

Statistical release

Land transport survey (Preliminary)

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Statistics South Africa 1 P7162

Contents

Summary of findings: Land transportation	2
Table A – Key figures for December 2010	2
Table B – Contribution of each type of commodity to the percentage change in freight transportation incom	ne3
Table C – Contribution of each type of service to the percentage change in passenger transportation incor	me3
Detailed results	4
Table 1 – Total freight transportation estimates	4
Table 2 – Total passenger transportation estimates	5
Table 3 – Total income according to the type of commodity for freight transportation (R million)	6
Table 4 – Quarterly and annual cumulative estimates and percentage changes for freight transportation	7
Table 5 – Quarterly and annual cumulative estimates and percentage changes for passenger transportation	on7
Explanatory notes	8
Technical note	10
Class limits	10
Glossary	10
General information	11

Statistics South Africa 2 P7162

Summary of findings: Land transportation

Table A - Key figures for December 2010

Freight transportation estimates	December 2010 1/	% change between December 2009 and December 2010	% change between October to December 2009 and October to December 2010	% change between January to December 2009 and January to December 2010
Payload (000 tons)	50 016	1,4	3,8	4,3
Total income (R million)	6 055	6,4	6,8	9,3

^{1/} Units of measurement can be found next to the respective variables in the previous column.

Passenger transportation estimates	December 2010 1/	% change between December 2009 and December 2010	% change between October to December 2009 and October to December 2010	% change between January to December 2009 and January to December 2010
Number of passengers (000)	54 051	-15,4	-13,9	-13,3
Total income (R million)	648	15,7	11,1	6,6

^{1/} Units of measurement can be found next to the respective variables in the previous column-

Income from freight transportation

The income from freight transportation for the fourth quarter of 2010 increased by 6,8% compared with the fourth quarter of 2009. Income from freight transportation for December 2010 increased by 6,4% compared with December 2009. The volume of goods transported (payload) for December 2010 increased by 1,4% compared with December 2009.

The increase of 6,8% in income from freight transportation for the fourth quarter of 2010 compared with the fourth quarter of 2009 was driven largely by primary mining and quarrying products (7,4% and contributing 2,2 percentage points) and manufactured food, beverages and tobacco products (8,2% and contributing 1,3 percentage points) – see Table B on page 3.

Income from passenger transportation

The income from passenger transportation for the fourth quarter of 2010 increased by 11,1% compared with the fourth quarter of 2009. Income from passenger transportation for December 2010 increased by 15,7% compared with December 2009. The number of passengers for December 2010 decreased by 15,4% compared with December 2009.

The main contributor to the increase of 11,1% in income from passenger transportation for the fourth quarter of 2010 compared with the fourth quarter of 2009 was road passenger transportation (17,2% and contributing 12,8 percentage points). However, this increase was counteracted by a decrease in railway passenger transportation (-6,6% and contributing -1,7 percentage points) – see Table C on page 3.

Statistics South Africa 3 P7162

Table B – Contribution of each type of commodity to the percentage change in freight transportation income

Type of commodity	October to December 2009 (R million)	Weight 1/	October to December 2010 (R million)	Difference in income between October to December 2009 and October to December 2010 (R million)	% change between October to December 2009 and October to December 2010	Contribution (percentage points) to the % change in total income 2/
Agriculture and forestry primary products	1 459	8,1	1 560	101	6,9	0,6
Primary mining and quarrying products	5 295	29,5	5 689	394	7,4	2,2
Manufactured food, beverages and tobacco products	2 845	15,9	3 077	232	8,2	1,3
Textiles, clothing and leather goods	342	1,9	235	-107	-31,3	-0,6
Chemicals, coke, petroleum, rubber, plastic and other mineral products	1 670	9,3	1 732	62	3,7	0,3
Basic metals and fabricated metal products	1 044	5,8	1 147	103	9,9	0,6
Non-metallic products	675	3,8	699	24	3,6	0,1
Electrical machinery, transport machinery and equipment	317	1,8	411	94	29,7	0,5
Motor vehicles, parts and accessories	324	1,8	433	109	33,6	0,6
Paper and paper products	362	2,0	372	10	2,8	0,1
Commercial products	467	2,6	582	115	24,6	0,6
Used household and office products	226	1,3	218	-8	-3,5	0,0
Containers	713	4,0	742	29	4,1	0,2
Parcels	248	1,4	220	-28	-11,3	-0,2
Other freight	1 958	10,9	2 045	87	4,4	0,5
Total income 3/	17 946	100,0	19 160	1 214	6,8	6,8

^{1/} Weight is the percentage contribution of each type of commodity to the total income for the three months up to the current month of the previous year.

Table C – Contribution of each type of service to the percentage change in passenger transportation income

Type of service	October to December 2009 (R million)	Weight 1/	October to December 2010 (R million)	Difference in income between October to December 2009 and October to December 2010 (R million)	% change between October to December 2009 and October to December 2010	Contribution (percentage points) to the % change in total income 2/
Railway passenger transportation	458	25,5	428	-30	-6,6	-1,7
Road passenger transportation	1 335	74,5	1 564	229	17,2	12,8
Total income 3/	1 793	100,0	1 992	199	11,1	11,1

^{1/} Weight is the percentage contribution of each type of service to the total income for the three months up to the current month of the previous year.

PJ Lehohla Statistician-General

^{2/} The contribution to the percentage change is calculated by multiplying the percentage change of each type of commodity with its corresponding weight, divided by 100.

^{3/} The figures have been rounded off. Therefore discrepancies may occur between the sums of the component items and the totals.

^{2/} The contribution to the percentage change is calculated by multiplying the percentage change of each type of service with its corresponding weight, divided by 100.

^{3/} The figures have been rounded off. Therefore discrepancies may occur between the sums of the component items and the totals.

Statistics South Africa 4 P7162

Detailed results

Table 1 – Total freight transportation estimates

		Ra	il	Roa	ad	Tota	l 2/
Year a	and month 1/	Payload (000 tons)	Income (R million)	Payload (000 tons)	Income (R million)	Payload (000 tons)	Income (R million)
2008	January	13 708	1 218	33 350	3 696	47 058	4 914
	February	15 033	1 317	37 484	4 035	52 517	5 352
	March	14 565	1 270	37 127	4 039	51 692	5 309
	April	14 803	1 444	40 858	4 525	55 661	5 969
	May	14 105	1 360	40 387	4 521	54 492	5 881
	June	17 533	1 498	42 631	4 716	60 164	6 214
	July	15 141	1 478	44 066	5 069	59 207	6 547
	August	15 474	1 536	42 248	4 834	57 722	6 370
	September	15 389	1 546	42 046	4 744	57 435	6 290
	October	16 146	1 535	43 177	4 878	59 323	6 413
	November	16 219	1 491	40 951	4 667	57 170	6 158
	December	14 990	1 263	34 510	4 039	49 500	5 302
	Total	183 106	16 956	478 835	53 763	661 941	70 719
2009	January	14 337	1 185	33 119	3 809	47 456	4 994
	February	14 874	1 428	34 919	3 871	49 793	5 299
	March	15 193	1 385	35 563	4 098	50 756	5 483
	April	15 274	1 565	32 906	3 803	48 180	5 368
	May	13 332	1 381	35 066	4 097	48 398	5 478
	June	15 930	1 645	35 720	4 026	51 650	5 671
	July	15 131	1 567	37 857	4 331	52 988	5 898
	August	15 397	1 605	35 829	4 065	51 226	5 670
	September	16 993	1 775	36 742	4 188	53 735	5 963
	October	15 395	1 749	37 170	4 350	52 565	6 099
	November	16 184	1 825	38 056	4 330	54 240	6 155
	December	15 443	1 664	33 876	4 028	49 319	5 692
	Total	183 483	18 774	426 823	48 996	610 306	67 770
2010	January	15 338	1 674	33 289	3 901	48 627	5 575
	February	16 114	1 812	35 422	4 103	51 536	5 915
	March	15 558	1 816	38 586	4 429	54 144	6 245
	April	15 595	1 790	35 008	4 064	50 603	5 854
	May	11 683	1 372	38 510	4 355	50 193	5 727
	June	14 653	1 771	39 431	4 500	54 084	6 271
	July	16 102	1 896	39 731	4 611	55 833	6 507
	August	15 039	1 886	38 940	4 543	53 979	6 429
	September	16 968	1 902	38 274	4 458	55 242	6 360
	October	16 794	1 883	39 028	4 616	55 821	6 500
	November	16 568	1 880	39 693	4 725	56 262	6 605
	December	15 434	1 778	34 583	4 278	50 016	6 055
	Total	185 846	21 460	450 495	52 583	636 340	74 043

^{1/ 2009} and 2010 figures are preliminary.

^{2/} The figures have been rounded off. Therefore discrepancies may occur between the sums of the component items and the totals.

Table 2 – Total passenger transportation estimates

		Ra	il	Roa	ad	Tota	I 2/
Year a	and month 1/	Number of passengers (000)	Income (R million)	Number of passengers (000)	Income (R million)	Number of passengers (000)	Income (R million)
2008	January	47 489	173	20 447	374	67 936	547
	February	57 078	163	23 532	408	80 610	571
	March	52 551	143	24 766	444	77 317	587
	April	49 031	133	22 250	373	71 281	506
	May	52 427	146	22 535	371	74 962	517
	June	46 508	132	24 258	425	70 766	557
	July	52 168	137	23 573	423	75 741	560
	August	52 334	145	24 640	440	76 974	585
	September	54 253	165	26 867	479	81 120	644
	October	59 237	164	25 678	469	84 915	633
	November	52 709	148	24 481	452	77 190	600
	December	37 650	139	20 253	376	57 903	515
	Total	613 435	1 788	283 280	5 034	896 715	6 822
2009	January	48 985	150	20 689	368	69 674	518
	February	51 998	151	24 732	447	76 730	598
	March	59 223	165	28 006	482	87 229	647
	April	54 365	152	23 521	438	77 886	590
	May	56 511	164	25 342	446	81 853	610
	June	53 058	146	23 948	434	77 006	580
	July	56 566	161	23 898	455	80 464	616
	August	52 122	150	23 465	438	75 587	588
	September	53 632	156	24 457	456	78 089	612
	October	60 163	172	25 063	464	85 226	636
	November	54 202	157	23 850	440	78 052	597
	December	43 068	129	20 826	431	63 894	560
	Total	643 893	1 853	287 797	5 299	931 690	7 152
2010	January	46 828	148	21 665	403	68 493	551
	February	54 984	160	24 162	425	79 146	585
	March	56 440	165	26 300	467	82 740	632
	April	50 601	184	22 804	468	73 405	652
	May	23 877	98	25 347	480	49 225	578
	June	33 491	132	23 509	508	57 000	640
	July	42 409	160	24 508	523	66 917	684
	August	42 053	145	24 482	492	66 535	637
	September	43 854	143	24 680	531	68 535	674
	October	46 707	155	24 962	521	71 670	676
	November	45 193	152	24 774	516	69 967	668
	December	33 364	121	20 687	527	54 051	648
	Total	519 801	1 763	287 880	5 861	807 684	7 625

^{1/ 2009} and 2010 figures are preliminary.

^{2/} The figures have been rounded off. Therefore discrepancies may occur between the sums of the component items and the totals.

Table 3 – Total income according to the type of commodity for freight transportation (R million)

Year	and month 1/	Type A	Type B	Type C	Type D	Type E	Type F	Type G	Type H	Type I	Type J	Type K	Type L	Type M	Type N	Type O	Total 2/
2009	January	571	1 155	913	101	500	246	192	140	106	76	90	86	116	90	613	4 994
	February	477	1 434	931	71	558	271	180	125	95	87	83	67	137	100	683	5 299
	March	510	1 261	989	101	584	343	184	146	110	94	134	58	155	86	725	5 483
	April	480	1 467	878	56	547	291	193	117	79	97	133	59	161	72	737	5 368
	May	527	1 343	962	64	591	288	220	109	101	103	157	58	167	73	715	5 478
	June	563	1 609	850	80	581	297	225	98	92	103	133	64	173	70	734	5 671
	July	588	1 573	1 029	105	613	294	236	87	113	104	134	66	168	62	727	5 898
	August	537	1 581	861	137	591	299	212	112	105	107	135	61	190	54	684	5 670
	September	530	1 767	867	113	594	359	228	101	102	119	140	63	244	75	659	5 963
	October	524	1 793	990	110	550	354	226	110	105	125	171	68	255	80	637	6 099
	November	473	1 885	848	125	578	351	251	115	126	127	169	73	270	95	669	6 155
	December	462	1 617	1 007	107	542	339	198	92	93	110	127	85	188	73	652	5 692
	Total	6 242	18 485	11 125	1 170	6 829	3 732	2 545	1 352	1 227	1 252	1 606	808	2 224	930	8 235	67 770
2010	January	442	1 698	989	71	519	353	216	78	93	106	103	59	188	68	592	5 575
	February	465	1 837	949	98	516	382	241	100	102	108	147	66	216	81	606	5 915
	March	515	1 970	980	124	540	374	268	103	121	119	146	72	200	92	620	6 245
	April	512	1 767	856	77	528	395	240	120	114	119	131	68	234	89	605	5 854
	May	560	1 597	862	80	556	353	242	123	120	119	159	66	176	86	626	5 727
	June	596	1 776	929	73	596	411	258	129	127	120	181	71	256	85	661	6 271
	July	620	1 985	925	77	538	422	238	119	147	121	190	71	263	81	711	6 507
	August	613	1 871	926	76	599	430	246	124	146	112	177	72	261	71	705	6 429
	September	603	1 917	916	72	573	397	239	133	121	123	178	68	250	69	701	6 360
	October	553	1 921	1 022	75	574	419	239	139	140	125	191	70	251	71	711	6 500
	November	534	1 965	982	89	605	394	244	147	155	128	218	73	264	84	724	6 605
	December	473	1 803	1 073	71	553	334	216	125	138	119	173	75	227	65	610	6 055
	Total	6 486	22 107	11 409	983	6 697	4 664	2 887	1 440	1 524	1 419	1 994	831	2 786	942	7 872	74 043

^{1/2009} and 2010 figures are preliminary.

Description of type of commodity included in indicated group type in Table 3

Group type	Type of commodity included in group type	Group type	Type of commodity included in group type
Type A	Transportation of agriculture and forestry primary products	Type I	Transportation of motor vehicles, parts and accessories
Type B	Transportation of primary mining and quarrying products	Type J	Transportation of paper and paper products
Type C	Transportation of manufactured food, beverages and tobacco products	Type K	Transportation of commercial products
Type D	Transportation of textiles, clothing and leather products	Type L	Transportation of used household and office products
Type E	Transportation of chemicals, coke, petroleum, rubber, plastic and other mineral products	Type M	Transportation of containers
Type F	Transportation of basic metals and fabricated metal products	Type N	Transportation of parcels
Type G	Transportation of non-metallic products	Type O	Transportation of other freight
Type H	Transportation of electrical machinery, transport machinery and equipment		

^{2/} The figures have been rounded off. Therefore discrepancies may occur between the sums of the component items and the totals.

Statistics South Africa 7 P7162

Table 4 – Quarterly and annual cumulative estimates and percentage changes for freight transportation

Freight transportation estimates	October to December 2009	October to December 2010	% change between October to December 2009 and October to December 2010	January to December 2009	January to December 2010	% change between January to December 2009 and January to December 2010
Payload (000 tons)	156 124	162 099	3,8	610 306	636 340	4,3
Total income (R million)	17 946	19 160	6,8	67 770	74 043	9,3

Table 5 – Quarterly and annual cumulative estimates and percentage changes for passenger transportation

Passenger transportation estimates	October to December 2009	October to December 2010	% change between October to December 2009 and October to December 2010	January to December 2009	January to December 2010	% change between January to December 2009 and January to December 2010
Number of passengers (000)	227 172	195 688	-13,9	931 690	807 684	-13,3
Total income (R million)	1 793	1 992	11,1	7 152	7 625	6,6

Statistics South Africa 8 P7162

Explanatory notes

Introduction

- Statistics South Africa (Stats SA) conducts a monthly survey of the land transportation industry, covering passenger and freight transportation by rail and road (see 4 below). This survey is based on a sample drawn from the 2010 Business Sampling Frame (BSF) that contains businesses registered for value added tax (VAT).
- As is usual, information for the latest month had to be estimated for respondents who have not reported by the cut-off date for production of results. These estimates will be revised in future statistical releases when their reported information becomes available. Published land transportation income estimates exclude VAT.

Purpose of the survey

The results of the monthly land transport survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy. These statistics are also used in the analysis of comparative business and industry performance.

Scope of the survey

- This survey covers enterprises involved in land transportation according to the following types of transportation:
 - Railway transport (including passenger and freight transportation);
 - Other scheduled passenger land transport urban, suburban and interurban bus and coach passenger lines and school buses;
 - Other non-scheduled passenger land transport safaris and sightseeing bus tours, metered taxis and other passenger transport including renting of motor cars with drivers; and
 - Freight transport by road.

Exclusions

- **5** Passenger transportation excludes:
 - Minibus taxis;
 - Gautrain;
 - Metropolitan buses (including the Bus Rapid System BRT); and
 - Rental of private cars/buses without drivers.

Freight transportation excludes:

- Renting of trucks without drivers; and
- In-house transportation.

Classification

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The 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 International Standard Industrial Classification of all Economic Activities (ISIC) with suitable adaptations for local conditions. Statistics in this publication are presented at SIC division (two-digit) level. Each enterprise is classified to the industry which reflects its predominant activity.

Response rate

7 The preliminary response rate for the survey on land transportation for December 2010 was 93,8%. The improved response rate for November 2010 was 97,4%.

Statistical unit

The statistical unit for which information is compiled and published is the enterprise, defined as a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its income activities.

Survey methodology and design

Questionnaires are collected monthly and the results are published on a monthly basis. Questionnaires are sent to a sample of about 700 enterprises from a population of about 4 400 enterprises. Completed questionnaires are required to be returned to Stats SA within 10 days after the end of the reference month. Fax and telephone reminders are used to follow up non-respondents.

Statistics South Africa 9 P7162

Sample design

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The value of income is obtained monthly from the sample of about 700 enterprises (which was drawn in April 2010 at the SIC four-digit level) from a population of about 4 400 land transportation enterprises. The land transportation industry is divided into four size groups. All large enterprises (size group one) are completely enumerated. Simple random sampling is applied to size groups two (medium sized), three and four (small) enterprises. The total value of income of the large enterprises (size group one) is added to the weighted totals of size groups two, three and four to reflect the total value of income.

Weighting methodology

11 For those strata not completely enumerated, the weights to produce estimates are the inverse ratio of the sampling fraction, modified to take account of non-response in the survey. Stratum estimates are calculated and then aggregated with the completely enumerated stratum to form division estimates. These procedures, which are in line with international best practice, are described in more detail on the Stats SA website at http://www.statssa.gov.za/publications/publicationsearch.asp.

Reliability of estimates

- Data presented in this publication are based on information obtained from a sample and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all enterprises in the land transport industry in South Africa. Estimates are subject to sampling and non-sampling errors. Preliminary figures are indicated in the tables.
- Inaccuracies may occur because of imperfections in reporting by enterprises and errors made in the collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling errors. Every effort is made to minimise non-sampling errors by careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Fluctuations may occur in consecutive months as a result of seasonal and economic factors.

Revised figures

Revised figures are due to respondents reporting revisions or corrections to their figures and late submission of their data to Stats SA. Preliminary figures are indicated in the relevant tables. Data are edited at the enterprise level.

Related publications

- 15 Users may also wish to refer to the following publications available from Stats SA -
 - Bulletin of Statistics issued quarterly; and
 - SA Statistics issued annually.

Rounding-off of figures

Where figures have been rounded off discrepancies may occur between sums of the component items and the totals.

Pre-release policy

17 Stats SA's pre-release policy may be inspected at its website, www.statssa.gov.za.

Symbols and abbreviations

18 BR Business register

BSF Business sampling frame GDP Gross domestic product

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of all Economic Activities

SARS South African Revenue Service

Stats SA Statistics South Africa
VAT Value added tax

* Revised

- Figures not available

Technical note

Neyman optimal allocation

A stratified random sample was drawn from the population of enterprises on the business sampling frame (BSF). Strata were formed using a combination of Standard Industrial Classification and the measure of size classes for enterprises. The Neyman optimal allocation formula given below was used to allocate samples to each stratum.

$$n_{\text{h}} = \frac{N_{h}S_{h}}{\sum N_{h}S_{h}}$$

 N_h and S_h are the stratum population size and the stratum variance respectively.

Neyman allocation formula not only allocates sample sizes to each stratum but also calculates the relative precision for each stratum as well as the relative precision for all strata. The relative precision for these strata did not exceed 1.0%.

Class limits

Enterprise size	Size Group	Lower limits	Upper limits
Very small	4	0	9 000 000
Small	3	9 000 001	39 000 000
Medium	2	39 000 001	78 000 000
Large	1	78 000 001	

Glossary

Enterprise

The enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its sales activities.

Industry

An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the *System of National Accounts (SNA)* in the same way as in the *Standard Industrial Classification of all Economic Activities, Fifth Edition, Report No. 09-90-02 of January 1993 (SIC)*.

Statistical unit

A statistical unit is a unit about which statistics are tabulated, compiled or published. The statistical units are derived from and linked to the South African Revenue Service (SARS) administrative data.

Number of passengers

The number of passengers refers to the passenger journeys.

Statistics South Africa 11 P7162

General information

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