7

Roads and Transport

Introduction

The South African transport network plays a major role in the economy of the country and the well-being of society. The network comprises the road, rail, air and sea transport systems. South Africa's economic growth, competitiveness, and improvements in the quality of life depend on the robustness of the transport network.

Transport network key to economic growth

Investment in transport infrastructure is a propeller for both economic and social development. Road transport is the dominant mode in South Africa, and investment in roads constitutes a major part of government's capital stock. The strategic goal is to protect, maintain and develop the current transport network. This requires an integrated transport planning framework that meets clear strategic objectives for industrial development with links to distribution zones, promoting transport corridors for passengers and freight as well as promoting tourism. The 2010 Soccer World Cup provides the country with an opportunity to overhaul its public transport infrastructure and system.

This chapter focuses mainly on the state and financing of the provincial road network and public transportation and also looks at traffic management. The analysis will focus mainly on provincial expenditure and service delivery trends.

This chapter provides an overview of:

- South Africa's road infrastructure and provinces' contributions to its funding.
- Road traffic management and safety.
- Developments related to the public transport system.

Institutional arrangements

Transport policy is built on the framework set out by the Moving South Africa Strategy (1999) and the National Land Transport Transition Act (22 of 2000). These set out the vision of an efficient

public transport system through the use of targeted subsidies and the provision of high quality, comprehensive transport infrastructure.

Provincial roads and traffic management exclusive provincial functions

Provincial roads and traffic are exclusive Schedule 5A provincial functions, while municipal roads, traffic and parking are exclusive Schedule 5B municipal functions. In contrast, public transport is a concurrent Schedule 4A national and provincial function, and municipal public transport is a Schedule 4B concurrent provincial and municipal function.

The national Department of Transport plays a largely facilitative and regulatory role. It develops policy and legislation, which is then implemented through provincial departments, local government and a range of public entities.

Agencies that support national government to execute its transport mandate

The national Department of Transport has a number of agencies that are mandated to deliver transport infrastructure and oversee transport regulation. These include:

- The South African National Roads Agency Limited (SANRAL), which is responsible for the planning, design, construction, operation, management, control, maintenance and rehabilitation of the national road network.
- The South African Rail Commuter Corporation (SARCC), which is responsible for passenger rail transport services and regulation.
- The Road Traffic Management Corporation (RTMC), which is responsible for improving co-operation between all three spheres of government and for law enforcement. It also seeks to promote a uniform strategy for road traffic management across the spheres of government.
- The Cross-Border Road Transport Agency (CBRTA), which regulates cross-border passenger, freight and road transport.
- The Civil Aviation Authority, which regulates air traffic and civil aviation.

Establishment of transport authorities

The National Land Transport Transition Act (NLTTA) seeks to establish an enabling framework for the promotion of public transport by provincial and local governments. The Act provides for the establishment of provincial transport authorities responsible for the planning, regulation and provision of public transport services, including rail, bus and the routing of minibus taxis.

Provinces are responsible for all activities related to provincial roads

Provincial governments are responsible for all activities related to the planning, design, construction and maintenance of the provincial road networks. Most provinces contract much of the work out to the private sector. Limpopo combines the traditional road authority structure which handles policy issues and maintenance activities with a roads agency structure for the remaining functions. Other provinces are also investigating the road agency concept for the provision of road infrastructure.

Until recently most provinces combined roads, transport and public works under one department. The trend currently is to separate roads

and transport from public works. Table 7.1 shows how various functions are organised across the provinces.

Table 7.1 Public works, roads and transport functions per province, 2006/07

Public Works, Transport and Roads	Transport and Roads	Public Works	Transport	Roads	Traffic Management
Gauteng	Eastern Cape	Eastern Cape	KwaZulu-Natal	KwaZulu-Natal	Gauteng
Western Cape	Limpopo	KwaZulu-Natal			*(Community safety)*
	Mpumalanga	Limpopo			Mpumalanga
	North West	*(Roads agency)*			*(Local government)*
		Mpumalanga			Western Cape
		North West			*(Community safety)*

Source: National Treasury provincial database

Some municipalities outsource their road development function

Most municipalities have departments that deal with the overall management of their road infrastructure. Some have stronger maintenance teams that can also handle light construction activities, while others outsource all but routine maintenance activities. The City of Johannesburg Metropolitan Municipality has established a roads agency for its delivery arm, under the guidance of a roads agency board. The ownership of roads still resides with the City, but the Johannesburg Roads Agency is responsible for the delivery of roads, based on a performance contract with the City.

Road infrastructure

The South African road network comprises some 754 600 km of roads and streets. Table 7.2 shows a breakdown of the network according to the responsible sphere of government and type of road.

Table 7.2 Approximate length of road networks in South Africa

Kilometres	Length	Percentage
Surfaced National toll and non-toll roads	15 600	2,1%
Surfaced provincial roads	348 100	46,1%
Unproclaimed rural roads	222 900	29,5%
Metropolitan, Municipal and other	168 000	22,3%
Total	**754 600**	**100,0%**

Source: National Department of Transport, SANRAL

A further 4 000 km of provincial roads transferred to the national road system in 2005

Road network integration is being intensified in accordance with the strategic framework for roads and the related action plan. About 8 451 km of provincial roads were transferred to SANRAL between 2003/04 and 2005/06 for incorporation into the strategic national road system. A new road-classification system has been developed to integrate the 30 per cent of unproclaimed roads into the road classification system. These roads are predominantly access roads serving rural communities and roads in settlements on the urban periphery.

Road network integration to support provincial economies

The strategic framework also envisages the creation of a 20 000 km strategic national road network supported by the identification of a strategic secondary road network that will be a primary feeder to the

national system and a backbone of provincial economies. It also focuses on access roads through the replication of labour intensive infrastructure programmes like Gundo-Lashu in Limpopo, and maintenance through projects like the Zibambele programme in KwaZulu-Natal.

National (primary) roads

To date 8 400 km of provincial roads reclassified as national roads

SANRAL is responsible for the development, maintenance and management of South Africa's 15 600 km national road network, comprising over R80 billion in assets. The new road-classification system has increased the national road network from 7 200 km in 2005 to the current 15 600 km. For example, responsibility for the N12 through North West was transferred from the province to SANRAL in July 2005.

32 toll plazas cover some 2 400 km of national road network

Toll roads and concessioned roads cover some 2 400 km and are serviced by 32 toll plazas. An example of a concessioned road is the N3 from Cedara just north of Pietermaritzburg through to its intersection with the N1 just north of Johannesburg. This is the country's busiest inter-city corridor.

Secondary and tertiary roads

Secondary and tertiary roads cater mainly for intra-provincial travel and are, in the main, the responsibility of provincial governments. A process of transferring some of the lower level or intra-district roads to district councils is underway.

Over 85 per cent of provincial roads are gravel and access roads

The quality of provincial roads varies from province to province as well as regionally within provinces. Table 7.3 shows that just over 85 per cent of the roads for which provinces are responsible are gravel roads and access roads. On aggregate only 16,7 per cent of provincial roads are paved. In addition to other factors such as the extent of historical maintenance backlogs of provincial roads, unsurfaced roads increase the need for continual maintenance, which requires ongoing expenditure.

Table 7.3 Extent of provincial road networks, March 2006

	Surface roads	Gravel roads	Access roads	Total kilometres	Total number of vehicles	Road densities
Kilometres						
Eastern Cape	5 493	34 692	7 631	**47 816**	480 059	10,0
Free State	6 310	22 046	20 000	**48 356**	416 029	8,6
Gauteng	3 357	1 771	2 410	**7 538**	2 893 665	383,9
KwaZulu-Natal	7 216	19 373	10 571	**37 160**	1 023 368	27,5
Limpopo	4 973	11 631	10 578	**27 182**	352 906	13,0
Mpumalanga	6 144	10 752	7 479	**24 375**	432 313	17,7
Northern Cape	3 013	53 725	12 023	**68 761**	160 113	2,3
North West	5 691	19 161	10 017	**34 869**	400 098	11,5
Western Cape	6 621	24 991	7 822	**39 434**	1 236 809	31,4
Total	**48 818**	**198 142**	**88 531**	**335 491**	**7 395 360**	**22,0**

Source: Road Infrastructure Strategic Framework for South Africa and National Department of Transport

The potential utilisation of roads is an important indicator of future spending requirements. The rate of utilisation determines the extent and timing of road maintenance. Over utilisation also result in traffic congestion. Potential utilisation can be inferred from road densities reflected in Table 7.3.

The indicators for the extent of road network and utilisation show that the problems faced by Gauteng are distinctly different from those of other provinces. Gauteng has a relatively higher population density, good roads, but high congestion. It therefore needs to examine other solutions to its transportation problems, such as alternative modes and network expansion. Other provinces are faced with issues relating to efficient spending for providing better access to people, and making choices about maintenance versus upgrading of existing roads.

Municipal roads and streets

Road congestion increasing rapidly in main metropolitan centres

Traffic congestion is increasing rapidly in Gauteng, and to a lesser extent in the Cape Town and Durban metropolitan areas. In Gauteng the N1, N3 and M1 freeways, which offer access to Midrand, Kyalami and Fourways, are congested. For example, the Ben Schoeman highway between Johannesburg and Tshwane carries 155 000 vehicles a day. Peak hour flows of 700 vehicles per hour prevail in both directions between 5 am and 9 am, and the short section between the Buccleugh and Allendale Road intersections operates under stop-go conditions most of the time. This situation is being exacerbated by commercial and residential property development in the area, as well as developments within Johannesburg and Tshwane metropolitan areas. Because of a lack of public transport systems in these areas, commuters must use private transport. In response to the problem Gauteng is looking at a range of options to ease the pressure on existing freeways. Consideration is being given to a toll road strategy whereby concessionaires would build new freeways. The Gautrain is also aimed at relieving traffic congestion along the Ben Schoeman Highway.

Table 7.4 Number of registered vehicles per province, March 2006

	Light vehicles	Heavy vehicles	Other	Total
Eastern Cape	448 314	20 345	11 400	**480 059**
Free State	358 512	17 645	39 872	**416 029**
Gauteng	2 735 414	127 307	30 944	**2 893 665**
KwaZulu-Natal	949 941	45 722	27 705	**1 023 368**
Limpopo	321 845	19 310	11 751	**352 906**
Mpumalanga	386 411	22 244	23 658	**432 313**
Northern Cape	146 212	7 389	6 512	**160 113**
North West	357 114	17 310	25 674	**400 098**
Western Cape	1 167 912	39 269	29 628	**1 236 809**
Total	**6 871 675**	**316 541**	**207 144**	**7 395 360**

Source: National Department of Transport

Number of registered vehicles

Table 7.4 indicates that there were 7,4 million registered vehicles in South Africa as at the end March 2006. Over 6,8 million were light vehicles, almost 317 000 heavy vehicles, and 207 000 other types of

vehicles. The largest shares of the vehicle population are in Gauteng, Western Cape and KwaZulu-Natal. 600 000 new cars were added to South African roads last year, 50 per cent of which are in Gauteng.

Consolidated expenditure on roads

R12,9 billion spent on roads in 2005/06 by the three spheres of government

Table 7.5 shows the three spheres of government spent a total of R12,9 billion on roads in 2005/06. Of this, provinces spent 58,7 per cent or R7,6 billion, municipalities 27,4 per cent or R3,5 billion, and national government 13,9 per cent or R1,8 billion. The highest spending on roads is in KwaZulu-Natal, which accounts for 18 per cent of the total provincial and municipal spending, followed by Western Cape at 13,7 per cent, and Eastern Cape and Limpopo at 13,4 per cent and 11,1 per cent respectively.

Table 7.5 Provincial, municipal and national roads infrastructure expenditure, 2005/06

	Provincial	Municipal	Total	Percentage of total	
R million				**Provincial**	**Municipal**
Eastern Cape	1 369	366	1 734	78,9%	21,1%
Free State	333	155	488	68,3%	31,7%
Gauteng	550	791	1 341	41,0%	59,0%
KwaZulu-Natal	1 728	593	2 321	74,4%	25,6%
Limpopo	1 152	275	1 427	80,8%	19,2%
Mpumalanga	723	165	888	81,4%	18,6%
Northern Cape	177	267	443	39,8%	60,2%
North West	605	100	705	85,8%	14,2%
Western Cape	935	831	1 765	52,9%	47,1%
Total provincial and municipal	**7 572**	**3 541**	**11 113**	**68,1%**	**31,9%**
National			**1 790**		
Total			**12 903**		
Percentage of total roads expenditure					
Eastern Cape	18,1%	10,3%	13,4%		
Free State	4,4%	4,4%	3,8%		
Gauteng	7,3%	22,3%	10,4%		
KwaZulu-Natal	22,8%	16,8%	18,0%		
Limpopo	15,2%	7,8%	11,1%		
Mpumalanga	9,5%	4,7%	6,9%		
Northern Cape	2,3%	7,5%	3,4%		
North West	8,0%	2,8%	5,5%		
Western Cape	12,3%	23,5%	13,7%		
Total provincial and municipal	**100,0%**	**100,0%**	**86,1%**		
National			**13,9%**		
Total			**100,0%**		

Source: National Treasury provincial and local government databases; 2006 Estimates of National Expenditure

Provincial expenditure on roads

Provincial road spending budgeted to reach R11,8 billion by 2008/09

Table 7.6 shows that provincial spending on roads grew by R2,3 billion between 2002/03 and 2005/06, and is predicted to grow by a further R4,2 billion over the next three years, reaching R11,8 billion by 2008/09. Except for Mpumalanga and Limpopo, the

other provinces show average annual growth of over 10 per cent in their roads budgets over the next three years with the Northern Cape reaching 23 per cent.

Table 7.6 Provincial and national roads infrastructure expenditure, 2002/03 – 2008/09

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
		Outcome		Preliminary outcome	Medium-term estimates		
R million							
Eastern Cape	1 315	1 431	1 283	1 369	1 482	1 795	1 917
Free State	336	292	322	333	515	926	1 230
Gauteng	559	520	594	550	650	721	915
KwaZulu-Natal	838	1 180	1 384	1 728	1 837	2 219	2 645
Limpopo	659	829	952	1 152	1 101	1 480	1 482
Mpumalanga	479	450	607	723	692	967	943
Northern Cape	128	127	186	177	226	296	331
North West	316	437	393	605	623	797	987
Western Cape	598	527	653	935	1 187	1 197	1 323
Total provincial	**5 230**	**5 792**	**6 375**	**7 572**	**8 312**	**10 398**	**11 773**
National	**1 203**	**1 293**	**1 450**	**1 790**	**2 383**	**3 149**	**3 625**
Total	**6 433**	**7 085**	**7 825**	**9 362**	**10 695**	**13 547**	**15 398**
Percentage of total provincial expenditure							
Eastern Cape	7,0%	6,6%	5,9%	5,8%	5,5%	5,9%	5,7%
Free State	4,3%	3,3%	3,3%	3,1%	4,4%	7,2%	8,7%
Gauteng	2,6%	2,2%	2,4%	2,0%	1,9%	2,0%	2,4%
KwaZulu-Natal	3,7%	4,6%	4,9%	5,2%	4,9%	5,3%	5,6%
Limpopo	4,5%	5,0%	5,1%	5,5%	4,8%	5,8%	5,2%
Mpumalanga	6,1%	5,0%	6,1%	6,2%	5,4%	6,8%	6,1%
Northern Cape	4,8%	4,1%	5,6%	4,5%	5,1%	6,1%	6,4%
North West	3,5%	4,3%	3,5%	4,6%	4,3%	5,0%	5,6%
Western Cape	5,0%	4,0%	4,5%	5,6%	6,5%	6,0%	6,1%
Total	**4,5%**	**4,4%**	**4,5%**	**4,7%**	**4,5%**	**5,2%**	**5,3%**
Percentage growth (average annual)		**2002/03 – 2005/06**		**2005/06 – 2006/07**		**2005/06 – 2008/09**	
Eastern Cape		1,4%		8,2%		11,9%	
Free State		-0,3%		54,8%		54,6%	
Gauteng		-0,6%		18,1%		18,5%	
KwaZulu-Natal		27,3%		6,3%		15,2%	
Limpopo		20,5%		-4,4%		8,8%	
Mpumalanga		14,7%		-4,3%		9,3%	
Northern Cape		11,2%		28,0%		23,3%	
North West		24,1%		3,0%		17,7%	
Western Cape		16,1%		27,0%		12,3%	
Total		**13,1%**		**9,8%**		**15,9%**	

Source: National Treasury provincial database

Roads infrastructure budgets are steady over the MTEF

Table 7.6 further shows that, relative to the total provincial budgets, roads infrastructure budgets are relatively low. In 2005/06 provincial expenditure on roads infrastructure was 4,7 per cent of total provincial expenditure. This share decreases marginally to 4,5 per cent in 2006/07 and increases to 5,2 per cent in 2007/08. In particular, Free

State's expenditure on roads as a percentage of total provincial expenditure increases to an average of 7 per cent over the MTEF.

Table 7.7 compares the spending outcome in 2005/06 against adjusted and original budgets. The figures show that provinces budgeted R7,7 billion for roads in 2005/06, an increase of 18,8 per cent from 2004/05 expenditure of R6,4 billion. Provinces spent an average of 98,3 per cent of their budgets during this period. Both Eastern Cape and Western Cape provinces marginally overspent their budgets, while Gauteng spent just 90,1 per cent. North West contributed the highest year-on-year growth of 54,1 per cent, followed by the Western Cape with 43,2 per cent and KwaZulu-Natal with 24,8 per cent. Northern Cape and Gauteng recorded negative growth rates of 5,3 per cent and 7,4 per cent respectively. The provincial roads infrastructure expenditure comprises 48,2 per cent share of the total expenditure for the provincial departments of roads and transport.

Table 7.7 Provincial roads infrastructure expenditure, 2004/05 and 2005/06

	2005/06						2004/05	
R thousand	Adjusted budget	Outcome	Actual as % of adjusted budget	Under(+)/ over(-) expen-diture	% Under(+)/ over(-) expen-diture of adjusted budget	% share of total prov expen-diture	Outcome	Year-on-year growth
Eastern Cape	1 367 390	1 368 965	100,1%	-1 575	-0,1%	61,3%	1 282 835	6,7%
Free State	359 079	332 947	92,7%	26 132	7,3%	38,9%	321 572	3,5%
Gauteng	610 612	550 201	90,1%	60 411	9,9%	24,8%	594 426	-7,4%
KwaZulu-Natal	1 728 197	1 728 183	100,0%	14	0,0%	62,4%	1 384 488	24,8%
Limpopo	1 157 273	1 152 058	99,5%	5 215	0,5%	49,3%	952 449	21,0%
Mpumalanga	731 087	722 781	98,9%	8 306	1,1%	57,2%	607 462	19,0%
Northern Cape	193 083	176 570	91,4%	16 513	8,6%	47,3%	186 457	-5,3%
North West	622 235	605 436	97,3%	16 799	2,7%	32,2%	392 977	54,1%
Western Cape	933 454	934 509	100,1%	-1 055	-0,1%	52,7%	652 699	43,2%
Total	**7 702 410**	**7 571 650**	**98,3%**	**130 760**	**1,7%**	**48,2%**	**6 375 365**	**18,8%**

Source: National Treasury provincial database

Expenditure on roads maintenance

R3,1 billion spent on roads maintenance in 2005/06 by provinces

Provinces spent almost R3,1 billion or 39 per cent of their R7,7 billion roads budget on maintenance in 2005/06. Table 7.8 shows that provincial spending on roads maintenance has increased from R2,6 billion in 2002/03 to R3,1 billion in 2005/06, and is budgeted to grow at an average annual rate of 15 per cent over the MTEF to reach R4,7 billion by 2008/09. This relatively high growth is disproportionately spread amongst the provinces. The average annual growth rate for road maintenance in Limpopo and Western Cape is less than 7 per cent over the medium term. All other provinces expect road maintenance expenditure to grow at a rate of more than 10 per cent per year over this period, with KwaZulu-Natal, Mpumalanga and North West growing more than 20 per cent per year.

Table 7.8 Provincial road maintenance expenditure, 2002/03 – 2008/09

R million	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
		Outcome		Preliminary outcome	Medium-term estimates		
Eastern Cape	525	333	379	424	540	567	603
Free State	161	164	198	192	256	269	288
Gauteng	175	138	268	362	299	364	547
KwaZulu-Natal	534	699	554	659	811	925	1 162
Limpopo	312	290	302	321	355	381	383
Mpumalanga	269	188	191	197	220	371	397
Northern Cape	69	56	86	80	89	98	121
North West	167	187	210	253	347	428	526
Western Cape	379	292	406	574	574	551	624
Total	**2 590**	**2 346**	**2 594**	**3 062**	**3 492**	**3 954**	**4 651**
Percentage growth (average annual)		**2002/03 – 2005/06**		**2005/06 – 2006/07**		**2005/06 – 2008/09**	
Eastern Cape		-6,9%		27,4%		12,4%	
Free State		6,1%		33,7%		14,5%	
Gauteng		27,4%		-17,5%		14,7%	
KwaZulu-Natal		7,3%		23,1%		20,8%	
Limpopo		1,0%		10,6%		6,1%	
Mpumalanga		-9,9%		12,0%		26,4%	
Northern Cape		5,1%		11,7%		15,1%	
North West		14,8%		37,1%		27,6%	
Western Cape		14,9%		-0,0%		2,8%	
Total		**5,7%**		**14,1%**		**15,0%**	

Source: National Treasury provincial database

Capital expenditure on roads

Provinces spent 61 per cent (or R4,7 billion) of their total roads budget in 2005/06 on capital – construction of new roads, upgrading and rehabilitation of surfaced roads. During this period, the Eastern Cape, KwaZulu-Natal, and Western Cape accelerated their actual expenditure as a percentage of the adjusted budget as indicated in table 7.7.

R4,7 billion spent on capital – construction of new roads, upgrading and rehabilitation in 2005/06 by provinces

Service delivery trends

Table 7.9 shows that in 2005/06, 890 km of surfaced provincial roads were upgraded and 839 km of surfaced roads were rehabilitated. The extent of upgrading and rehabilitation varies from 11 km in Gauteng to 606 km in Limpopo. The information from Mpumalanga is not provided and Free State and Gauteng only provided information on surfaced roads upgraded.

In 2005/06 provinces upgraded 890 km and rehabilitated 839 km of surfaced roads

Table 7.9 Provincial roads construction outputs, 2005/06

	Number of kilometres surfaced roads upgraded	Number of kilometres surfaced roads rehabilitated	Total number of kilometres	Total capital budget (R million)
Eastern Cape	389	68	**457**	267
Free State	39	–	**39**	129
Gauteng	11	–	**11**	190
KwaZulu-Natal	93	77	**170**	679
Limpopo	115	491	**606**	650
Mpumalanga	–	–	**–**	401
Northern Cape	55	44	**99**	107
North West	175	126	**301**	176
Western Cape	13	33	**46**	204
Total	**890**	**839**	**1 729**	**2 804**
Percentage of total				
Eastern Cape	43,7%	8,1%	**26,4%**	9,5%
Free State	4,4%	–	**2,3%**	4,6%
Gauteng	1,2%	–	**0,6%**	6,8%
KwaZulu-Natal	10,4%	9,2%	**9,8%**	24,2%
Limpopo	12,9%	58,5%	**35,0%**	23,2%
Mpumalanga	–	–	**–**	14,3%
Northern Cape	6,2%	5,2%	**5,7%**	3,8%
North West	19,7%	15,0%	**17,4%**	6,3%
Western Cape	1,5%	3,9%	**2,7%**	7,3%
Total	**100,0%**	**100,0%**	**100,0%**	**100,0%**

Source: National Department of Transport

In 2005/06 provinces resealed 2 218 km of surfaced roads, re-gravelled 2 975 km and undertook routine maintenance on 189 138 km of all roads

Table 7.10 shows that in 2005/06, provinces resealed 2 218 km of surfaced roads, re-gravelled 2 975 km and undertook routine maintenance on 189 138 km of all categories of roads. Western Cape resealed over 30 per cent (682 km) of the total and KwaZulu-Natal resealed 29,3 per cent (650 km) of the total. With regards to re-gravelling of roads, KwaZulu-Natal re-gravelled 30,9 per cent (920 km) of the total, Western Cape re-gravelled 29,4 per cent (876 km) of the total.

Extended Public Works Programme

R15 billion over the next five year is targeted for EPWP

A total of R15 billion over the next five years is targeted for the EPWP through the provincial and municipal conditional grants for infrastructure. With such funding commitments, the roads sub-sector needs to have sufficient capacity to deliver.

Provinces step up EPWP projects

Pilot projects have been put in place, such as Zibambele in KwaZulu-Natal, Gundo Lashu in Limpopo and Siyakha in Gauteng. These have been successful, and will be replicated and extended in partnership with the Department of Public Works, to strengthen the expanded public works programme.

Table 7.10 Kilometres of roads maintained, 2005/06

Number of kilometres	Resealed tarred roads	Re-gravel roads	Routine maintenance on all roads	Total
Eastern Cape	60	586	43 490	**44 136**
Free State	58	214	28 416	**28 688**
Gauteng	120	115	4 927	**5 162**
KwaZulu-Natal	650	920	27 950	**29 520**
Limpopo	–	135	115	**250**
Mpumalanga	131	31	15 909	**16 071**
Northern Cape	129	–	5 633	**5 762**
North West	388	98	23 698	**24 184**
Western Cape	682	876	39 000	**40 558**
Total	**2 218**	**2 975**	**189 138**	**194 331**
Percentage of total				
Eastern Cape	2,7%	19,7%	23,0%	**22,7%**
Free State	2,6%	7,2%	15,0%	**14,8%**
Gauteng	5,4%	3,9%	2,6%	**2,7%**
KwaZulu-Natal	29,3%	30,9%	14,8%	**15,2%**
Limpopo	–	4,5%	0,1%	**0,1%**
Mpumalanga	5,9%	1,0%	8,4%	**8,3%**
Northern Cape	5,8%	–	3,0%	**3,0%**
North West	17,5%	3,3%	12,5%	**12,4%**
Western Cape	30,7%	29,4%	20,6%	**20,9%**
Total	**100,0%**	**100,0%**	**100,0%**	**100,0%**

Source: National Department of Transport

Table 7.11 shows that a total of 47 530 jobs were created through the EPWP in 2005/06. KwaZulu-Natal reported 30 647 jobs created, followed by North West with 6 325, and Western Cape with 4 004.

Table 7.11 Roads infrastructure - maintenance, 2005/06

	Kilometres resealed tarred roads	Kilometres re-gravel roads	Kilometres routine maintenance on all roads	EPWP Employment - jobs created
Eastern Cape	60	586	30 826	1 242
Free State	16	69	26 722	764
Gauteng	120	6	64	1 329
KwaZulu-Natal	72	868	11 084	30 647
Limpopo	111	7 750	63 392	619
Mpumalanga	–	–	–	–
Northern Cape	90	–	1 681	2 600
North West	80	49	46 170	6 325
Western Cape	548	581	34 000	4 004
Total	**1 097**	**9 909**	**213 939**	**47 530**

Source: National Department of Transport

Road traffic management and safety

The Department of Transport is responsible for coordinating and harmonising traffic control (law enforcement) in South Africa. This is done in conjunction with provinces, which have legislative and executive powers.

The Road Traffic Management Corporation is now in operation since September 2005

Particular attention has been given to setting up the Road Traffic Management Corporation (RTMC) which began operating in September 2005. The RTMC is responsible for traffic co-ordination, the national traffic information system (NaTIS), traffic information, and traffic training and education. The aim is to enhance traffic quality, promote voluntary compliance by road users, reduce the incidence of traffic offences, prevent accidents, ensure effective adjudication and implement improved management.

Expenditure trends in traffic management

Table 7.12 shows that 98 per cent of the total aggregate spending on road traffic management and safety in 2005/06 was at provincial level.

Table 7.12 Provincial road traffic management and safety expenditure, 2002/03 – 2008/09

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
		Outcome		Preliminary outcome	Medium-term estimates		
R thousand							
Eastern Cape	79 962	77 050	98 106	113 346	120 492	134 403	148 766
Free State	92 240	102 493	114 564	129 523	130 627	137 157	146 638
Gauteng	144 922	197 709	182 788	167 126	188 576	228 460	180 072
KwaZulu-Natal	197 682	231 134	265 894	370 433	389 149	422 427	408 125
Limpopo	107 753	114 425	131 802	132 961	145 280	156 700	164 750
Mpumalanga	55 957	74 551	104 693	107 072	122 894	132 489	142 113
Northern Cape	22 398	27 919	31 340	30 060	34 235	34 276	36 129
North West	170 130	198 149	224 839	281 257	294 508	321 754	346 846
Western Cape	136 240	158 034	191 098	193 425	202 944	197 480	210 383
Total provincial	**1 007 284**	**1 181 464**	**1 345 124**	**1 525 203**	**1 628 705**	**1 765 146**	**1 783 822**
National	**32 954**	**19 042**	**56 316**	**32 380**	**35 423**	**388 830**	**43 223**
Total	**1 040 238**	**1 200 506**	**1 401 440**	**1 557 583**	**1 664 128**	**2 153 976**	**1 827 045**
Percentage of total provincial road traffic management and safety expenditure							
Eastern Cape	7,9%	6,5%	7,3%	7,4%	7,4%	7,6%	8,3%
Free State	9,2%	8,7%	8,5%	8,5%	8,0%	7,8%	8,2%
Gauteng	14,4%	16,7%	13,6%	11,0%	11,6%	12,9%	10,1%
KwaZulu-Natal	19,6%	19,6%	19,8%	24,3%	23,9%	23,9%	22,9%
Limpopo	10,7%	9,7%	9,8%	8,7%	8,9%	8,9%	9,2%
Mpumalanga	5,6%	6,3%	7,8%	7,0%	7,5%	7,5%	8,0%
Northern Cape	2,2%	2,4%	2,3%	2,0%	2,1%	1,9%	2,0%
North West	16,9%	16,8%	16,7%	18,4%	18,1%	18,2%	19,4%
Western Cape	13,5%	13,4%	14,2%	12,7%	12,5%	11,2%	11,8%
Total	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**

Source: National Treasury provincial database; National Department of Transport

Total provincial spending grew at an average annual rate of 18,3 per cent from 2002/03 to 2005/06, and is budgeted to grow at an average annual rate of 14 per cent over the next three years reaching R1,8 billion by 2008/09. This is in line with government's commitment to enforce compliance with traffic regulation and safety standards. Historically, KwaZulu-Natal recorded the highest accident rates. In an effort to improve this record, KwaZulu-Natal has the highest spending on traffic management and safety. Its share in traffic management and safety grew from 19,6 per cent in 2002/03 to 24,3 per cent in 2005/06.

Provincial expenditure on road traffic management and safety grew at a rate of 18,3 per cent per year from 2002/03 to 2005/06

Service delivery trends

Road accidents

The country's high road accident and fatality rates make traffic management and safety a major challenge. It is estimated that the cost of road-traffic accidents is about R13 billion a year. The RTMC, found that 90 per cent of accidents in South Africa in 2005 were the result of lawlessness - in other words, were foreseeable and preventable, hence not strictly "accidents" at all.

An estimated cost of road-traffic accidents is about R13 billion a year

Most accidents on South Africa's roads are multivariate, with one or more of the following factors being contributory causes:

- *Human factors* - such as non-adherence to traffic rules, and aggressive, reckless, negligent or inconsiderate driver behaviour. These were the major contributing factors, playing a causal role in 70-80 per cent of all accidents. Included was driving too fast for the circumstances, as well as driving under the influence of alcohol.
- *Vehicle factors* - such as poor lights, smooth or damaged tyres, and poor brakes contributed to a further 10-15 per cent of accidents.
- *Poor road conditions* - which have drawn much media attention lately, only contributed to 5-10 per cent of accidents.

It deserves to be noted that the second group of factors relates to the roadworthiness of vehicles – in short, criminal negligence on the part of the vehicle owner. An important facet of the Department of Transport's work is the development of a standardised management system for traffic control at micro-levels. About 100 provincial and local traffic authorities have implemented the traffic-management model.

Provincial and local traffic authorities have implemented the traffic-management model

Overload control

Improved law enforcement, especially with regard to overloading, is essential to reducing material damage to the road network and minimising the risk of accidents. South Africa relies on road transportation to convey about 80 per cent of its freight, and its current limit of gross vehicle mass is 56 tons. This is significantly higher than the limit for gross vehicle masses around the world. As a result, overload control has been identified as one of the key focus areas of the road safety strategy.

About 80 per cent of freight is transported on the road network

An estimated cost of overloading is about R650 million a year

Overloading is estimated to be costing the country over R600 million a year in damage to roads. For example, on the N3 route between Durban and Gauteng, up to 2 000 daily movements by large rigs is commonplace, and the great majority are interlink combinations carrying maximum loads.

Table 7.13 shows that over one million heavy vehicles were weighed on 97 weighbridges along national and provincial roads in 2005/06. Most of the monitoring took place along the major routes in Gauteng, KwaZulu-Natal, Western Cape, Mpumalanga and Limpopo. Some of the routes are cross-border routes. At most weighbridges, almost 6 per cent of the trucks weighed were overloaded.

Table 7.13 Effectiveness of overload control per province[1], 2005/06

	Number of heavy vehicles[2]	Number of weigh bridges	Number of vehicles weighed	Number of vehicles overloaded between 0 to 5%	Number of vehicles overloaded above 5% grace	Number of penalties issued[3]
Eastern Cape	19 710	3	1 395	897	474	474
Free State	16 649	3	91 312	11 221	2 623	2 623
Gauteng	93 471	20	109 798	30 319	4 482	4 482
KwaZulu-Natal	40 905	14	186 432	40 843	9 062	9 062
Limpopo	14 641	17	147 332	20 552	19 237	19 237
Mpumalanga	19 957	19	202 461	66 536	11 550	11 550
Northern Cape	6 930	4	13 824	208	584	584
North West	15 042	8	24 970	9 067	2 308	2 308
Western Cape	32 346	9	316 331	65 126	14 042	14 042
Total	**259 651**	**97**	**1 093 855**	**244 769**	**64 362**	**64 362**

1. *Numbers based on latest available data supplied by provinces and the national Department of Transport for the National Overload Control Website.*
2. *Number of heavy vehicle trucks supplied by RTMC.*
3. *Penalties are issued for vehicles, which are overloaded beyond the 5% grace. This grace has been reduced to 2% with effect from June 2006.*

Source: National Department of Transport

An improvement in the level of control of heavy vehicle overloading in South Africa could result in significant benefits, including reducing the deterioration rate of the road network and improving road safety.

Law enforcement

R2,5 billion has been committed to increase law-enforcement capacity relating to public transport

Over the MTEF period, R2,5 billion has been committed to increase law-enforcement capacity relating to public transport. The law-enforcement strategy includes strengthening the capacity of existing public transport law enforcement units in the various provinces in 2006, and establishing such units where necessary.

Personnel

Plans to increase the number of visible traffic officers

The biggest factor in road accidents is that there are insufficient trained and visible traffic officials. Statistics show that after drivers see a traffic officer, their behaviour on the road improves for 17 to 19 minutes. Accordingly, government has embarked on a drive to increase the number of visible traffic officers.

In the nine provincial departments, approximately 50 per cent of professional engineering posts are vacant. Many of those that are filled are actually filled by technicians. The shortage is strongly felt in local municipalities.

Approximately 50 per cent of the professional engineering posts are vacant

- Of the 231 local municipalities, 79 have no civil or transport engineers, technologists or technicians and 42 have only one civil or transport technician;
- Of the 47 district municipalities, 4 have only one civil or transport technician.

Table 7.14 shows that Gauteng has the highest number of traffic personnel. This is because there are three metros in the province. Gauteng is followed by the Western Cape and Mpumalanga, with the Northern Cape accounting for the lowest number of personnel.

Table 7.14 Provincial and Local Government traffic personnel, 2005/06

	Local authority	Metros	Provinces	Total	Kilometres patrolled per traffic officer	Traffic officer per 10 000 vehicles
Eastern Cape	360	–	272	**632**	133,9	13,6
Free State	188	–	357	**545**	151,9	14,2
Gauteng	254	2 314	430	**2 998**	4,5	11,8
KwaZulu-Natal	241	–	466	**707**	81,2	23,7
Limpopo	280	–	402	**682**	59,6	17,5
Mpumalanga	123	1 198	422	**1 743**	54,2	18,4
Northern Cape	77	–	60	**137**	483,9	10,0
North West	49	–	468	**517**	108,0	13,8
Western Cape	150	1 248	414	**1 812**	24,2	15,8
Total/Average	**1 722**	**4 760**	**3 291**	**9 773**	**1 101,4**	**15,4**

Source: National Department of Transport

Public transport system

The current public transport system carries 39,7 per cent of people to work each day, of whom 85 per cent are in metropolitan and urban areas. Commuters using private transport account for 60,3 per cent, while 15 per cent of people use non-motorised transport (mostly walk). Public transport usage is high in Gauteng and KwaZulu-Natal where more than half of transport users use public services to travel to work.

Public transport system carries 39,7 per cent of passengers to work every day

Public transport expenditure

Table 7.15 shows that provincial public transport expenditure increased from R684,7 million in 2002/03 to R1,15 billion in 2005/06 and is budgeted to grow by an average annual rate of 14,9 per cent over the medium term to reach R1,6 billion in 2008/09. In 2005/06 North West spent the greatest proportion of provincial transport spending, at 38,3 per cent, and Northern Cape the lowest proportion, at 0,8 per cent. The lower spending on public transport in the Northern Cape reflects its smaller population. Following the North West, Limpopo is budgeting to spend substantially more on public

Public transport expenditure increased from R684,7 million in 2002/03 to R1,15 billion in 2005/06

transport over the MTEF; the budget is projected to grow sharply from R242 million in 2005/06 to R410 million in 2008/09.

Table 7.15 Provincial public transport expenditure, 2002/03 – 2008/09

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
		Outcome		Preliminary outcome	Medium-term estimates		
R thousand							
Eastern Cape	80 722	135 657	109 710	129 181	170 961	186 442	207 624
Free State	9 596	16 028	13 067	20 951	19 927	20 923	22 370
Gauteng	38 427	51 994	57 250	67 397	74 411	77 518	77 560
KwaZulu-Natal	27 152	31 884	30 967	34 097	36 389	37 788	43 478
Limpopo	114 115	114 088	185 850	241 772	314 235	385 414	410 086
Mpumalanga	13 685	14 042	15 667	15 755	28 517	30 593	32 174
Northern Cape	8 319	5 905	7 758	9 708	14 638	16 060	17 777
North West	346 677	316 669	355 013	439 559	448 929	496 872	539 184
Western Cape	45 999	115 328	60 377	189 019	208 088	223 652	256 892
Total	**684 692**	**801 595**	**835 659**	**1 147 439**	**1 316 095**	**1 475 262**	**1 607 145**
Percentage of total public transport expenditure							
Eastern Cape	11,8%	16,9%	13,1%	11,3%	13,0%	12,6%	12,9%
Free State	1,4%	2,0%	1,6%	1,8%	1,5%	1,4%	1,4%
Gauteng	5,6%	6,5%	6,9%	5,9%	5,7%	5,3%	4,8%
KwaZulu-Natal	4,0%	4,0%	3,7%	3,0%	2,8%	2,6%	2,7%
Limpopo	16,7%	14,2%	22,2%	21,1%	23,9%	26,1%	25,5%
Mpumalanga	2,0%	1,8%	1,9%	1,4%	2,2%	2,1%	2,0%
Northern Cape	1,2%	0,7%	0,9%	0,8%	1,1%	1,1%	1,1%
North West	50,6%	39,5%	42,5%	38,3%	34,1%	33,7%	33,5%
Western Cape	6,7%	14,4%	7,2%	16,5%	15,8%	15,2%	16,0%
Total	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**

Source: National Treasury provincial database

Bus subsidies

Both national and provincial budgets provide for spending on public transport. The national Department of Transport continues to administer subsidies for buses, using provinces as implementing agencies. In addition to the national bus subsidy scheme, provinces subsidise public transport from their own budgets.

Bus subsidies grew at an average annual rate of 7,6 per cent from R1,8 billion in 2002/03 to R2,3 billion in 2005/06

Almost all public transport expenditure goes towards bus subsidies. Table 7.16 shows that bus subsidies increased at an average annual rate of 7,6 per cent, from R1,8 billion in 2002/03 to R2,3 billion in 2005/06, increasing further to R2,8 billion in 2008/09.

The policy challenge in administering the public transport subsidy system is to enhance equity, efficiency and better targeting since Gauteng, KwaZulu-Natal and Western Cape are the biggest spenders in this regard, mainly in the metro's.

Table 7.16 National bus subsidies expenditure to provinces, 2002/03 – 2008/09

R million	2002/03	2003/04 Outcome	2004/05	2005/06 Preliminary outcome	2006/07 Medium-term estimates	2007/08	2008/09	Average annual growth 2002/03– 2008/09
Eastern Cape	61	78	84	90	95	99	109	10,2%
Free State	80	111	117	90	94	99	109	5,2%
Gauteng	811	749	789	846	889	934	1 027	4,0%
KwaZulu-Natal	341	448	452	482	507	532	585	9,4%
Limpopo	64	80	95	102	107	113	124	11,6%
Mpumalanga	164	200	211	229	241	253	278	9,2%
Northern Cape	12	14	15	14	15	16	17	7,1%
North West	20	37	30	34	36	38	41	13,1%
Western Cape	295	353	380	411	432	453	498	9,1%
Total	**1 847**	**2 069**	**2 173**	**2 298**	**2 415**	**2 536**	**2 790**	**7,1%**
Percentage of total bus subsidies								
Eastern Cape	3,3%	3,8%	3,9%	3,9%	3,9%	3,9%	3,9%	
Free State	4,3%	5,3%	5,4%	3,9%	3,9%	3,9%	3,9%	
Gauteng	43,9%	36,2%	36,3%	36,8%	36,8%	36,8%	36,8%	
KwaZulu-Natal	18,4%	21,6%	20,8%	21,0%	21,0%	21,0%	21,0%	
Limpopo	3,5%	3,8%	4,4%	4,4%	4,4%	4,4%	4,4%	
Mpumalanga	8,9%	9,7%	9,7%	10,0%	10,0%	10,0%	10,0%	
Northern Cape	0,6%	0,7%	0,7%	0,6%	0,6%	0,6%	0,6%	
North West	1,1%	1,8%	1,4%	1,5%	1,5%	1,5%	1,5%	
Western Cape	16,0%	17,1%	17,5%	17,9%	17,9%	17,9%	17,9%	
Total	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	
Percentage growth (average annual)		**2002/03 – 2005/06**		**2005/06 – 2006/07**		**2005/06 – 2008/09**		
Eastern Cape		13,8%		5,1%		6,7%		
Free State		3,7%		5,1%		6,7%		
Gauteng		1,4%		5,1%		6,7%		
KwaZulu-Natal		12,3%		5,1%		6,7%		
Limpopo		16,8%		5,1%		6,7%		
Mpumalanga		11,8%		5,1%		6,7%		
Northern Cape		7,5%		5,1%		6,7%		
North West		19,9%		5,1%		6,7%		
Western Cape		11,6%		5,1%		6,7%		
Total		**7,6%**		**5,1%**		**6,7%**		

Source: National Department of Transport

Service delivery trends

Metro Rail

Passenger rail transport is facing many challenges particularly problems with maintenance and provision of new infrastructure and security. The Department of Transport has begun an initiative to increase the number of special rail police from 400 to 5 000 by the end of 2008 to address security concerns.

Passenger rail transports is still facing challenges of maintenance and new infrastructure

The revision of the public transport subsidy system will underpin the merger of Metrorail, Shosholoza Meyl and the SARCC. The Department of Transport will be responsible for this merged entity.

Taxi Recapitalisation Programme

A new taxi fleet of 18-seater and 35-seater vehicles which will be locally built will replace the current ageing taxi fleet

Minibus taxis as an informal transport system comprises 67,9 per cent of the 2,5 billion annual passenger trips in urban areas, as well as a high percentage of rural and inter-city transport. This highlights the important role that a well-managed minibus taxi system can play as the core focus of public transportation. The Taxi Recapitalisation Programme is set to replace the current ageing minibus taxi fleet with new, safer, purpose-built 18-seater and 35-seater vehicles which will be locally built. This will be done by issuing operating licences to taxi operators who have converted their radius permits.

Government hopes to remove 10 000 un-roadworthy mini-bus taxis from the country's roads by December 2006

By December 2006 government hopes to have removed 10 000 un-roadworthy mini-bus taxis from the country's roads. A target has been set for 80 per cent of public transport in the country to be compliant with set safety requirements by 2009. The compulsory safety requirements published in 2005 are now yielding results as vehicle manufacturers begin to respond towards satisfying them.

New, safety requirement-compliant taxis are now available, starting from about R140 000, excluding the R50 000 scrapping allowance.

2010 FIFA World Cup preparations

A conditional grant was introduced in 2005/06 to fund urgent public transport infrastructure projects for host cities

To facilitate transport preparations for 2010, provinces and host cities prepared priority statements defining their transport infrastructure requirements for 2010 and beyond. A new conditional grant was introduced in 2005/06 to fund, initially, some of the more urgent public transport infrastructure projects for host cities. The Public Transport Infrastructure grant will fund infrastructure investments of R3,5 billion in all municipalities over the medium term. The Department of Transport will consolidate all the 2010 transport plans into one national transport action agenda which should lead to the overall modernisation of our public transport system.

Conclusion

The principal objective of Government is to ensure that the transport system is integrated, safe, reliable and cost-effective

Government recognises that good transport is essential for competing in the modern global economy. As such, transport infrastructure is quintessential for limiting transaction costs, thereby enabling efficient production processes to occur in any modern economy. The principal objective of government is to ensure that the transport system is integrated, safe, reliable and cost-effective. Budgetary allocations and spending over the MTEF are geared towards facilitating access to, and affordability of, public transport to the commuting public; planning, developing and maintaining transport infrastructure to improve mobility and quality of life; and to contribute to economic development and promoting sector and enterprise reforms in order to create a safe, reliable and competitive transport system.