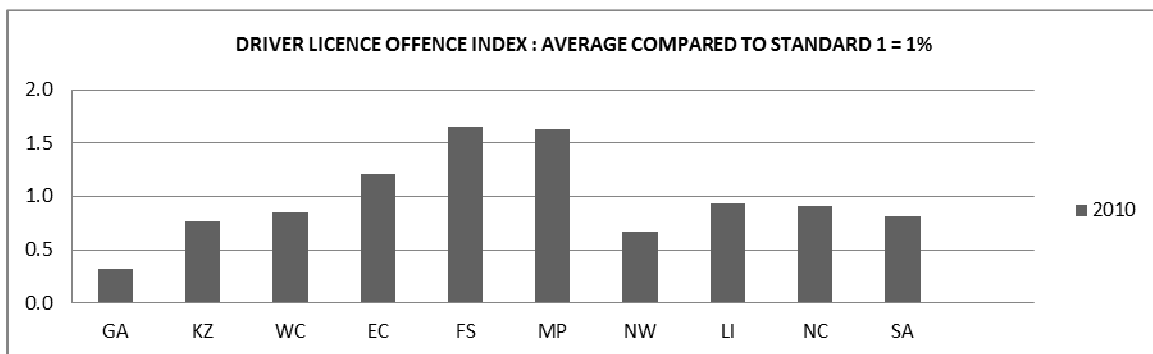
Information on absent driver licenses for all vehicles, for both urban and rural areas, during daytime and night time, is shown in the following table and reflected in the graph below.

### 2.11.5.1 Average Offence Levels

AVERAGE DRIVER LICENCE OFFENCE RATES - STANDARD 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	0.32%	0.77%	0.85%	1.21%	1.65%	1.63%	0.67%	0.93%	0.92%	0.81%

### 2.11.5.2 Driving Licence Offence Index

DRIVER LICENCE OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2010	0.3	0.8	0.9	1.2	1.7	1.6	0.7	0.9	0.9	0.8

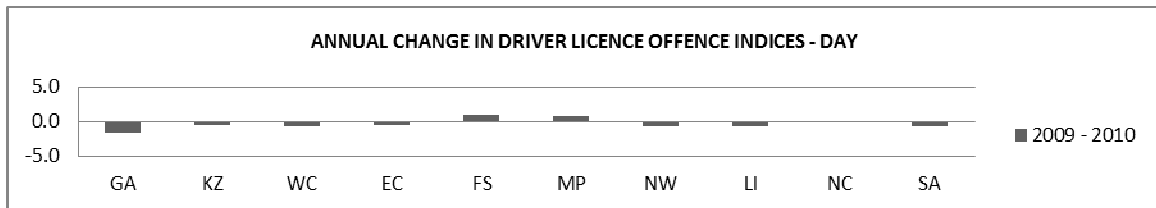
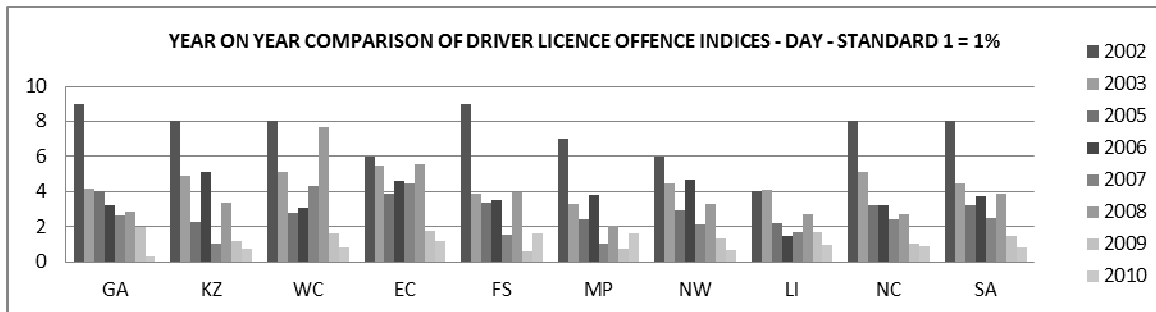


The information above shows that on a national basis the index for driver licence offences for 2010 in this category is highest in Free State (1.7), followed by Mpumalanga (1.6) and Eastern Cape (1.2). Gauteng has the lowest offence index with 0.3, followed by North West (0.7) and KwaZulu Natal (0.8).

### 2.11.5.3 Comparison of offence indices for different years: Absence of Driver Licences

Information on absent driver licenses for all vehicles, for both urban and rural areas, during daytime and night time, is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF DRIVER LICENCE OFFENCE INDICES - DAY - STANDARD 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9	8	8	6	9	7	6	4	8	8
2003	4.2	4.9	5.1	5.5	3.9	3.3	4.5	4.1	5.1	4.5
2005	4	2.3	2.8	3.9	3.4	2.4	2.9	2.2	3.2	3.2
2006	3.2	5.1	3.1	4.6	3.5	3.8	4.7	1.5	3.2	3.7
2007	2.6	1.1	4.3	4.4	1.5	1.1	2.1	1.7	2.4	2.5
2008	2.8	3.3	7.6	5.6	4.0	2.1	3.3	2.7	2.7	3.9
2009	2.0	1.2	1.6	1.8	0.6	0.8	1.4	1.7	1.0	1.5
2010	0.3	0.8	0.9	1.2	1.7	1.6	0.7	0.9	0.9	0.8
ANNUAL CHANGE IN DRIVER LICENCE OFFENCE INDICES - DAY										
2007 - 2008	0.2	2.3	3.3	1.1	2.5	1.0	1.2	1.1	0.3	1.4
2008 - 2009	-0.8	-2.2	-6.0	-3.8	-3.4	-1.3	-2.0	-1.1	-1.7	-2.4
2009 - 2010	-1.7	-0.4	-0.8	-0.6	1.0	0.9	-0.7	-0.8	-0.1	-0.7



The information above shows that on a national basis the index for driver licence offences in this category has decreased from 1.5 in 2009 to 0.8 in 2010. Free State has the highest offence index in this regard for 2010 with 1.7, and Gauteng has the lowest offence index with 0.3. Free State shows the largest increase in offence indices, from 0.6 to 1.7. Gauteng shows the largest decrease in offence indices from 2.0 to 0.3.

## **2.12 SUMMARY OF ABSENCE OF PROFESSIONAL DRIVER PERMIT (PRDP)**

The following tables show the figures for PrDP offences per vehicle type. Note that PrDP offences are only applicable on Minibus Taxis, Trucks, and Buses.

When comparing the 2009 and 2010 results, it is clear to see a slight decrease in the overall offence rate. This is of course an indication that more and more people are indeed carrying a valid PrDP while driving, and that more and more people are presenting a valid PrDP when requested to.

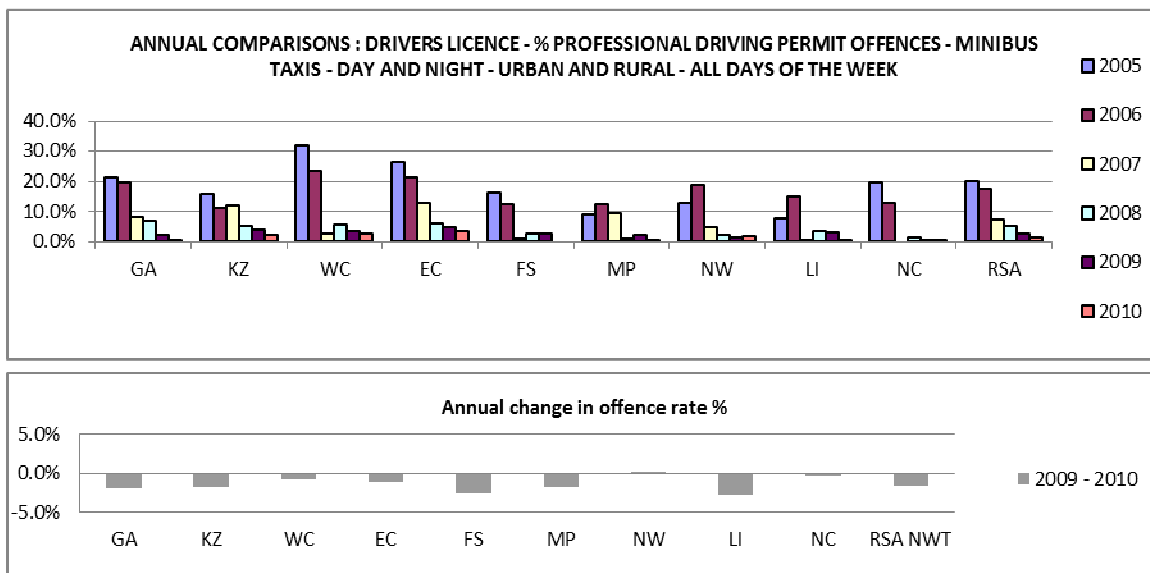
Looking at the overall trend since the 2002 survey, it is easy to see a major improvement regarding this offence category, with the national offence rate decreasing from 19.8% to the current 1.3% offence rate for Minibus Taxis, Trucks, and Buses combined.

The overall offence rate for 2010 is still slightly higher than the desired maximum offence rate of 1%.

## 2.12.1 SUMMARY OF ABSENCE OF PRDP: URBAN AND RURAL ROADS – DAY TIME AND NIGHT TIME

### 2.12.1.1 Summary of Absence of PRDP: Minibus Taxis – Urban and Rural Roads – Day Time and Night Time

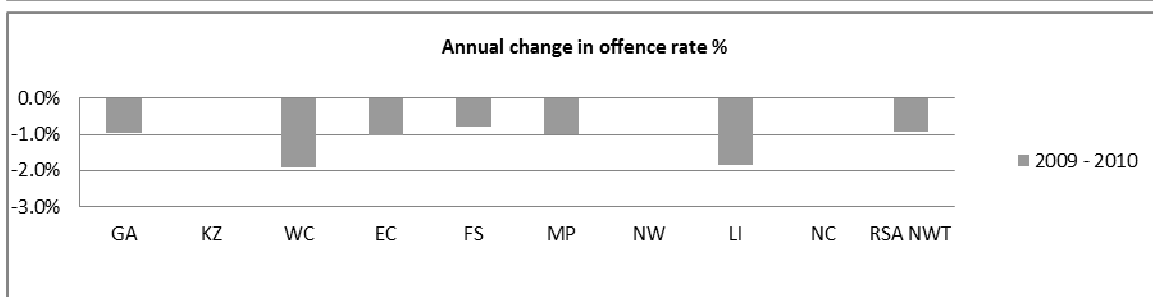
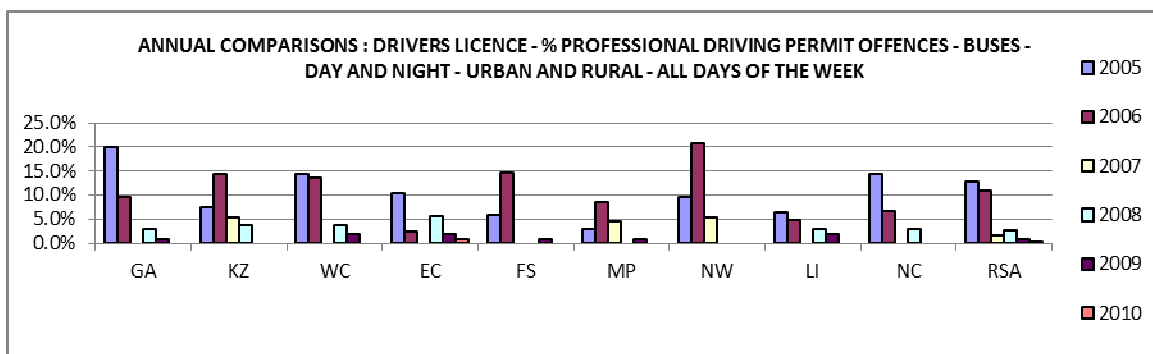
ANNUAL COMPARISONS : DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	21.2%	15.8%	31.9%	26.3%	16.2%	8.9%	12.7%	7.9%	19.6%	19.9%
2006	19.5%	11.3%	23.3%	21.3%	12.6%	12.6%	18.8%	14.8%	12.8%	17.5%
2007	8.0%	11.8%	2.8%	12.9%	0.7%	9.2%	4.9%	0.7%	0.0%	7.2%
2008	7.0%	5.3%	5.4%	6.2%	2.8%	1.0%	2.3%	3.7%	1.5%	5.1%
2009	2.2%	4.0%	3.3%	4.8%	2.5%	2.0%	1.5%	3.0%	0.7%	2.8%
2010	0.3%	2.3%	2.5%	3.7%	0.0%	0.3%	1.6%	0.3%	0.3%	1.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-1.0%	-6.5%	2.7%	-6.7%	2.0%	-8.3%	-2.6%	3.0%	1.5%	-2.1%
2008 - 2009	-4.8%	-1.3%	-2.2%	-1.4%	-0.2%	1.0%	-0.8%	-0.7%	-0.8%	-2.3%
2009 - 2010	-1.8%	-1.7%	-0.8%	-1.2%	-2.5%	-1.7%	0.1%	-2.7%	-0.3%	-1.6%



The information above shows that on a national basis the percentage PrDP offences for Minibus Taxis in this category have decreased from 2.8% in 2009 to 1.3% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 3.7%, and Free State has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 1.5% to 1.6%. Limpopo shows the largest decrease in offence rate percentage from 3.0% to 0.3%.

### 2.12.1.2 Summary of Absence of PRDP: Buses – Urban and Rural Roads – Day Time and Night Time

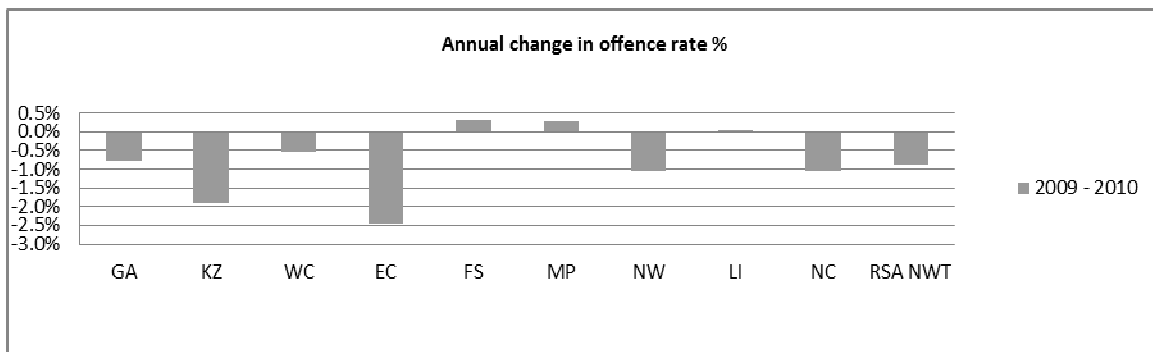
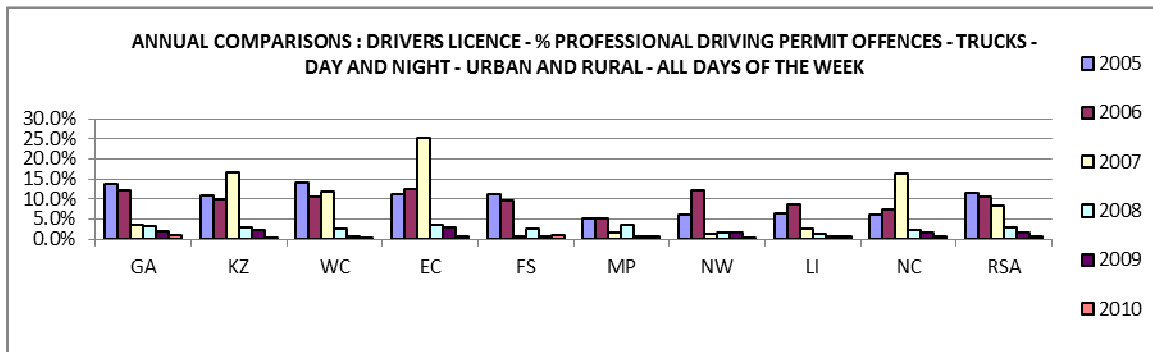
ANNUAL COMPARISONS : DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	20.0%	7.4%	14.3%	10.5%	6.0%	3.1%	9.5%	6.5%	14.3%	12.9%
2006	9.7%	14.3%	13.5%	2.4%	14.7%	8.6%	20.7%	4.8%	6.7%	11.0%
2007	0.0%	5.3%	0.0%	0.0%	0.0%	4.6%	5.3%	0.0%	0.0%	1.5%
2008	3.0%	3.8%	3.8%	5.7%	0.0%	0.0%	0.0%	2.9%	3.0%	2.8%
2009	0.9%	0.0%	1.9%	2.0%	0.8%	1.0%	0.0%	1.8%	0.0%	1.0%
2010	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	3.0%	-1.4%	3.8%	5.7%	0.0%	-4.6%	-5.3%	2.9%	3.0%	1.3%
2008 - 2009	-2.1%	-3.8%	-1.9%	-3.7%	0.8%	1.0%	0.0%	-1.0%	-3.0%	-1.8%
2009 - 2010	-0.9%	0.0%	-1.9%	-1.0%	-0.8%	-1.0%	0.0%	-1.8%	0.0%	-0.9%



The information above shows that on a national basis the percentage PrDP offences for Buses in this category have decreased from 1.0% in 2009 to 0.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.0%, and Gauteng, along with North West and Northern Cape, has the lowest offence rate with 0.0%. None of the provinces show an increase in offence rates between 2009 and 2010. Western Cape shows the largest decrease in offence rate percentage from 1.9% to 0.0%.

### 2.12.1.3 Summary of Absence of PRDP: Trucks – Urban and Rural Roads – Day Time and Night Time

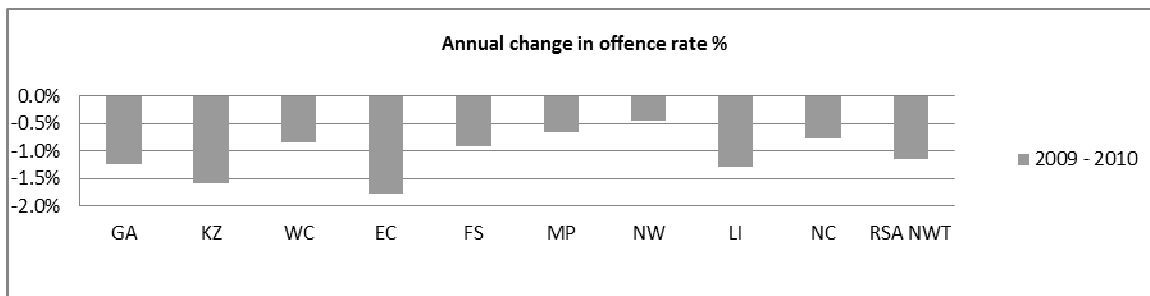
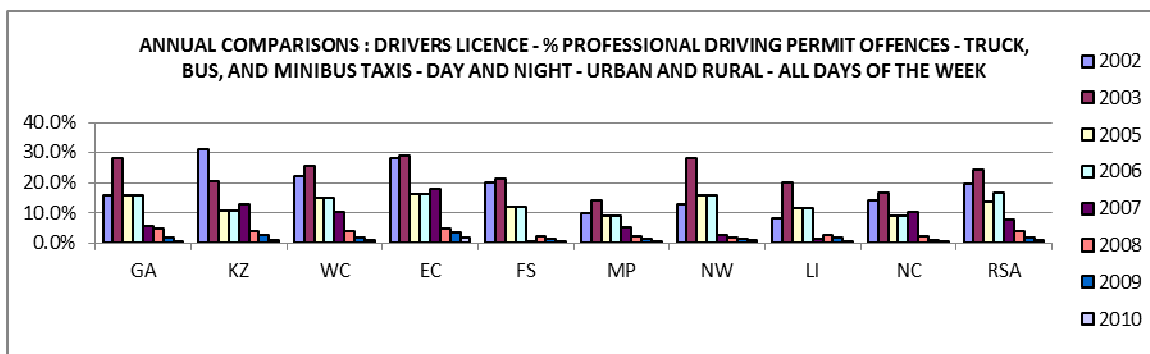
ANNUAL COMPARISONS : DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	13.9%	10.9%	14.1%	11.2%	11.2%	5.3%	6.0%	6.4%	6.1%	11.4%
2006	12.2%	9.9%	10.6%	12.5%	9.7%	5.3%	12.3%	8.7%	7.5%	10.7%
2007	3.6%	16.7%	11.8%	25.3%	0.6%	1.6%	1.4%	2.5%	16.4%	8.4%
2008	3.3%	3.1%	2.6%	3.7%	2.5%	3.5%	1.6%	1.4%	2.4%	2.9%
2009	1.9%	2.2%	0.8%	3.0%	0.8%	0.6%	1.6%	0.6%	1.6%	1.6%
2010	1.1%	0.3%	0.2%	0.6%	1.1%	0.8%	0.5%	0.6%	0.6%	0.7%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-0.4%	-13.6%	-9.2%	-21.6%	1.9%	2.0%	0.3%	-1.1%	-13.9%	-5.5%
2008 - 2009	-1.4%	-0.9%	-1.8%	-0.7%	-1.8%	-3.0%	-0.1%	-0.8%	-0.8%	-1.4%
2009 - 2010	-0.8%	-1.9%	-0.5%	-2.4%	0.3%	0.3%	-1.0%	0.0%	-1.0%	-0.9%



The information above shows that on a national basis the percentage PrDP offences for Trucks in this category have decreased from 1.6% in 2009 to 0.7% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 1.1%, and Western Cape has the lowest offence rate with 0.2%. Free State shows the largest increase in offence rate percentage, from 0.8% to 1.1%. Eastern Cape shows the largest decrease in offence rate percentage from 3.0% to 0.6%.

### 2.12.1.4 Summary of Absence of PRDP: Minibus Taxis, Buses and Trucks Combined – Urban and Rural Roads – Day Time and Night Time

ANNUAL COMPARISONS : DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - TRUCK, BUS, AND MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	28.1%	20.6%	25.4%	28.8%	21.5%	14.3%	28.2%	20.1%	16.5%	24.3%
2005	15.9%	10.7%	14.8%	16.3%	11.8%	9.0%	15.9%	11.4%	9.0%	13.8%
2006	15.9%	10.7%	14.8%	16.3%	11.8%	9.0%	15.9%	11.4%	9.0%	16.7%
2007	5.4%	12.8%	10.1%	17.8%	0.6%	5.3%	2.8%	1.2%	10.5%	7.7%
2008	4.7%	4.1%	3.9%	5.0%	2.3%	2.1%	1.7%	2.5%	2.1%	3.8%
2009	1.9%	2.7%	1.9%	3.6%	1.4%	1.2%	1.3%	1.7%	1.1%	2.0%
2010	0.6%	1.1%	1.1%	1.9%	0.5%	0.5%	0.9%	0.4%	0.4%	0.8%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-0.7%	-8.7%	-6.2%	-12.9%	1.7%	-3.2%	-1.1%	1.3%	-8.4%	-4.0%
2008 - 2009	-2.8%	-1.4%	-2.0%	-1.3%	-0.9%	-0.9%	-0.4%	-0.8%	-1.0%	-1.8%
2009 - 2010	-1.2%	-1.6%	-0.8%	-1.8%	-0.9%	-0.7%	-0.4%	-1.3%	-0.8%	-1.1%



The information above shows that on a national basis the percentage PrDP offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 2.0% in 2009 to 0.8% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.9%, and Limpopo has the lowest offence rate with 0.4%. None of the provinces show an increase in offence rates between 2009 and 2010. Eastern Cape shows the largest decrease in offence rate percentage from 3.6% to 1.9%.

## 2.12.2 ABSENCE OF PRDP OFFENCE INDEXES

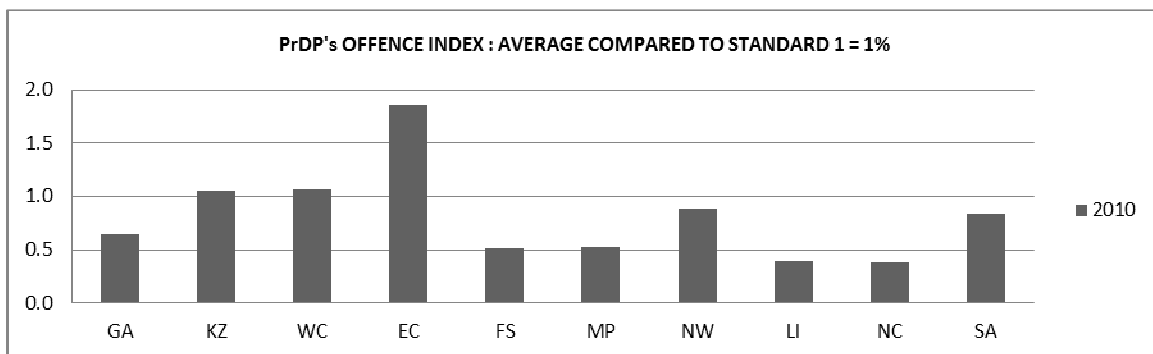
Information on absent professional driving permits (PrDPs) for trucks, buses, and minibus taxis combined, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

### 2.12.2.1 Average PrDP Offence Level

AVERAGE PrDP OFFENCE RATES - STANDARD 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	0.6%	1.1%	1.1%	1.9%	0.5%	0.5%	0.9%	0.4%	0.4%	0.8%

### 2.12.2.2 PrDP offence index: Average offence level compared to standard

PrDP's OFFENCE INDEX : AVERAGE COMPARED TO STANDARD 1 = 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2010	0.6	1.1	1.1	1.9	0.5	0.5	0.9	0.4	0.4	0.8



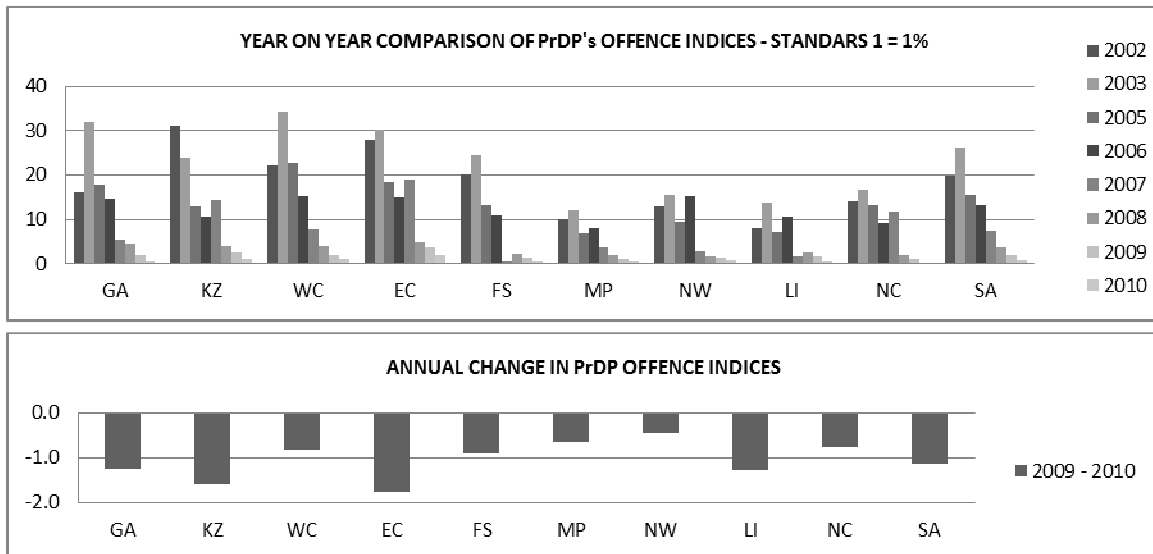
The information above shows that on a national basis the index for PrDP offences for 2010 in this category is highest in Eastern Cape (1.9), followed by KwaZulu Natal (1.1) and Western Cape (1.1). Limpopo has the lowest offence index with 0.4, followed by Northern Cape (0.4) and Gauteng (0.6).



### 2.12.2.3 Comparison of offence indices for different years: Absence of PrDP

Information on absent professional driving permits (PrDPs) for trucks, buses, and minibus taxis combined, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF PrDP's OFFENCE INDICES - STANDARS 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	16	31	22	28	20	10	13	8	14	19.8
2003	32	24	34.3	30.1	24.5	12.1	15.5	13.7	16.6	26.3
2005	17.7	13	22.6	18.4	13.3	6.9	9.4	7.1	13.1	15.6
2006	14.6	10.7	15.3	15	11	8.1	15.1	10.6	9.3	13.1
2007	5.4	14.3	7.8	19.1	0.6	3.7	2.8	1.7	11.8	7.5
2008	4.7	4.1	3.9	5.0	2.3	2.1	1.7	2.5	2.1	3.8
2009	1.9	2.7	1.9	3.6	1.4	1.2	1.3	1.7	1.1	2.0
2010	0.6	1.1	1.1	1.9	0.5	0.5	0.9	0.4	0.4	0.8
ANNUAL CHANGE IN PrDP OFFENCE INDICES										
2007 - 2008	-0.7	-10.3	-3.9	-14.1	1.7	-1.7	-1.1	0.8	-9.7	-3.7
2008 - 2009	-2.8	-1.4	-2.0	-1.3	-0.9	-0.9	-0.4	-0.8	-1.0	-1.8
2009 - 2010	-1.2	-1.6	-0.8	-1.8	-0.9	-0.7	-0.4	-1.3	-0.8	-1.1



The information above shows that on a national basis the index for PrDP offences in this category has decreased from 2.0 in 2009 to 0.8 in 2010. Eastern Cape has the highest offence index in this regard for 2010 with 1.9, and Limpopo has the lowest offence index with 0.4. None of the provinces show an increase in offence rates between 2009 and 2010. Eastern Cape shows the largest decrease in offence indices from 3.6 to 1.9.

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## 2.13 SUMMARY OF VEHICLE FITNESS: WORN TYRES

The following tables show the Worn Tyre Offence rates applying to the different vehicle types. Surveys were done during roadblocks.

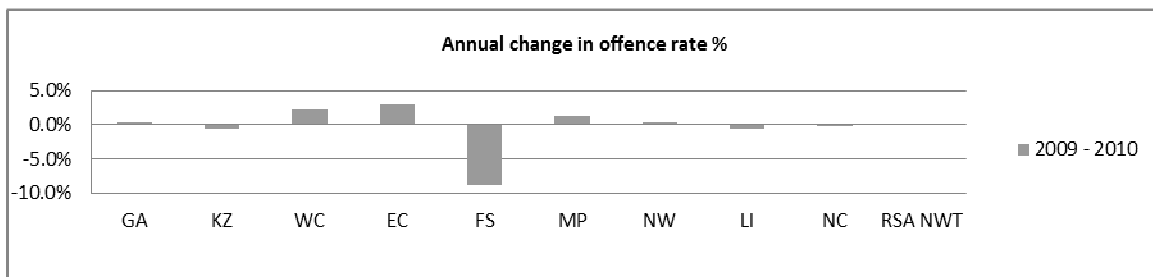
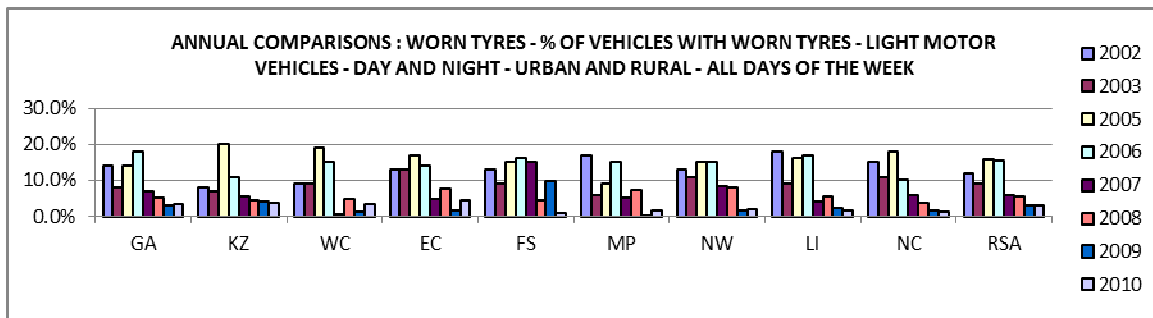
When comparing the 2009 and 2010 offence data, the 2010 offence rates are on average slightly lower than the 2009 offence rates.

When looking at the overall trend line since the 2002 offence survey, it is clear to see a steady decline in the national offence rates, indicating some improvement.

Yet the average national offence rate for 2010 is 5.9 times higher than the desired maximum offence rate for this category, which should raise some serious concerns, given the large contribution that worn tyres has regarding road accidents.

### 2.13.1 SUMMARY OF VEHICLE FITNESS – WORN TYRES: LIGHT MOTOR VEHICLES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

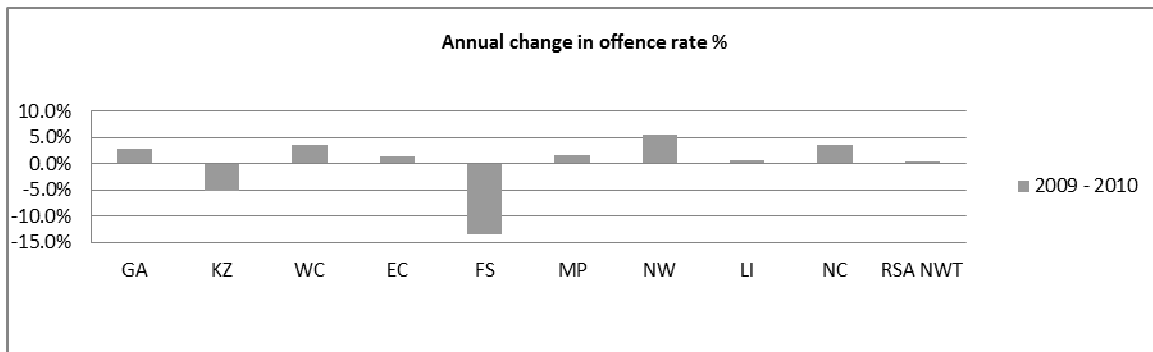
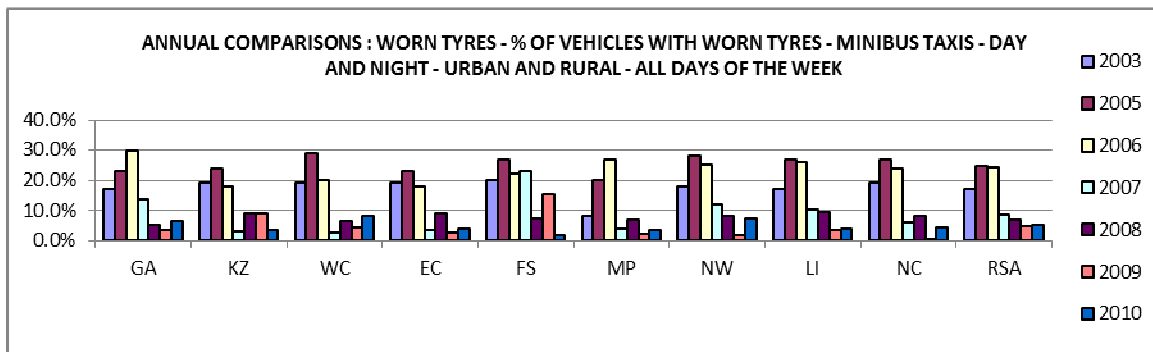
ANNUAL COMPARISONS : WORN TYRES - % OF VEHICLES WITH WORN TYRES - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2002	8.0%	7.0%	9.0%	13.0%	9.0%	6.0%	11.0%	9.0%	11.0%	9.0%
2005	14.0%	20.0%	19.0%	17.0%	15.0%	9.0%	15.0%	16.0%	18.0%	15.9%
2006	18.0%	11.0%	15.0%	14.0%	16.0%	15.0%	15.0%	17.0%	10.0%	15.5%
2007	7.0%	5.5%	0.4%	4.7%	15.1%	5.3%	8.5%	4.3%	5.7%	5.8%
2008	5.3%	4.5%	5.0%	7.5%	4.4%	7.1%	8.0%	5.5%	3.6%	5.5%
2009	3.1%	4.3%	1.2%	1.5%	9.7%	0.3%	1.6%	2.2%	1.5%	2.9%
2010	3.4%	3.6%	3.4%	4.4%	0.9%	1.5%	1.9%	1.6%	1.2%	3.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-1.7%	-1.0%	4.6%	2.8%	-10.7%	1.9%	-0.5%	1.2%	-2.1%	-0.2%
2008 - 2009	-2.2%	-0.3%	-3.7%	-6.0%	5.3%	-6.9%	-6.4%	-3.3%	-2.1%	-2.6%
2009 - 2010	0.3%	-0.6%	2.2%	2.9%	-8.8%	1.2%	0.3%	-0.5%	-0.3%	0.0%



The information above shows that on a national basis the percentage worn tyre offences for Light Motor Vehicles in this category has increased from 2.9% in 2009 to 3.0% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 4.4%, and Free State has the lowest offence rate with 0.9%. Eastern Cape shows the largest increase in offence rate percentage, from 1.5% to 4.4%. Free State shows the largest decrease in offence rate percentage from 9.7% to 0.9%.

## 2.13.2 SUMMARY OF VEHICLE FITNESS – WORN TYRES: MINIBUS TAXIS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

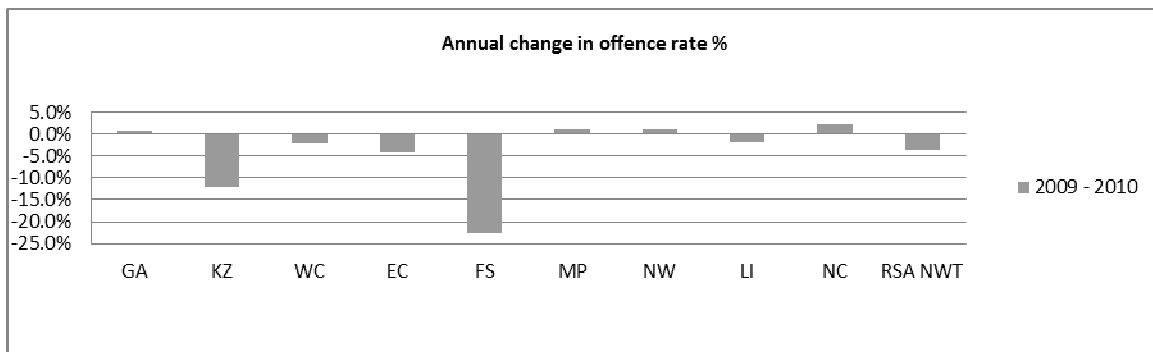
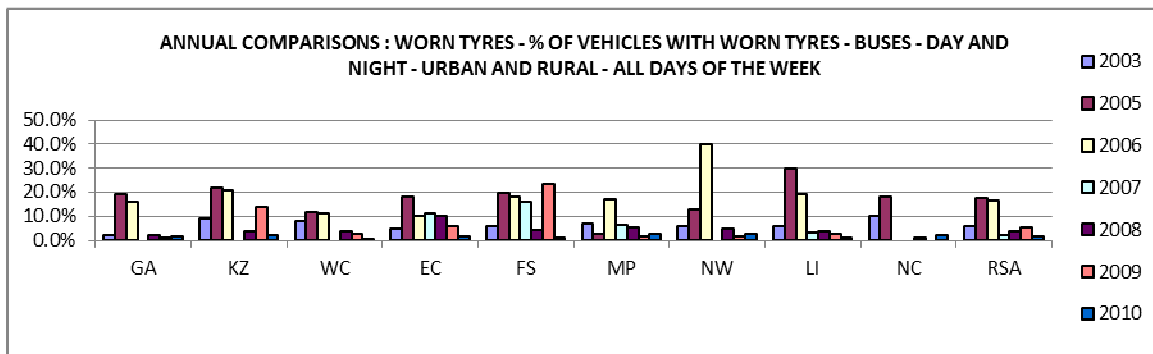
ANNUAL COMPARISONS : WORN TYRES - % OF VEHICLES WITH WORN TYRES - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	23.0%	24.0%	29.0%	23.0%	27.0%	20.0%	28.0%	27.0%	27.0%	24.6%
2006	30.0%	18.0%	20.0%	18.0%	22.0%	27.0%	25.0%	26.0%	24.0%	24.2%
2007	13.9%	2.9%	2.4%	3.6%	23.0%	4.1%	12.0%	10.3%	6.1%	8.8%
2008	5.0%	8.9%	6.4%	9.2%	7.4%	6.8%	8.0%	9.4%	8.0%	6.9%
2009	3.4%	8.8%	4.3%	2.7%	15.2%	2.0%	1.8%	3.3%	0.7%	4.9%
2010	6.3%	3.6%	8.0%	4.0%	1.7%	3.6%	7.3%	4.0%	4.3%	5.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-8.8%	6.1%	3.9%	5.6%	-15.6%	2.7%	-4.0%	-0.9%	1.9%	-1.9%
2008 - 2009	-1.6%	-0.1%	-2.1%	-6.5%	7.8%	-4.8%	-6.2%	-6.0%	-7.3%	-2.0%
2009 - 2010	2.9%	-5.2%	3.7%	1.3%	-13.5%	1.6%	5.5%	0.6%	3.6%	0.4%



The information above shows that on a national basis the percentage worn tyre offences for Minibus Taxis in this category have increased from 4.9% in 2009 to 5.3% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 8.0%, and Free State has the lowest offence rate with 1.7%. North West shows the largest increase in offence rate percentage, from 1.8% to 7.3%. Free State shows the largest decrease in offence rate percentage from 15.2% to 1.7%.

### 2.13.3 SUMMARY OF VEHICLE FITNESS – WORN TYRES: BUSES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

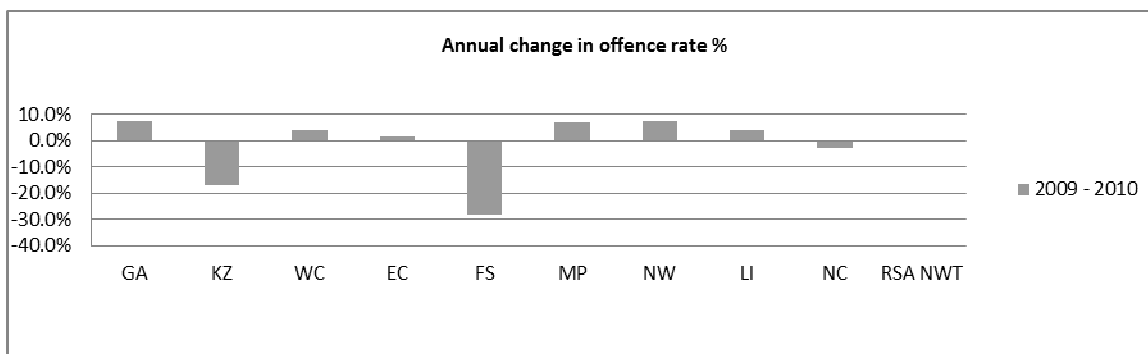
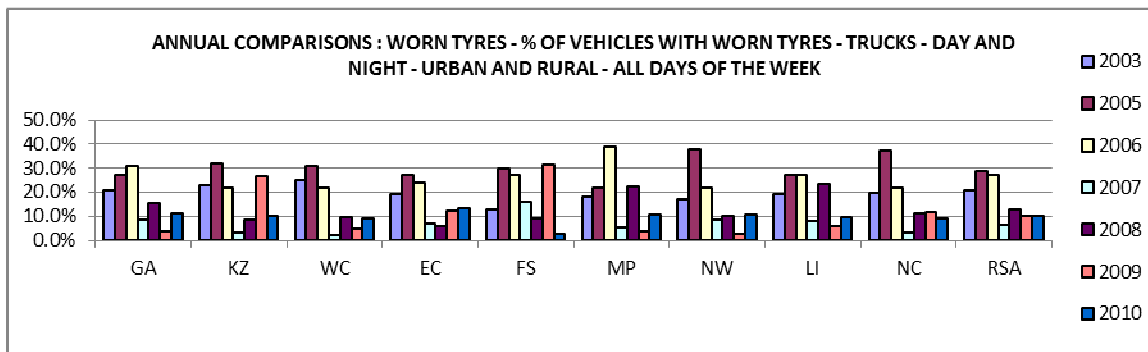
ANNUAL COMPARISONS : WORN TYRES - % OF VEHICLES WITH WORN TYRES - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	19.0%	22.0%	12.0%	18.0%	20.0%	3.0%	13.0%	30.0%	18.0%	17.4%
2006	16.0%	21.0%	11.0%	10.0%	18.0%	17.0%	40.0%	19.0%	0.0%	16.7%
2007	0.0%	0.0%	0.0%	11.1%	15.9%	6.7%	0.0%	3.2%	0.0%	2.3%
2008	2.0%	3.8%	3.8%	10.2%	4.4%	5.4%	5.1%	3.7%	1.0%	3.9%
2009	0.9%	14.0%	2.9%	6.0%	23.4%	2.0%	2.0%	2.8%	0.0%	5.4%
2010	1.7%	2.0%	0.9%	1.9%	0.9%	3.0%	3.0%	1.0%	2.4%	1.8%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	2.0%	3.8%	3.8%	-0.9%	-11.5%	-1.3%	5.1%	0.5%	1.0%	1.5%
2008 - 2009	-1.1%	10.2%	-1.0%	-4.2%	19.0%	-3.4%	-3.1%	-1.0%	-1.0%	1.6%
2009 - 2010	0.7%	-12.1%	-2.0%	-4.1%	-22.5%	1.0%	1.0%	-1.8%	2.4%	-3.7%



The information above shows that on a national basis the percentage worn tyre offences for Buses in this category has decreased from 5.4% in 2009 to 1.8% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 3.0%, and Western Cape has the lowest offence rate with 0.9%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 2.4%. Free State shows the largest decrease in offence rate percentage from 23.4% to 0.9%.

### 2.13.4 SUMMARY OF VEHICLE FITNESS – WORN TYRES: TRUCKS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

ANNUAL COMPARISONS : WORN TYRES - % OF VEHICLES WITH WORN TYRES - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	27.0%	32.0%	31.0%	27.0%	30.0%	22.0%	38.0%	27.0%	37.0%	29.0%
2006	31.0%	22.0%	22.0%	24.0%	27.0%	39.0%	22.0%	27.0%	22.0%	27.0%
2007	8.7%	3.5%	2.4%	7.2%	16.3%	5.6%	8.6%	7.8%	3.4%	6.7%
2008	15.3%	8.7%	9.4%	5.9%	8.9%	22.3%	10.1%	23.7%	11.4%	12.9%
2009	3.8%	26.8%	5.0%	12.1%	31.2%	3.7%	2.9%	6.1%	11.9%	10.3%
2010	11.2%	10.0%	9.1%	13.6%	3.0%	10.6%	10.5%	9.9%	9.2%	10.1%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	6.6%	5.1%	7.0%	-1.3%	-7.3%	16.7%	1.5%	15.9%	8.0%	6.2%
2008 - 2009	-11.4%	18.2%	-4.4%	6.1%	22.2%	-18.6%	-7.2%	-17.6%	0.5%	-2.5%
2009 - 2010	7.4%	-16.9%	4.1%	1.5%	-28.2%	7.0%	7.7%	3.8%	-2.8%	-0.2%



The information above shows that on a national basis the percentage worn tyre offences for Trucks in this category has decreased from 10.3% in 2009 to 10.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 13.6%, and Free State has the lowest offence rate with 3.0%. North West shows the largest increase in offence rate percentage, from 2.9% to 10.5%. Free State shows the largest decrease in offence rate percentage from 31.2% to 3.0%.

## 2.13.5 VEHICLE FITNESS – WORN TYRES OFFENCE INDEXES

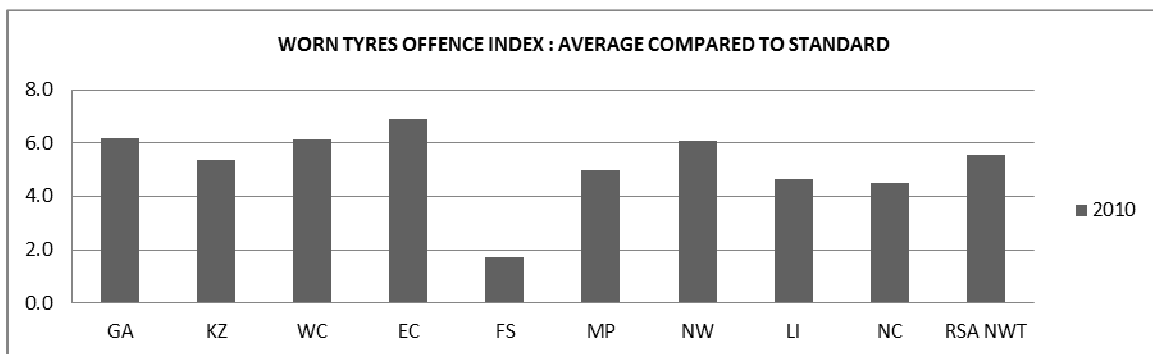
Information on worn tyres for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

### 2.13.5.1 Weighted average offence level: Vehicles with one or more worn tyres

AVERAGE WORN TYRES OFFENCE RATES										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	6.18%	5.37%	6.12%	6.88%	1.73%	4.98%	6.07%	4.65%	4.49%	5.56%

### 2.13.5.2 Worn tyre index: Average compared to index, all vehicles

WORN TYRES OFFENCE INDEX : AVERAGE COMPARED TO STANDARD										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	6.2	5.4	6.1	6.9	1.7	5.0	6.1	4.6	4.5	5.6

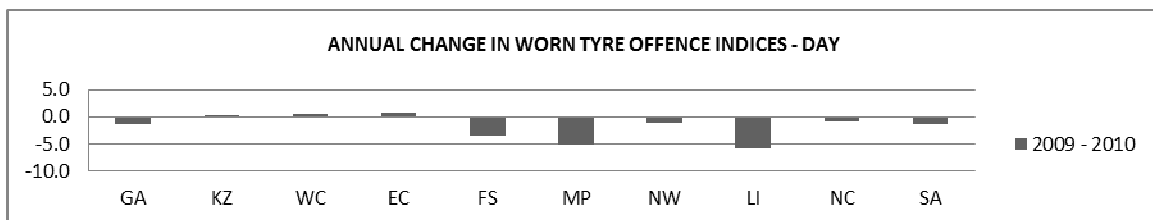
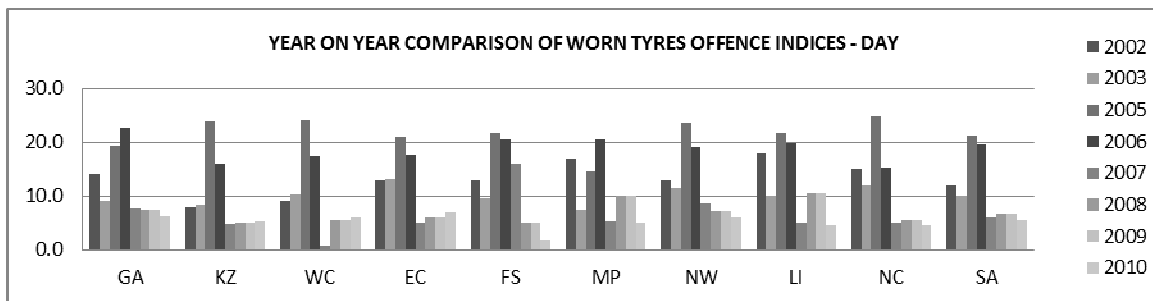


The information above shows that on a national basis the index for worn tyre offences for 2010 in this category is highest in Eastern Cape (6.9), followed by Gauteng (6.2), Western Cape (6.1) and North West (6.1). Free State has the lowest offence index with 1.7, followed by Northern Cape (4.5) and Limpopo (4.6).

### 2.13.5.3 Comparison of offence indices for different years: Vehicles with one or more worn tyres

Information on worn tyres for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF WORN TYRES OFFENCE INDICES - DAY										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	14.0	8.0	9.0	13.0	13.0	17.0	13.0	18.0	15.0	12.0
2003	9.2	8.5	10.4	13.2	9.6	7.5	11.5	10.0	11.9	10.1
2005	19.4	23.9	24.1	20.9	21.7	14.6	23.6	21.7	24.7	21.3
2006	22.6	15.9	17.4	17.6	20.5	20.6	19.0	19.9	15.3	19.6
2007	7.6	4.9	0.8	5.0	15.9	5.3	8.7	5.2	5.0	6.1
2008	7.4	5.1	5.6	6.1	5.2	10.1	7.2	10.5	5.5	6.8
2009	7.4	5.1	5.6	6.1	5.2	10.1	7.2	10.5	5.5	6.9
2010	6.2	5.4	6.1	6.9	1.7	5.0	6.1	4.6	4.5	5.6
ANNUAL CHANGE IN WORN TYRE OFFENCE INDICES - DAY										
2007 - 2008	-0.2	0.1	4.8	1.1	-10.7	4.8	-1.4	5.3	0.4	0.8
2008 - 2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009 - 2010	-1.2	0.3	0.5	0.8	-3.4	-5.1	-1.1	-5.8	-1.0	-1.3



The information above shows that on a national basis the index for worn tyre offences in this category has decreased from 6.9 in 2009 to 5.6 in 2010. Eastern Cape has the highest offence index in this regard for 2010 with 6.9, and Free State has the lowest offence index with 1.7. Eastern Cape shows the largest increase in offence indices, from 6.1 to 6.9. Limpopo shows the largest decrease in offence indices from 10.5 to 4.6.



## 2.14 SUMMARY OF VEHICLE FITNESS: LIGHTS NOT FUNCTIONING

The following tables show the offence rates for Vehicle Lights. The sections are sub divided into vehicle type.

When comparing the 2009 and the 2010 offence survey data, it is clear to see that the offence rates for all vehicle types has increased slightly.

When looking at the individual light categories it is clear to see that the brake light category has the highest offence rate (4.2), followed by head lights (1.0) and tail lights (0.5) respectively.

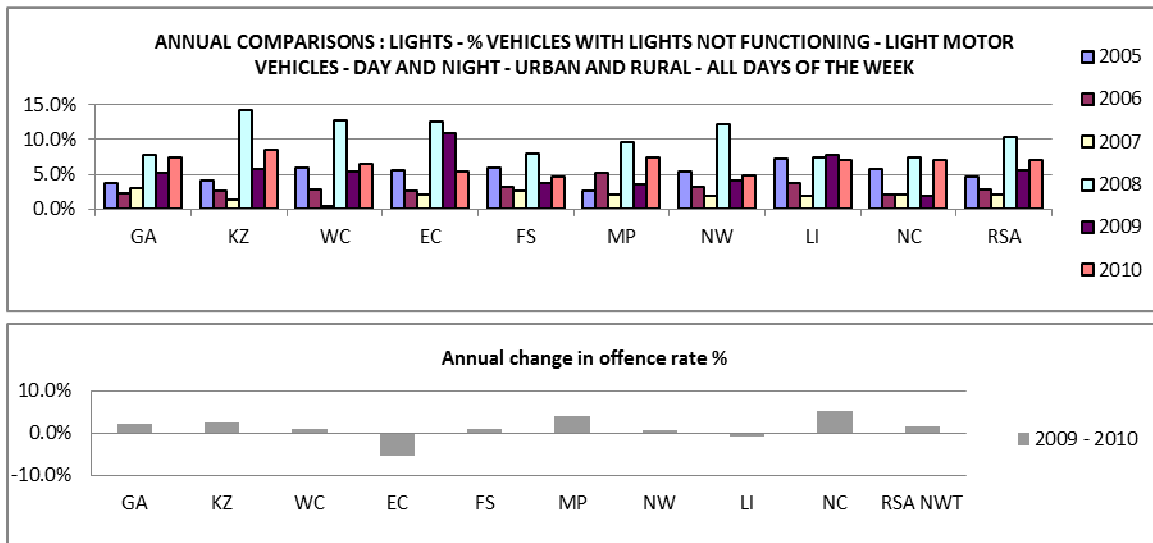
When looking at the different vehicle categories, it is clear to see that the highest offence rate was recorded among Minibus Taxis and Trucks, followed by Light motor vehicles, and Buses respectively.

The national offence rate for all three categories discussed in this section is still much higher than the desired maximum.

## 2.14.1 SUMMARY OF VEHICLE FITNESS – LIGHTS NOT FUNCTIONING – URBAN AND RURAL ROADS – DAY TIME AND NIGHT TIME

### 2.14.1.1 Summary of Vehicle Fitness – Lights not Functioning: Light Motor Vehicles – Urban and Rural Roads– Day Time and Night Time

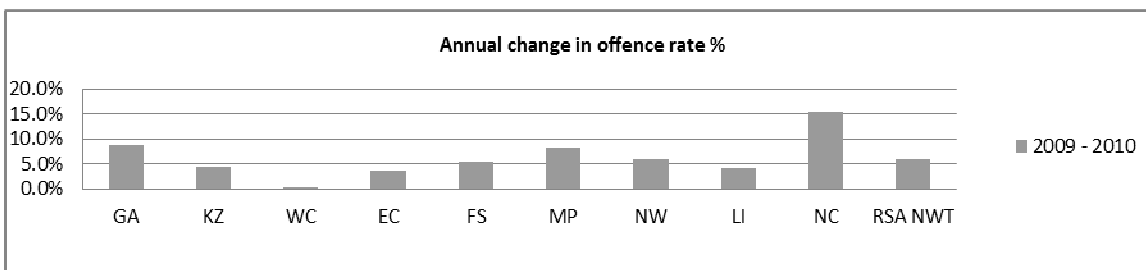
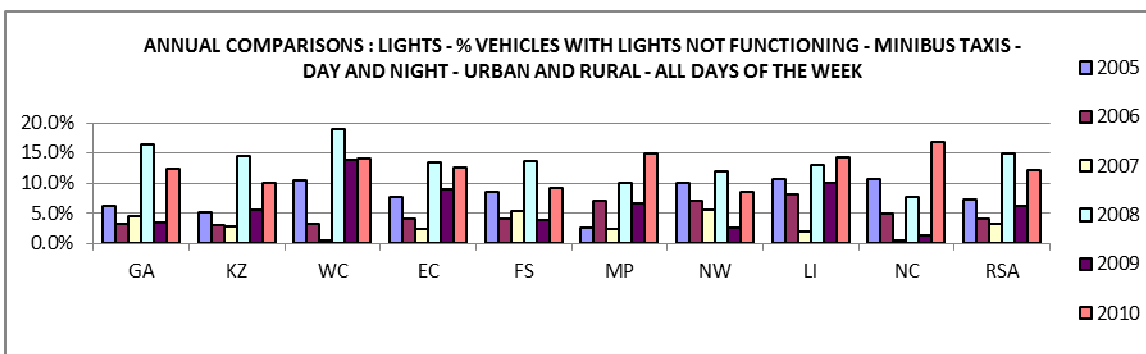
ANNUAL COMPARISONS : LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	3.8%	4.2%	6.0%	5.5%	6.0%	2.7%	5.4%	7.3%	5.7%	4.7%
2006	2.3%	2.7%	2.8%	2.7%	3.3%	5.1%	3.3%	3.7%	2.0%	2.8%
2007	3.0%	1.3%	0.5%	2.1%	2.7%	2.1%	2.0%	2.0%	2.0%	2.1%
2008	7.8%	14.2%	12.7%	12.6%	8.0%	9.7%	12.1%	7.3%	7.5%	10.3%
2009	5.3%	5.8%	5.5%	10.8%	3.7%	3.5%	4.2%	7.8%	1.9%	5.5%
2010	7.5%	8.5%	6.6%	5.4%	4.7%	7.4%	4.8%	7.1%	7.1%	7.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	4.8%	12.9%	12.2%	10.4%	5.3%	7.6%	10.2%	5.4%	5.4%	8.3%
2008 - 2009	-2.5%	-8.4%	-7.3%	-1.7%	-4.3%	-6.2%	-7.9%	0.4%	-5.5%	-4.8%
2009 - 2010	2.2%	2.6%	1.1%	-5.4%	0.9%	3.9%	0.6%	-0.7%	5.2%	1.4%



The information above shows that on a national basis the percentage damaged light offences for Light Motor Vehicles in this category has increased from 5.5% in 2009 to 7.0% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 8.5%, and Free State has the lowest offence rate with 4.7%. Northern Cape shows the largest increase in offence rate percentage, from 1.9% to 7.1%. Eastern Cape shows the largest decrease in offence rate percentage from 10.8% to 5.4%.

### 2.14.1.2 Summary of Vehicle Fitness – Lights not Functioning: Minibus Taxis – Urban and Rural Roads– Day Time and Night Time

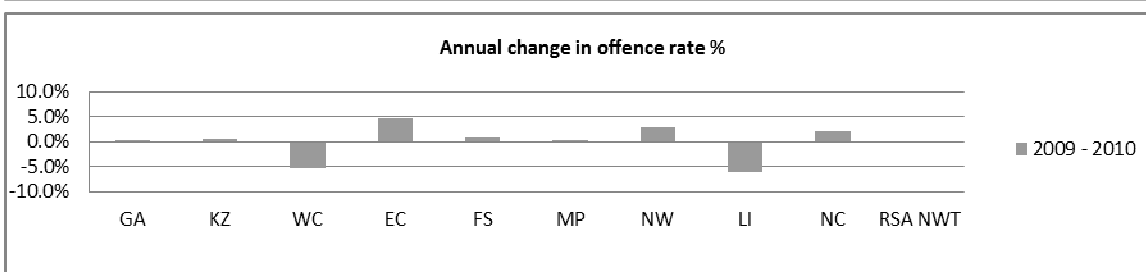
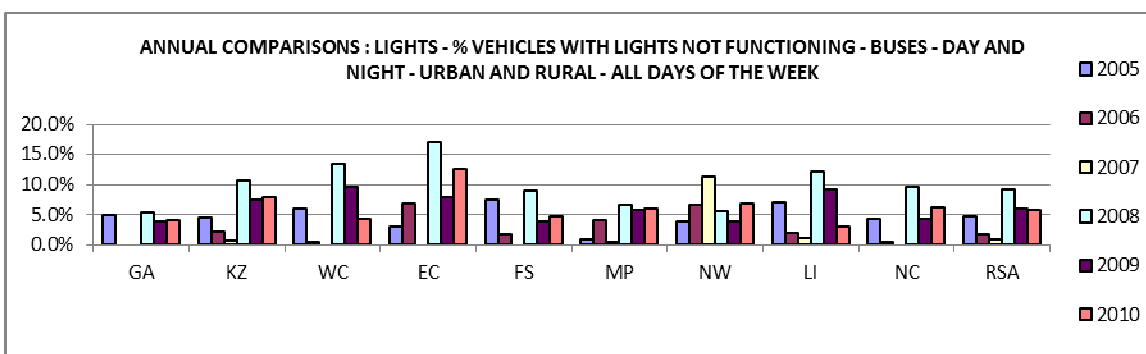
ANNUAL COMPARISONS : LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	6.3%	5.1%	10.5%	7.7%	8.5%	2.6%	10.0%	10.6%	10.6%	7.2%
2006	3.2%	3.0%	3.2%	4.2%	4.1%	7.1%	7.0%	8.2%	4.9%	4.1%
2007	4.5%	2.8%	0.4%	2.4%	5.3%	2.4%	5.5%	2.0%	0.5%	3.1%
2008	16.4%	14.6%	18.8%	13.4%	13.5%	10.0%	11.9%	13.0%	7.7%	14.9%
2009	3.4%	5.6%	13.8%	9.1%	3.8%	6.7%	2.6%	10.0%	1.3%	6.3%
2010	12.3%	10.1%	14.1%	12.6%	9.2%	14.9%	8.5%	14.2%	16.7%	12.2%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	11.9%	11.8%	18.4%	10.9%	8.3%	7.6%	6.5%	11.1%	7.2%	11.8%
2008 - 2009	-13.0%	-9.0%	-5.1%	-4.3%	-9.7%	-3.3%	-9.3%	-3.1%	-6.4%	-8.6%
2009 - 2010	8.9%	4.5%	0.3%	3.6%	5.4%	8.2%	5.9%	4.2%	15.4%	6.0%



The information above shows that on a national basis the percentage damaged light offences for Minibus Taxis in this category has increased from 6.3% in 2009 to 12.2% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 16.7%, and North West has the lowest offence rate with 8.5%. Northern Cape shows the largest increase in offence rate percentage, from 1.3% to 16.7%. None of the provinces show a decrease in offence rates between 2009 and 2010.

### 2.14.1.3 Summary of Vehicle Fitness – Lights not Functioning: Buses – Urban and Rural Roads– Day Time and Night Time

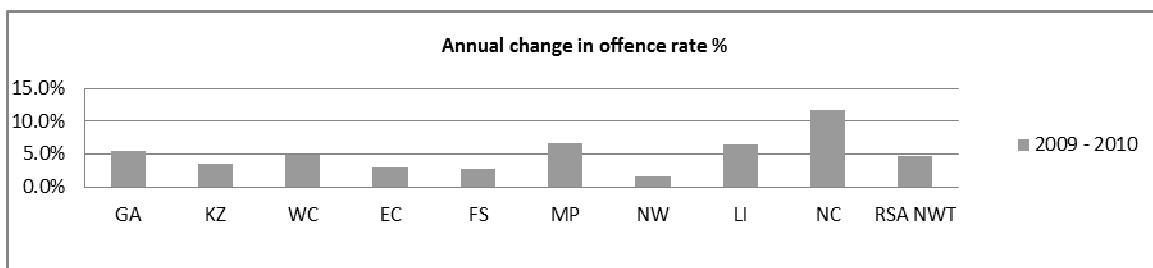
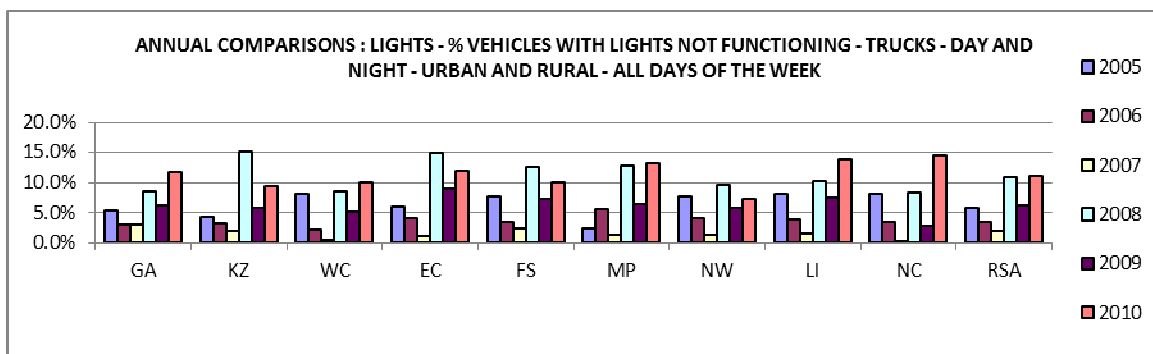
ANNUAL COMPARISONS : LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	5.0%	4.4%	6.0%	3.0%	7.4%	1.0%	3.9%	7.0%	4.4%	4.8%
2006	0.0%	2.1%	0.4%	6.8%	1.8%	4.2%	6.7%	2.0%	0.5%	1.8%
2007	0.0%	0.7%	0.0%	0.0%	0.0%	0.6%	11.4%	1.1%	0.0%	0.9%
2008	5.5%	10.6%	13.5%	17.0%	9.0%	6.7%	5.6%	12.1%	9.6%	9.1%
2009	3.8%	7.4%	9.6%	8.0%	3.9%	5.9%	3.9%	9.2%	4.3%	6.0%
2010	4.2%	7.9%	4.3%	12.6%	4.7%	6.0%	6.9%	2.9%	6.3%	5.8%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	5.5%	9.9%	13.5%	17.0%	9.0%	6.1%	-5.8%	11.1%	9.6%	8.2%
2008 - 2009	-1.7%	-3.1%	-3.8%	-9.0%	-5.1%	-0.8%	-1.7%	-3.0%	-5.4%	-3.0%
2009 - 2010	0.4%	0.5%	-5.3%	4.6%	0.8%	0.1%	3.0%	-6.2%	2.0%	-0.3%



The information above shows that on a national basis the percentage damaged light offences for Buses in this category has decreased from 6.0% in 2009 to 5.8% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 12.6%, and Limpopo has the lowest offence rate with 2.9%. Eastern Cape shows the largest increase in offence rate percentage, from 8.0% to 12.6%. Limpopo shows the largest decrease in offence rate percentage from 9.2% to 2.9%.

### 2.14.1.4 Summary of Vehicle Fitness – Lights not Functioning: Trucks – Urban and Rural Roads– Day Time and Night Time

ANNUAL COMPARISONS : LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2005	5.3%	4.4%	8.1%	6.0%	7.6%	2.5%	7.7%	8.1%	8.1%	5.9%
2006	3.1%	3.3%	2.3%	4.0%	3.4%	5.6%	4.1%	3.8%	3.4%	3.4%
2007	3.0%	1.9%	0.5%	1.1%	2.5%	1.4%	1.3%	1.5%	0.2%	1.9%
2008	8.4%	15.0%	8.6%	15.0%	12.6%	12.8%	9.6%	10.2%	8.4%	10.8%
2009	6.3%	5.9%	5.2%	9.0%	7.2%	6.5%	5.8%	7.4%	2.7%	6.3%
2010	11.8%	9.4%	10.1%	11.9%	9.9%	13.2%	7.3%	13.9%	14.4%	11.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	5.5%	13.1%	8.1%	13.9%	10.1%	11.4%	8.3%	8.7%	8.2%	8.9%
2008 - 2009	-2.2%	-9.2%	-3.3%	-5.9%	-5.3%	-6.3%	-3.8%	-2.8%	-5.7%	-4.5%
2009 - 2010	5.5%	3.5%	4.9%	2.9%	2.7%	6.7%	1.5%	6.4%	11.7%	4.8%



The information above shows that on a national basis the percentage damaged light offences for Trucks in this category has increased from 6.3% in 2009 to 11.0% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 14.4%, and North West has the lowest offence rate with 7.3%. Northern Cape shows the largest increase in offence rate percentage, from 2.7% to 14.4%. None of the provinces show a decrease in offence rates between 2009 and 2010.

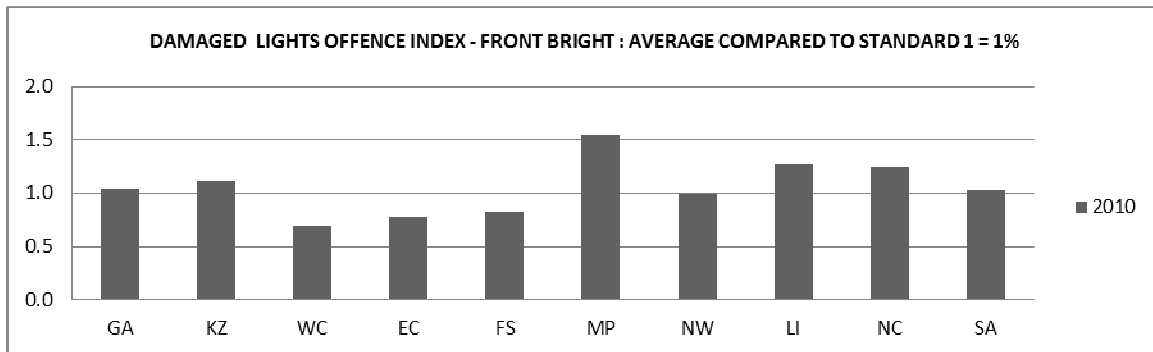
## 2.14.2 VEHICLE FITNESS – LIGHTS NOT FUNCTIONING OFFENCE INDEXES

### 2.14.2.1 Average Offence for Head Lights (Front Bright)

Information on damaged front bright lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

AVERAGE DAMAGED LIGHTS OFFENCE RATES - FRONT BRIGHT - STANDARD 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	1.0%	1.1%	0.7%	0.8%	0.8%	1.5%	1.0%	1.3%	1.2%	1.0%

DAMAGED LIGHTS OFFENCE INDEX - FRONT BRIGHT : AVERAGE COMPARED TO STANDARD 1 = 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2010	1.0	1.1	0.7	0.8	0.8	1.5	1.0	1.3	1.2	1.0

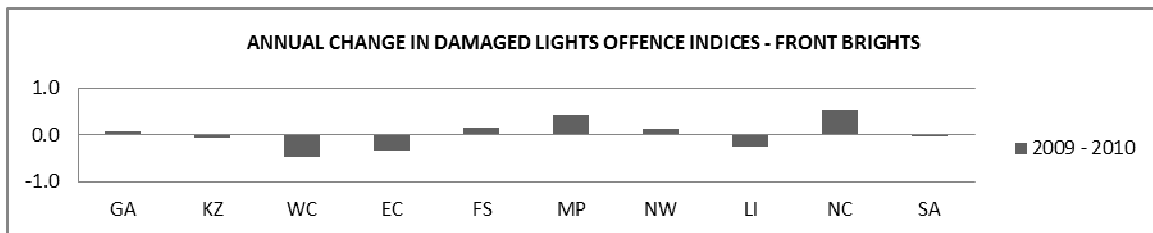
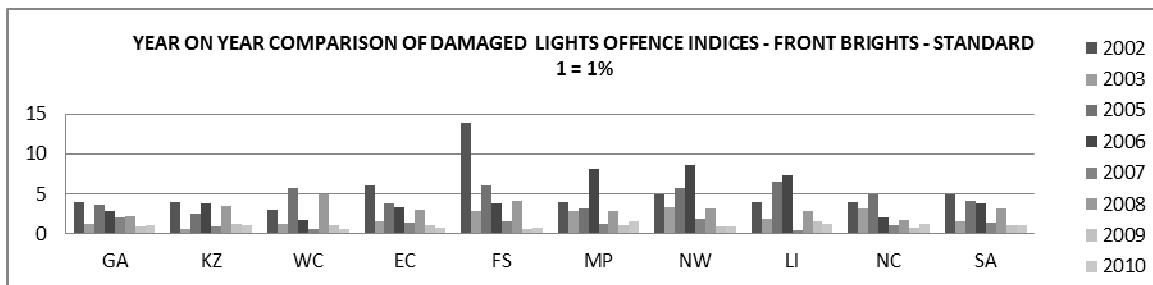


The information above shows that on a national basis the index for damaged front bright light offences for 2010 in this category is highest in Mpumalanga (1.5), followed by Limpopo (1.3) and Northern Cape (1.2). Western Cape has the lowest offence index with 0.7, followed by Eastern Cape (0.8) and Free State (0.8).

### 2.14.2.2 Comparison of offence indices for different years: Head Lights (Front Bright)

Information on damaged front bright lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF DAMAGED LIGHTS OFFENCE INDICES - FRONT BRIGHTS - STANDARD 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	4	4	3	6	14	4	5	4	4	5
2003	1.3	0.6	1.2	1.6	2.8	2.9	3.4	1.9	3.2	1.6
2005	3.6	2.6	5.7	3.9	6.1	3.2	5.8	6.6	4.9	4.2
2006	2.8	3.9	1.8	3.4	3.9	8.1	8.7	7.4	2	3.9
2007	2.0	1.0	0.6	1.5	1.5	1.2	1.8	0.5	1.1	1.4
2008	2.3	3.5	5.0	3.0	4.1	2.8	3.2	2.8	1.7	3.2
2009	1.0	1.2	1.2	1.1	0.7	1.1	0.9	1.5	0.7	1.1
2010	1.0	1.1	0.7	0.8	0.8	1.5	1.0	1.3	1.2	1.0
ANNUAL CHANGE IN DAMAGED LIGHTS OFFENCE INDICES - FRONT BRIGHTS										
2007 - 2008	0.3	2.5	4.4	1.5	2.6	1.6	1.4	2.3	0.6	1.8
2008 - 2009	-1.3	-2.3	-3.8	-1.9	-3.4	-1.7	-2.3	-1.3	-1.0	-2.1
2009 - 2010	0.1	-0.1	-0.5	-0.3	0.1	0.4	0.1	-0.3	0.5	0.0



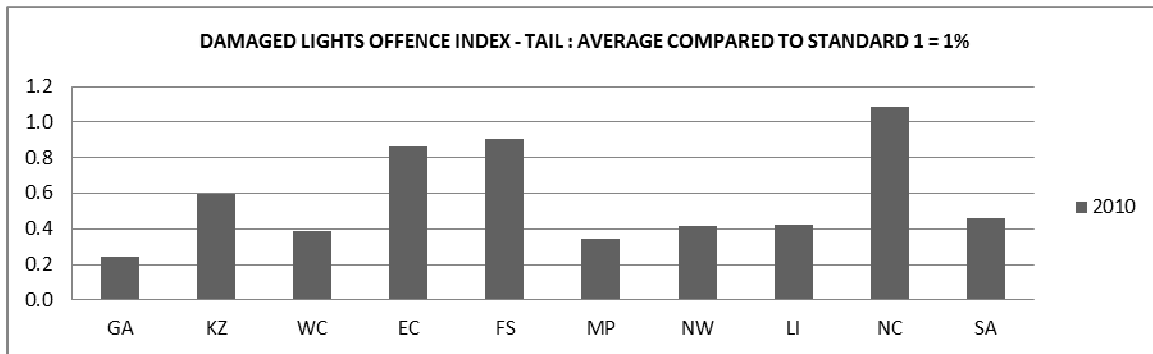
The information above shows that on a national basis the index for damaged front bright light offences in this category has decreased from 1.1 in 2009 to 1.0 in 2010. Mpumalanga has the highest offence index in this regard for 2010 with 1.5, and Western Cape has the lowest offence index with 0.7. Northern Cape shows the largest increase in offence indices, from 0.7 to 1.2. Western Cape shows the largest decrease in offence indices from 1.2 to 0.7.

### 2.14.2.3 Average Offence for Tail Lights

Information on damaged rear tail lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

AVERAGE DAMAGED LIGHTS OFFENCE RATES - TAIL - STANDARD 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	0.2%	0.6%	0.4%	0.9%	0.9%	0.3%	0.4%	0.4%	1.1%	0.5%

DAMAGED LIGHTS OFFENCE INDEX - TAIL : AVERAGE COMPARED TO STANDARD 1 = 1%										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2010	0.2	0.6	0.4	0.9	0.9	0.3	0.4	0.4	1.1	0.5



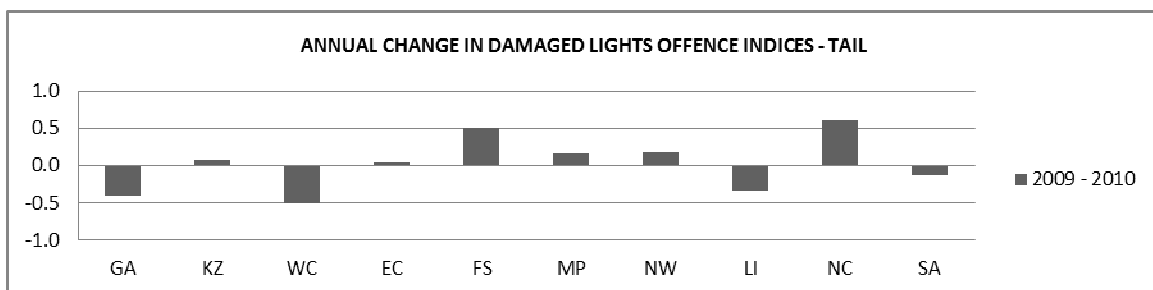
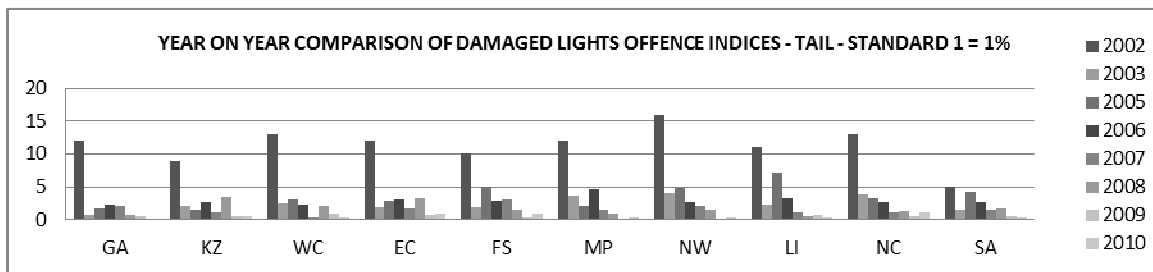
The information above shows that on a national basis the index for damaged tail light offences for 2010 in this category is highest in Northern Cape (1.1), followed by Free State (0.9) and Eastern Cape (0.9). Gauteng has the lowest offence index with 0.2, followed by Mpumalanga (0.3), North West (0.4) and Limpopo (0.4).



#### 2.14.2.4 Comparison of offence indices for different years: Tail Lights

Information on damaged rear tail lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF DAMAGED LIGHTS OFFENCE INDICES - TAIL - STANDARD 1 = 1%										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12	9	13	12	10	12	16	11	13	5
2003	0.8	2.2	2.5	1.9	1.9	3.7	4	2.3	3.8	1.6
2005	1.7	1.5	3	2.9	5	2.1	4.8	7.2	3.2	4.2
2006	2.3	2.8	2.4	3.1	2.9	4.6	2.7	3.2	2.7	2.8
2007	2.1	1.2	0.3	1.7	3.0	1.5	2.1	1.1	1.1	1.6
2008	0.8	3.5	2.1	3.2	1.5	0.9	1.5	0.5	1.4	1.7
2009	0.6	0.5	0.9	0.8	0.4	0.2	0.2	0.8	0.5	0.6
2010	0.2	0.6	0.4	0.9	0.9	0.3	0.4	0.4	1.1	0.5
ANNUAL CHANGE IN DAMAGED LIGHTS OFFENCE INDICES - TAIL										
2007 - 2008	-1.3	2.3	1.8	1.5	-1.5	-0.6	-0.6	-0.6	0.3	0.1
2008 - 2009	-0.2	-3.0	-1.2	-2.4	-1.1	-0.7	-1.3	0.3	-0.9	-1.1
2009 - 2010	-0.4	0.1	-0.5	0.0	0.5	0.2	0.2	-0.3	0.6	-0.1



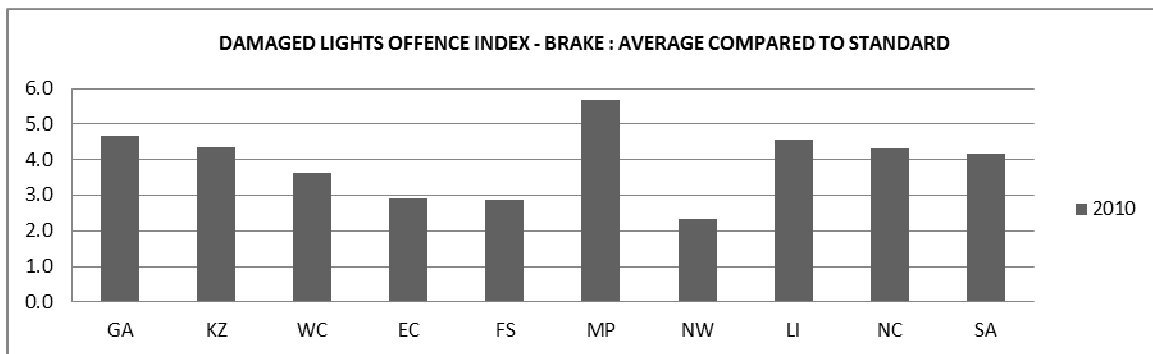
The information above shows that on a national basis the index for damaged tail light offences in this category has decreased from 0.6 in 2009 to 0.5 in 2010. Northern Cape has the highest offence index in this regard for 2010 with 1.1, and Gauteng has the lowest offence index with 0.2. Northern Cape shows the largest increase in offence indices, from 0.5 to 1.1. Western Cape shows the largest decrease in offence indices from 0.9 to 0.4.

### 2.14.2.5 Average Offence for Brake Lights

Information on damaged brake lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

AVERAGE DAMAGED LIGHTS OFFENCE RATES - BRAKE										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA NWT
2010	4.7%	4.3%	3.6%	2.9%	2.9%	5.7%	2.3%	4.6%	4.3%	4.2%

DAMAGED LIGHTS OFFENCE INDEX - BRAKE : AVERAGE COMPARED TO STANDARD										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2010	4.7	4.3	3.6	2.9	2.9	5.7	2.3	4.6	4.3	4.2

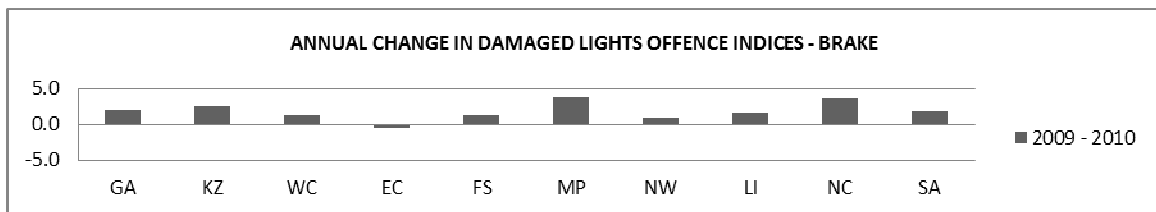
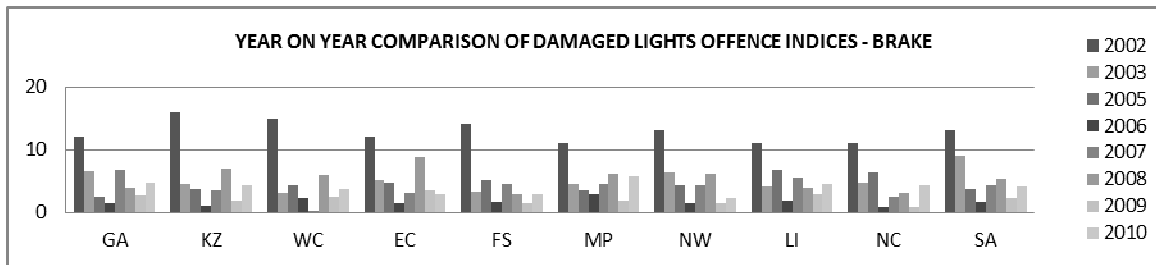


The information above shows that on a national basis the index for damaged brake light offences for 2010 in this category is highest in Mpumalanga (5.7), followed by Gauteng (4.7) and Limpopo (4.6) . North West has the lowest offence index with 2.3, followed by Free State (2.9) and Eastern Cape (2.9).

### 2.14.2.6 Comparison of offence indices for different years: Brake Lights

Information on damaged brake lights for a combination of all vehicles, in both urban and rural areas, during daytime and night time is shown in the following table and reflected in the graph below.

YEAR ON YEAR COMPARISON OF DAMAGED LIGHTS OFFENCE INDICES - BRAKE										
YEAR	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12	16	15	12	14	11	13	11	11	13
2003	6.5	4.6	3.2	5.2	3.3	4.6	6.3	4.2	4.8	9
2005	2.4	3.7	4.3	4.7	5.1	3.5	4.3	6.8	6.3	3.7
2006	1.4	1.1	2.2	1.5	1.7	2.9	1.4	1.9	0.9	1.6
2007	6.8	3.6	0.2	3.1	4.6	4.6	4.3	5.5	2.4	4.4
2008	4.0	7.0	5.9	8.9	2.9	6.2	6.1	3.9	3.1	5.3
2009	2.6	1.9	2.4	3.5	1.6	1.9	1.5	3.0	0.8	2.3
2010	4.7	4.3	3.6	2.9	2.9	5.7	2.3	4.6	4.3	4.2
ANNUAL CHANGE IN DAMAGED LIGHTS OFFENCE INDICES - BRAKE										
2007 - 2008	-2.8	3.4	5.7	5.8	-1.7	1.6	1.8	-1.6	0.7	0.9
2008 - 2009	-1.4	-5.1	-3.5	-5.4	-1.3	-4.3	-4.6	-0.9	-2.3	-3.0
2009 - 2010	2.0	2.4	1.2	-0.6	1.3	3.8	0.8	1.6	3.5	1.8



The information above shows that on a national basis the index for damaged brake light offences in this category has increased from 2.3 in 2009 to 4.2 in 2010. Mpumalanga has the highest offence index in this regard for 2010 with 5.7, and North West has the lowest offence index with 2.3. Mpumalanga shows the largest increase in offence indices, from 1.9 to 5.7. Eastern Cape shows the largest decrease in offence indices from 3.5 to 2.9.

## **2.15 SUMMARY OF VEHICLE DOCUMENTATION: CORRELATION BETWEEN NUMBER PLANT AND LICENCE DISC**

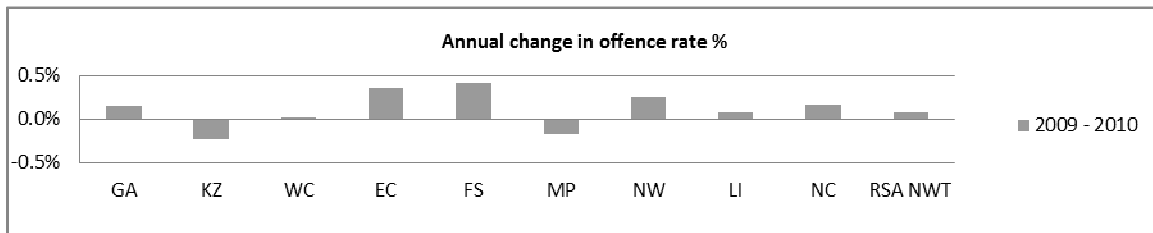
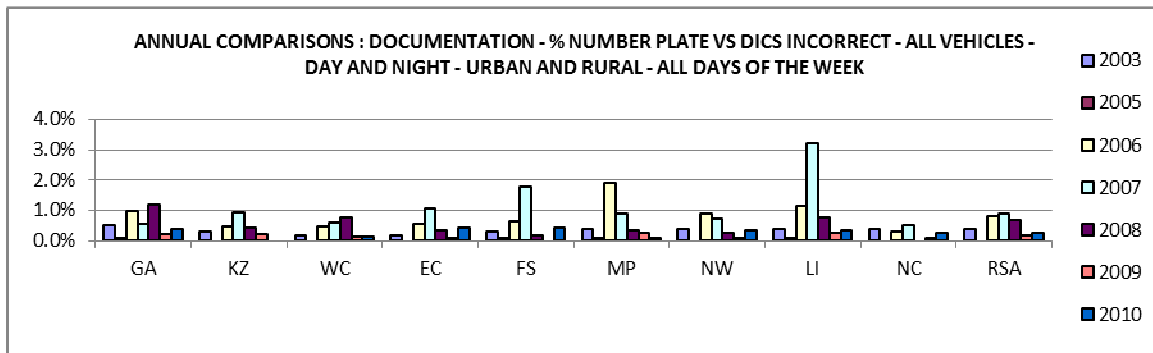
The following tables show the offence rates for Vehicle Documentation. The sub sections are broken down into the different vehicle types. No historic data is available for Buses and Trucks.

On average there is a slight decrease between the 2009 and 2010 offence rates. When looking at the overall trend line since the 2003 offence survey, there seems to be a slight decrease in the overall offence rate.

The overall offence rate seems to stay beneath 1%.

### 2.15.1 SUMMARY OF VEHICLE DOCUMENTATION – CORRELATION BETWEEN NUMBER PLATE & LICENSE DISC: ALL VEHICLES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

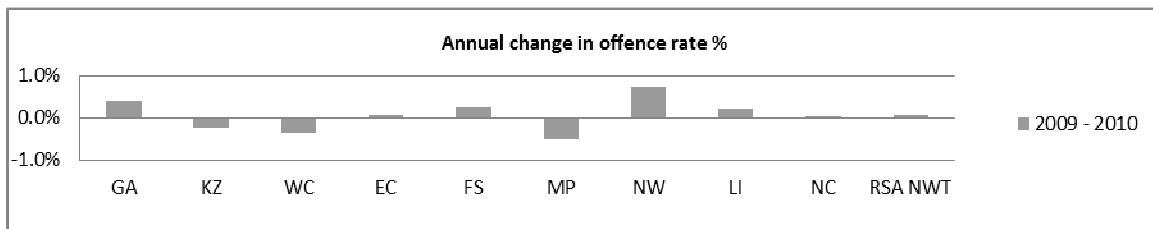
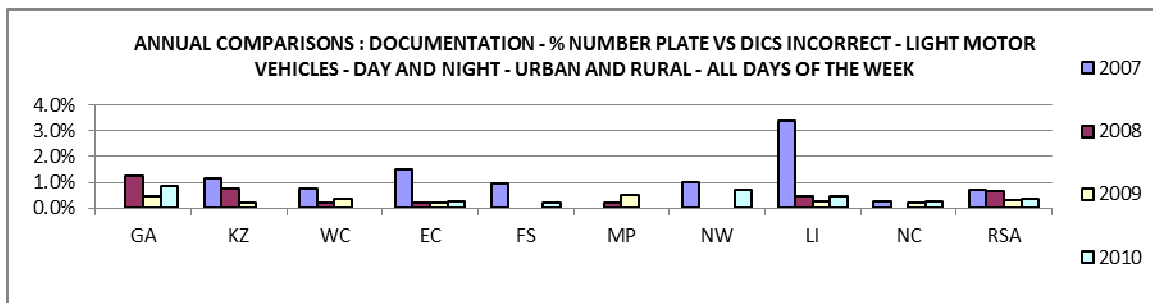
ANNUAL COMPARISONS : DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - ALL VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2003	0.5%	0.3%	0.2%	0.2%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%
2005	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%
2006	1.0%	0.5%	0.5%	0.6%	0.6%	1.9%	0.9%	1.2%	0.3%	0.8%
2007	0.6%	0.9%	0.6%	1.1%	1.8%	0.9%	0.7%	3.2%	0.5%	0.9%
2008	1.2%	0.4%	0.8%	0.3%	0.2%	0.3%	0.3%	0.8%	0.0%	0.7%
2009	0.2%	0.2%	0.1%	0.1%	0.0%	0.3%	0.1%	0.3%	0.1%	0.2%
2010	0.4%	0.0%	0.2%	0.4%	0.4%	0.1%	0.3%	0.3%	0.2%	0.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.6%	-0.5%	0.2%	-0.7%	-1.6%	-0.6%	-0.5%	-2.5%	-0.5%	-0.2%
2008 - 2009	-1.0%	-0.2%	-0.6%	-0.3%	-0.2%	-0.1%	-0.2%	-0.5%	0.1%	-0.5%
2009 - 2010	0.2%	-0.2%	0.0%	0.4%	0.4%	-0.2%	0.3%	0.1%	0.2%	0.1%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for all vehicles in this category has increased from 0.2% in 2009 to 0.3% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 0.4%, and KwaZulu Natal has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.0% to 0.4%. KwaZulu Natal shows the largest decrease in offence rate percentage from 0.2% to 0.0%.

## 2.15.2 SUMMARY OF VEHICLE DOCUMENTATION – CORRELATION BETWEEN NUMBER PLATE & LICENSE DISC: LIGHT MOTOR VEHICLES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

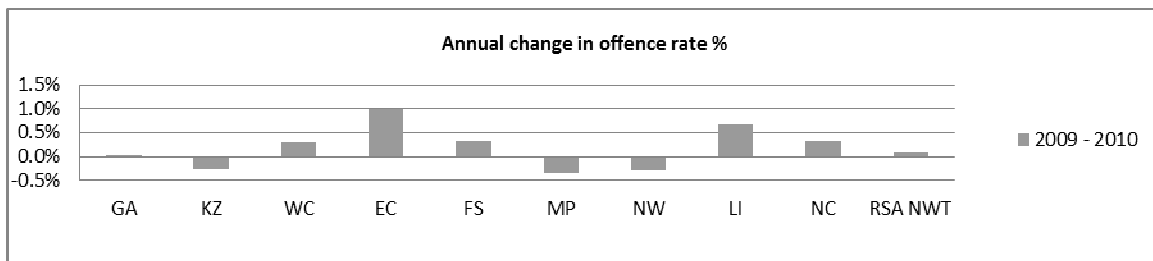
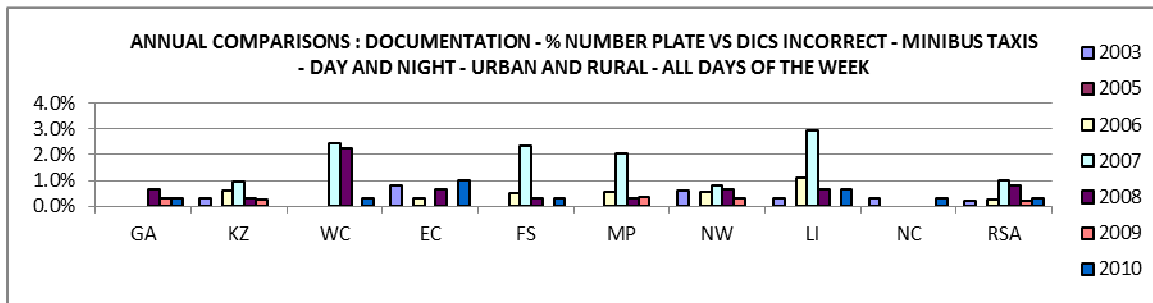
ANNUAL COMPARISONS : DOCUMENTATION - % NUMBER PLATE VS DISCS INCORRECT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	0.0%	1.2%	0.8%	1.5%	1.0%	0.0%	1.0%	3.4%	0.2%	0.7%
2008	1.3%	0.8%	0.2%	0.2%	0.0%	0.2%	0.0%	0.5%	0.0%	0.6%
2009	0.4%	0.2%	0.4%	0.2%	0.0%	0.5%	0.0%	0.2%	0.2%	0.3%
2010	0.9%	0.0%	0.0%	0.2%	0.2%	0.0%	0.7%	0.5%	0.2%	0.4%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	1.3%	-0.4%	-0.5%	-1.3%	-1.0%	0.2%	-1.0%	-2.9%	-0.2%	-0.1%
2008 - 2009	-0.8%	-0.5%	0.1%	0.0%	0.0%	0.3%	0.0%	-0.2%	0.2%	-0.3%
2009 - 2010	0.4%	-0.2%	-0.4%	0.1%	0.2%	-0.5%	0.7%	0.2%	0.0%	0.1%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Light Motor Vehicles in this category has increased from 0.3% in 2009 to 0.4% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 0.9%, and KwaZulu Natal, along with Western Cape and Mpumalanga, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 0.7%. Mpumalanga shows the largest decrease in offence rate percentage from 0.5% to 0.0%.

### 2.15.3 SUMMARY OF VEHICLE DOCUMENTATION – CORRELATION BETWEEN NUMBER PLATE & LICENSE DISC: MINIBUS TAXIS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

ANNUAL COMPARISONS : DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2003	0.0%	0.3%	0.0%	0.8%	0.0%	0.0%	0.6%	0.3%	0.3%	0.2%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2006	0.0%	0.6%	0.0%	0.3%	0.5%	0.6%	0.5%	1.1%	0.0%	0.3%
2007	0.0%	1.0%	2.4%	0.0%	2.3%	2.1%	0.8%	2.9%	0.0%	1.0%
2008	0.7%	0.3%	2.2%	0.7%	0.3%	0.3%	0.7%	0.7%	0.0%	0.8%
2009	0.3%	0.3%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.2%
2010	0.3%	0.0%	0.3%	1.0%	0.3%	0.0%	0.0%	0.7%	0.3%	0.3%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	0.7%	-0.6%	-0.2%	0.7%	-2.0%	-1.7%	-0.1%	-2.3%	0.0%	-0.2%
2008 - 2009	-0.4%	-0.1%	-2.2%	-0.7%	-0.3%	0.0%	-0.4%	-0.7%	0.0%	-0.6%
2009 - 2010	0.0%	-0.3%	0.3%	1.0%	0.3%	-0.3%	-0.3%	0.7%	0.3%	0.1%

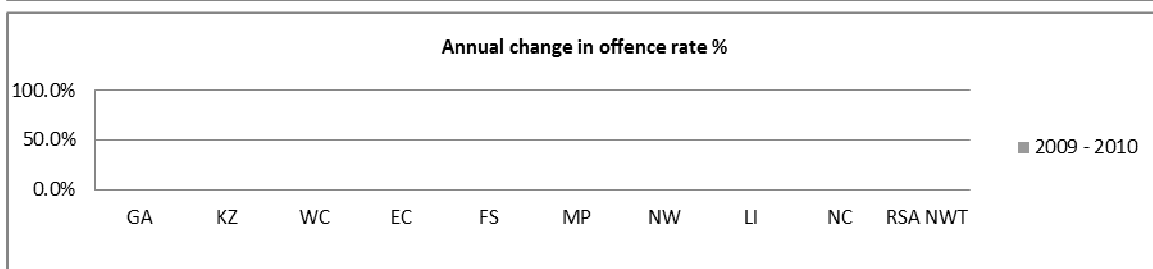
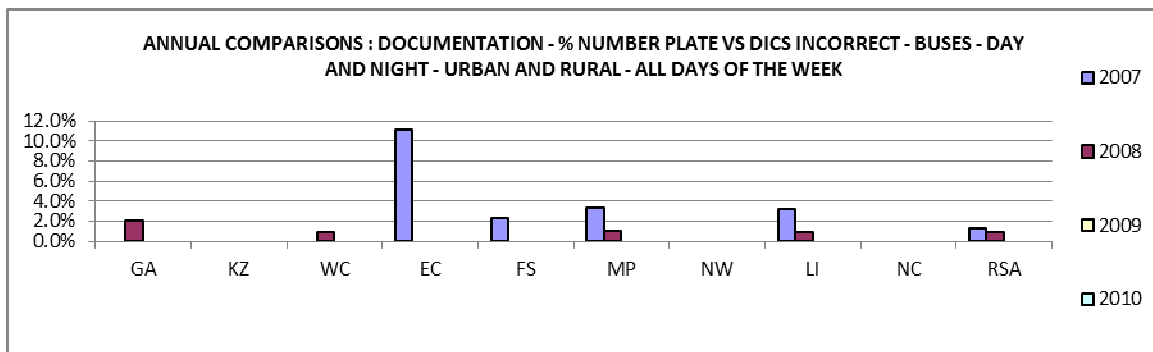


The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Minibus Taxis in this category has increased from 0.2% in 2009 to 0.3% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.0%, and KwaZulu Natal, along with Mpumalanga and North West, has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 1.0%.

KwaZulu Natal shows the largest decrease in offence rate percentage from 0.3% to 0.0%.

### 2.15.4 SUMMARY OF VEHICLE DOCUMENTATION – CORRELATION BETWEEN NUMBER PLATE & LICENCE DISC: BUSES – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

ANNUAL COMPARISONS : DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	0.0%	0.0%	0.0%	11.1%	2.3%	3.3%	0.0%	3.2%	0.0%	1.3%
2008	2.0%	0.0%	1.0%	0.0%	0.0%	1.1%	0.0%	0.9%	0.0%	1.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	2.0%	0.0%	1.0%	-11.1%	-2.3%	-2.2%	0.0%	-2.3%	0.0%	-0.4%
2008 - 2009	-2.0%	0.0%	-1.0%	0.0%	0.0%	-1.1%	0.0%	-0.9%	0.0%	-1.0%
2009 - 2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

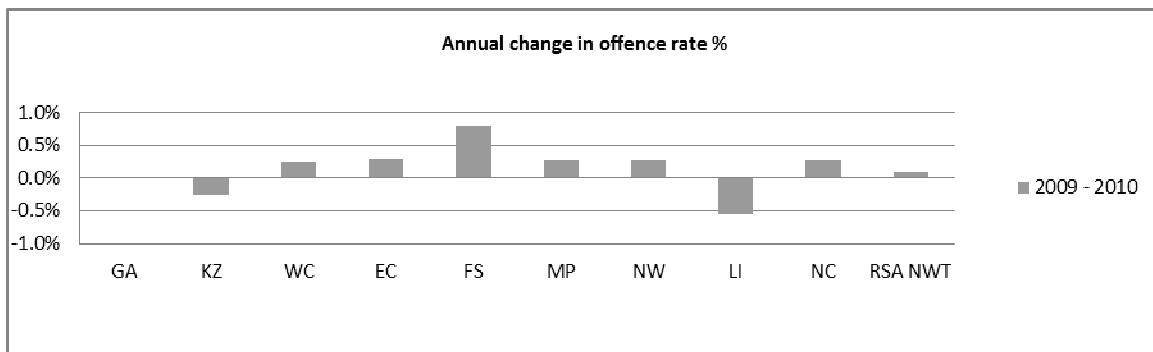
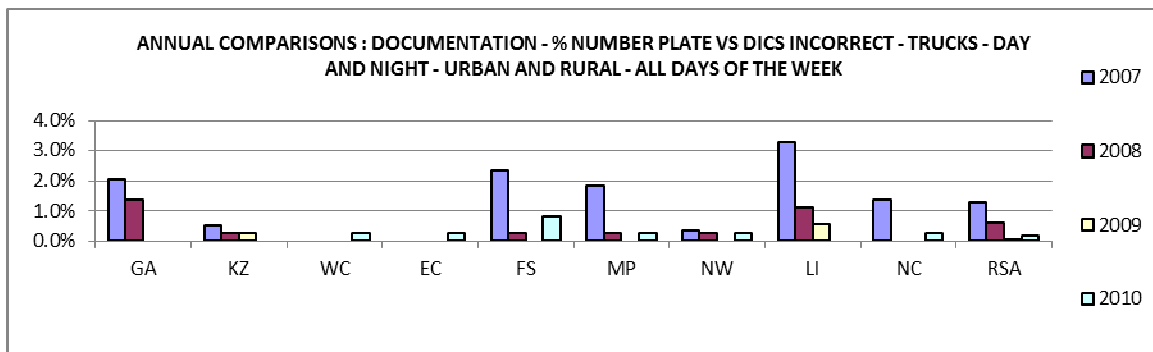


The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Buses in this category has remained the same between 2009 and 2010. No offences were recorded for this category during the 2010 survey, as well as during the previous survey in 2009.



## 2.15.5 SUMMARY OF VEHICLE DOCUMENTATION – CORRELATION BETWEEN NUMBER PLATE & LICENCE DISC: TRUCKS – URBAN AND RURAL ROADS– DAY TIME AND NIGHT TIME

ANNUAL COMPARISONS : DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	2.0%	0.5%	0.0%	0.0%	2.4%	1.9%	0.3%	3.3%	1.4%	1.3%
2008	1.4%	0.3%	0.0%	0.0%	0.3%	0.3%	0.3%	1.1%	0.0%	0.6%
2009	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.1%
2010	0.0%	0.0%	0.2%	0.3%	0.8%	0.3%	0.3%	0.0%	0.3%	0.2%
Annual change in offence rate %										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007 - 2008	-0.7%	-0.2%	0.0%	0.0%	-2.1%	-1.6%	-0.1%	-2.2%	-1.4%	-0.7%
2008 - 2009	-1.4%	0.0%	0.0%	0.0%	-0.3%	-0.3%	-0.3%	-0.6%	0.0%	-0.5%
2009 - 2010	0.0%	-0.2%	0.2%	0.3%	0.8%	0.3%	0.3%	-0.6%	0.3%	0.1%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Trucks in this category has increased from 0.1% in 2009 to 0.2% in 2010. Free State has the highest offence rate in this regard for 2010 with 0.8%, and Gauteng, along with KwaZulu Natal and Limpopo, has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.0% to 0.8%. Limpopo shows



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the largest decrease in offence rate percentage from 0.6% to 0.0%.

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## 2.16 CONCLUSIONS AND RECCOMENDATIONS

The recommendations flowing from the 2010 offence monitoring study are as follows:

- a. Although the general trend of law compliance rates has decreased between 2009 and 2010, the study found that, as in the past, offence levels on South African roads and the related levels of risk are still extremely high. The recommendation is repeated that a renewed, innovative, systematic, coordinated law enforcement and education intervention strategy be introduced under the leadership of the national Minister of Transport and the Road Traffic Management Corporation to bring the situation under control. This should be done in cooperation with the provincial and local spheres of government, other relevant departments of state, the passenger and freight transport industries, and research institutions. The aim should be to identify the factors that will bring about change in road user behaviour; and by focussing on those factors, to achieve levels of traffic law compliance that will make a real difference to the traffic safety situation. The implementation of AARTO should be monitored carefully and the data recorded compared to national and local offence levels to determine the effectiveness of the system.
- b. The most important offences to focus on, as identified in the study, are:
  - ✚ Driving under the influence of Alcohol: Very high levels of drunk driving were encountered in some provinces, especially during the night, with a national night time offence index of 2.3. Alcohol control should be stepped up and the penalties should be severe.
  - ✚ Barrier line offences. The huge contribution of this offence to the dangerous situation on our roads should be recognised, with a national day time offence index of 10.3.
  - ✚ Smooth and damaged tyres. Serious problems with tyres of vehicles, including trucks and taxis were found on the road, with a national worn tyre index of 5.6. Reasons for serious deterioration of tyres and for the apparent neglect of tyres by a large proportion of vehicle owners,

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- professional drivers and the freight and passenger transport industries should be investigated.
- ✚ Speeding. High levels of speeding offences were observed. The national rural speed index for 2010 remains very high on 5.6. Speed discipline must be restored on South African roads and community leaders on all levels should set an example.
  - c. The standards or targets for law compliance as proposed in Section 2.2.2 of this report (which represent a “quantum leap” towards safer road traffic conditions) should be set as targets for future road traffic management performance. It is also recommended that a study be undertaken as part of a future survey program to determine to what extent such standards have been formulated internationally; and to compare the proposed standards to international standards.
  - d. The recommendation with regard to pedestrian safety that was already made in the 2003 offence monitoring report is repeated. Pedestrian accidents are the single biggest accident category in South Africa. Pedestrians must be protected effectively in all parts of the traffic network. International research has demonstrated that highly reduced speed levels in urban areas (pedestrian sensitive areas) are the most effective and affordable way to reduce pedestrian casualties. *There is a disproportionate relationship between vehicle speed in pedestrian sensitive areas and the number of pedestrians injured and killed.* Compared to countries where international best practice in pedestrian safety is applied, the South African urban speed limit of 60km per hour is already high. Add to this that as many as 30% of urban drivers exceed this relatively high speed limit and one of the main reasons for the disastrous level of pedestrian casualties in this country becomes evident.
  - e. *Reduced speed levels via reduced speed limits combined with vigorous speed control measures in pedestrian sensitive areas should be a top priority, and will make a significant contribution to the reduction of pedestrian casualties in the country.*
  - f. While the national traffic offence monitoring survey provides valuable information about the levels of law compliance on South African roads, there
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is a further need for more detailed information. In particular, there is a need for more regular (monthly) information on local and regional levels within the provinces. Such information will enable traffic managers in the local, provincial and national spheres of government to set and pursue targets for law compliance with more accuracy and persistence, which in turn will lead to significant improvements in road safety on South African roads. It is therefore recommended that options for ways in which the annual national offence monitoring survey could be complemented with more regular and geographically more extensive surveys on provincial and local level, be investigated as part of a future offence monitoring study.

- g. It is recommended that the RTMC consider expanding its current accident reporting process (which focuses only on fatal accidents) to include serious injury accidents. This will lead to a more comprehensive understanding of the road accident trends and their relationship to offences and other factors contributing to accidents.
- h. Indicators and indexes of all the previous surveys since 2002 are reported in the 2010 report. A new approach (with speed indicators excluding the 10% grace, offence levels weighted according to the proportional contribution of the different vehicle categories) was used to calculate the indexes in the 2006 to 2010 report (see the explanation in section 1.2).
- i. It is recommended that future national surveys be undertaken during the months of August to October. The reason is that the execution of the study during the same season every year will add to the validity of the year-on-year comparisons. This specific time of the year is proposed because of the good weather conditions that normally prevail during this time (low rainfall in most parts of the country) and because there are a minimum of holidays that influence traffic patterns during that period.
- j. The comparison between the traffic offence results for 2010 and the accident statistics for 2010 (discussed in detail in chapter 7.3.1) showed remarkable correlation on a national basis, as well as on a provincial basis. The reasons for this strong correlation can most likely be attributed to the recession

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experienced in 2010. During the recession, the citizens of South Africa were much less likely to spend time on the roads because of the already high fuel prices. This would result in people spending only the necessary amount of time on the roads in order to save money on fuel. Another factor that could have played a big role in this reduction is the 2010 FIFA world cup. The world cup required an increase in law enforcement across the country, resulting in a higher adherence by the citizens of South Africa to the laws of the road. This increase in obedience could most likely explain the large reductions observed in both fatal accidents statistics and the traffic offence rates for 2010.

### **3 CHAPTER 3: GENERAL OVERVIEW OF THE SURVEY**

#### **3.1 GOAL OF THE SURVEY**

The goal of the Arrive Alive Offence Monitoring Program is to provide the RTMC with management information related to the effectiveness of law enforcement and education intervention in the country. The information obtained from the traffic offence monitoring program is mainly used for the following purposes:

- a. To complement existing traffic safety information and to clarify the factors that contributes to road accidents;
- b. To measure the effect and impact of road safety and law enforcement programs;
- c. To determine the general level of lawlessness on the provincial and municipal road network on a year to year basis; and
- d. To evaluate the impact and effectiveness of the implementation of the AARTO project.

The background to this goal statement is as follows: The Arrive Alive Offence Monitoring Program is part of the comprehensive Arrive Alive road traffic safety program which was launched by the Department of Transport on 1 October 1997.

The main goal of the Arrive Alive program is to promote road traffic safety throughout South Africa, in order to achieve a decrease in road accidents, fatalities and injuries.

A comprehensive, multi-disciplinary approach is followed in the Arrive Alive program. One of the methods to bring about a reduction in accidents, fatalities and injuries is to reduce road traffic offence levels. It has been clearly established that a large majority of accidents are directly or indirectly related to traffic offences. It is well known that moving violations (e.g. speeding, overtaking when not safe, and ignoring traffic signals and many more) make a disproportionate contribution to road accidents. Offences related to driver ability and fitness (in particular drivers being intoxicated, but also drivers not properly trained and

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licensed) are significant contributors to accident levels. Offences in the form of driving unfit vehicles also play a role. In addition, administrative offences (e.g. drivers not carrying their licenses on person for positive identification when stopped, drivers not issued with permits when required for certain classes of vehicles, number plates and licence disks not being in order, etc.) are important road safety factors as these offences restrain effective law enforcement.

Because of the significance of traffic offences on traffic safety, the operations of law enforcement departments as well as the education entities are of utmost importance. The comprehensive Arrive Alive program therefore focuses to a very large extent on these activities. As the institution responsible for the strategic management of traffic safety in South Africa, the National Department of Transport, with assistance from the RTMC has to measure the effectiveness of law enforcement and education intervention in the country. The best way to measure its effectiveness is to measure its impact on offence levels, hence the Arrive Alive Offence Monitoring program.

This report provides the feedback from the Arrive Alive Offence Monitoring program that was executed during 2010. Comparisons with the information obtained from previous surveys are made to establish a trend.

### **3.2 STANDARDISATION OF SURVEY**

Since 2002 the annual road traffic offence survey was standardised in order to be comparable, as far as possible, on a year to year basis. The ideal is that the same times (seasons, days of the weeks, approximate times of the day) and same locations be used for the survey in consecutive years. A preliminary guideline on the network of survey locations was proposed during the 2002 study, and this network was again used during the 2003 study, with some minor additions. For the 2005 survey, a number of new locations were selected to cover hazardous rural routes that were identified by the RTMC. During the 2006 survey the locations that were selected during 2005 were used. The same locations were used during the 2007 surveys. These locations were used again during the



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2008, 2009 and 2010 surveys, although fewer locations were visited per town, and only 60kph zones were visited in urban areas.

An important issue to be noted is that, to date, the surveys were all held during different times of the year. Although some difficulties were experienced with the project appointment, the survey times were standardised for 2008, 2009 and 2010. The annual survey times are listed below:

- ✚ 2002: Late October onwards;
- ✚ 2003: Early February onwards;
- ✚ 2004: No survey;
- ✚ 2005: Mid September onwards;
- ✚ 2006: May and June;
- ✚ 2007: October to December, and February 2008
- ✚ 2008: Mid August to the beginning of November
- ✚ 2009: August to beginning of November
- ✚ 2010: September to November

To have year on year comparability of the data collected during the surveys, the environmental differences between surveys should be kept as small as possible. It is generally accepted that seasonal factors (issues such as length of daylight, rainy seasons, holiday seasons, typical fluctuations in economic and agricultural activity during different seasons, etc) has a definite influence on traffic patterns, and therefore also on offence patterns. The need for year on year comparability of consecutive surveys therefore implies that surveys should be done, not only on the same routes, at the same locations, at the same times of the day and of the week, but also during the same seasons. It was recommended in the 2006 Traffic Offence survey Report that the Corporation introduce a program that will ensure that the survey will each year be executed during the same weeks of the year. The best time of the year to do a national survey will be September to November, the reasons being is that this is normally a relatively dry period in all parts of the country; and days are longer than in mid winter; and the period does not include school holidays.

### 3.3 OFFENCES AND OTHER OBSERVATIONS

The following offences were measured:

- ✚ Drivers exceeding the speed limit in urban and rural areas
- ✚ Drivers exceeding the legal breath alcohol limit
- ✚ Overtaking on a barrier line.
- ✚ Vehicles disobeying traffic signals
- ✚ Wearing of seatbelts recorded at traffic signals (unobserved) – Surveyors were not observed by the drivers and passengers of the vehicles (Unobserved Drivers & front passengers)
- ✚ Wearing of seatbelts (observed) – The wearing of seatbelts by back passengers and the use of child restraints was recorded during road blocks. (Observed Drivers & front passengers)
- ✚ Driver licence present and valid
- ✚ Public Driver Permit present and valid
- ✚ The validity of the vehicle registration discs and correlation between the registration disc and number plate
- ✚ Worn vehicle tyres
- ✚ Vehicle lights defective
- ✚ The use of cellular phones while driving a vehicle
- ✚ Pedestrians disobeying traffic signals

Definitions of the offences are provided in Annexure B.

A summary of the results obtained during the surveys of these offences is provided in Chapter 2. The detailed results are reported in Chapter 6.

### 3.4 DATES OF THE SURVEY

The 2010 offence monitoring survey was done from 6 September 2010 to 16 November 2010. The specific dates for the different provinces were as follows:

Province	Survey Type	Date Start	Date End
Free State	Speed	6 September 2010	13 September 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	8 September 2010	15 September 2010
Kwa Zulu Natal	Speed	13 September 2010	18 September 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	15 September 2010	21 September 2010
Eastern Cape	Speed	18 September 2010	1 October 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	21 September 2010	30 September 2010
Western Cape	Speed	1 October 2010	7 October 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	30 September 2010	7 October 2010
Northern Cape	Speed	13 October 2010	18 October 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	8 October 2010	13 October 2010

Province	Survey Type	Date Start	Date End
North West	Speed	20 October 2010	26 October 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	14 October 2010	20 October 2010
Gauteng	Speed	27 October 2010	2 November 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	20 October 2010	26 October 2010
Limpopo	Speed	3 November 2010	10 November 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	28 October 2010	3 November 2010
Mpumalanga	Speed	10 November 2010	16 November 2010
	Barrier lines		
	Pedestrian Compliance		
	Robots		
	Roadblocks and Alcohol	3 November 2010	11 November 2010

### 3.5 THE CITIES AND TOWNS AND SURVEY LOCATIONS

The towns and cities listed below were included in the survey for the urban part of the survey. The rural component of the survey was conducted on roads in the surrounding area of these towns and cities. Surveys were conducted with the assistance of the municipal and provincial Traffic Departments of these towns or cities.

The cities, towns and areas in the survey were as follows:

Province	Town	Province	Town
Gauteng	Krugersdorp	Mpumalanga	Standerton
	Vereeniging		Ermelo
	Boksburg		Nelspruit
	Johannesburg		Lydenburg
	Pretoria		Witbank
KZN	Port Shepstone	North West	Potchefstroom
	Pietermaritzburg		Klerksdorp
	Durban		Mafikeng
	Richardsbaai		Rustenburg
	Newcastle		Britz
Western Cape	Piketberg	Limpopo	Modimolle
	Cape Town		Mokopane
	Paarl		Polokwane
	Laingsburg		Tzaneen
	Mossel Bay		Makhado
Eastern Cape	Port Elizabeth	Northern Cape	Colesberg
	King Williams Town		Kimberley
	East London		Olifantshoek
	Queenstown		Upington
	Umtata		Springbok
Free State	Harrysmith		
	Kroonstad		
	Welkom		
	Bloemfontein		
	Botshabelo		

## 4 CHAPTER 4: PROCEDURES AND METHODS FOLLOWED

### 4.1 SAMPLE SIZES

The sample sizes used during the survey process was prescribed by the RTMC. The prescribed confidence interval of 95% was reached in all cases when the total dataset for the specific survey and vehicle types were taken into account. In some cases where the datasets were broken down further (For example: weekday vs. Weekend analysis), the confidence interval fell outside the 90% margin. In practice it is sometimes difficult to achieve these targets, particularly in areas where only a few vehicles for a specific type can be found (e.g. buses and minibus taxis on rural roads).

#### 4.1.1 SUMMARY OF SAMPLE SIZES OBTAINED DURING THE 2010 SURVEY

When looking at the total sample sizes obtained for each sample size category, all of the required sample size requirements have been reached and also exceeded. The table below shows a summary of the required and obtained sample sizes for the 2010 survey:

Survey Type	Required	Obtained	% Exceeded
Speed	62190	71904	116%
Vehicle Condition	10350	10819	105%
Alcohol	4860	8217	169%
Pedestrian Compliance	5400	6140	114%

By exceeding all the required sample sizes, the accuracy of the individual offence calculations is improved. This in turn provides for a more accurate reflection of the state law abidance on South African roads.

#### 4.1.2 ISSUES REGARDING SPESIFIC SAMPLE SIZE CATEGORIES

During the 2010 survey the teams experienced a few difficulties regarding specific sample size categories. The difficulties are listed and discussed below.

Bus samples during roadblocks:

Because of initial delays at the beginning of the 2010 survey, the program had to be shortened. This meant that teams only had 2 months instead of 3 months to gather all the data required to complete the survey. Because of this, there was no extra time available for teams outside of their program to go out and find scarce vehicles. As a result, the roadblock team was unable to complete a full sample size for day time buses, but they did manage to exceed their required sample for night time buses by 40%.

The sample sizes obtained, as well as the confidence interval of the offence results are shown in tabular format for each offence discussion in Chapter 6. The tables in section 4.1.3 show the overall sample sizes that were obtained on a provincial level for each offence category monitored.

## 4.1.3 SUMMARY OF SAMPLE SIZES OBTAINED DURING 2010 SURVEY

### 4.1.3.1 Speed

Light Motor Vehicles												
Province	Urban						Rural					
	Day			Night			Day			Night		
	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%
GA	1500	1,680	112%	1200	1,220	102%	1500	1,600	107%	1200	1,280	107%
KZ	1500	1,600	107%	1200	1,280	107%	1500	1,600	107%	1200	1,298	108%
WC	1500	1,749	117%	1200	1,290	108%	1500	1,553	104%	1200	1,520	127%
EC	1500	1,669	111%	600	620	103%	1500	1,520	101%	600	825	138%
FS	1500	1,760	117%	600	800	133%	1500	2,080	139%	600	1,599	267%
MP	1500	1,520	101%	600	800	133%	1500	1,660	111%	600	640	107%
NW	1500	1,500	100%	600	640	107%	1500	1,537	102%	600	640	107%
LI	1500	1,600	107%	600	640	107%	1500	1,600	107%	600	783	131%
NC	1500	1,520	101%	600	810	135%	1500	1,919	128%	600	647	108%
SA	13500	14,598	108%	7200	8,100	113%	13500	15,069	112%	7200	9,232	128%

Minibus Taxis												
Province	Urban						Rural					
	Day			Night			Day			Night		
	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%
GA	400	486	122%	150	150	100%	400	405	101%	100	123	123%
KZ	400	417	104%	150	201	134%	400	419	105%	100	223	223%
WC	400	485	121%	150	387	258%	400	408	102%	100	139	139%
EC	400	405	101%	150	157	105%	200	301	151%	100	198	198%
FS	400	414	104%	150	170	113%	200	213	107%	100	189	189%
MP	400	442	111%	150	164	109%	200	204	102%	100	114	114%
NW	400	407	102%	150	167	111%	200	208	104%	100	246	246%
LI	400	441	110%	150	155	103%	200	385	193%	100	160	160%
NC	400	414	104%	150	182	121%	200	244	122%	100	106	106%
SA	3600	3,911	109%	1350	1,733	128%	2400	2,787	116%	900	1,498	166%

Buses												
Province	Urban						Rural					
	Day			Night			Day			Night		
	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%
GA	60	62	103%				50	73	146%			
KZ	60	65	108%				50	66	132%			
WC	60	75	125%				50	52	104%			
EC	60	71	118%				25	58	232%			
FS	60	82	137%				25	185	740%			
MP	60	62	103%				25	56	224%			
NW	60	97	162%				25	64	256%			
LI	60	70	117%				25	106	424%			
NC	60	73	122%				25	92	368%			
SA	540	657	122%				300	752	251%			



Trucks												
Province	Urban						Rural					
	Day			Night			Day			Night		
	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%	Required	Obtained	%
GA	400	422	106%	100	120	120%	400	441	110%	400	419	105%
KZ	400	406	102%	100	219	219%	400	438	110%	400	415	104%
WC	400	409	102%	100	111	111%	400	456	114%	400	504	126%
EC	400	419	105%	100	109	109%	400	455	114%	400	401	100%
FS	400	437	109%	100	329	329%	400	673	168%	400	657	164%
MP	400	411	103%	100	141	141%	400	455	114%	400	400	100%
NW	400	413	103%	100	171	171%	400	459	115%	400	400	100%
LI	400	410	103%	100	168	168%	400	474	119%	400	440	110%
NC	400	426	107%	100	113	113%	400	440	110%	400	406	102%
SA	3600	3,753	104%	900	1,481	165%	3600	4,291	119%	3600	4,042	112%

#### 4.1.3.2 Vehicle Condition

Light Motor Vehicles			
Province	Required	Obtained	%
GA	400	469	117%
KZ	400	413	103%
WC	400	440	110%
EC	400	405	101%
FS	400	428	107%
MP	400	406	102%
NW	400	415	104%
LI	400	425	106%
NC	400	409	102%
SA	3600	3810	106%

Minibus Taxis			
Province	Required	Obtained	%
GA	300	300	100%
KZ	300	306	102%
WC	300	326	109%
EC	300	300	100%
FS	300	303	101%
MP	300	302	101%
NW	300	316	105%
LI	300	303	101%
NC	300	305	102%
SA	2700	2761	102%

Buses			
Province	Required	Obtained	%
GA	100	120	120%
KZ	100	101	101%
WC	100	116	116%
EC	100	103	103%
FS	100	107	107%
MP	100	100	100%
NW	100	101	101%
LI	100	102	102%
NC	100	127	127%
SA	900	977	109%
Trucks			
Province	Required	Obtained	%
GA	350	357	102%
KZ	350	348	99%
WC	350	405	116%
EC	350	352	101%
FS	350	372	106%
MP	350	357	102%
NW	350	370	106%
LI	350	350	100%
NC	350	360	103%
SA	3150	3271	104%

#### 4.1.3.3 Alcohol

Light Motor Vehicles						
	Day			Night		
	Required	Obtained	%	Required	Obtained	%
GA	100	217	217%	100	251	251%
KZ	100	139	139%	100	173	173%
WC	100	172	172%	100	191	191%
EC	100	128	128%	100	185	185%
FS	100	159	159%	100	198	198%
MP	100	104	104%	100	149	149%
NW	100	212	212%	100	150	150%
LI	100	102	102%	100	148	148%
NC	100	100	100%	100	208	208%
SA	900	1333	148%	900	1653	184%

Minibus Taxis						
	Day			Night		
	Required	Obtained	%	Required	Obtained	%
GA	60	125	208%	60	175	292%
KZ	60	94	157%	60	120	200%
WC	60	154	257%	60	100	167%
EC	60	100	167%	60	122	203%
FS	60	128	213%	60	101	168%
MP	60	66	110%	60	100	167%
NW	60	116	193%	60	117	195%
LI	60	71	118%	60	96	160%
NC	60	100	167%	60	105	175%
SA	540	954	177%	540	1036	192%
Buses						
	Day			Night		
	Required	Obtained	%	Required	Obtained	%
GA	60	55	92%	40	65	163%
KZ	60	36	60%	40	65	163%
WC	60	64	107%	40	52	130%
EC	60	59	98%	40	44	110%
FS	60	67	112%	40	40	100%
MP	60	42	70%	40	58	145%
NW	60	45	75%	40	56	140%
LI	60	50	83%	40	52	130%
NC	60	52	87%	40	75	188%
SA	540	470	87%	360	507	141%
Trucks						
	Day			Night		
	Required	Obtained	%	Required	Obtained	%
GA	60	211	352%	60	146	243%
KZ	60	130	217%	60	101	168%
WC	60	136	227%	60	158	263%
EC	60	162	270%	60	119	198%
FS	60	139	232%	60	134	223%
MP	60	96	160%	60	66	110%
NW	60	125	208%	60	141	235%
LI	60	70	117%	60	83	138%
NC	60	118	197%	60	129	215%
SA	540	1187	220%	540	1077	199%

#### 4.1.3.4 Pedestrian Compliance

Pedestrian Compliance						
	Day			Night		
	Required	Obtained	%	Required	Obtained	%
GA	300	320	107%	300	320	107%
KZ	300	320	107%	300	320	107%
WC	300	320	107%	300	300	100%
EC	300	320	107%	300	300	100%
FS	300	440	147%	300	360	120%
MP	300	400	133%	300	300	100%
NW	300	440	147%	300	380	127%
LI	300	320	107%	300	360	120%
NC	300	300	100%	300	320	107%
SA	2700	3180	118%	2700	2960	110%

## **4.2 SURVEY FORMS**

The forms used during the survey were mostly the same as those prescribed in the tender documents and used during previous studies. Some minor changes were made to accommodate the recording of additional information required by the RTMC. The survey forms that were used are attached in Annexure H.

## **4.3 SCHEDULES**

Survey schedules were drawn up in accordance with guidelines in the tender document. The schedules were designed to meet and exceed the minimum limits as set by the Corporation with regard to level of confidence, and to improve on the maximum margins of errors that were set. During previous surveys in the case of some vehicle classes (especially buses, but also for example taxis and trucks during night time) it was very difficult to reach the required samples within a reasonable time. By adjusting the scheduled programs it was possible to achieve, and even exceed, the required sample sizes for all vehicle types during the 2010 survey.

The survey teams also moved to additional locations in a specific area if it was found that not enough vehicles of a specific type was observed at a specific location. Traffic officers attending roadblocks also assisted the survey team greatly by advising the survey team where scarcer vehicle types could be found, and moving the road blocks to these areas to obtain the necessary sample.

## **4.4 TIMES OF THE DAY AND DAYS OF THE WEEK**

The requirement of the RTMC for surveys since 2005 was that day time as well as night time had to be covered; and that surveys should be done during weekdays as well as over weekends. Surveys were conducted from Monday morning to Saturday night, scheduled in such a way to ensure that all surveys were performed during the required times, and that a representative sample could be obtained for each respective survey category.

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## 4.5 SURVEY LOCATIONS

The network of locations that was used during the previous surveys was used as a base for determining the location for the 2010 traffic offence survey. The survey locations were selected to provide for a wide distribution of survey points over the target area, but also to ensure that the category of vehicle that needed to be surveyed would be found in ample volumes so as to reach the prescribed sample sizes within the time that was available for the survey. Reference to the list of survey locations with codes and co-ordinates can be found in Annexure C.

All the locations used are also indicated in the RTMC Traffic Offence Survey software developed specifically for the processing of the offence data.

## 4.6 ARRANGEMENTS WITH TRAFFIC DEPARTMENTS

Traffic officers were required to attend all road blocks to assist with the accommodation of traffic and provide assistance during the survey. The RTMC and the project team informed all provincial and municipal traffic heads of the survey well in advance. In most cases the assistance provided by Traffic Departments was exceptional and well organised, with very few road blocks delayed due to traffic officers not being present.

## 4.7 EQUIPMENT

The following equipment was acquired for the 2007 survey, and reused for subsequent surveys:

- ✚ A SafetyExpress Stromberg road block trailer complying with the K78 specifications was purchased and used for the accommodation of traffic.
- ✚ All alcohol readings were taken using a Sentech Alcoscan AL-6000.
- ✚ Two AlcoBlow breath alcohol scanners were purchased and used from 2008 onwards.
- ✚ Genesis GHD radar guns were used for the measuring of speed.

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The equipment was selected for functionality and reliability in the field. The speed and alcohol measuring devices were calibrated regularly to comply with the manufacturers specifications.

#### **4.8 THE CONSTITUTION OF THE SURVEY TEAM**

The survey team consisted of two field teams consisting of:

- One dedicated road block team comprising of three members
- One dedicated team of two persons to survey
  - Speed
  - Barrier line
  - Hazardous routes
  - Robots
  - Unobserved seatbelts
  - Pedestrian traffic signal compliance

In total five field survey persons were used, all unemployed and with HDI status. The same persons were mostly used since 2007, ensuring consistent data collection over the different survey years.

Survey teams were trained by senior personnel of the project team to perform a specific task. The same team was used to conduct surveys throughout the country. This ensures that the quality of the data collected is accurate and of the highest standard possible.





A dedicated project manager was assigned to managed and oversee the day to day operation of the project. An administrative assistant was also dedicated to coordinate accommodation and finances.

The survey teams were visited on site at regular intervals to ensure that the surveys were being conducted to specification. Senior officials from the RTMC also visited the survey teams.

## 4.9 DATA CAPTURING AND PROCESSING

Great care was taken to safeguard the survey forms and recorded data while the survey teams were in the field. Copies was made and mailed to head office via registered mail on a weekly basis. Originals were collected during site visits by senior staff during every two to three weeks. All data was reviewed by a senior data analyst and captured by four data capturers at the MicroZone offices.

MicroZone developed a custom software product specifically for the capturing, processing and reporting of the traffic offence survey information. The software is built on GIS technology and allows the user to:

-  View all the survey point on an interactive GIS map
-  View photos of the survey
-  View all the data collected during a specific survey
-  Draw detail and summary reports on all the data, or a subset thereof

A website displaying all the survey locations, captured data, as well as survey results was also developed. The web site will be made public as soon as approval from the RTMC has been obtained to publish the data.

Find a more detailed discussion of the software in annexure D.



## 4.10 WEIGHTING SYSTEM

The simplified weighting system to determine the national average figures that were introduced since the 2005 report was used again for the 2010 study. For the 2005 to 2010 reports the weighting system was based on the estimated number of vehicle kilometres travelled per province, as calculated by the RTMC based on fuel consumption in the different provinces. The simplifying assumption behind this choice is that, under “normal” conditions, the likelihood for offences to occur in the different provinces will be directly related to the number of kilometres that vehicles travel in the different provinces.

### 4.10.1 COMPARISON OF VEHICLE KILOMETER WEIGHTS PER PROVINCE

Provinces	2007 WEIGHTING SYSTEM		2008 WEIGHTING SYSTEM		2009 WEIGHTING SYSTEM		2010 WEIGHTING SYSTEM	
	WEIGHT PER PROVINCE	% OF NATIONAL TOTAL	WEIGHT PER PROVINCE	% OF NATIONAL TOTAL	WEIGHT PER PROVINCE	% OF NATIONAL TOTAL	WEIGHT PER PROVINCE	% OF NATIONAL TOTAL
Gauteng	3 692.84	34.53%	3628.34	34%	3643.03	34%	3,606.93	33%
KwaZulu-Natal	1 747.64	16.34%	1728.15	16%	1748.57	16%	1,758.90	16%
Western Cape	1 683.94	15.75%	1671.12	15%	1651.58	15%	1,653.79	15%
Eastern Cape	773.53	7.23%	763.3	7%	772.95	7%	783.82	7%
Free State	565.76	5.29%	687.56	6%	723.46	7%	769.61	7%
Mpumalanga	857.56	8.02%	975.85	9%	957.54	9%	1,040.99	10%
North West	628.2	5.87%	622.55	6%	610.73	6%	613.37	6%
Limpopo	500.73	4.68%	496.07	5%	498.7	5%	478.04	4%
Northern Cape	244.64	2.29%	238.76	2%	228.65	2%	225.33	2%
RSA Total	10 694.84	100.00%	10811.7	100.00%	10835.22	100.00%	10,920.66	100%

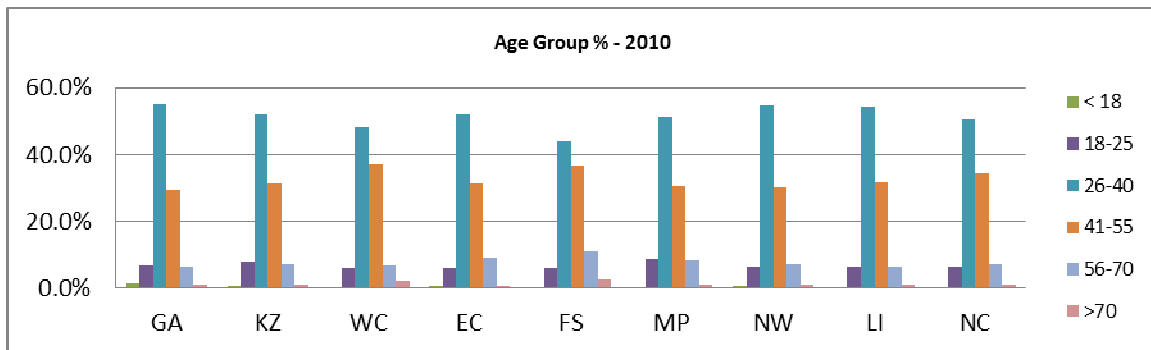
## 5 CHAPTER 5: DRIVER AND VEHICLE PROFILES

### 5.1 DRIVER PROFILE

The tables below give a summary of the drives and vehicles that were observed as part of the data collection process.

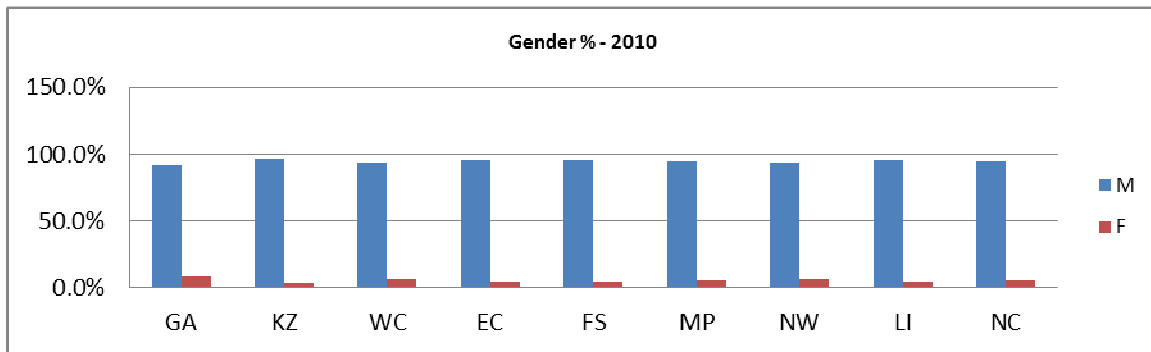
#### 5.1.1 AGE DISTRIBUTION OF DRIVERS SURVEYED

	Age Group % - 2010						
	Total	< 18	18-25	26-40	41-55	56-70	>70
GA	1251	1.5%	6.9%	55.1%	29.3%	6.4%	0.9%
KZ	1170	0.6%	7.9%	52.1%	31.3%	7.2%	0.9%
WC	1289	0.2%	5.8%	48.3%	36.9%	6.7%	2.0%
EC	1162	0.6%	6.0%	52.2%	31.5%	9.0%	0.8%
FS	1212	0.1%	5.9%	43.9%	36.6%	11.0%	2.5%
MP	1173	0.1%	8.6%	51.3%	30.4%	8.4%	1.2%
NW	1203	0.5%	6.4%	54.7%	30.3%	7.0%	1.1%
LI	1178	0.2%	6.4%	54.2%	31.7%	6.4%	1.2%
NC	1202	0.1%	6.5%	50.7%	34.4%	7.3%	1.0%
RSA NWT	10840	0.7%	6.9%	52.1%	31.8%	7.3%	1.2%



## 5.1.2 GENDER PER PROVINCE AND SA TOTAL

	Gender % - 2010		
	Total	M	F
GA	1243	92.0%	8.0%
KZ	1167	96.3%	3.7%
WC	1288	93.4%	6.6%
EC	1161	95.1%	4.9%
FS	1197	95.4%	4.6%
MP	1172	94.2%	5.8%
NW	1197	93.9%	6.1%
LI	1179	95.7%	4.3%
NC	1197	94.3%	5.7%
RSA NWT	10801	93.9%	6.1%

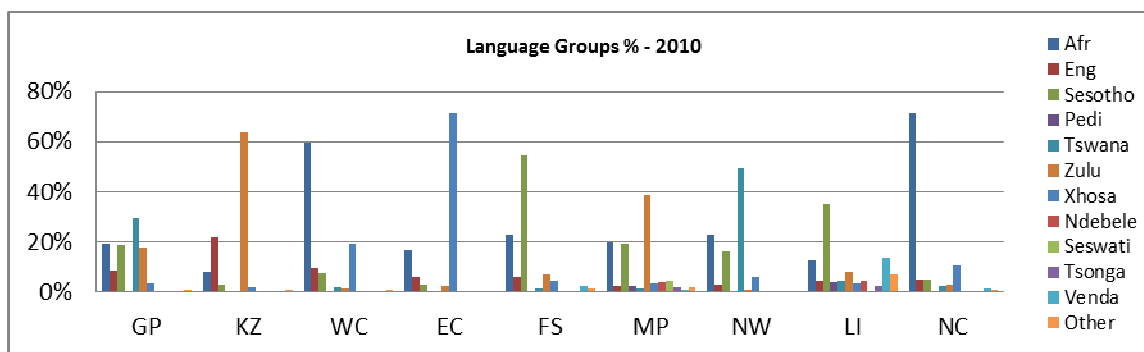


It is clearly visible that the averages for each age criteria are more or less the same for each province, indicating a strong correlation of correctness. The age groups ranging from 26 to 55 represent the majority of active drivers on our roads with a combined average of 83.9%. Also noted are the low percentages of female drivers relevant to all provinces.

### 5.1.3 LANGUAGE DISTRIBUTION OF DRIVERS SURVEYED

The language profile of drivers who were tested during the day time roadblock surveys are shown in the following table. Drivers were requested to specify their preferred language.

Language Groups % - 2010													
Province	Total	Afr	Eng	Sesotho	Pedi	Tswana	Zulu	Xhosa	Ndebele	Seswati	Tsonga	Venda	Other
GP	1252	19%	8%	19%	0%	30%	18%	3%	0%	0%	1%	0%	1%
KZ	1173	8%	22%	3%	0%	0%	64%	2%	0%	0%	0%	0%	1%
WC	1289	59%	9%	8%	0%	2%	1%	19%	0%	0%	0%	0%	1%
EC	1162	17%	6%	3%	0%	0%	2%	71%	0%	0%	0%	0%	1%
FS	1213	23%	6%	54%	0%	1%	7%	5%	0%	0%	0%	2%	1%
MP	1173	20%	3%	19%	2%	1%	38%	3%	4%	5%	2%	1%	2%
NW	1203	23%	3%	16%	0%	49%	1%	6%	0%	0%	1%	0%	1%
LI	1180	13%	4%	35%	4%	5%	8%	3%	4%	0%	3%	13%	7%
NC	1200	71%	5%	5%	0%	2%	3%	11%	0%	0%	0%	1%	1%
RSA NWT	10845	25%	9%	16%	1%	13%	21%	11%	1%	0%	1%	1%	1%



The language preference for each province is clearly distinguishable and different towards each other. Afrikaans (25%) has the highest occurrence on national level, followed by Zulu (21%). The languages preferred by more than 10% of road users in the different provinces are:

- Afrikaans: Applies to all provinces, except for KwaZulu-Natal (8%), and the highest occurrence is the Northern Cape (71%).
- English: Applies to KwaZulu-Natal.
- Zulu: Applies to Gauteng, KwaZulu-Natal and Mpumalanga.
- Xhosa: Applies Western Cape and Eastern Cape, and Northern Cape.

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Sotho: Applies to Gauteng, Free State, Mpumalanga, North West and Limpopo.  
Tswana: Applies to Gauteng and North West.  
Venda: Applies to Limpopo.

Pedi, Ndebele, Seswati, and Tsonga had no preference above 10%, the highest being Venda in Limpopo and Seswati in Mpumalanga both with 9%.

This confirms the need for a multilingual approach in road traffic education. The main language groups should be Afrikaans, Zulu, Sesotho, Tswana and English, with a differentiation among the provinces as reflected in the Table.

## 5.2 VEHICLE PROFILE

The profile of vehicles inspected during roadblock surveys are as follow...

### 5.2.1 PROFILE OF VEHICLES INSPECTED DURING SURVEYS

The national breakdown of the vehicles that were inspected is as follow...

Profile of vehicles observed or evaluated during surveys					
Survey	Light motor vehicle (LMV)	Minibus Taxi	Bus	Truck	Total
Vehicle condition	3810	2761	977	3271	10819
Alcohol Day	1333	954	470	1187	3944
Alcohol Night	1653	1036	507	1077	4273
Speed Day	29667	6698	1409	8044	45818
Speed Night	17332	3231	0	5523	26086
Total vehicle	53795	14680	3363	19102	90940

## 5.2.2 PROFILE OF VEHICLES INSPECTED DURING ROAD BLOCKS

Profile of vehicle inspected during road blocks					
Province	Light motor vehicle (LMV)	Minibus Taxi	Bus	Truck	Total
GP	469	300	120	357	1246
KZ	413	306	101	348	1168
WC	440	326	116	405	1287
EC	405	300	103	352	1160
FS	428	303	107	372	1210
MP	406	302	100	357	1165
NW	415	316	101	370	1202
LI	425	303	102	350	1180
NC	409	305	127	360	1201
<b>TOTAL</b>	<b>3810</b>	<b>2761</b>	<b>977</b>	<b>3271</b>	<b>10819</b>
% of Total	35.22%	25.52%	9.03%	30.23%	100.00%

The sample sizes for the surveys on barrier line offences are expressed in terms of the number of vehicle convoys. Sample sizes for offences at traffic signals are expressed in terms of the number of red phases used for observations. The sample sizes for these two offence categories are as follow...

## 5.2.3 NUMBER OF UNITS IN THE BARRIER LINE AND TRAFFIC SIGNAL SURVEYS

	BARRIER LINES : TOTAL CONVOYS OBSERVED		TRAFFIC SIGNALS : TOTAL RED PHASES OBSERVED	
	Day	Night	Day	Night
GP	300	300	320	300
KZ	360	320	320	320
WC	400	400	320	300
EC	306	334	320	300
FS	400	360	440	360
MP	300	300	560	300
NW	300	320	360	320
LI	300	340	400	320
NC	340	300	360	320
<b>TOTAL</b>	<b>3006</b>	<b>2974</b>	<b>3400</b>	<b>2840</b>
Joint Totals	5980		6240	

## 6 CHAPTER 6: DETAIL OF OFFENCE RATES AND TRENDS PER PROVINCE AND THE COUNTRY

In this chapter, details of the results of the traffic offence surveys are reported. The chapter contains tables with information on the various offences and categories of vehicles, with notes highlighting some important features requiring specific attention. All the information produced in previous reports, were regenerated for comparison purposes.

The national totals have been weighted as explained in Chapter 4 (section 4.10). Also note that the abbreviations, NWT, used in all the tables refers to the "National Weighted Total".

### IMPORTANT NOTE ON SPEED ZONES IN URBAN & RURAL AREAS

- Previous traffic Offence survey reports only reported on in 120kph zones for rural observations. There was however 100kph zones which were also surveyed as part of the rural speed observations. Only the 120kph zones were reported on in the previous reports. For the 2007, 2008, 2009 and 2010 reports, both the 100kph and 120kph zones were reported on under the single heading of "RURAL SPEED OBSERVATIONS".
- The same applies for 60kph zones in urban areas. 80kph zones were also found in urban areas during the 2007 surveys. For the 2007 report both 60kph and 80kph zones were reported on under the single heading of "URBAN SPEED OBSERVATIONS". For the 2008, 2009 and 2010 reports however, the survey urban speed locations were changed to only include 60kph zones. The results were also reported under the heading of "URBAN SPEED OBSERVATIONS"

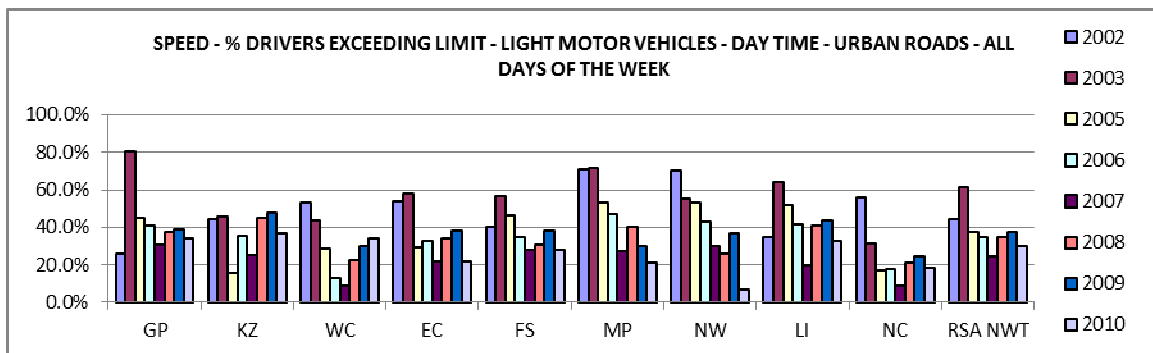
The effective speed limit for minibus taxis and buses on rural roads is 100kph. The effective speed limit for trucks on rural roads is 80kph. For all speed reports for minibus taxis, trucks and buses, an offence is shown where the vehicle exceeded the maximum allowed speeds above.

## 6.1 SPEED

### 6.1.1 URBAN SPEED - LIGHT MOTOR VEHICLES

#### 6.1.1.1 Speed Measurements during Day Time – Light Motor Vehicles – Urban Roads – All Days of the Week

SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK												
2010 Survey					% Of drivers exceeding limit, no grace							
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003	2002
GP	1,680	11	572	±2%	34.0%	38.5%	37.3%	31.0%	40.8%	45.2%	80.2%	26.0%
KZ	1,600	8	587	±2%	36.7%	47.9%	45.0%	24.9%	35.4%	15.6%	45.5%	44.0%
WC	1,749	28	600	±2%	34.3%	30.3%	22.6%	9.2%	13.1%	28.6%	43.4%	53.0%
EC	1,669	8	364	±2%	21.8%	38.3%	33.8%	21.8%	33.0%	29.4%	58.2%	54.0%
FS	1,760	9	487	±2%	27.7%	38.2%	31.0%	27.7%	35.0%	46.1%	56.7%	40.0%
MP	1,520	7	324	±2%	21.3%	30.2%	40.1%	27.3%	47.3%	53.3%	71.3%	71.0%
NW	1,500	6	100	±1%	6.7%	36.6%	26.2%	29.9%	42.7%	53.4%	55.0%	70.0%
LI	1,600	20	524	±2%	32.8%	43.5%	40.9%	20.1%	41.6%	51.9%	64.2%	35.0%
NC	1,520	8	278	±2%	18.3%	24.5%	21.4%	8.9%	17.5%	17.2%	31.2%	56.0%
RSA NWT	14,598	12	3,836	±1%	30.1%	37.8%	35.0%	24.3%	35.0%	37.7%	61.2%	44.0%

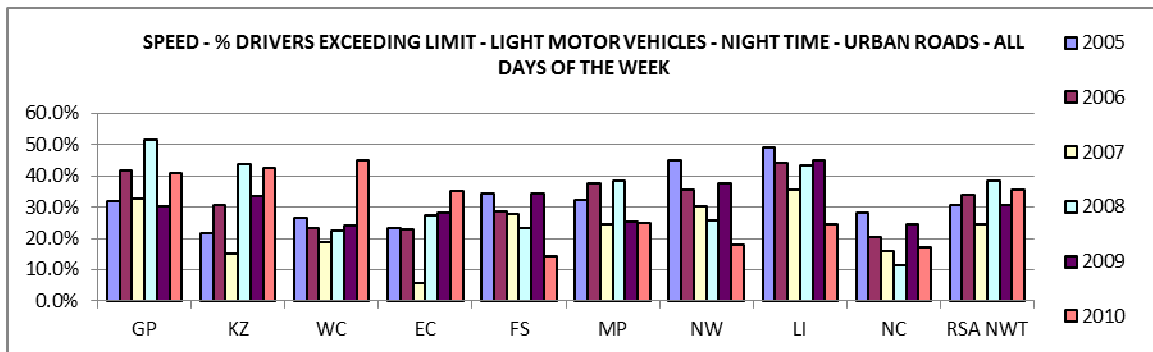


The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the day time in urban areas decreased from 37.8% in 2009 to 30.1% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 36.7%, and North West has the lowest offence rate with 6.7%. Western Cape shows the largest increase in offence rate percentage, from 30.3% to 34.3%. North West shows the largest decrease in offence rate percentage from 36.6% to 6.7%.



### 6.1.1.2 Speed Measurements during Night Time – Light Motor Vehicles – Urban Roads – All Days of the Week

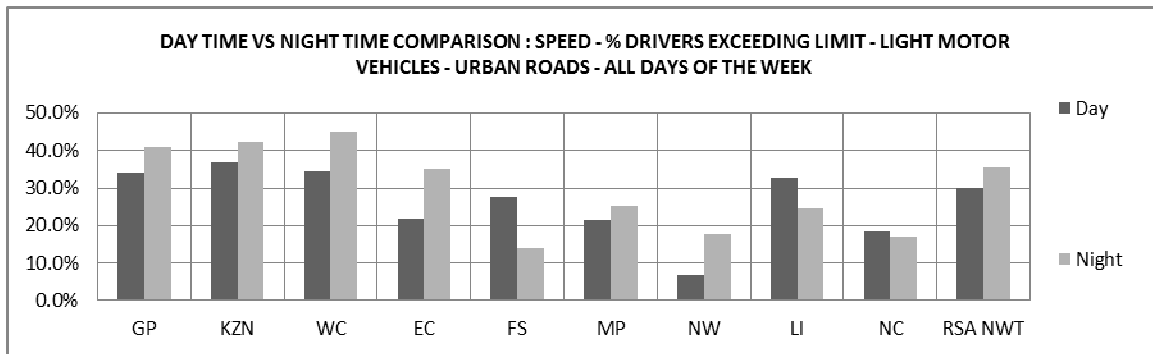
SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	1,220	12	498	±3%	40.8%	30.4%	51.5%	32.6%	41.7%	31.8%
KZ	1,280	10	543	±3%	42.4%	33.6%	43.7%	15.3%	30.7%	21.5%
WC	1,290	15	580	±3%	45.0%	24.1%	22.6%	18.8%	23.4%	26.4%
EC	620	10	218	±4%	35.2%	28.3%	27.4%	5.6%	23.0%	23.4%
FS	800	7	113	±2%	14.1%	34.5%	23.3%	28.0%	28.7%	34.2%
MP	800	10	201	±3%	25.1%	25.3%	38.5%	24.7%	37.8%	32.4%
NW	640	7	114	±3%	17.8%	37.6%	25.6%	30.1%	35.5%	44.8%
LI	640	9	157	±3%	24.5%	44.9%	43.5%	35.7%	44.1%	49.0%
NC	810	7	139	±3%	17.2%	24.5%	11.3%	15.8%	20.3%	28.2%
RSA NWT	8,100	11	2,563	±1%	35.4%	30.6%	38.4%	24.4%	34.1%	30.5%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the night time in urban areas increased from 30.6% in 2009 to 35.4% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 45%, and Free State has the lowest offence rate with 14.1%. Western Cape shows the largest increase in offence rate percentage, from 24.1% to 45.0%. Limpopo shows the largest decrease in offence rate percentage from 44.9% to 24.5%.

### 6.1.1.3 Speed Measurements – Day Time vs. Night Time Comparisons – Light Motor Vehicles – Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	34.0%	40.8%
KZN	36.7%	42.4%
WC	34.3%	45.0%
EC	21.8%	35.2%
FS	27.7%	14.1%
MP	21.3%	25.1%
NW	6.7%	17.8%
LI	32.8%	24.5%
NC	18.3%	17.2%
RSA NWT	30.1%	35.4%

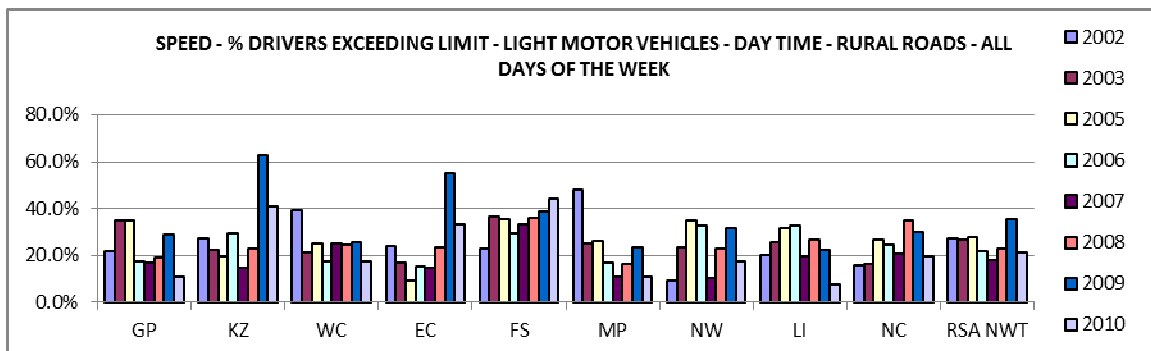


The information above shows that on a national basis the percentage speed offences for this category are lower during the day (30.1%) than during the night (35.4%). The province with the largest difference in day and night time offence rates is Free State, with 27.7% during the day, and 14.1% during the night. The province with the smallest difference in day and night time offence rates is Northern Cape, with 18.3% during the day, and 17.2% during the night.

## 6.1.2 RURAL SPEED - LIGHT MOTOR VEHICLES

### 6.1.2.1 Speed Measurements during Day Time – Light Motor Vehicles – Rural Roads – All Days of the Week

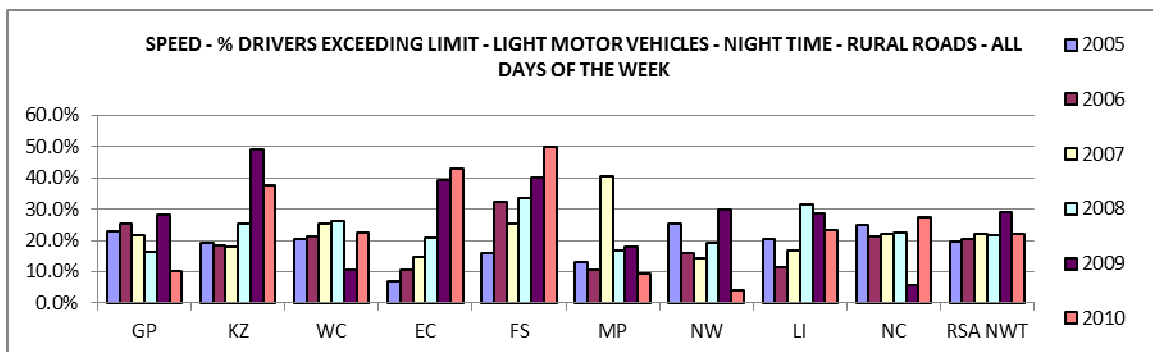
SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK												
Provinces	2010 Survey				% Of drivers exceeding limit, no grace							
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003	2002
GP	1,600	10	171	±2%	10.7%	28.7%	19.3%	17.0%	17.7%	34.7%	34.7%	22.0%
KZ	1,600	12	654	±2%	40.9%	62.6%	23.0%	14.8%	29.3%	19.7%	22.1%	27.0%
WC	1,553	11	275	±2%	17.7%	25.8%	24.7%	24.9%	17.7%	25.0%	21.2%	39.0%
EC	1,520	13	509	±2%	33.5%	55.3%	23.3%	14.6%	15.0%	9.0%	16.8%	24.0%
FS	2,080	12	922	±2%	44.3%	38.7%	36.1%	33.4%	29.2%	35.3%	36.4%	23.0%
MP	1,660	10	183	±2%	11.0%	23.3%	16.3%	10.7%	16.9%	26.4%	25.0%	48.0%
NW	1,537	10	266	±2%	17.3%	31.7%	23.0%	10.5%	32.8%	34.8%	23.7%	9.0%
LI	1,600	9	122	±1%	7.6%	22.2%	26.6%	19.7%	32.7%	31.4%	25.5%	20.0%
NC	1,919	10	373	±2%	19.4%	29.8%	34.7%	20.7%	24.7%	26.8%	16.3%	16.0%
RSA NWT	15,069	11	3,475	±1%	21.1%	35.7%	22.7%	17.9%	21.7%	28.0%	26.8%	27.0%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the day time in rural areas decreased from 35.7% in 2009 to 21.1% in 2010. Free State has the highest offence rate in this regard for 2010 with 44.3%, and Limpopo has the lowest offence rate with 7.6%. Free State shows the largest increase in offence rate percentage, from 38.7% to 44.3%. Eastern Cape shows the largest decrease in offence rate percentage from 55.3% to 33.5%.

### 6.1.2.2 Speed Measurements during Night Time – Light Motor Vehicles – Rural Roads – All Days of the Week

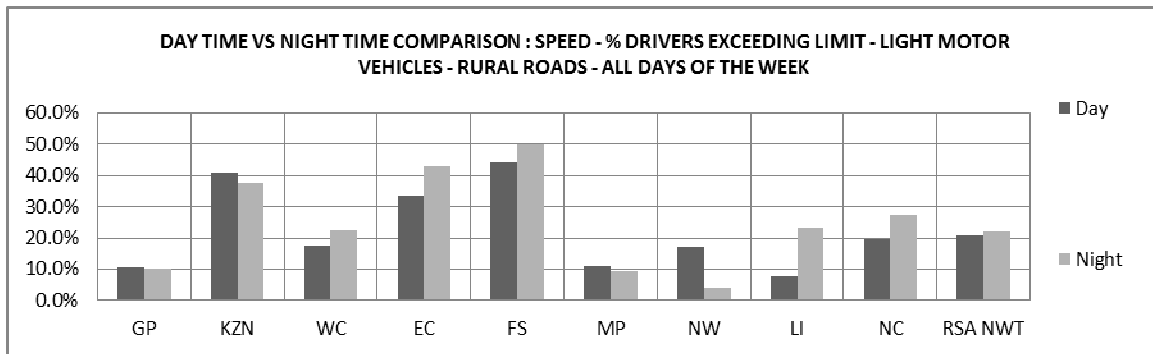
SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	1,280	11	131	±2%	10.2%	28.2%	16.3%	21.7%	25.4%	23.1%
KZ	1,298	16	487	±3%	37.5%	48.9%	25.3%	17.9%	18.6%	19.1%
WC	1,520	12	345	±2%	22.7%	10.7%	26.1%	25.4%	21.3%	20.3%
EC	825	12	354	±3%	42.9%	39.5%	20.7%	14.8%	10.7%	6.9%
FS	1,599	14	795	±2%	49.7%	39.9%	33.6%	25.3%	32.3%	15.9%
MP	640	11	61	±2%	9.5%	18.0%	16.6%	40.4%	10.6%	13.1%
NW	640	15	27	±2%	4.2%	29.9%	19.1%	14.2%	15.9%	25.4%
LI	783	12	183	±3%	23.4%	28.8%	31.4%	16.7%	11.3%	20.5%
NC	647	11	178	±3%	27.5%	5.6%	22.5%	21.9%	21.2%	24.9%
RSA NWT	9,232	12	2,561	±1%	22.2%	29.2%	21.7%	22.2%	20.5%	19.7%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the night time in rural areas decreased from 29.2% in 2009 to 22.2% in 2010. Free State has the highest offence rate in this regard for 2010 with 49.7%, and North West has the lowest offence rate with 4.2%. Northern Cape shows the largest increase in offence rate percentage, from 5.6% to 27.5%. North West shows the largest decrease in offence rate percentage from 29.9% to 4.2%.

### 6.1.2.3 Speed Measurements – Day Time vs. Night Time Comparisons – Light Motor Vehicles – Rural Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	10.7%	10.2%
KZN	40.9%	37.5%
WC	17.7%	22.7%
EC	33.5%	42.9%
FS	44.3%	49.7%
MP	11.0%	9.5%
NW	17.3%	4.2%
LI	7.6%	23.4%
NC	19.4%	27.5%
RSA NWT	21.1%	22.2%

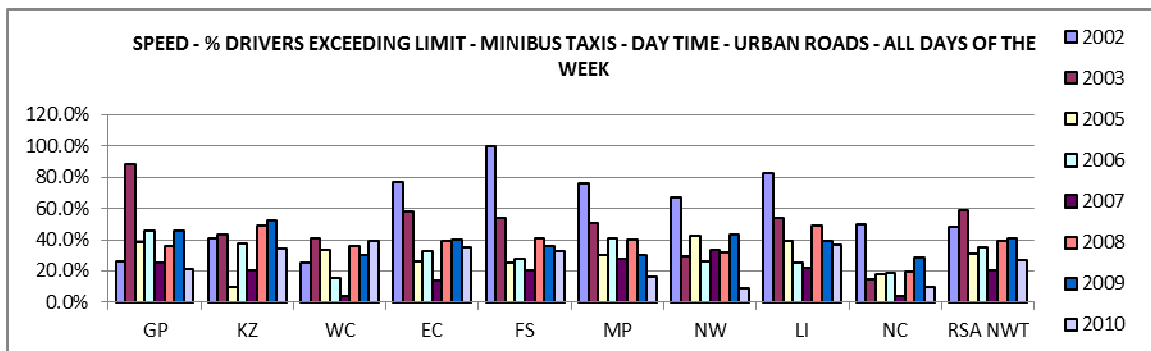


The information above shows that on a national basis the percentage speed offences for this category are lower during the day (21.1%) than during the night (22.2%). The province with the largest difference in day and night time offence rates is Limpopo, with 7.6% during the day, and 23.4% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, with 10.7% during the day, and 10.2% during the night.

### 6.1.3 URBAN SPEED – MINIBUS TAXIS

#### 6.1.3.1 Speed Measurements during Day Time – Minibus Taxis – Urban Roads – All Days of the Week

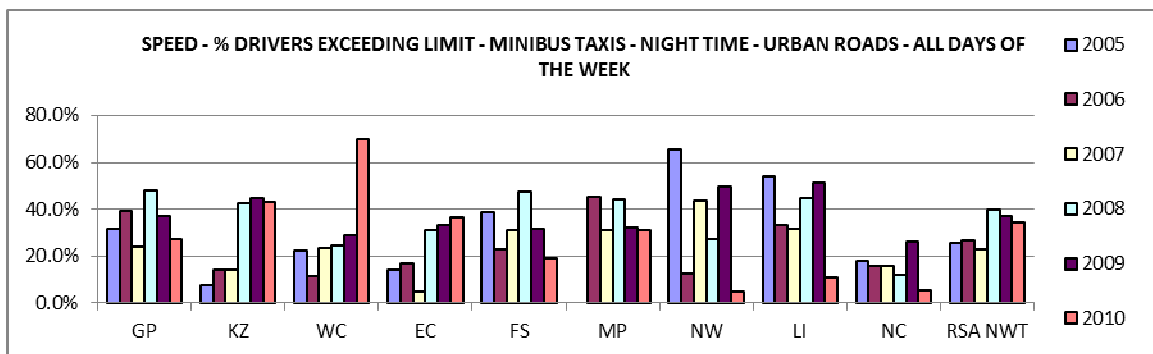
SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK												
Provinces	Sample size	2010 Survey			% Of drivers exceeding limit, no grace							
		Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003	2002
GP	486	14	102	±4%	21.0%	45.5%	35.8%	25.1%	46.1%	38.7%	88.6%	26.0%
KZ	417	9	143	±5%	34.3%	52.6%	48.7%	20.5%	37.9%	10.1%	43.3%	41.0%
WC	485	14	190	±4%	39.2%	30.5%	36.2%	4.4%	15.6%	33.5%	40.6%	25.0%
EC	405	11	144	±5%	35.6%	40.4%	39.1%	14.2%	32.8%	26.0%	58.1%	77.0%
FS	414	12	137	±5%	33.1%	35.9%	40.7%	20.8%	28.2%	25.0%	54.0%	100.0%
MP	442	6	73	±3%	16.5%	29.9%	40.0%	27.8%	40.5%	30.1%	50.7%	76.0%
NW	407	6	38	±3%	9.3%	43.2%	32.2%	33.6%	26.0%	42.6%	29.3%	67.0%
LI	441	13	162	±4%	36.7%	39.6%	49.4%	22.0%	25.6%	39.3%	54.4%	83.0%
NC	414	8	41	±3%	9.9%	28.6%	19.5%	4.3%	19.1%	17.7%	14.9%	50.0%
RSA NWT	3,911	12	1,030	±1%	27.2%	41.2%	38.9%	20.2%	34.9%	30.8%	58.8%	48.0%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the day time in urban areas decreased from 41.2% in 2009 to 27.2% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 39.2%, and North West has the lowest offence rate with 9.3%. Western Cape shows the largest increase in offence rate percentage, from 30.5% to 39.2%. North West shows the largest decrease in offence rate percentage from 43.2% to 9.3%.

### 6.1.3.2 Speed Measurements during Night Time – Minibus Taxis – Urban Roads – All Days of the Week

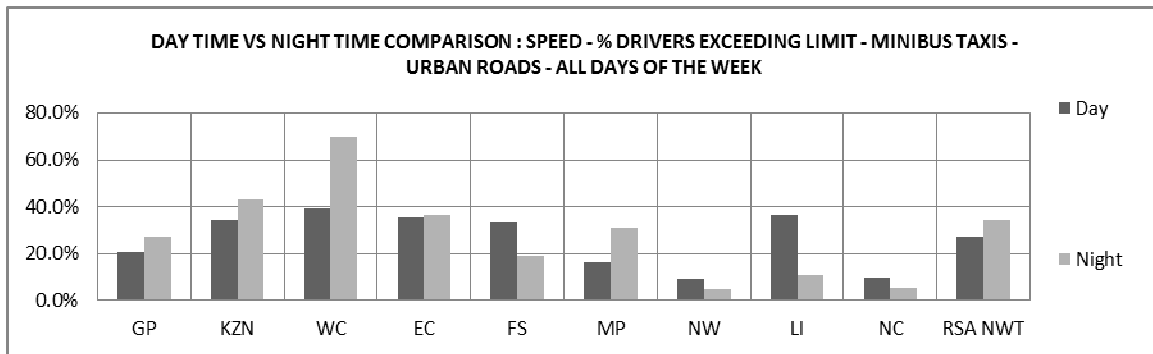
SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	150	11	41	±7%	27.3%	37.1%	47.8%	23.8%	39.2%	31.6%
KZ	201	8	87	±7%	43.3%	44.8%	42.6%	14.1%	14.3%	7.5%
WC	387	15	270	±5%	69.8%	29.0%	24.7%	23.5%	11.5%	22.6%
EC	157	9	57	±7%	36.3%	33.5%	30.9%	4.9%	17.0%	14.0%
FS	170	6	32	±6%	18.8%	31.5%	47.6%	31.3%	23.0%	38.5%
MP	164	10	51	±7%	31.1%	31.9%	44.0%	31.3%	45.2%	0.0%
NW	167	6	8	±4%	4.8%	49.7%	27.2%	43.7%	12.3%	65.2%
LI	155	7	17	±5%	11.0%	51.1%	45.0%	31.4%	33.3%	54.2%
NC	182	4	10	±4%	5.5%	26.0%	12.0%	15.8%	15.8%	18.2%
RSA NWT	1,733	10	573	±2%	34.3%	37.1%	39.7%	23.1%	26.6%	25.9%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the night time in urban areas decreased from 37.1% in 2009 to 34.3% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 69.8%, and North West has the lowest offence rate with 4.8%. Western Cape shows the largest increase in offence rate percentage, from 29.0% to 69.8%. North West shows the largest decrease in offence rate percentage from 49.7% to 4.8%.

### 6.1.3.3 Speed Measurements – Day Time vs. Night Time Comparisons – Minibus Taxis – Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	21.0%	27.3%
KZN	34.3%	43.3%
WC	39.2%	69.8%
EC	35.6%	36.3%
FS	33.1%	18.8%
MP	16.5%	31.1%
NW	9.3%	4.8%
LI	36.7%	11.0%
NC	9.9%	5.5%
RSA NWT	27.2%	34.3%



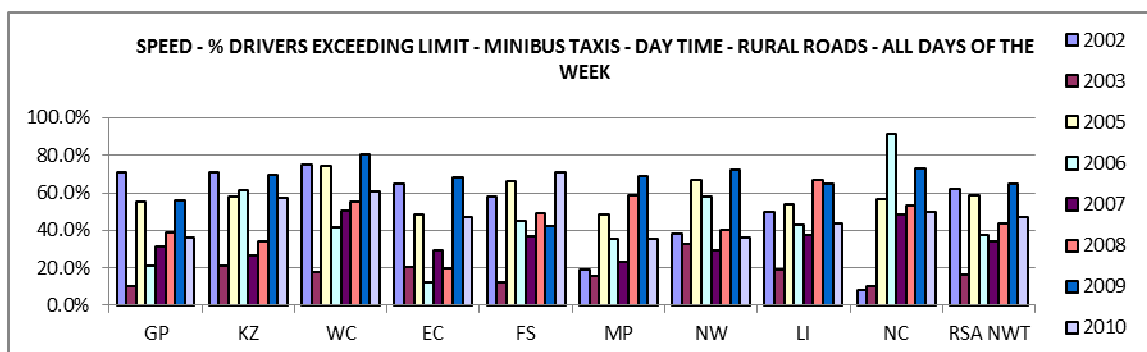
The information above shows that on a national basis the percentage speed offences for this category are lower during the day (27.2%) than during the night (34.3%). The province with the largest difference in day and night time offence rates is Western Cape, with 39.2% during the day, and 69.8% during the night. The province with the smallest difference in day and night time offence rates is Eastern Cape, with 35.6% during the day, and 36.3% during the night.



## 6.1.4 RURAL SPEED – MINIBUS TAXIS

### 6.1.4.1 Speed Measurements during Day Time – Minibus Taxis – Rural Roads – All Days of the Week – Maximum effective speed limit of 100kph

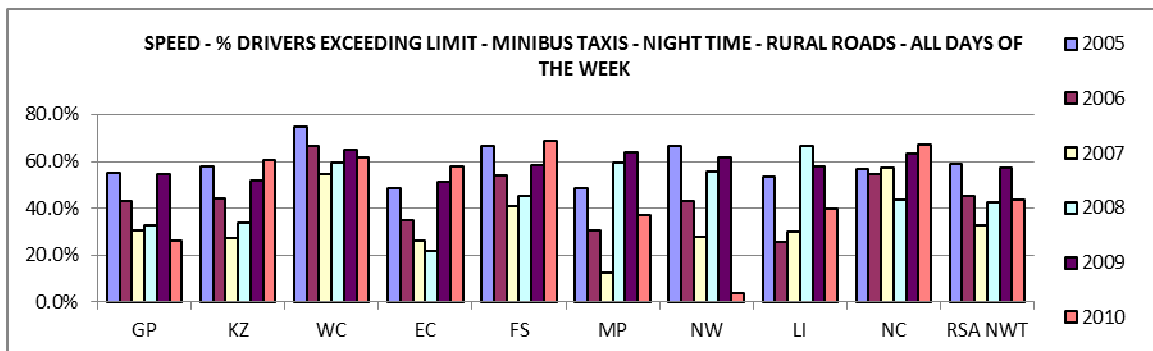
SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK												
2010 Survey					% Of drivers exceeding limit, no grace							
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003	2002
GP	405	5	147	±5%	36.3%	56.0%	39.0%	31.7%	21.1%	54.9%	10.4%	71.0%
KZ	419	10	240	±5%	57.3%	69.3%	33.9%	26.8%	61.4%	57.8%	21.1%	71.0%
WC	408	10	247	±5%	60.5%	80.6%	55.4%	50.5%	41.9%	74.6%	17.4%	75.0%
EC	301	12	142	±6%	47.2%	68.1%	19.5%	29.4%	12.6%	48.4%	20.3%	65.0%
FS	213	9	151	±6%	70.9%	42.1%	49.3%	36.6%	44.7%	66.3%	12.0%	58.0%
MP	204	6	72	±7%	35.3%	68.7%	59.0%	23.2%	35.6%	48.3%	15.7%	19.0%
NW	208	9	75	±6%	36.1%	72.0%	40.0%	29.2%	57.8%	66.7%	32.6%	38.0%
LI	385	6	168	±5%	43.6%	64.9%	66.8%	37.2%	42.7%	53.7%	19.3%	50.0%
NC	244	8	121	±6%	49.6%	73.0%	53.3%	48.2%	91.7%	56.7%	10.4%	8.0%
RSA NWT	2,787	8	1,363	±2%	47.0%	64.6%	43.5%	33.7%	37.2%	58.7%	16.5%	62.0%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the day time in rural areas decreased from 64.6% in 2009 to 47.0% in 2010. Free State has the highest offence rate in this regard for 2010 with 70.9%, and Mpumalanga has the lowest offence rate with 35.3%. Free State shows the largest increase in offence rate percentage, from 42.1% to 70.9%. North West shows the largest decrease in offence rate percentage from 72.0% to 36.1%.

### 6.1.4.2 Speed Measurements during Night Time – Minibus Taxis – Rural Roads – All Days of the Week – Maximum effective speed limit of 100kph

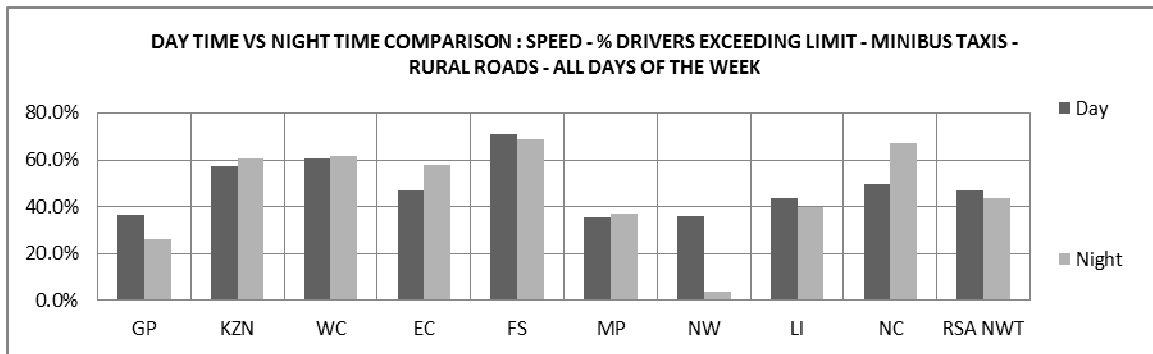
SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
Provinces	2010 Survey				% Of drivers exceeding limit, no grace					
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	123	7	32	±8%	26.0%	54.4%	32.9%	30.3%	42.9%	54.9%
KZ	223	11	135	±6%	60.5%	51.8%	34.0%	27.3%	44.0%	57.8%
WC	139	9	86	±8%	61.9%	64.9%	59.6%	54.6%	66.7%	74.6%
EC	198	11	115	±7%	58.1%	51.4%	21.9%	26.3%	34.8%	48.4%
FS	189	10	130	±7%	68.8%	58.3%	45.4%	41.2%	53.9%	66.3%
MP	114	9	42	±9%	36.8%	63.8%	59.5%	12.5%	30.4%	48.3%
NW	246	8	9	±3%	3.7%	61.4%	55.5%	28.0%	43.2%	66.7%
LI	160	9	64	±8%	40.0%	57.9%	66.7%	30.1%	25.8%	53.7%
NC	106	8	71	±9%	67.0%	63.2%	43.8%	57.1%	54.6%	56.7%
RSA NWT	1,498	9	684	±3%	43.5%	57.2%	42.7%	33.0%	45.1%	58.7%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the night time in rural areas decreased from 57.2% in 2009 to 43.5% in 2010. Free State has the highest offence rate in this regard for 2010 with 68.8%, and North West has the lowest offence rate with 3.7%. Free State shows the largest increase in offence rate percentage, from 58.3% to 68.8%. North West shows the largest decrease in offence rate percentage from 61.4% to 3.7%.

### 6.1.4.3 Speed Measurements – Day Time vs. Night Time Comparisons – Minibus Taxis – Rural Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	36.3%	26.0%
KZN	57.3%	60.5%
WC	60.5%	61.9%
EC	47.2%	58.1%
FS	70.9%	68.8%
MP	35.3%	36.8%
NW	36.1%	3.7%
LI	43.6%	40.0%
NC	49.6%	67.0%
RSA NWT	47.0%	43.5%

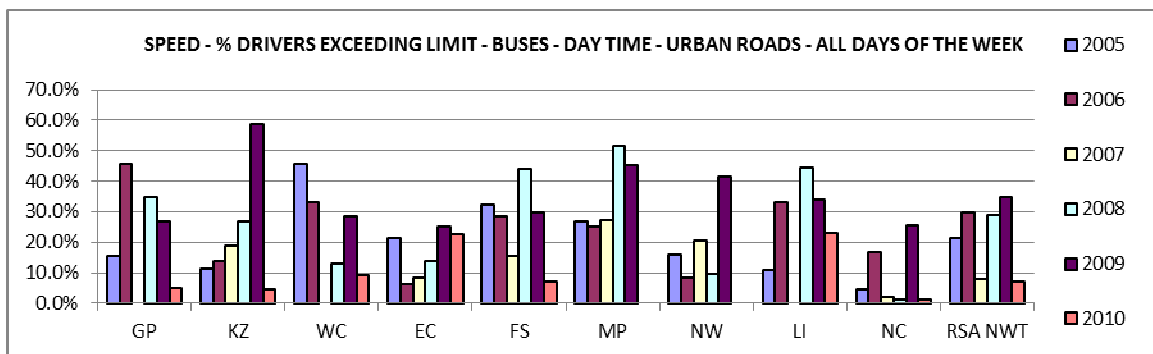


The information above shows that on a national basis the percentage speed offences for this category are higher during the day (47.0%) than during the night (43.5%). The province with the largest difference in day and night time offence rates is North West, with 36.1% during the day, and 3.7% during the night. The province with the smallest difference in day and night time offence rates is Western Cape, with 60.5% during the day, and 61.9% during the night.

## 6.1.5 URBAN SPEED – BUSES

### 6.1.5.1 Speed Measurements during Day Time – Buses – Urban Roads – All Days of the Week

SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	62	10	3	±6%	4.8%	26.7%	34.7%	0.0%	45.8%	15.6%
KZ	65	2	3	±6%	4.6%	58.5%	26.7%	18.8%	13.9%	11.4%
WC	75	4	7	±7%	9.3%	28.6%	13.1%	0.0%	33.3%	45.5%
EC	71	9	16	±10%	22.5%	25.4%	13.7%	8.2%	6.3%	21.4%
FS	82	4	6	±6%	7.3%	29.7%	44.0%	15.4%	28.6%	32.4%
MP	62	0	0	±4%	0.0%	45.3%	51.5%	27.3%	25.0%	26.7%
NW	97	0	0	±3%	0.0%	41.4%	9.7%	20.5%	8.3%	15.8%
LI	70	10	16	±10%	22.9%	33.8%	44.4%	0.0%	33.3%	10.8%
NC	73	2	1	±4%	1.4%	25.4%	1.4%	2.2%	16.7%	4.8%
RSA NWT	657	5	52	±2%	6.9%	35.0%	29.0%	7.9%	29.9%	21.2%



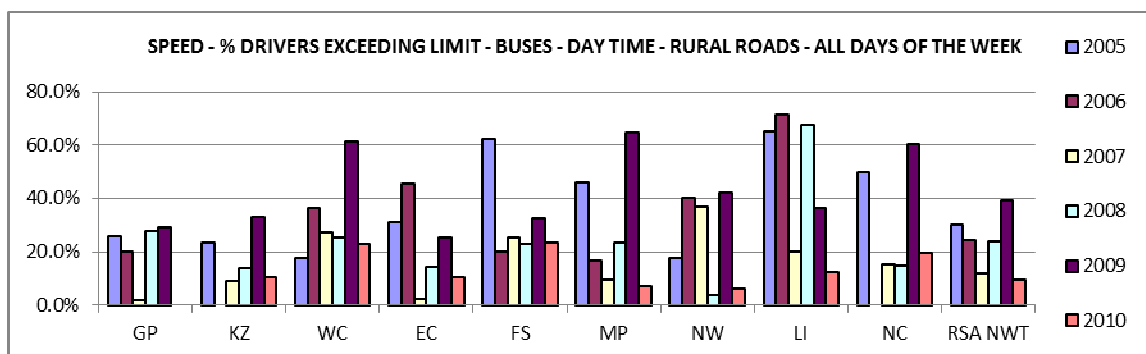
The information above shows that on a national basis the percentage speed offences for Buses during the day time in urban areas decreased from 35.0% in 2009 to 6.9% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 22.9%, and Mpumalanga has the lowest offence rate with 0.0%. All provinces show a decrease in offence rates between 2009 and 2010. KwaZulu Natal shows the largest decrease in offence rate percentage from 58.5% to 4.6%.

- Note that the sample size for this category is very small, resulting in a larger confidence interval.

## 6.1.6 RURAL SPEED – BUSES

### 6.1.6.1 Speed Measurements during Day Time – Buses – Rural Roads – All Days of the Week – Maximum effective speed limit of 100kph

SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	73	0	0	±4%	0.0%	29.2%	27.8%	1.9%	20.0%	25.7%
KZ	66	5	7	±8%	10.6%	32.9%	14.1%	9.1%	0.0%	23.5%
WC	52	5	12	±11%	23.1%	61.4%	25.4%	27.5%	36.4%	17.9%
EC	58	3	6	±8%	10.3%	25.5%	14.5%	2.5%	45.5%	31.3%
FS	185	5	43	±6%	23.2%	32.7%	23.2%	25.4%	20.0%	62.5%
MP	56	3	4	±8%	7.1%	64.8%	23.7%	9.5%	16.7%	46.2%
NW	64	4	4	±7%	6.3%	42.1%	3.7%	36.8%	40.0%	17.7%
LI	106	4	13	±6%	12.3%	36.2%	67.6%	20.0%	71.4%	65.2%
NC	92	6	18	±8%	19.6%	60.4%	14.8%	15.4%	0.0%	50.0%
RSA NWT	752	3	107	±3%	9.6%	39.5%	23.8%	12.2%	24.3%	30.3%



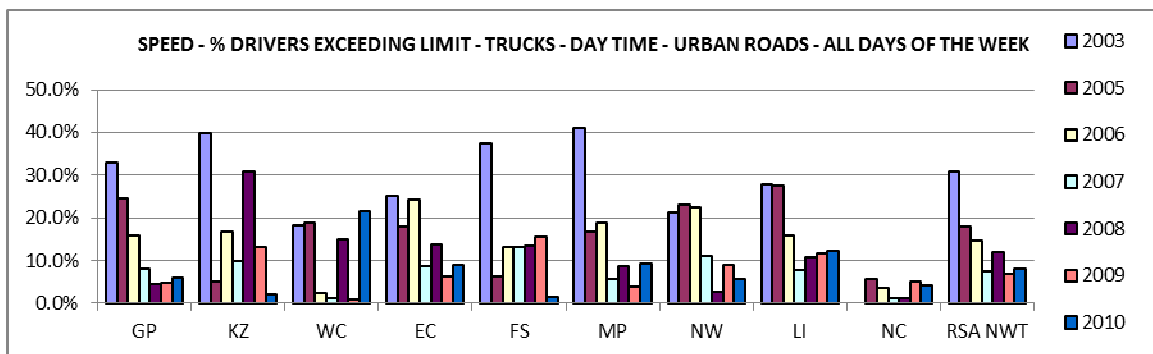
The information above shows that on a national basis the percentage speed offences for Buses during the day time in rural areas decreased from 39.5% in 2009 to 9.6% in 2010. Free State has the highest offence rate in this regard for 2010 with 23.2%, and Gauteng has the lowest offence rate with 0.0%. All provinces show a decrease in offence rates between 2009 and 2010. Mpumalanga shows the largest decrease in offence rate percentage from 64.8% to 7.1%.

- Note that the sample size for this category is very small, resulting in a larger confidence interval.

## 6.1.7 URBAN SPEED – TRUCKS

### 6.1.7.1 Speed Measurements during Day Time – Trucks – Urban Roads – All Days of the Week

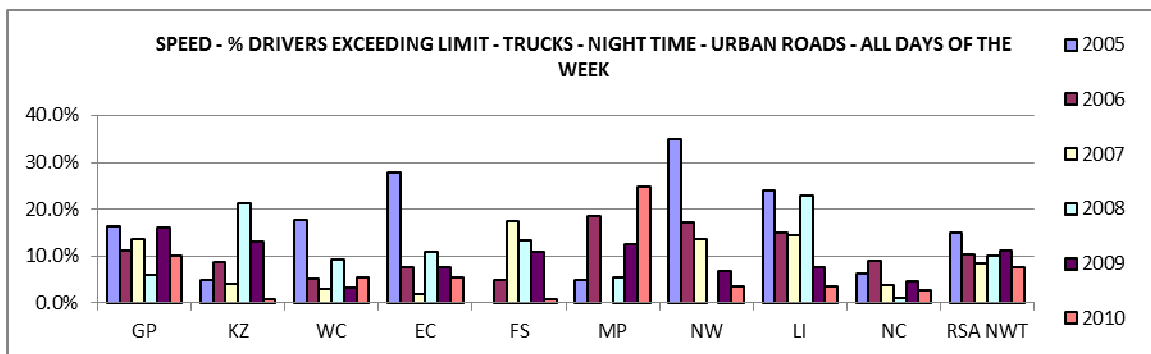
SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK											
2010 Survey					% Of drivers exceeding limit, no grace						
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003
GP	422	4	25	±2%	5.9%	4.8%	4.3%	8.1%	15.8%	24.4%	32.8%
KZ	406	1	9	±2%	2.2%	13.1%	30.9%	10.0%	16.8%	5.0%	39.8%
WC	409	26	88	±4%	21.5%	1.0%	15.0%	1.2%	2.3%	18.9%	18.4%
EC	419	9	37	±3%	8.8%	6.4%	13.7%	8.7%	24.3%	18.1%	25.0%
FS	437	3	6	±1%	1.4%	15.6%	13.5%	13.2%	13.1%	6.3%	37.5%
MP	411	6	38	±3%	9.2%	3.9%	8.8%	5.7%	19.0%	16.8%	41.0%
NW	413	4	24	±2%	5.8%	9.0%	2.7%	11.2%	22.6%	23.0%	21.4%
LI	410	15	50	±3%	12.2%	11.7%	10.6%	7.6%	15.9%	27.5%	27.7%
NC	426	7	18	±2%	4.2%	5.1%	1.2%	1.2%	3.7%	5.8%	0.0%
RSA NWT	3,753	8	295	±1%	8.1%	6.9%	12.0%	7.4%	14.8%	18.1%	30.7%



The information above shows that on a national basis the percentage speed offences for Buses during the day time in urban areas increased from 6.9% in 2009 to 8.1% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 21.5%, and Free State has the lowest offence rate with 1.4%. Western Cape shows the largest increase in offence rate percentage, from 1.0% to 21.5%. Free State shows the largest decrease in offence rate percentage from 15.6% to 1.4%.

### 6.1.7.2 Speed Measurements during Night Time – Trucks – Urban Roads – All Days of the Week

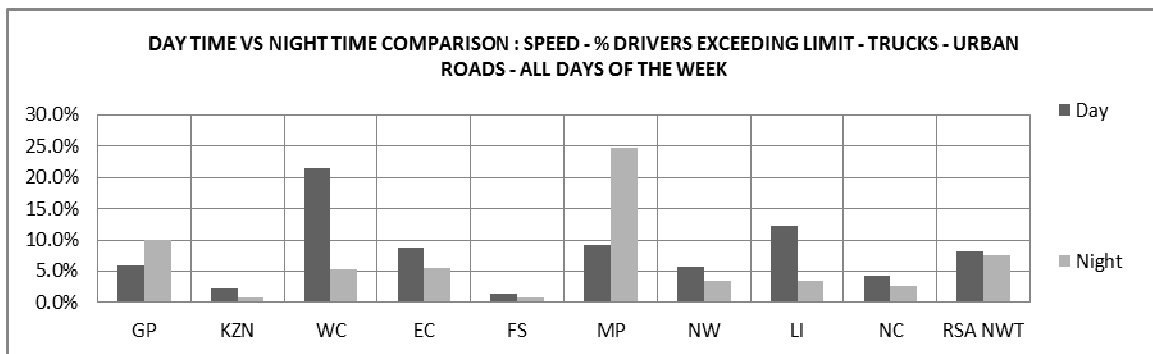
SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	120	5	12	±6%	10.0%	16.0%	5.9%	13.6%	11.1%	16.4%
KZ	219	2	2	±2%	0.9%	13.0%	21.3%	4.1%	8.6%	5.0%
WC	111	5	6	±5%	5.4%	3.3%	9.2%	3.1%	5.2%	17.7%
EC	109	9	6	±5%	5.5%	7.7%	10.9%	1.9%	7.7%	27.7%
FS	329	2	3	±1%	0.9%	11.0%	13.3%	17.5%	4.8%	0.0%
MP	141	6	35	±7%	24.8%	12.5%	5.4%	0.0%	18.5%	4.8%
NW	171	9	6	±3%	3.5%	6.8%	0.0%	13.8%	17.3%	34.9%
LI	168	10	6	±3%	3.6%	7.8%	22.9%	14.6%	14.9%	24.1%
NC	113	3	3	±4%	2.7%	4.8%	1.2%	3.8%	8.9%	6.3%
RSA NWT	1,481	5	79	±1%	7.5%	11.2%	10.0%	8.5%	10.3%	15.0%



The information above shows that on a national basis the percentage speed offences for Buses during the night time in urban areas decreased from 11.2% in 2009 to 7.5% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 24.8%, and KwaZulu Natal has the lowest offence rate with 0.9%. Mpumalanga shows the largest increase in offence rate percentage, from 12.5% to 24.8%. KwaZulu Natal shows the largest decrease in offence rate percentage from 13.0% to 0.9%.

### 6.1.7.3 Speed Measurements – Day Time vs. Night Time Comparisons – Trucks – Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	5.9%	10.0%
KZN	2.2%	0.9%
WC	21.5%	5.4%
EC	8.8%	5.5%
FS	1.4%	0.9%
MP	9.2%	24.8%
NW	5.8%	3.5%
LI	12.2%	3.6%
NC	4.2%	2.7%
RSA NWT	8.1%	7.5%



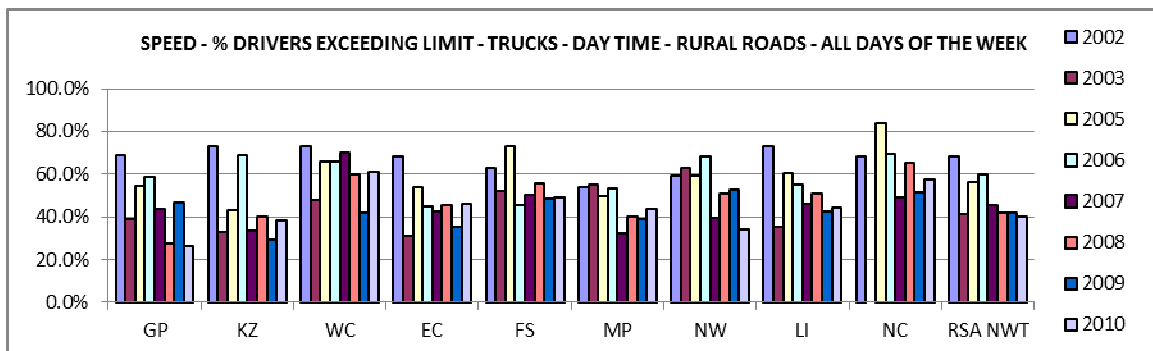
The information above shows that on a national basis the percentage speed offences for this category are higher during the day (8.1%) than during the night (7.5%). The province with the largest difference in day and night time offence rates is Western Cape, with 21.5% during the day, and 5.4% during the night. The province with the smallest difference in day and night time offence rates is Free State, with 1.4% during the day, and 0.9% during the night.



## 6.1.8 RURAL SPEED – TRUCKS

### 6.1.8.1 Speed Measurements during Day Time – Trucks – Rural Roads – All Days of the Week – Maximum effective speed limit of 80kph

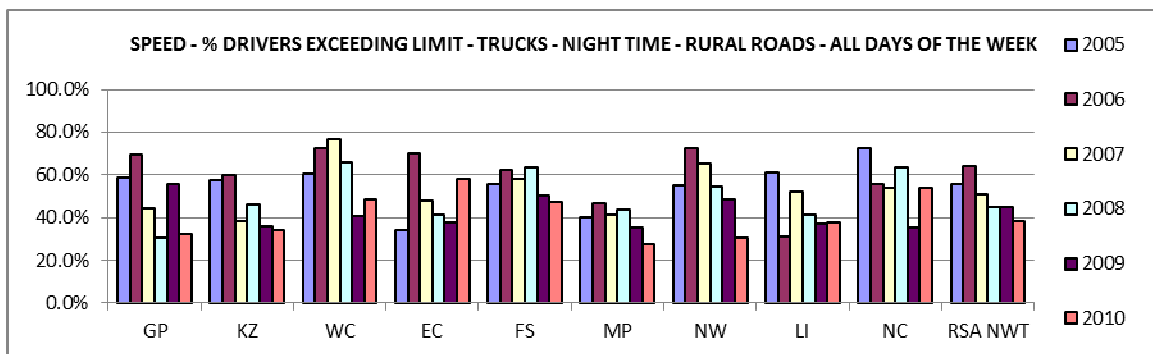
SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK												
2010 Survey					% Of drivers exceeding limit, no grace							
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005	2003	2002
GP	441	8	116	±4%	26.3%	46.7%	27.5%	43.7%	58.7%	54.7%	38.9%	69.0%
KZ	438	5	168	±5%	38.4%	29.2%	40.4%	33.5%	69.0%	43.0%	33.0%	73.0%
WC	456	9	278	±4%	61.0%	41.9%	60.0%	70.2%	65.9%	65.9%	48.1%	73.0%
EC	455	4	210	±5%	46.2%	35.3%	45.2%	42.2%	45.2%	53.8%	30.9%	68.0%
FS	673	5	329	±4%	48.9%	48.7%	55.7%	50.0%	45.5%	73.0%	52.1%	63.0%
MP	455	10	198	±5%	43.5%	38.8%	40.1%	32.4%	53.4%	49.6%	55.2%	54.0%
NW	459	6	156	±4%	34.0%	52.6%	50.8%	39.8%	68.0%	59.2%	62.6%	59.0%
LI	474	12	209	±4%	44.1%	42.4%	50.8%	46.3%	55.2%	60.3%	35.5%	73.0%
NC	440	6	253	±5%	57.5%	51.4%	65.4%	49.4%	69.3%	83.6%	0.0%	68.0%
RSA NWT	4,291	7	1,917	±1%	40.0%	42.0%	42.0%	45.5%	59.9%	56.3%	41.1%	68.0%



The information above shows that on a national basis the percentage speed offences for Trucks during the day time in rural areas decreased from 42.0% in 2009 to 40.0% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 61.0%, and Gauteng has the lowest offence rate with 26.3%. Western Cape shows the largest increase in offence rate percentage, from 41.9% to 61.0%. Gauteng shows the largest decrease in offence rate percentage from 46.7% to 26.3%.

### 6.1.8.2 Speed Measurements during Night Time – Trucks – Rural Roads – All Days of the Week – Maximum effective speed limit of 80kph

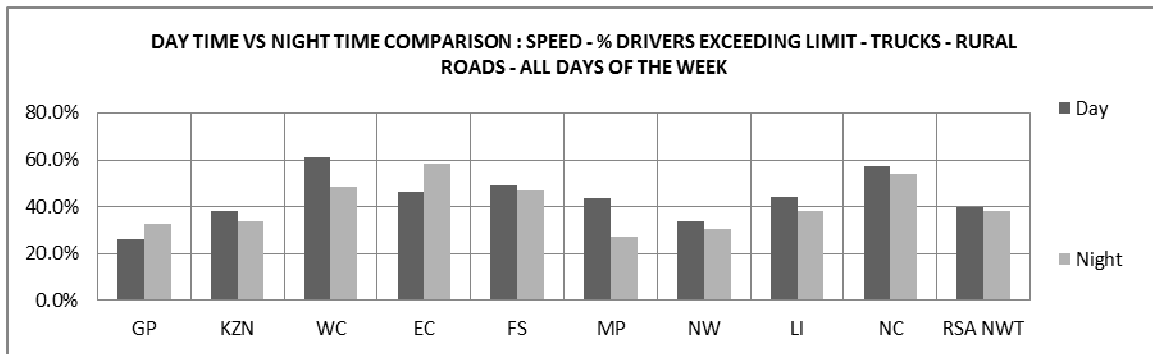
SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK										
2010 Survey					% Of drivers exceeding limit, no grace					
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007	2006	2005
GP	419	7	136	±4%	32.5%	55.7%	30.3%	44.5%	69.2%	58.8%
KZ	415	5	141	±5%	34.0%	35.6%	46.0%	38.3%	59.9%	57.4%
WC	504	9	245	±4%	48.6%	40.8%	65.8%	76.8%	72.2%	60.7%
EC	401	13	234	±5%	58.4%	38.0%	41.1%	48.0%	69.9%	34.3%
FS	657	5	309	±4%	47.0%	50.5%	63.7%	58.1%	62.0%	55.4%
MP	400	7	110	±4%	27.5%	35.1%	43.6%	41.2%	46.7%	40.0%
NW	400	9	122	±4%	30.5%	48.5%	54.3%	65.2%	72.5%	55.0%
LI	440	9	167	±5%	38.0%	37.1%	41.1%	51.8%	31.2%	61.2%
NC	406	8	219	±5%	53.9%	35.5%	63.6%	54.1%	55.4%	72.3%
RSA NWT	4,042	8	1,683	±2%	38.1%	45.1%	45.0%	51.0%	64.0%	55.6%



The information above shows that on a national basis the percentage speed offences for Trucks during the night time in rural areas decreased from 45.1% in 2009 to 38.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 58.4%, and Mpumalanga has the lowest offence rate with 27.5%. Eastern Cape shows the largest increase in offence rate percentage, from 38.0% to 58.4%. Gauteng shows the largest decrease in offence rate percentage from 55.7% to 32.5%.

### 6.1.8.3 Speed Measurements – Day Time vs. Night Time Comparisons – Trucks – Rural Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	26.3%	32.5%
KZN	38.4%	34.0%
WC	61.0%	48.6%
EC	46.2%	58.4%
FS	48.9%	47.0%
MP	43.5%	27.5%
NW	34.0%	30.5%
LI	44.1%	38.0%
NC	57.5%	53.9%
RSA NWT	40.0%	38.1%

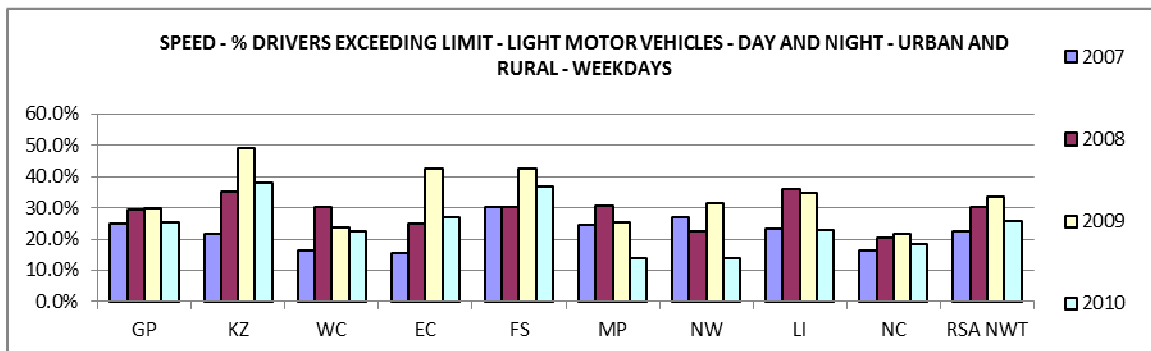


The information above shows that on a national basis the percentage speed offences for this category are higher during the day (40.0%) than during the night (38.1%). The province with the largest difference in day and night time offence rates is Mpumalanga, with 43.5% during the day, and 27.5% during the night. The province with the smallest difference in day and night time offence rates is Free State, with 48.9% during the day, and 47.0% during the night.

## 6.1.9 SPEED – WEEKDAY VS WEEKEND COMPARISONS – LIGHT MOTOR VEHICLES

### 6.1.9.1 Speed Measurements during Weekdays – Light Motor Vehicles – Rural & Urban Roads – Day Time & Night Time

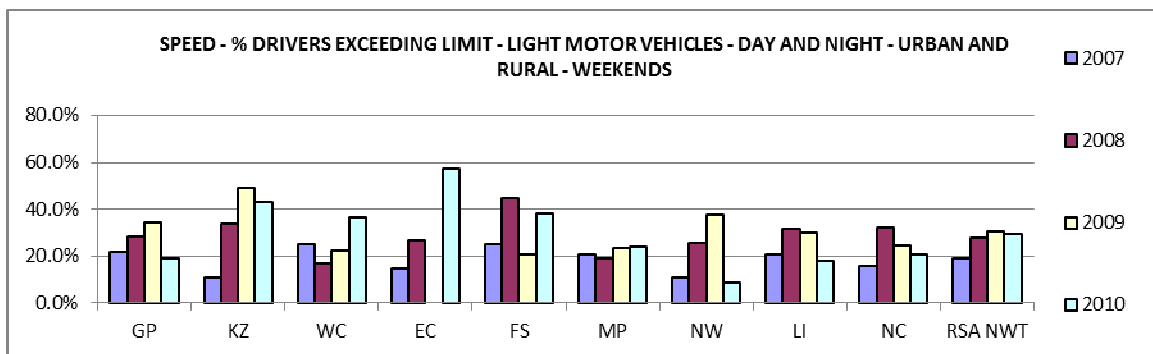
SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - WEEKDAYS								
2010 Survey					% Of drivers exceeding limit, no grace			
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	4,220	12	1071	±1%	25.4%	29.7%	29.6%	25.1%
KZ	4,160	11	1578	±1%	37.9%	49.1%	35.3%	21.6%
WC	3,052	23	690	±1%	22.6%	23.9%	30.3%	16.4%
EC	3,994	11	1078	±1%	27.0%	42.7%	24.8%	15.6%
FS	4,000	12	1468	±1%	36.7%	42.7%	30.1%	30.1%
MP	3,340	9	460	±1%	13.8%	25.5%	30.9%	24.6%
NW	2,460	10	342	±1%	13.9%	31.6%	22.3%	27.1%
LI	3,183	18	727	±1%	22.8%	35.0%	36.1%	23.4%
NC	3,467	9	640	±1%	18.5%	21.7%	20.6%	16.3%
RSA NWT	31,876	13	8,054	±0%	25.9%	33.6%	30.1%	22.5%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles during the week has decreased from 33.6% in 2009 to 25.9% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 37.9%, and Mpumalanga has the lowest offence rate with 13.8%. All provinces show a decrease in offence rates between 2009 and 2010. North West shows the largest decrease in offence rate percentage from 31.6% to 13.9%.

### 6.1.9.2 Speed Measurements during Weekends – Light Motor Vehicles – Rural & Urban Roads – Day Time & Night Time

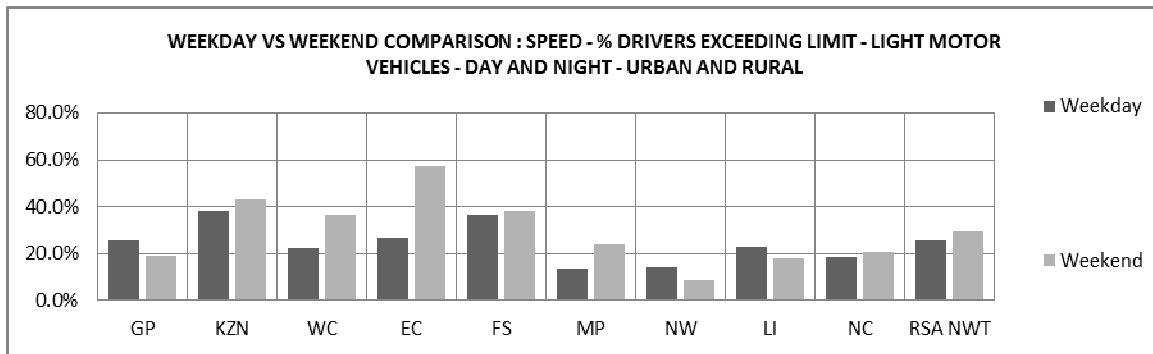
SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - WEEKENDS								
Provinces	2010 Survey				% Of drivers exceeding limit, no grace			
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	1,560	10	301	±2%	19.3%	34.2%	28.3%	21.8%
KZ	1,618	12	693	±2%	42.8%	49.3%	33.9%	10.6%
WC	3,060	15	1110	±2%	36.3%	22.6%	16.9%	24.9%
EC	640	11	367	±4%	57.3%	0.0%	26.9%	14.8%
FS	2,239	12	849	±2%	37.9%	21.0%	44.9%	25.1%
MP	1,280	8	309	±2%	24.1%	23.4%	18.8%	21.0%
NW	1,857	7	165	±1%	8.9%	37.5%	25.8%	10.6%
LI	1,440	9	259	±2%	18.0%	30.0%	31.5%	20.7%
NC	1,589	10	332	±2%	20.9%	24.3%	32.0%	15.8%
RSA NWT	15,283	11	4,385	±1%	29.5%	30.4%	27.6%	19.2%



The information above shows that on a national basis the percentage speed offences for Light Motor Vehicles over the weekend has decreased from 30.4% in 2009 to 29.5% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 57.3%, and North West has the lowest offence rate with 8.9%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 57.3%. North West shows the largest decrease in offence rate percentage from 37.5% to 8.9%.

### 6.1.9.3 Speed Measurements Weekday vs. Weekend Comparison – Light Motor Vehicles – Rural & Urban Roads – Day Time & Night Time

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	25.4%	19.3%
KZN	37.9%	42.8%
WC	22.6%	36.3%
EC	27.0%	57.3%
FS	36.7%	37.9%
MP	13.8%	24.1%
NW	13.9%	8.9%
LI	22.8%	18.0%
NC	18.5%	20.9%
RSA NWT	25.9%	29.5%

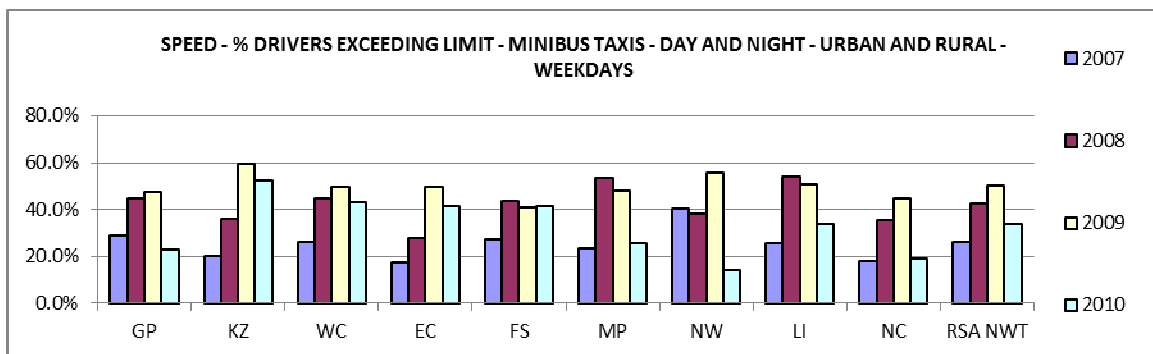


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (25.9%) than over the weekend (29.5%). The province with the largest difference in week and weekend offence rates is Eastern Cape, with 27.0% during the week, and 57.3% over the weekend. The province with the smallest difference in week and weekend offence rates is Free State, with 36.7% during the week, and 37.9% over the weekend.

## 6.1.10 SPEED - WEEKDAY VS WEEKEND COMPARISONS – MINIBUS TAXIS

### 6.1.10.1 Speed Measurements during Weekdays – Minibus Taxis – Rural & Urban Roads – Day Time & Night Time

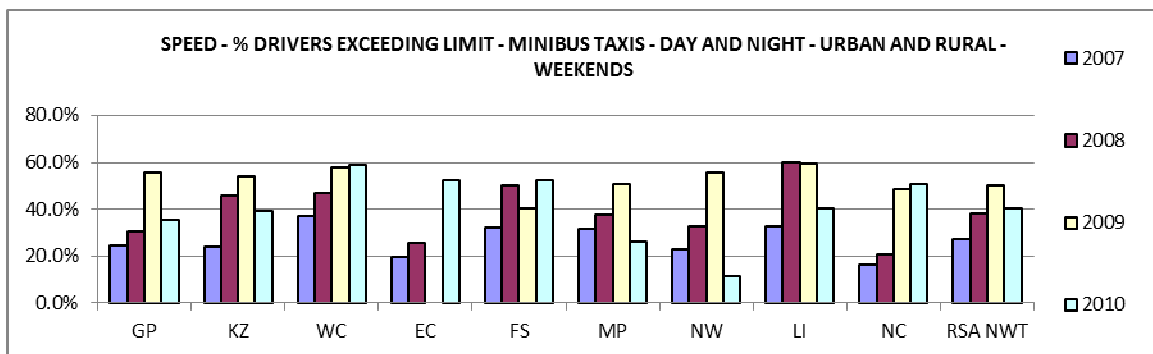
SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - WEEKDAYS								
2010 Survey					% Of drivers exceeding limit, no grace			
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	734	12	169	±3%	23.0%	47.3%	44.7%	29.0%
KZ	847	9	443	±3%	52.3%	59.4%	35.9%	20.3%
WC	260	11	112	±6%	43.1%	49.4%	44.5%	26.0%
EC	912	11	380	±3%	41.7%	49.6%	27.9%	17.2%
FS	624	10	260	±4%	41.7%	41.1%	43.6%	27.4%
MP	702	8	180	±3%	25.6%	48.2%	53.2%	23.3%
NW	502	8	70	±3%	13.9%	55.8%	38.4%	40.5%
LI	798	11	272	±3%	34.1%	50.7%	54.0%	25.6%
NC	761	8	145	±3%	19.1%	44.7%	35.5%	18.0%
RSA NWT	6,140	11	2,031	±1%	33.6%	50.0%	42.6%	26.0%



The information above shows that on a national basis the percentage speed offences for Minibus Taxis during the week has decreased from 50.0% in 2009 to 33.6% in 2010. KwaZulu has the highest offence rate in this regard for 2010, with 52.3%, and North West has the lowest offence rate with 13.9%. Free State shows the largest increase in offence rate percentage, from 41.1% to 41.7%. North West shows the largest decrease in offence rate percentage from 55.8% to 13.9%.

### 6.1.10.2 Speed Measurements during Weekends – Minibus Taxis – Rural & Urban Roads – Day Time & Night Time

SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - WEEKENDS								
Provinces	2010 Survey				% Of drivers exceeding limit, no grace			
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	430	6	153	±5%	35.6%	55.6%	30.4%	24.7%
KZ	413	11	162	±5%	39.2%	54.0%	45.7%	24.1%
WC	1,159	13	681	±3%	58.8%	57.8%	46.9%	37.2%
EC	149	12	78	±8%	52.3%	0.0%	25.4%	19.7%
FS	362	10	190	±5%	52.5%	40.1%	50.0%	32.0%
MP	222	6	58	±6%	26.1%	50.5%	37.7%	31.9%
NW	526	7	60	±3%	11.4%	55.7%	32.6%	23.1%
LI	343	6	139	±5%	40.5%	59.5%	60.0%	32.9%
NC	197	9	100	±7%	50.8%	48.6%	20.7%	16.2%
RSA NWT	3,801	9	1,621	±2%	40.3%	50.3%	38.2%	27.2%

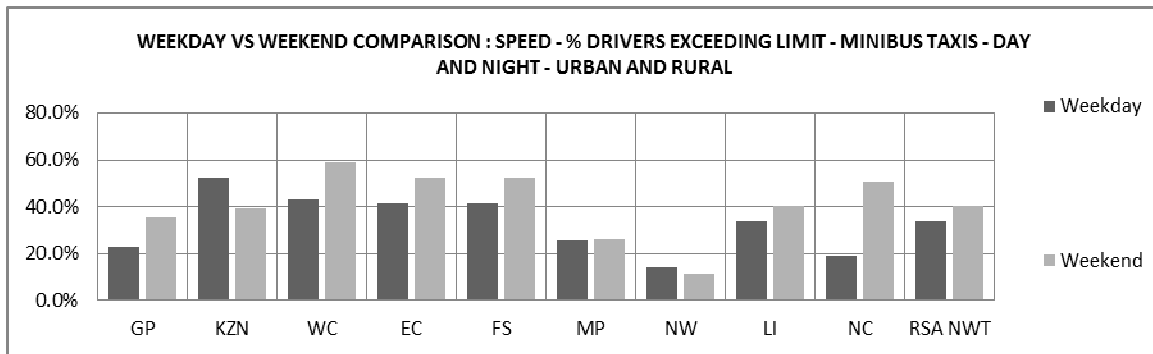


The information above shows that on a national basis the percentage speed offences for Minibus Taxis over the weekend has decreased from 50.3% in 2009 to 40.3% in 2010. Western Cape has the highest offence rate in this regard for 2010, with 58.8%, and North West has the lowest offence rate with 11.4%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 52.3%. North West shows the largest decrease in offence rate percentage from 55.7% to 11.4%.



### 6.1.10.3 Speed Measurements Weekday vs. Weekend Comparison – Minibus Taxis – Rural & Urban Roads – Day Time & Night Time

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	23.0%	35.6%
KZN	52.3%	39.2%
WC	43.1%	58.8%
EC	41.7%	52.3%
FS	41.7%	52.5%
MP	25.6%	26.1%
NW	13.9%	11.4%
LI	34.1%	40.5%
NC	19.1%	50.8%
RSA NWT	33.6%	40.3%

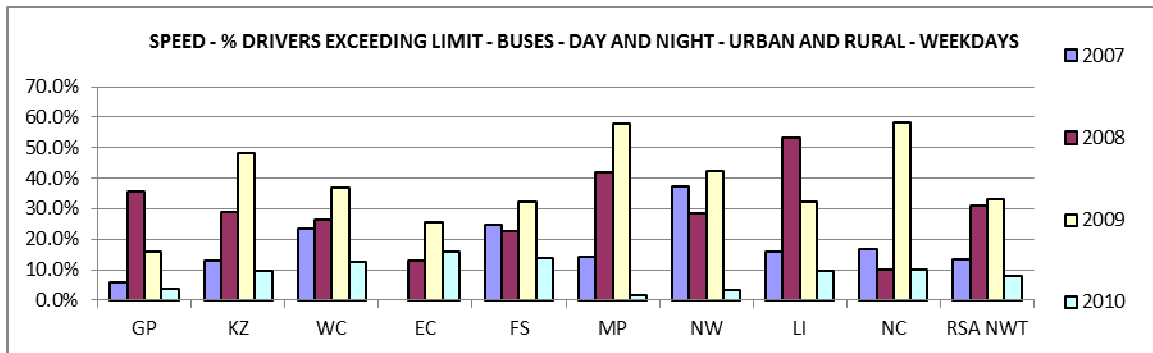


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (33.6%) than over the weekend (40.3%). The province with the largest difference in week and weekend offence rates is Northern Cape, with 19.1% during the week, and 50.8% over the weekend. The province with the smallest difference in week and weekend offence rates is Mpumalanga, with 25.6% during the week, and 26.1% over the weekend.

## 6.1.11 SPEED - WEEKDAY VS WEEKEND COMPARISONS – BUSES

### 6.1.11.1 Speed Measurements during Weekdays – Buses – Rural & Urban Roads – Day Time & Night Time

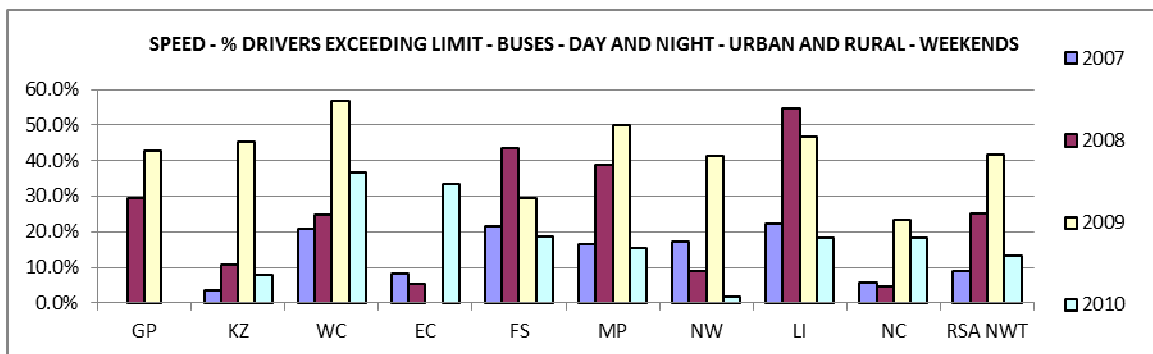
SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY AND NIGHT - URBAN AND RURAL - WEEKDAYS								
2010 Survey					% Of drivers exceeding limit, no grace			
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	109	11	4	±4%	3.7%	16.1%	35.7%	5.8%
KZ	143	5	14	±5%	9.8%	48.1%	29.0%	13.0%
WC	87	4	11	±7%	12.6%	36.8%	26.6%	23.3%
EC	150	6	24	±6%	16.0%	25.4%	13.1%	0.0%
FS	335	5	47	±4%	14.0%	32.2%	22.7%	24.8%
MP	108	1	2	±3%	1.9%	57.8%	42.0%	14.3%
NW	61	7	2	±6%	3.3%	42.2%	28.6%	37.4%
LI	41	9	4	±10%	9.8%	32.5%	53.1%	16.1%
NC	166	6	17	±5%	10.2%	58.3%	10.3%	16.7%
RSA NWT	1,200	7	125	±2%	7.8%	33.0%	31.2%	13.6%



The information above shows that on a national basis the percentage speed offences for Buses during the week has decreased from 33.0% in 2009 to 7.8% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 16.0%, and Mpumalanga has the lowest offence rate with 1.9%. All provinces show a decrease in offence rates between 2009 and 2010. Mpumalanga shows the largest decrease in offence rate percentage from 57.8% to 1.9%.

### 6.1.11.2 Speed Measurements during Weekends – Buses – Rural & Urban Roads – Day Time & Night Time

SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY AND NIGHT - URBAN AND RURAL - WEEKENDS								
Provinces	2010 Survey				% Of drivers exceeding limit, no grace			
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	33	0	0	±7%	0.0%	42.9%	29.6%	0.0%
KZ	51	2	4	±8%	7.8%	45.2%	10.8%	3.7%
WC	87	10	32	±10%	36.8%	56.8%	24.7%	20.8%
EC	6	11	2	±30%	33.3%	0.0%	5.3%	8.1%
FS	69	3	13	±9%	18.8%	29.4%	43.3%	21.4%
MP	13	5	2	±20%	15.4%	50.0%	38.9%	16.7%
NW	111	1	2	±3%	1.8%	41.4%	9.0%	17.1%
LI	137	7	25	±6%	18.2%	46.7%	54.7%	22.2%
NC	11	10	2	±22%	18.2%	23.2%	4.7%	5.7%
RSA NWT	518	4	82	±3%	13.3%	41.7%	25.3%	9.1%

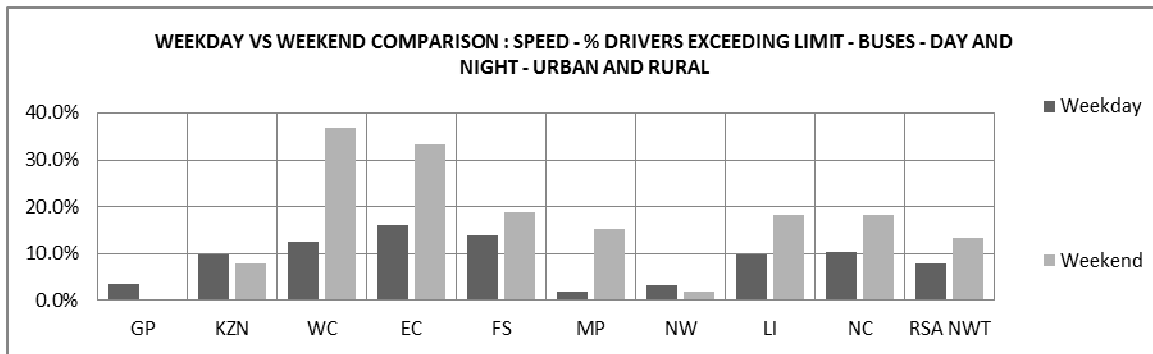


The information above shows that on a national basis the percentage speed offences for Buses over the weekend has decreased from 41.7% in 2009 to 13.3% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 36.8%, and Gauteng has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 33.3%. Gauteng shows the largest decrease in offence rate percentage from 42.9% to 0.0%.

- Note that the sample size for this category is very small, resulting in a larger confidence interval.

### 6.1.11.3 Speed Measurements Weekday vs. Weekend Comparison – Buses – Rural & Urban Roads – Day Time & Night Time

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - BUSES - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	3.7%	0.0%
KZN	9.8%	7.8%
WC	12.6%	36.8%
EC	16.0%	33.3%
FS	14.0%	18.8%
MP	1.9%	15.4%
NW	3.3%	1.8%
LI	9.8%	18.2%
NC	10.2%	18.2%
RSA NWT	7.8%	13.3%

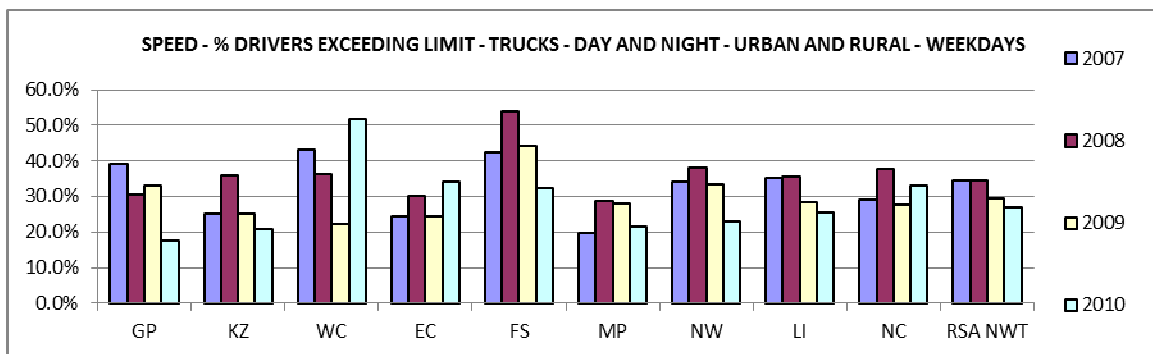


The information above shows that on a national basis the percentage speed offences for this category are lower during the week (7.8%) than over the weekend (13.3%). The province with the largest difference in week and weekend offence rates is Western Cape, with 12.6% during the week, and 36.8% over the weekend. The province with the smallest difference in week and weekend offence rates is North West, with 3.3% during the week, and 1.8% over the weekend.

## 6.1.12 SPEED - WEEKDAY VS WEEKEND COMPARISONS – TRUCKS

### 6.1.12.1 Speed Measurements during Weekdays – Trucks – Rural & Urban Roads – Day Time & Night Time

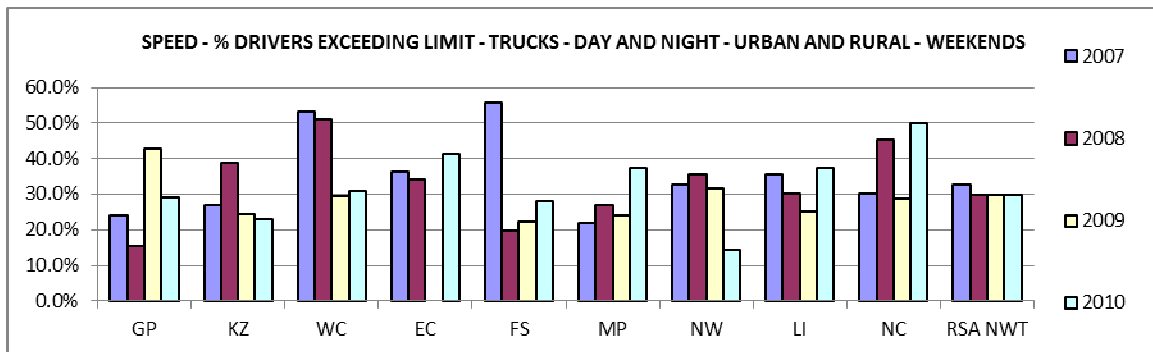
SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - WEEKDAYS								
2010 Survey					% Of drivers exceeding limit, no grace			
Provinces	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	1,037	6	183	±2%	17.6%	32.9%	30.5%	39.3%
KZ	1,033	5	217	±2%	21.0%	25.0%	36.0%	25.3%
WC	761	14	394	±4%	51.8%	22.4%	36.4%	43.0%
EC	1,200	10	411	±3%	34.3%	24.6%	30.2%	24.4%
FS	1,379	6	447	±2%	32.4%	44.1%	53.9%	42.3%
MP	913	7	196	±3%	21.5%	28.1%	28.7%	19.7%
NW	1,184	8	271	±2%	22.9%	33.5%	38.0%	34.0%
LI	1,073	11	275	±3%	25.6%	28.3%	35.4%	35.1%
NC	1,222	6	404	±3%	33.1%	27.8%	37.6%	29.2%
RSA NWT	9,802	8	2,798	±1%	26.9%	29.5%	34.4%	34.4%



The information above shows that on a national basis the percentage speed offences for Trucks during the week has decreased from 29.5% in 2009 to 26.9% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 51.8%, and Gauteng has the lowest offence rate with 17.6%. Western Cape shows the largest increase in offence rate percentage, from 22.4% to 51.8%. Gauteng shows the largest decrease in offence rate percentage from 32.9% to 17.6%.

### 6.1.12.2 Speed Measurements during Weekends – Trucks – Rural & Urban Roads – Day Time & Night Time

SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - WEEKENDS								
Provinces	2010 Survey				% Of drivers exceeding limit, no grace			
	Sample size	Average speed over the limit (kph)	No. of drivers exceeding limit, no grace	% Confidence interval	2010	2009	2008	2007
GP	365	9	106	±5%	29.0%	42.8%	15.6%	24.1%
KZ	445	5	103	±4%	23.1%	24.3%	38.9%	27.1%
WC	719	7	223	±3%	31.0%	29.6%	51.2%	53.3%
EC	184	4	76	±7%	41.3%	0.0%	34.2%	36.4%
FS	717	3	200	±3%	27.9%	22.1%	19.9%	55.8%
MP	494	10	185	±4%	37.4%	24.1%	27.1%	21.9%
NW	259	5	37	±4%	14.3%	31.4%	35.5%	32.6%
LI	419	11	157	±5%	37.5%	25.3%	30.0%	35.5%
NC	178	7	89	±7%	50.0%	28.7%	45.1%	30.4%
RSA NWT	3,780	7	1,176	±1%	30.0%	30.0%	29.9%	32.7%

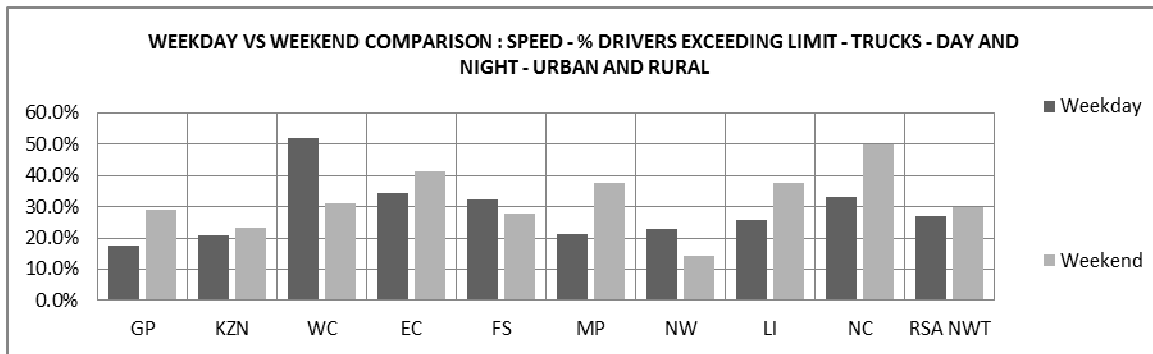


The information above shows that on a national basis the percentage speed offences for Trucks over the weekend has remained the same between 2009 and 2010. Northern Cape has the highest offence rate in this regard for 2010 with 50.0%, and North West has the lowest offence rate with 14.3%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 41.3%. North West shows the largest decrease in offence rate percentage from 31.4% to 14.3%.

- Note that the sample size for this category is very small, resulting in a larger confidence interval.

### 6.1.12.3 Speed Measurements Weekday vs. Weekend Comparison – Trucks – Rural & Urban Roads – Day Time & Night Time Alcohol: Drivers

WEEKDAY VS WEEKEND COMPARISON : SPEED - % DRIVERS EXCEEDING LIMIT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL		
Province	Weekday	Weekend
GP	17.6%	29.0%
KZN	21.0%	23.1%
WC	51.8%	31.0%
EC	34.3%	41.3%
FS	32.4%	27.9%
MP	21.5%	37.4%
NW	22.9%	14.3%
LI	25.6%	37.5%
NC	33.1%	50.0%
RSA NWT	26.9%	30.0%



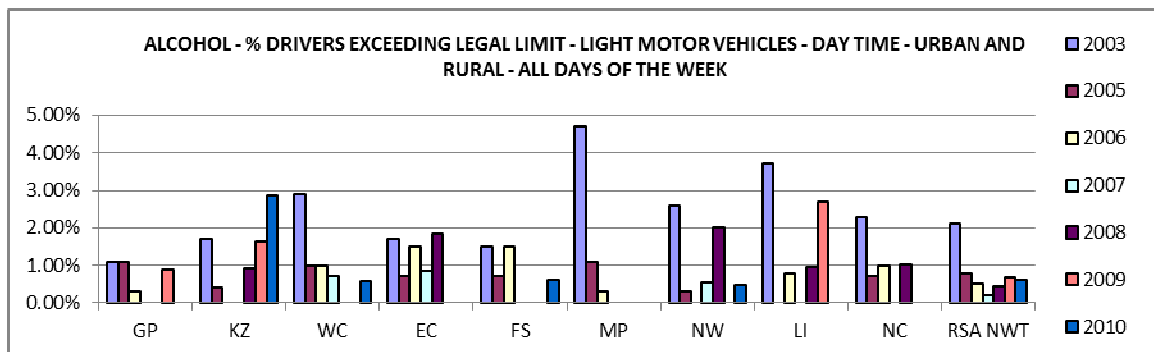
The information above shows that on a national basis the percentage speed offences for this category are lower during the week (26.9%) than over the weekend (30.0%). The province with the largest difference in week and weekend offence rates is Western Cape with 51.8% during the week, and 31.0% over the weekend. The province with the smallest difference in week and weekend offence rates is KwaZulu Natal, with 21.0% during the week, and 23.1% over the weekend.

## 6.2 ALCOHOL

### 6.2.1 ALCOHOL MEASUREMENTS FOR LIGHT MOTOR VEHICLES – URBAN & RURAL ROADS

#### 6.2.1.1 Alcohol Measurements during Daytime – Light Motor Vehicles – Rural and Urban Roads – All Days of the Week

ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	217	0.00	0.00	0	1%	0.00%	0.89%	0.00%	0.00%	0.30%	1.10%	1.10%
KZ	139	0.01	0.31	4	3%	2.88%	1.64%	0.92%	0.00%	0.00%	0.40%	1.70%
WC	172	0.00	0.20	1	2%	0.58%	0.00%	0.00%	0.73%	1.00%	1.00%	2.90%
EC	128	0.00	0.00	0	2%	0.00%	0.00%	1.85%	0.84%	1.50%	0.70%	1.70%
FS	159	0.00	0.20	1	2%	0.63%	0.00%	0.00%	0.00%	1.50%	0.70%	1.50%
MP	104	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.00%	0.30%	1.10%	4.70%
NW	212	0.00	0.27	1	2%	0.47%	0.00%	2.00%	0.56%	0.00%	0.30%	2.60%
LI	102	0.00	0.00	0	3%	0.00%	2.70%	0.96%	0.00%	0.80%	0.00%	3.70%
NC	100	0.00	0.00	0	3%	0.00%	0.00%	1.02%	0.00%	1.00%	0.70%	2.30%
RSA NWT	1333	0.00	0.00	7	0%	0.62%	0.69%	0.46%	0.21%	0.50%	0.80%	2.10%

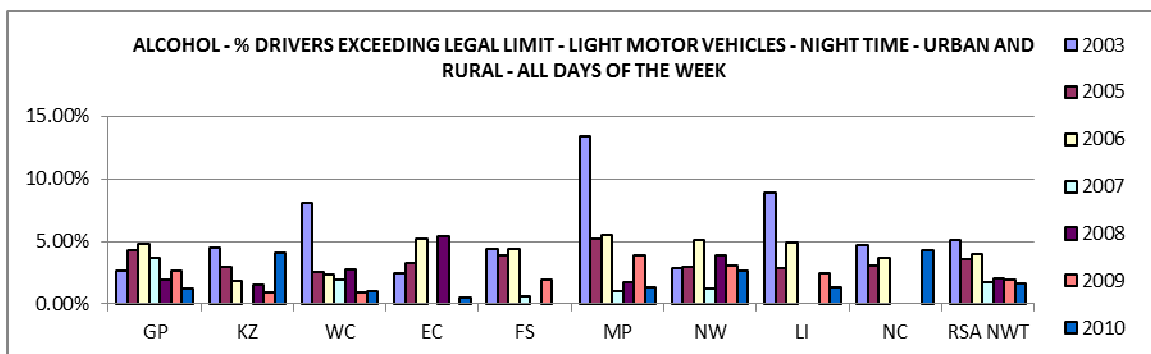


The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 0.69% in 2009 to 0.62% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 2.88%, and Gauteng, along with Eastern Cape, Mpumalanga, Limpopo and Northern Cape have the lowest offence rates with 0.00%. KwaZulu Natal shows the largest increase in offence rate percentage, from 1.64% to 2.88%. Limpopo shows the largest decrease in offence rate percentage from 2.7% to 0.0%.



### 6.2.1.2 Alcohol Measurements during Night time – Light Motor Vehicles – Rural and Urban Roads – All Days of the Week

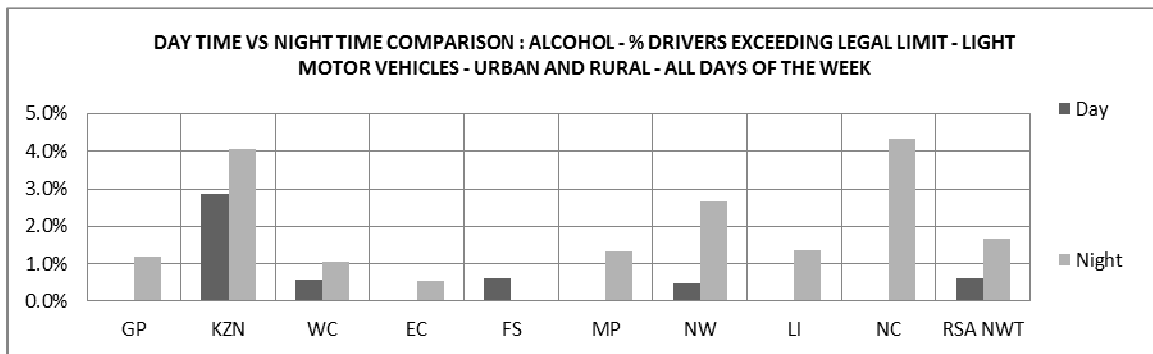
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	251	0.00	0.12	3	2%	1.20%	2.68%	1.90%	3.64%	4.83%	4.28%	2.65%
KZ	173	0.01	0.44	7	3%	4.05%	0.95%	1.48%	0.00%	1.84%	3.01%	4.49%
WC	191	0.00	0.10	2	2%	1.05%	0.96%	2.75%	1.92%	2.30%	2.51%	8.13%
EC	185	0.00	0.19	1	2%	0.54%	0.00%	5.41%	0.00%	5.20%	3.28%	2.48%
FS	198	0.00	0.00	0	1%	0.00%	1.96%	0.00%	0.58%	4.41%	3.92%	4.40%
MP	149	0.00	0.38	2	3%	1.34%	3.92%	1.79%	0.97%	5.57%	5.21%	13.42%
NW	150	0.01	0.30	4	3%	2.67%	3.08%	3.85%	1.20%	5.07%	2.99%	2.86%
LI	148	0.00	0.18	2	3%	1.35%	2.48%	0.00%	0.00%	4.94%	2.82%	8.90%
NC	208	0.01	0.47	9	3%	4.33%	0.00%	0.00%	0.00%	3.64%	3.06%	4.69%
RSA NWT	1653	0.00	0.00	30	1%	1.67%	1.97%	2.07%	1.74%	4.02%	3.60%	5.10%



The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 1.97% in 2009 to 1.67% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 4.33%, and Free State has the lowest offence rate with 0.00%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 4.33%. Mpumalanga shows the largest decrease in offence rate percentage from 3.92% to 1.34%.

### 6.2.1.3 Alcohol Measurements: Day Time vs. Night Time Comparisons: Light Motor Vehicles – Rural and Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	1.2%
KZN	2.9%	4.0%
WC	0.6%	1.0%
EC	0.0%	0.5%
FS	0.6%	0.0%
MP	0.0%	1.3%
NW	0.5%	2.7%
LI	0.0%	1.4%
NC	0.0%	4.3%
RSA NWT	0.6%	1.7%

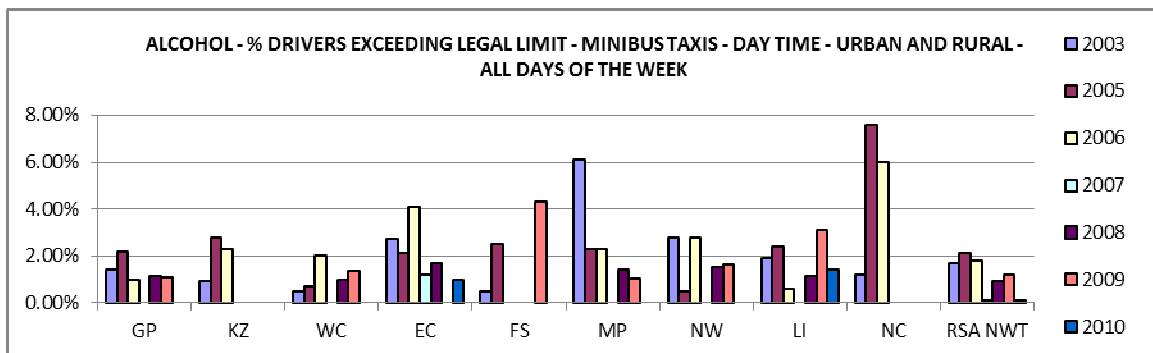


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.6%) than during the night (1.7%). The province with the largest difference in day and night time offence rates is Northern Cape, with 0.0% during the day, and 4.3% during the night. The province with the smallest difference in day and night time offence rates is Western Cape, with 0.6% during the day, and 1.0% during the night.

## 6.2.2 ALCOHOL MEASUREMENTS FOR MINIBUS TAXIS – URBAN & RURAL ROADS

### 6.2.2.1 Alcohol Measurements during Daytime – Mini bus Taxis – Rural and Urban Roads – All Days of the Week

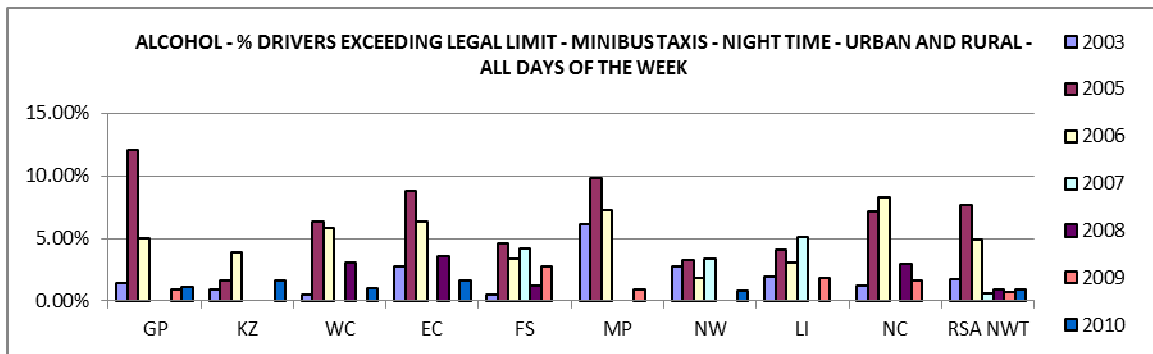
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	125	0.00	0.00	0	2%	0.00%	1.08%	1.15%	0.00%	1.00%	2.20%	1.40%
KZ	94	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.00%	2.30%	2.80%	0.90%
WC	154	0.00	0.00	0	2%	0.00%	1.37%	0.97%	0.00%	2.00%	0.70%	0.50%
EC	100	0.00	0.13	1	3%	1.00%	0.00%	1.67%	1.18%	4.10%	2.10%	2.70%
FS	128	0.00	0.00	0	2%	0.00%	4.30%	0.00%	0.00%	0.00%	2.50%	0.50%
MP	66	0.00	0.00	0	4%	0.00%	1.05%	1.41%	0.00%	2.30%	2.30%	6.10%
NW	116	0.00	0.00	0	2%	0.00%	1.64%	1.52%	0.00%	2.80%	0.50%	2.80%
LI	71	0.00	0.15	1	4%	1.41%	3.13%	1.14%	0.00%	0.60%	2.40%	1.90%
NC	100	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.00%	6.00%	7.60%	1.20%
RSA NWT	954	0.00	0.00	2	0%	0.13%	1.19%	0.92%	0.09%	1.80%	2.10%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Minibus Taxis in this category have decreased from 1.19% in 2009 to 0.13% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.41%, and Gauteng, along with all other provinces except Eastern Cape and Limpopo, has the lowest offence rate with 0.00%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 1.0%. Free State shows the largest decrease in offence rate percentage from 4.3% to 0.0%.

### 6.2.2.2 Alcohol Measurements during Night Time – Minibus Taxis – Rural and Urban Roads – All Days of the Week

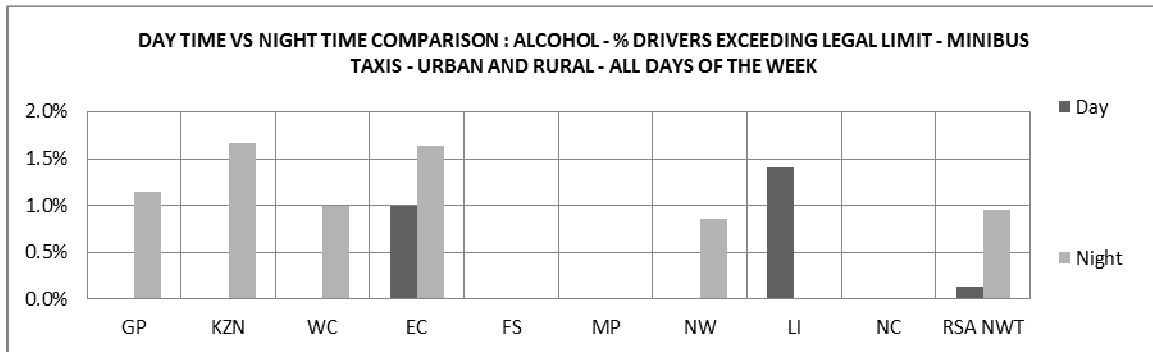
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	175	0.00	0.15	2	2%	1.14%	0.88%	0.00%	0.00%	4.98%	12.12%	1.44%
KZ	120	0.00	0.40	2	3%	1.67%	0.00%	0.00%	0.00%	3.85%	1.64%	0.90%
WC	100	0.00	0.15	1	3%	1.00%	0.00%	3.08%	0.00%	5.88%	6.38%	0.51%
EC	122	0.00	0.32	2	3%	1.64%	0.00%	3.57%	0.00%	6.35%	8.82%	2.74%
FS	101	0.00	0.00	0	3%	0.00%	2.74%	1.27%	4.23%	3.33%	4.58%	0.50%
MP	100	0.00	0.00	0	3%	0.00%	0.93%	0.00%	0.00%	7.25%	9.80%	6.12%
NW	117	0.00	0.21	1	3%	0.85%	0.00%	0.00%	3.37%	1.79%	3.26%	2.79%
LI	96	0.00	0.00	0	3%	0.00%	1.82%	0.00%	5.13%	3.08%	4.04%	1.92%
NC	105	0.00	0.00	0	3%	0.00%	1.59%	2.99%	0.00%	8.33%	7.14%	1.23%
RSA NWT	1036	0.00	0.00	8	1%	0.96%	0.68%	0.87%	0.66%	4.91%	7.70%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Minibus Taxis in this category have increased from 0.68% in 2009 to 0.96% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 1.67%, and Free State, along with Mpumalanga, Limpopo and Northern Cape, has the lowest offence rate with 0.0%. KwaZulu Natal shows the largest increase in offence rate percentage, from 0.0% to 1.67%. Free State shows the largest decrease in offence rate percentage from 2.74% to 0.0%.

### 6.2.2.3 Alcohol Measurements: Day Time vs. Night Time Comparisons: Minibus Taxis – Rural and Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - MINIBUS TAXIS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	1.1%
KZN	0.0%	1.7%
WC	0.0%	1.0%
EC	1.0%	1.6%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.0%	0.9%
LI	1.4%	0.0%
NC	0.0%	0.0%
RSA NWT	0.1%	1.0%

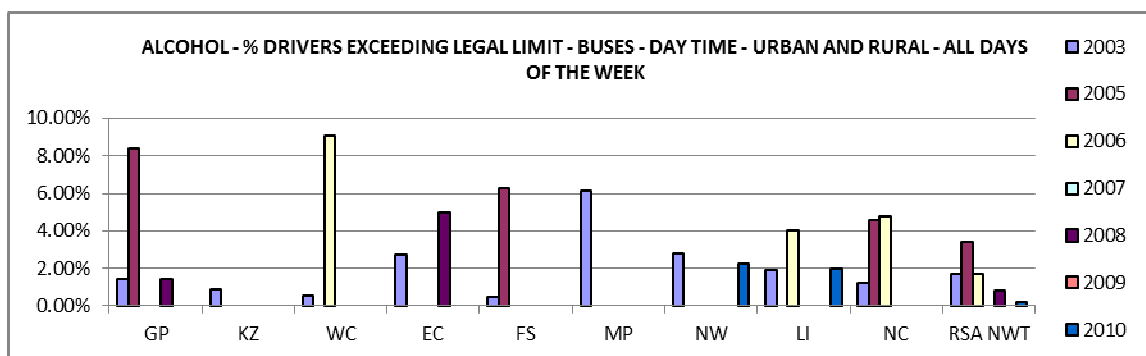


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.1%) than during the night (1.0%). The province with the largest difference in day and night time offence rates is KwaZulu Natal, with 0.0% during the day, and 1.7% during the night. The province with the smallest difference in day and night time offence rates is Free State, along with Mpumalanga and Northern Cape, with 0.0% during the day, and 0.0% during the night.

## 6.2.3 ALCOHOL MEASUREMENTS FOR BUSES – URBAN & RURAL ROADS

### 6.2.3.1 Alcohol Measurements during Daytime – Buses – Rural and Urban Roads – All Days of the Week

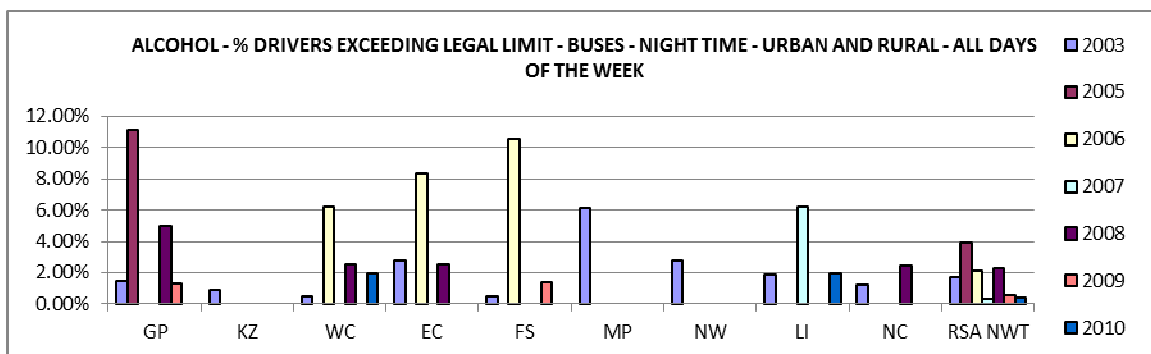
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	55	0.00	0.00	0	5%	0.00%	0.00%	1.43%	0.00%	0.00%	8.36%	1.44%
KZ	36	0.00	0.00	0	7%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.90%
WC	64	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%	0.51%
EC	59	0.00	0.00	0	4%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	2.74%
FS	67	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	0.50%
MP	42	0.00	0.00	0	6%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.12%
NW	45	0.00	0.20	1	7%	2.22%	0.00%	0.00%	0.00%	0.00%	0.00%	2.79%
LI	50	0.00	0.10	1	6%	2.00%	0.00%	0.00%	0.00%	0.00%	4.00%	1.92%
NC	52	0.00	0.00	0	5%	0.00%	0.00%	0.00%	0.00%	4.76%	4.55%	1.23%
RSA NWT	470	0.00	0.00	2	1%	0.21%	0.00%	0.83%	0.00%	1.70%	3.40%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Buses in this category have increased from 0.0% in 2009 to 0.21% in 2010. North West has the highest offence rate in this regard for 2010 with 2.22%, and Gauteng, along with all other provinces except North West and Limpopo, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 2.22%. None of the provinces show a decrease in offence rates between 2009 and 2010.

### 6.2.3.2 Alcohol Measurements during Night Time – Buses – Rural and Urban Roads – All Days of the Week

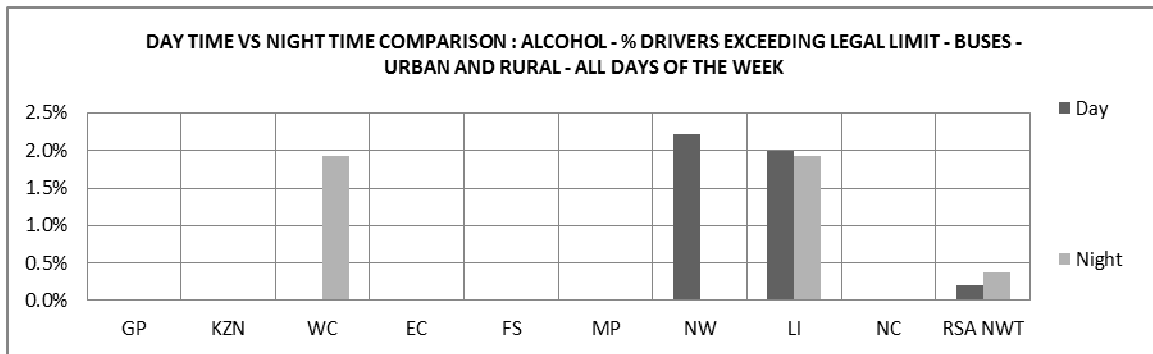
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	65	0.00	0.00	0	4%	0.00%	1.32%	5.00%	0.00%	0.00%	11.11%	1.44%
KZ	65	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.90%
WC	52	0.00	0.14	1	6%	1.92%	0.00%	2.50%	0.00%	6.25%	0.00%	0.51%
EC	44	0.00	0.00	0	6%	0.00%	0.00%	2.50%	0.00%	8.33%	0.00%	2.74%
FS	40	0.00	0.00	0	6%	0.00%	1.41%	0.00%	0.00%	10.53%	0.00%	0.50%
MP	58	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.12%
NW	56	0.00	0.00	0	5%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.79%
LI	52	0.00	0.10	1	6%	1.92%	0.00%	0.00%	6.25%	0.00%	0.00%	1.92%
NC	75	0.00	0.00	0	3%	0.00%	0.00%	2.44%	0.00%	0.00%	0.00%	1.23%
RSA NWT	507	0.00	0.00	2	1%	0.38%	0.54%	2.29%	0.29%	2.10%	3.90%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Buses in this category have decreased from 0.54% in 2009 to 0.38% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 1.92%, and Gauteng, along with all other provinces except Western Cape and Limpopo, has the lowest offence rate with 0.00%. Western Cape shows the largest increase in offence rate percentage, from 0.00% to 1.92%. Free State shows the largest decrease in offence rate percentage from 1.41% to 0.00%.

### 6.2.3.3 Alcohol Measurements: Day Time vs. Night Time Comparisons: Buses – Rural and Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - BUSES - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.0%
KZN	0.0%	0.0%
WC	0.0%	1.9%
EC	0.0%	0.0%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	2.2%	0.0%
LI	2.0%	1.9%
NC	0.0%	0.0%
RSA NWT	0.2%	0.4%



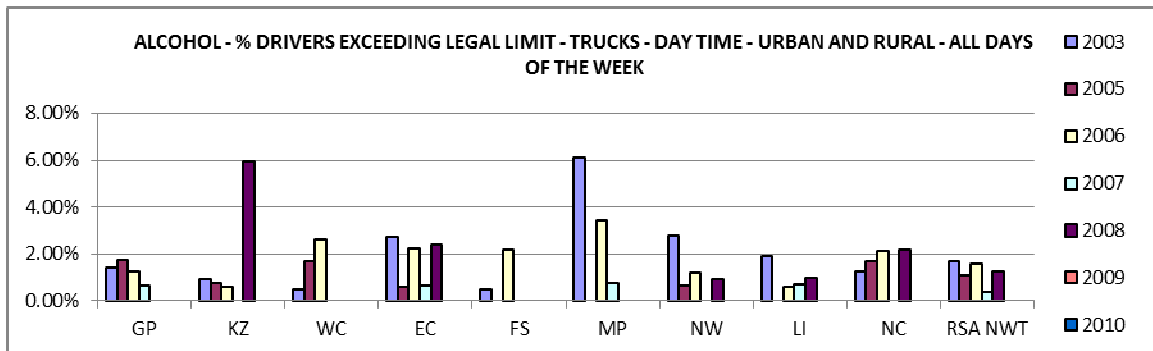
The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.2%) than during the night (0.4%). The province with the largest difference in day and night time offence rates is North West, with 2.2% during the day, and 0.0% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, along with all other provinces except Western Cape, North West and Limpopo, with 0.0% during the day, and 0.0% during the night.



## 6.2.4 ALCOHOL MEASUREMENTS FOR TRUCKS - URBAN & RURAL ROADS

### 6.2.4.1 Alcohol Measurements during Daytime – Trucks – Rural and Urban Roads – All Days of the Week

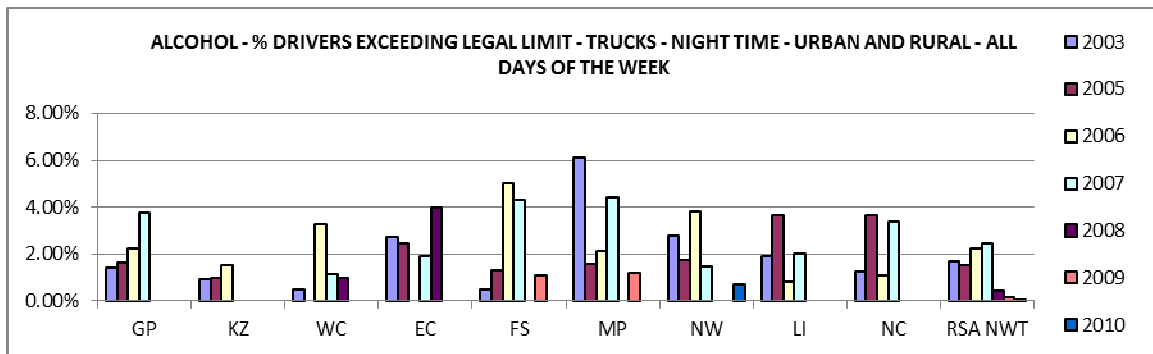
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	211	0.00	0.00	0	1%	0.00%	0.00%	0.00%	0.68%	1.25%	1.76%	1.44%
KZ	130	0.00	0.00	0	2%	0.00%	0.00%	5.92%	0.00%	0.58%	0.78%	0.90%
WC	136	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	2.63%	1.69%	0.51%
EC	162	0.00	0.00	0	2%	0.00%	0.00%	2.41%	0.67%	2.22%	0.61%	2.74%
FS	139	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	2.16%	0.00%	0.50%
MP	96	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.74%	3.43%	0.00%	6.12%
NW	125	0.00	0.00	0	2%	0.00%	0.00%	0.93%	0.00%	1.22%	0.68%	2.79%
LI	70	0.00	0.00	0	4%	0.00%	0.00%	0.97%	0.70%	0.60%	0.00%	1.92%
NC	118	0.00	0.00	0	2%	0.00%	0.00%	2.16%	0.00%	2.13%	1.71%	1.23%
RSA NWT	1187	0.00	0.00	0	0%	0.00%	0.00%	1.26%	0.37%	1.60%	1.10%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Trucks remained the same between 2009 and 2010. No offences were recorded for this category in 2009, as well as in 2010.

### 6.2.4.2 Alcohol Measurements during Night Time – Trucks – Rural and Urban Roads – All Days of the Week

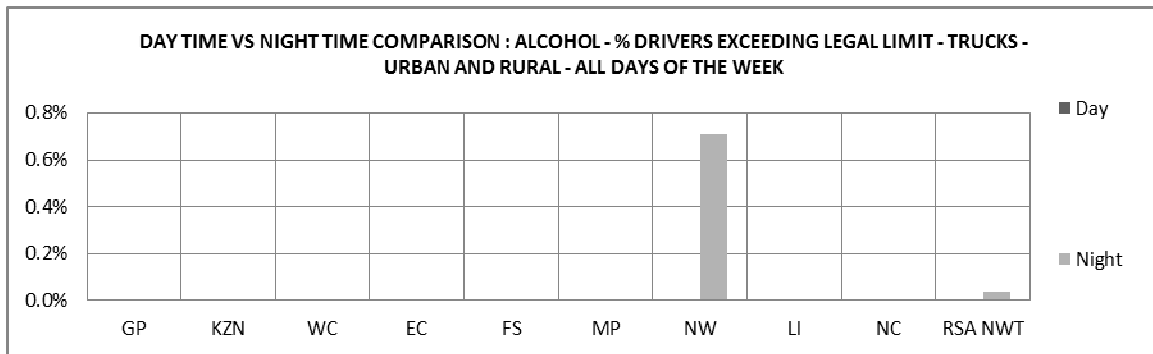
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit						
						2010	2009	2008	2007	2006	2005	2003
GP	146	0.00	0.00	0	2%	0.00%	0.00%	0.00%	3.75%	2.21%	1.64%	1.44%
KZ	101	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.00%	1.54%	0.96%	0.90%
WC	158	0.00	0.00	0	2%	0.00%	0.00%	0.96%	1.17%	3.27%	0.00%	0.51%
EC	119	0.00	0.00	0	2%	0.00%	0.00%	4.00%	1.89%	0.00%	2.44%	2.74%
FS	134	0.00	0.00	0	2%	0.00%	1.11%	0.00%	4.30%	5.00%	1.31%	0.50%
MP	66	0.00	0.00	0	4%	0.00%	1.20%	0.00%	4.44%	2.15%	1.60%	6.12%
NW	141	0.00	0.37	1	2%	0.71%	0.00%	0.00%	1.48%	3.80%	1.75%	2.79%
LI	83	0.00	0.02	0	3%	0.00%	0.00%	0.00%	2.04%	0.79%	3.64%	1.92%
NC	129	0.00	0.00	0	2%	0.00%	0.00%	0.00%	3.37%	1.11%	3.64%	1.23%
RSA NWT	1077	0.00	0.00	1	0%	0.04%	0.18%	0.43%	2.46%	2.25%	1.50%	1.70%



The information above shows that on a national basis the percentage alcohol offences for Trucks in this category have decreased from 0.18% in 2009 to 0.4% in 2010. North West has the highest offence rate in this regard for 2010 with 0.71%, and Gauteng, along with all other provinces except North West, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 0.71%. Mpumalanga shows the largest decrease in offence rate percentage from 1.2% to 0.0%.

### 6.2.4.3 Alcohol Measurements: Day Time vs. Night Time Comparisons: Trucks – Rural and Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCKS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.00%
KZN	0.0%	0.00%
WC	0.0%	0.00%
EC	0.0%	0.00%
FS	0.0%	0.00%
MP	0.0%	0.00%
NW	0.0%	0.71%
LI	0.0%	0.00%
NC	0.0%	0.00%
RSA NWT	0.0%	0.04%

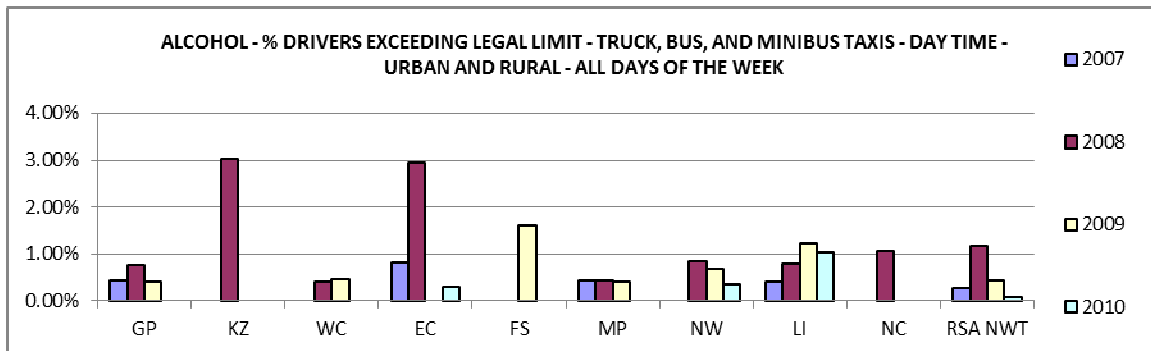


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.0%) than during the night (0.04%). The province with the largest difference in day and night time offence rates is North West, with 0.0% during the day, and 0.71% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, along with all other provinces except North West, with 0.0% during the day, and 0.0% during the night.

## 6.2.5 ALCOHOL MEASUREMENTS FOR MINIBUS TAXIS, TRUCKS AND BUSES COMBINED – URBAN & RURAL ROADS

### 6.2.5.1 Alcohol Measurements during Daytime – Mini bus Taxis, Trucks and Buses combined – Rural and Urban Roads – All Days of the Week

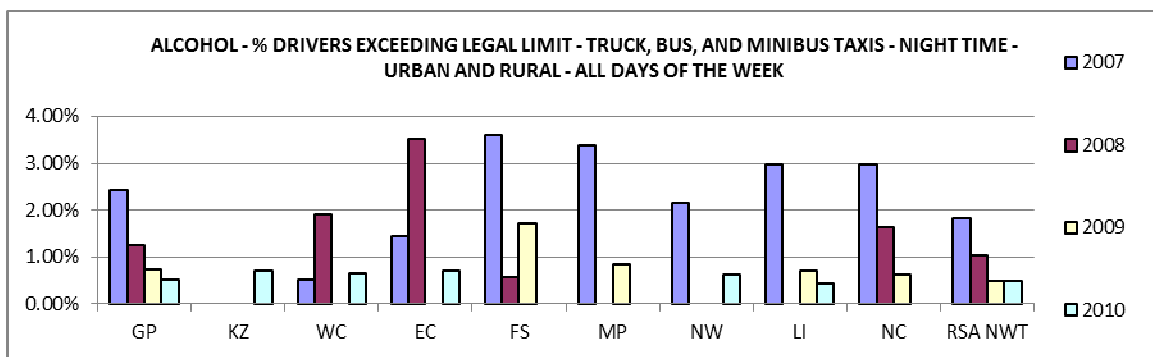
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK									
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit			
						2010	2009	2008	2007
GP	391	0.00	0.00	0	1%	0.00%	0.41%	0.75%	0.43%
KZ	260	0.00	0.00	0	1%	0.00%	0.00%	3.03%	0.00%
WC	354	0.00	0.00	0	1%	0.00%	0.45%	0.42%	0.00%
EC	321	0.00	0.13	1	1%	0.31%	0.00%	2.96%	0.81%
FS	334	0.00	0.00	0	1%	0.00%	1.60%	0.00%	0.00%
MP	204	0.00	0.00	0	1%	0.00%	0.40%	0.44%	0.44%
NW	286	0.00	0.20	1	1%	0.35%	0.69%	0.83%	0.00%
LI	191	0.00	0.15	2	2%	1.05%	1.23%	0.79%	0.40%
NC	270	0.00	0.00	0	1%	0.00%	0.00%	1.05%	0.00%
RSA NWT	2611	0.00	0.00	4	0%	0.09%	0.44%	1.16%	0.26%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 0.44% in 2009 to 0.09% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.05%, and Gauteng, along with all other provinces except Eastern Cape, North West and Limpopo, has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 0.31%. Free State shows the largest decrease in offence rate percentage from 1.6% to 0.0%.

### 6.2.5.2 Alcohol Measurements during Night time – Minibus Taxis, Trucks and Buses combined – Rural and Urban Roads – All Days of the Week

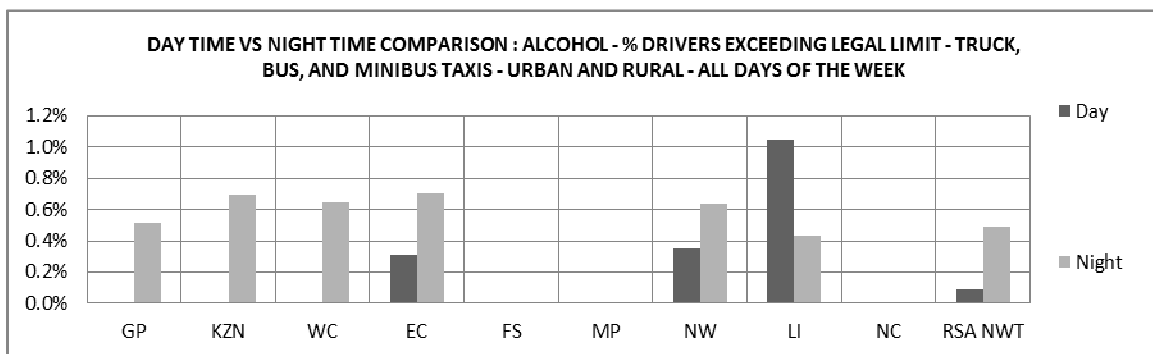
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - NIGHT TIME - URBAN AND RURAL - ALL DAYS OF THE WEEK									
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit			
						2010	2009	2008	2007
GP	386	0.00	0.15	2	1%	0.52%	0.75%	1.25%	2.44%
KZ	286	0.00	0.40	2	1%	0.70%	0.00%	0.00%	0.00%
WC	310	0.00	0.15	2	1%	0.65%	0.00%	1.91%	0.53%
EC	285	0.00	0.32	2	1%	0.70%	0.00%	3.52%	1.45%
FS	275	0.00	0.00	0	1%	0.00%	1.71%	0.56%	3.59%
MP	224	0.00	0.00	0	1%	0.00%	0.85%	0.00%	3.39%
NW	314	0.00	0.37	2	1%	0.64%	0.00%	0.00%	2.15%
LI	231	0.00	0.10	1	1%	0.43%	0.72%	0.00%	2.97%
NC	309	0.00	0.00	0	1%	0.00%	0.61%	1.65%	2.97%
RSA NWT	2620	0.00	0.00	11	0%	0.49%	0.49%	1.04%	1.83%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category have remained the same between 2009 and 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 0.7%, and Free State, along with Mpumalanga and Northern Cape, has the lowest offence rate with 0.0%. KwaZulu Natal shows the largest increase in offence rate percentage, from 0.0% to 0.7%. Free State shows the largest decrease in offence rate percentage from 1.71% to 0.0%.

### 6.2.5.3 Alcohol Measurements: Day Time vs. Night Time Comparisons: Minibus Taxis, Trucks and Buses combined– Rural and Urban Roads – All Days of the Week

DAY TIME VS NIGHT TIME COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - URBAN AND RURAL - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	0.0%	0.5%
KZN	0.0%	0.7%
WC	0.0%	0.6%
EC	0.3%	0.7%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.3%	0.6%
LI	1.0%	0.4%
NC	0.0%	0.0%
RSA NWT	0.1%	0.5%

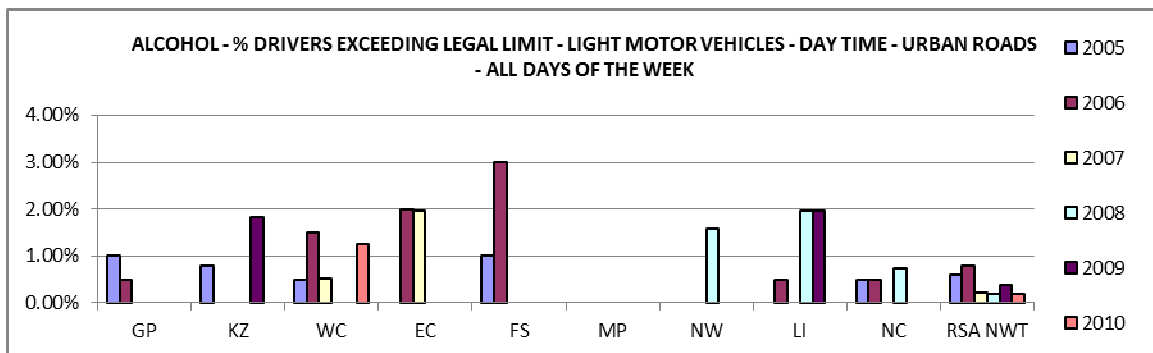


The information above shows that on a national basis the percentage alcohol offences for this category are lower during the day (0.1%) than during the night (0.5%). The province with the largest difference in day and night time offence rates is KwaZulu Natal, with 0.0% during the day, and 0.7% during the night. The province with the smallest difference in day and night time offence rates is Free State, along with Mpumalanga and Northern Cape, with 0.0% during the day, and 0.0% during the night.

## 6.2.6 ALCOHOL MEASUREMENTS FOR LIGHT MOTOR VEHICLES – URBAN VS RURAL COMPARISONS - DAY TIME

### 6.2.6.1 Alcohol Measurements during Day time – Light Motor Vehicles – Urban Roads – All Days of the Week

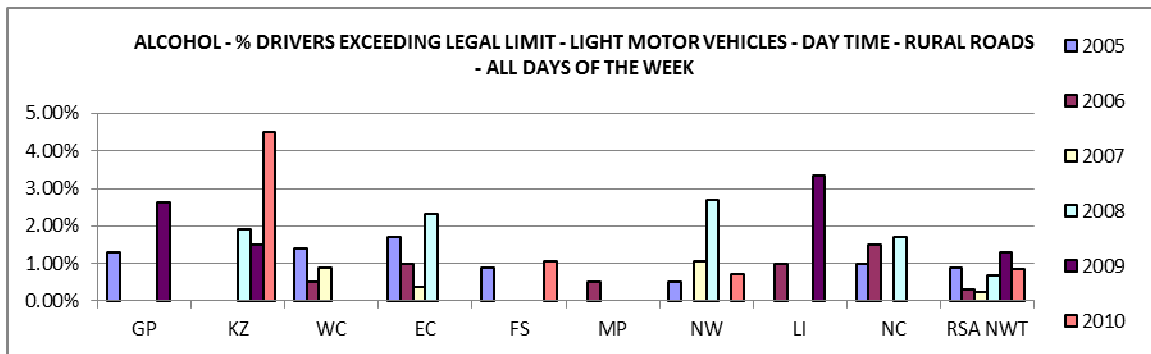
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	114	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	0.50%	1.00%
KZ	50	0.00	0.04	0	5%	0.00%	1.82%	0.00%	0.00%	0.00%	0.80%
WC	80	0.00	0.20	1	4%	1.25%	0.00%	0.00%	0.53%	1.50%	0.50%
EC	63	0.00	0.00	0	4%	0.00%	0.00%	0.00%	1.96%	2.00%	0.00%
FS	63	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	3.00%	1.00%
MP	45	0.00	0.00	0	6%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NW	72	0.00	0.00	0	4%	0.00%	0.00%	1.59%	0.00%	0.00%	0.00%
LI	56	0.00	0.00	0	5%	0.00%	1.96%	1.96%	0.00%	0.50%	0.00%
NC	48	0.00	0.00	0	5%	0.00%	0.00%	0.72%	0.00%	0.50%	0.50%
RSA NWT	591	0.00	0.00	1	1%	0.19%	0.38%	0.20%	0.23%	0.80%	0.60%



The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 0.38% in 2009 to 0.19% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 1.25%, and Gauteng, along with all other provinces except Western Cape, has the lowest offence rate with 0.0%. Western Cape shows the largest increase in offence rate percentage, from 0.0% to 1.25%. Limpopo shows the largest decrease in offence rate percentage from 1.96% to 0.0%.

### 6.2.6.2 Alcohol Measurements during Day time – Light Motor Vehicles – Rural Roads – All Days of the Week

ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	103	0.00	0.00	0	3%	0.00%	2.63%	0.00%	0.00%	0.00%	1.30%
KZ	89	0.01	0.31	4	5%	4.49%	1.49%	1.92%	0.00%	0.00%	0.00%
WC	92	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.90%	0.50%	1.40%
EC	65	0.00	0.00	0	4%	0.00%	0.00%	2.33%	0.39%	1.00%	1.70%
FS	96	0.00	0.20	1	3%	1.04%	0.00%	0.00%	0.00%	0.00%	0.90%
MP	59	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	0.50%	0.00%
NW	140	0.00	0.27	1	2%	0.71%	0.00%	2.70%	1.04%	0.00%	0.50%
LI	46	0.00	0.00	0	5%	0.00%	3.33%	0.00%	0.00%	1.00%	0.00%
NC	52	0.00	0.00	0	5%	0.00%	0.00%	1.69%	0.00%	1.50%	1.00%
RSA NWT	742	0.00	0.00	6	1%	0.84%	1.28%	0.66%	0.23%	0.30%	0.90%

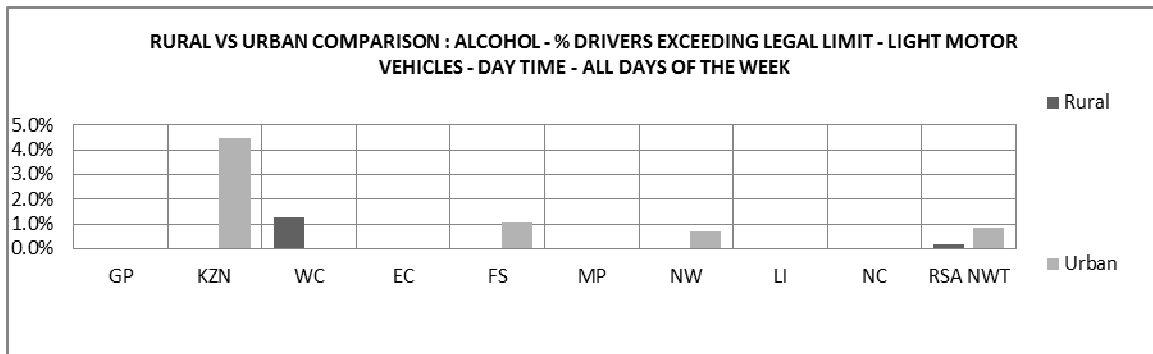


The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 1.28% in 2009 to 0.84% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 4.49%, and Gauteng, along with all other provinces except KwaZulu Natal, Free State and North West, has the lowest offence rate with 0.00%. KwaZulu Natal shows the largest increase in offence rate percentage, from 1.49% to 4.49%. Limpopo shows the largest decrease in offence rate percentage from 3.33% to 0.00%.



### 6.2.6.3 Alcohol Measurements during Day Time: Urban vs. Rural Comparisons: Light Motor Vehicles – All Days of the Week

RURAL VS URBAN COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - DAY TIME - ALL DAYS OF THE WEEK		
Province	Rural	Urban
GP	0.0%	0.0%
KZN	0.0%	4.5%
WC	1.3%	0.0%
EC	0.0%	0.0%
FS	0.0%	1.0%
MP	0.0%	0.0%
NW	0.0%	0.7%
LI	0.0%	0.0%
NC	0.0%	0.0%
RSA NWT	0.2%	0.8%

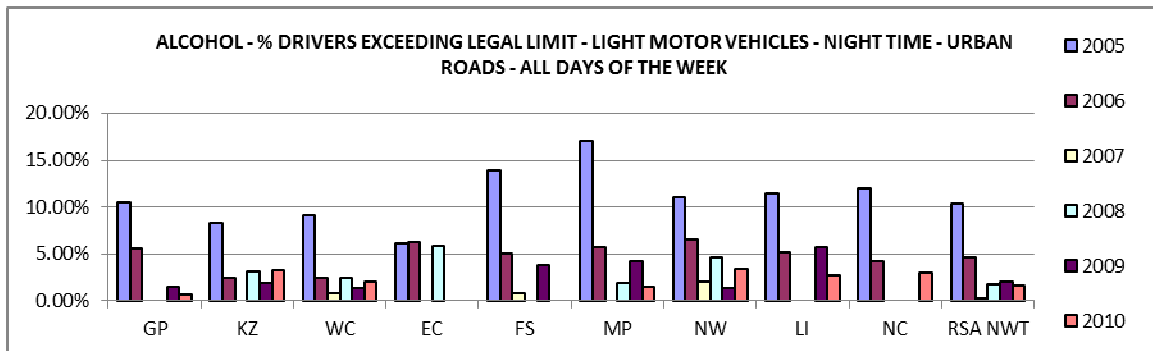


The information above shows that on a national basis the percentage alcohol offences for this category are lower in urban areas (0.2%) than in rural areas (0.8%). The province with the largest difference in urban and rural offence rates is KwaZulu Natal, with 0.0% in urban areas, and 4.5% in rural areas. The province with the smallest difference in urban and rural offence rates is Gauteng, along with Eastern Cape, Mpumalanga, Limpopo and Northern Cape, with 0.0% in urban areas, and 0.0% in rural areas.

## 6.2.7 ALCOHOL MEASUREMENTS FOR LIGHT MOTOR VEHICLES – URBAN VS RURAL COMPARISONS - NIGHT TIME

### 6.2.7.1 Alcohol Measurements during Night time – Light Motor Vehicles – Urban Roads – All Days of the Week

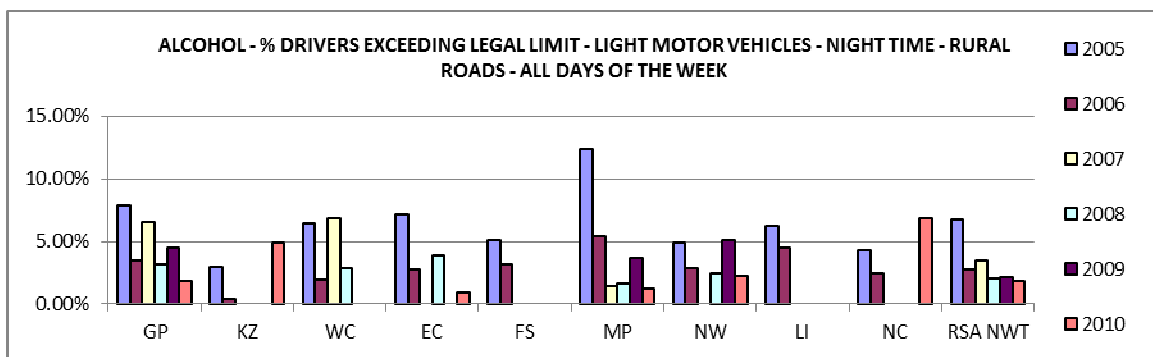
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	145	0.00	0.10	1	2%	0.69%	1.49%	0.00%	0.00%	5.60%	10.50%
KZ	91	0.01	0.44	3	4%	3.30%	1.92%	3.08%	0.00%	2.50%	8.30%
WC	97	0.00	0.10	2	4%	2.06%	1.35%	2.50%	0.79%	2.50%	9.10%
EC	79	0.00	0.00	0	3%	0.00%	0.00%	5.88%	0.00%	6.30%	6.10%
FS	116	0.00	0.00	0	2%	0.00%	3.77%	0.00%	0.83%	5.10%	13.90%
MP	67	0.00	0.10	1	5%	1.49%	4.26%	1.92%	0.00%	5.70%	17.10%
NW	59	0.01	0.30	2	6%	3.39%	1.41%	4.69%	2.04%	6.50%	11.00%
LI	75	0.00	0.18	2	5%	2.67%	5.66%	0.00%	0.00%	5.20%	11.50%
NC	135	0.01	0.47	4	3%	2.96%	0.00%	0.00%	0.00%	4.20%	12.00%
RSA NWT	864	0.00	0.00	15	1%	1.58%	1.99%	1.74%	0.29%	4.70%	10.40%



The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 1.99% in 2009 to 1.58% in 2010. North West has the highest offence rate in this regard for 2010 with 3.39%, and Eastern Cape, along with Free State, has the lowest offence rate with 0.0%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 2.96%. Free State shows the largest decrease in offence rate percentage from 3.77% to 0.0%.

### 6.2.7.2 Alcohol Measurements during Night time – Light Motor Vehicles – Rural Roads – All Days of the Week

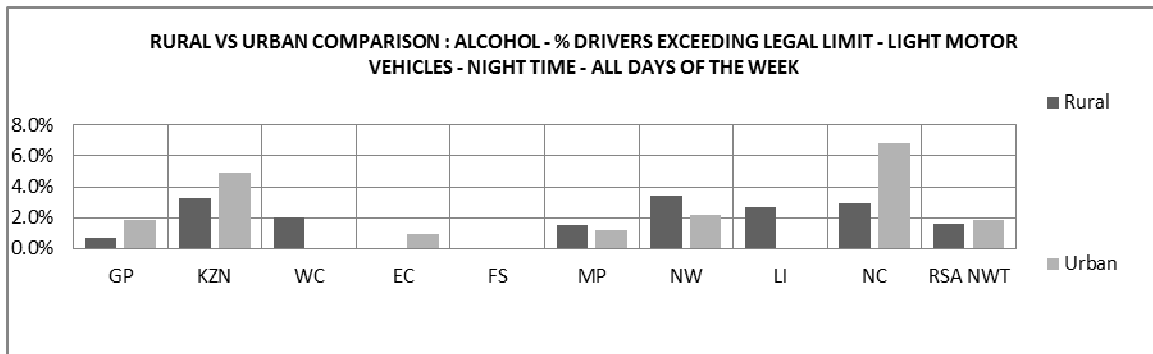
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	106	0.00	0.12	2	3%	1.89%	4.55%	3.13%	6.56%	3.50%	7.90%
KZ	82	0.01	0.23	4	5%	4.88%	0.00%	0.00%	0.00%	0.40%	3.00%
WC	94	0.00	0.00	0	3%	0.00%	0.00%	2.90%	6.90%	1.90%	6.40%
EC	106	0.00	0.19	1	3%	0.94%	0.00%	3.85%	0.00%	2.80%	7.20%
FS	82	0.00	0.00	0	3%	0.00%	0.00%	0.00%	0.00%	3.20%	5.10%
MP	82	0.00	0.38	1	4%	1.22%	3.64%	1.67%	1.43%	5.40%	12.40%
NW	91	0.00	0.21	2	4%	2.20%	5.08%	2.50%	0.00%	2.90%	4.90%
LI	73	0.00	0.00	0	4%	0.00%	0.00%	0.00%	0.00%	4.50%	6.20%
NC	73	0.01	0.37	5	6%	6.85%	0.00%	0.00%	0.00%	2.50%	4.30%
RSA NWT	789	0.00	0.00	15	1%	1.86%	2.14%	2.06%	3.47%	2.80%	6.70%



The information above shows that on a national basis the percentage alcohol offences for Light Motor Vehicles in this category have decreased from 2.14% in 2009 to 1.86% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 6.85%, and Western Cape, along with Free State and Limpopo, has the lowest offence rate with 0.0%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 6.85%. North West shows the largest decrease in offence rate percentage from 5.08% to 2.2%.

### 6.2.7.3 Alcohol Measurements during night time: Urban vs. Rural Comparisons - Light Motor Vehicles – All Days of the Week

RURAL VS URBAN COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - LIGHT MOTOR VEHICLES - NIGHT TIME - ALL DAYS OF THE WEEK		
Province	Rural	Urban
GP	0.7%	1.9%
KZN	3.3%	4.9%
WC	2.1%	0.0%
EC	0.0%	0.9%
FS	0.0%	0.0%
MP	1.5%	1.2%
NW	3.4%	2.2%
LI	2.7%	0.0%
NC	3.0%	6.8%
RSA NWT	1.6%	1.9%

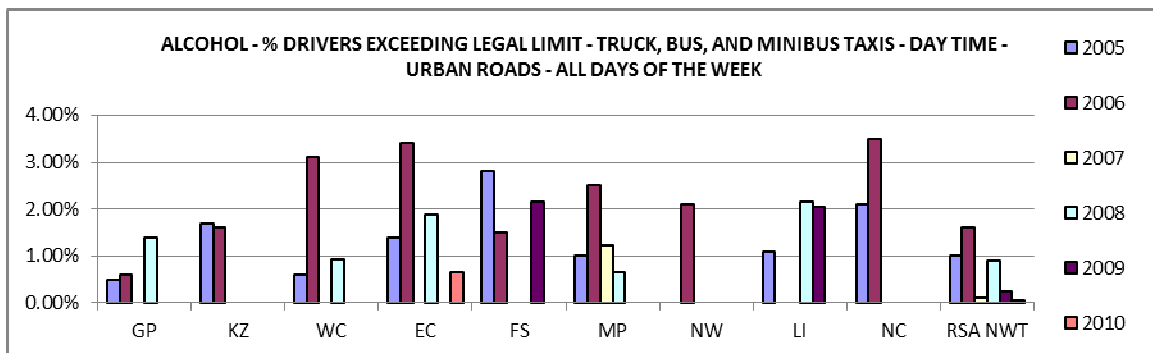


The information above shows that on a national basis the percentage alcohol offences for this category are lower in urban areas (1.6%) than in rural areas (1.9%). The province with the largest difference in urban and rural offence rates is Northern Cape, with 3.0% in urban areas, and 6.8% in rural areas. The province with the smallest difference in urban and rural offence rates is Free State, with 0.0% in urban areas, and 0.0% in rural areas.

## 6.2.8 ALCOHOL MEASUREMENTS FOR MINIBUS TAXIS, TRUCKS AND BUSES COMBINED – URBAN VS RURAL COMPARISONS - DAY TIME

### 6.2.8.1 Alcohol Measurements during Day time – Minibus Taxis, Trucks and Buses combined – Urban Roads – All Days of the Week

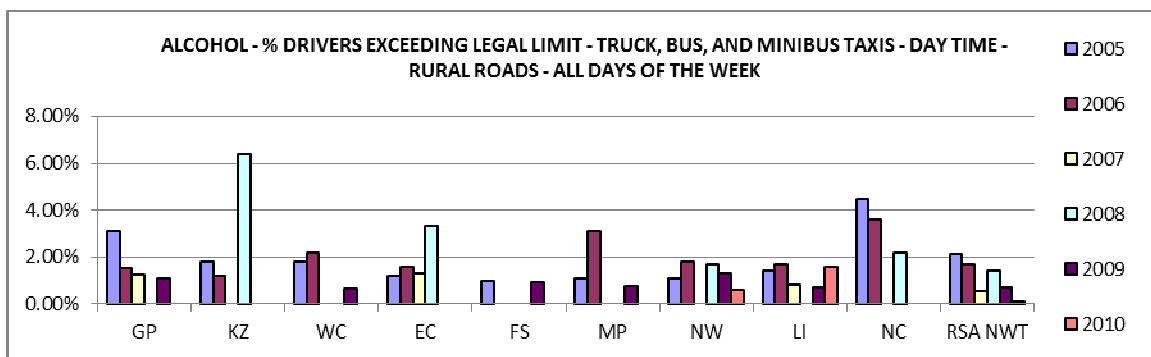
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	184	0.00	0.00	0	1%	0.00%	0.00%	1.39%	0.00%	0.60%	0.50%
KZ	127	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	1.60%	1.70%
WC	184	0.00	0.00	0	1%	0.00%	0.00%	0.93%	0.00%	3.10%	0.60%
EC	156	0.00	0.13	1	2%	0.64%	0.00%	1.89%	0.00%	3.40%	1.40%
FS	194	0.00	0.00	0	1%	0.00%	2.14%	0.00%	0.00%	1.50%	2.80%
MP	112	0.00	0.00	0	2%	0.00%	0.00%	0.67%	1.23%	2.50%	1.00%
NW	118	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	2.10%	0.00%
LI	63	0.00	0.00	0	4%	0.00%	2.04%	2.15%	0.00%	0.00%	1.10%
NC	139	0.00	0.00	0	2%	0.00%	0.00%	0.00%	0.00%	3.50%	2.10%
RSA NWT	1277	0.00	0.00	1	0%	0.05%	0.24%	0.90%	0.10%	1.60%	1.00%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 0.24% in 2009 to 0.05% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 0.64%, and Gauteng, along with all other provinces except Eastern Cape, has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 0.64%. Free State shows the largest decrease in offence rate percentage from 2.14% to 0.0%.

### 6.2.8.2 Alcohol Measurements during Day time – Minibus Taxis, Trucks and Buses combined – Rural Roads – All Days of the Week

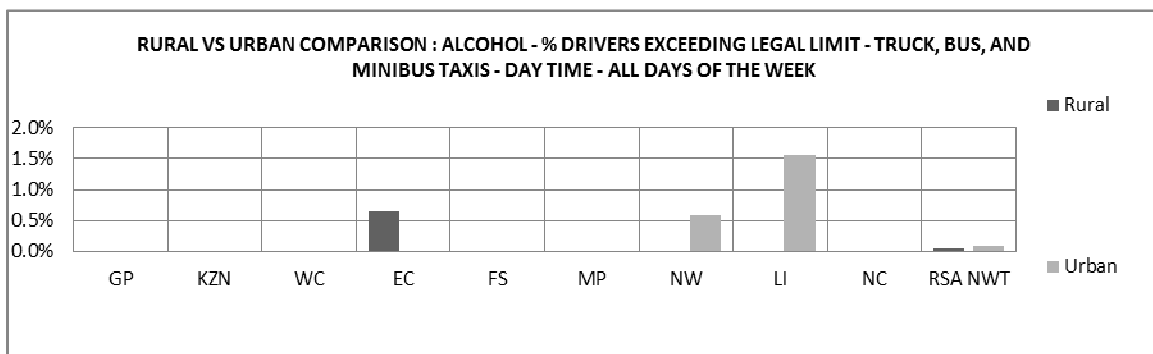
ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK											
Province	Sample size	Avg. reading (BAC)	Max. reading (BAC)	No. exceeding limit	% Confidence interval	% Drivers exceeding limit					
						2010	2009	2008	2007	2006	2005
GP	207	0.00	0.00	0	1%	0.00%	1.06%	0.00%	1.27%	1.50%	3.10%
KZ	133	0.00	0.00	0	2%	0.00%	0.00%	6.38%	0.00%	1.20%	1.80%
WC	170	0.00	0.00	0	2%	0.00%	0.68%	0.00%	0.00%	2.20%	1.80%
EC	165	0.00	0.00	0	2%	0.00%	0.00%	3.33%	1.32%	1.60%	1.20%
FS	140	0.00	0.00	0	2%	0.00%	0.91%	0.00%	0.00%	0.00%	1.00%
MP	92	0.00	0.00	0	3%	0.00%	0.74%	0.00%	0.00%	3.10%	1.10%
NW	168	0.00	0.20	1	2%	0.60%	1.33%	1.67%	0.00%	1.80%	1.10%
LI	128	0.00	0.15	2	3%	1.56%	0.68%	0.00%	0.81%	1.70%	1.40%
NC	131	0.00	0.00	0	2%	0.00%	0.00%	2.19%	0.00%	3.60%	4.50%
RSA NWT	1334	0.00	0.00	3	0%	0.10%	0.69%	1.40%	0.57%	1.70%	2.10%



The information above shows that on a national basis the percentage alcohol offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 0.69% in 2009 to 0.1% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.56%, and Gauteng, along with all other provinces except North West and Limpopo, has the lowest offence rate with 0.0%. Limpopo shows the largest increase in offence rate percentage, from 0.68% to 1.56%. Gauteng shows the largest decrease in offence rate percentage from 1.06% to 0.0%.

### 6.2.8.3 Alcohol Measurements during Day Time: Urban vs. Rural Comparisons: Minibus Taxis, Trucks and Buses combined – All Days of the Week

RURAL VS URBAN COMPARISON : ALCOHOL - % DRIVERS EXCEEDING LEGAL LIMIT - TRUCK, BUS, AND MINIBUS TAXIS - DAY TIME - ALL DAYS OF THE WEEK		
Province	Rural	Urban
GP	0.0%	0.0%
KZN	0.0%	0.0%
WC	0.0%	0.0%
EC	0.6%	0.0%
FS	0.0%	0.0%
MP	0.0%	0.0%
NW	0.0%	0.6%
LI	0.0%	1.6%
NC	0.0%	0.0%
RSA NWT	0.1%	0.1%

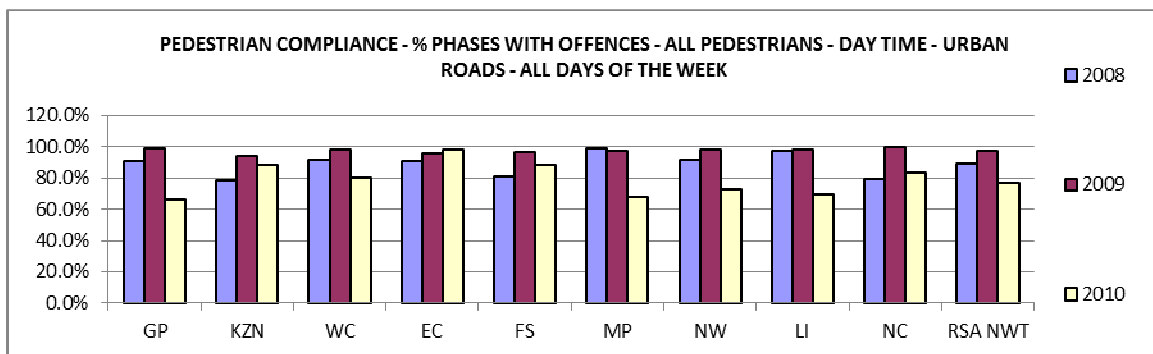


The information above shows that on a national basis the percentage alcohol offences for this category exactly the same for both urban and rural areas. The province with the largest difference in urban and rural offence rates is Limpopo, with 0.0% in urban areas, and 1.6% in rural areas. The province with the smallest difference in urban and rural offence rates is Gauteng, along with all other provinces except Eastern Cape, North West and Limpopo, with 0.0% in urban areas, and 0.0% in rural areas.

## 6.3 PEDESTRIAN COMPLIANCE AT TRAFFIC SIGNALS

### 6.3.1.1 Pedestrian Compliance at Traffic Signals – Day Time

PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK								
Province	Number of phases	Phases with offences	Pedestrians stopping	Pedestrians entering	% Confidence interval	% Of phases with offences		
						2010	2009	2008
GP	320	213	429	768	±5%	66.6%	98.8%	90.9%
KZN	320	284	961	912	±4%	88.8%	94.1%	78.4%
WC	320	257	523	1563	±4%	80.3%	97.8%	91.5%
EC	320	315	831	946	±2%	98.4%	96.1%	91.0%
FS	440	389	947	860	±3%	88.4%	96.7%	81.2%
MP	400	273	371	903	±5%	68.3%	97.0%	98.8%
NW	440	320	293	730	±4%	72.7%	97.8%	91.8%
LI	320	223	421	747	±5%	69.7%	98.1%	97.2%
NC	300	251	96	590	±4%	83.7%	99.7%	79.1%
RSA NWT	3180	2525	4872	8019	±1%	77.0%	97.3%	89.2%

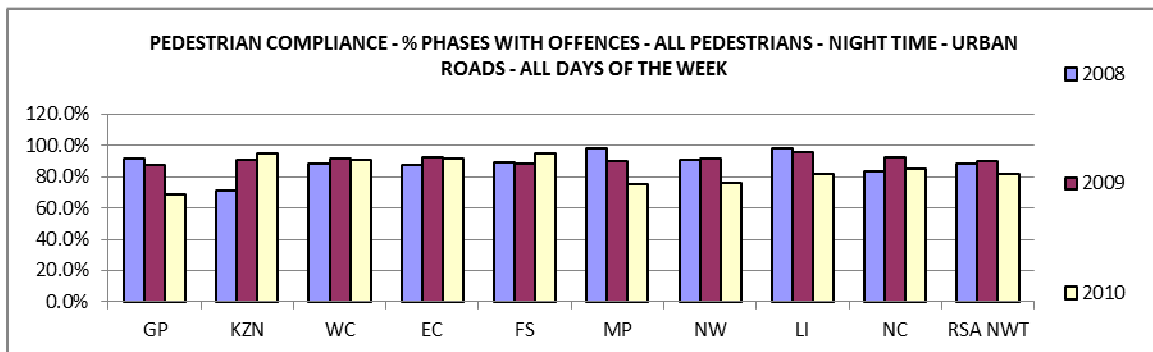


The information above shows that on a national basis the percentage pedestrian compliance offences during the day time have decreased from 97.3% in 2009 to 77.0% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 98.4%, and Gauteng has the lowest offence rate with 66.6%. Eastern Cape shows the largest increase in offence rate percentage, from 96.1% to 98.4%. Gauteng shows the largest decrease in offence rate percentage from 98.8% to 66.6%.



### 6.3.1.2 Pedestrian Compliance at Traffic Signals – Night Time

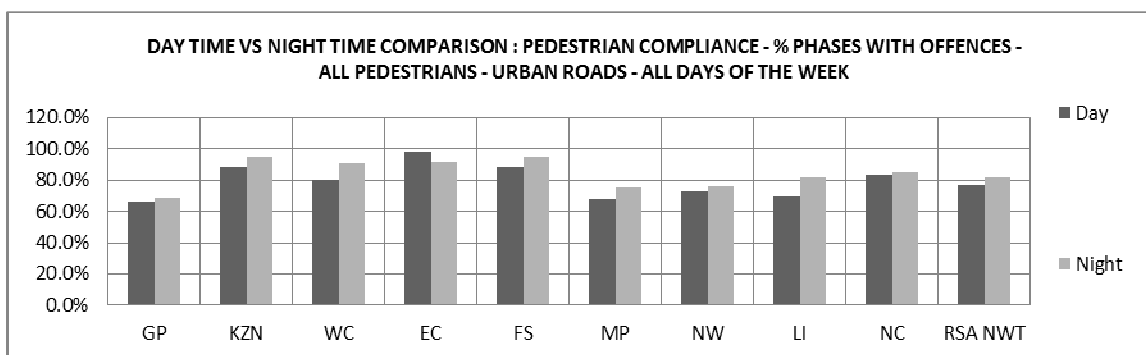
PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK								
Province	Number of phases	Phases with offences	Pedestrians stopping	Pedestrians entering	% Confidence interval	% Of phases with offences		
						2010	2009	2008
GP	320	221	209	490	±5%	69.1%	87.8%	91.8%
KZN	320	305	892	994	±2%	95.3%	90.6%	71.5%
WC	300	273	47	780	±3%	91.0%	91.3%	88.3%
EC	300	274	452	653	±3%	91.3%	92.8%	87.9%
FS	360	341	840	856	±2%	94.7%	88.8%	89.1%
MP	300	226	140	584	±5%	75.3%	90.3%	98.0%
NW	380	289	276	691	±4%	76.1%	91.9%	90.5%
LI	360	294	102	667	±4%	81.7%	95.9%	98.1%
NC	320	273	80	486	±4%	85.3%	92.5%	83.8%
RSA NWT	2960	2496	3038	6201	±1%	81.9%	90.1%	88.1%



The information above shows that on a national basis the percentage pedestrian compliance offences during the night time have decreased from 90.1% in 2009 to 81.9% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 95.3%, and Gauteng has the lowest offence rate with 69.1%. Free State shows the largest increase in offence rate percentage, from 88.8% to 94.7%. Gauteng shows the largest decrease in offence rate percentage from 87.8% to 69.1%.

### 6.3.1.3 Pedestrian Compliance at Traffic Signals – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : PEDESTRIAN COMPLIANCE - % PHASES WITH OFFENCES - ALL PEDESTRIANS - URBAN ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	66.6%	69.1%
KZN	88.8%	95.3%
WC	80.3%	91.0%
EC	98.4%	91.3%
FS	88.4%	94.7%
MP	68.3%	75.3%
NW	72.7%	76.1%
LI	69.7%	81.7%
NC	83.7%	85.3%
RSA NWT	77.0%	81.9%

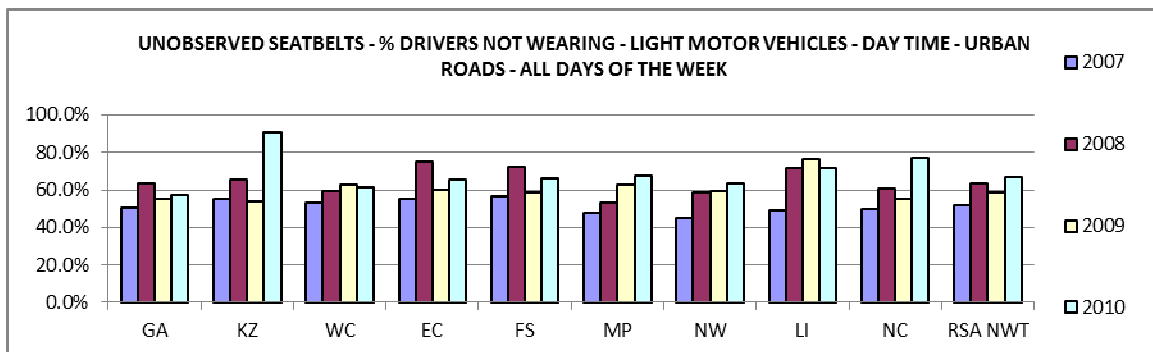


The information above shows that on a national basis the percentage pedestrian compliance offence rate for this category is lower during the day (77.0%) than during the night (81.9%). The province with the largest difference in day and night time offence rates is Limpopo, with 69.7% during the day, and 81.7% during the night. The province with the smallest difference in day and night time offence rates is Northern Cape, with 83.7% during the day, and 85.3% during the night.

## 6.4 UNOBSERVED SEAT BELTS

### 6.4.1.1 Not wearing of seat belts: Unobserved Surveys – Light Motor Vehicle: Drivers

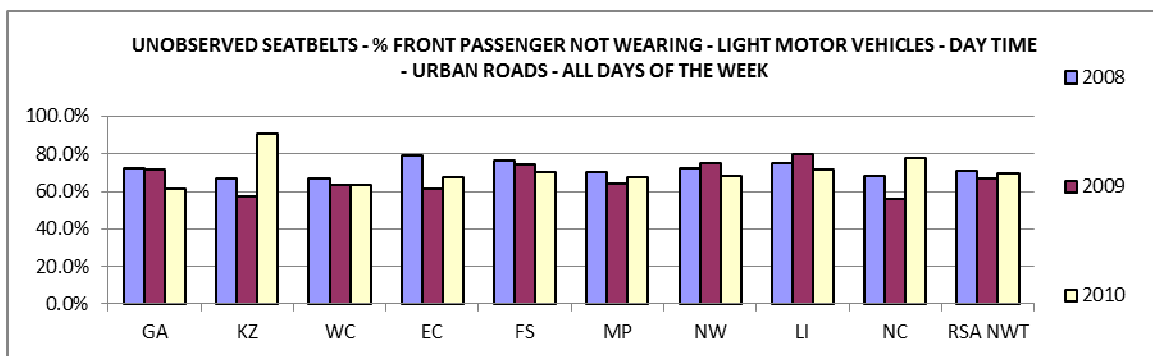
UNOBSERVED SEATBELTS - % DRIVERS NOT WEARING - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK								
Province	Front Drivers	No. wearing	No. not wearing	% Confidence interval	% Of drivers not wearing			
					2010	2009	2008	2007
GA	340	145	195	±5%	57.4%	55.4%	63.4%	50.7%
KZ	360	34	326	±3%	90.6%	53.6%	65.3%	55.0%
WC	560	216	344	±4%	61.4%	62.9%	59.3%	53.2%
EC	400	139	261	±5%	65.3%	59.8%	74.8%	55.2%
FS	480	161	319	±4%	66.5%	58.8%	72.6%	56.9%
MP	360	117	243	±5%	67.5%	62.7%	53.0%	48.0%
NW	360	131	229	±5%	63.6%	59.1%	58.8%	45.0%
LI	380	109	271	±5%	71.3%	76.5%	71.7%	49.0%
NC	440	101	339	±4%	77.0%	55.5%	60.6%	49.9%
RSA NWT	3680	1153	2527	±1%	66.9%	58.6%	63.6%	51.8%



The information above shows that on a national basis the percentage unobserved seatbelt offences for drivers in Light Motor Vehicles has increased from 58.6% in 2009 to 66.9% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 90.6%, and Gauteng has the lowest offence rate with 57.4%. KwaZulu Natal shows the largest increase in offence rate percentage, from 53.6% to 90.6%. Limpopo shows the largest decrease in offence rate percentage from 76.5% to 71.3%.

### 6.4.1.2 Not wearing of seat belts: Unobserved Surveys – Light Motor Vehicle: Front Passengers

UNOBSERVED SEATBELTS - % FRONT PASSENGER NOT WEARING - LIGHT MOTOR VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK					% Of drivers not wearing		
Province	Front Drivers	No. wearing	No. not wearing	% Confidence interval	2010	2009	2008
GA	340	131	209	±5%	61.5%	71.3%	72.4%
KZ	360	33	327	±3%	90.8%	57.3%	66.7%
WC	560	206	354	±4%	63.2%	63.2%	66.6%
EC	400	130	270	±5%	67.5%	61.6%	79.1%
FS	480	142	338	±4%	70.4%	74.0%	76.3%
MP	360	117	243	±5%	67.5%	64.3%	70.4%
NW	360	114	246	±5%	68.3%	75.3%	72.1%
LI	380	108	272	±5%	71.6%	79.8%	75.0%
NC	440	97	343	±4%	78.0%	55.8%	68.4%
RSA NWT	3680	1078	2602	±1%	69.3%	67.0%	71.1%

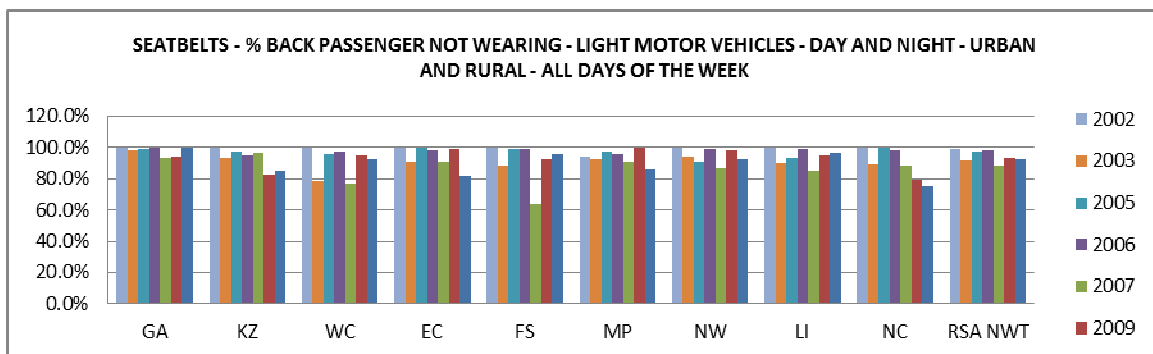


The information above shows that on a national basis the percentage unobserved seatbelt offences for front passengers in Light Motor Vehicles has increased from 67.0% in 2009 to 69.3% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 90.8%, and Gauteng has the lowest offence rate with 61.5%. KwaZulu Natal shows the largest increase in offence rate percentage, from 57.3% to 90.8%. Gauteng shows the largest decrease in offence rate percentage from 71.3% to 61.5%.

## 6.5 ROADBLOCK BACK PASSENGER SEATBELTS AND CHILD RESTRAINTS

### 6.5.1.1 Roadblock back passenger seatbelts – Light Motor Vehicles

SEATBELTS - % BACK PASSENGER NOT WEARING - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK											
2010					% NOT WEARING						
PROVINCE	NO. BACK PASSENGERS OBSERVED	NO. BACK PASSENGERS WEARING	NO. BACK PASSENGERS NOT WEARING	% CONFIDENCE INTERVAL	2010	2009	2007	2006	2005	2003	2002
GA	34	0	34	7.1%	100.0%	93.8%	92.9%	99.5%	99.0%	98.4%	99.5%
KZ	40	6	34	11.4%	85.0%	82.9%	96.7%	94.8%	97.0%	93.3%	99.5%
WC	63	5	58	7.3%	92.1%	95.2%	76.6%	97.7%	95.8%	78.4%	99.5%
EC	49	9	40	10.9%	81.6%	99.4%	90.5%	98.3%	99.5%	91.2%	99.5%
FS	50	2	48	7.0%	96.0%	92.2%	63.9%	98.9%	99.1%	88.5%	99.7%
MP	21	3	18	15.7%	85.7%	100.0%	90.5%	95.4%	97.1%	92.6%	94.2%
NW	28	2	26	11.5%	92.9%	98.6%	86.4%	99.2%	90.7%	93.8%	99.5%
LI	59	2	57	6.0%	96.6%	95.0%	84.7%	99.4%	93.0%	90.3%	99.7%
NC	32	8	24	14.6%	75.0%	79.6%	88.1%	98.0%	99.6%	89.0%	99.6%
RSA NWT	376	37	339	3.1%	92.4%	93.1%	88.2%	98.0%	97.3%	92.0%	99.1%



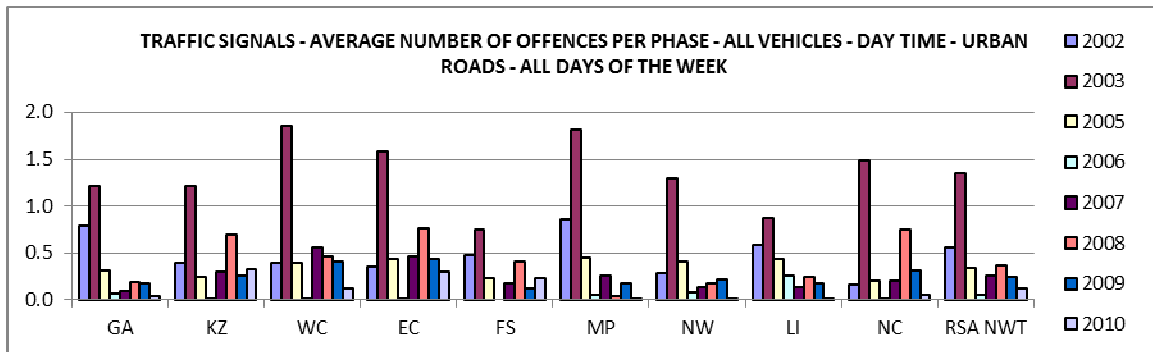
The information above shows that on a national basis the percentage back passenger seatbelt offences for Light Motor Vehicles in this category has decreased from 93.1% in 2009 to 92.4% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 100.0%, and Northern Cape has the lowest offence rate with 75.0%. Gauteng shows the largest increase in offence rate percentage, from 93.8% to 100.00%. Eastern Cape shows the largest decrease in offence rate percentage from 99.4% to 81.6%.

- Note that the sample size for this category is very small, resulting in a larger confidence interval.

## 6.6 TRAFFIC SIGNALS: URBAN AREAS

### 6.6.1.1 Drivers Ignoring Red Traffic Signals – Day Time

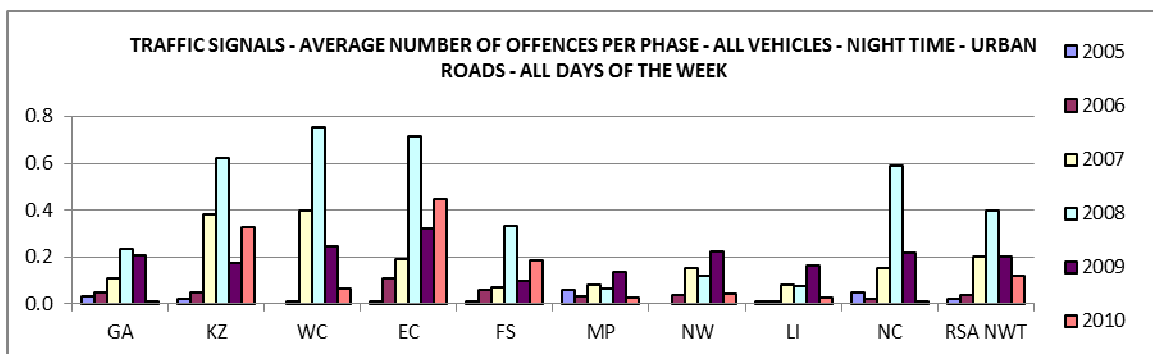
TRAFFIC SIGNALS - AVERAGE NUMBER OF OFFENCES PER PHASE - ALL VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK														
Province	No. of red phases evaluated	No. of offenders per vehicle type					Avg. offences per phase							
		LMV	Taxi	Bus	Truck	Total	2010	2009	2008	2007	2006	2005	2003	2002
GA	320	9	1	0	2	12	0.0	0.2	0.2	0.1	0.1	0.3	1.2	0.8
KZ	320	59	47	0	0	106	0.3	0.3	0.7	0.3	0.0	0.2	1.2	0.4
WC	320	33	4	0	1	38	0.1	0.4	0.5	0.6	0.0	0.4	1.9	0.4
EC	320	49	39	0	6	94	0.3	0.4	0.8	0.5	0.0	0.4	1.6	0.4
FS	440	71	29	0	1	101	0.2	0.1	0.4	0.2	0.0	0.2	0.8	0.5
MP	560	1	0	0	0	1	0.0	0.2	0.0	0.3	0.1	0.5	1.8	0.9
NW	360	3	0	0	0	3	0.0	0.2	0.2	0.1	0.1	0.4	1.3	0.3
LI	400	2	0	0	0	2	0.0	0.2	0.2	0.1	0.3	0.4	0.9	0.6
NC	360	16	5	0	0	21	0.1	0.3	0.8	0.2	0.0	0.2	1.5	0.2
RSA NWT	3400	243	125	0	10	378	0.1	0.2	0.4	0.3	0.1	0.3	1.4	0.6



The information above shows that on a national basis the average number of offences per traffic signal phase has decreased from 0.2 in 2009 to 0.1 in 2010. KwaZulu Natal and Eastern Cape has the highest average in this regard for 2010 with 0.3, and Gauteng, along with Mpumalanga, North West and Limpopo, has the lowest average in this regard with 0.0 offences per phase. Free State shows the largest increase in offence rate, from 0.1 to 0.2 average offences per phase. Western Cape shows the largest decrease in offence rate from 0.4 to 0.1 average offences per phase.

### 6.6.1.2 Drivers Ignoring Red Traffic Signals – Night Time

TRAFFIC SIGNALS - AVERAGE NUMBER OF OFFENCES PER PHASE - ALL VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK												
Province	No. of red phases evaluated	No. of offenders per vehicle type					Avg. offences per phase					
		LMV	Taxi	Bus	Truck	Total	2010	2009	2008	2007	2006	2005
GA	300	3	0	0	0	3	0.0	0.2	0.2	0.1	0.1	0.0
KZ	320	58	47	0	0	105	0.3	0.2	0.6	0.4	0.1	0.0
WC	300	18	2	0	0	20	0.1	0.2	0.8	0.4	0.0	0.0
EC	300	92	35	0	7	134	0.4	0.3	0.7	0.2	0.1	0.0
FS	360	50	15	0	1	66	0.2	0.1	0.3	0.1	0.1	0.0
MP	300	8	0	0	0	8	0.0	0.1	0.1	0.1	0.0	0.1
NW	320	10	4	0	0	14	0.0	0.2	0.1	0.2	0.0	0.0
LI	320	8	1	0	0	9	0.0	0.2	0.1	0.1	0.0	0.0
NC	320	4	0	0	0	4	0.0	0.2	0.6	0.2	0.0	0.1
RSA NWT	2840	251	104	0	8	363	0.1	0.2	0.4	0.2	0.0	0.0

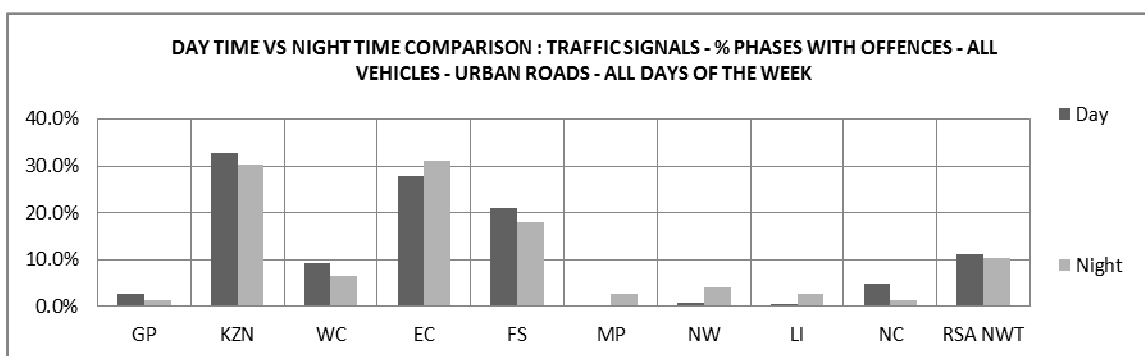


The information above shows that on a national basis the average number of offences per traffic signal phase has decreased from 0.2 in 2009 to 0.1 in 2010. Eastern Cape has the highest average in this regard for 2010 with 0.4 average offences per phases, and all provinces except KwaZulu Natal, Western Cape, Eastern Cape and Free State show an average of 0.0 offences per phase. KwaZulu Natal and Eastern Cape shows the largest increase in offence rate average, from 0.2 to 0.3, and 0.3 to 0.4 respectively. Gauteng, North West, Limpopo and Northern Cape all show a decrease in offence rate average from 0.2 to 0.0.

### 6.6.1.3 Drivers Ignoring Red Traffic Signals – Day Time vs. Night Time

TRAFFIC SIGNALS - % PHASES WITH OFFENCES - ALL VEHICLES - DAY TIME - URBAN ROADS - ALL DAYS OF THE WEEK				
2010				
Province	No. of red phases evaluated	No. of phases with offences	% Of phases with offences	% Confidence interval
GA	320	9	2.8%	±2%
KZ	320	105	32.8%	±5%
WC	320	30	9.4%	±3%
EC	320	89	27.8%	±5%
FS	440	92	20.9%	±4%
MP	560	1	0.2%	±1%
NW	360	3	0.8%	±1%
LI	400	2	0.5%	±1%
NC	360	18	5.0%	±2%
RSA NWT	3400	349	11.3%	±1%

TRAFFIC SIGNALS - % PHASES WITH OFFENCES - ALL VEHICLES - NIGHT TIME - URBAN ROADS - ALL DAYS OF THE WEEK				
2010				
Province	No. of red phases evaluated	No. of phases with offences	% Of phases with offences	% Confidence interval
GA	300	4	1.3%	±2%
KZ	320	97	30.3%	±5%
WC	300	20	6.7%	±3%
EC	300	93	31.0%	±5%
FS	360	65	18.1%	±4%
MP	300	8	2.7%	±2%
NW	320	13	4.1%	±2%
LI	320	9	2.8%	±2%
NC	320	4	1.3%	±1%
RSA NWT	2840	313	10.5%	±1%



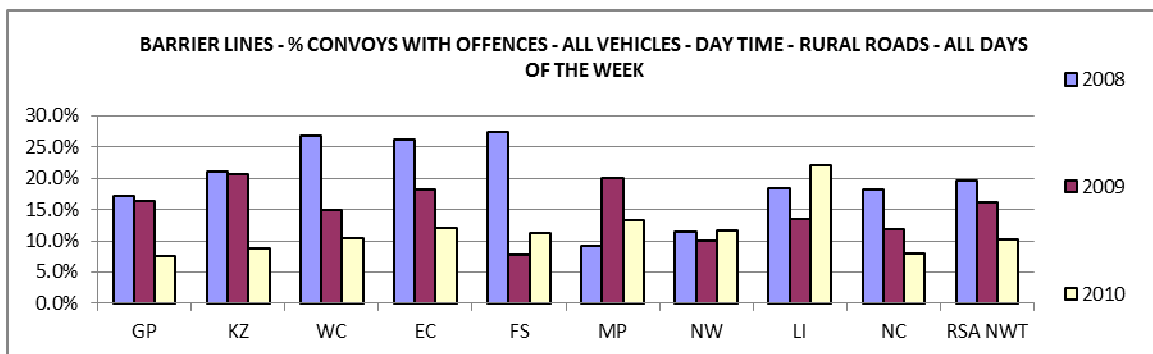
The information above shows that on a national basis the percentage traffic signal phases with offences for this category are higher during the day (11.3%) than during the night (10.5%). The province with the largest difference in day and night time offence rates is Northern Cape, with 5.0% during the day, and 1.3% during the night. The province with the smallest difference in day and night time offence rates is Gauteng, with 2.8% during the day, and 1.3% during the night.



## 6.7 OVERTAKING ACROSS BARRIER LINES

### 6.7.1.1 Drivers Ignoring Barrier Lines – Day Time

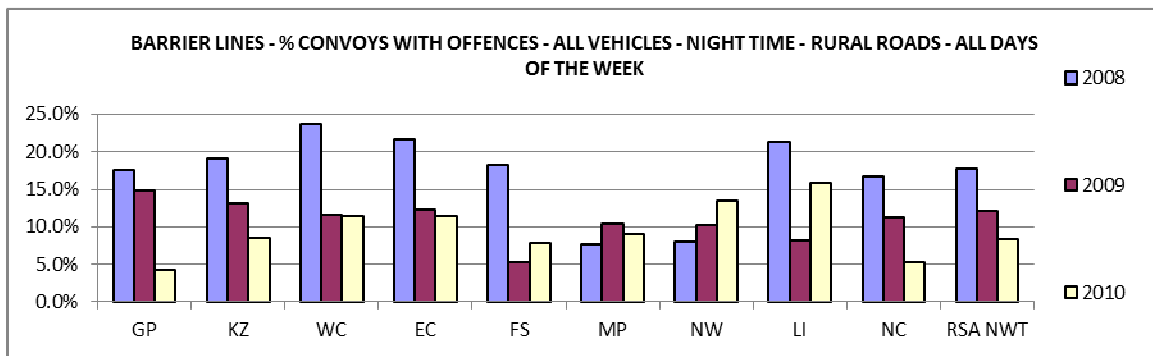
BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - DAY TIME - RURAL ROADS - ALL DAYS OF THE WEEK						
Provinces	2010 Survey			% Of convoys offending		
	Total convoys observed	No. convoys offending	% Confidence interval	2010	2009	2008
GP	300	23	±3%	7.7%	16.4%	17.2%
KZ	360	32	±3%	8.9%	20.6%	21.1%
WC	400	42	±3%	10.5%	15.0%	26.9%
EC	306	37	±4%	12.1%	18.1%	26.1%
FS	400	45	±3%	11.3%	7.8%	27.5%
MP	300	40	±4%	13.3%	20.0%	9.2%
NW	300	35	±4%	11.7%	10.0%	11.4%
LI	300	66	±5%	22.0%	13.4%	18.3%
NC	340	27	±3%	7.9%	11.9%	18.2%
RSA NWT	3,006	347	±1%	10.3%	16.1%	19.6%



The information above shows that on a national basis the percentage barrier line offences during the day time has decreased from 16.1% in 2009 to 10.3% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 22.0%, and Gauteng has the lowest offence rate with 7.7%. Limpopo shows the largest increase in offence rate percentage, from 13.4% to 22.0%. KwaZulu Natal shows the largest decrease in offence rate percentage from 20.6% to 8.9%.

### 6.7.1.2 Drivers Ignoring Barrier Lines – Night Time

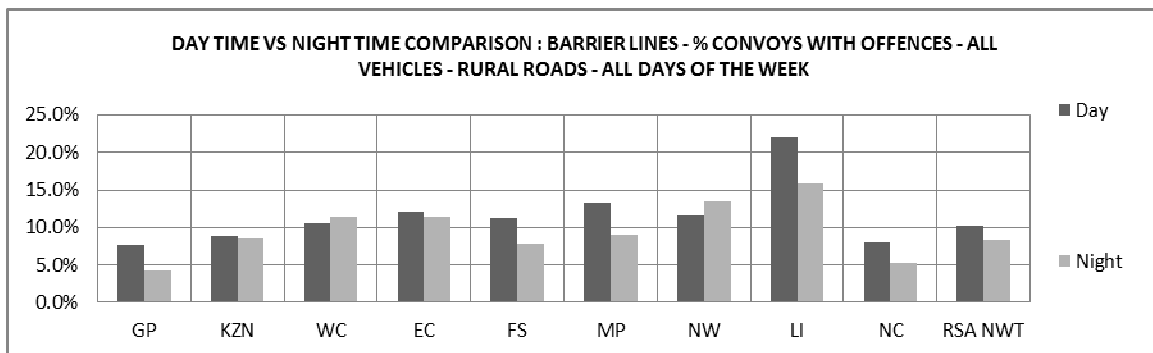
BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - NIGHT TIME - RURAL ROADS - ALL DAYS OF THE WEEK						
Provinces	2010 Survey			% Of convoys offending		
	Total convoys observed	No. convoys offending	% Confidence interval	2010	2009	2008
GP	300	13	±2%	4.3%	14.8%	17.5%
KZ	320	27	±3%	8.4%	13.1%	19.1%
WC	400	46	±3%	11.5%	11.6%	23.8%
EC	334	38	±3%	11.4%	12.2%	21.6%
FS	360	28	±3%	7.8%	5.3%	18.3%
MP	300	27	±3%	9.0%	10.3%	7.8%
NW	320	43	±4%	13.4%	10.3%	8.1%
LI	340	54	±4%	15.9%	8.1%	21.3%
NC	300	16	±3%	5.3%	11.3%	16.8%
RSA NWT	2,974	292	±1%	8.3%	12.2%	17.8%



The information above shows that on a national basis the percentage barrier line offences during the night time has decreased from 12.2% in 2009 to 8.3% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 15.9%, and Gauteng has the lowest offence rate with 4.3%. Limpopo shows the largest increase in offence rate percentage, from 8.1% to 15.9%. Gauteng shows the largest decrease in offence rate percentage from 14.8% to 4.3%.

### 6.7.1.3 Drivers Ignoring Barrier Lines – Day Time vs. Night Time

DAY TIME VS NIGHT TIME COMPARISON : BARRIER LINES - % CONVOYS WITH OFFENCES - ALL VEHICLES - RURAL ROADS - ALL DAYS OF THE WEEK		
Province	Day	Night
GP	7.7%	4.3%
KZN	8.9%	8.4%
WC	10.5%	11.5%
EC	12.1%	11.4%
FS	11.3%	7.8%
MP	13.3%	9.0%
NW	11.7%	13.4%
LI	22.0%	15.9%
NC	7.9%	5.3%
RSA NWT	10.3%	8.3%



The information above shows that on a national basis the percentage barrier line offences for this category are higher during the day (10.3%) than during the night (8.3%). The province with the largest difference in day and night time offence rates is Limpopo, with 22.0% during the day, and 15.9% during the night. The province with the smallest difference in day and night time offence rates is KwaZulu Natal, with 8.9% during the day, and 8.4% during the night.

## 6.8 DRIVERS: DRIVER LICENCES AND PROFESSIONAL DRIVING PERMITS

### 6.8.1 DRIVER LICENCES - % DRIVER LICENCE NOT PRESENT

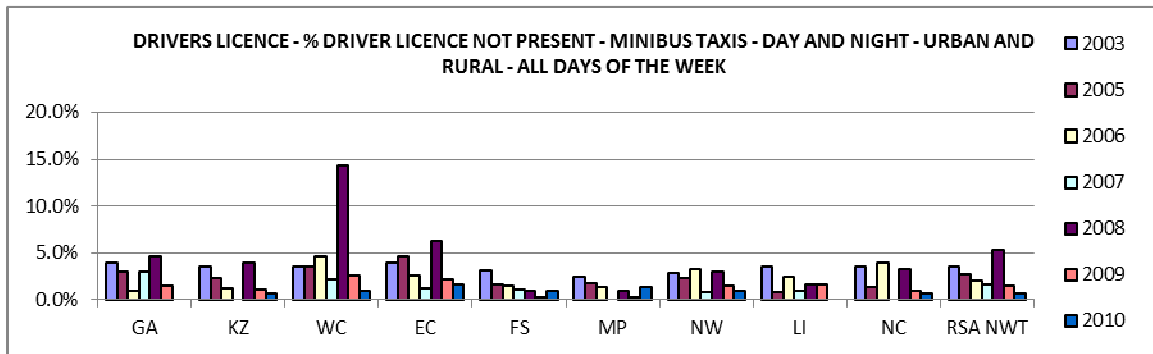
#### 6.8.1.1 Driver Licences - % Driver Licence not present - Light motor vehicles

DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK											
Province	Sample size	Present	Absent	% Confidence interval	Offence %						
					2010	2009	2008	2007	2006	2005	2003
GA	469	466	3	±1%	0.6%	2.6%	2.8%	2.9%	3.7%	4.0%	4.2%
KZ	413	405	7	±1%	1.7%	1.8%	4.5%	1.4%	5.6%	2.3%	4.9%
WC	440	432	8	±1%	1.8%	1.9%	9.0%	4.8%	3.2%	2.8%	5.1%
EC	405	398	6	±1%	1.5%	2.5%	7.3%	5.2%	5.1%	3.9%	5.5%
FS	428	414	12	±2%	2.8%	1.1%	7.3%	1.9%	3.9%	3.4%	3.9%
MP	406	394	12	±2%	3.0%	1.8%	2.3%	0.7%	4.3%	2.4%	3.3%
NW	415	412	3	±1%	0.7%	2.1%	5.1%	2.6%	5.0%	2.9%	4.5%
LI	425	415	8	±1%	1.9%	3.2%	4.8%	1.6%	1.4%	2.2%	4.1%
NC	409	401	7	±1%	1.7%	1.3%	2.6%	2.9%	3.3%	3.2%	5.1%
RSA NWT	3810	3737	66	±0%	1.5%	2.2%	4.8%	2.8%	4.0%	3.2%	4.5%

The information above shows that on a national basis the percentage driver licence offences for Light Motor Vehicles in this category has decreased from 2.2% in 2009 to 1.5% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 3.0%, and Gauteng has the lowest offence rate with 0.6%. Free State shows the largest increase in offence rate percentage, from 1.1% to 2.8%. Gauteng shows the largest decrease in offence rate percentage from 2.6% to 0.6%.

### 6.8.1.2 Driver Licences - % Driver Licence not present – Mini Bus Taxis

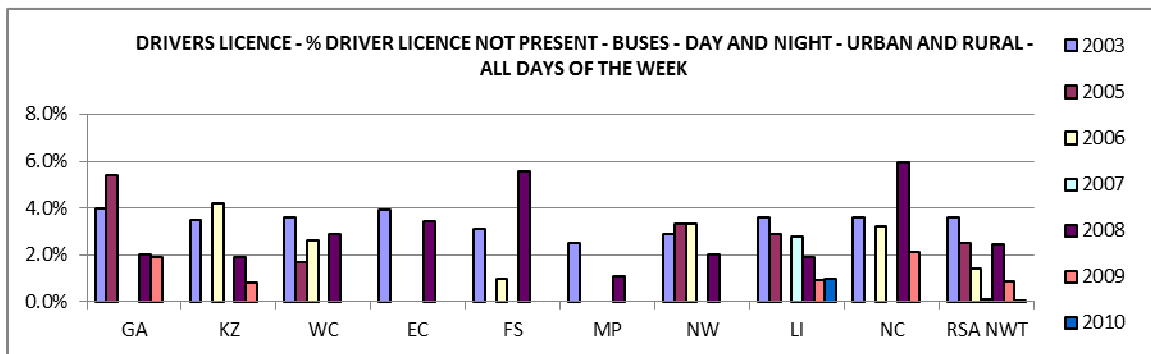
DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Present	Absent	% Confidence interval	Offence %							
					2010	2009	2008	2007	2006	2005	2003	
GA	300	300	0	±1%	0.0%	1.6%	4.7%	3.0%	0.9%	3.0%	4.0%	
KZ	306	304	2	±1%	0.7%	1.1%	4.0%	0.0%	1.2%	2.3%	3.5%	
WC	326	323	3	±1%	0.9%	2.6%	14.4%	2.2%	4.6%	3.5%	3.6%	
EC	300	295	5	±2%	1.7%	2.1%	6.2%	1.2%	2.6%	4.6%	3.9%	
FS	303	299	3	±1%	1.0%	0.3%	0.9%	1.1%	1.5%	1.7%	3.1%	
MP	302	297	4	±2%	1.3%	0.3%	1.0%	0.0%	1.4%	1.8%	2.5%	
NW	316	313	3	±1%	0.9%	1.5%	3.0%	0.8%	3.3%	2.3%	2.9%	
LI	303	302	0	±1%	0.0%	1.7%	1.7%	1.0%	2.5%	0.8%	3.6%	
NC	305	303	2	±1%	0.7%	1.0%	3.3%	0.0%	4.0%	1.4%	3.6%	
RSA NWT	2761	2736	22	±0%	0.6%	1.5%	5.3%	1.6%	2.0%	2.7%	3.6%	



The information above shows that on a national basis the percentage driver licence offences for Minibus Taxis in this category has decreased from 1.5% in 2009 to 0.6% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.7%, and Gauteng, along with Limpopo, has the lowest offence rate with 0.0%. Mpumalanga shows the largest increase in offence rate percentage, from 0.3% to 1.3%. Western Cape shows the largest decrease in offence rate percentage from 2.6% to 0.9%.

### 6.8.1.3 Driver Licences - % Driver Licence not present – Buses

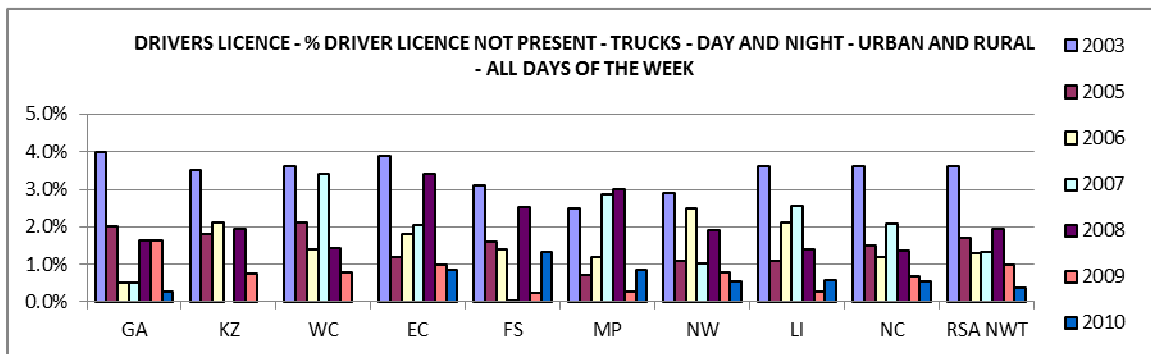
DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Present	Absent	% Confidence interval	Offence %							
					2010	2009	2008	2007	2006	2005	2003	
GA	120	120	0	±2%	0.0%	1.9%	2.0%	0.0%	0.0%	5.4%	4.0%	
KZ	101	101	0	±3%	0.0%	0.8%	1.9%	0.0%	4.2%	0.0%	3.5%	
WC	116	116	0	±2%	0.0%	0.0%	2.9%	0.0%	2.6%	1.7%	3.6%	
EC	103	102	0	±3%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	3.9%	
FS	107	107	0	±2%	0.0%	0.0%	5.6%	0.0%	1.0%	0.0%	3.1%	
MP	100	100	0	±3%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	2.5%	
NW	101	101	0	±3%	0.0%	0.0%	2.0%	0.0%	3.3%	3.3%	2.9%	
LI	102	101	1	±3%	1.0%	0.9%	1.9%	2.8%	0.0%	2.9%	3.6%	
NC	127	127	0	±2%	0.0%	2.1%	5.9%	0.0%	3.2%	0.0%	3.6%	
RSA NWT	977	975	1	±0%	0.0%	0.9%	2.5%	0.1%	1.4%	2.5%	3.6%	



The information above shows that on a national basis the percentage driver licence offences for Buses in this category has decreased from 0.9% in 2009 to 0.0% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 1.0%, and Gauteng, along with all other provinces except Limpopo, has the lowest offence rate with 0.0%. Limpopo shows the largest increase in offence rate percentage, from 0.9% to 1.0%. Northern Cape shows the largest decrease in offence rate percentage from 2.1% to 0.0%.

### 6.8.1.4 Driver Licences - % Driver Licence not present – Trucks

DRIVERS LICENCE - % DRIVER LICENCE NOT PRESENT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	Present	Absent	% Confidence interval	Offence %							
					2010	2009	2008	2007	2006	2005	2003	
GA	357	355	1	±1%	0.3%	1.6%	1.6%	0.5%	0.5%	2.0%	4.0%	
KZ	348	348	0	±1%	0.0%	0.7%	1.9%	0.0%	2.1%	1.8%	3.5%	
WC	405	405	0	±1%	0.0%	0.8%	1.4%	3.4%	1.4%	2.1%	3.6%	
EC	352	349	3	±1%	0.9%	1.0%	3.4%	2.0%	1.8%	1.2%	3.9%	
FS	372	367	5	±1%	1.3%	0.3%	2.5%	0.0%	1.4%	1.6%	3.1%	
MP	357	354	3	±1%	0.8%	0.3%	3.0%	2.9%	1.2%	0.7%	2.5%	
NW	370	368	2	±1%	0.5%	0.8%	1.9%	1.0%	2.5%	1.1%	2.9%	
LI	350	347	2	±1%	0.6%	0.3%	1.4%	2.5%	2.1%	1.1%	3.6%	
NC	360	358	2	±1%	0.6%	0.7%	1.4%	2.1%	1.2%	1.5%	3.6%	
RSA NWT	3271	3251	18	±0%	0.4%	1.0%	2.0%	1.3%	1.3%	1.7%	3.6%	

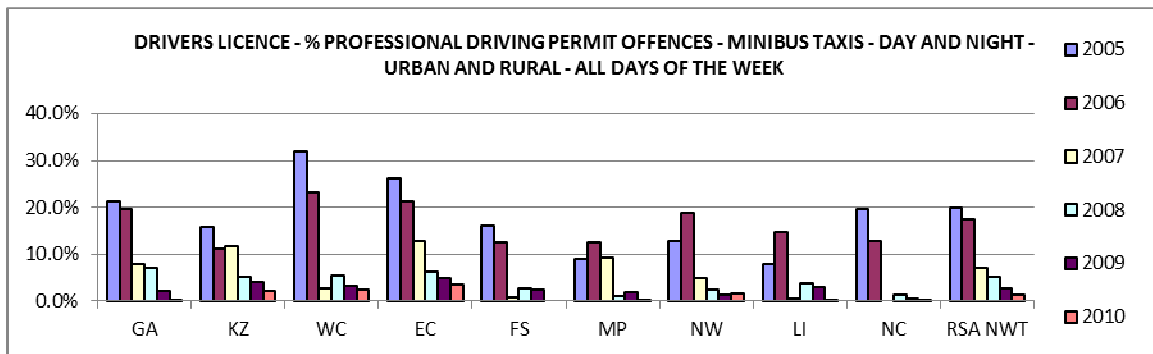


The information above shows that on a national basis the percentage driver licence offences for Trucks in this category has decreased from 1.0% in 2009 to 0.4% in 2010. Free State has the highest offence rate in this regard for 2010 with 1.3%, and KwaZulu Natal, along with Western Cape, has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.3% to 1.3%. Gauteng shows the largest decrease in offence rate percentage from 1.6% to 0.3%.

## 6.8.2 PROFESSIONAL DRIVING PERMIT - % PRDP NOT PRESENT

### 6.8.2.1 Professional Driving Permit - % PRDP not present – Mini Bus Taxis

DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
Province	Total sample	No. absent	% Confidence interval	% Absent					
				2010	2009	2008	2007	2006	2005
GA	300	1	2%	0.3%	2.2%	7.0%	8.0%	19.5%	21.2%
KZ	306	7	1%	2.3%	4.0%	5.3%	11.8%	11.3%	15.8%
WC	326	8	1%	2.5%	3.3%	5.4%	2.8%	23.3%	31.9%
EC	300	11	2%	3.7%	4.8%	6.2%	12.9%	21.3%	26.3%
FS	303	0	1%	0.0%	2.5%	2.8%	0.7%	12.6%	16.2%
MP	302	1	2%	0.3%	2.0%	1.0%	9.2%	12.6%	8.9%
NW	316	5	2%	1.6%	1.5%	2.3%	4.9%	18.8%	12.7%
LI	303	1	1%	0.3%	3.0%	3.7%	0.7%	14.8%	7.9%
NC	305	1	1%	0.3%	0.7%	1.5%	0.0%	12.8%	19.6%
RSA NWT	2761	35	0%	1.3%	2.8%	5.1%	7.2%	17.5%	19.9%

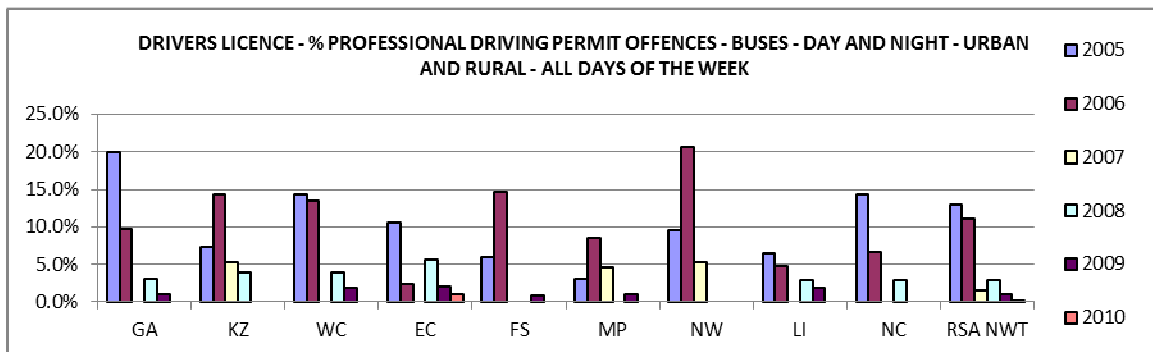


The information above shows that on a national basis the percentage PrDP offences for Minibus Taxis in this category have decreased from 2.8% in 2009 to 1.3% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 3.7%, and Free State has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 1.5% to 1.6%. Limpopo shows the largest decrease in offence rate percentage from 3.0% to 0.3%.



### 6.8.2.2 Professional Driving Permit - % PRDP not present – Buses

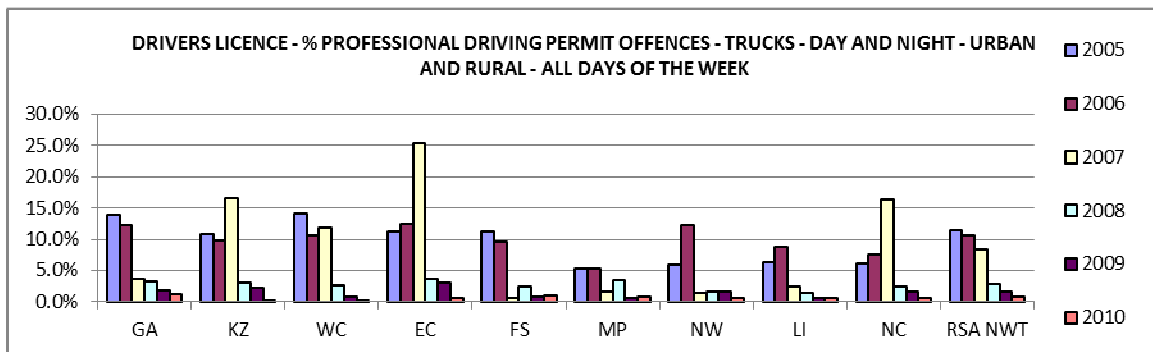
DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
Province	Total sample	No. absent	% Confidence interval	% Absent					
				2010	2009	2008	2007	2006	2005
GA	120	0	2%	0.0%	0.9%	3.0%	0.0%	9.7%	20.0%
KZ	101	0	1%	0.0%	0.0%	3.8%	5.3%	14.3%	7.4%
WC	116	0	1%	0.0%	1.9%	3.8%	0.0%	13.5%	14.3%
EC	103	1	2%	1.0%	2.0%	5.7%	0.0%	2.4%	10.5%
FS	107	0	1%	0.0%	0.8%	0.0%	0.0%	14.7%	6.0%
MP	100	0	2%	0.0%	1.0%	0.0%	4.6%	8.6%	3.1%
NW	101	0	2%	0.0%	0.0%	0.0%	5.3%	20.7%	9.5%
LI	102	0	1%	0.0%	1.8%	2.9%	0.0%	4.8%	6.5%
NC	127	0	1%	0.0%	0.0%	3.0%	0.0%	6.7%	14.3%
RSA NWT	977	1	0%	0.1%	1.0%	2.8%	1.5%	11.0%	12.9%



The information above shows that on a national basis the percentage PrDP offences for Buses in this category have decreased from 1.0% in 2009 to 0.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.0%, and Gauteng, along with North West and Northern Cape, has the lowest offence rate with 0.0%. None of the provinces show an increase in offence rates between 2009 and 2010. Western Cape shows the largest decrease in offence rate percentage from 1.9% to 0.0%.

### 6.8.2.3 Professional Driving Permit - % PRDP not present – Trucks

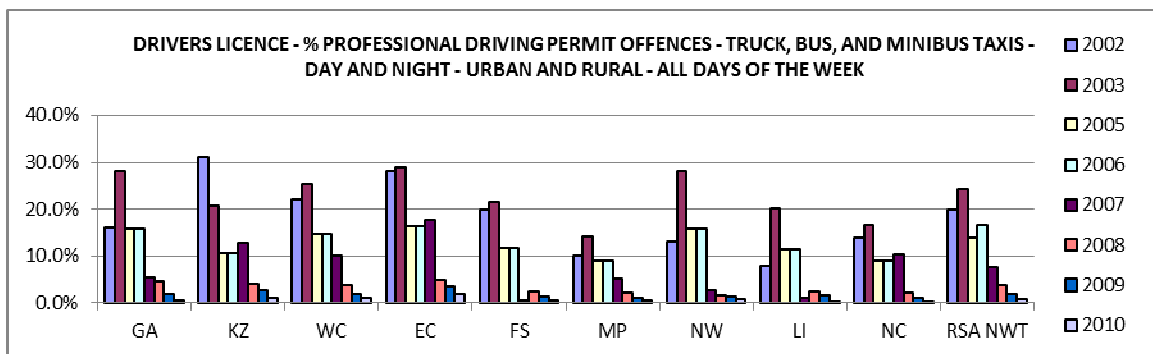
DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
Province	Total sample	No. absent	% Confidence interval	% Absent					
				2010	2009	2008	2007	2006	2005
GA	357	4	2%	1.1%	1.9%	3.3%	3.6%	12.2%	13.9%
KZ	348	1	1%	0.3%	2.2%	3.1%	16.7%	9.9%	10.9%
WC	405	1	1%	0.2%	0.8%	2.6%	11.8%	10.6%	14.1%
EC	352	2	2%	0.6%	3.0%	3.7%	25.3%	12.5%	11.2%
FS	372	4	1%	1.1%	0.8%	2.5%	0.6%	9.7%	11.2%
MP	357	3	2%	0.8%	0.6%	3.5%	1.6%	5.3%	5.3%
NW	370	2	2%	0.5%	1.6%	1.6%	1.4%	12.3%	6.0%
LI	350	2	1%	0.6%	0.6%	1.4%	2.5%	8.7%	6.4%
NC	360	2	1%	0.6%	1.6%	2.4%	16.4%	7.5%	6.1%
RSA NWT	3271	21	0%	0.7%	1.6%	2.9%	8.4%	10.7%	11.4%



The information above shows that on a national basis the percentage PrDP offences for Trucks in this category have decreased from 1.6% in 2009 to 0.7% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 1.1%, and Western Cape has the lowest offence rate with 0.2%. Free State shows the largest increase in offence rate percentage, from 0.8% to 1.1%. Eastern Cape shows the largest decrease in offence rate percentage from 3.0% to 0.6%.

### 6.8.2.4 Professional Driving Permit - % PRDP not present – Mini Bus Taxis, Trucks and Buses combined

DRIVERS LICENCE - % PROFESSIONAL DRIVING PERMIT OFFENCES - TRUCK, BUS, AND MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Total sample	No. absent	% Confidence interval	% Absent								
				2010	2009	2008	2007	2006	2005	2003	2002	
GA	777	5	2%	0.6%	1.9%	4.7%	5.4%	15.9%	15.9%	28.1%	16.0%	
KZ	755	8	1%	1.1%	2.7%	4.1%	12.8%	10.7%	10.7%	0.206	0.31	
WC	847	9	1%	1.1%	1.9%	3.9%	10.1%	14.8%	14.8%	0.254	0.22	
EC	755	14	2%	1.9%	3.6%	5.0%	17.8%	16.3%	16.3%	0.288	0.28	
FS	782	4	1%	0.5%	1.4%	2.3%	0.6%	11.8%	11.8%	0.215	0.2	
MP	759	4	2%	0.5%	1.2%	2.1%	5.3%	9.0%	9.0%	0.143	0.1	
NW	787	7	2%	0.9%	1.3%	1.7%	2.8%	15.9%	15.9%	0.282	0.13	
LI	755	3	1%	0.4%	1.7%	2.5%	1.2%	11.4%	11.4%	0.201	0.08	
NC	792	3	1%	0.4%	1.1%	2.1%	10.5%	9.0%	9.0%	0.165	0.14	
RSA NWT	7009	57	0%	0.8%	2.0%	3.8%	7.7%	16.7%	13.8%	0.243	0.198	



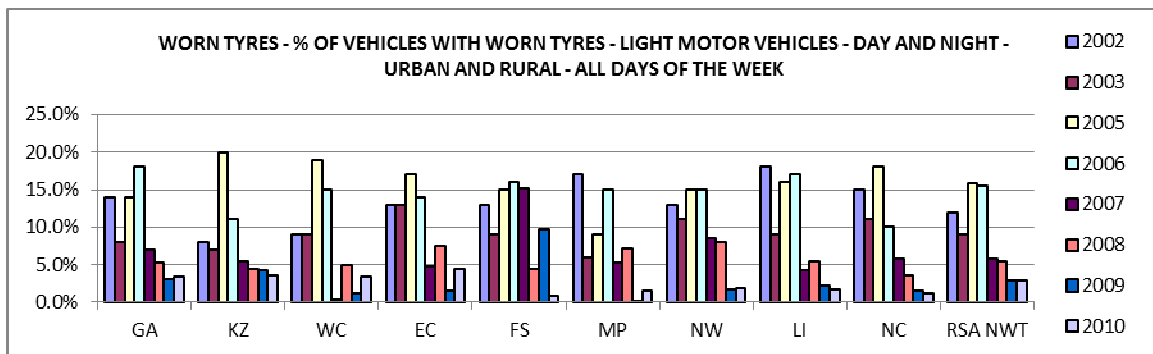
The information above shows that on a national basis the percentage PrDP offences for a combination of Trucks, Buses, and Minibus Taxis in this category has decreased from 2.0% in 2009 to 0.8% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.9%, and Limpopo has the lowest offence rate with 0.4%. None of the provinces show an increase in offence rates between 2009 and 2010. Eastern Cape shows the largest decrease in offence rate percentage from 3.6% to 1.9%.

## 6.9 VEHICLE FITNESS: TYRES AND LIGHTS

### 6.9.1 VEHICLES WITH WORN / DAMAGED TYRES

#### 6.9.1.1 Vehicles with Worn/Damaged Tyres – Light Motor Vehicles

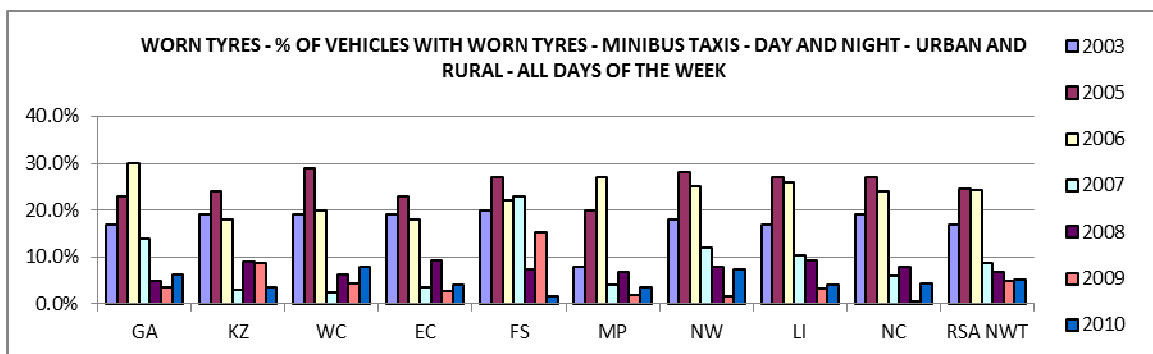
WORN TYRES - % OF VEHICLES WITH WORN TYRES - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK													
Province	Sample size	No. with worn tyres			% Confidence interval	% With > 0 worn tyre							
		> 0	= 1	> 1		2010	2009	2008	2007	2006	2005	2003	2002
GA	469	16	14	2	±2%	3.4%	3.1%	5.3%	7.0%	18.0%	14.0%	8.0%	14.0%
KZ	414	15	12	3	±2%	3.6%	4.3%	4.5%	5.5%	11.0%	20.0%	7.0%	8.0%
WC	442	15	13	2	±2%	3.4%	1.2%	5.0%	0.4%	15.0%	19.0%	9.0%	9.0%
EC	405	18	16	2	±2%	4.4%	1.5%	7.5%	4.7%	14.0%	17.0%	13.0%	13.0%
FS	429	4	3	1	±1%	0.9%	9.7%	4.4%	15.1%	16.0%	15.0%	9.0%	13.0%
MP	406	6	5	1	±1%	1.5%	0.3%	7.1%	5.3%	15.0%	9.0%	6.0%	17.0%
NW	415	8	8	0	±1%	1.9%	1.6%	8.0%	8.5%	15.0%	15.0%	11.0%	13.0%
LI	425	7	6	1	±1%	1.6%	2.2%	5.5%	4.3%	17.0%	16.0%	9.0%	18.0%
NC	410	5	5	0	±1%	1.2%	1.5%	3.6%	5.7%	10.0%	18.0%	11.0%	15.0%
RSA NWT	3815	94	82	12	±0%	3.0%	2.9%	5.5%	5.8%	15.5%	15.9%	9.0%	12.0%



The information above shows that on a national basis the percentage worn tyre offences for Light Motor Vehicles in this category has increased from 2.9% in 2009 to 3.0% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 4.4%, and Free State has the lowest offence rate with 0.9%. Eastern Cape shows the largest increase in offence rate percentage, from 1.5% to 4.4%. Free State shows the largest decrease in offence rate percentage from 9.7% to 0.9%.

### 6.9.1.2 Vehicles with Worn/Damaged Tyres – Mini Bus Taxis

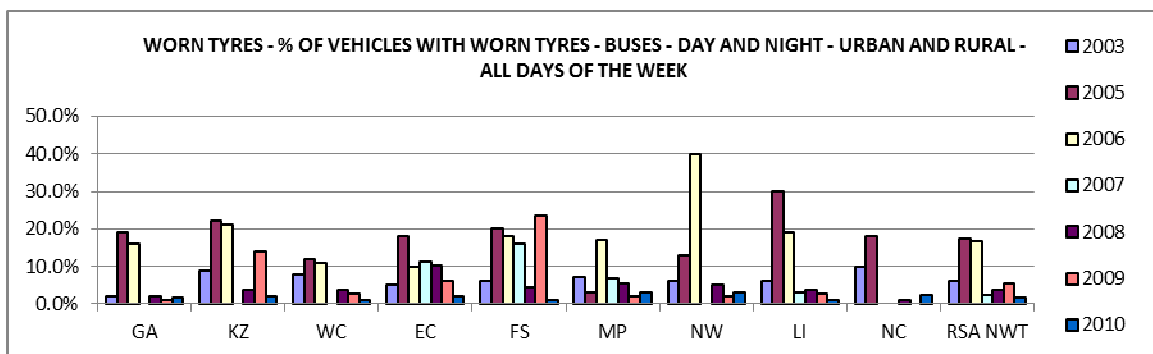
WORN TYRES - % OF VEHICLES WITH WORN TYRES - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	No. with worn tyres			% Confidence interval	% With > 0 worn tyre						
		> 0	= 1	> 1		2010	2009	2008	2007	2006	2005	2003
GA	300	19	18	1	±3%	6.3%	3.4%	5.0%	13.9%	30.0%	23.0%	17.0%
KZ	307	11	9	2	±2%	3.6%	8.8%	8.9%	2.9%	18.0%	24.0%	19.0%
WC	327	26	25	1	±3%	8.0%	4.3%	6.4%	2.4%	20.0%	29.0%	19.0%
EC	301	12	11	1	±2%	4.0%	2.7%	9.2%	3.6%	18.0%	23.0%	19.0%
FS	303	5	4	1	±2%	1.7%	15.2%	7.4%	23.0%	22.0%	27.0%	20.0%
MP	302	11	10	1	±2%	3.6%	2.0%	6.8%	4.1%	27.0%	20.0%	8.0%
NW	316	23	21	2	±3%	7.3%	1.8%	8.0%	12.0%	25.0%	28.0%	18.0%
LI	303	12	11	1	±2%	4.0%	3.3%	9.4%	10.3%	26.0%	27.0%	17.0%
NC	305	13	11	2	±2%	4.3%	0.7%	8.0%	6.1%	24.0%	27.0%	19.0%
RSA NWT	2764	132	120	12	±1%	5.3%	4.9%	6.9%	8.8%	24.2%	24.6%	17.0%



The information above shows that on a national basis the percentage worn tyre offences for Minibus Taxis in this category have increased from 4.9% in 2009 to 5.3% in 2010. Western Cape has the highest offence rate in this regard for 2010 with 8.0%, and Free State has the lowest offence rate with 1.7%. North West shows the largest increase in offence rate percentage, from 1.8% to 7.3%. Free State shows the largest decrease in offence rate percentage from 15.2% to 1.7%.

### 6.9.1.3 Vehicles with Worn/Damaged Tyres– Buses

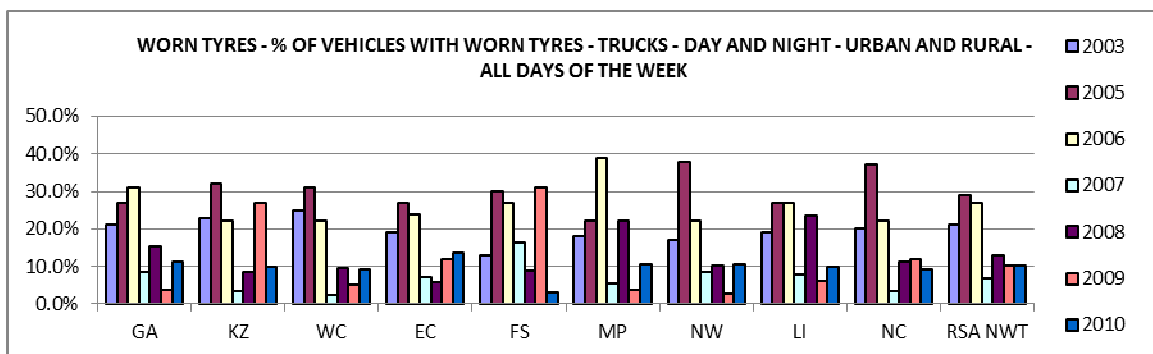
WORN TYRES - % OF VEHICLES WITH WORN TYRES - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	No. with worn tyres			% Confidence interval	% With > 0 worn tyre						
		> 0	= 1	> 1		2010	2009	2008	2007	2006	2005	2003
GA	120	2	2	0	±3%	1.7%	0.9%	2.0%	0.0%	16.0%	19.0%	2.0%
KZ	101	2	1	1	±4%	2.0%	14.0%	3.8%	0.0%	21.0%	22.0%	9.0%
WC	116	1	1	0	±3%	0.9%	2.9%	3.8%	0.0%	11.0%	12.0%	8.0%
EC	103	2	2	0	±4%	1.9%	6.0%	10.2%	11.1%	10.0%	18.0%	5.0%
FS	107	1	0	1	±3%	0.9%	23.4%	4.4%	15.9%	18.0%	20.0%	6.0%
MP	100	3	3	0	±4%	3.0%	2.0%	5.4%	6.7%	17.0%	3.0%	7.0%
NW	101	3	2	1	±4%	3.0%	2.0%	5.1%	0.0%	40.0%	13.0%	6.0%
LI	102	1	1	0	±3%	1.0%	2.8%	3.7%	3.2%	19.0%	30.0%	6.0%
NC	127	3	3	0	±3%	2.4%	0.0%	1.0%	0.0%	0.0%	18.0%	10.0%
RSA NWT	977	18	15	3	±1%	1.8%	5.4%	3.9%	2.3%	16.7%	17.4%	6.0%



The information above shows that on a national basis the percentage worn tyre offences for Buses in this category has decreased from 5.4% in 2009 to 1.8% in 2010. Mpumalanga has the highest offence rate in this regard for 2010 with 3.0%, and Western Cape has the lowest offence rate with 0.9%. Northern Cape shows the largest increase in offence rate percentage, from 0.0% to 2.4%. Free State shows the largest decrease in offence rate percentage from 23.4% to 0.9%.

### 6.9.1.4 Vehicles with Worn/Damaged Tyres– Trucks

WORN TYRES - % OF VEHICLES WITH WORN TYRES - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK												
Province	Sample size	No. with worn tyres			% Confidence interval	% With > 0 worn tyre						
		> 0	= 1	> 1		2010	2009	2008	2007	2006	2005	2003
GA	357	40	20	20	±3%	11.2%	3.8%	15.3%	8.7%	31.0%	27.0%	21.0%
KZ	351	35	19	16	±3%	10.0%	26.8%	8.7%	3.5%	22.0%	32.0%	23.0%
WC	405	37	22	15	±3%	9.1%	5.0%	9.4%	2.4%	22.0%	31.0%	25.0%
EC	353	48	28	20	±4%	13.6%	12.1%	5.9%	7.2%	24.0%	27.0%	19.0%
FS	372	11	3	8	±2%	3.0%	31.2%	8.9%	16.3%	27.0%	30.0%	13.0%
MP	357	38	29	9	±3%	10.6%	3.7%	22.3%	5.6%	39.0%	22.0%	18.0%
NW	370	39	27	12	±3%	10.5%	2.9%	10.1%	8.6%	22.0%	38.0%	17.0%
LI	353	35	30	5	±3%	9.9%	6.1%	23.7%	7.8%	27.0%	27.0%	19.0%
NC	360	33	16	17	±3%	9.2%	11.9%	11.4%	3.4%	22.0%	37.0%	20.0%
RSA NWT	3278	316	194	122	±1%	10.1%	10.3%	12.9%	6.7%	27.0%	29.0%	21.0%

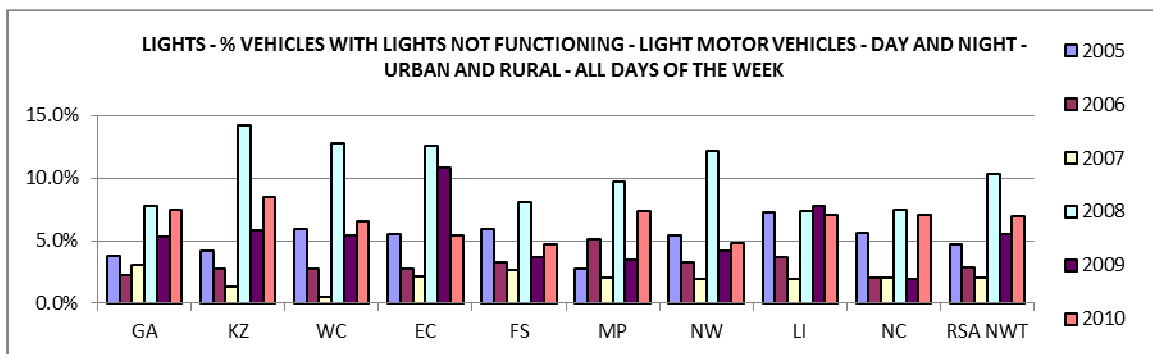


The information above shows that on a national basis the percentage worn tyre offences for Trucks in this category has decreased from 10.3% in 2009 to 10.1% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 13.6%, and Free State has the lowest offence rate with 3.0%. North West shows the largest increase in offence rate percentage, from 2.9% to 10.5%. Free State shows the largest decrease in offence rate percentage from 31.2% to 3.0%.

## 6.9.2 LIGHTS NOT FUNCTIONING

### 6.9.2.1 Lights not functioning – Light Motor Vehicles

LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
2010				% Vehicles with offences					
Province	Sample size	No. vehicles with offences	% Confidence interval	2010	2009	2008	2007	2006	2005
GA	469	35	±2%	7.5%	5.3%	7.8%	3.0%	2.3%	3.8%
KZ	414	35	±3%	8.5%	5.8%	14.2%	1.3%	2.7%	4.2%
WC	442	29	±2%	6.6%	5.5%	12.7%	0.5%	2.8%	6.0%
EC	405	22	±2%	5.4%	10.8%	12.6%	2.1%	2.7%	5.5%
FS	429	20	±2%	4.7%	3.7%	8.0%	2.7%	3.3%	6.0%
MP	406	30	±3%	7.4%	3.5%	9.7%	2.1%	5.1%	2.7%
NW	415	20	±2%	4.8%	4.2%	12.1%	2.0%	3.3%	5.4%
LI	425	30	±2%	7.1%	7.8%	7.3%	2.0%	3.7%	7.3%
NC	410	29	±3%	7.1%	1.9%	7.5%	2.0%	2.0%	5.7%
RSA NWT	3815	250	±1%	7.0%	5.5%	10.3%	2.1%	2.8%	4.7%

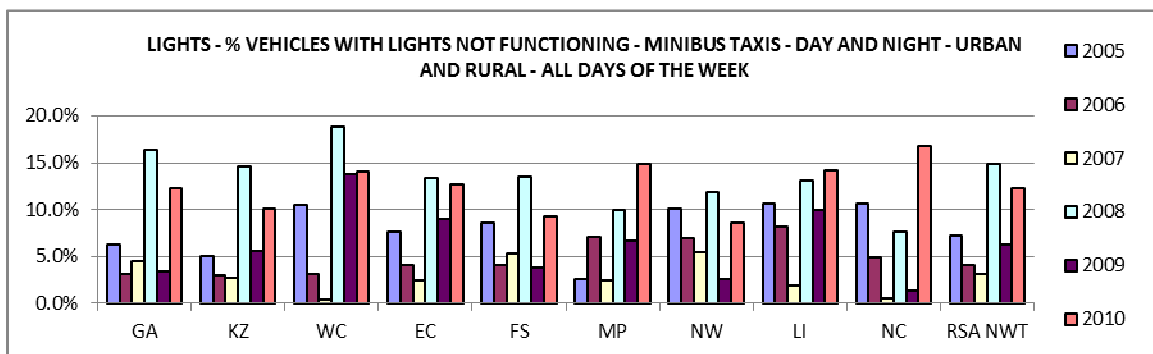


The information above shows that on a national basis the percentage damaged light offences for Light Motor Vehicles in this category has increased from 5.5% in 2009 to 7.0% in 2010. KwaZulu Natal has the highest offence rate in this regard for 2010 with 8.5%, and Free State has the lowest offence rate with 4.7%. Northern Cape shows the largest increase in offence rate percentage, from 1.9% to 7.1%. Eastern Cape shows the largest decrease in offence rate percentage from 10.8% to 5.4%.



### 6.9.2.2 Lights not functioning – Mini Bus Taxis

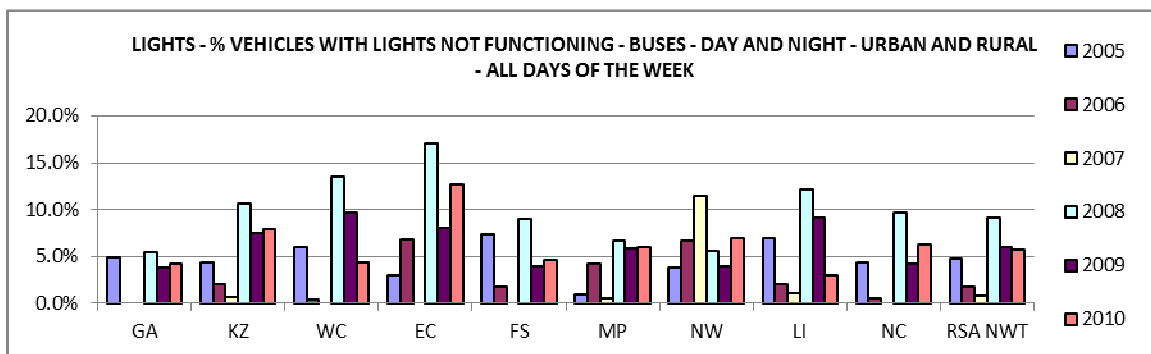
LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
2010				% Vehicles with offences					
Province	Sample size	No. vehicles with offences	% Confidence interval	2010	2009	2008	2007	2006	2005
GA	300	37	±4%	12.3%	3.4%	16.4%	4.5%	3.2%	6.3%
KZ	307	31	±3%	10.1%	5.6%	14.6%	2.8%	3.0%	5.1%
WC	327	46	±4%	14.1%	13.8%	18.8%	0.4%	3.2%	10.5%
EC	301	38	±4%	12.6%	9.1%	13.4%	2.4%	4.2%	7.7%
FS	303	28	±3%	9.2%	3.8%	13.5%	5.3%	4.1%	8.5%
MP	303	45	±4%	14.9%	6.7%	10.0%	2.4%	7.1%	2.6%
NW	316	27	±3%	8.5%	2.6%	11.9%	5.5%	7.0%	10.0%
LI	303	43	±4%	14.2%	10.0%	13.0%	2.0%	8.2%	10.6%
NC	305	51	±4%	16.7%	1.3%	7.7%	0.5%	4.9%	10.6%
RSA NWT	2765	346	±1%	12.2%	6.3%	14.9%	3.1%	4.1%	7.2%



The information above shows that on a national basis the percentage damaged light offences for Minibus Taxis in this category has increased from 6.3% in 2009 to 12.2% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 16.7%, and North West has the lowest offence rate with 8.5%. Northern Cape shows the largest increase in offence rate percentage, from 1.3% to 16.7%. None of the provinces show a decrease in offence rates between 2009 and 2010.

### 6.9.2.3 Lights not functioning – Buses

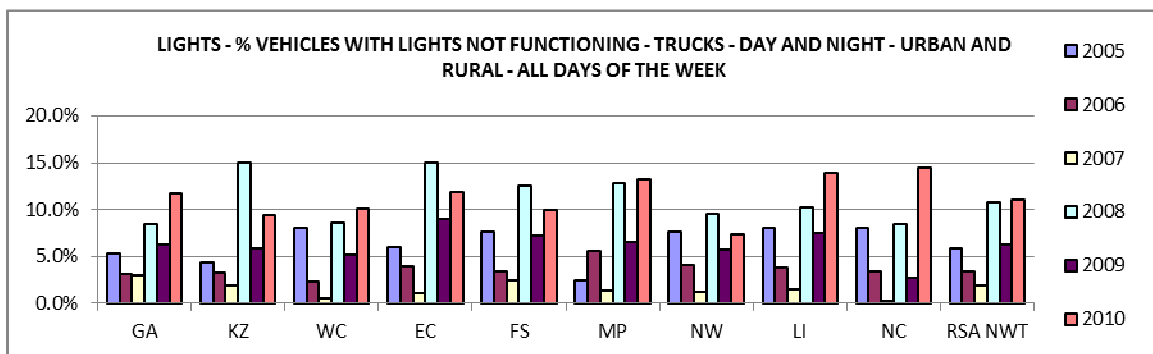
LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
2010				% Vehicles with offences					
Province	Sample size	No. vehicles with offences	% Confidence interval	2010	2009	2008	2007	2006	2005
GA	120	5	±4%	4.2%	3.8%	5.5%	0.0%	0.0%	5.0%
KZ	101	8	±6%	7.9%	7.4%	10.6%	0.7%	2.1%	4.4%
WC	116	5	±4%	4.3%	9.6%	13.5%	0.0%	0.4%	6.0%
EC	103	13	±7%	12.6%	8.0%	17.0%	0.0%	6.8%	3.0%
FS	107	5	±5%	4.7%	3.9%	9.0%	0.0%	1.8%	7.4%
MP	100	6	±5%	6.0%	5.9%	6.7%	0.6%	4.2%	1.0%
NW	101	7	±5%	6.9%	3.9%	5.6%	11.4%	6.7%	3.9%
LI	102	3	±4%	2.9%	9.2%	12.1%	1.1%	2.0%	7.0%
NC	127	8	±5%	6.3%	4.3%	9.6%	0.0%	0.5%	4.4%
RSA NWT	977	60	±2%	5.8%	6.0%	9.1%	0.9%	1.8%	4.8%



The information above shows that on a national basis the percentage damaged light offences for Buses in this category has decreased from 6.0% in 2009 to 5.8% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 12.6%, and Limpopo has the lowest offence rate with 2.9%. Eastern Cape shows the largest increase in offence rate percentage, from 8.0% to 12.6%. Limpopo shows the largest decrease in offence rate percentage from 9.2% to 2.9%.

### 6.9.2.4 Lights not functioning – Trucks

LIGHTS - % VEHICLES WITH LIGHTS NOT FUNCTIONING - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK									
2010				% Vehicles with offences					
Province	Sample size	No. vehicles with offences	% Confidence interval	2010	2009	2008	2007	2006	2005
GA	357	42	±3%	11.8%	6.3%	8.4%	3.0%	3.1%	5.3%
KZ	351	33	±3%	9.4%	5.9%	15.0%	1.9%	3.3%	4.4%
WC	406	41	±3%	10.1%	5.2%	8.6%	0.5%	2.3%	8.1%
EC	353	42	±3%	11.9%	9.0%	15.0%	1.1%	4.0%	6.0%
FS	372	37	±3%	9.9%	7.2%	12.6%	2.5%	3.4%	7.6%
MP	357	47	±4%	13.2%	6.5%	12.8%	1.4%	5.6%	2.5%
NW	370	27	±3%	7.3%	5.8%	9.6%	1.3%	4.1%	7.7%
LI	353	49	±4%	13.9%	7.4%	10.2%	1.5%	3.8%	8.1%
NC	360	52	±4%	14.4%	2.7%	8.4%	0.2%	3.4%	8.1%
RSA NWT	3279	370	±1%	11.0%	6.3%	10.8%	1.9%	3.4%	5.9%

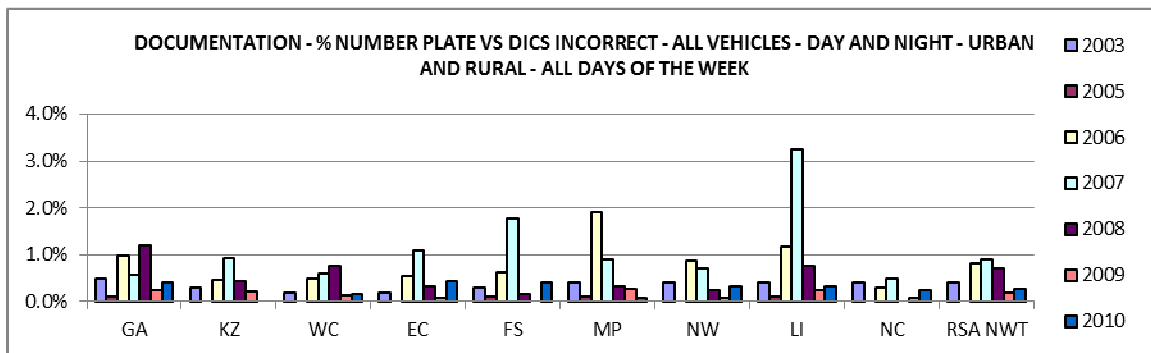


The information above shows that on a national basis the percentage damaged light offences for Trucks in this category has increased from 6.3% in 2009 to 11.0% in 2010. Northern Cape has the highest offence rate in this regard for 2010 with 14.4%, and North West has the lowest offence rate with 7.3%. Northern Cape shows the largest increase in offence rate percentage, from 2.7% to 14.4%. None of the provinces show a decrease in offence rates between 2009 and 2010.

## 6.10 CORRELATION OF INFORMATION BETWEEN VEHICLE REGISTRATION PLATE AND LICENCE DISC

### 6.10.1.1 Correlation between vehicle registration plate and licence disc – All vehicles

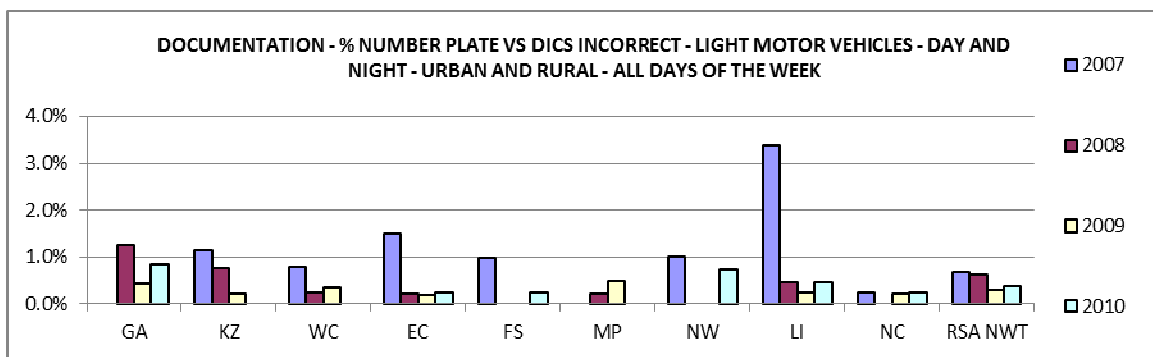
DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - ALL VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK													
Province	Total	No. the Same	2010				% not the same						
			% Confidence interval	% the same	No. not the same	% Confidence interval	2010	2009	2008	2007	2006	2005	2003
GA	1252	1246	0%	99.5%	5	0%	0.4%	0.2%	1.2%	0.6%	1.0%	0.1%	0.5%
KZ	1173	1171	0%	99.8%	0	0%	0.0%	0.2%	0.4%	0.9%	0.5%	0.0%	0.3%
WC	1291	1289	0%	99.8%	2	0%	0.2%	0.1%	0.8%	0.6%	0.5%	0.0%	0.2%
EC	1162	1156	0%	99.5%	5	0%	0.4%	0.1%	0.3%	1.1%	0.6%	0.0%	0.2%
FS	1213	1207	0%	99.5%	5	0%	0.4%	0.0%	0.2%	1.8%	0.6%	0.1%	0.3%
MP	1173	1172	0%	99.9%	1	0%	0.1%	0.3%	0.3%	0.9%	1.9%	0.1%	0.4%
NW	1203	1197	0%	99.5%	4	0%	0.3%	0.1%	0.3%	0.7%	0.9%	0.0%	0.4%
LI	1183	1179	0%	99.7%	4	0%	0.3%	0.3%	0.8%	3.2%	1.2%	0.1%	0.4%
NC	1203	1199	0%	99.7%	3	0%	0.2%	0.1%	0.0%	0.5%	0.3%	0.0%	0.4%
RSA NWT	10853	10816	0%	99.7%	29	0%	0.3%	0.2%	0.7%	0.9%	0.8%	0.0%	0.4%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for all vehicles in this category has increased from 0.2% in 2009 to 0.3% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 0.4%, and KwaZulu Natal has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.0% to 0.4%. KwaZulu Natal shows the largest decrease in offence rate percentage from 0.2% to 0.0%.

### 6.10.1.2 Correlation of information between vehicle registration plate and licence disc – light motor vehicles

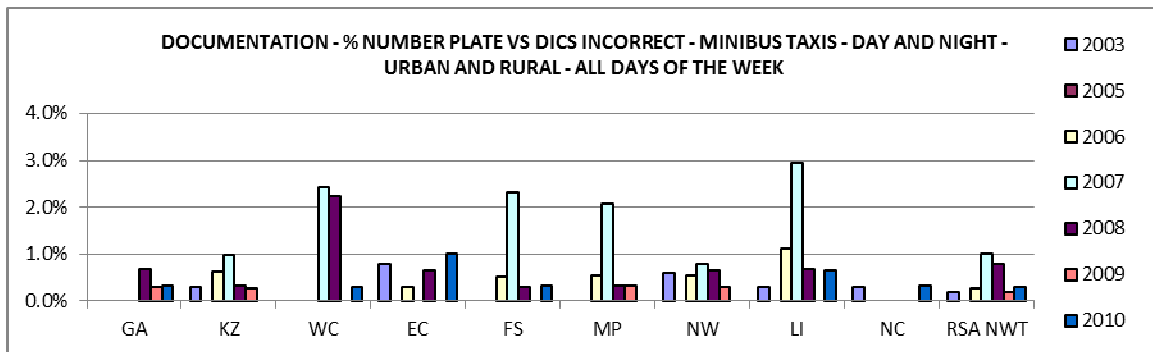
DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - LIGHT MOTOR VEHICLES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
Province	Total	2010					% not the same			
		No. the Same	% Confidence interval	% the same	No. not the same	% Confidence interval	2010	2009	2008	2007
GA	469	465	1%	99.1%	4	1%	0.9%	0.4%	1.3%	0.0%
KZ	414	412	1%	99.5%	0	1%	0.0%	0.2%	0.8%	1.2%
WC	442	442	1%	100.0%	0	1%	0.0%	0.4%	0.2%	0.8%
EC	405	404	1%	99.8%	1	1%	0.2%	0.2%	0.2%	1.5%
FS	429	428	1%	99.8%	1	1%	0.2%	0.0%	0.0%	1.0%
MP	406	406	1%	100.0%	0	1%	0.0%	0.5%	0.2%	0.0%
NW	415	411	1%	99.0%	3	1%	0.7%	0.0%	0.0%	1.0%
LI	425	423	1%	99.5%	2	1%	0.5%	0.2%	0.5%	3.4%
NC	410	408	1%	99.5%	1	1%	0.2%	0.2%	0.0%	0.2%
RSA NWT	3815	3799	0%	99.5%	12	0%	0.4%	0.3%	0.6%	0.7%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Light Motor Vehicles in this category has increased from 0.3% in 2009 to 0.4% in 2010. Gauteng has the highest offence rate in this regard for 2010 with 0.9%, and KwaZulu Natal, along with Western Cape and Mpumalanga, has the lowest offence rate with 0.0%. North West shows the largest increase in offence rate percentage, from 0.0% to 0.7%. Mpumalanga shows the largest decrease in offence rate percentage from 0.5% to 0.0%.

### 6.10.1.3 Correlation between vehicle registration plate and licence disc – Mini Bus Taxis

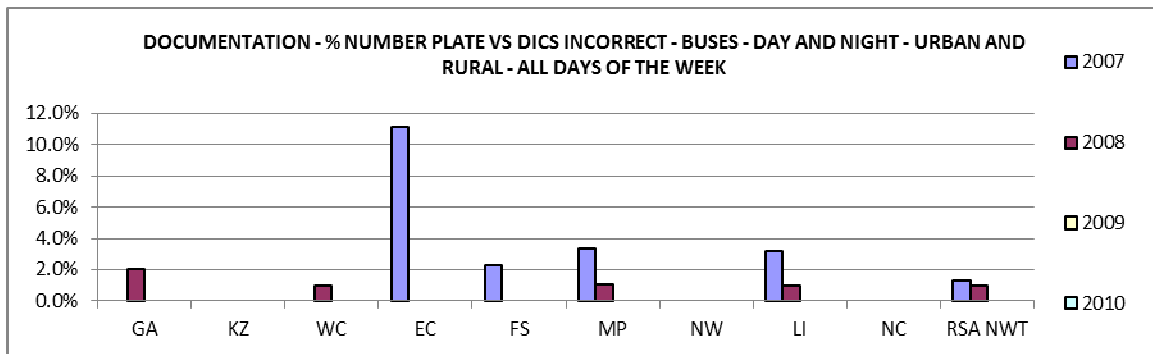
DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK													
Province	Total	2010					% not the same						
		No. the Same	% Confidence interval	% the same	No. not the same	% Confidence interval	2010	2009	2008	2007	2006	2005	2003
GA	300	298	1%	99.3%	1	1%	0.3%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%
KZ	307	307	1%	100.0%	0	1%	0.0%	0.3%	0.3%	1.0%	0.6%	0.0%	0.3%
WC	327	326	1%	99.7%	1	1%	0.3%	0.0%	2.2%	2.4%	0.0%	0.0%	0.0%
EC	301	298	1%	99.0%	3	1%	1.0%	0.0%	0.7%	0.0%	0.3%	0.0%	0.8%
FS	303	301	1%	99.3%	1	1%	0.3%	0.0%	0.3%	2.3%	0.5%	0.0%	0.0%
MP	303	303	1%	100.0%	0	1%	0.0%	0.3%	0.3%	2.1%	0.6%	0.0%	0.0%
NW	316	316	1%	100.0%	0	1%	0.0%	0.3%	0.7%	0.8%	0.5%	0.0%	0.6%
LI	303	301	1%	99.3%	2	1%	0.7%	0.0%	0.7%	2.9%	1.1%	0.0%	0.3%
NC	305	304	1%	99.7%	1	1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
RSA NWT	2765	2754	0%	99.6%	9	0%	0.3%	0.2%	0.8%	1.0%	0.3%	0.0%	0.2%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Minibus Taxis in this category has increased from 0.2% in 2009 to 0.3% in 2010. Eastern Cape has the highest offence rate in this regard for 2010 with 1.0%, and KwaZulu Natal, along with Mpumalanga and North West, has the lowest offence rate with 0.0%. Eastern Cape shows the largest increase in offence rate percentage, from 0.0% to 1.0%. KwaZulu Natal shows the largest decrease in offence rate percentage from 0.3% to 0.0%.

### 6.10.1.4 Correlation between vehicle registration plate and licence disc – Buses

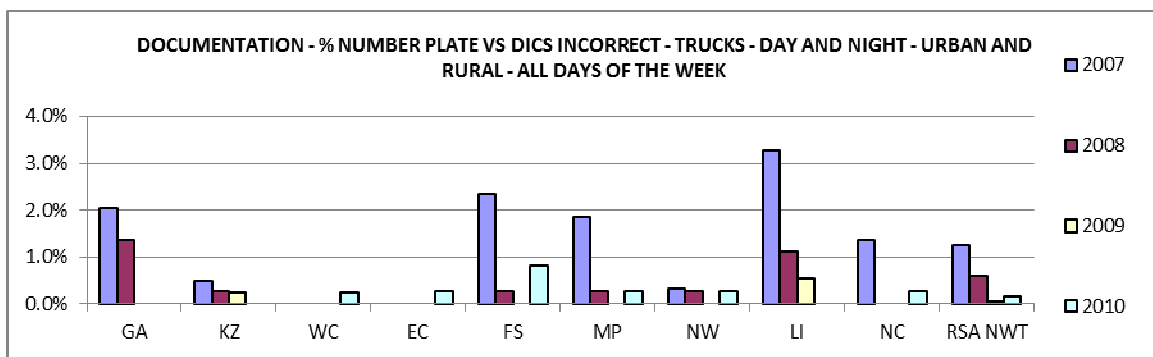
DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
Province	Total	2010					% not the same			
		No. the Same	% Confidence interval	% the same	No. not the same	% Confidence interval	2010	2009	2008	2007
GA	120	120	2%	100.0%	0	2%	0.0%	0.0%	2.0%	0.0%
KZ	101	101	3%	100.0%	0	3%	0.0%	0.0%	0.0%	0.0%
WC	116	116	2%	100.0%	0	2%	0.0%	0.0%	1.0%	0.0%
EC	103	103	3%	100.0%	0	3%	0.0%	0.0%	0.0%	11.1%
FS	107	107	2%	100.0%	0	2%	0.0%	0.0%	0.0%	2.3%
MP	100	100	3%	100.0%	0	3%	0.0%	0.0%	1.1%	3.3%
NW	101	101	3%	100.0%	0	3%	0.0%	0.0%	0.0%	0.0%
LI	102	102	3%	100.0%	0	3%	0.0%	0.0%	0.9%	3.2%
NC	127	127	2%	100.0%	0	2%	0.0%	0.0%	0.0%	0.0%
RSA NWT	977	977	0%	100.0%	0	0%	0.0%	0.0%	1.0%	1.3%



The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Buses in this category has remained the same between 2009 and 2010. No offences were recorded for this category during the 2010 survey, as well as during the previous survey in 2009.

### 6.10.1.5 Correlation between vehicle registration plate and licence disc – Trucks

DOCUMENTATION - % NUMBER PLATE VS DICS INCORRECT - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK										
Province	Total	2010					% not the same			
		No. the Same	% Confidence interval	% the same	No. not the same	% Confidence interval	2010	2009	2008	2007
GA	357	357	1%	100.0%	0	1%	0.0%	0.0%	1.4%	2.0%
KZ	351	351	1%	100.0%	0	1%	0.0%	0.2%	0.3%	0.5%
WC	406	405	1%	99.8%	1	1%	0.2%	0.0%	0.0%	0.0%
EC	353	351	1%	99.4%	1	1%	0.3%	0.0%	0.0%	0.0%
FS	372	369	1%	99.2%	3	1%	0.8%	0.0%	0.3%	2.4%
MP	357	356	1%	99.7%	1	1%	0.3%	0.0%	0.3%	1.9%
NW	370	368	1%	99.5%	1	1%	0.3%	0.0%	0.3%	0.3%
LI	353	353	1%	100.0%	0	1%	0.0%	0.6%	1.1%	3.3%
NC	360	359	1%	99.7%	1	1%	0.3%	0.0%	0.0%	1.4%
RSA NWT	3279	3269	0%	99.8%	8	0%	0.2%	0.1%	0.6%	1.3%



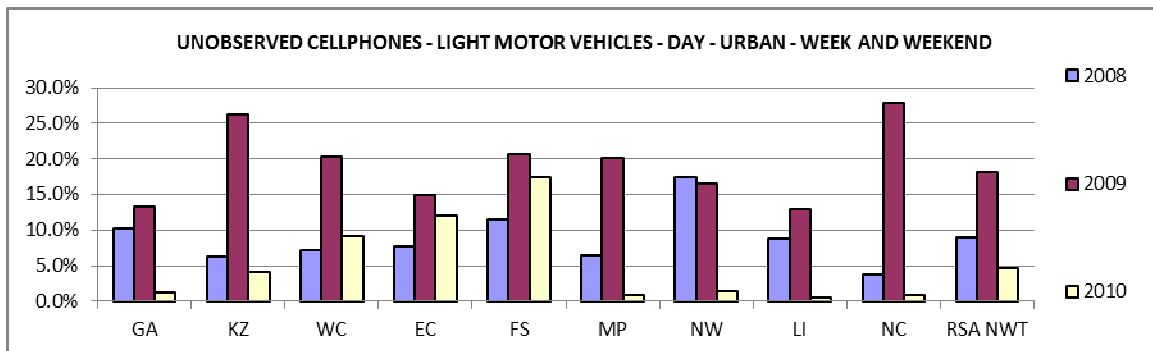
The information above shows that on a national basis the percentage registration plate and licence disc correlation offences for Trucks in this category has increased from 0.1% in 2009 to 0.2% in 2010. Free State has the highest offence rate in this regard for 2010 with 0.8%, and Gauteng, along with KwaZulu Natal and Limpopo, has the lowest offence rate with 0.0%. Free State shows the largest increase in offence rate percentage, from 0.0% to 0.8%. Limpopo shows the largest decrease in offence rate percentage from 0.6% to 0.0%.



## 6.11 DRIVERS TALKING ON CELL PHONES DURING UNOBSERVED SURVEYS IN URBAN AREAS

### 6.11.1.1 Drivers Talking on Cell Phones – Light Motor Vehicles

UNOBSERVED CELLPHONES - LIGHT MOTOR VEHICLES - DAY - URBAN - WEEK AND WEEKEND							
Province	Front Drivers				% Talking on Cell phones		
	No observed	No talking on cell phone	No not talking on cell phone	% Confidence interval	2010	2009	2008
GA	340	4	336	±1%	1.2%	13.4%	10.3%
KZ	360	15	345	±2%	4.2%	26.2%	6.3%
WC	560	51	509	±2%	9.1%	20.3%	7.3%
EC	400	48	352	±3%	12.0%	14.9%	7.8%
FS	480	84	396	±3%	17.5%	20.6%	11.5%
MP	360	3	357	±1%	0.8%	20.2%	6.5%
NW	360	5	355	±1%	1.4%	16.5%	17.5%
LI	380	2	378	±1%	0.5%	12.8%	8.8%
NC	440	4	436	±1%	0.9%	27.9%	3.8%
RSA NWT	3680	216	3464	±1%	4.7%	18.1%	9.0%

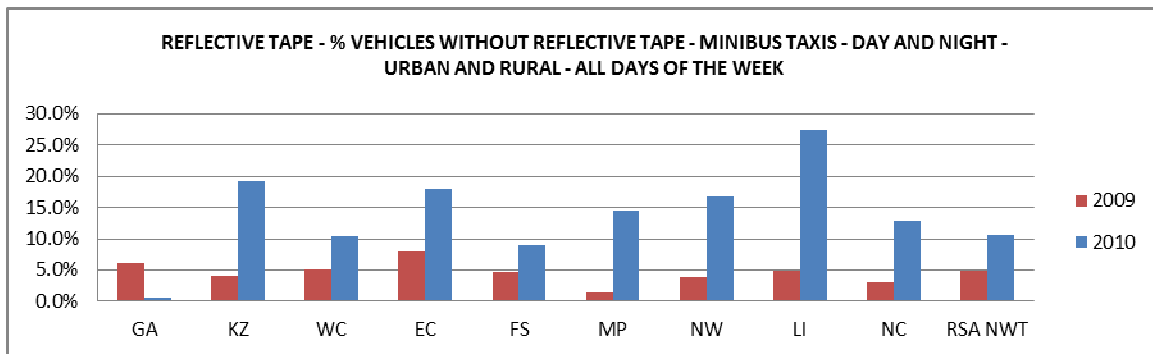


The information above shows that on a national basis the percentage cell phone offences for Light Motor Vehicles in this category have decreased from 18.1% in 2009 to 4.7% in 2010. Free State has the highest offence rate in this regard for 2010 with 17.5%, and Limpopo has the lowest offence rate with 0.5%. None of the provinces show an increase in offence rates between 2009 and 2010. Northern Cape shows the largest decrease in offence rate percentage from 27.9% to 0.9%.

## 6.12 REFLECTIVE TAPE ON MINIBUS TAXIS, TRUCKS AND BUSES

### 6.12.1.1 Reflective tape on Minibus Taxis

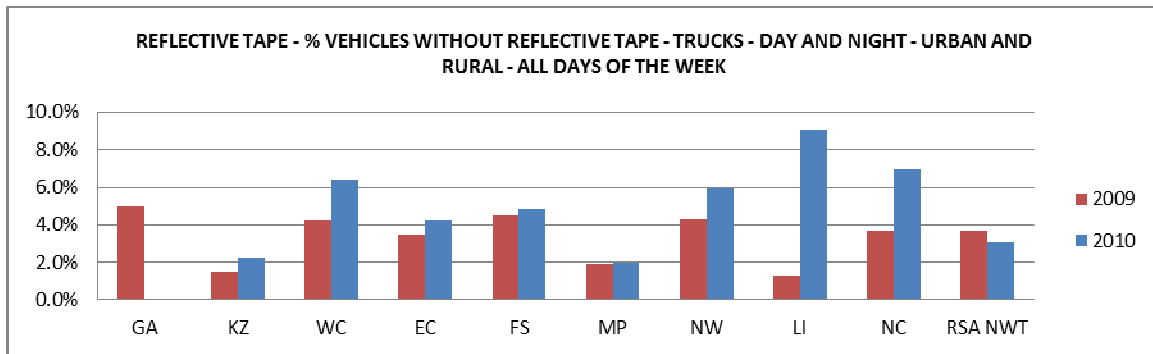
REFLECTIVE TAPE - % VEHICLES WITHOUT REFLECTIVE TAPE - MINIBUS TAXIS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK						
2010					% NOT WEARING	
PROVINCE	SAMPLE SIZE	NO. PRESENT	NO. ABSENT	% CONFIDENCE INTERVAL	2010	2009
GA	300	298	2	1.3%	0.7%	6.1%
KZ	307	248	59	4.4%	19.2%	4.0%
WC	327	293	34	3.4%	10.4%	5.2%
EC	301	247	54	4.3%	17.9%	7.9%
FS	303	276	27	3.3%	8.9%	4.8%
MP	303	259	44	4.0%	14.5%	1.4%
NW	316	263	53	4.1%	16.8%	3.9%
LI	303	220	83	5.0%	27.4%	5.0%
NC	305	266	39	3.8%	12.8%	3.0%
RSA NWT	2765	2370	395	1.3%	10.6%	5.0%



The information above shows that on a national basis the percentage reflective tape offences for Minibus Taxis in this category has increased from 5.0% in 2009 to 10.6% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 27.4%, and Gauteng has the lowest offence rate with 0.7%. Limpopo shows the largest increase in offence rate percentage, from 5.0% to 27.4%. Gauteng shows the largest decrease in offence rate percentage from 6.1% to 0.7%.

### 6.12.1.2 Reflective tape on Trucks

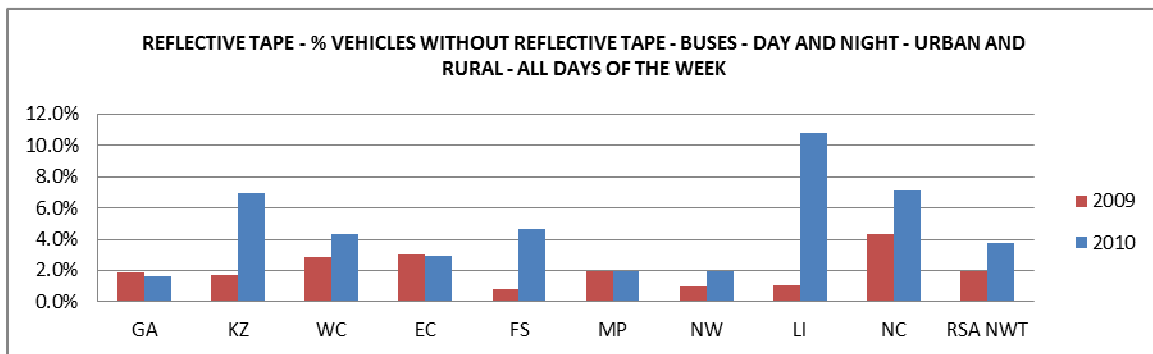
REFLECTIVE TAPE - % VEHICLES WITHOUT REFLECTIVE TAPE - TRUCKS - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK						
PROVINCE	SAMPLE SIZE	2010			% NOT WEARING	
		NO. PRESENT	NO. ABSENT	% CONFIDENCE INTERVAL	2010	2009
GA	357	357	0	0.8%	0.0%	5.0%
KZ	351	343	8	1.7%	2.3%	1.5%
WC	406	380	26	2.4%	6.4%	4.2%
EC	353	338	15	2.2%	4.2%	3.5%
FS	372	354	18	2.3%	4.8%	4.5%
MP	357	350	7	1.6%	2.0%	1.9%
NW	370	348	22	2.5%	5.9%	4.3%
LI	353	321	32	3.0%	9.1%	1.3%
NC	360	335	25	2.7%	6.9%	3.7%
RSA NWT	3279	3126	153	0.7%	3.0%	3.7%



The information above shows that on a national basis the percentage reflective tape offences for Trucks in this category has decreased from 3.7% in 2009 to 3.0% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 9.1%, and Gauteng has the lowest offence rate with 0.0%. Limpopo shows the largest increase in offence rate percentage, from 1.3% to 9.1%. Gauteng shows the largest decrease in offence rate percentage from 5.0% to 0.0%.

### 6.12.1.3 Reflective tape on Buses

REFLECTIVE TAPE - % VEHICLES WITHOUT REFLECTIVE TAPE - BUSES - DAY AND NIGHT - URBAN AND RURAL - ALL DAYS OF THE WEEK						
PROVINCE	SAMPLE SIZE	2010			% NOT WEARING	
		NO. PRESENT	NO. ABSENT	% CONFIDENCE INTERVAL	2010	2009
GA	120	118	2	3.1%	1.7%	1.9%
KZ	101	94	7	5.4%	6.9%	1.7%
WC	116	111	5	4.2%	4.3%	2.9%
EC	103	100	3	4.0%	2.9%	3.0%
FS	107	102	5	4.5%	4.7%	0.8%
MP	100	98	2	3.7%	2.0%	2.0%
NW	101	99	2	3.7%	2.0%	1.0%
LI	102	91	11	6.2%	10.8%	1.1%
NC	127	118	9	4.7%	7.1%	4.3%
RSA NWT	977	931	46	1.3%	3.8%	2.0%



The information above shows that on a national basis the percentage reflective tape offences for Buses in this category has increased from 2.0% in 2009 to 3.8% in 2010. Limpopo has the highest offence rate in this regard for 2010 with 10.8%, and Gauteng has the lowest offence rate with 1.7%. Limpopo shows the largest increase in offence rate percentage, from 1.1% to 10.8%. Gauteng shows the largest decrease in offence rate percentage from 1.9% to 1.7%.

## 7 CHAPTER 7: COMPARISONS

The sections discussed in this chapter are as follows:

- Section 7.1: Results from previous surveys are compared to the 2010 survey data.
- Section 7.2: A comparison is made between traffic offences and accident statistics.

### 7.1 COMPARISON WITH THE RESULTS OF THE PREVIOUS SURVEYS

Results from the 2010 surveys are compared to previous surveys (2002, 2003, 2005, 2006, 2007, 2008 and 2009), as represented in section 7.1.1.1 through 7.1.1.1.4.

Section 7.1.1.1 indicates the weighted average comparative factors of change for LMV's, Trucks and Taxi's.

Sections 7.1.1.2 to 7.1.1.4 indicate individual comparative factors for numerous surveys, for the individual vehicle classes mentioned above.

Please take note of the following comment that was taken from the 2006 report...

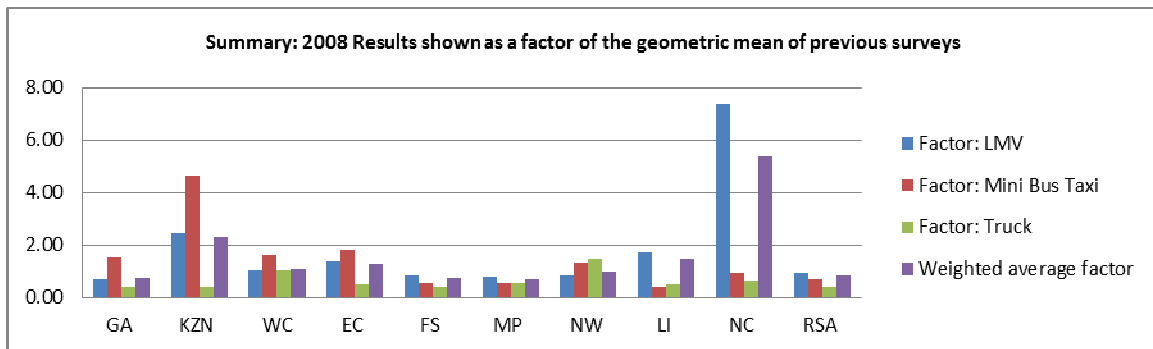
*'The recommendation is that the arithmetic mean of the first three years be used as base year information, and that the results of the future surveys (after 2006) be compared to this three year average, using the geometric mean.'*

This guideline was followed during the 2007, 2008, 2009, and 2010 calculations in order to determine the Weighted Average Factor of change for each province, as shown in Section 7.1.1.1. The form of the geometric mean when comparing annual growth rates is  $(Y_2/Y_1 \cdot Y_3/Y_2 \cdot Y_n/Y_{n-1})^{1/n}$ . This formula was applied to the data shown in the table found in section 7.1.1.2 to 7.1.1.4. Furthermore, a

description of both the Geometric and Arithmetic means are provided at the end of this section.

**7.1.1.1 Summary: Factor of change in offence rates from 2002 to 2010**  
(Only a selection of offences are indicated: Refer to offence description in tables for details)

	Province									
	GA	KZN	WC	EC	FS	MP	NW	LI	NC	RSA
Factor: LMV	0.70	2.43	1.03	1.36	0.84	0.78	0.86	1.71	7.38	0.93
Factor: Mini Bus Taxi	1.55	4.65	1.64	1.83	0.53	0.56	1.32	0.41	0.92	0.70
Factor: Truck	0.39	0.41	1.03	0.51	0.40	0.54	1.46	0.49	0.63	0.43
Weighted average factor	0.74	2.31	1.08	1.30	0.73	0.72	0.99	1.46	5.39	0.84



Refer to section 7.1 for definition of calculation.

The tables and figure reveal a number of trends that merit specific consideration:

The following observations flow from these tables, figures and the information in the rest of this report:

The information in section 7.1.1.1 shows a definite improvement in the overall level of traffic discipline on South African roads.

## Definitions:

### **The Arithmetic Mean...**

*In mathematics and statistics, the arithmetic mean (or simple the mean) of a list of numbers is the sum of all the members of the list divided by the number of items in the list. In statistics such as stratified samples, an outlier is an observation that is numerically distant from the rest of the data. Statistics derived from data sets that include outliers will often be misleading. For example, if one is calculation the average temperature of 10 objects in a room, and most are between 20 and 25 degrees Celsius, but an oven is at 350 degrees Celsius, the median of the data may be 23 but the mean temperature will be 55. In this case, the median better reflects the temperature of a randomly sampled object than the mean. In most samplings of data, some data points will be further away from their expected values than what is deemed reasonable. This can be due to systematic error, faults in the theory that generated the expected values. Outlier points can therefore indicate faulty data, erroneous procedures, or areas where a certain theory may not be valid.*

### **The Geometric Mean...**

*The geometric mean, in mathematics, is a type of mean or average, which indicates the central tendency or typical value of a set of numbers. It is similar to the arithmetic mean, which is what most people think of with the word "average," except that instead of adding the set of numbers and then dividing the sum by the count of numbers in the set,  $n$ , the numbers are multiplied and then the  $n$ th root of the resulting product is taken.*

The following tables provide detail of the offence rates that were found during the previous surveys. The situation with light motor vehicles, trucks and minibus taxis are shown separately. Buses are not shown in these tables because low traffic volumes resulted in insufficient sample sizes for each province.

\*\* Values marked in yellow in section 7.1.1.1 through 7.1.1.4 have been adjusted from zero to 0.01 in order to enable the calculation of the Geometric mean.

### 7.1.1.2 Summary of information obtained during the present study, compared to information in previous reports: Light motor vehicles

Speed: Urban: Day (% offenders) (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	26.0%	44.0%	53.0%	54.0%	40.0%	71.0%	70.0%	35.0%	56.0%	44.0%
2003	80.2%	45.5%	43.4%	58.2%	56.7%	71.3%	55.0%	64.2%	31.2%	61.2%
2005	45.2%	15.6%	28.6%	29.4%	46.1%	53.3%	53.4%	51.9%	17.2%	37.7%
Arithmetic Mean	50.5%	35.0%	41.7%	47.2%	47.6%	65.2%	59.5%	50.4%	34.8%	47.6%
2006	40.8%	35.4%	13.1%	33.0%	35.0%	47.3%	42.7%	41.6%	17.5%	35.0%
2007	31.0%	24.9%	9.2%	21.8%	27.7%	27.3%	29.9%	20.1%	8.9%	24.4%
2008	37.3%	45.0%	22.6%	33.8%	31.0%	40.1%	26.2%	40.9%	21.4%	35.0%
2009	38.5%	47.9%	30.3%	38.3%	38.2%	30.2%	36.6%	43.5%	24.5%	37.8%
2010	34.0%	36.7%	34.3%	21.8%	27.7%	21.3%	6.7%	32.8%	18.3%	30.1%
Geometric Mean	38.2%	36.7%	22.1%	31.4%	33.9%	36.0%	28.1%	36.7%	19.3%	34.3%
Comparative Factor(1)	0.89	1.00	1.55	0.69	0.82	0.59	0.24	0.89	0.95	0.88
Speed: Rural: Day (% offenders) (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	22.0%	27.0%	39.0%	24.0%	23.0%	48.0%	9.0%	20.0%	16.0%	27.0%
2003	34.7%	22.1%	21.2%	16.8%	36.4%	25.0%	23.7%	25.5%	16.3%	26.8%
2005	34.7%	19.7%	25.0%	9.0%	35.3%	26.4%	34.8%	31.4%	26.8%	28.0%
Arithmetic Mean	30.5%	22.9%	28.4%	16.6%	31.6%	33.1%	22.5%	25.6%	19.7%	27.3%
2006	17.7%	29.0%	17.7%	15.0%	29.2%	16.9%	32.8%	32.7%	24.7%	21.7%
2007	17.0%	14.8%	24.9%	14.6%	33.4%	10.7%	10.5%	19.7%	20.7%	17.9%
2008	19.3%	23.0%	24.7%	23.3%	36.1%	16.3%	23.0%	26.6%	34.7%	22.7%
2009	28.7%	62.6%	25.8%	55.3%	38.7%	23.3%	31.7%	22.2%	29.8%	35.6%
2010	10.7%	40.9%	17.7%	33.5%	44.3%	11.0%	17.3%	7.6%	19.4%	21.1%
Geometric Mean	19.5%	28.9%	22.8%	23.2%	35.2%	17.1%	21.5%	20.5%	24.2%	23.8%
Comparative Factor	0.55	1.42	0.78	1.44	1.26	0.64	0.81	0.37	0.80	0.89
Speed: Urban: Night (% offenders) (Weight: 3)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	Night surveys on speed not executed in 2002									
2003	Night surveys on speed not executed in 2003									
2005	31.8%	21.5%	26.4%	23.4%	34.2%	32.4%	44.8%	49.0%	28.2%	30.4%
Arithmetic Mean	31.8%	21.5%	26.4%	23.4%	34.2%	32.4%	44.8%	49.0%	28.2%	30.4%
2006	41.7%	30.7%	23.4%	23.0%	28.7%	37.8%	35.5%	44.1%	20.3%	34.1%
2007	32.6%	15.3%	18.8%	5.6%	28.0%	24.7%	30.1%	35.7%	15.8%	24.4%
2008	51.5%	43.7%	22.6%	27.4%	23.3%	38.5%	25.6%	43.5%	11.3%	38.4%
2009	30.4%	33.6%	24.1%	28.3%	34.5%	25.3%	37.6%	44.9%	24.5%	30.5%
2010	40.8%	42.4%	45.0%	35.2%	14.1%	25.1%	17.8%	24.5%	17.2%	35.4%
Geometric Mean	37.5%	29.3%	25.6%	20.9%	26.0%	30.1%	30.6%	39.3%	18.7%	31.9%
Comparative Factor	1.09	1.45	1.75	1.69	0.54	0.83	0.58	0.62	0.92	1.11
Speed: Rural: Night (% offenders) (Weight: 3)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	Night surveys on speed not executed in 2002									
2003	Night surveys on speed not executed in 2003									
2005	23.1%	19.1%	20.3%	6.9%	15.9%	13.1%	25.4%	20.5%	24.9%	19.7%
Arithmetic Mean	23.1%	19.1%	20.3%	6.9%	15.9%	13.1%	25.4%	20.5%	24.9%	19.7%
2006	25.4%	18.6%	21.3%	10.7%	32.3%	10.6%	15.9%	11.3%	21.2%	20.5%
2007	21.7%	17.9%	25.4%	14.8%	25.3%	40.4%	14.2%	16.7%	21.9%	22.2%
2008	16.3%	25.3%	26.1%	20.7%	33.6%	16.6%	19.1%	31.4%	22.5%	21.7%
2009	28.2%	48.9%	10.7%	39.5%	39.9%	18.0%	29.9%	28.8%	5.6%	29.1%
2010	10.2%	37.5%	22.7%	42.9%	49.7%	9.5%	4.2%	23.4%	27.5%	22.2%
Geometric Mean	19.8%	25.8%	20.3%	18.4%	30.9%	15.9%	15.5%	20.8%	18.5%	22.4%
Comparative Factor	0.52	1.45	1.12	2.34	1.61	0.60	0.27	1.12	1.49	0.99
Alcohol levels, drivers Night (% offenders) (Weight: 12)										



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	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	7.8%	2.5%	2.6%	6.3%	3.6%	5.0%	8.9%	8.0%	7.4%	5.5%
2003	2.7%	4.5%	8.1%	2.5%	4.4%	13.4%	2.9%	8.9%	4.7%	5.1%
2005	4.3%	3.0%	2.5%	3.3%	3.9%	5.2%	3.0%	2.8%	3.1%	3.6%
Arithmetic Mean	4.9%	3.3%	4.4%	4.0%	4.0%	7.9%	4.9%	6.6%	5.1%	4.7%
2006	4.8%	1.8%	2.3%	5.2%	4.4%	5.6%	5.1%	4.9%	3.6%	4.0%
2007	3.6%	0.0%	1.9%	0.0%	0.6%	1.0%	1.2%	0.0%	0.0%	1.7%
2008	1.9%	1.5%	2.8%	5.4%	0.0%	1.8%	3.8%	0.0%	0.0%	2.1%
2009	2.7%	1.0%	1.0%	0.0%	2.0%	3.9%	3.1%	2.5%	0.0%	2.0%
2010	1.2%	4.1%	1.1%	0.5%	0.0%	1.3%	2.7%	1.4%	4.3%	1.7%
Geometric Mean	2.8%	0.8%	2.0%	0.4%	0.4%	2.7%	3.1%	0.5%	0.2%	2.5%
Comparative Factor	0.42	4.79	0.54	1.26	0.03	0.49	0.85	2.87	20.90	0.67
Unobserved Seatbelts : Driver (Weight: 2) (Survey Method has been changed - Refer section 2.7)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	20.0%	21.8%	14.4%	16.3%	12.4%	12.8%	13.1%	11.6%	13.4%	16.2%
2003	17.3%	16.4%	17.2%	16.3%	18.8%	11.2%	12.1%	17.4%	13.1%	16.2%
2005	15.9%	15.9%	18.1%	24.1%	18.3%	17.7%	18.2%	13.4%	21.5%	17.2%
Arithmetic Mean	17.7%	18.0%	16.6%	18.9%	16.5%	13.9%	14.5%	14.1%	16.0%	16.5%
2006	29.1%	25.7%	38.5%	31.4%	29.8%	28.1%	29.4%	25.8%	30.5%	30.0%
2007	50.7%	55.0%	53.2%	55.2%	56.9%	48.0%	45.0%	49.0%	49.9%	51.8%
2008	63.4%	65.3%	59.3%	74.8%	72.6%	53.0%	58.8%	71.7%	60.6%	63.6%
2009	55.4%	53.6%	62.9%	59.8%	58.8%	62.7%	59.1%	76.5%	55.5%	58.6%
2010	57.4%	90.6%	61.4%	65.3%	66.5%	67.5%	63.6%	71.3%	77.0%	66.9%
Geometric Mean	41.7%	44.8%	44.5%	46.1%	44.7%	40.2%	40.2%	43.7%	43.0%	43.1%
Comparative Factor	1.38	2.02	1.38	1.42	1.49	1.68	1.58	1.63	1.79	1.55
Unobserved Seatbelts : Front passenger (Weight: 2) (Survey Method has been changed - Refer section 2.7)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	38.8%	38.0%	24.5%	26.2%	20.3%	21.3%	22.8%	16.8%	22.5%	37.5%
2003	39.2%	40.8%	33.2%	36.1%	36.4%	36.6%	31.9%	42.1%	31.9%	37.5%
2005	32.2%	34.2%	31.1%	45.1%	30.2%	60.6%	39.4%	29.9%	31.0%	35.7%
Arithmetic Mean	36.7%	37.7%	29.6%	35.8%	29.0%	39.5%	31.4%	29.6%	28.5%	36.9%
2006	28.4%	28.5%	39.8%	41.0%	36.4%	30.5%	33.9%	30.6%	36.5%	32.3%
2007										
2008	72.4%	66.7%	66.6%	79.1%	76.3%	70.4%	72.1%	75.0%	68.4%	71.1%
2009	71.3%	57.3%	63.2%	61.6%	74.0%	64.3%	75.3%	79.8%	55.8%	67.0%
2010	61.5%	90.8%	63.2%	67.5%	70.4%	67.5%	68.3%	71.6%	78.0%	69.3%
Geometric Mean	50.6%	51.8%	50.0%	54.5%	53.0%	51.7%	52.4%	52.2%	49.9%	52.4%
Comparative Factor	1.22	1.75	1.26	1.24	1.33	1.31	1.30	1.37	1.56	1.32

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Traffic signals (% of phases with offence): Day (Weight: 1 instead of 4 in view of caution that was recommended in section 2.3.4)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	36.0%	18.0%	14.0%	13.0%	23.0%	29.0%	12.0%	29.0%	42.0%	23.0%
2003	55.0%	54.0%	66.0%	57.0%	34.0%	62.0%	55.0%	45.0%	38.0%	55.0%
2005	26.0%	20.0%	32.0%	36.0%	21.0%	34.0%	35.0%	37.0%	12.0%	28.0%
Arithmetic Mean	39.0%	30.7%	37.3%	35.3%	26.0%	41.7%	34.0%	37.0%	30.7%	35.3%
2006	6.0%	1.2%	1.7%	1.0%	0.3%	4.6%	6.3%	18.9%	1.7%	4.0%
2007	8.7%	24.9%	35.6%	32.5%	16.3%	12.5%	11.7%	8.1%	19.3%	18.4%
2008	18.4%	49.2%	36.5%	58.0%	34.4%	4.0%	22.5%	20.8%	55.9%	29.9%
2009	18.5%	25.6%	40.0%	43.6%	12.0%	17.8%	21.6%	18.4%	30.9%	24.7%
2010	2.8%	32.8%	9.4%	27.8%	20.9%	0.2%	0.8%	0.5%	5.0%	11.3%
Geometric Mean	11.2%	18.3%	17.7%	20.8%	10.2%	5.6%	10.0%	10.1%	14.3%	16.7%
Comparative Factor	0.25	1.79	0.53	1.34	2.06	0.03	0.08	0.05	0.35	0.68
Barrier lines : % Convoys with offences: Night (Weight: 1) (Survey Method has been changed - Refer section 2.9)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	10.5%	9.0%	4.2%	5.1%	3.0%	27.3%	4.8%	2.4%	0.9%	8.7%
2003	1.6%	2.1%	4.3%	4.5%	2.4%	9.5%	5.7%	1.2%	2.6%	3.3%
2005	0.0%	0.6%	0.9%	0.9%	0.2%	6.2%	0.6%	2.0%	0.0%	0.9%
Arithmetic Mean	4.0%	3.9%	3.1%	3.5%	1.9%	14.3%	3.7%	1.9%	1.2%	4.3%
2006	0.6%	0.5%	0.2%	0.7%	0.5%	2.3%	5.9%	1.5%	0.3%	1.0%
2007	0.7%	1.9%	1.2%	0.8%	2.0%	1.8%	1.6%	2.5%	1.2%	1.3%
2008	17.5%	19.1%	23.8%	21.6%	18.3%	7.8%	8.1%	21.3%	16.8%	17.8%
2009	14.8%	13.1%	11.6%	12.2%	5.3%	10.3%	10.3%	8.1%	11.3%	12.2%
2010	4.3%	8.4%	11.5%	11.4%	7.8%	9.0%	13.4%	15.9%	5.3%	8.3%
Geometric Mean	3.5%	4.4%	6.5%	4.3%	3.3%	5.9%	5.8%	5.2%	2.7%	4.6%
Comparative Factor	1.24	1.89	1.77	2.67	2.33	1.53	2.30	3.07	1.94	1.80
Driving licence (% offenders) (LMV) (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0%	8.0%	8.0%	6.0%	9.0%	7.0%	6.0%	4.0%	8.0%	8.0%
2003	4.2%	4.9%	5.1%	5.5%	3.9%	3.3%	4.5%	4.1%	5.1%	4.5%
2005	4.0%	2.3%	2.8%	3.9%	3.4%	2.4%	2.9%	2.2%	3.2%	3.2%
Arithmetic Mean	5.7%	5.1%	5.3%	5.1%	5.4%	4.2%	4.5%	3.4%	5.4%	5.2%
2006	3.7%	5.6%	3.2%	5.1%	3.9%	4.3%	5.0%	1.4%	3.3%	4.0%
2007	2.9%	1.4%	4.8%	5.2%	1.9%	0.7%	2.6%	1.6%	2.9%	2.8%
2008	2.8%	4.5%	9.0%	7.3%	7.3%	2.3%	5.1%	4.8%	2.6%	4.8%
2009	2.6%	1.8%	1.9%	2.5%	1.1%	1.8%	2.1%	3.2%	1.3%	2.2%
2010	0.6%	1.7%	1.8%	1.5%	2.8%	3.0%	0.7%	1.9%	1.7%	1.5%
Geometric Mean	2.5%	2.9%	3.7%	3.9%	3.1%	2.3%	2.7%	2.5%	2.6%	3.1%
Comparative Factor	0.24	0.60	0.49	0.38	0.90	1.28	0.25	0.77	0.66	0.48
Tyres worn (% Offenders) (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	14.0%	8.0%	9.0%	13.0%	13.0%	17.0%	13.0%	18.0%	15.0%	12.0%
2003	8.0%	7.0%	9.0%	13.0%	9.0%	6.0%	11.0%	9.0%	11.0%	9.0%
2005	14.0%	20.0%	19.0%	17.0%	15.0%	9.0%	15.0%	16.0%	18.0%	15.9%
Arithmetic Mean	12.0%	11.7%	12.3%	14.3%	12.3%	10.7%	13.0%	14.3%	14.7%	12.3%
2006	18.0%	11.0%	15.0%	14.0%	16.0%	15.0%	15.0%	17.0%	10.0%	15.5%
2007	7.0%	5.5%	0.4%	4.7%	15.1%	5.3%	8.5%	4.3%	5.7%	5.8%
2008	5.3%	4.5%	5.0%	7.5%	4.4%	7.1%	8.0%	5.5%	3.6%	5.5%
2009	3.1%	4.3%	1.2%	1.5%	9.7%	0.3%	1.6%	2.2%	1.5%	2.9%
2010	3.4%	3.6%	3.4%	4.4%	0.9%	1.5%	1.9%	1.6%	1.2%	3.0%
Geometric Mean	6.6%	6.1%	3.4%	6.0%	7.0%	3.7%	5.9%	5.2%	4.2%	6.1%
Comparative Factor	0.51	0.59	1.01	0.73	0.13	0.40	0.32	0.31	0.29	0.49

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Lights: Front Bright (% offenders) (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	4.0%	4.0%	3.0%	6.0%	14.0%	4.0%	5.0%	4.0%	4.0%	5.0%
2003	1.3%	0.6%	1.2%	1.6%	2.8%	2.9%	3.4%	1.9%	3.2%	1.6%
2005	3.6%	2.6%	5.7%	3.9%	6.1%	3.2%	5.8%	6.6%	4.9%	4.2%
Arithmetic Mean	3.0%	2.4%	3.3%	3.8%	7.6%	3.4%	4.7%	4.2%	4.0%	3.6%
2006	2.7%	4.0%	1.6%	3.3%	3.9%	8.3%	8.4%	7.4%	1.7%	3.8%
2007	1.6%	0.9%	0.8%	1.7%	1.0%	1.2%	1.5%	0.5%	1.7%	1.2%
2008	2.3%	3.5%	5.0%	3.0%	4.1%	2.8%	3.2%	2.8%	1.7%	3.2%
2009	0.7%	0.9%	1.1%	1.5%	0.8%	0.8%	1.4%	1.7%	0.4%	0.9%
2010	1.1%	1.0%	0.5%	0.2%	0.5%	1.7%	1.4%	1.9%	0.7%	1.0%
Geometric Mean	1.7%	1.7%	1.5%	1.7%	1.9%	2.3%	2.7%	2.2%	1.3%	1.9%
Comparative Factor	0.64	0.56	0.31	0.14	0.25	0.77	0.54	0.84	0.55	0.51
Lights: Tail (% offenders) (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	6.0%	8.0%	7.0%	9.0%	6.0%	7.0%	13.0%	8.0%	11.0%	7.0%
2003	0.8%	2.2%	2.5%	1.9%	1.9%	3.7%	4.0%	2.3%	3.8%	2.0%
2005	1.7%	1.5%	3.0%	2.9%	5.0%	2.1%	4.8%	7.2%	3.2%	2.7%
Arithmetic Mean	2.8%	3.9%	4.2%	4.6%	4.3%	4.3%	7.3%	5.8%	6.0%	3.9%
2006	2.3%	2.8%	2.3%	2.8%	2.8%	4.6%	2.4%	3.0%	2.3%	2.7%
2007	2.1%	1.2%	0.4%	2.0%	3.5%	1.9%	1.5%	1.4%	1.7%	1.6%
2008	0.8%	3.5%	2.1%	3.2%	1.5%	0.9%	1.5%	0.5%	1.4%	1.7%
2009	0.4%	0.7%	0.4%	1.1%	0.0%	0.3%	0.0%	0.2%	0.2%	0.4%
2010	0.4%	0.5%	0.5%	0.2%	0.9%	0.0%	0.5%	0.7%	0.5%	0.4%
Geometric Mean	1.1%	1.6%	1.1%	1.7%	0.9%	0.7%	0.8%	1.1%	1.2%	1.3%
Comparative Factor	0.39	0.31	0.42	0.15	1.02	0.01	0.64	0.65	0.40	0.33
Lights: Brake (% offenders) (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	6.0%	9.0%	8.0%	11.0%	9.0%	7.0%	10.0%	8.0%	11.0%	8.0%
2003	6.5%	4.6%	3.2%	5.2%	3.3%	4.6%	6.3%	4.2%	4.8%	9.0%
2005	2.4%	3.7%	4.3%	4.7%	5.1%	3.5%	4.3%	6.8%	6.3%	3.7%
Arithmetic Mean	5.0%	5.8%	5.2%	7.0%	5.8%	5.0%	6.9%	6.3%	7.4%	6.9%
2006	1.3%	1.0%	2.4%	1.3%	1.6%	2.7%	1.4%	1.7%	1.0%	1.6%
2007	7.0%	3.5%	0.0%	3.0%	4.5%	4.6%	4.0%	5.8%	3.1%	4.4%
2008	4.0%	7.0%	5.9%	8.9%	2.9%	6.2%	6.1%	3.9%	3.1%	5.4%
2009	3.3%	2.2%	1.6%	4.6%	0.8%	1.8%	1.4%	2.9%	0.8%	2.5%
2010	3.4%	4.1%	3.6%	1.5%	1.9%	3.0%	1.7%	2.8%	3.4%	3.1%
Geometric Mean	3.6%	3.3%	1.3%	3.4%	2.4%	3.6%	2.9%	3.6%	2.4%	3.6%
Comparative Factor	0.96	1.25	2.85	0.43	0.78	0.83	0.59	0.79	1.42	0.88
Weighted average comparative factor	0.70	2.43	1.03	1.36	0.84	0.78	0.86	1.71	7.38	0.93

### 7.1.1.3 Summary of information obtained during the present study, compared to information in previous reports: Truck

Speed Urban: Day Time (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	25.0%	21.0%	23.0%	35.0%	100.0%	47.0%	0.0%	89.0%	27.0%	33.7%
2003	32.8%	39.8%	18.4%	25.0%	37.5%	41.0%	21.4%	27.7%		30.7%
2005	24.4%	5.0%	18.9%	18.1%	6.3%	16.8%	23.0%	27.5%	5.8%	18.1%
Arithmetic Mean	27.4%	21.9%	20.1%	26.0%	47.9%	34.9%	14.8%	48.1%	16.4%	27.5%
2006	15.8%	16.8%	2.3%	24.3%	13.1%	19.0%	22.6%	15.9%	3.7%	14.8%
2007	8.1%	10.0%	1.2%	8.7%	13.2%	5.7%	11.2%	7.6%	1.2%	7.4%
2008	4.3%	30.9%	15.0%	13.7%	13.5%	8.8%	2.7%	10.6%	1.2%	12.0%
2009	4.8%	13.1%	1.0%	6.4%	15.6%	3.9%	9.0%	11.7%	5.1%	6.8%
2010	5.9%	2.2%	21.5%	8.8%	1.4%	9.2%	5.8%	12.2%	4.2%	8.1%
Geometric Mean	8.7%	12.2%	5.1%	12.7%	11.6%	10.3%	9.0%	14.4%	3.5%	11.2%
Comparative Factor	0.68	0.18	4.23	0.69	0.12	0.89	0.65	0.85	1.20	0.72
Speed Rural: Day Time (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	69.0%	73.0%	73.0%	68.0%	63.0%	54.0%	59.0%	73.0%	68.0%	68.0%
2003	38.9%	33.0%	48.1%	30.9%	52.1%	55.2%	62.6%	35.5%		41.1%
2005	54.7%	43.0%	65.9%	53.8%	73.0%	49.6%	59.2%	60.3%	83.6%	56.1%
Arithmetic Mean	54.2%	49.7%	62.3%	50.9%	62.7%	52.9%	60.3%	56.3%	75.8%	55.1%
2006	58.7%	65.9%	65.9%	45.2%	45.5%	53.4%	68.0%	55.2%	69.3%	59.9%
2007	43.7%	33.5%	70.2%	42.2%	50.0%	32.4%	39.8%	46.3%	49.4%	45.6%
2008	27.5%	40.4%	60.0%	45.2%	55.7%	40.1%	50.8%	50.8%	65.4%	42.0%
2009	46.7%	29.2%	41.9%	35.3%	48.7%	38.8%	52.6%	42.4%	51.4%	42.0%
2010	26.3%	38.4%	61.0%	46.2%	48.9%	43.5%	34.0%	44.1%	57.5%	40.0%
Geometric Mean	40.9%	41.3%	59.5%	43.9%	51.6%	42.9%	49.6%	48.9%	60.7%	46.9%
Comparative Factor	0.64	0.93	1.03	1.05	0.95	1.02	0.69	0.90	0.95	0.85
Alcohol: All times (2002/3) Night time (2005/6/7) (Weight:12)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	3.0%	4.2%	1.6%	1.4%	0.8%	1.1%	2.3%	2.0%	3.4%	2.5%
2003	1.4%	0.9%	0.5%	2.7%	0.5%	6.1%	2.8%	1.9%	1.2%	1.7%
2005	1.8%	0.8%	1.7%	0.6%	0.5%	0.0%	0.7%	0.0%	1.7%	1.1%
Arithmetic Mean	2.1%	2.0%	1.3%	1.6%	0.6%	2.4%	1.9%	1.3%	2.1%	1.8%
2006	1.3%	0.6%	2.6%	2.2%	2.2%	3.4%	1.2%	0.6%	2.1%	1.6%
2007	3.8%	0.0%	1.2%	1.9%	4.3%	4.4%	1.5%	2.0%	3.4%	2.5%
2008	0.0%	0.0%	1.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
2009	0.0%	0.0%	0.0%	0.0%	1.1%	1.2%	0.0%	0.0%	0.0%	0.2%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%
Geometric Mean	0.1%	0.0%	0.3%	0.4%	0.3%	0.4%	0.2%	0.1%	0.2%	0.5%
Comparative Factor	0.07	0.21	0.04	0.03	0.03	0.02	2.84	0.09	0.06	0.08

Driving licenses: 2002/3: TBT 2005/6/7: Truck (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0%	6.0%	5.0%	10.0%	4.0%	5.0%	4.0%	3.0%	2.0%	6.6%
2003	4.0%	3.5%	3.6%	3.9%	3.1%	2.5%	2.9%	3.6%	3.6%	3.6%
2005	2.0%	1.8%	2.1%	1.2%	1.6%	0.7%	1.1%	1.1%	1.5%	1.7%
Arithmetic Mean	5.0%	3.8%	3.6%	5.0%	2.9%	2.7%	2.7%	2.6%	2.4%	4.0%
2006	0.5%	2.1%	1.4%	1.8%	1.4%	1.2%	2.5%	2.1%	1.2%	1.3%
2007	0.5%	0.0%	3.4%	2.0%	0.0%	2.9%	1.0%	2.5%	2.1%	1.3%
2008	1.6%	1.9%	1.4%	3.4%	2.5%	3.0%	1.9%	1.4%	1.4%	2.0%
2009	1.6%	0.7%	0.8%	1.0%	0.3%	0.3%	0.8%	0.3%	0.7%	1.0%
2010	0.3%	0.0%	0.0%	0.9%	1.3%	0.8%	0.5%	0.6%	0.6%	0.4%
Geometric Mean	1.0%	0.3%	0.8%	2.0%	0.7%	1.4%	1.3%	1.2%	1.2%	1.3%
Comparative Factor	0.30	0.03	0.01	0.46	1.98	0.58	0.38	0.49	0.49	0.30
PrDP: (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	16.0%	31.0%	22.0%	28.0%	20.0%	10.0%	13.0%	8.0%	14.0%	19.8%
2003	18.1%	18.5%	16.1%	19.9%	16.0%	7.6%	12.0%	16.6%	12.7%	16.5%
2005	13.9%	10.9%	14.1%	11.2%	11.2%	5.3%	6.0%	6.4%	6.1%	11.4%
Arithmetic Mean	16.0%	20.1%	17.4%	19.7%	15.7%	7.6%	10.3%	10.3%	10.9%	15.9%
2006	12.2%	9.9%	10.6%	12.5%	9.7%	5.3%	12.3%	8.7%	7.5%	10.7%
2007	3.6%	16.7%	11.8%	25.3%	0.6%	1.6%	1.4%	2.5%	16.4%	8.4%
2008	3.3%	3.1%	2.6%	3.7%	2.5%	3.5%	1.6%	1.4%	2.4%	2.9%
2009	1.9%	2.2%	0.8%	3.0%	0.8%	0.6%	1.6%	0.6%	1.6%	1.6%
2010	1.1%	0.3%	0.2%	0.6%	1.1%	0.8%	0.5%	0.6%	0.6%	0.7%
Geometric Mean	4.1%	4.4%	3.1%	5.9%	2.4%	2.2%	2.5%	2.2%	3.8%	4.1%
Comparative Factor	0.27	0.07	0.06	0.10	0.45	0.37	0.20	0.27	0.16	0.17
Tyres worn: % of vehicles with defects:2002: TBT 2003/5/6/7: Truck (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	25.0%	17.0%	18.0%	20.0%	28.0%	29.0%	26.0%	35.0%	30.0%	23.0%
2003	15.0%	19.0%	20.0%	21.0%	18.0%	10.0%	17.0%	16.0%	18.0%	17.0%
2005	27.0%	31.0%	31.0%	27.0%	37.0%	22.0%	38.0%	38.0%	38.0%	30.0%
Arithmetic Mean	22.3%	22.3%	23.0%	22.7%	27.7%	20.3%	27.0%	29.7%	28.7%	23.3%
2006	31.0%	22.0%	22.0%	24.0%	27.0%	39.0%	22.0%	27.0%	22.0%	27.0%
2007	8.7%	3.5%	2.4%	7.2%	16.3%	5.6%	8.6%	7.8%	3.4%	6.7%
2008	15.3%	8.7%	9.4%	5.9%	8.9%	22.3%	10.1%	23.7%	11.4%	12.9%
2009	3.8%	26.8%	5.0%	12.1%	31.2%	3.7%	2.9%	6.1%	11.9%	10.3%
2010	11.2%	10.0%	9.1%	13.6%	3.0%	10.6%	10.5%	9.9%	9.2%	10.1%
Geometric Mean	12.6%	12.6%	9.0%	12.5%	14.7%	12.5%	10.8%	14.4%	11.8%	13.4%
Comparative Factor	0.89	0.79	1.02	1.09	0.20	0.85	0.97	0.69	0.78	0.76
Front bright: % of vehicles with defects: 2002/3: TBT 2005/6: Truck (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0%	12.0%	7.0%	6.0%	14.0%	8.0%	11.0%	8.0%	8.0%	9.0%
2003	2.8%	0.8%	0.4%	3.2%	0.6%	2.7%	3.4%	2.0%	2.9%	2.0%
2005	4.5%	3.2%	4.7%	5.4%	9.0%	2.0%	9.2%	5.9%	8.1%	4.9%
Arithmetic Mean	5.4%	5.3%	4.0%	4.9%	7.9%	4.2%	7.9%	5.3%	6.3%	5.3%
2006	3.5%	2.7%	2.5%	3.6%	3.4%	5.9%	8.8%	6.4%	3.3%	3.8%
2007	2.6%	1.0%	0.0%	0.0%	2.3%	0.9%	0.7%	0.3%	0.0%	1.3%
2008	2.5%	3.9%	2.6%	4.2%	3.6%	4.3%	0.8%	2.5%	1.9%	3.0%
2009	1.1%	0.7%	1.0%	0.5%	0.7%	0.8%	0.5%	1.4%	1.1%	0.9%
2010	0.8%	1.1%	1.0%	1.4%	1.3%	2.2%	0.8%	1.1%	1.1%	1.1%
Geometric Mean	2.2%	1.9%	0.8%	0.9%	2.4%	2.4%	1.6%	1.9%	0.9%	2.1%
Comparative Factor	0.38	0.60	1.23	1.58	0.55	0.94	0.51	0.60	1.25	0.55

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Tail lights: % of vehicles with defects: 2002/3: TBT 2005/6/7: Truck (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12.0%	9.0%	13.0%	12.0%	10.0%	12.0%	16.0%	11.0%	13.0%	12.0%
2003	3.1%	5.2%	5.5%	5.9%	5.2%	4.3%	3.7%	4.1%	4.3%	4.4%
2005	2.7%	1.7%	8.6%	4.3%	5.2%	0.7%	6.5%	10.6%	4.2%	5.0%
Arithmetic Mean	5.9%	5.3%	9.0%	7.4%	6.8%	5.7%	8.7%	8.6%	7.2%	7.1%
2006	2.4%	3.3%	3.0%	4.4%	3.4%	4.4%	3.0%	4.7%	5.7%	3.2%
2007	3.1%	1.5%	0.0%	0.7%	1.2%	0.0%	2.1%	0.0%	0.0%	1.5%
2008	1.4%	1.7%	1.4%	2.0%	2.8%	0.8%	0.8%	0.8%	1.1%	1.4%
2009	1.6%	0.0%	1.0%	0.3%	1.2%	0.0%	0.5%	1.4%	0.7%	0.9%
2010	0.0%	0.9%	0.5%	1.7%	0.5%	0.3%	0.3%	0.6%	1.4%	0.5%
Geometric Mean	1.0%	0.9%	0.8%	1.7%	1.9%	0.3%	1.3%	0.8%	0.9%	1.7%
Comparative Factor	0.01	1.00	0.65	1.02	0.28	0.98	0.20	0.71	1.59	0.28
Brake lights: % of vehicles with defects:2002/3: TBT 2005/6: Truck (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12.0%	16.0%	15.0%	12.0%	14.0%	11.0%	13.0%	11.0%	11.0%	13.0%
2003	8.6%	7.1%	8.4%	10.8%	8.0%	6.2%	6.3%	6.7%	9.0%	8.0%
2005	4.5%	5.0%	8.2%	6.6%	6.5%	2.8%	9.2%	10.8%	11.2%	6.6%
Arithmetic Mean	8.4%	9.4%	10.5%	9.8%	9.5%	6.7%	9.5%	9.5%	10.4%	9.2%
2006	2.7%	1.5%	0.8%	1.8%	2.4%	4.1%	0.9%	1.8%	0.8%	2.0%
2007	5.1%	3.5%	1.4%	3.3%	4.7%	4.7%	2.4%	4.3%	0.7%	3.8%
2008	5.2%	5.6%	2.0%	7.1%	6.7%	6.8%	4.9%	5.2%	3.3%	5.1%
2009	3.0%	1.7%	2.4%	3.0%	3.2%	1.4%	1.8%	2.2%	0.7%	2.4%
2010	5.9%	4.8%	3.0%	3.4%	3.0%	5.9%	2.2%	4.8%	4.4%	4.6%
Geometric Mean	4.7%	3.6%	2.3%	4.0%	4.3%	4.4%	2.7%	4.0%	2.0%	4.0%
Comparative Factor	1.26	1.33	1.26	0.85	0.68	1.34	0.80	1.21	2.25	1.16
	0.39	0.41	1.03	0.51	0.40	0.54	1.46	0.49	0.63	0.43

### 7.1.1.4 Summary of information obtained during the present study, compared to information in previous reports: Taxi

Speed urban: Day 2002: Bus and Taxi (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	26.0%	41.0%	25.0%	77.0%	100.0%	76.0%	67.0%	83.0%	50.0%	48.0%
2003	88.6%	43.3%	40.6%	58.1%	54.0%	50.7%	29.3%	54.4%	14.9%	58.8%
2005	38.7%	10.1%	33.5%	26.0%	25.0%	30.1%	42.6%	39.3%	17.7%	30.8%
Arithmetic Mean	51.1%	31.5%	33.0%	53.7%	59.7%	52.3%	46.3%	58.9%	27.5%	45.9%
2006	46.1%	37.9%	15.6%	32.8%	28.2%	40.5%	26.0%	25.6%	19.1%	34.9%
2007	25.1%	20.5%	4.4%	14.2%	20.8%	27.8%	33.6%	22.0%	4.3%	20.2%
2008	35.8%	48.7%	36.2%	39.1%	40.7%	40.0%	32.2%	49.4%	19.5%	38.9%
2009	45.5%	52.6%	30.5%	40.4%	35.9%	29.9%	43.2%	39.6%	28.6%	41.2%
2010	21.0%	34.3%	39.2%	35.6%	33.1%	16.5%	9.3%	36.7%	9.9%	27.2%
Geometric Mean	35.6%	35.9%	21.5%	33.5%	34.5%	32.4%	28.4%	36.5%	15.2%	33.5%
Comparative Factor	0.59	0.96	1.82	1.06	0.96	0.51	0.33	1.00	0.65	0.81
Speed rural: Day (100 kph effective) (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	71.0%	71.0%	75.0%	65.0%	58.0%	19.0%	38.0%	50.0%	8.0%	62.0%
2003	10.4%	21.1%	17.4%	20.3%	12.0%	15.7%	32.6%	19.3%	10.4%	16.5%
2005	54.9%	57.8%	74.6%	48.4%	66.3%	48.3%	66.7%	53.7%	56.7%	58.5%
Arithmetic Mean	45.4%	50.0%	55.7%	44.6%	45.4%	27.7%	45.8%	41.0%	25.0%	45.7%
2006	21.1%	61.4%	41.9%	12.6%	44.7%	35.6%	57.8%	42.7%	91.7%	37.2%
2007	31.7%	26.8%	50.5%	29.4%	36.6%	23.1%	29.2%	37.2%	48.2%	33.8%
2008	39.0%	33.9%	55.4%	19.5%	49.3%	59.0%	40.0%	66.8%	53.3%	43.5%
2009	56.0%	69.3%	80.6%	68.1%	42.1%	68.7%	72.0%	64.9%	73.0%	64.8%
2010	36.3%	57.3%	60.5%	47.2%	70.9%	35.3%	36.1%	43.6%	49.6%	47.0%
Geometric Mean	36.6%	47.2%	56.3%	31.8%	47.1%	38.5%	44.8%	48.0%	52.7%	44.3%
Comparative Factor	0.99	1.21	1.07	1.48	1.50	0.92	0.81	0.91	0.94	1.06
Alcohol: Night time (Weight: 12)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	3.0%	4.2%	1.6%	1.4%	0.8%	1.1%	2.3%	2.0%	3.4%	2.5%
2003	1.4%	0.9%	0.5%	2.7%	0.5%	6.1%	2.8%	1.9%	1.2%	1.7%
2005	12.1%	1.6%	6.4%	8.8%	4.6%	9.8%	3.3%	4.0%	7.1%	7.7%
Arithmetic Mean	5.5%	2.2%	2.8%	4.3%	2.0%	5.7%	2.8%	2.6%	3.9%	4.0%
2006	5.0%	3.9%	5.9%	6.4%	3.3%	7.3%	1.8%	3.1%	8.3%	4.9%
2007	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	3.4%	5.1%	0.0%	0.7%
2008	0.0%	0.0%	3.1%	3.6%	1.3%	0.0%	0.0%	0.0%	3.0%	0.9%
2009	0.9%	0.0%	0.0%	0.0%	2.7%	0.9%	0.0%	1.8%	1.6%	0.7%
2010	1.1%	1.7%	1.0%	1.6%	0.0%	0.0%	0.9%	0.0%	0.0%	1.0%
Geometric Mean	0.4%	0.2%	0.4%	0.5%	1.0%	0.2%	0.3%	0.4%	0.5%	1.4%
Comparative Factor	3.03	10.69	2.40	3.26	0.01	0.05	2.53	0.02	0.02	0.68

Driving licences: 2002/3: TBT 2005/6/7: Taxi (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0%	6.0%	5.0%	10.0%	4.0%	5.0%	4.0%	3.0%	2.0%	6.6%
2003	4.0%	3.5%	3.6%	3.9%	3.1%	2.5%	2.9%	3.6%	3.6%	3.6%
2005	3.0%	2.3%	3.5%	4.6%	1.7%	1.8%	2.3%	0.8%	1.4%	2.7%
Arithmetic Mean	5.3%	3.9%	4.0%	6.2%	2.9%	3.1%	3.1%	2.5%	2.3%	4.3%
2006	0.9%	1.2%	4.6%	2.6%	1.5%	1.4%	3.3%	2.5%	4.0%	2.0%
2007	3.0%	0.0%	2.2%	1.2%	1.1%	0.0%	0.8%	1.0%	0.0%	1.6%
2008	4.7%	4.0%	14.4%	6.2%	0.9%	1.0%	3.0%	1.7%	3.3%	5.3%
2009	1.6%	1.1%	2.6%	2.1%	0.3%	0.3%	1.5%	1.7%	1.0%	1.5%
2010	0.0%	0.7%	0.9%	1.7%	1.0%	1.3%	0.9%	0.0%	0.7%	0.6%
Geometric Mean	1.0%	0.7%	3.3%	2.7%	1.1%	0.5%	1.8%	0.7%	0.8%	2.0%
Comparative Factor	0.01	0.97	0.27	0.62	0.95	2.57	0.51	0.01	0.90	0.30
PrDP (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	16.0%	31.0%	22.0%	28.0%	20.0%	10.0%	13.0%	8.0%	14.0%	19.8%
2003	18.1%	18.5%	16.1%	19.9%	16.0%	7.6%	12.0%	16.6%	12.7%	16.5%
2005	21.2%	15.8%	31.9%	26.3%	16.2%	8.9%	12.7%	7.9%	19.6%	19.9%
Arithmetic Mean	18.4%	21.8%	23.3%	24.7%	17.4%	8.8%	12.6%	10.8%	15.4%	18.7%
2006	19.5%	11.3%	23.3%	21.3%	12.6%	12.6%	18.8%	14.8%	12.8%	17.5%
2007	8.0%	11.8%	2.8%	12.9%	0.7%	9.2%	4.9%	0.7%	0.0%	7.2%
2008	7.0%	5.3%	5.4%	6.2%	2.8%	1.0%	2.3%	3.7%	1.5%	5.1%
2009	2.2%	4.0%	3.3%	4.8%	2.5%	2.0%	1.5%	3.0%	0.7%	2.8%
2010	0.3%	2.3%	2.5%	3.7%	0.0%	0.3%	1.6%	0.3%	0.3%	1.3%
Geometric Mean	4.9%	7.2%	6.4%	9.5%	1.5%	2.9%	4.3%	2.7%	0.9%	5.9%
Comparative Factor	0.06	0.32	0.39	0.39	0.01	0.10	0.37	0.11	0.32	0.22
Tyres worn: % of vehicles with defects: 2002/3: TBT 2005/6/7: Taxi (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	25.0%	17.0%	18.0%	20.0%	28.0%	29.0%	26.0%	35.0%	30.0%	23.0%
2003	17.0%	19.0%	19.0%	19.0%	20.0%	8.0%	18.0%	17.0%	19.0%	17.4%
2005	23.0%	24.0%	29.0%	23.0%	27.0%	20.0%	28.0%	27.0%	27.0%	25.4%
Arithmetic Mean	21.7%	20.0%	22.0%	20.7%	25.0%	19.0%	24.0%	26.3%	25.3%	21.9%
2006	30.0%	18.0%	20.0%	18.0%	22.0%	27.0%	25.0%	26.0%	24.0%	24.2%
2007	13.9%	2.9%	2.4%	3.6%	23.0%	4.1%	12.0%	10.3%	6.1%	8.8%
2008	5.0%	8.9%	6.4%	9.2%	7.4%	6.8%	8.0%	9.4%	8.0%	6.9%
2009	3.4%	8.8%	4.3%	2.7%	15.2%	2.0%	1.8%	3.3%	0.7%	4.9%
2010	6.3%	3.6%	8.0%	4.0%	1.7%	3.6%	7.3%	4.0%	4.3%	5.3%
Geometric Mean	9.9%	8.1%	7.9%	7.1%	11.6%	6.9%	9.5%	9.8%	6.7%	9.7%
Comparative Factor	0.63	0.44	1.02	0.56	0.15	0.53	0.76	0.41	0.64	0.55
Front bright: % of vehicles with defects: 2002/3: TBT 2005/6/7: Taxi (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0%	12.0%	7.0%	6.0%	14.0%	8.0%	11.0%	8.0%	8.0%	9.0%
2003	2.5%	3.8%	4.2%	3.6%	4.3%	4.2%	7.8%	5.0%	5.6%	3.8%
2005	6.4%	5.3%	8.2%	8.1%	8.4%	2.8%	15.9%	10.2%	13.3%	8.8%
Arithmetic Mean	6.0%	7.0%	6.5%	5.9%	8.9%	5.0%	11.6%	7.7%	9.0%	7.2%
2006	2.9%	5.0%	3.1%	4.1%	5.6%	8.0%	13.0%	9.8%	5.6%	4.9%
2007	5.9%	1.9%	0.0%	1.2%	5.8%	2.1%	5.6%	1.5%	0.0%	3.3%
2008	8.4%	5.0%	7.7%	3.9%	4.3%	4.8%	2.3%	5.0%	3.8%	6.2%
2009	1.2%	1.6%	1.3%	1.2%	0.6%	2.3%	0.6%	1.7%	0.3%	1.3%
2010	1.7%	1.0%	0.9%	0.7%	0.7%	1.0%	0.9%	1.0%	2.6%	1.2%
Geometric Mean	3.5%	2.8%	1.1%	2.1%	2.8%	3.1%	3.2%	3.1%	1.1%	3.2%
Comparative Factor	0.48	0.34	0.83	0.31	0.24	0.32	0.30	0.32	2.45	0.37



Tall lights: % of vehicles with defects: 2002/3: TBT 2005/6/7: Taxi (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12.0%	9.0%	13.0%	12.0%	10.0%	12.0%	16.0%	11.0%	13.0%	12.0%
2003	3.1%	1.9%	5.1%	3.6%	6.8%	2.9%	10.0%	3.2%	7.4%	4.0%
2005	2.7%	1.7%	8.6%	4.3%	5.2%	0.7%	6.5%	10.6%	4.2%	5.3%
Arithmetic Mean	5.9%	4.2%	8.9%	6.6%	7.3%	5.2%	10.8%	8.3%	8.2%	7.1%
2006	3.2%	2.2%	4.1%	5.9%	3.3%	5.5%	6.8%	5.3%	4.8%	3.9%
2007	1.0%	1.0%	0.0%	1.2%	2.9%	1.0%	5.6%	1.0%	0.0%	1.2%
2008	1.3%	2.3%	6.4%	3.6%	1.5%	0.6%	1.7%	1.0%	0.9%	2.4%
2009	0.0%	1.1%	1.6%	0.9%	0.3%	0.3%	0.0%	0.3%	0.3%	0.6%
2010	0.3%	0.3%	0.3%	1.0%	1.0%	1.0%	0.6%	0.0%	1.6%	0.5%
Geometric Mean	0.7%	1.4%	1.0%	2.3%	1.8%	1.3%	1.3%	0.7%	0.7%	1.7%
Comparative Factor	0.51	0.23	0.30	0.43	0.56	0.75	0.49	0.01	2.19	0.30
Brake lights: % of vehicles with defects: 2002/3: TBT 2005/6/7: Taxi (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	12.0%	16.0%	15.0%	12.0%	14.0%	11.0%	13.0%	11.0%	11.0%	13.0%
2003	12.0%	6.7%	6.4%	5.7%	9.7%	6.1%	13.0%	7.4%	5.9%	8.8%
2005	4.5%	5.0%	8.2%	6.6%	6.5%	2.8%	9.2%	10.8%	11.2%	7.2%
Arithmetic Mean	9.5%	9.2%	9.9%	8.1%	10.1%	6.6%	11.7%	9.7%	9.4%	9.7%
2006	2.0%	1.6%	1.0%	2.6%	1.8%	4.7%	2.7%	5.1%	0.0%	2.2%
2007	7.9%	4.9%	0.0%	4.8%	6.9%	5.2%	8.8%	5.4%	3.0%	5.5%
2008	8.7%	5.3%	7.3%	6.2%	7.1%	4.2%	7.3%	5.7%	2.7%	6.9%
2009	1.6%	2.4%	4.6%	2.7%	1.3%	2.0%	0.9%	3.3%	0.7%	2.3%
2010	6.3%	4.2%	4.6%	3.7%	4.0%	9.9%	3.2%	7.9%	6.9%	5.6%
Geometric Mean	4.9%	4.0%	1.6%	4.3%	4.1%	4.9%	4.2%	5.8%	0.6%	4.7%
Comparative Factor	1.30	1.07	2.91	0.85	0.97	2.03	0.75	1.36	11.93	1.20
	1.55	4.65	1.64	1.83	0.53	0.56	1.32	0.41	0.92	0.70

## 7.2 COMPARISON BETWEEN TRAFFIC OFFENCES AND ACCIDENT STATISTICS

In this section, a summary of information about accidents that occurred during 2010 is provided, and the 2010 accident patterns are compared to those of previous years (see section 7.2.1). The relationship between the accident information and the offence information (as reported earlier in this report) is discussed in section 7.2.2.

In its evaluation of traffic accident information, the RTMC uses *fatal accident* statistics as a substitute for general accident information. This is done because of the relatively good quality of the fatal accident statistics compared to the rest. The same practice is followed in this section. The assumption behind this practice is that the trends in fatal accident statistics are representative of the trends of all categories of accidents. This assumption is reasonable but conclusions should nevertheless be made with care.

## 7.2.1 Summary of accident information

### 7.2.1.1 Annual number of fatal accidents by province from 2003 to 2010, with factors of change (annual growth factors)

The table below shows the total number of fatal accidents that occurred annually in South Africa since 2003.

Year	Province										% Change between years
	GA	KZN	WC	EC	FS	MP	NW	LI	NC	SA	
2003	2257	2184	1209	878	732	951	847	872	267	10197	-
2004	2338	2296	1281	938	743	965	866	890	290	10607	2.20%
2005	2642	2498	1363	1108	789	1129	938	985	284	11736	13.40%
2006	2961	2468	1347	1400	894	1111	957	1010	308	12456	4.40%
2007	2907	2032	1369	1313	823	1257	989	1034	287	12011	-3.57%
2008	2311	2117	1290	1067	650	1187	869	1081	233	10805	-10.04%
2009 est.	2121	2249	1055	993	699	1236	840	1144	227	10564	-2.23%
2010 est.	1872	2243	1029	1207	775	1177	855	1121	256	10535	-0.27%
Factor of change in the number of accidents from 2009 to 2010**	0.88	1.00	0.98	1.21	1.11	0.95	1.02	0.98	1.13	1.00	
Average factor of change in number of accidents from 2003 - 2010***	1.00	0.99	1.04	1.07	0.99	1.02	1.01	1.02	1.00	1.01	

The information above shows that the total number of fatal accidents for 2010 decreased by 0.27% since 2009. The average factor of change in the number of accidents since 2003 is 1.01, indicating only a slight, yet constant increase in the total number of accidents each year.

## 7.2.2 FATAL ACCIDENT STATISTICS COMPARED TO THE RESULTS OF THE OFFENCE SURVEY AND OTHER TRAFFIC PARAMETERS

In this section, the statistical aspect of the relationship between the incidence of offences and accidents is discussed.

## 7.2.3 THE CORRELATION BETWEEN ACCIDENT AND OFFENCE RATES

In this section, the changes in the number of accidents over five years up to 2010 are compared to changes in the incidence pattern of offences.

Section 7.2.3.1 shows the “factors of change” that were calculated for accidents and offences (see Section 7.1.1.1) respectively. The coefficient of correlation between these two series of factors is also shown.

### 7.2.3.1 Comparison between accident and offence growth patterns (expressed as “factors of change”) from 2003 to 2010

	GA	KZN	WC	EC	FS	MP	NW	LI	NC	RSA
Factor of change in accident numbers: 2003 - 2010	1.00	0.99	1.04	1.07	0.99	1.02	1.01	1.02	1.00	1.01
Factor of change in offence indices: 2002 - 2010	0.79	0.90	1.02	1.00	0.95	0.65	0.82	0.87	0.97	0.87

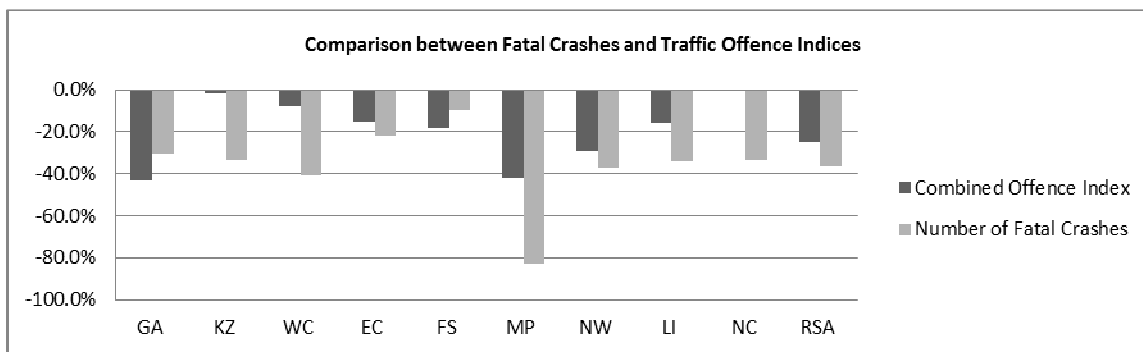
There is little correlation between the two series of factors. Accident figures show a national factor of 1.01, which indicates a slight, yet constant increase in the annual number of fatal accidents and annual offence rates, while the national offence rate factor is 0.84, indicating a rather large decrease. Eastern Cape and Western Cape shows the largest increase in factor of change for accident numbers, with 1.07 and 1.04 respectively. Free State and KwaZulu Natal shows the largest decrease in factor of change for accident numbers with 0.99. Western Cape shows the largest increase in factor of change in offence rates with 1.02. Mpumalanga shows the largest decrease in factor of change in offence rates with 0.65.

## 7.3 THE CORRELATION BETWEEN FATAL CRASH STATISTICS AND TRAFFIC OFFENCE RATES

### 7.3.1 GENERAL OVERVIEW

Information on the comparison between fatal crashes and road traffic offences for the years 2009 and 2010 is given in the table below and the % change is reflected in the graph below.

Comparison between Fatal Crashes and Traffic Offence Indices										
Number of Fatal Crashes										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2009	2440	2994	1448	1471	849	2155	1173	1500	342	14372
2010	1872	2243	1029	1207	775	1177	855	1121	256	10535
Change	-568	-751	-419	-264	-74	-978	-318	-379	-86	-3837
% Change	-30.3%	-33.5%	-40.7%	-21.9%	-9.6%	-83.0%	-37.2%	-33.8%	-33.6%	-36.4%
Combined Offence Index										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2009	5.8	6	5	5.9	5	6.2	5.1	5.7	4.3	5.6
2010	3.3	5.9	4.6	5	4.1	3.6	3.6	4.8	4.3	4.2
Change	-2.5	-0.1	-0.4	-0.9	-0.9	-2.6	-1.5	-0.9	0	-1.4
% Change	-43.1%	-1.7%	-8.0%	-15.3%	-18.0%	-41.9%	-29.4%	-15.8%	0.0%	-25.0%



The information above shows that there is strong correlation in the change in the number of fatal crashes and the change in the overall combined offence index. For example:

- National level : offence index decreased by 25.0% and fatal crashes decreased by 36.4%
- Gauteng : offence index decreased by 43.1% and fatal crashes decreased by 30.3%

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- KwaZulu-Natal : offence index decreased by 1.7% and fatal crashes decreased by 33.5%
  - Western Cape : offence index decreased by 8.0% and fatal crashes decreased by 40.7%
  - Eastern Cape : offence index decreased by 15.3% and fatal crashes decreased by 21.9%
  - Free State : offence index decreased by 18.0% and fatal crashes decreased by 9.6%
  - Mpumalanga : offence index decreased by 41.9% and fatal crashes decreased by 83.0%
  - North West : offence index decreased by 29.4% and fatal crashes decreased by 37.2%
  - Limpopo : offence index decreased by 15.8% and fatal crashes decreased by 33.8%;

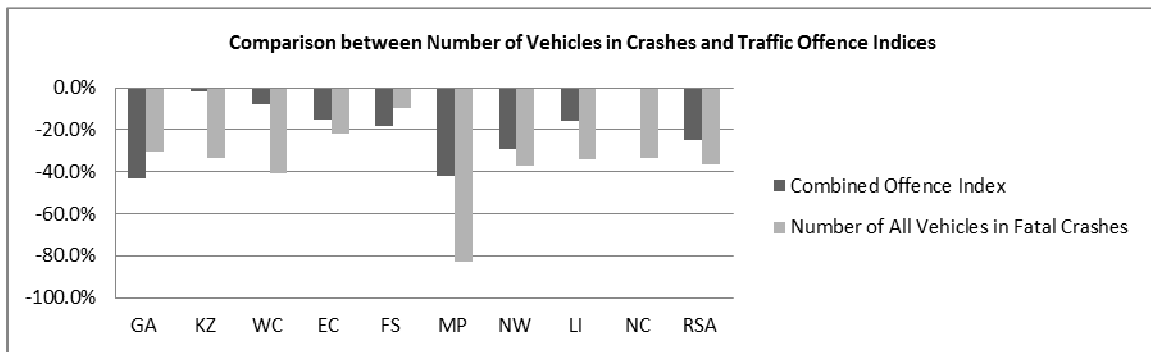
Exceptions in this regard are the following provinces which show contradictions in traffic offences and fatal crashes from 2008 to 2009:

- Northern Cape : offence index remained the same and fatal crashes decreased by 33.6%

### 7.3.2 COMPARISON BETWEEN TOTAL VEHICLES IN CRASHES AND OFFENCE INDICES

Information on the comparison between the number of all vehicle involved in fatal crashes and road traffic offences for the years 2009 and 2010 is given in the table below and the % change for each is reflected in the graph below.

Comparison between Number of Vehicles in Crashes and Traffic Offence Indices										
Number of vehicles in Fatal Crashes										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2009	2440	2994	1448	1471	849	2155	1173	1500	342	14372
2010	1872	2243	1029	1207	775	1177	855	1121	256	10535
Change	-568	-751.333	-418.667	-264.333	-74.3333	-977.667	-318.333	-378.667	-86	-3837.33
% Change	-30.3%	-33.5%	-40.7%	-21.9%	-9.6%	-83.0%	-37.2%	-33.8%	-33.6%	-36.4%
Combined Offence Index										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2009	5.8	6	5	5.9	5	6.2	5.1	5.7	4.3	5.6
2010	3.3	5.9	4.6	5	4.1	3.6	3.6	4.8	4.3	4.2
Change	-2.5	-0.1	-0.4	-0.9	-0.9	-2.6	-1.5	-0.9	0	-1.4
% Change	-75.8%	-1.7%	-8.7%	-18.0%	-22.0%	-72.2%	-41.7%	-18.8%	0.0%	-33.3%



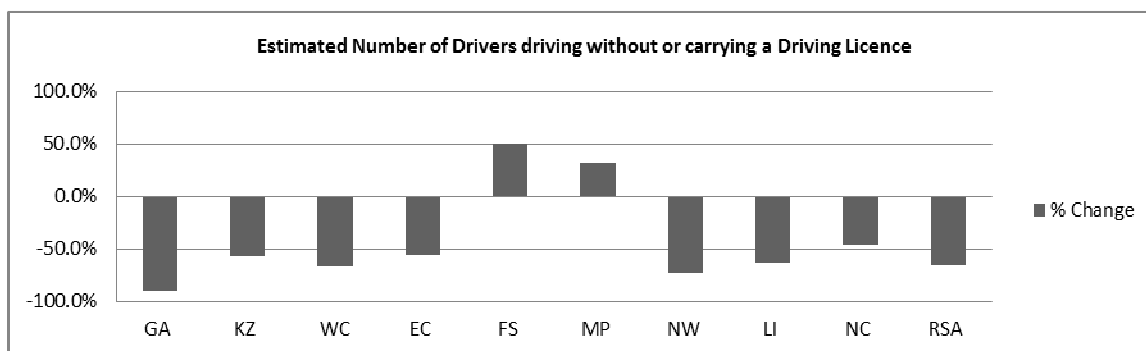
The information above shows strong correlation in the change in the number of vehicles involved in fatal crashes and the change in the overall combined offence index. The change in fatal crashes and the change in offence indices of eight (8) provinces correlate to each other. Only Northern Cape shows a contradiction between a decrease in the number of vehicles involved in fatal crashes and a unchanged offence index.

### 7.3.3 ESTIMATED VEHICLE POPULATIONS IN RELATION TO OFFENCE PERCENTAGES

Based on the offence indices and accompanying percentages of the various types of offences discussed throughout this report, estimates were made of the number of vehicles, per type of vehicle, on the road that might be committing a specific road traffic offence.

#### 7.3.3.1 Estimated number of drivers driving without or carrying a driving license

Estimated Number of Drivers driving without or carrying a Driving Licence										
Year	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	74870	14374	57941	26623	6819	5285	9010	7944	3827	206692
2008	83389	44852	106178	35125	18898	10653	14787	13553	4490	331924
2009	97741	20650	33780	15445	4442	6231	9755	10391	2923	193211
2010	10398.28	8918.656	11348.94	6927.698	6690.651	8217.156	2687.799	3856.682	1568.563	66512.389
Change	-87343	-11731	-22431	-8517	2249	1986	-7067	-6534	-1354	-126699
% Change	-89.4%	-56.8%	-66.4%	-55.1%	50.6%	31.9%	-72.4%	-62.9%	-46.3%	-65.6%

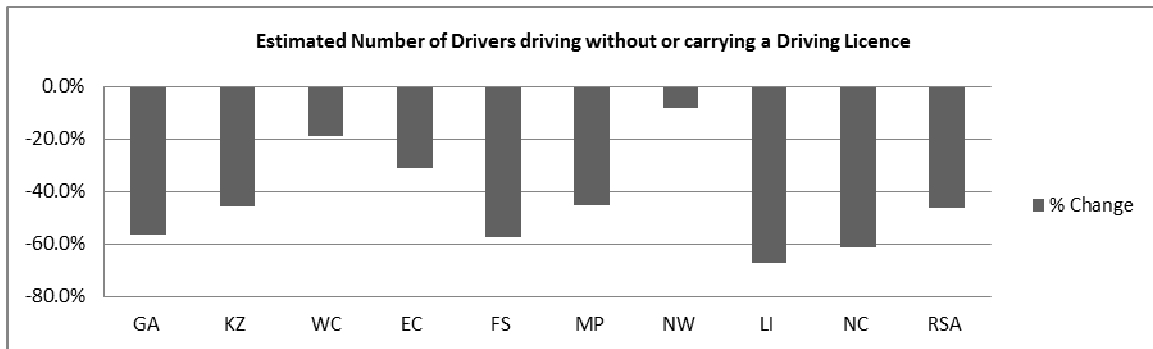


The information above shows that the overall estimation for the number of drivers driving without or carrying a driving licence in 2010 is 65% lower than the previous estimation. All provinces, except Free State and Mpumalanga, show a decreased estimate for 2010. Gauteng shows the largest decrease in this regard with 89.4%.



### 7.3.3.2 Estimated number of professional drivers driving without or carrying a PrDP

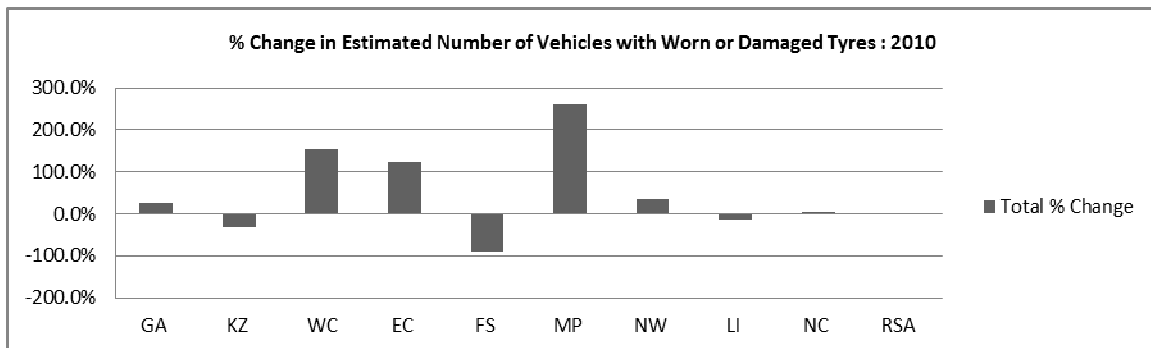
Estimated Number of Professional Drivers driving without or carrying a PrDP										
Year	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	10656	17058	7360	10412	283	2229	1197	1058	2253	52506
2008	9907	5194	3965	3005	1167	1390	795	1734	432	27591
2009	3458	2060	1008	1357	397	467	363	522	144	9760
2010	1510	1120	817	935	169	255	333	172	55	5246
Change	-1948	-940	-191	-422	-228	-212	-30	-350	-89	-4514
% Change	-56.3%	-45.7%	-18.9%	-31.1%	-57.4%	-45.3%	-8.3%	-67.0%	-61.5%	-46.2%



The information above shows that the overall estimation for the number of drivers driving without or carrying a PrDP in 2010 is 46.2% lower than the previous estimation. All provinces show a decreased estimate for 2010. Limpopo shows the largest decrease in this regard with 67.0%.

### 7.3.3.3 Estimated number of vehicles with worn or damaged tires

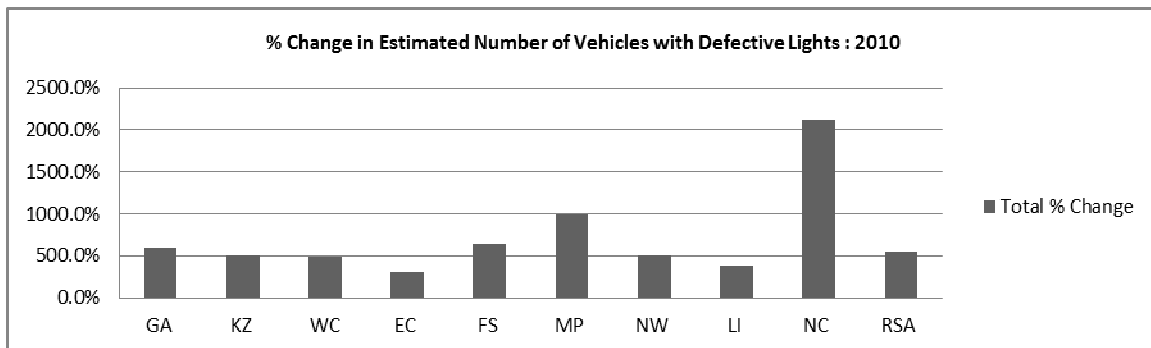
Estimated Number of Vehicles with Worn or Damaged Tyres : 2009										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	89133	44323	14851	7562	35137	1281	6116	7672	2279	212280
MB Taxis	3761	3809	1539	561	1831	394	329	619	27	13875
Buses	1098	7050	1004	1470	4500	497	356	538	0	17353
Trucks	4204	11601	1789	2513	3758	730	531	1144	460	29165
Total	98196	66784	19184	12106	45226	2902	7333	9974	2766	272674
Estimated Number of Vehicles with Worn or Damaged Tyres : 2010										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	101,926	38,034	42,870	23,026	3,345	6,795	6,919	5,947	1,880	226,669
MB Taxis	7,060	1,612	2,798	843	207	726	1,226	759	166	15,099
Buses	273	137	45	73	19	142	93	40	29	845
Trucks	13,834	5,014	3,119	3,306	587	2,780	1,797	1,981	807	32,717
Total	123,093	44,797	48,832	27,248	4,158	10,443	10,035	8,727	2,882	275,330
% Change in Estimated Number of Vehicles with Worn or Damaged Tyres : 2010										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	14.4%	-14.2%	188.7%	204.5%	-90.5%	430.4%	13.1%	-22.5%	-17.5%	6.8%
MB Taxis	87.7%	-57.7%	81.8%	50.3%	-88.7%	84.3%	272.6%	22.6%	514.8%	8.8%
Buses	-75.1%	-98.1%	-95.5%	-95.0%	-99.6%	-71.4%	-73.9%	-92.6%	100.0%	-95.1%
Trucks	229.1%	-56.8%	74.3%	31.6%	-84.4%	280.8%	238.4%	73.2%	75.4%	12.2%
Total % Change	25.4%	-32.9%	154.5%	125.1%	-90.8%	259.9%	36.8%	-12.5%	4.2%	1.0%



The information above shows that the overall estimation for the number of vehicles with worn or damaged tyres in 2010 is 1% higher than the previous estimation. All provinces, except Kwa-Zulu Natal, Free State and Limpopo, show an increased estimate for 2010. Free State shows the largest decrease in this regard with 90.8%.

### 7.3.3.4 Estimated number of vehicles with defective lights

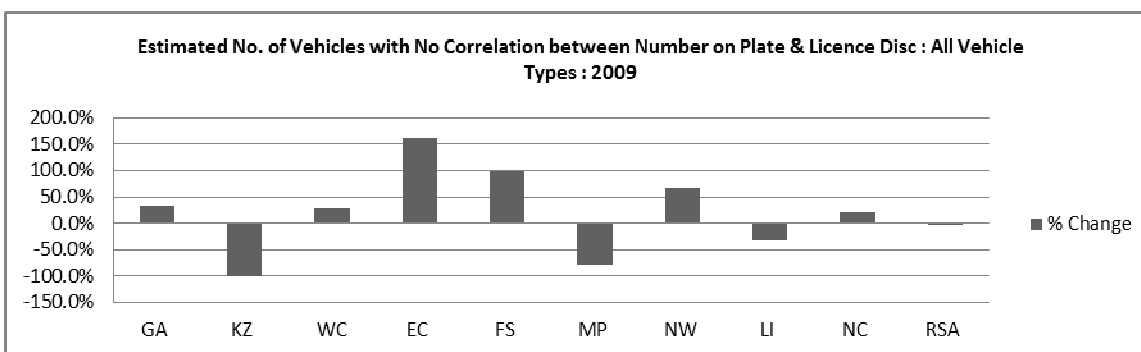
Estimated Number of Vehicles with Defective Lights : 2009										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	152389	59785	68067	54446	13403	14948	16056	27201	2887	402600
MB Taxis	3761	2424	4939	1890	458	1321	476	1876	50	17839
Buses	4637	3726	3325	1961	750	1466	695	1769	375	19282
Trucks	6969	2554	1861	1869	867	1282	1061	1388	104	17839
Total	167756	68489	78191	60165	15478	19017	18288	32234	3416	457560
Estimated Number of Vehicles with Defective Lights : 2010										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	224837	89802	83219	28259	17467	33524	17480	26388	11121	528894
MB Taxis	13783	4523	4932	2655	1123	3003	1427	2695	645	34755
Buses	675	542	216	485	98	283	214	117	77	2724
Trucks	14575	4713	3461	2892	1938	3462	1249	2782	1264	35633
Total	1163307	415818	468644	243328	115566	209210	110320	158000	75871	2956106
% Change in Estimated Number of Vehicles with Defective Lights : 2010										
Type	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
LMVs	47.5%	50.2%	22.3%	-48.1%	30.3%	124.3%	8.9%	-3.0%	285.2%	31.4%
MB Taxis	266.5%	86.6%	-0.1%	40.5%	145.1%	127.3%	199.8%	43.6%	1190.6%	94.8%
Buses	-85.5%	-85.5%	-93.5%	-75.3%	-87.0%	-80.7%	-69.2%	-93.4%	-79.4%	-85.9%
Trucks	109.1%	84.5%	86.0%	54.8%	123.5%	170.0%	17.7%	100.4%	1115.3%	99.7%
Total % Change	593.5%	507.1%	499.4%	304.4%	646.6%	1000.1%	503.2%	390.2%	2121.0%	546.1%



The information above shows that the overall estimation for the number of vehicles with defective lights in 2010 is much higher than the previous estimation. All provinces show an increased estimate for 2010. Northern Cape shows the largest increase in this regard. The large increases indicated here can be attributed to the high increase in vehicle light offences observed during the 2010 survey.

### 7.3.3.5 Estimated number of vehicles with no correlation between number plates & license disc

Estimated No. of Vehicles with No Correlation between Number on Plate & Licence Disc : All Vehicle Types : 2009										
Year	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2007	18798	10412	8265	6149	7838	4281	3125	12127	854	71849
2008	38641	4708	11278	1728	894	1490	1378	3161	0	63278
2009	9774	3471	2085	873	0	2397	717	1845	284	25423
2010	12998	0	2670	2290	1622	504	1203	1244	341	24634
Change	3224	-3471	585	1417	1622	-1893	486	-601	57	-789
% Change	33.0%	-100.0%	28.1%	162.3%	100.0%	-79.0%	67.9%	-32.6%	20.1%	-3.1%



The information above shows that the overall estimation for the number of vehicles with no correlation between the number plate and the licence disc in 2010 is 3.1% lower than the previous estimation. All provinces, except KwaZulu Natal, Mpumalanga and Limpopo, show an increased estimate for 2010. KwaZulu Natal shows the largest decrease in this regard with 100%.

## **8 CHAPTER 8: ESTIMATED ACTUAL NUMBER OF CONTRAVENTIONS IN TERMS OF THE NUMBER OF DRIVER LICENCES, PRDPS AND REGISTERED VEHICLES**

One of the requirements of the RTMC for the project was that *“the average contravention rates in terms of the number of driver licences and PrDPs issued and vehicle contravention rates in terms of the number of registered vehicles”* should be determined.

This requirement is interpreted as follows: that the offence rates determined during the survey should be applied to the number of vehicles, drivers and professional drivers registered in the country, in order to get a rough estimate of the actual number of offences on the road network in the country. Rates (such as percentages or number of offences per hour) on their own do not give a proper “feel” of the actual extent of the problems on the roads. Such a “feel” can only be obtained by doing the calculations required by the Corporation.

There are however some conceptual problems with this kind of calculation. These can best be explained by referring to a few examples. The situation is relatively simple in the case of “vehicle contravention rates.” For example: if, during a survey of a properly selected sample of vehicles, it is found that 20% of light motor vehicles have defective brake lights, and it is known that there are five million registered vehicles in the country, then the result obtained from the sample can be applied to the population with some confidence. The estimated number of vehicles with defective lights will then be 20% of five million, i.e. one million vehicles with defective lights.

The situation becomes more complex in the case of “driver contravention rates.” For example: if, during a survey of a properly selected sample of vehicles at selected locations on the road, it is found that 20% of the drivers of light motor vehicles commit speeding offences, it is not clear to which population these rates should be applied to determine the actual extent of the problem.

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Should it be applied to the number of light motor vehicles registered in the country? This could not be the case, as a speeding offence is not a characteristic of the vehicle but of driver performance. Should it then be applied to the number of driver licences for light motor vehicles that were issued in the country? This is also not conceptually sound because the extent of the offences is not merely a function of the number of documents issued by the traffic administration departments.

It is the function of a complex array of variables including the number of light motor vehicle trips undertaken within environments that are comparable to those where the offences were observed, and the number of such environments. This complex kind of information is not available, which means that a conceptually sound calculation of the actual number of drivers and vehicles involved in speeding offences is not possible. This applies to all driver contraventions, including moving violations (e.g. ignoring traffic signals and barrier lines) and driving under the influence of alcohol, as well as administrative offences such as a driver not having the required driver licence or PrDP. Even these administrative offences are in the end not a function of the number of licences or PrDPs issued by the traffic administration departments, but rather of the number of trips undertaken by drivers as explained above.

In the rest of this section, information on the number of vehicles registered, as well as the number of driver licences and PrDPs issued in South Africa, is provided. The information on the number of vehicles registered is then related to a selection of vehicle condition related offences. In view of the discussion above, an attempt to determine the actual number of driver contraventions committed cannot be made.

## **8.1 NUMBER OF REGISTERED VEHICLES, PROFESSIONAL DRIVERS AND OTHER DRIVERS**

The number of vehicles that were registered in South Africa in September 2010 is shown in Section 8.1.1 while the number of driver documents is shown in section 8.1.2.

### 8.1.1 NUMBER OF REGISTERED VEHICLES PER PROVINCE, SEPTEMBER 2010

Sept. 2010 Category	Number of Registered Vehicles per Province Motorised Vehicles									
	GA	KZ	WC	EC	FS	MP	NW	NP	NC	RSA
Motor cars	2,347,702	769,471	987,592	357,363	259,169	295,315	240,689	211,754	94,703	5,563,758
LDV's	650,121	287,018	273,301	165,948	112,470	157,708	123,472	159,910	61,928	1,991,876
Total LMV	2,997,823	1,056,489	1,260,893	523,311	371,639	453,023	364,161	371,664	156,631	7,555,634
Mini Bus Taxis	112,060	44,787	34,976	21,069	12,203	20,153	16,791	18,976	3,864	284,879
Buses	16,063	6,856	5,028	3,851	2,075	4,719	3,100	4,044	1,224	46,960
Trucks	123,516	50,135	34,272	24,306	19,577	26,225	17,112	20,013	8,777	323,933
Motorcycles	2,347,702	769,471	987,592	357,363	259,169	295,315	240,689	211,754	94,703	5,563,758
Other & Unknown	38,377	31,815	33,561	14,197	39,454	26,211	26,193	15,083	8,041	232,930
Total	5,635,541	1,959,553	2,356,322	944,097	704,117	825,646	668,046	641,534	273,240	14,008,094

### 8.2 NUMBERS OF VEHICLES REGISTERED IN SOUTH AFRICA APPLIED TO A SELECTION OF OFFENCE RATES

In the table below, offence rates, per vehicle type, are applied to the total number of registered vehicles to determine the number of offences per offence type; namely, Worn Tyres, Lights not functioning-Front Bright, as well as Lights not functioning-Tail.

## 8.2.1 ESTIMATED NUMBER OF VEHICLES WITH DEFECTIVE TYRES AND FRONT AND TAIL LIGHTS

Number of registered vehicles per class										
Vehicle Type	GA	KZ	WC	EC	FS	MP	NW	NW	NC	RSA
Total LMV	2,997,823	1,056,489	1,260,893	523,311	371,639	453,023	364,161	371,664	156,631	7,555,634
Mini Bus Taxis	112,060	44,787	34,976	21,069	12,203	20,153	16,791	18,976	3,864	284,879
Buses	16,063	6,856	5,028	3,851	2,075	4,719	3,100	4,044	1,224	46,960
Trucks	123,516	50,135	34,272	24,306	19,577	26,225	17,112	20,013	8,777	323,933
Tyres Worn										
Vehicle Type	GA	KZ	WC	EC	FS	MP	NW	NW	NC	RSA
LMV Rate:	3.40%	3.60%	3.40%	4.40%	0.90%	1.50%	1.90%	1.60%	1.20%	3.00%
Number	101,926	38,034	42,870	23,026	3,345	6,795	6,919	5,947	1,880	226,669
Mini Bus Taxi Rate:	6.30%	3.60%	8.00%	4.00%	1.70%	3.60%	7.30%	4.00%	4.30%	5.30%
Number	7,060	1,612	2,798	843	207	726	1,226	759	166	15,099
Bus Rate:	1.70%	2.00%	0.90%	1.90%	0.90%	3.00%	3.00%	1.00%	2.40%	1.80%
Number	273	137	45	73	19	142	93	40	29	845
Truck Rate:	11.20%	10.00%	9.10%	13.60%	3.00%	10.60%	10.50%	9.90%	9.20%	10.10%
Number	13,834	5,014	3,119	3,306	587	2,780	1,797	1,981	807	32,717
Lights not functioning: Front bright										
Vehicle Type	GA	KZ	WC	EC	FS	MP	NW	NW	NC	RSA
LMV Rate:	1.07%	0.97%	0.45%	0.25%	0.47%	1.72%	1.45%	1.88%	0.73%	0.97%
Number	31,960	10,208	5,705	1,292	1,733	7,811	5,265	6,996	1,146	73,290
Mini Bus Taxi Rate:	1.67%	0.98%	0.92%	0.66%	0.66%	0.99%	0.95%	0.99%	2.62%	1.19%
Number	1,868	438	321	140	81	200	159	188	101	3,390
Bus Rate:	0.00%	1.98%	0.00%	0.97%	0.93%	0.00%	0.00%	0.00%	0.00%	0.45%
Number	0	136	0	37	19	0	0	0	0	211
Truck Rate:	0.84%	1.14%	0.99%	1.42%	1.34%	2.24%	0.81%	1.13%	1.11%	1.14%
Number	1,038	571	338	344	263	588	139	227	98	3,693
Lights not functioning: Tail										
Vehicle Type	GA	KZ	WC	EC	FS	MP	NW	NW	NC	RSA
LMV Rate:	0.43%	0.48%	0.45%	0.25%	0.93%	0.00%	0.48%	0.71%	0.49%	0.44%
Number	12,784	5,104	5,705	1,292	3,465	0	1,755	2,624	764	33,245
Mini Bus Taxi Rate:	0.33%	0.33%	0.31%	1.00%	0.99%	0.99%	0.63%	0.00%	1.64%	0.51%
Number	374	146	107	210	121	200	106	0	63	1,453
Bus Rate:	0.00%	0.99%	0.00%	0.00%	1.87%	0.00%	0.00%	0.00%	0.79%	0.31%
Number	0	68	0	0	39	0	0	0	10	146
Truck Rate:	0.00%	0.85%	0.49%	1.70%	0.54%	0.28%	0.27%	0.57%	1.39%	0.47%
Number	0	429	169	413	105	73	46	113	122	1,522





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## 9 SUGGESTIONS ON IMPROVING FUTURE SURVEYS

Several areas of possible improvement were identified while conducting the field surveys and compiling the annual report. These issues were already identified in the 2008 report and are included again in the 2010 report as they have not been fully addressed.

### 9.1 TRAFFIC OFFICER ATTENDANCE AT ROAD BLOCKS

The first issue relates to the attendance of traffic officers at roadblocks. A major logistical challenge during the field surveys was to ensure that traffic officers attend all the road blocks. It is not legal, and therefore not possible to conduct a road block without a traffic officer being present. Any delay at a roadblock due to traffic officers not attending leads to unnecessary delay in the already tightly scheduled program followed by the survey teams, and results in significant cost implications to redo the roadblock at a later stage.

Although a great improvement has been experienced in comparison with the 2007 and 2008 surveys, it is still recommended that a dedicated team of traffic officer be made available in each province to attend all road blocks.

### 9.2 SPEED MEASUREMENTS

SANRAL and Provincial Government Departments operates a series of permanent traffic counting stations throughout the country. The traffic counters measure speed for a selection of vehicle types, depending on the hardware installation at the specific site. Most of these counters are operational for 24 hours a day, 365 days a year. The stations are mostly on high importance roads. The speed profiles obtained from these stations are very reliable.

In the 2008 report it was recommended that speed offence monitoring be replaced, or supplemented by using the data from permanent traffic counting stations. The RTMC has since obtained permission from SANRAL regarding the use of permanent counting data. The initial analysis of this speed data revealed that the average offence rate was much lower than that of the RTMC Speed Offence Surveys. It is therefore recommended that a detailed analysis of the SANRAL data be done by a specialist statistician before any final conclusion should be reached apparent difference between these two datasets.

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### 9.3 HIGH SPEED WEIGH IN MOTION (HSWIM) AND OVERLOADING

Overloading is the most significant contributor towards the deterioration of any pavement surface. Some of the traffic counters operated by SANRAL and Provincial Roads Departments also collect High Speed Weigh In Motion (HSWIM). The HSWIM information includes E80 axle loads per for heavy vehicles. A very accurate figure for vehicle mass can be calculated from this information.

It is recommended that vehicle overloading information collected from HSWIM counters are included as part of future Traffic Offence surveys.

### 9.4 ELECTRONIC ANALYSIS OF OFFENCE INFORMATION

The hard copy annual report has grown significantly in volume with the different ways of analysing the offence information. The RTMC traffic offence survey information system developed by MicroZone to produce the reports in the hard copy document is also capable of displaying the information in an electronic format.

The software will be installed on the RTMC's intranet as part of the contract. Any of the reports found in the hard copy can be reproduced by the touch of a button. The software allows for amongst other:

- ✚ Detail analysis of offence information in any format for any vehicle type or combination thereof
- ✚ Historic trends and comparisons
- ✚ Comparisons of:
  - Day Time vs. Night Time
  - Urban vs. Rural
  - Weekday vs. Weekend

It is recommended that the hard copy document be scaled down to an executive summary and that future reports be generated electronically.

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## 10 ANNEXURE A: DEVELOPMENT OF THE TRAFFIC OFFENCE INDICATORS AND INDEXES USED IN CHAPTER 2

The purpose of this Annexure is to provide a brief introduction to the concepts of indicators and indexes, and to explain the way in which the indicators and indexes that were reported in Chapter 2 were calculated.

### 10.1 ABOUT INDICATORS AND INDEXES

#### a. What are indicators and indexes?

An *indicator* is a number which is used to tell managers or other interested persons something about the nature of a certain thing. Indicators in this report tell us about the offences that were observed on roads (Chapter 2).

There are two kinds of indicators: an indicator can be *specific* or *composite* in nature. A *specific indicator* reports information about one specific issue at a time, for example *the proportion or percentage of vehicles that were exceeding the speed limit*. A *composite indicator*, which is called an *index* or *index number*, condenses a group of specific indicators into a single number. For example, one number can be used to tell us something about speed, alcohol and seat belts simultaneously; such a number is then referred to as an *index*.

#### b. What are indexes used for?

Composite indicators (indexes) differ from specific indicators in that they are without a unit. This means that they are not expressed in terms of units such as *kilometres per hour* (as for speed) or *grams per 100 millilitres* (as for breath alcohol). They are merely numbers. The index number without a unit only has meaning when they are used for comparative purposes. Three types of comparison are used in section 2, namely:

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- *Comparing* the results observed on the road *with a specific standard* or target (indicating whether progress was made towards achievement of the target);
  - *Comparing* the results of new surveys *with those of previous surveys* (indicating whether progress was made over time); and
  - *Comparing* the achievements of *different entities*, such as cities or provinces, with each other (indicating whether one entity had more success than another).

## 10.2 INDICATORS AND INDEXES FOR THE ANNUAL ARRIVE ALIVE OFFENCE MONITORING PROGRAM

In Chapter 2 of this report, indicators and indexes were used to provide summarised information about the offence levels that were observed in the country during the national offence monitoring program. The purpose of this Annexure and section is to provide a brief explanation on how those indexes were calculated, and on the standards (targets) that were used to evaluate the performance levels of the road users (and the traffic management systems) in the different provinces.

The traffic offence indexes in Chapter 2 (section 2.2) were calculated as follows:

- ✚ The first step was to define the standards (targets) that are pursued with regard to the different offences. The standards that are proposed for the different offences are discussed in section 2.2.2 of the main report.
- ✚ The second step was to measure and report the actual offence levels. Chapter 6 reports on the offence levels as measured during the survey.
- ✚ The third step was to standardise the offence results, i.e. to express the results for the different offences in the form of indicators which would be mutually compared. This was done by expressing the actual offence levels (indicators) that were reported in Chapter 6, as a factor of the standard. The results of these calculations are shown in the tables in section 2. The following is an examples of how the calculations were done: If the standard for speed offences is a maximum offence rate of 5% for speed, and if 20% were actually exceeding the speed limit on the road, the

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standardised speed indicator would be 4 (i.e. 20% divided by 5% - this means that, in this example, the speed offence level is four times higher than the standard. Indicators for all offences were calculated in the same way for each province and for the country as a whole.

- ✚ The last step was to add the offence indicators that were calculated and reported in section 2 together into one single index number (combined road traffic offence index) for each province and for the country as a whole. The table in Section 10.3 of this annexure was used for the calculations. The results of this exercise are shown in section 2 under the titled “Comparison of combined road traffic offence indices for different years”
- ✚ While calculating the overall index numbers, a process of weighting was also followed. This means that, while adding the indicators together, a greater importance was attached to some of the offences than to others in accordance with the importance of each specific offence as a contributor to unsafe conditions on the road. The weights that were used are shown in the table 10.3 below.

### 10.3 THE CALCULATION TABLE

The following table was used to calculate the combined provincial and national offence indexes. The individual offence indexes used in this table were obtained from the tables in Section 2.3.

(It should be noted that the numbers in this table are indexes and not direct offence measurements in terms of percentages or other units of direct measurement.)

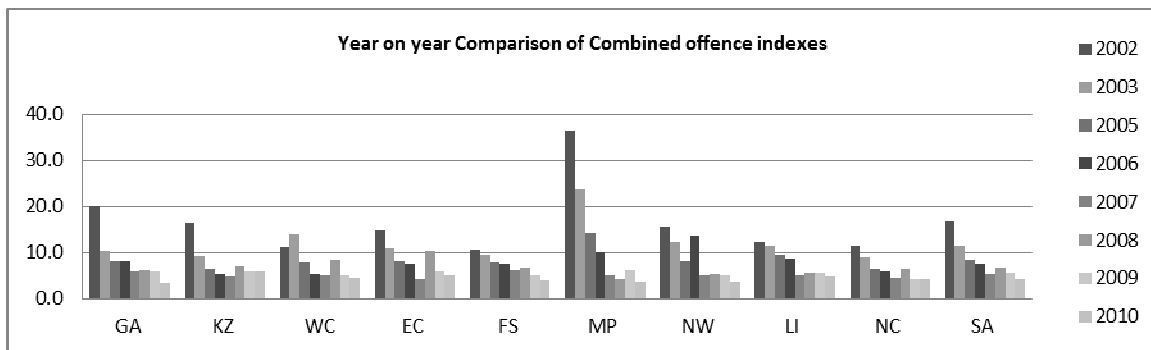
Table for the calculation of the combined offence index for a representative sample of offences

Speed index, Urban, (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	5.2	8.8	10.3	11.1	8.7	14.3	14.0	7.6	11.1	8.9
2003	15.3	9.0	8.2	11.1	11.0	13.5	10.2	12.1	5.5	11.7
2005	7.4	3.4	5.4	5.2	7.3	7.7	9.5	9.6	4.2	6.4
2006	7.8	6.2	3.4	5.4	5.9	8.1	7.3	8.0	3.6	6.5
2007	5.8	3.6	2.5	2.5	5.1	4.3	5.6	5.1	1.9	4.4
2008	7.7	8.4	4.4	5.6	5.8	7.1	4.7	7.8	3.0	6.7
2009	6.4	8.0	4.9	6.2	6.6	5.1	6.7	7.5	4.4	6.3
2010	6.1	6.6	7.7	4.9	3.9	4.1	1.7	5.4	2.8	5.6
Speed index, Rural, (Weight: 5)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	5.7	6.7	8.8	6.0	5.7	9.4	3.0	5.2	4.0	6.5
2003	6.8	4.6	4.7	3.6	7.3	5.4	5.5	5.2	2.9	5.5
2005	6.8	4.3	5.7	3.8	7.2	5.8	8.4	8.2	5.9	6.0
2006	5.2	5.8	5.1	3.5	6.8	3.6	5.9	4.9	5.8	5.1
2007	4.5	4.0	6.7	3.9	6.8	5.4	4.0	4.7	6.2	5.0
2008	4.6	5.8	7.5	5.2	8.2	5.1	5.9	7.3	7.8	5.8
2009	7.6	10.5	6.5	9.5	8.4	6.4	7.9	6.7	6.4	7.9
2010	3.4	8.2	6.4	8.4	9.6	3.8	3.7	4.7	6.4	5.6
Alcohol index, Driver, Night, (Weight: 12)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	15.8	6.8	6.2	13.9	8.0	11.1	19.9	17.9	17.1	12.7
2003	6.3	10.0	17.7	6.3	9.6	31.0	7.1	19.8	10.5	11.6
2005	11.2	6.9	6.2	8.8	9.3	12.9	7.2	7.4	8.3	9.1
2006	11.5	4.8	6.4	12.0	11.0	13.4	12.0	11.2	9.2	9.8
2007	8.4	0.0	4.2	0.6	3.7	3.9	3.5	1.7	2.1	4.4
2008	3.8	1.6	5.5	10.5	0.9	1.7	3.5	0.0	2.6	3.6
2009	3.3	0.8	0.8	0.0	4.5	4.4	2.9	3.1	0.9	2.4
2010	2.0	4.9	2.0	1.6	0.0	1.3	3.2	2.0	4.4	2.3
Unobserved Seat belt index, Driver, (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	1.3	1.5	1.0	1.1	0.8	0.9	0.9	0.8	0.9	1.1
2003	1.2	1.1	1.1	1.1	1.3	0.7	0.8	1.2	0.9	1.1
2005	1.1	1.1	1.2	1.6	1.2	1.2	1.2	0.9	1.4	1.1
2006	1.9	1.7	2.6	2.1	2.0	1.9	2.0	1.7	2.0	2.0
2007	0.6	0.1	0.3	0.5	1.9	0.3	0.6	0.1	0.5	0.5
2008	2.8	3.3	7.6	5.6	4.0	2.1	3.3	2.7	2.7	3.9
2009	2.0	1.2	1.6	1.8	0.6	0.8	1.4	1.7	1.0	1.5
2010	0.3	0.8	0.9	1.2	1.7	1.6	0.7	0.9	0.9	0.8
Seat belt index, Front Passenger, (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	2.6	2.5	1.6	1.7	1.4	1.4	1.5	1.1	1.5	2.5
2003	2.6	2.7	2.2	2.4	2.4	2.4	2.1	2.8	2.1	2.5
2005	2.1	2.3	2.1	3.0	2.0	4.0	2.6	2.0	2.1	2.4
2006	1.9	1.9	2.7	2.7	2.4	2.0	2.3	2.0	2.4	2.2
2007	1.2	1.4	1.2	1.8	2.1	1.1	1.4	0.8	0.9	1.3
2008	4.8	4.4	4.4	5.3	5.1	4.7	4.8	5.0	4.6	4.7
2009	4.8	3.8	4.2	4.1	4.9	4.3	5.0	5.3	3.7	4.5
2010	3.5	5.6	6.8	4.5	6.4	5.0	4.8	5.5	7.6	5.0

Traffic signal index, Day, (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	30.0	18.0	14.0	13.0	23.0	29.0	12.0	29.0	42.0	23.0
2003	55.0	54.0	66.0	57.0	34.0	62.0	55.0	45.0	38.0	55.0
2005	26.0	20.0	32.0	36.0	21.0	34.0	35.0	37.0	12.0	28.0
2006	6.0	1.2	1.7	1.0	0.3	4.6	6.3	18.9	1.7	4.0
2007	8.7	24.9	35.6	32.5	16.3	12.5	11.7	8.1	19.3	18.4
2008	18.4	49.2	36.5	58.0	34.4	4.0	22.5	20.8	55.9	29.8
2009	18.5	25.6	40.0	43.6	12.0	17.8	21.6	18.4	30.9	24.7
2010	3.8	33.1	11.9	29.4	23.0	0.2	0.8	0.5	5.8	12.3
Barrier line index, Day, (Weight: 4)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	105.0	90.0	42.0	51.0	30.0	273.0	48.0	24.0	9.0	87.0
2003	16.0	21.4	42.9	45.0	24.4	94.6	56.5	12.4	26.3	32.7
2005	0.0	5.6	8.6	8.6	1.9	61.9	5.6	20.3	0.0	9.1
2006	6.0	5.0	2.4	6.8	4.6	22.5	58.5	15.0	3.2	10.0
2007	6.5	18.8	11.8	8.3	19.7	17.6	16.1	25.3	11.9	12.6
2008	17.2	21.1	26.9	26.1	27.5	9.2	11.4	18.3	18.2	19.6
2009	16.4	20.6	15.0	18.1	7.8	20.0	10.0	13.4	11.9	16.1
2010	7.7	8.9	10.5	12.1	11.3	13.3	11.7	22.0	7.9	10.3
Driver licence index, (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	9.0	8.0	8.0	6.0	9.0	7.0	6.0	4.0	8.0	8.0
2003	4.2	4.9	5.1	5.5	3.9	3.3	4.5	4.1	5.1	4.5
2005	4.0	2.3	2.8	3.9	3.4	2.4	2.9	2.2	3.2	3.2
2006	3.2	5.1	3.1	4.6	3.5	3.8	4.7	1.5	3.2	3.7
2007	2.6	1.1	4.3	4.4	1.5	1.1	2.1	1.7	2.4	2.5
2008	2.8	3.3	7.6	5.6	4.0	2.1	3.3	2.7	2.7	3.9
2009	2.0	1.2	1.6	1.8	0.6	0.8	1.4	1.7	1.0	1.5
2010	0.3	0.8	0.9	1.2	1.7	1.6	0.7	0.9	0.9	0.8
PrDP index, (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	17.0	31.0	22.0	28.0	20.0	10.0	13.0	8.0	14.0	19.8
2003	32.0	24.0	34.3	30.1	24.5	12.1	15.5	13.7	16.6	26.3
2005	17.7	13.0	22.6	18.4	13.3	6.9	9.4	7.1	13.1	15.6
2006	14.6	10.7	15.3	15.0	11.0	8.1	15.1	10.6	9.3	13.1
2007	5.4	14.3	7.8	19.1	0.6	3.7	2.8	1.7	11.8	7.5
2008	4.7	4.1	3.9	5.0	2.3	2.1	1.7	2.5	2.1	3.8
2009	1.9	2.7	1.9	3.6	1.4	1.2	1.3	1.7	1.1	2.0
2010	0.6	1.1	1.1	1.9	0.5	0.5	0.9	0.4	0.4	0.8
Worn Tyres index, (Weight: 2)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	14.0	8.0	9.0	13.0	13.0	17.0	13.0	18.0	15.0	12.0
2003	9.2	8.5	10.4	13.2	9.6	7.5	11.5	10.0	11.9	10.1
2005	19.4	23.9	24.1	20.9	21.7	14.6	23.6	21.7	24.7	21.3
2006	22.6	15.9	17.4	17.6	20.5	20.6	19.0	10.9	15.3	19.6
2007	7.6	4.9	0.8	5.0	15.9	5.3	8.7	5.2	5.0	6.1
2008	7.4	5.1	5.6	6.1	5.2	10.1	7.2	10.5	5.5	6.9
2009	7.4	5.1	5.6	6.1	5.2	10.1	7.2	10.5	5.5	6.8
2010	6.2	5.4	6.1	6.9	1.7	5.0	6.1	4.6	4.5	5.6



Light index, Front Bright, (LMV), (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	4.0	4.0	3.0	6.0	14.0	4.0	5.0	4.0	4.0	5.0
2003	1.3	0.6	1.2	1.6	2.8	2.9	3.4	1.9	3.2	1.6
2005	3.6	2.6	5.7	3.9	6.1	3.2	5.8	6.6	4.9	4.2
2006	2.8	3.9	1.8	3.4	3.9	8.1	8.7	7.4	2.0	3.9
2007	2.0	1.0	0.6	1.5	1.5	1.2	1.8	0.5	1.1	1.4
2008	2.3	3.5	5.0	3.0	4.1	2.8	3.2	2.8	1.7	3.2
2009	1.0	1.2	1.2	1.1	0.7	1.1	0.9	1.5	0.7	1.1
2010	1.0	1.1	0.7	0.8	0.8	1.5	1.0	1.3	1.2	1.0
Lights index, Tail, (LMV), (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	6.0	8.0	7.0	9.0	6.0	7.0	13.0	8.0	11.0	7.0
2003	0.8	2.2	2.5	1.9	1.9	3.7	4.0	2.3	3.8	2.0
2005	1.7	1.5	3.0	2.9	5.0	2.1	4.8	7.2	3.2	4.2
2006	2.3	2.8	2.4	3.1	2.9	4.6	2.7	3.2	2.7	2.8
2007	2.1	1.2	0.3	1.7	3.0	1.5	2.0	1.1	1.1	1.6
2008	0.8	3.5	2.1	3.2	1.5	0.9	1.5	0.5	1.4	1.7
2009	0.6	0.5	0.9	0.8	0.4	0.2	0.2	0.8	0.5	0.6
2010	0.2	0.6	0.4	0.9	0.9	0.3	0.4	0.4	1.1	0.5
Light index, Brake, (LMV), (Weight: 1)										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	6.0	9.0	8.0	11.0	9.0	7.0	10.0	8.0	11.0	8.0
2003	6.5	4.6	3.2	5.2	3.3	4.6	6.3	4.2	4.8	5.1
2005	2.4	3.7	4.3	4.7	5.1	3.5	4.3	6.8	6.3	3.7
2006	1.4	1.1	2.2	1.5	1.7	2.9	1.4	1.9	0.9	1.6
2007	6.8	3.6	0.2	3.1	4.6	4.6	4.3	5.5	2.4	4.4
2008	4.0	7.0	5.9	8.9	2.9	6.2	6.1	3.9	3.1	5.3
2009	2.6	1.9	2.4	3.5	1.6	1.9	1.5	3.0	0.8	2.3
2010	4.7	4.3	3.6	2.9	2.9	5.7	2.3	4.6	4.3	4.2
Combined offence indexes										
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	SA
2002	20.0	16.5	11.3	14.9	10.7	36.6	15.6	12.2	11.6	16.7
2003	10.3	9.2	14.0	11.0	9.5	23.7	12.4	11.6	9.1	11.4
2005	8.2	6.4	7.9	8.2	7.8	14.3	8.2	9.6	6.6	8.4
2006	8.2	5.4	5.5	7.7	7.5	10.1	13.7	8.6	6.0	7.7
2007	5.8	4.7	5.2	4.3	6.3	5.2	5.1	5.1	4.5	5.3
2008	6.1	7.0	8.5	10.3	6.9	4.3	5.4	5.6	6.4	6.8
2009	5.8	6.0	5.0	5.9	5.0	6.2	5.1	5.7	4.3	5.6
2010	3.3	5.9	4.6	5.0	4.1	3.6	3.6	4.8	4.3	4.2



## 11 ANNEXURE B: DEFINITION OF OFFENCES

For survey purposes, the different offences were defined as follows:

### *a. Speed offences*

For the calculation of the indicators and indexes in Chapter 2 the offence rates *excluding* the tolerance were used. The speed limits for all vehicles are the same in the 60 km/h zones. In the higher speed zones, goods vehicles weighing more than 3 500 kg are restricted to 80 km/h; while buses and minibus taxis are restricted to 100 km/h in zones with a higher general speed limit.

### *b. Alcohol levels*

In respect of drivers of light motor vehicles, the legal limit of 0.24 mg/litre of breath were applied. Professional drivers as defined (i.e. drivers needing a Professional Driver Permit) were tested on a level of 0.1 mg/l.

### *c. Seatbelts and Child Restraints*

The survey recorded the wearing of seatbelts by drivers and passengers of Light Motor Vehicles only. The observations of the drivers and front passengers were made at traffic signals in urban areas, without the occupants being aware that they wearing of seatbelts were being checked (unobserved). The wearing of seatbelts by back passengers, and the use of child restraints were recorded during the roadblock surveys (observed).

### *d. Traffic signals*

Where vehicles passed the stop line after the signal controlling their movement turned red, it was recorded as an offence. However, where vehicles turned right in the face of the red light after waiting for oncoming traffic during the green or amber phases, the movement was not recorded as an offence if the front wheels were already over the stop line when the light turned red.

*e. Barrier lines*

In the survey of barrier line offences, an offence was recorded when any wheel or wheels of a vehicle crossed the barrier line. Only convoys of vehicles were recorded, thus only recording data where the driver of the vehicle was following another vehicle, and where there was an opportunity to commit an offence.

*f. Driver documentation*

It was recorded as an offence when a driver could not produce a valid driver's licence for the relevant vehicle type. Learners' licences, temporary licences and valid international licences were recorded separately. PrDPs appear as an inscription on the card licence. The presence of the PrDP inscriptions on the licences of the drivers of the relevant vehicles (goods vehicles with GVM exceeding 3,500 kg, public transport vehicles) was recorded. If a permit was present but expired, it was recorded as a separate category of offence.

*g. Vehicle documentation*

Agreement between the registration number on the number plate and the licence disk was checked. In some cases the letters on the licence disk were illegible and this was recorded separately. The correlation between the number plate and license disk was also checked.

*h. Vehicle fitness*

Tyres and lights were covered in this part of the survey. Tyres were recorded as illegal if the treads on a part of more than  $\pm 5\text{cm} \times 5\text{ cm}$ , or a strip of more than  $\pm 10\text{cm} \times 1.5\text{ cm}$ , was worn to less than 1 mm in depth. Tread depth meters were used for the purpose of the survey. As far as damage to tyres was concerned, small dents that would clearly not influence the strength of the tyre were ignored. Any damage (tears, cuts, holes) that the surveyors felt uncomfortable about was recorded as an offence. A subjective element could not be avoided.

Six categories of lights were tested: indicators front and back, head lights dim, head lights bright, tail lights and brake lights. The number working was recorded. An offence was recorded when any of those lights did not function.

i. Pedestrian Compliance with Traffic Signals

Pedestrian compliance with traffic signals was observed in urban areas at traffic signals (robots) where pedestrian signals were present. The number of pedestrians arriving on the red man, vs. the number of pedestrians crossing the red man was recorded.

k. Use of cell phones while driving

Drivers of vehicles talking on cell phones were observed at traffic signals (robots) in urban areas. If the driver of a vehicle was using a cell phone while passing through, or stopping at a traffic signal, it was recorded as an offence.

## 12 ANNEXURE C: LOCATION CODES AND DESCRIPTIONS

The complete list of locations and descriptions are now available as a separate document, and can be obtained from the MicroZone.

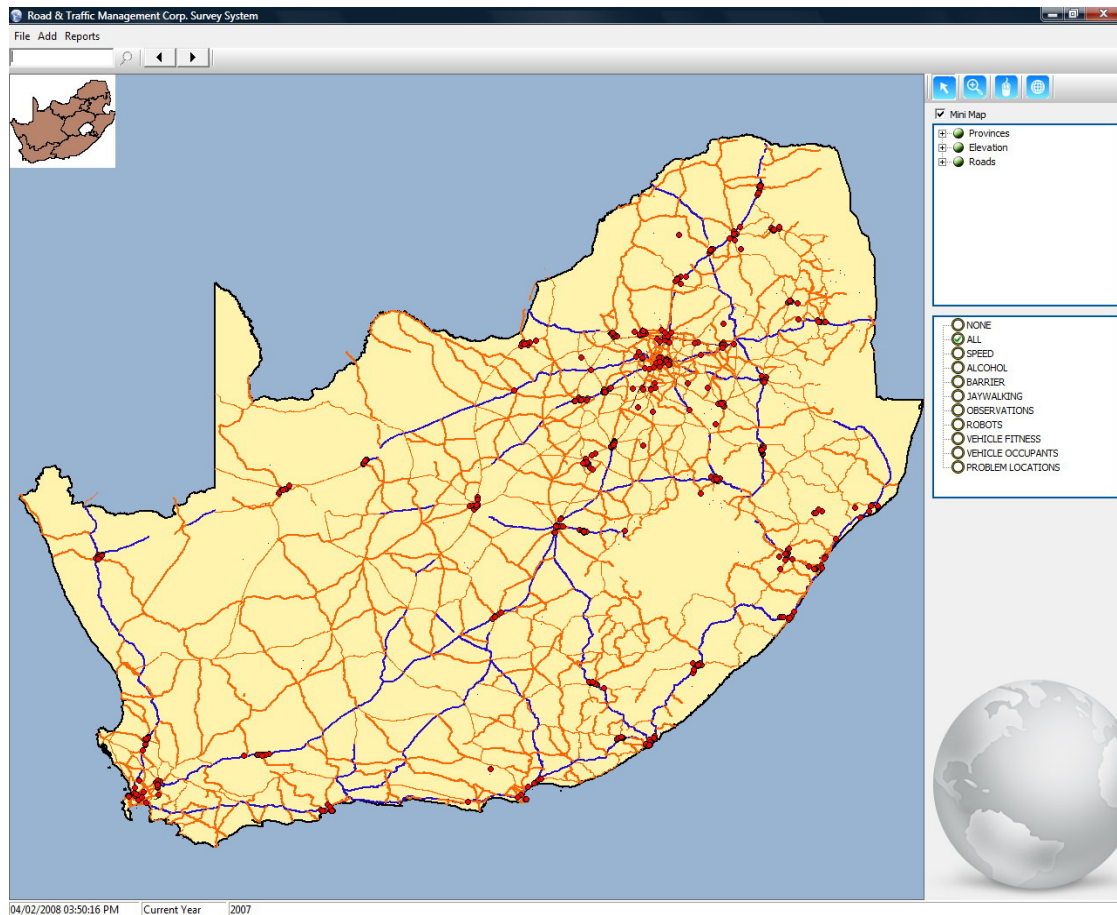
All the location codes and descriptions used during the survey is available in the RTMC traffic offence survey software used to view, process, analyse and report on the data.

Contact MicroZone at [support@mz.co.za](mailto:support@mz.co.za) to request the document.

## 13 ANNEXURE D: RTMC ROAD TRAFFIC OFFENCE SURVEY SOFTWARE

### 13.1 BACKGROUND

MicroZone developed software to cater for the specific needs of the Traffic Offence Surveys performed on an annual basis. The system is a GIS based management reporting tool for the analysis of traffic offence survey information.





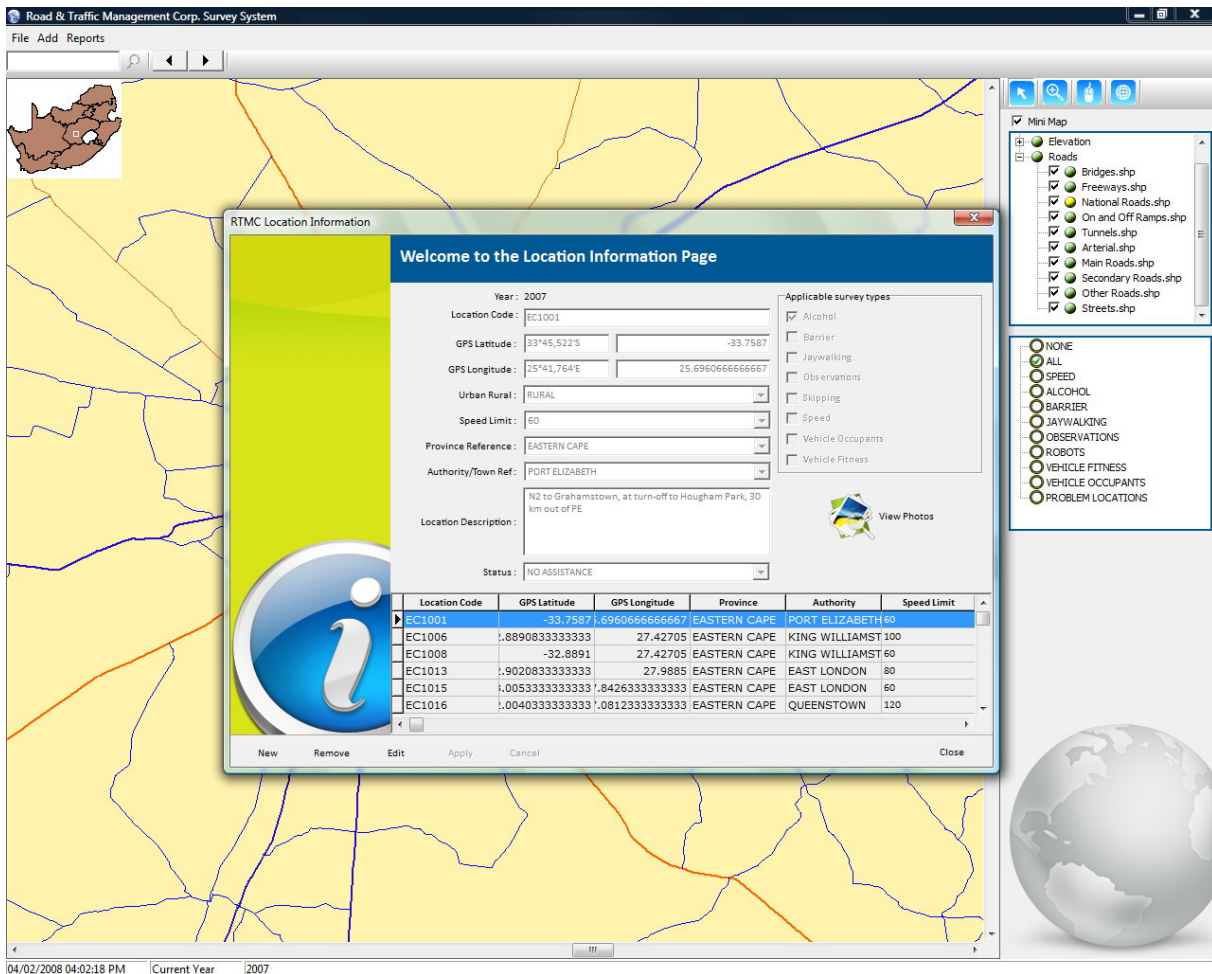
The system is server based, with MS SQL server as the database backbone. The RTMC software has been under constant development since 2007. The system

was designed for specific use by the RTMC for the monitoring and statistical analysis of traffic offence data.

### 13.2 BASIC OFFENCE INFORMATION

The following basic information can be processed for each offence:

-  Year of the survey
-  Location information
  - GPS Latitude
  - GPS Longitude
  - Urban / Rural
  - Speed Limit
  - Province
  - Location Description
  - Type Of Survey
-  Photos of location
-  Survey offence information



The screenshot displays the 'Road & Traffic Management Corp. Survey System' interface. A map of South Africa is shown with a location information window open. The window contains the following details:

**Welcome to the Location Information Page**

Year: 2007  
 Location Code: EC1001  
 GPS Latitude: 33°45,522'S    -33.7587  
 GPS Longitude: 25°41,764'E    25.6950666666667  
 Urban Rural: RURAL  
 Speed Limit: 60  
 Province Reference: EASTERN CAPE  
 Authority/Town Ref: PORT ELIZABETH  
 Location Description: N2 to Grahamstown, at turn-off to Hougham Park, 30 km out of PE  
 Status: NO ASSISTANCE

**Applicable survey types:**

- Alcohol
- Barrier
- Jaywalking
- Observations
- Skipping
- Speed
- Vehicle Occupants
- Vehicle Fitness

**RTMC Location Information Table:**

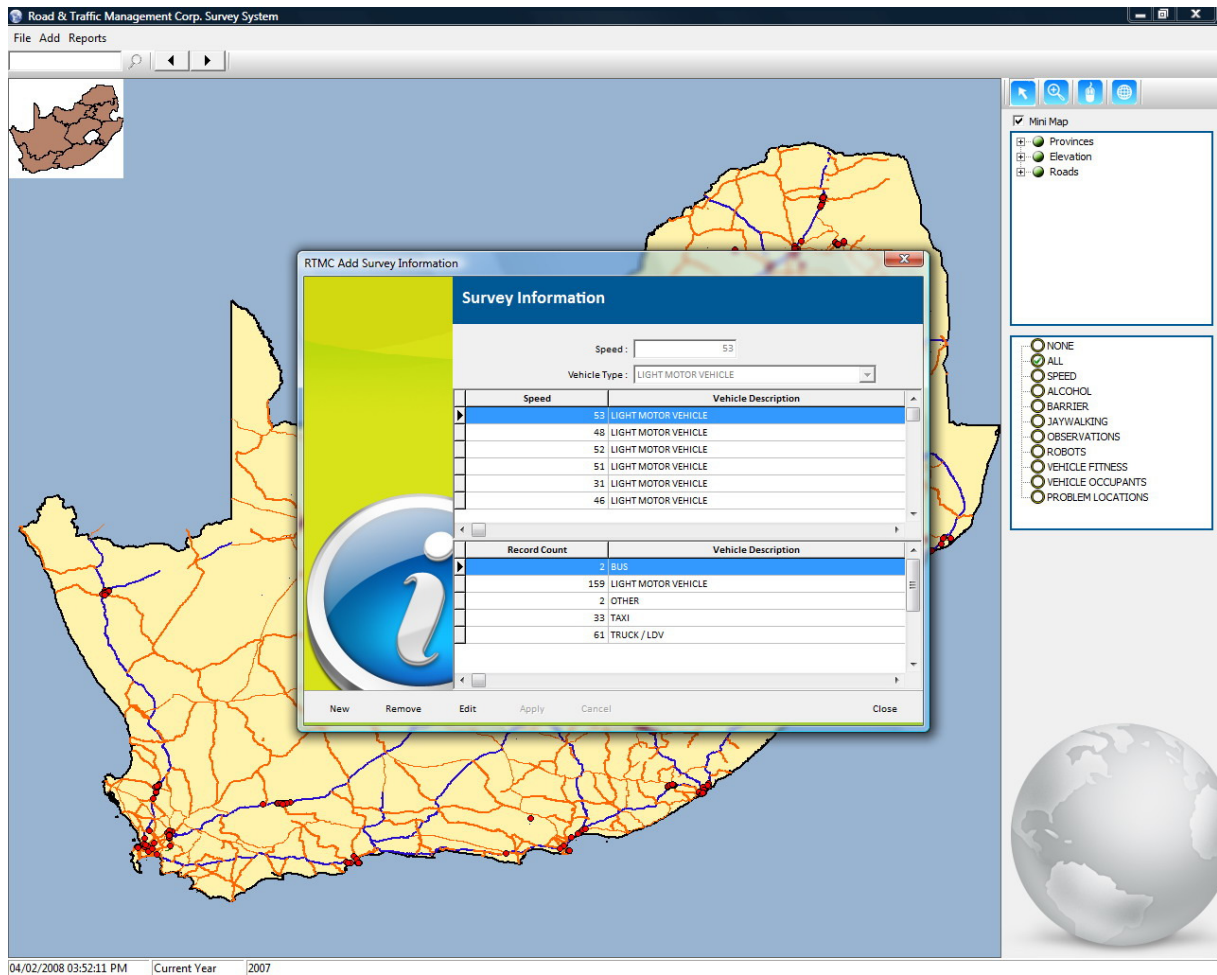
Location Code	GPS Latitude	GPS Longitude	Province	Authority	Speed Limit
EC1001	-33.7587	25.6950666666667	EASTERN CAPE	PORT ELIZABETH	60
EC1006	-32.8891	27.42705	EASTERN CAPE	KING WILLIAMST	100
EC1008	-32.8891	27.42705	EASTERN CAPE	KING WILLIAMST	60
EC1013	-32.8891	27.9885	EASTERN CAPE	EAST LONDON	80
EC1015	-32.8891	27.9885	EASTERN CAPE	EAST LONDON	60
EC1016	-32.8891	27.9885	EASTERN CAPE	QUEENSTOWN	120

The interface also includes a 'Mini Map' on the right with a legend for various road types (Elevation, Roads, Bridges, Freeways, National Roads, etc.) and a 'View Photos' button.

### 13.3 LOCATION OF SURVEYS

A location consists of multiple surveys. The following information can be processed for each location:

-  Alcohol offences
-  Barrier offences
-  Pedestrian traffic compliance offences
-  Rural road observation offences
-  Skipping of traffic signal offences
-  Speeding offences
-  Vehicle Occupants offences
-  Vehicle Fitness offences
-  Cell phone usage offences



The screenshot displays the 'Road & Traffic Management Corp. Survey System' interface. A map of South Africa is shown with a network of roads. A dialog box titled 'RTMC Add Survey Information' is open, showing 'Survey Information' for a 'LIGHT MOTOR VEHICLE' with a speed of 53. The dialog box contains two tables:

Speed	Vehicle Description
53	LIGHT MOTOR VEHICLE
48	LIGHT MOTOR VEHICLE
52	LIGHT MOTOR VEHICLE
51	LIGHT MOTOR VEHICLE
31	LIGHT MOTOR VEHICLE
46	LIGHT MOTOR VEHICLE

Record Count	Vehicle Description
2	BUS
159	LIGHT MOTOR VEHICLE
2	OTHER
33	TAXI
61	TRUCK / LDV

The dialog box also includes a 'Mini Map' panel on the right with options for Provinces, Elevation, and Roads, and a legend for various offence types. The status bar at the bottom shows the date '04/02/2008 03:52:11 PM', 'Current Year', and '2007'.




## 13.4 REPORTS ON TRAFFIC OFFENCES

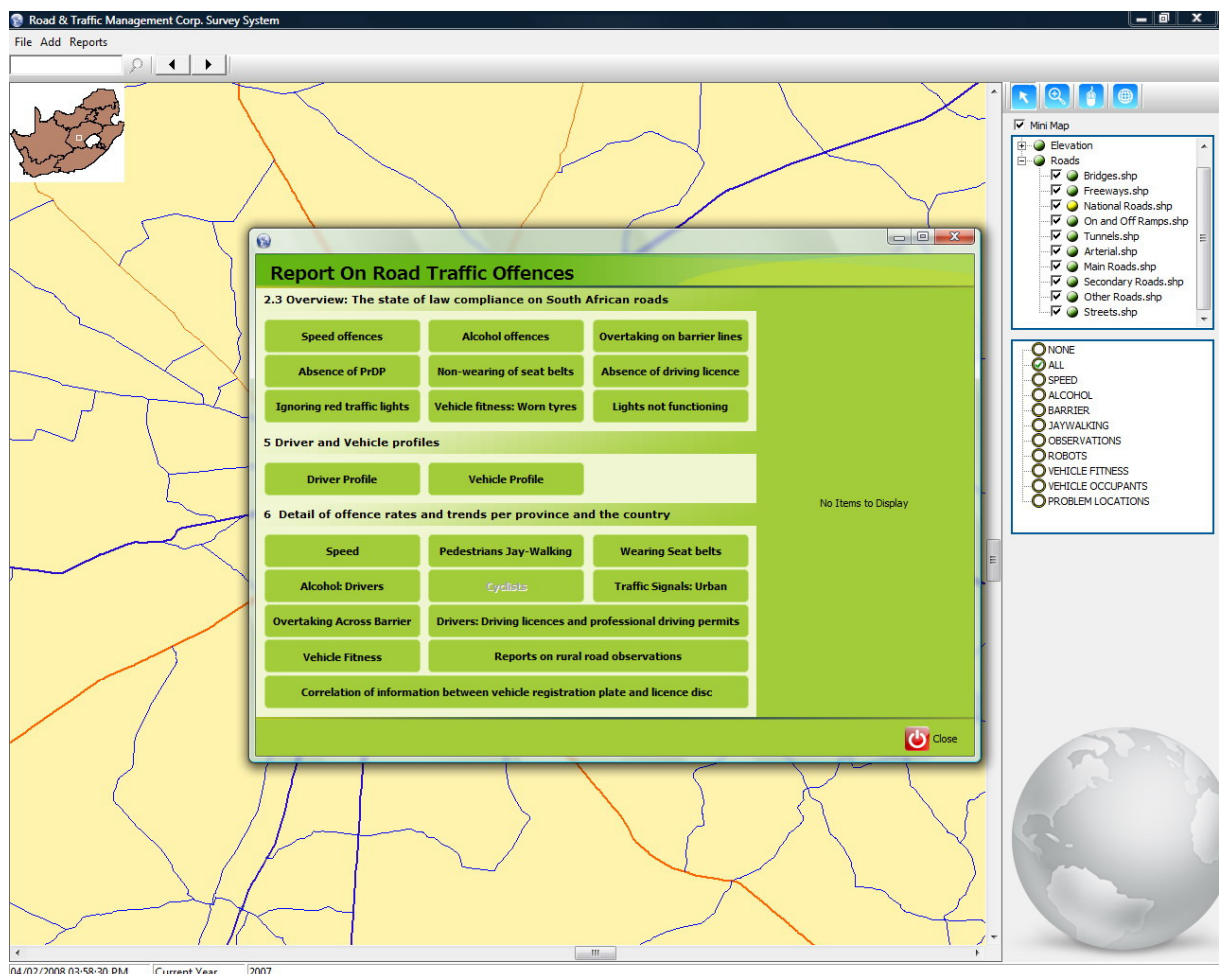
Multiple reports can be generated of the survey information captured. All the reports required by the RTMC have been developed into the system to easily draw and compare information between different surveys.

Additional reports can easily be added since all the required information is already available in the system.

Some sample reports have been attached to this document.

The reports are divided into different categories:

-  Overview: The state of law compliance on South African Roads
-  Driver and vehicle profiles
-  Detail of offence rates and trends per province and the country.



The screenshot displays the 'Road & Traffic Management Corp. Survey System' interface. A map of South Africa is visible in the background. A report window titled 'Report On Road Traffic Offences' is open, showing the following content:

**Report On Road Traffic Offences**

2.3 Overview: The state of law compliance on South African roads

Speed offences	Alcohol offences	Overtaking on barrier lines
Absence of PrDP	Non-wearing of seat belts	Absence of driving licence
Ignoring red traffic lights	Vehicle fitness: Worn tyres	Lights not functioning

5 Driver and Vehicle profiles

Driver Profile	Vehicle Profile
----------------	-----------------










6 Detail of offence rates and trends per province and the country

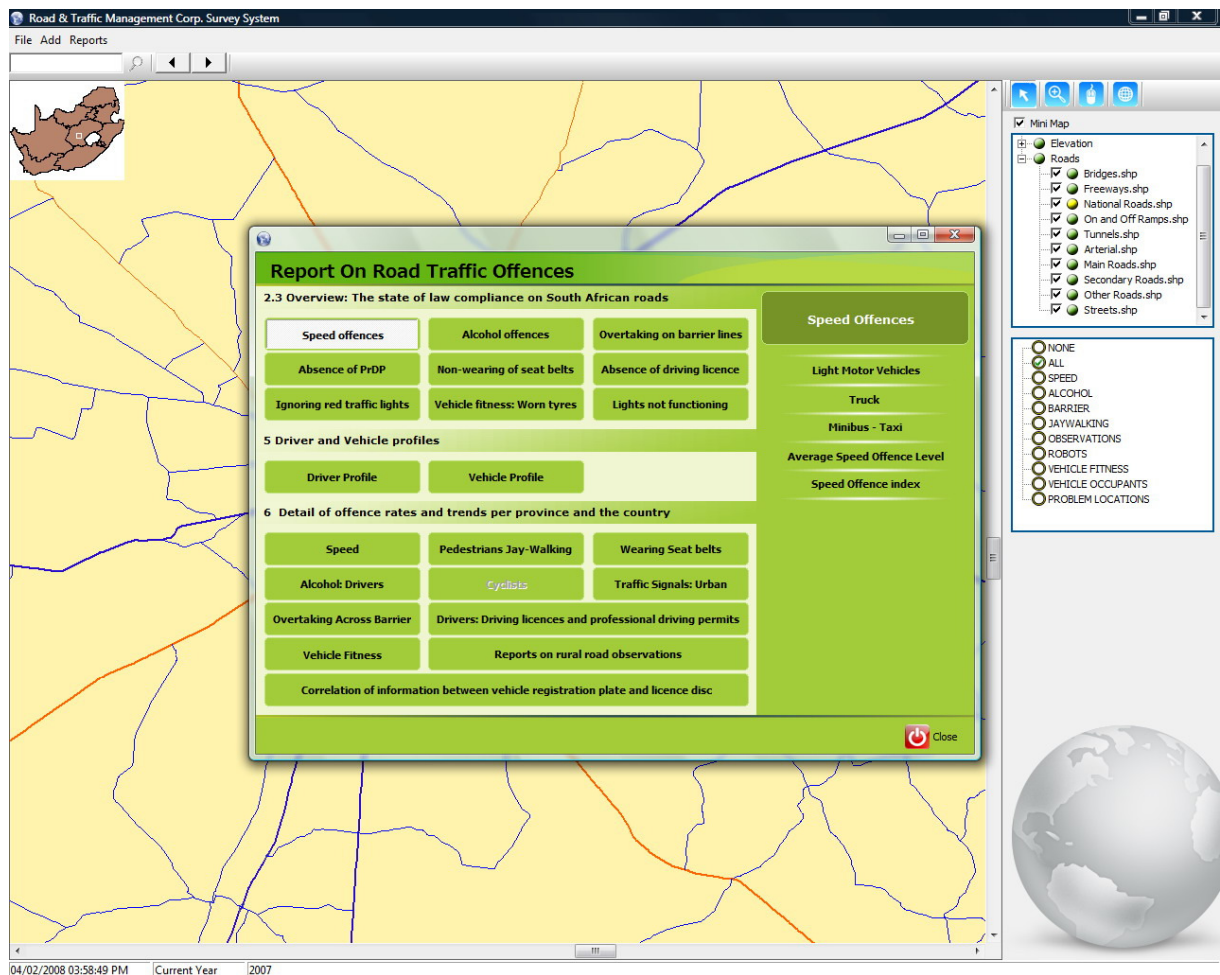
Speed	Pedestrians Jay-Walking	Wearing Seat belts
Alcohol: Drivers	Cyclists	Traffic Signals: Urban
Overtaking Across Barrier	Drivers: Driving licences and professional driving permits	
Vehicle Fitness	Reports on rural road observations	
Correlation of information between vehicle registration plate and licence disc		

The interface also includes a 'Mini Map' panel on the right with a list of layers (Elevation, Roads, Bridges.shp, Freeways.shp, National Roads.shp, On and Off Ramps.shp, Tunnels.shp, Arterial.shp, Main Roads.shp, Secondary Roads.shp, Other Roads.shp, Streets.shp) and a legend with various filter options (NONE, ALL, SPEED, ALCOHOL, BARRIER, JAYWALKING, OBSERVATIONS, ROBOTS, VEHICLE FITNESS, VEHICLE OCCUPANTS, PROBLEM LOCATIONS). A globe icon is visible in the bottom right corner.



Most of the reports can be divided into the following categories:

-  Light Motor Vehicle
-  Truck
-  Minibus Taxi
-  Averages
-  Offence Index
-  Urban Night
-  Urban Day
-  Rural Night
-  Rural Day



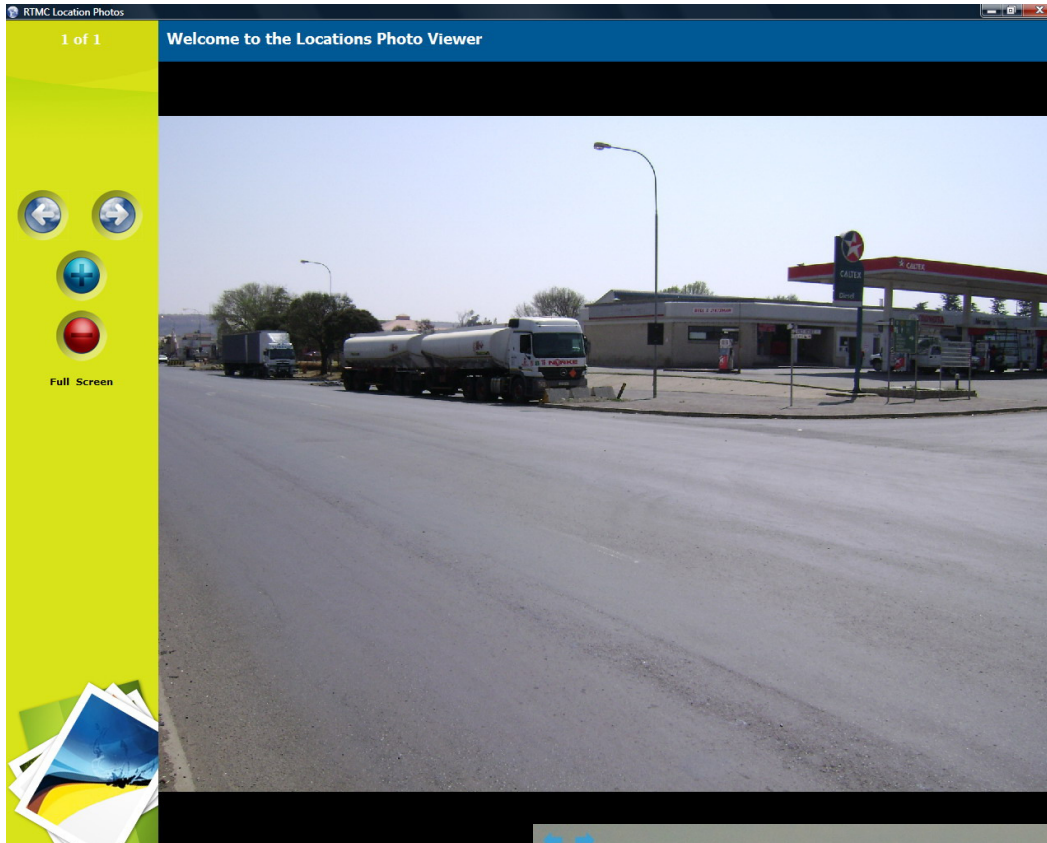
The screenshot displays the 'Report On Road Traffic Offences' window within the 'Road & Traffic Management Corp. Survey System'. The window is titled 'Report On Road Traffic Offences' and contains several sections:

- 2.3 Overview: The state of law compliance on South African roads**
  - Speed offences
  - Alcohol offences
  - Overtaking on barrier lines
  - Absence of PrDP
  - Non-wearing of seat belts
  - Absence of driving licence
  - Ignoring red traffic lights
  - Vehicle fitness: Worn tyres
  - Lights not functioning
- 5 Driver and Vehicle profiles**
  - Driver Profile
  - Vehicle Profile
- 6 Detail of offence rates and trends per province and the country**
  - Speed
  - Pedestrians Jay-Walking
  - Wearing Seat belts
  - Alcohol: Drivers
  - Cyclists
  - Traffic Signals: Urban
  - Overtaking Across Barrier
  - Drivers: Driving licences and professional driving permits
  - Vehicle Fitness
  - Reports on rural road observations
  - Correlation of information between vehicle registration plate and licence disc
- Speed Offences**
  - Light Motor Vehicles
  - Truck
  - Minibus - Taxi
  - Average Speed Offence Level
  - Speed Offence index

The interface also includes a map of South Africa, a 'Mini Map' panel on the right with a tree view of road types (Elevation, Roads, Bridges, Freeways, National Roads, etc.), and a legend for various offence types. The status bar at the bottom shows the date '04/02/2008 03:58:49 PM' and the 'Current Year' as '2007'.

## 13.5 PHOTO VIEWER

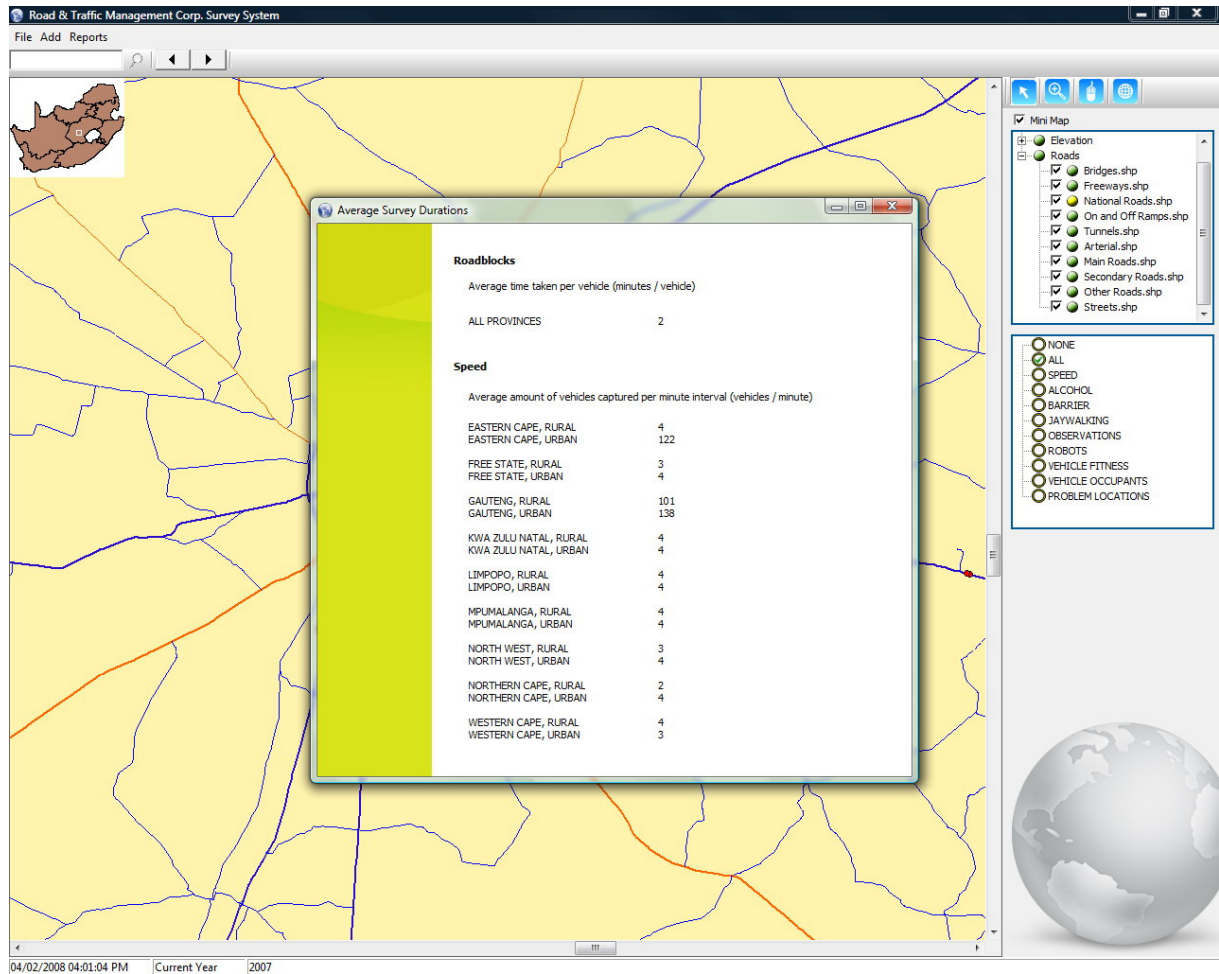
Photos of each location can be stored in the database.



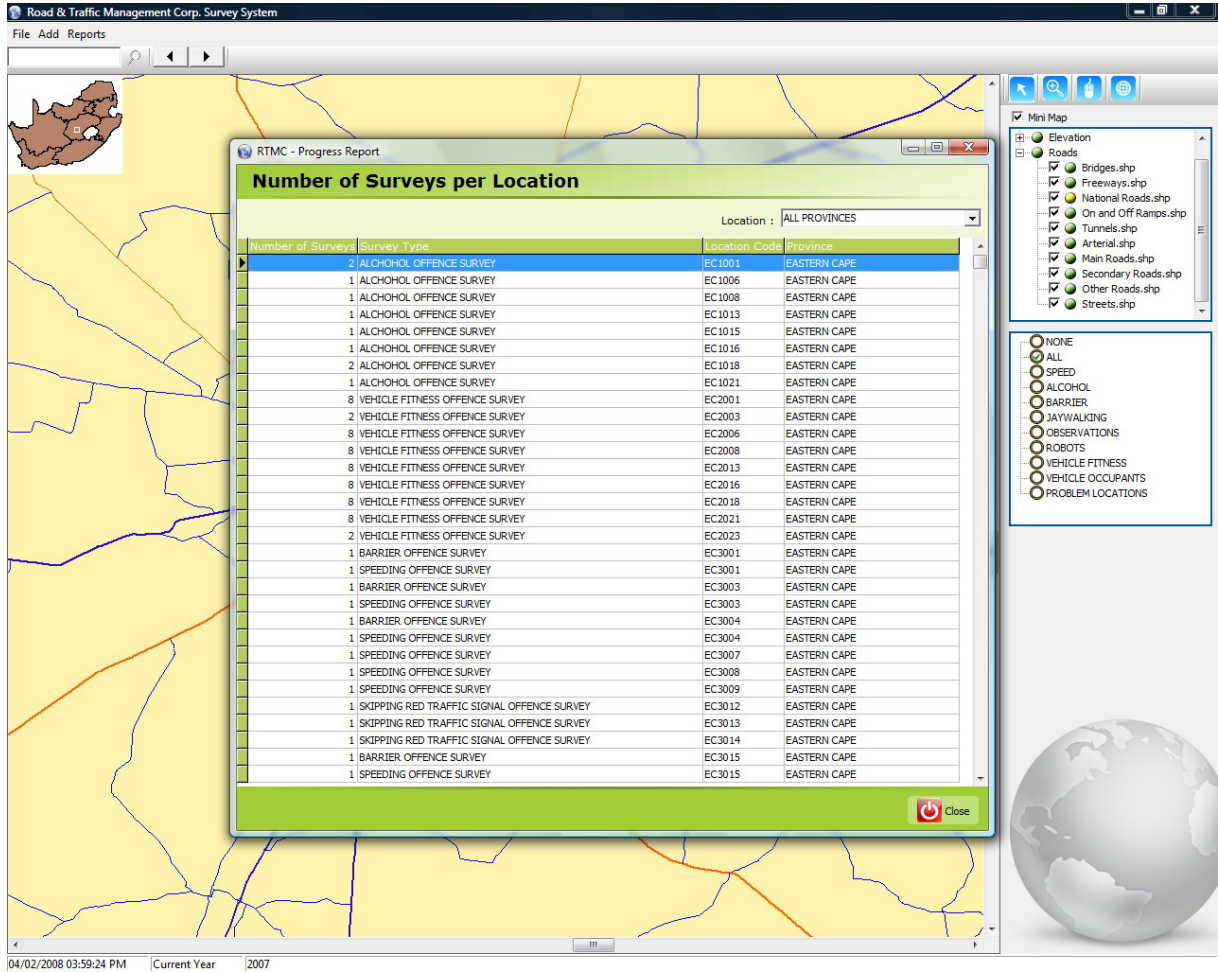
## 13.6 REPORT INFORMATION PER YEAR

Different reports can be displayed to show information per year:

- Duration



- Progress



RTMC - Progress Report

Number of Surveys per Location

Location : ALL PROVINCES

Number of Surveys	Survey Type	Location Code	Province
2	ALCOHOL OFFENCE SURVEY	EC1001	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1006	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1008	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1013	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1015	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1016	EASTERN CAPE
2	ALCOHOL OFFENCE SURVEY	EC1018	EASTERN CAPE
1	ALCOHOL OFFENCE SURVEY	EC1021	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2001	EASTERN CAPE
2	VEHICLE FITNESS OFFENCE SURVEY	EC2003	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2006	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2008	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2013	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2016	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2018	EASTERN CAPE
8	VEHICLE FITNESS OFFENCE SURVEY	EC2021	EASTERN CAPE
2	VEHICLE FITNESS OFFENCE SURVEY	EC2023	EASTERN CAPE
1	BARRIER OFFENCE SURVEY	EC3001	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3001	EASTERN CAPE
1	BARRIER OFFENCE SURVEY	EC3003	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3003	EASTERN CAPE
1	BARRIER OFFENCE SURVEY	EC3004	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3004	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3007	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3008	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3009	EASTERN CAPE
1	SKIPPING RED TRAFFIC SIGNAL OFFENCE SURVEY	EC3012	EASTERN CAPE
1	SKIPPING RED TRAFFIC SIGNAL OFFENCE SURVEY	EC3013	EASTERN CAPE
1	SKIPPING RED TRAFFIC SIGNAL OFFENCE SURVEY	EC3014	EASTERN CAPE
1	BARRIER OFFENCE SURVEY	EC3015	EASTERN CAPE
1	SPEEDING OFFENCE SURVEY	EC3015	EASTERN CAPE

04/02/2008 03:59:24 PM | Current Year | 2007



**Road Traffic Management Corporation  
2010 Traffic Offence Survey Report**

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- Sample Sizes

RTMC - Sample Sizes

**Actual versus Captured Sample Sizes**

Alcohol

Barrier Lines

Seatbelts

Robots

Vehicle Documentation

Vehicle Fitness

Speed Urban

Speed Rural

Hazardous Roads

Jaywalking

Observations

Province: ALL PROVINCES | Vehicle Type: ALL VEHICLES | Copy to Clipboard

Province	Vehicle Type	Day Sample Size	Day Captured	% Day Completed	Night Sample Size	Night Captured	% Night Complete
EASTERN CAPE	BUS	60	13	22 %	40	5	12 %
EASTERN CAPE	LIGHT MOTOR VEHICLE	100	337	337 %	100	140	140 %
EASTERN CAPE	OTHER	0	100	100 %	0	0	100 %
EASTERN CAPE	TAXI	60	85	142 %	60	27	45 %
EASTERN CAPE	TRUCK / LDV	60	149	248 %	60	106	177 %
FREE STATE	BUS	60	45	75 %	40	31	78 %
FREE STATE	LIGHT MOTOR VEHICLE	100	339	339 %	100	172	172 %
FREE STATE	OTHER	0	3	100 %	0	0	100 %
FREE STATE	TAXI	60	184	307 %	60	71	118 %
FREE STATE	TRUCK / LDV	60	255	425 %	60	93	155 %
GAUTENG	BUS	60	8	13 %	40	6	15 %
GAUTENG	LIGHT MOTOR VEHICLE	100	235	235 %	100	110	110 %
GAUTENG	OTHER	0	100	100 %	0	0	100 %
GAUTENG	TAXI	60	92	153 %	60	37	62 %
GAUTENG	TRUCK / LDV	60	180	300 %	60	80	133 %
KWA ZULU NATAL	BUS	60	25	42 %	40	4	10 %
KWA ZULU NATAL	LIGHT MOTOR VEHICLE	100	200	200 %	100	132	132 %
KWA ZULU NATAL	OTHER	0	3	100 %	0	0	100 %
KWA ZULU NATAL	TAXI	60	101	168 %	60	31	52 %
KWA ZULU NATAL	TRUCK / LDV	60	191	318 %	60	134	223 %
LIMPOPO	BUS	60	37	62 %	40	16	40 %
LIMPOPO	LIGHT MOTOR VEHICLE	100	383	383 %	100	115	115 %
LIMPOPO	OTHER	0	100	100 %	0	0	100 %
LIMPOPO	TAXI	60	203	338 %	60	39	65 %
LIMPOPO	TRUCK / LDV	60	301	502 %	60	147	245 %
MPUMALANGA	BUS	60	29	48 %	40	7	18 %
MPUMALANGA	LIGHT MOTOR VEHICLE	100	223	223 %	100	103	103 %
MPUMALANGA	OTHER	0	3	100 %	0	0	100 %
MPUMALANGA	TAXI	60	93	155 %	60	21	35 %
MPUMALANGA	TRUCK / LDV	60	207	345 %	60	90	150 %
NORTH WEST	BUS	60	23	38 %	40	9	22 %
NORTH WEST	LIGHT MOTOR VEHICLE	100	377	377 %	100	183	183 %
NORTH WEST	OTHER	0	100	100 %	0	0	100 %
NORTH WEST	TAXI	60	156	260 %	60	89	148 %
NORTH WEST	TRUCK / LDV	60	363	605 %	60	158	263 %
NORTHERN CAPE	BUS	60	1	2 %	40	3	8 %
NORTHERN CAPE	LIGHT MOTOR VEHICLE	100	244	244 %	100	122	122 %
NORTHERN CAPE	OTHER	0	1	100 %	0	0	100 %
NORTHERN CAPE	TAXI	60	29	48 %	60	9	15 %
NORTHERN CAPE	TRUCK / LDV	60	145	242 %	60	66	110 %
WESTERN CAPE	BUS	60	4	7 %	40	6	15 %
WESTERN CAPE	LIGHT MOTOR VEHICLE	100	505	505 %	100	156	156 %
WESTERN CAPE	OTHER	0	3	100 %	0	0	100 %
WESTERN CAPE	TAXI	60	47	78 %	60	10	17 %
WESTERN CAPE	TRUCK / LDV	60	295	492 %	60	171	285 %

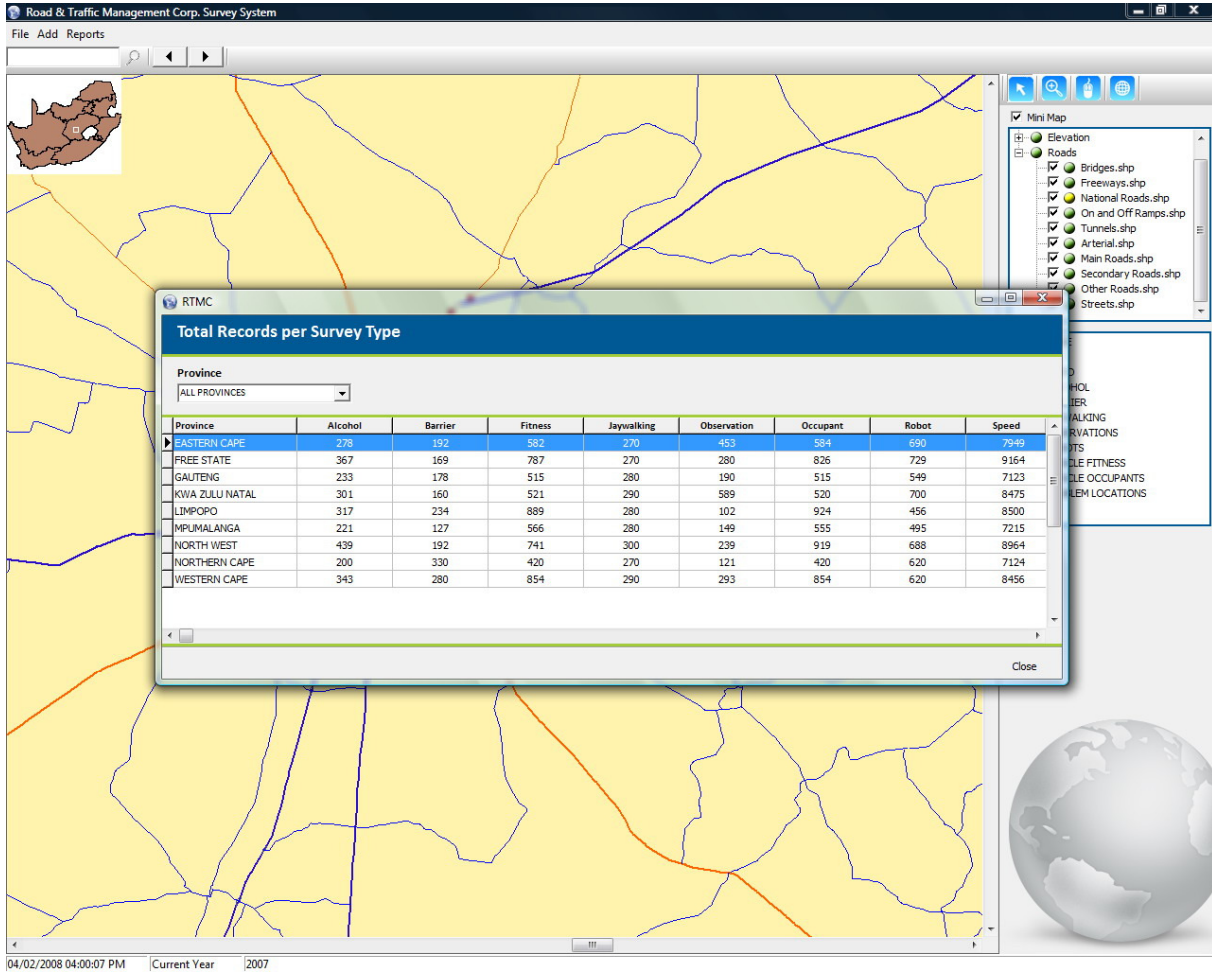
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**Road Traffic Management Corporation  
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- Total Records





## 14 ANNEXURE E: ARRIVE ALIVE PARTOL CAR ROUTES

ROUTE NR.	ROUTE	PROVINCE	SURVEY LOCATION CODE	FROM	TO
1	N1	GA	GT3027	Sandton	Pretoria
2	N12	GA	GT3075, GT1016, GT2010	Lenasia	Germiston
3	N12	GA	GT1012	Boksburg	Daveyton
4	N3	GA		Heidelberg	Bedfordview
5	N3	GA		Bedfordview	Sandton
6	R59	GA	GT3028, GT1006, GT2004	Vereeniging	Alberton
7	N1	GA		Pretoria	Maubane
8	N1	GA	GT3027, GT3076, GT1007, GT1017	Vaal River	Sandton
9	R80	GA	GT3099, GT1021, GT2013	Mabopane freeway	Mabopane
10	R24	GA		Bedfordview	Kemptonpark
11	R21	GA	GT3051, GT3098, GT3100, GT1011, GT1022, GT2007	Boksburg	Centurion
12	R28	GA	GT3002, GT1001, GT2001	Evaton	Pretoria
13	N12	GA	GT3052	Potchefstroom	Lenasia
14	R24	GA	GT3001, GT1002	Rustenburg	Krugersdorp
15	R25	GA		Bapsfontein	Bronkhorstspuit
16	N4	GA		Hartebeespoort	Witbank
17	N17	GA		Springs	Leandra
18	N2	KZ	KZ3075	Kingsburg	Tongaat
19	N3	KZ	KZ3027, KZ3026, KZ3025, KZ1006, KZ1007, KZ2004	Durban	Howick
20	N2	KZ	KZ3003, KZ3002, KZ3001, KZ1001, KZ1002, KZ2001	Harding	Winkelspruit
21	N2	KZ	KZ3052	Stanger	Hluhluwe
22	R56	KZ		PMBG	Richmond
23	N3	KZ	KZ3028	Howick	Harrismith
24	R66	KZ		Gingindlovu	Melmoth
25	N2	KZ		Kokstad	Harding
26	N11	KZ	KZ3098, KZ3097	Ladysmith	Volksrust
27	R34	KZ		Vryheid	R/bay
28	R74	KZ		Greytown	Stanger
29	R68	KZ		Dundee	Babanango
30	N2	KZ		Pongola	Piet Retief
31	N1	WC	WC3051, WC3052	Cape Town	Worcester
32	N2	WC		Knysna	Plettenberg Bay

ROUTE NR.	ROUTE	PROVINCE	SURVEY LOCATION CODE	FROM	TO
33	N2	WC	WC3027	Cape Town	Somerset West
34	N2	WC		Somerset West	Rivieronderend
35	N7	WC	WC3001, WC3003, WC3004, WC3008, WC1001, WC1002	Cape Town	Citrusdal
36	R45	WC	WC3054, WC3050, WC3049, WC1011, WC1012, WC2007	Wellington	Villiersdorp
37	R44	WC	WC3002	Somerset West	Porterville
38	N1	WC	WC3075, WC3076, WC1016, WC1017, WC2010, WC2011	Worcester	Beaufort West
39	N2	WC	WC3100, WC3099, WC3098, WC3097, WC1021, WC2013	Rivieronderend	Hartenbos
40	R61	WC		Beaufort West	Aberdeen
41	N2	EC	EC3026, EC3051, EC3098, EC1006, EC1012, EC1022, EC2010	King W' Town	Kokstad
42	R61	EC	EC1021, EC2013	Umtata	Kokstad
43	N2	EC		Plet / Bay	King W' Town
44	R63	EC	EC1007	Ford Beaufort	King W'Town
45	R61	EC	EC3004, EC3003, EC3025, EC3097	Port St Johns	Port Edward
46	R61	EC	EC3073, EC3074, EC3075, EC3076, EC1016, EC2010	Queenstown	Umtata
47	N10	EC		Patterson	Cradock
48	R72	EC	EC3052, EC3049, EC1001, EC1011, EC2001	Port Elizabeth	East Londen
49	N9	EC		Aberdeen	Middelburg
50	R75	EC	EC1002	Port Elizabeth	Graaff-Reinette
51	N6	EC	EC1017	Queenstown	Aliwal North
52	R62	EC		Avontuur	Humansdorp
53	N3	FS	FS3004, FS3002, FS3003, FS3001, FS1001, FS2001	Harrismith	Villiers
54	R57	FS		Heilbron	Sasolburg
55	N8	FS	FS3074, FS3097, FS3098, FS1021, FS1021, FS1022, FS2010, FS2013	Bloemfontein	Ladybrand
56	N1	FS	FS3076, FS1006, FS1016, FS2004	Bloemfontein	Vaal River
57	N4	MP	MP3060, MP3102	Witbank	Waterval Boven
58	N4	MP	MP3059, MP3058, MP1011, MP1022, MP2007, MP2013	Waterval Boven	Hectorspruit
59	N12	MP		Springs	Witbank
60	R23	MP	MP3011, MP3012, MP3009, MP3010, MP1001, MP1002, MP2001	Volksrust	Greylingstad
61	R40	MP	MP3057, MP1012	Barberton	Hazyview

ROUTE NR.	ROUTE	PROVINCE	SURVEY LOCATION CODE	FROM	TO
62	N11	MP	MP3033, MP3036, MP3034, MP3035, MP3108, MP1006, MP1007, MP2004	Ammersfort	Groblersdal
63	N2	MP		Piet Retief	Ermelo
64	R50	MP		Delmas	Standerton
65	N17	MP	MP3039	Trichardt	Lochiel
66	N3	MP		Villiers	Heidelberg
67	R35	MP		Bethal	Middelburg
68	R25	MP	MP3105, MP3106, MP1021	Bronkhorstspuit	Middelburg
69	N12	NW	NW3010, NW3036, NW1001, NW2001, NW2001, NW2004	Stilfontein	Lanasia
70	R24	NW	NW3083, NW1016, NW2010	Rustenburg	Magaliesburg
71	N4	NW	NW3084, NW3107, NW1021	Lobatse	Hartebeespoort
72	R49	NW	NW3060, NW1011	Mmabatho	Zeerust
73	N12	NW	NW3011, NW3009, NW3012, NW3033, NW3034, NW3035, NW1006	Bloemhof	Stilfontein
74	R52	NW	NW1017	Lichtenburg	Rustenburg
75	N14	NW		Kuruman	Delareyville
76	N1	LI	LI3011, LI3012, LI3057, LI3059, LI3107, LI1002, LI1006, LI2001, LI2004	Maubane	Polokwane
77	R71	LI	LI3084, LI2010	Polokwane	Nanamakoale
78	N1	LI	LI3108, LI3105, LI1011 LI1022, LI1023, LI2007, LI2013	Polokwane	Musina
79	R37	LI		Polokwane	Burgersfort
80	R36	LI	LI3081, LI3083	Ohrigstad	Tzaneen
81	N12	NC	NC3025, NC3027, NC1006, NC2004	Kimberley	Warrenton
82	R31	NC	NC3026, NC1007	Barkly West	Kimberley
83	N10	NC	NC3074, NC1017	Groblershoop	Upington
84	N1	NC	NC1001, NC2001	Three Sisters	Colesberg
85	N7	NC	NC3160, NC3099, NC1021, NC2013	Springbok	Violsdrif
86	N14	NC	NC3051, NC3052, NC3076, NC3073, NC3075, NC1011, NC1016, NC2010	Kakamas	Olifantshoek

## 15 ANNEXURE F: OTHER ROAD TRAFFIC RELATED PARAMETERS

**Table F1: Number of vehicles registered per Province (2003 to 2008)**

Year	Number of vehicles registered per Province									
Province	GA	KZN	WC	EC	FS	MP	NW	LI	NC	RSA
2003	2 717 884	995 724	1 226 220	488 208	443 277	430 903	413 140	314 623	156 558	7 186 537
2004	2 831 350	1 031 813	1 273 360	513 217	453 974	451 389	428 676	332 506	162 893	7 479 178
2005	3 037 944	1 103 642	1 349 553	549 829	470 314	485 301	449 215	354 594	170 795	7 971 187
2006	3 276 800	1 186 082	1 437 288	586 295	491 666	513 881	478 990	391 678	182 222	8 544 902
2007	3 486 073	1 258 720	1 515 147	619 448	511 950	545 212	512 130	419 812	199 628	9 068 120
2008	3 220 050	1 177 105	1 409 741	576 015	447 083	496 568	459 311	395 122	176 572	8 357 564
Factor of increase (2007 to 2008)	0.92	0.94	0.93	0.93	0.87	0.91	0.90	0.94	0.88	0.92

**Table F2: Annual number of vehicles involved in fatal accidents by vehicle type from 2005 to 2009**

Vehicle Type	2007	2008	2009	% Change
Motorcars	7343	6323	6872	9
Minibuses	1220	953	1225	29
Minibus Taxis	195	342	602	76
Buses	296	280	392	40
Motorcycles	313	286	314	10
LDV's - Bakkies	2903	3291	2814	-15
Trucks	651	540	197	-63
Trucks - articulated	883	901	534	-41
Other and unknown	1479	1253	1169	-7
Total Motorised	15282	14169	14119	0
Bicycle	328	294	252	-14
Animal drawn	1	0	0	100
Total	15612	14463	14372	-1

**Table F4: Estimated distance travelled per type of vehicle: 2005 to 2009 (Million Vehicle Kilometres)**

Vehicle type							2007 to 2008	
	2007 (Est.)	2008	2009	2007	2008	2009	Year on year change	Percentage change
Motorcars	75572.9	72471.5	48746.1	0.6	0.6	0.6	-23725.4	0
Minibuses	7600.5	7295.6	4903.6	0.1	0.1	0.1	-2391.9	0
Buses	1406.8	1403.5	916.3	0	0	0	-487.2	0
Motorcycles	1911.4	1841.4	1234.3	0	0	0	-607.2	0
LDV's - Bakkies	34280.6	33442.1	22204.7	0.3	0.3	0.3	-11237.4	0
Trucks	12996.6	12961.6	8464.6	0.1	0.1	0.1	-4497	0
Other & Unknown	325.7	324.8	212.1	0	0	0	-112.7	0
Total MilVehKms	134094.5	129740.5	86681.8	1	1	1	-43058.7	0

**Table F5: Number of registered vehicles from 2002 to 2010**

Year	Number of vehicles registered	Year on year factor of increase	Factor of increase since 2003
2002	7000316	0	0.97
2003	7186537	1.03	1
2004	7479178	1.04	1.04
2005	7971187	1.07	1.11
2006	8544902	1.07	1.19
2007	9068120	1.06	1.26
2008	9304508	1.03	1.33
2009 (Sept.)	9533444	1.02	1.36
2010 (Sept. )	9772874	1.03	1.40

## 16 ANNEXURE G: RELATION OF BREATH AND BLOOD ALCOHOL CONCENTRATION TO STAGE OF ALCHOL INFLEUNCE

Source: Wikipedia, Blood Alcohol Content

Progressive effects of alcohol		
Blood Alcohol Content (%)	Behaviour	Impairment
0.01–0.029	Average individual appears normal	Subtle effects that can be detected with special tests
0.03–0.059	Mild euphoria, sense of well-being, relaxation, talkativeness, joyous, decreased inhibition	Lowered alertness, judgment, coordination
0.06–0.10	Blunted feelings, disinhibition, extroversion, impaired sexual pleasure	Reflexes impaired, reasoning, depth perception, distance acuity, peripheral vision, glare recovery
0.11–0.20	Over-expression, emotional swings, angry or sad, boisterous	Reaction time, gross motor control, staggering, slurred speech
0.21–0.29	Stupor, lose understanding, impaired sensations	Severe motor impairment, loss of consciousness, memory blackout
0.30–0.39	Severe depression, unconsciousness, death possible	Bladder function, breathing, heart pulse
>0.40	Unconsciousness, death	Breathing, heart rate

## 17 ANNEXURE H: SAMPLE SURVEY FORMS

### Speed Offence Form

SURVEY SHEET: SPEED				Location Code:								Photo No:										
Province:				Date:				Latitude (E):				Longitude (S):										
Town:				Start time:				Speed limit:				Urban/Rural:										
Surveyor:				End time:				Speed limit:				Urban/Rural:										
Traffic Officer(s):				Day:		S	M	T	W	T	F	S	Urban/Rural:		U	or	R					
Item	Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Actual speed of vehicle observed	LMV																					
	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Motorcycle																					
Other																						
Item	Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Actual speed of vehicle observed	LMV																					
	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Motorcycle																					
Other																						
Item	Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Actual speed of vehicle observed	LMV																					
	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Motorcycle																					
Other																						
Item	Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Actual speed of vehicle observed	LMV																					
	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Motorcycle																					
Other																						

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**Barrier Offence Form**

SURVEY SHEET: BARRIER LINES					Location Code:					Photo No:												
Province:					Date:					Latitude (E):												
Town:					Start time:					Longitude (S):												
Surveyor:					End time:					Speed limit:												
Traffic Officer(s):					Day:					Urban/Rural:												
					S	M	T	W	T	F	S	U					or	R				
<b>Item</b>	<b>Vehicle Type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	
Number of vehicles overtaking	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Other																					
Number of vehicles overtaken	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Other																					
Dangerous(D) of safe(S) overtaking?																						
<b>Item</b>	<b>Vehicle Type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	
Number of vehicles overtaking	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Other																					
Number of vehicles overtaken	LMV																					
	Minibus Taxi																					
	Bus																					
	Truck																					
	Other																					
Dangerous(D) of safe(S) overtaking?																						

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**Red Robot Offence Form**



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<b>SURVEY SHEET: SKIPPING RED TRAFFIC SIGNALS</b>				<b>Location Code:</b>										<b>Photo No:</b>									
<b>Province:</b>		<b>Date:</b>										<b>Latitude (E):</b>											
<b>Town:</b>		<b>Start time:</b>										<b>Longitude (S):</b>											
<b>Surveyor:</b>		<b>End time:</b>										<b>Speed limit:</b>											
<b>Traffic Officer(s):</b>		<b>Day:</b> S M T W T F S										<b>Urban/Rural:</b> U or R											
<b>Item</b>	<b>Vehicle type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>TOTALS</b>	
<b>Number of vehicles crossing on RED</b>	LMV																						
	Minibus Taxi																						
	Bus																						
	Truck																						
	Other																						
<b>How many vehicles stopped?</b>																							
<b>Item</b>	<b>Vehicle type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>TOTALS</b>	
<b>Number of vehicles crossing on RED</b>	LMV																						
	Minibus Taxi																						
	Bus																						
	Truck																						
	Other																						
<b>How many vehicles stopped?</b>																							
<b>Item</b>	<b>Vehicle type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>TOTALS</b>	
<b>Number of vehicles crossing on RED</b>	LMV																						
	Minibus Taxi																						
	Bus																						
	Truck																						
	Other																						
<b>How many vehicles stopped?</b>																							
																						<b>Total of above (This total must add up to the provincial sample size)</b>	

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**Roadblock Details Offence Form**





## **Pedestrian Compliance Offence Form**





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SURVEY SHEET: SEATBELTS & CELL PHONES		Location Code:											Photo No:								
Province:		Date:											Latitude (E):								
Town:		Start time:											Longitude (S):								
Surveyor:		End time:											Speed limit:								
Traffic Officer(s):		Day: S M T W T F S											Urban/Rural: U or R								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Type of vehicle	LMV																				
	TAXI																				
	BUS																				
Driver	Wearing (✓) or not (X)																				
Driver cellphone	Talking (✓) or not (X)																				
Front passenger	Wearing (✓) or not (X)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Type of vehicle	LMV																				
	TAXI																				
	BUS																				
Driver	Wearing (✓) or not (X)																				
Driver cellphone	Talking (✓) or not (X)																				
Front passenger	Wearing (✓) or not (X)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Type of vehicle	LMV																				
	TAXI																				
	BUS																				
Driver	Wearing (✓) or not (X)																				
Driver cellphone	Talking (✓) or not (X)																				
Front passenger	Wearing (✓) or not (X)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Type of vehicle	LMV																				
	TAXI																				
	BUS																				
Driver	Wearing (✓) or not (X)																				
Driver cellphone	Talking (✓) or not (X)																				
Front passenger	Wearing (✓) or not (X)																				

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## 18 ANNEXURE I: STRATEGY FOR SAMPLE SIZE DETERMINATION

The determination of sample sizes for a survey is often a complicated issue and various factors need to be taken into account. These factors include:

- ✚ The nature of the relevant parameter to be estimated, which could be the mean, a proportion, etc
- ✚ The statistical properties of the associated estimators of the parameters
- ✚ The amount of previous knowledge available.
- ✚ Specifications for the survey in terms of accuracy, confidence level, etc.

In addition to the above, in planning phases of the previous surveys some decisions on sampling strategy had to be taken, like where to sample, which environmental / traffic conditions need to be taken into account, etc. With all these factors in mind, certain recommended sample sizes were proposed and implemented in the surveys.

At the end of the 2003 survey the standard errors of estimation were evaluated using a simulation process. This process quantified the observed standard errors relative to standard errors of other usually smaller sample sizes.

Based on the experience and knowledge gained during the previous survey (2002 to date), it was possible to introduce some refinements in the sampling strategy.

The results of the evaluation of the initial sampling strategy are shown in the tables in the rest of this chapter.

In the evaluation of the sampling strategy the actual results of previous surveys were taken into account. By using the more detailed information from the previous surveys, it was possible to make more accurate estimates of the “required” sample sizes. However, the “required” sample sizes were not always practical, considering the realities out on the road. One example of such a situation is where the theoretical “required” sample size for light motor vehicles is

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much smaller than the samples that were normally taken in the past. Taking the practical situation into account, it turns out that smaller samples for light motor vehicles will not really be less expensive because the survey teams will still have to stay out on the road waiting for the other scarcer vehicle types to appear (taxis, trucks and especially buses). On the other hand, the required sample sizes that are based on an ideal combination of confidence interval and maximum error will be unpractical (read “too expensive”) in the case of some of the scarcer vehicle categories on certain roads and during certain times of the day (e.g. buses on rural roads during night time). In such cases it is necessary to lower the standards - in some cases it will be necessary to use much less stringent requirements than those implied by the “required” sample size.

The proposals on the “practical” sample sizes on the next couple of pages have been prepared, taking the relevant issues (statistical requirements, realities on the road and typical cost structures) into account. In most cases the original standards that were set by the Corporation are met and even exceeded with these “practical” sample sizes. There are however some of the “practical” sample sizes where the standards have been lowered substantially – in most cases this is related to the scarcer vehicle types, especially during times of the day when very low volumes of these vehicles are expected.

A new strategy to determine sample sizes for barrier line offences was introduced during the 2008 survey. The number of convoys of vehicles were recorded, with the convoys where barrier lines were crossed being recorded as an offence.

The proposal on the “practical” sample sizes to be used during future surveys are shown in the rest of this section.



## 18.1 SPEED

### 18.1.1 LIGHT MOTOR VEHICLES

Urban roads: 60 kph, day (Table 6.1-1)

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.452	381	1476		1500	1,680	112%
KZ	1.96	0.05	0.156	202	1430		1500	1,600	107%
WC	1.96	0.05	0.286	314	1268		1500	1,749	117%
EC	1.96	0.05	0.294	319	1455		1500	1,669	111%
FS	1.96	0.05	0.461	382	1254		1500	1,760	117%
MP	1.96	0.05	0.533	382	825		1500	1,520	101%
NW	1.96	0.05	534	382	1232		1500	1,500	100%
LI	1.96	0.05	0.519	384	1246		1500	1,600	107%
NC	1.96	0.05	0.172	219	1254		1500	1,520	101%
SA				2965	11440		13500	14,598	108%

Urban roads: 60 kph, night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.318	333	1001		1200	1,220	102%
KZ	1.96	0.05	0.215	259	1190		1200	1,280	107%
WC	1.96	0.05	0.264	299	761		1200	1,290	108%
EC	1.96	0.05	0.234	275	1083		600	620	103%
FS	1.96	0.05	0.342	346	572		600	800	133%
MP	1.96	0.05	0.324	337	352		600	800	133%
NW	1.96	0.05	0.448	380	523		600	640	107%
LI	1.96	0.05	0.49	384	388		600	640	107%
NC	1.96	0.05	0.282	311	458		600	810	135%
SA				2924	6328		7200	8,100	113%

Rural roads: 120 kph, day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.318	333	1001		1500	1,600	107%
KZ	1.96	0.05	0.215	259	1190		1500	1,600	107%
WC	1.96	0.05	0.264	299	761		1500	1,553	104%
EC	1.96	0.05	0.234	275	1083		1500	1,520	101%
FS	1.96	0.05	0.342	346	572		1500	2,080	139%
MP	1.96	0.05	0.324	337	352		1500	1,660	111%
NW	1.96	0.05	0.448	380	523		1500	1,537	102%
LI	1.96	0.05	0.49	384	388		1500	1,600	107%
NC	1.96	0.05	0.282	311	458		1500	1,919	128%
SA				2924	6328		13500	15,069	112%

Rural roads: 120 kph, night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.231	273	1336		1200	1,280	107%
KZ	1.96	0.05	0.191	237	638		1200	1,298	108%
WC	1.96	0.05	0.203	249	966		1200	1,520	127%
EC	1.96	0.05	0.069	99	523		600	825	138%
FS	1.96	0.05	0.159	205	794		600	1,599	267%
MP	1.96	0.05	0.131	175	221		600	640	107%
NW	1.96	0.05	0.254	291	540		600	640	107%
LI	1.96	0.05	0.205	250	604		600	783	131%
NC	1.96	0.05	0.249	287	301		600	647	108%
SA				2066	5923		7200	9,232	128%

## 18.1.2 MINIBUS-TAXIS

Urban roads: 60 kph, day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.39	366	366	0.05	400	486	122%
KZ	1.96	0.05	0.1	138	138	0.05	400	417	104%
WC	1.96	0.05	0.34	345	345	0.05	400	485	121%
EC	1.96	0.05	0.26	296	296	0.05	400	405	101%
FS	1.96	0.05	0.25	288	288	0.05	400	414	104%
MP	1.96	0.05	0.3	323	323	0.05	400	442	111%
NW	1.96	0.05	0.43	377	377	0.05	400	407	102%
LI	1.96	0.05	0.39	366	366	0.05	400	441	110%
NC	1.96	0.05	0.18	227	227	0.05	400	414	104%
SA				2726	2726		3600	3,911	109%

Urban roads: 60 kph, night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.32	334	149	0.075	150	150	100%
KZ	1.96	0.05	0.75	288	72	0.1	150	201	134%
WC	1.96	0.05	0.23	272	68	0.1	150	387	258%
EC	1.96	0.05	0.14	185	185	0.05	150	157	105%
FS	1.96	0.05	0.39	366	23	0.2	150	170	113%
MP	1.96	0.05	0.3	323	81	0.1	150	164	109%
NW	1.96	0.05	0.65	350	39	0.15	150	167	111%
LI	1.96	0.05	0.54	382	42	0.15	150	155	103%
NC	1.96	0.05	0.18	227	14	0.2	150	182	121%
SA				2727	673		1350	1,733	128%

Rural roads: 120 kph (effective speed limit: 100 kph), day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.55	380	380	0.05	400	405	101%
KZ	1.96	0.05	0.58	374	374	0.05	400	419	105%
WC	1.96	0.05	0.75	288	288	0.05	400	408	102%
EC	1.96	0.05	0.48	384	170	0.075	200	301	151%
FS	1.96	0.05	0.66	345	153	0.075	200	213	107%
MP	1.96	0.05	0.48	384	170	0.075	200	204	102%
NW	1.96	0.05	0.67	340	340	0.05	200	208	104%
LI	1.96	0.05	0.54	382	382	0.05	200	385	193%
NC	1.96	0.05	0.57	377	94	0.1	200	244	122%
SA				3254	2351		2400	2,787	116%

Rural roads: 120 kph (effective speed limit: 100 kph), night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.4	369	164	0.075	100	123	123%
KZ	1.96	0.05	0.66	345	38	0.15	100	223	223%
WC	1.96	0.05	0.58	374	94	0.1	100	139	139%
EC	1.96	0.05	0.25	288	72	0.1	100	198	198%
FS	1.96	0.05	0.14	185	82	0.075	100	189	189%
MP	1.96	0.05	0.33	340	21	0.2	100	114	114%
NW	1.96	0.05	0.54	382	95	0.1	100	246	246%
LI	1.96	0.05	0.45	380	95	0.1	100	160	160%
NC	1.96	0.05	0.57	377	24	0.2	100	106	106%
SA				3040	685		900	1,498	166%

### 18.1.3 BUS

Urban roads: 60 kph, day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.16	207	52	0.1	60	62	103%
KZ	1.96	0.05	0.11	150	67	0.075	60	65	108%
WC	1.96	0.05	0.46	382	42	0.15	60	75	125%
EC	1.96	0.05	0.21	255	64	0.1	60	71	118%
FS	1.96	0.05	0.32	334	84	0.1	60	82	137%
MP	1.96	0.05	0.27	303	34	0.15	60	62	103%
NW	1.96	0.05	0.16	207	52	0.1	60	97	162%
LI	1.96	0.05	0.11	150	67	0.075	60	70	117%
NC	1.96	0.05	0.048	70	31	0.075	60	73	122%
SA				2058	493		540	657	122%

Rural roads: 120 kph (effective speed limit: 100 kph), day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.26	296	74	0.1	50	73	146%
KZ	1.96	0.05	0.24	280	70	0.1	50	66	132%
WC	1.96	0.05	0.18	227	57	0.1	50	52	104%
EC	1.96	0.05	0.31	329	21	0.2	25	58	232%
FS	1.96	0.05	0.62	362	14	0.25	25	185	740%
MP	1.96	0.05	0.46	382	42	0.15	25	56	224%
NW	1.96	0.05	0.18	227	25	0.15	25	64	256%
LI	1.96	0.05	0.65	350	87	0.1	25	106	424%
NC	1.96	0.05	0.5	384	15	0.25	25	92	368%
SA				2837	405		300	752	251%

## 18.1.4 TRUCKS

### Urban roads: 60 kph, day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.51	384	384		400	422	106%
KZ	1.96	0.05	0.39	366	162		400	406	102%
WC	1.96	0.05	0.47	383	383		400	409	102%
EC	1.96	0.05	0.49	384	171		400	419	105%
FS	1.96	0.05	0.43	377	167		400	437	109%
MP	1.96	0.05	0.49	384	171		400	411	103%
NW	1.96	0.05	0.53	383	170		400	413	103%
LI	1.96	0.05	0.52	384	170		400	410	103%
NC	1.96	0.05	0.39	366	162		400	426	107%
SA				3411	1940		3600	3,753	104%

### Urban roads: 60 kph, night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.47	383	96	0.1	100	120	120%
KZ	1.96	0.05	0.42	374	42	0.15	100	219	219%
WC	1.96	0.05	0.43	377	94	0.1	100	111	111%
EC	1.96	0.05	0.52	384	96	0.1	100	109	109%
FS	1.96	0.05	0.35	350	39	0.15	100	329	329%
MP	1.96	0.05	0.46	382	95	0.1	100	141	141%
NW	1.96	0.05	0.55	380	95	0.1	100	171	171%
LI	1.96	0.05	0.5	384	96	0.1	100	168	168%
NC	1.96	0.05	0.38	362	40	0.15	100	113	113%
SA				3376	693		900	1,481	165%

Rural roads: 120 kph (effective speed limit: 80 kph), day

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.55	380	380	0.05	400	441	110%
KZ	1.96	0.05	0.43	377	377	0.05	400	438	110%
WC	1.96	0.05	0.66	345	345	0.05	400	456	114%
EC	1.96	0.05	0.54	382	170	0.075	400	455	114%
FS	1.96	0.05	0.73	303	303	0.05	400	673	168%
MP	1.96	0.05	0.5	384	171	0.075	400	455	114%
NW	1.96	0.05	0.59	372	372	0.05	400	459	115%
LI	1.96	0.05	0.6	369	369	0.05	400	474	119%
NC	1.96	0.05	0.84	207	207	0.05	400	440	110%
SA				3119	2694		3600	4,291	119%

Rural roads: 120 kph (effective speed limit: 80 kph), night

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.075	0.59	165	372	0.05	400	419	105%
KZ	1.96	0.075	0.57	167	167	0.075	400	415	104%
WC	1.96	0.075	0.61	162	366	0.05	400	504	126%
EC	1.96	0.075	0.34	153	153	0.075	400	401	100%
FS	1.96	0.075	0.55	169	380	0.05	400	657	164%
MP	1.96	0.075	0.4	164	92	0.1	400	400	100%
NW	1.96	0.075	0.55	169	169	0.075	400	400	100%
LI	1.96	0.075	0.61	162	162	0.075	400	440	110%
NC	1.96	0.075	0.72	138	138	0.075	400	406	102%
SA				1449	1999		3600	4,042	112%

## 18.2 VEHICLE CONDITION (TYRES, LIGHTS), DOCUMENTS (DRIVER LICENCE, PRDP) AND SEATBELTS

### 18.2.1 LIGHT MOTOR VEHICLE

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.14	185	185	0.05	400	469	117%
KZ	1.96	0.05	0.2	246	246	0.05	400	413	103%
WC	1.96	0.05	0.19	236	236	0.05	400	440	110%
EC	1.96	0.05	0.17	217	217	0.05	400	405	101%
FS	1.96	0.05	0.15	196	196	0.05	400	428	107%
MP	1.96	0.05	0.09	126	126	0.05	400	406	102%
NW	1.96	0.05	0.15	196	196	0.05	400	415	104%
LI	1.96	0.05	0.16	207	207	0.05	400	425	106%
NC	1.96	0.05	0.18	227	227	0.05	400	409	102%
SA				1836	1836		3600	3810	106%

### 18.2.2 MINIBUS TAXI

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.23	272	272	0.05	300	300	100%
KZ	1.96	0.05	0.24	280	280	0.05	300	306	102%
WC	1.96	0.05	0.29	316	316	0.05	300	326	109%
EC	1.96	0.05	0.23	272	272	0.05	300	300	100%
FS	1.96	0.05	0.27	303	303	0.05	300	303	101%
MP	1.96	0.05	0.2	246	246	0.05	300	302	101%
NW	1.96	0.05	0.28	310	310	0.05	300	316	105%
LI	1.96	0.05	0.27	303	303	0.05	300	303	101%
NC	1.96	0.05	0.27	303	303	0.05	300	305	102%
SA				2605	2605		2700	2761	102%



### 18.2.3 BUS

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.19	236	59	0.1	100	120	120%
KZ	1.96	0.05	0.22	264	66	0.1	100	101	101%
WC	1.96	0.05	0.12	162	72	0.075	100	116	116%
EC	1.96	0.05	0.18	227	57	0.1	100	103	103%
FS	1.96	0.05	0.2	246	109	0.075	100	107	107%
MP	1.96	0.05	0.03	45	45	0.05	100	100	100%
NW	1.96	0.05	0.13	174	43	0.1	100	101	101%
LI	1.96	0.05	0.3	323	143	0.075	100	102	102%
NC	1.96	0.05	0.18	227	57	0.1	100	127	127%
SA				1904	651		900	977	109%

### 18.2.4 TRUCK

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.27	303	303	0.05	350	357	102%
KZ	1.96	0.05	0.32	334	334	0.05	350	348	99%
WC	1.96	0.05	0.31	329	329	0.05	350	405	116%
EC	1.96	0.05	0.27	303	303	0.05	350	352	101%
FS	1.96	0.05	0.3	323	323	0.05	350	372	106%
MP	1.96	0.05	0.22	264	264	0.05	350	357	102%
NW	1.96	0.05	0.38	362	362	0.05	350	370	106%
LI	1.96	0.05	0.27	303	303	0.05	350	350	100%
NC	1.96	0.05	0.37	358	358	0.05	350	360	103%
SA				2879	2879		3150	3271	104%

## 18.3 ALCOHOL

### 18.3.1 DAY TIME: LIGHT MOTOR VEHICLE

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0112	17	17	0.05	100	217	217%
KZ	1.96	0.05	0.0035	5	5	0.05	100	139	139%
WC	1.96	0.05	0.0098	15	15	0.05	100	172	172%
EC	1.96	0.05	0.0074	11	11	0.05	100	128	128%
FS	1.96	0.05	0.0072	11	11	0.05	100	159	159%
MP	1.96	0.05	0.011	17	17	0.05	100	104	104%
NW	1.96	0.05	0.0026	4	4	0.05	100	212	212%
LI	1.96	0.05	0.0072	11	11	0.05	100	102	102%
NC	1.96	0.05	0.0074	11	11	0.05	100	100	100%
SA				102	102		900	1333	148%

### 18.3.2 DAY TIME: MINIBUS TAXI

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0221	33	33	0.05	60	125	208%
KZ	1.96	0.05	0.0284	42	42	0.05	60	94	157%
WC	1.96	0.05	0.0074	11	11	0.05	60	154	257%
EC	1.96	0.05	0.0214	32	32	0.05	60	100	167%
FS	1.96	0.05	0.0245	37	37	0.05	60	128	213%
MP	1.96	0.05	0.0227	34	34	0.05	60	66	110%
NW	1.96	0.05	0.0051	8	8	0.05	60	116	193%
LI	1.96	0.05	0.024	36	36	0.05	60	71	118%
NC	1.96	0.05	0.0759	108	108	0.05	60	100	167%
SA				341	341		540	954	177%

### 18.3.3 DAY TIME: BUS

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0836	118	29	0.1	60	55	92%
KZ	1.96	0.05	0.038	56	25	0.075	60	36	60%
WC	1.96	0.05	0.038	56	56	0.05	60	64	107%
EC	1.96	0.05	0.038	56	56	0.05	60	59	98%
FS	1.96	0.05	0.625	360	90	0.1	60	67	112%
MP	1.96	0.05	0.038	56	25	0.075	60	42	70%
NW	1.96	0.05	0.038	56	25	0.075	60	45	75%
LI	1.96	0.05	0.038	56	25	0.075	60	50	83%
NC	1.96	0.05	0.0455	67	30	0.075	60	52	87%
SA				881	361		540	470	87%

### 18.3.4 DAY TIME: TRUCK

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0176	27	27	0.05	60	211	352%
KZ	1.96	0.05	0.0078	12	12	0.05	60	130	217%
WC	1.96	0.05	0.0169	26	26	0.05	60	136	227%
EC	1.96	0.05	0.0061	9	9	0.05	60	162	270%
FS	1.96	0.05	0.0112	17	17	0.05	60	139	232%
MP	1.96	0.05	0.0112	17	17	0.05	60	96	160%
NW	1.96	0.05	0.0068	10	10	0.05	60	125	208%
LI	1.96	0.05	0.0112	17	17	0.05	60	70	117%
NC	1.96	0.05	0.0171	26	26	0.05	60	118	197%
SA				161	161		540	1187	220%

### 18.3.5 NIGHT TIME: LIGHT MOTOR VEHICLE

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0428	63	63	0.05	100	251	251%
KZ	1.96	0.05	0.0301	45	45	0.05	100	173	173%
WC	1.96	0.05	0.0251	38	38	0.05	100	191	191%
EC	1.96	0.05	0.0328	49	49	0.05	100	185	185%
FS	1.96	0.05	0.0392	58	58	0.05	100	198	198%
MP	1.96	0.05	0.0521	76	76	0.05	100	149	149%
NW	1.96	0.05	0.0299	45	45	0.05	100	150	150%
LI	1.96	0.05	0.0282	42	42	0.05	100	148	148%
NC	1.96	0.05	0.0306	46	46	0.05	100	208	208%
SA				462	462		900	1653	184%

### 18.3.6 NIGHT TIME: MINIBUS TAXI

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.1212	164	73	0.075	60	175	292%
KZ	1.96	0.05	0.0164	25	25	0.05	60	120	200%
WC	1.96	0.05	0.0638	92	92	0.05	60	100	167%
EC	1.96	0.05	0.0882	124	124	0.05	60	122	203%
FS	1.96	0.05	0.0458	67	67	0.05	60	101	168%
MP	1.96	0.05	0.098	136	60	0.075	60	100	167%
NW	1.96	0.05	0.0326	48	48	0.05	60	117	195%
LI	1.96	0.05	0.0404	60	60	0.05	60	96	160%
NC	1.96	0.05	0.0714	102	45	0.075	60	105	175%
SA				818	594		540	1036	192%

### 18.3.7 NIGHT TIME: BUS

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.1111	152	17	0.15	40	65	163%
KZ	1.96	0.05	0.1111	152	38	0.1	40	65	163%
WC	1.96	0.05	0.1111	152	38	0.1	40	52	130%
EC	1.96	0.05	0.1111	152	38	0.1	40	44	110%
FS	1.96	0.05	0.1111	152	38	0.1	40	40	100%
MP	1.96	0.05	0.1111	152	38	0.1	40	58	145%
NW	1.96	0.05	0.1111	152	17	0.15	40	56	140%
LI	1.96	0.05	0.1111	152	9	0.2	40	52	130%
NC	1.96	0.05	0.1111	152	17	0.15	40	75	188%
SA				1368	250		360	507	141%

### 18.3.8 NIGHT TIME: TRUCK

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.0164	25	25	0.05	60	146	243%
KZ	1.96	0.05	0.0096	15	15	0.05	60	101	168%
WC	1.96	0.05	0.0147	22	22	0.05	60	158	263%
EC	1.96	0.05	0.0244	37	37	0.05	60	119	198%
FS	1.96	0.05	0.0131	20	20	0.05	60	134	223%
MP	1.96	0.05	0.016	24	24	0.05	60	66	110%
NW	1.96	0.05	0.0175	26	26	0.05	60	141	235%
LI	1.96	0.05	0.0364	54	54	0.05	60	83	138%
NC	1.96	0.05	0.0364	54	54	0.05	60	129	215%
SA				277	277		540	1077	199%

## 18.4 PEDESTRIAN COMPLIANCE

### 18.4.1 DAY TIME

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.26	296	296	0.05	300	320	107%
KZ	1.96	0.05	0.2	246	246	0.05	300	320	107%
WC	1.96	0.05	0.32	334	334	0.05	300	320	107%
EC	1.96	0.05	0.36	354	354	0.05	300	320	107%
FS	1.96	0.05	0.21	255	255	0.05	300	440	147%
MP	1.96	0.05	0.34	345	345	0.05	300	400	133%
NW	1.96	0.05	0.35	350	350	0.05	300	440	147%
LI	1.96	0.05	0.37	358	358	0.05	300	320	107%
NC	1.96	0.05	0.12	162	162	0.05	300	300	100%
SA				2700	2700		2700	3180	118%

### 18.4.2 NIGHT TIME

	Conf. fact	Error	Historic proportion	Required number	Suggested number	Varied error	Practical number	Number obtained during 2010 survey	% Complete
GA	1.96	0.05	0.03	45	279	0.02	300	320	107%
KZ	1.96	0.05	0.013	20	123	0.02	300	320	107%
WC	1.96	0.05	0.003	5	29	0.02	300	300	100%
EC	1.96	0.05	0.01	15	95	0.02	300	300	100%
FS	1.96	0.05	0.01	15	95	0.02	300	360	120%
MP	1.96	0.05	0.063	91	91	0.05	300	300	100%
NW	1.96	0.05	0.003	5	29	0.02	300	380	127%
LI	1.96	0.05	0.013	20	123	0.02	300	360	120%
NC	1.96	0.05	0.033	49	306	0.02	300	320	107%
SA				265	1170		2700	2960	110%