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AUG 2011
MA RTLEE 30814



Road Traffic
Management Corporation

Road Traffic Report
31 December 2010



transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

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PREAMBLE

Data Sources

The Road Traffic Management Corporation (the Corporation) gathers data from the South African Police Services, Provincial Traffic Authorities, and Metropolitan Municipalities through Accident Report Forms and the Quick Response forms which are obtained from police stations where road accidents have been reported. Upon receipt of these 'Accident Report Forms' the Metropolitan Municipalities, Provincial Traffic Authorities and Corporation then captures the data contained in the forms. The Accident Report forms captures data for all crash types. The Quick Response forms, which are mainly used to record fatal crashes, are captured only by the Corporation.

Other data sources are as follows; Natis for registered vehicles and Statistics South Africa for human population data.

The Corporation also undertakes Road Traffic Offence Surveys on an annual basis. The following are the objectives of these surveys:

- To determine the general level of lawlessness on our roads;
- To assist Corporation to determine the impact of intervention strategies to promote road safety in the country.
- To monitor and evaluate the capacities of the Corporation and traffic authorities to implement efficient and effective road safety interventions.
- To assist the Traffic authorities to determine whether the road users know and understand their rights and obligations to promote road safety in the country.
- To determine the fitness of drivers and vehicles.

- To determine the management capacity of the Corporation to interpret the results and develop road safety policies and strategies to reduce carnage on the road network.

Targets used for the survey

The target for the evaluation of the success of the level of compliance by the road users are the following:

- 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)
- Overtaking on a barrier line: Maximum of 1% barrier line offences (1 offence for every 100 convoys observed)
- Vehicles disobeying traffic signals: Maximum of 1% of red phases with an offence
- Wearing of seat belts: Maximum 15% offence rate
- The use of child restraints: Maximum 15% offence rate
- Driving licence present and valid: Maximum 1% offence rate
- The validity of the vehicle licence discs and correlation between the registration disc and number plate: Maximum 1% offence rate
- Professional Driving Permit (PrDP) 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

Note: See annexure K for survey sample sizes

Limitations

The Corporation further receives the CAS Analysis Report from the South African Police Services. This particular report assists with data validation of the data already received from the various Police Stations regarding fatal crashes only.

In the reporting and capturing of road crash data it sometimes happens that crashes are duplicated. The checking, cross-checking and verification of data is a lengthy and time consuming manual process, which amongst others involves the comparison of the initial data received from individual police stations at the time of the crash with that received from individual police stations at the time the crash with that received from the central SAPS data base. The process also involves the identification and elimination of duplicated reports; as well as follow-ups on the un-confirmed crash data.

In most cases the data on the Quick Response Forms are mainly fatalities that are reported are those recorded at the crash scene.

A reduction has been observed for variables for the period under review:

- a) Fatal Crashes (0.18%) from 10 857 to 10 837
- b) Un-roadworthy vehicles (4.64%) from 428 714 to 408 815
- c) Number of fatal crashes per 10,000 motorised vehicles (2.81%) from 12.79 to 12.43
- d) Number of fatalities per 10,000 motorised vehicles (1.22%) from 16.22 to 16.02

Improve Data Quality

- Expansion of data sources
- Development of the new Crash Data Management System (CDIMS)
- Improve data collection and capturing

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

- 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 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 overall offence index has decreased from 5.6 to 4.2.

Correlation between number of vehicles in crashes and traffic offence indices

Comparison between Number of Vehicles in Crashes and Traffic Offence Indices										
Number of vehicles in Fatal Crashes										
Year	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
2009	2 196	2 214	1 076	1 055	743	1 257	884	1 173	259	10 857
2010	1 959	2 249	1 029	1 272	823	1 188	869	1 160	288	10 837
change	-237	35	-47	217	80	-69	-15	-13	29	-20
% change	-10.79	1.58	-4.37	20.57	10.77	-5.49	-1.70	-1.11	11.20	-0.18
Combined Offence Index										
Year	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 table above shows that there is a correlation in the change in the number of fatal crashes and the change in the overall combined offence index. With exception of KwaZulu Natal, Eastern Cape, Free State and Northern Cape, other provinces have shown a correlation.

On a National level, the fatal crashes decreased by 0.94% and the offence index decreased by 33.3%.

On a provincial basis the biggest decrease were recorded for:

- Gauteng : Fatal crashes decreased by 10.79% and offence index with 75.8%
- Mpumalanga : Fatal crashes decreased 5.49% and offence index with 72.2%
- North West : Fatal crashes decreased 1.70% and offence index with 41.7%

The down-ward trend of the variables above **may be ATTRIBUTED** to the following programmes undertaken by RTMC for the period under review:

- Number of vehicles stopped and screened = 7 734 766
- Number of notices issued = 2 976 868
- Number of vehicles discontinued / suspended / impounded
- Number of people arrested for all road traffic offences including driving whilst under the influence, dangerous driving, fraudulent public passenger transport documentation and other serious offences

Road Safety Education projects:

- Scholar Patrol programme in all nine provinces : 2520 schools participated
- Road Safety Schools Debates : 618 schools participated
- Participatory Educational Techniques : 169 schools participated

There were other projects that were run such as:-

- Brandhouse RTMC Number One Taxi Driver Campaign : 1380 taxi drivers participated in the competition.
- Professional Drivers Championships (Driver of the year – DOTY): 111 professional drivers participated in the championship.

Road Traffic Law Enforcement

- Effective and efficient co-ordination of road traffic law enforcement across the three tiers of government as per the National Rolling Enforcement Plan.
- Identification of and greater focus on critical offences as per the Offence Survey results
- Target of stopping and checking million vehicles per month, nation-wide.

- Inclusion of special enforcement blitzes
- Greater media awareness of traffic law enforcement activities and interventions

Note: The report should be read with the above mentioned issues in mind. It should also be noted that with the new approach of reporting according to the 30 days international standard the figures of fatalities in South Africa may increase dramatically as compared to the previous years.

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1. Executive Summary

1.1		Vehicle Population
	1.1.1	The number of registered vehicles increased by 241 619 (2,52%) from 9 587 781 on 31 December 2009 to 9 829 400 vehicles on 31 December 2010
	1.1.2	On a percentage basis the biggest change was for buses which increased by 4,70% to 47 341, followed by motorcars which increased by 3,42% to 5 596 343. Light trailers increased by 2,98% to 740 443.
	1.1.3	The total number of vehicles that are either un-roadworthy, un-licenced or both increased by 5,242 (0,69%) from 755,383 vehicles on 31 December 2009 to 760,628 vehicles on 31 December 2010.
	1.1.4	The number of vehicles that are un-roadworthy (but licenced) decreased by 19,899 (4,64%) from 428,714 vehicles on 31 December 2009 to 408,815 vehicles on 31 December 2010.
	1.1.5	The number of un-licenced vehicles increased by 14,490 (4,94%) from 293,166 vehicles on 31 December 2009 to 307,656 vehicles on 31 December 2010
	1.1.6	The general overall mobility in terms of the number of persons per road vehicle (vehicles that can reasonably transport passengers – motorcars, minibuses, buses, motorcycles and LDV's "bakkies"), improved by 6,00% from a national average of 6,26 persons per vehicle at the end of December 2007 to 6,17 persons per vehicle at the end of December 2008. From the end of December 2009 to December 2010 the improvement shows a decrease of 0,04%, from 6,09 to 6,09 persons per vehicle.
1.2		Driver Population
	1.2.1	The number of learner driving licences issued increased by 43,408 (3,34%) from 1,298,042 on 31 December 2009 to 1,341,450 on 31

		December 2010.
	1.2.2	The number of driving licences issued increased by 420,426 (4,77%) from 8,816,928 on 31 December 2009 to 9,237, 354 on 31 December 2010.
	1.2.3	At the end of 31 December 2010 there were a total of 1,628,113 expired driving licence cards recorded on the National Traffic Information System (NaTIS). This figure represents 17,63% of all driving licences issued.
	1.2.4	The number of Professional Driving Permits (PrDP's) issued increased by 33,863 (4,28%) from 790,954 on 31 December 2009 to 824,863 on 31 December 2010.
	1.2.5	At the end of 31 December 2010 there were a total of 257,437 expired Professional Driving Permits (PrDPs) recorded on the National Traffic Information System (NaTIS). This figure represents 31,21% of all PrDPs issued.
1.3		Fatal Road Crashes and Fatalities
	1.3.1	Over the 12 months period from 1 January 2010 to 31 December 2010 the number of fatal crashes decreased by 20 (0,18%) from 10,857 crashes over the same period the previous year (2008) to 10,837 in 2010.
	1.3.2	Over the 12-month period from 1 January 2009 to 31 December 2010 the number of fatalities increased by 200 (1,45%) from 13,768 fatalities over the same period the previous year to 13,967.
	1.3.3	The driver fatalities decreased by 39 (0,97%) from 4,066 to 4,106; passenger fatalities increased by 229 (4,57%) from 5,023 to 5,253 and pedestrian fatalities decreased by 69 (1,48%) from 4,678 to 4,609 over the 12-month period from 1 January 2010 to 31 December 2010.

	1.3.4	During 2009 and 2010 driver fatalities were (29,26% and 29,40%), passengers (37,49% and 37,61%) and pedestrians (33,98% and 33,00% of all fatalities.
	1.3.5	The severity of fatal crashes increased by 0,021 (1,64%) from 1,268 during 2009 to 1,289 during 2010.
	1.3.6	The number of fatal crashes per 10,000 registered motorised vehicles decreased by 0,36 (2,81%) from 12,79 during 2009 to 12,43 during 2010.
	1.3.7	The number of fatalities per 10,000 registered motorised vehicles decreased by 0,20 (1,22%) from 16,22 during 2009 to 16,02 during 2010.
	1.3.8	The number of fatalities per 100,000 human population increased by 0,03 (0,09%) from 27,91 during 2009 to 27,94 during 2010.
1.4		Results of the 2010 Road Traffic Offence Survey
	1.4.1	The independent Road Traffic Offence Survey for 2010 showed a decrease in the overall Road Traffic Offence Index from 5,6 in 2009 to 4,2 in 2010.

1.1 Measuring Progress towards Achieving Target to Reduce Fatalities by 50% by 2015

Based on the 2006 Millennium Development Goals, one of the goals of the 2015 Road Traffic Safety Management Plan is to reduce by half the rate of accident fatalities arising from road and other transport by 2015. In the development of the 2015 Plan it was agreed that the number of fatalities for the year 2007 would be used as the benchmark on which the 50% reduction would be based. Using this benchmark and the 50% target reduction, the maximum allowable number of road fatalities per quarter per province up to the end of 2015 was calculated as continuous reduced target figures over the 8 year period. These set targets for the indicated quarters for each province and the RSA total, are shown in the table below, shown as "Target" figures or maximum allowable number of fatalities.

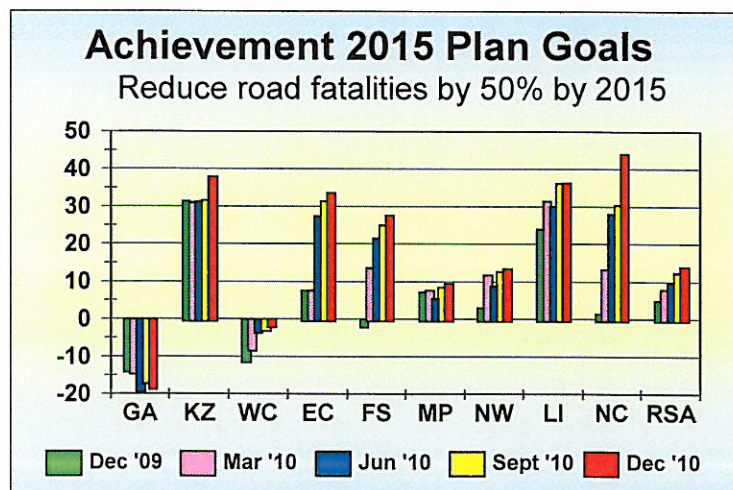
Rolling 12 month Number of Road Fatalities per Province											
Month	Item	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
Dec '09	Target	2 875	2 172	1 445	1 435	985	1 562	1 097	1 204	333	13 553
	Actual	2 485	2 854	1 285	1 543	967	1 674	1 130	1 492	337	13 768
	Difference	-390	681	-160	108	-17	112	33	288	4	660
	% Diff	-13.58	31.37	-11.08	7.53	-1.74	7.20	3.02	23.95	1.31	4.87
Mar '10	Target	2 824	2 133	1 420	1 410	967	1 534	1 078	1 182	327	13 329
	Actual	2 426	2 795	1 307	1 517	1 098	1 651	1 204	1 554	370	13 923
	Difference	-398	661	-113	107	131	118	126	372	43	1 048
	% Diff	-14.10	31.00	-7.96	7.59	13.58	7.66	11.73	31.43	13.23	7.86
Jun '10	Target	2 774	2 096	1 395	1 385	950	1 507	1 059	1 161	321	13 108
	Actual	2 248	2 752	1 349	1 763	1 154	1 589	1 152	1 511	411	13 929
	Difference	-527	656	-45	379	204	83	93	349	90	1 282
	% Diff	-18.98	31.31	-3.24	27.35	21.48	5.48	8.80	30.10	28.01	9.78
Sept '10	Target	2 725	2 058	1 370	1 360	933	1 480	1 040	1 141	315	12 875
	Actual	2 272	2 709	1 332	1 786	1 167	1 603	1 172	1 553	411	14 005
	Difference	-453	651	-38	426	234	124	132	412	96	1 583
	% Diff	-16.64	31.63	-2.78	31.36	25.04	8.35	12.67	36.13	30.40	12.30
Dec '10	Target	2 677	2 022	1 346	1 336	917	1 454	1 022	1 120	310	12 646
	Actual	2 181	2 788	1 323	1 784	1 169	1 591	1 159	1 528	446	13 967
	Difference	-496	766	-23	448	253	137	137	407	136	1 766
	% Diff	-18.53	37.87	-1.71	33.57	27.58	9.43	13.43	36.35	44.03	13.96

Also shown in the table above are the "Actual" figures, which reflect the real number of road fatalities recorded per province for the respective quarters as

indicated. Both the Target and Actual figures represent the 12-month rolling total fatality figures per province and the RSA on a national basis.

The difference; as well as the percentage difference figures in the table shows the difference between the set Target and Actual number of road fatalities. A difference of "0" indicates that the set target of reducing the number of fatalities was met. Differences smaller than "0" (<0) shows achievements better than what is expected or required and differences larger than"0" (>0) shows that the required targets were not achieved and reflects inadequate performance towards reaching the desired goal per quarter and ultimately the 2015 goal.

The % difference in meeting the set targets per province is also reflected in the figure below.



The information in the table and graph above shows that better performing provinces (Differences less than"0") well on track towards achieving the goal of reducing road fatalities by 50% by the year 2015, amongst others are :

- Gauteng : which is also continuously improving its performance from -13,58% in December 2009 to -18,53% in December 2010;
- Western Cape : shows an improvement performance from -11,08% in December 2009 to -1,71% in December 2010.
- Free State : shows an improved performance from of -1,74% during December 2009 only..

The provinces that are not performing as required,(Differences larger than “0”) are the following:

- KwaZulu-Natal : overall the worst performing province, with even a continuous increase in the quarterly number of road fatalities that exceed the set quarterly targets for the province – ranging from +31,37% in December 2009 and +31,00% in March 2010, +31.31% in June 2010, + 31,63% in September 2010 and +37,87 December 2010. This province was the biggest contributor to the RSA, on a national basis not achieving its set target towards the end of the review period.
- Limpopo : made no contribution towards achieving the 2015 goals. Over the review period the performance of this province worsened from +23,95% in December 2009 to +36,35% in December 2010.

Western Cape was operating close to the border-line with figures ranging from -11,08% to -1.71% in December 2010 moving in a non-contributory direction.

National - RSA : over the review period the national figures range from -4,87% in December 2009 to +13,96% in December 2010. The country's performance towards the reduction of fatalities by 50% for the assessed period is deteriorating. The worst performing provinces listed above, contributed to this non-achieving trend, with the biggest negative influence from KwaZulu-Natal, Eastern Cape, Northern Cape and Limpopo.

2. Vehicle Population

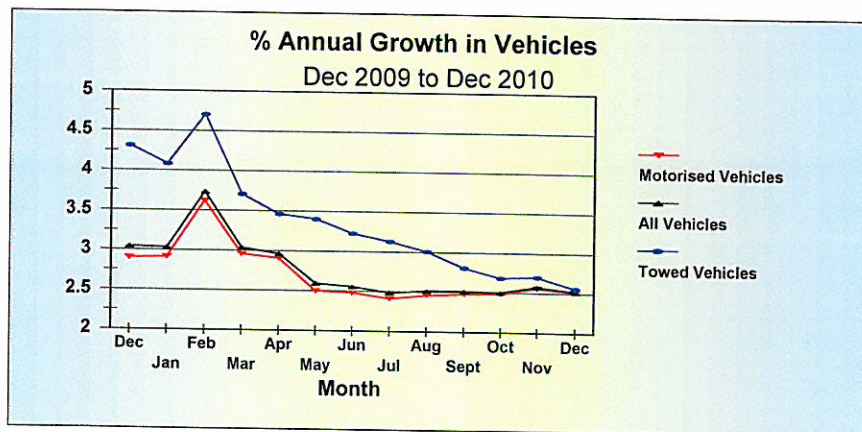
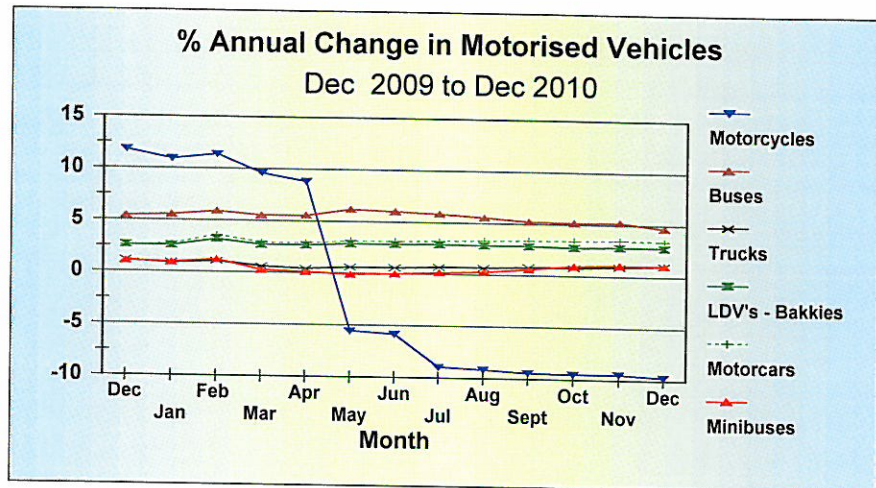
2.1 Number of Registered Vehicles

The number of registered vehicles increased by 241 619 (2,52%) from 9 587 781 on 31 December 2009 to 9 829 400 vehicles on 31 December 2010. Detail per type of vehicle is given in Table 2 below.

Table 2 : Number of Registered Vehicles	Number registered Dec 2009	Number registered Dec 2010	Change	% Change	% of Group Dec 2010	% of Total Dec 2010
Motorised Vehicles						
Motorcars	5 411 093	5 596 343	185 250	3.42	63.48	56.93
Minibuses	282 941	285 983	3 042	1.08	3.24	2.91
Buses	45 217	47 341	2 124	4.70	0.54	0.48
Motorcycles	362 400	327 275	-35 125	-9.69	3.71	3.33
LDV's - Bakkies	1 946 292	2 000 827	54 535	2.80	22.69	20.36
Trucks	321 604	324 997	3 393	1.06	3.69	3.31
Other & Unknown	230 484	233 600	3 116	1.35	2.65	2.38
Total Motorised	8 600 031	8 816 366	216 335	2.52	100.00	89.69
Towed Vehicles						
Caravans	105 462	105 251	-211	-0.20	10.39	1.07
Heavy Trailers	146 402	150 496	4 094	2.80	14.86	1.53
Light Trailers	719 034	740 443	21 409	2.98	73.09	7.53
Other & Unknown	16 852	16 845	-8	-0.04	1.66	0.17
Total Towed	987 750	1 013 035	25 285	2.56	100.00	10.31
All Vehicles	9 587 781	9 829 400	241 619	2.52		100.00

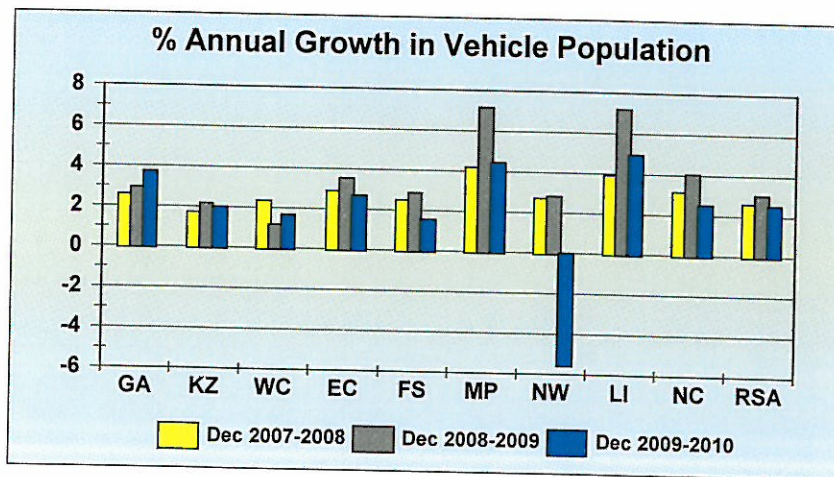
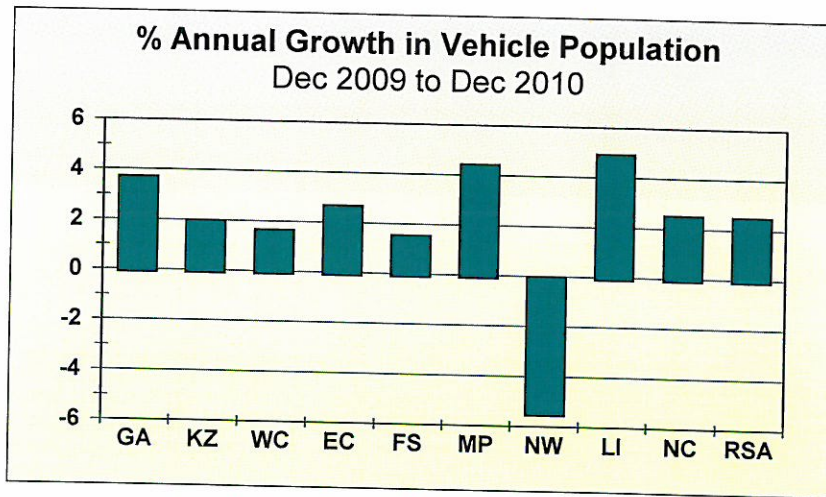
The information above shows that on a percentage basis the biggest change was for buses which increased by 4,70% to 47 341, followed by motorcars which increased by 3,42% to 5 596 343. Light trailers increased by 2,98% to 740 443.

The monthly percentage change over the past year for specific types of vehicles; as well as motorised and towed vehicles, are shown in the figures below.



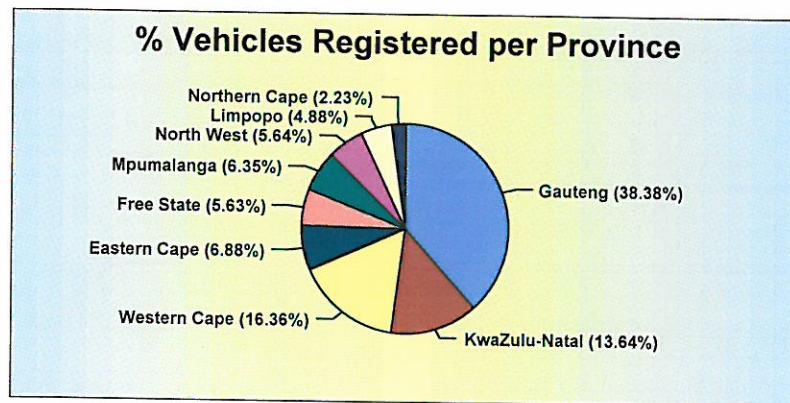
The total motor vehicle population per Province for December 2009 and December 2010 respectively, is given in Table 3 and reflected in the figure below.

Table 3 : Number of Registered Vehicles per Province	Number registered Dec 2009	Number registered Dec 2010	Change	% Change	% of Total Dec 2010
Gauteng	3 680 158	3 817 291	137 133	3.73	38.84
KwaZulu-Natal	1 308 090	1 334 316	26 226	2.00	13.57
Western Cape	1 568 622	1 594 785	26 163	1.67	16.22
Eastern Cape	659 829	677 597	17 768	2.69	6.89
Free State	539 704	548 098	8 394	1.56	5.58
Mpumalanga	608 676	635 718	27 042	4.44	6.47
North West	540 786	511 092	-29 694	-5.49	5.20
Limpopo	467 690	490 843	23 153	4.95	4.99
Northern Cape	214 226	219 660	5 434	2.54	2.23
RSA	9 587 781	9 829 400	241 619	2.52	100



Over the past year from December 2009 to December 2010 the biggest percentage growth in total vehicles was recorded in Limpopo with a growth of 4,95% followed by Mpumalanga with a growth of 4,44%. A decrease in this regard has been recorded in North West with 5,49%.

The percentage vehicles registered per province on 31 December 2010 is reflected in the graph below.



The information in the graph above shows that 38.38% of all vehicles are registered in Gauteng; 16,36 in Western Cape and 13,64% in KwaZulu-Natal.

More detailed information on the number of vehicles per type registered per Province for December 2009 and December 2010 is given in the Table under **Annexure A**.

2.2 Human Population and Mobility

The estimated human population on 31 December of each year from 2007 to 2010 is given in Table 4 below. (These figures are estimates from the mid-year estimates released annually by StatsSA).

Month	Province									Total RSA
	GA	KZ	WC	EC	FS	MP	NW	LI	NC	
Dec 2007	9.61	9.97	4.79	6.90	2.96	3.52	3.38	5.38	1.10	47.62
Dec 2008	10.07	10.06	5.05	6.74	2.92	3.56	3.41	5.34	1.11	48.27
Dec 2009	10.49	10.28	5.31	6.61	2.89	3.60	3.44	5.25	1.14	49.00
Dec 2010	10.66	10.99	5.50	6.75	2.94	3.63	3.49	5.16	1.18	50.30

Based on the information on human and vehicle populations, the average number of persons per vehicle per Province (excluding trucks, towed vehicles and "other" and "unknown" vehicles) at the end of December 2007, 2008, 2009 and 2010 is shown in Table 5 and reflected in the graph below.

