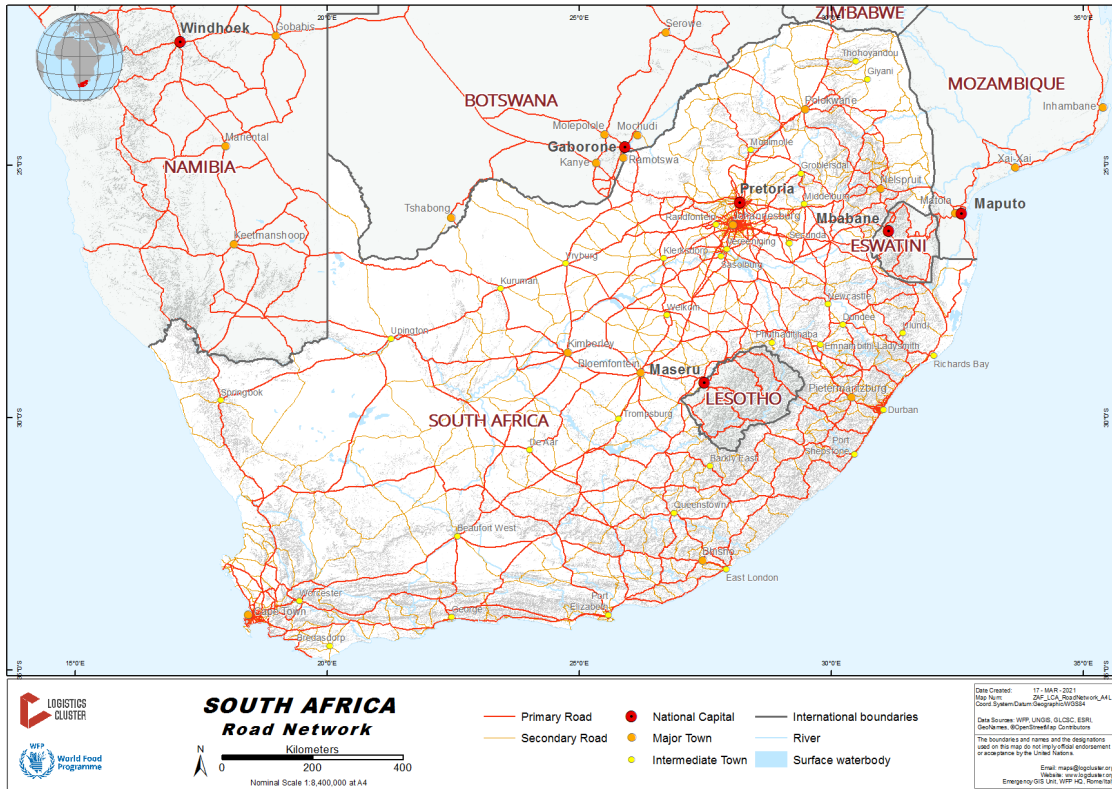


2.3 South Africa Road Network

- Distance Matrix
- Road Security
- Weighbridges and Axle Load Limits



National routes in South Africa are a class of trunk roads and freeways which connect major cities. They form the highest category in the South African route numbering scheme, and are designated with route numbers beginning with "N", from N1 to N18. Most segments of the national route network are officially proclaimed National Roads that are maintained by the South African National Roads Agency (SANRAL), but some segments are maintained by provincial or local road authorities.

South Africa has a road network of 750 000km's, the tenth longest network in the world. SANRAL is currently managing about 21,403 kms, of which 84 percent are non-tolled and only 16 percent are tolled. Provinces manage about 47,348 km's whereas 51,682km's is managed by municipalities.

Authority	Paved	Gravel	Total
Sanral	21 403	0	21 403
Provinces - 9	47 348	226 273	273 621
Metros - 8	51 682	14 461	66 143
Municipalities	37 691	219 223	256 914
Total	158 124	459 957	618 081
Un-Proclaimed (Estimate)		131 919	131 919
Estimated Total	158 124	591 876	750 000

* rounded estimate

Source : <https://www.transport.gov.za/roads>

In comparison with the rest of the world, South Africa has the 10th Longest Total (750,000 Road Length) and 18th Longest Paved Road Network. Roads representing one of the largest public infrastructure investments it is notable that South Africa's road replacement cost is R2 trillion.

Currently, road is unavoidably the default freight transport mode, absorbing whatever traffic cannot be accommodated in other modes. The road industry is an extremely competitive one, where the need to maximise loads will pose a continuous threat of overloading vehicles between safe operating capacity (of both the vehicle and road conditions). About 60% of the damage to roads is attributed to overloaded heavy vehicles, overloading is estimated to cost the country over R600 million a year in damage to roads.

Through the S'hamba Sonke ("walking together") Programme, a labour-intensive road maintenance programme with projects run by the provinces to upgrade and repair roads in rural areas, 1100 kms of surfaced road were rehabilitated, 3000 km's of surfaced roads sealed, 3926 km's of roads graveled, more than 1.4 million squares meters of potholes patched, 147 00 km's of roads bladed and 30 billion rand to create over 23 500 fulltime equivalent jobs in the 2014/15 financial year spent.

The traffic looks set to continue growing - much of it on roads that are already operating at close to capacity during busy periods. Furthermore the spatial design of South Africa's cities and major towns also contributes to congestion due to most central segments being reserved for business activities only, with residential zones mapped out in consecutively circular layout planning around these business centres resulting in predominately one way traffic.

For more information on government contact details, please see the following link: [4.1 Government Contact List](#).

Distance Matrix

Distances from Capital City to Major Towns (km)								
	Pretoria	Johannesburg	Bloemfontein	Polokwane	Durban	Port Elizabeth	East London	Cape Town
Pretoria		68.8	467.7	259.3	624.2	1115.3	1034	1467.7
Johannesburg	68.8		396.9	317	567.6	1044.5	963.2	1396.9
Bloemfontein	467.7	396.9		718.5	634.8	652.4	569.4	1004.8
Polokwane	259.3	317	718.5		876.9	1361.6	1280.3	1714
Durban	624.2	567.6	634.8	876.9		909.5	650.5	1634.6
Port Elizabeth	1115.3	1044.5	652.4	1361.6	909.5		283.8	749.4
East London	1034	963.2	569.4	1280.3	650.5	283.8		1028.3
Cape Town	1467.7	1396.9	1004.8	1714	1634.6	749.4	1028.3	

Travel Time from Capital City to Major Towns (times indicated in hours)								
	Pretoria	Johannesburg	Bloemfontein	Polokwane	Durban	Port Elizabeth	East London	Cape Town
Pretoria		0:50	4:56	2:52	6:48	11:29	11:08	15:11
Johannesburg	0:50		3:54	3:44	6:19	10:37	10:20	14:04
Bloemfontein	4:56	3:54		7:23	7:06	7:01	6:27	10:38
Polokwane	2:52	3:44	7:23		9:13	13:54	13:28	17:11
Durban	6:48	6:19	7:06	9:13		10:52	8:17	16:44
Port Elizabeth	11:29	10:37	07:01	13:54	10:52		2:59	8:22
East London	11:08	10:20	6:27	13:28	8:17	2:59		10:56
Cape Town	15:11	14:04	10:38	17:11	16:44	8:22	10:56	

Road Security

Roads in South Africa are well maintained and easy to navigate, road surfaces are generally well maintained and lit in and around urban areas, regular patrols by traffic police are also common in this setting. Further out of urban areas on secondary roads there is a greater prevalence of potholed roads and unlit areas which may pose a risk to travelers at night, traffic or other law enforcement presence will also be lessen in outlying areas. Propensity for incidences of roadside crime is exacerbated under such conditions.

During times of increased traffic and congestion (peak hours and festive seasons), a risk of opportunistic crimes may be present, such as smash-and-grab (the breaking of vehicle windows and stealing of valuable contents a vehicle or demands for money and valuables of travelers) as well as hijackings / carjacking (the theft of an automobile from its driver by force or intimidation, often with the use of a firearm).

Weighbridges and Axle Load Limits

Weighbridges are available for and via various industries (eg. Manufacturing, Agriculture, Warehousing and Freight depot operators, etc.) in South Africa, being either privately owned or at state, local authority and state owned companies (SOCs) installations. Weighbridges in South Africa are required by law, as prescribed by the National Regulator for Compulsory Specifications (NRCS) - a specialised agency under the Department of Trade and Industry, to be calibrated and so certified every 2 years, however most large corporations and SOC (ie. Transnet National Ports Authority) maintain a 6 month to 1 year recalibration cycle with accredited SANAS (South African National Accreditation System, which operates under the “Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act” – Act 19 of 2006) laboratories. Traffic authorities may divert trucks to accredited weighbridges on suspicion of overloading for weigh verification.

Axle Load Limits	South Africa
Truck with 2 Axles	18,000 kgs
Truck with 3 Axles	24,000 kgs
Truck with 4 Axles	TBA
Semi-trailer with 3 Axles	TBA
Semi-trailer with 4 Axles	TBA
Semi-trailer with 5 Axles	TBA
Semi-trailer with 6 Axles	TBA
Truck & Drawbar Trailer with 4 Axles	TBA
Truck & Drawbar Trailer with 5 Axles	TBA
Truck & Drawbar Trailer with 6 Axles	TBA
Truck & Drawbar Trailer with 7 Axles	TBA