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DEPUTY MINISTER OF TRANSPORT

TOPIC:

BRIEFING ON THE STATE OF ROADS IN SOUTH AFRICA

DATE:

9 JUNE 2023

OVERVIEW

- Management of Roads**
- State of Roads in RSA**
- Interventions**
- Recommendations**



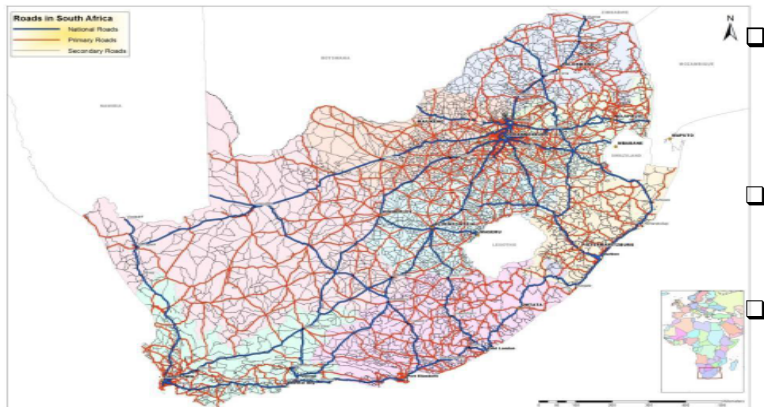
Management of Roads - Factsheet

- ❑ National Department coordinates overall performance in the Sector
- ❑ Administration Roles and Responsibilities
 - 288 Road Authorities;
 - Maintenance responsibility changes along the same road as you drive;
 - Road Administration is a Exclusive Constitutional Responsibility.
- ❑ Budget Allocation and Prioritisation
 - National Departments oversees the distribution of National Grants allocations and enforces the DORA conditions;
 - The conditions have to be adhered to and monitored by the Department.
- ❑ Project Selection, Prioritisation and Intervention
 - Road Authorities have to use the agreed upon methodology;
 - Road Authorities uses road asset management system.
- ❑ Other Considerations
 - Most roads have reached end of design life;
 - Exponential increase in Traffic volumes, especially freight, which cannot be diverted to the rail system (short term);
 - Road authorities must respond to this reality by (a) scheduled preventative maintenance, (b) strengthening pavements (c) lane capacity enhancements, (d) build new or upgrade existing interchanges, etc.



State of the Roads in RSA

Fact Sheet



750 000 km = **11th longest** and 159 272 km = **19th longest paved network** in the world.
The estimated replacement cost > R2 trillion;

To maintain such an extensive network means significant budgets are required;

Roads account for **88% of all Freight** and **98% of Person Trips**;

The **National Network** (23 398 km) carries 39% of all vehicle kilometres and **70% of long distance freight**;

Estimated that 131 919 km are Unproclaimed roads = Public roads not formally gazetted by any authority;

79% of the road network are **gravel roads** (61% proclaimed + **18% Unproclaimed**)

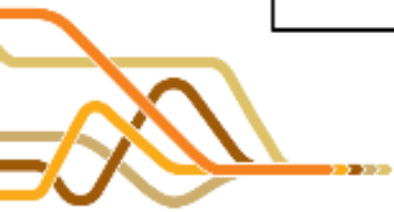
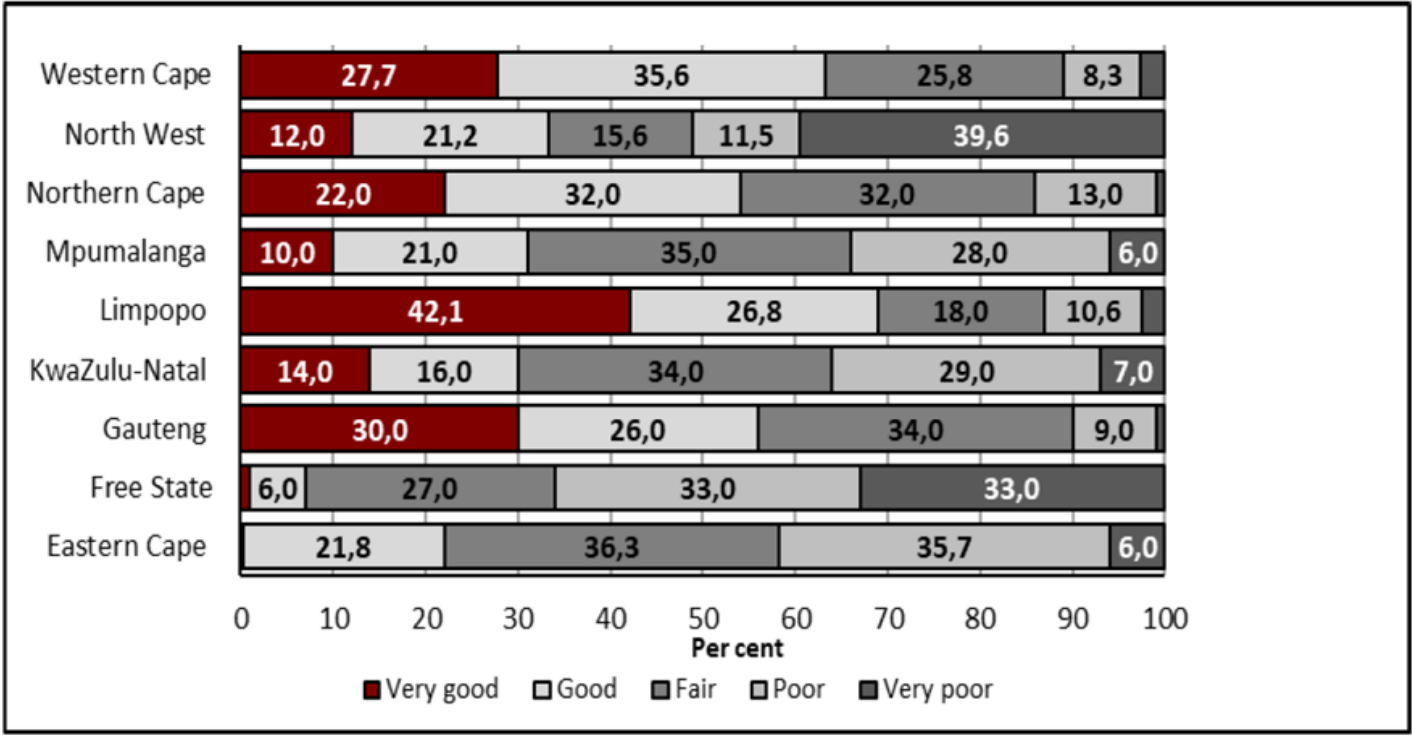
Up to **40% -50%** are in a **poor to very poor** condition at some Road Authorities

State of the Roads in RSA

Authority	Total Network	Visual Condition Data (km)								
		Very Poor (km)	Poor (km)	Fair (km)	Good (km)	Very Good (km)	Total km with Data	% Network With Data	Length Very Poor & Poor	% Very Poor & Poor
SANRAL - Paved	19 704	148	2 091	7 941	6 688	2 837	19 705	100	2239	11.36%
Provinces - Paved	49 047	4 104	11 196	14 783	11 592	6 463	48 139	98.15	15301	31.20%
Metros - Paved	51 682	421	1 256	6 707	20 104	12 250	40 737	78.82	2127	4.12%
Municipalities - Paved	37 691	121	272	1 579	5 271	3 623	10 866	28.83	1363	3.62%
Provinces - Gravel	143 338	37 394	56 737	34 993	9 331	1 886	140 340	97.91	94130	65.67%
Metros - Gravel	14 461	25	140	55	1 722	3	1 945	13.45	1227	8.48%
Municipalities - Gravel	302 158	123	485	849	557	117	2 131	0.71	86245	28.54%
Totals km	618 081	42 336	72 177	66 906	55 266	27 179	263 863			
Totals %		16.04	27.35	25.36	20.94	10.30	100	42.69%	202632	32.78%

- Despite a R106 billion Intervention through the PRMG
- No significant improvement in the state of road condition

State of the Roads in RSA



SOUTH AFRICAN ROAD MAINTENANCE BACKLOG

Authority	Paved			Gravel			Total	
	%	Length	Cost	%	Length	Cost	Length	Cost
SANRAL	11.36%	2 239	R 19 027 022 000	0.00%	0	R 0	2 239	R 19 027 022 000
Provinces - 9	22.26%	15 301	R 130 027 898 000	65.67%	94 131	R 18 826 140 000	109 432	R 148 854 038 000
Metros - 8	4.16%	1 658	R 8 290 000 000	8.48%	1 227	R 245 315 473	2 885	R 8 535 315 473
Municipalities	3.62%	1 363	R 4 089 000 000	28.54%	86 245	R 17 249 009 106	87 608	R 21 338 009 106
Total Backlog		20 561	R 161 433 920 000		181 602	R 36 320 464 579	202 163	R 197 754 384 579

South Africa's road infrastructure backlog was at R 197 Billion as per the 2013 data and is expected to have increased to over R 200 billion.

ESTIMATED BUDGET REQUIREMENT PER YEAR

Estimated Budget Requirement per Year					2014/15	
Authority	Total Network	Maintenance Budget Per Year for 5 Years			Allocation	%
		Sustain	Backlogs	Total		
SANRAL	21 403	R 12 189 580 000	R 12 877 984 000	R 25 067 564 000	R 11 916 947 000	47.54%
Provinces - 9	190 693	R 21 593 816 160	R 9 593 104 320	R 31 186 920 480	R 20 087 355 000	64.41%
Metros - 8	61 436	R 13 270 782 971	R 343 788 528	R 13 614 571 499	R 12 011 961 000	36.54%
Municipalities	344 556	R 18 779 265 100	R 480 374 700	R 19 259 639 800		
Totals km	618 088	R 65 833 444 231	R 23 295 251 548	R 89 128 695 779	R 44 016 263 000	49.39%

As indicated on the table above the budget allocated does not meet the road infrastructure needs/

OBLIGATIONS FOR AUTHORITIES

All spheres of government have some responsibility for the three key elements of the road transport system: roads, infrastructure, public transport and traffic management

- ❑ Provincial and Municipal Road Authorities have the obligation to provide a reliable, effective, efficient and integrated transport system that supports the sustainable economic and social development objectives of the country;
- ❑ All Road Authorities also have the obligation to **plan, design, construct** and **maintain** their road networks, protect public investment in the road infrastructure, ensure the continued functionality of the transportation system, and promote safety of traffic on the road network.
- ❑ Although the National Department of Transport's major responsibility is to set out a facilitative and regulatory policy framework for an efficient transport system with policy being implemented through SANRAL, Provincial departments, and Municipalities, the Department has not distanced itself from working closely with provinces and municipalities to address the challenges facing the Road Authorities.



NATIONAL INTERVENTIONS

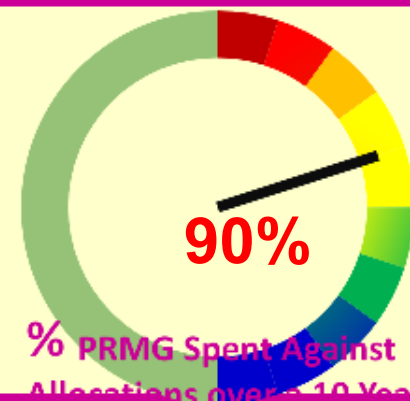
PRMG is a supplementary budget to augment provincial investments for roads. As of 2023. Road Refurbishment: component was added to the PRMG baseline budget with the following conditions:

- ❑ new facilities - aimed to improve network capacity, including upgrading of earth (dirt) road to an engineered gravel road, the upgrading of a gravel road to a surfaced road and upgrading of single carriageway road to four-lane or dual carriageway road. The construction of new gravel or surfaced road where previously no road existed (brown/green fields construction). This also include construction of new bridge to replace existing bridge or new interchange to replace intersection.
- ❑ NB: Without a major cash injection into the road network, a “drastic Intervention needed” e.g. taking charge of grants - ringfencing of a portion of PRMG identified.
- ❑ Objective would be to gain efficiencies from limited budgets;
- ❑ Step up preventative maintenance programme and adopt a reviewed planning approach - analysis of road data through software modelling to scientifically determine correct interventions and priorities – key corridors & roads;

PRMG 10 YEAR EXPENDITURE ANALYSIS



PRMG TOTAL ALLOCATIONS 2013/14 - 2022/23



GOVERNMENT INTERVENTIONS THROUGH VALA ZONKE

- ❑ The Transport MINMEC of 1 August 2022, adopted the intervention plan - the fight against potholes and general road refurbishment and improvement
- ❑ Operation Vala Zonke, launched on 08 August 2022 in Emfuleni Local Municipality in Gauteng as part of the build-up to Presidential Imbizo that took place on 12 August 2022. All provinces had simultaneous launches on 08 August 2022
- ❑ The Transport Integrated Information System (ITIS) was made available to all Road Authorities for the provision of Centralised Repository and Asset Management Services
- ❑ A centralised Mobile Pothole Reporting APP that enables the public to report potholes wherever they encounter it on any road
- ❑ Plan envisaged to have a central platform, using an automated system to (a) allocate a complaint, (b) track progress, (c) identify and resolve delays, (d) intervene (provide support) to address service delivery and (e) provide feedback to the public using the APP



VALAZONKE PROGRESS AND CHALLANEGES

- ❑ **Step 1: Network Verification-** Road classification and the assignment of roles.
- ❑ **Step 2. ITIS Mobile deployment (secure user account provided)-** Deploy Mobile pothole reporting APP.
- ❑ **Step 3: Assign Potholes to Maintenance Teams-** Repairs not being automatically assigned to existing maintenance teams
- ❑ **Step 4: Resolve identified pothole repair delay causes-** road authorities not using the road Authority APP to close apps digitally, we cannot track delays in closing.
- ❑ **Step 5: Address Remaining Challenges – SANRAL Direct Involvement-** Secure budget to enable SANRAL for direct involvement on the repair of potholes on other authority routes.



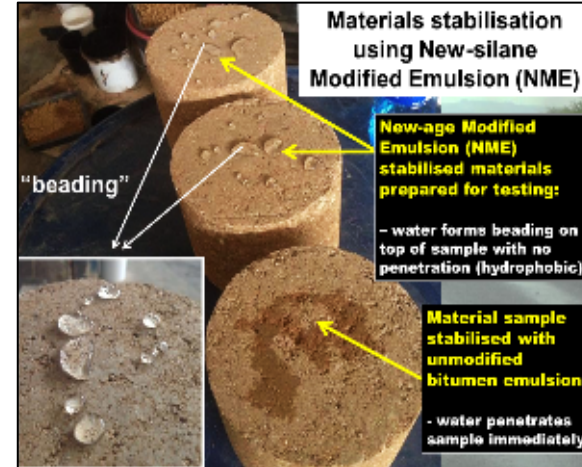
PRIVATE SECTOR INVOLVEMENT

- ❑ **Corporate Social Responsibility (CSR)** –tax deduction in terms of SARS Section 18A. The Pilot Section 18A.
- ❑ **Adopt-A-Road Program** –e.g. Mining Houses to adopt roads leading to facilities.
- ❑ **Performance Based Maintenance Model** – National Treasury through DORA to allow borrowings against future budget and grants for provinces.
- ❑ **Insurance Companies** - Establish partnership with South African Insurance Associations
- ❑ **Coal haulage funding** – involvement of mining institutions to support the maintenance of roads leading to electricity generating sites (Mpumalanga).



MAINTENANCE OF GRAVEL ROADS AND SURFACING USING NANO TECHNOLOGY SOLUTION

- in responding to the need to address the poor state of gravel roads, which form 79% of the network, an exercise was carried out, where **10 000 km of gravel roads** identified as having more than **300 vehicles per day** and are economically viable to surface / upgrade;
- research indicates that the **NANO solution treatment reduces cost from R10 million to R4 million per / km** and **NATO treatment can be used for both on gravel and paved roads**;
- SANRAL will implement seven (7) pilot projects for construction during 2023/24;
- **provinces are required to submit candidate projects as per 17 April 2023 MINMEC resolutions**;
- CSIR will continue assisting the programme with quality assurance.



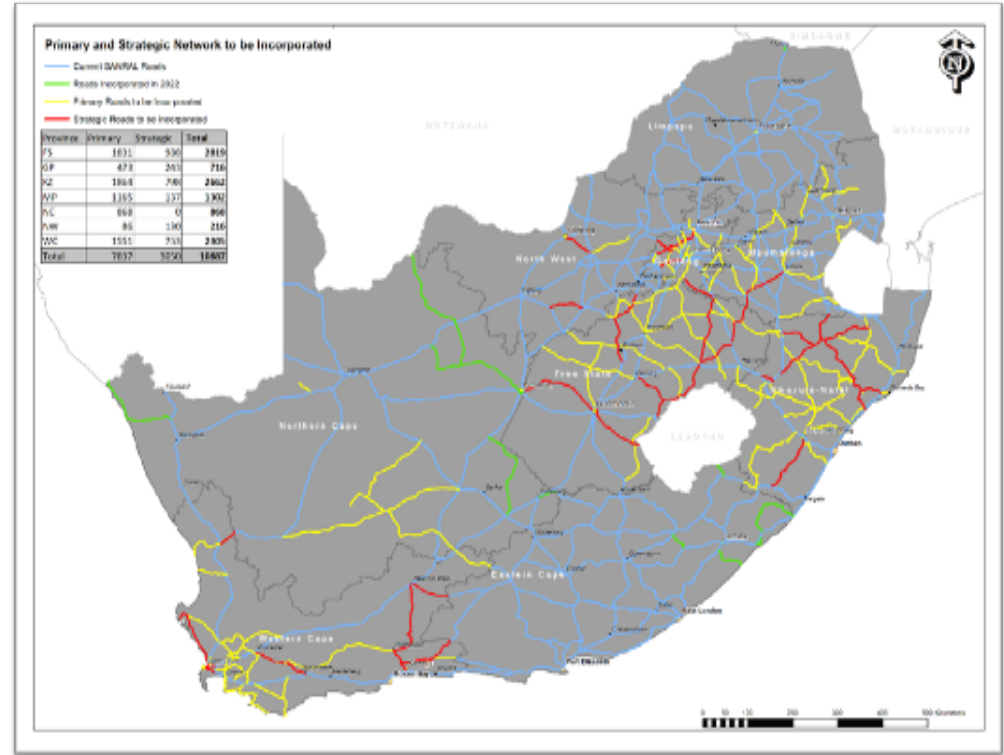
ROAD REFURBISHMENT AND MAINTENANCE

- Technical Manual (TRH24) developed for use of NANO Technology on gravel roads (desired output – ability to reuse existing on-site material, construction costs reduced by up to 70%, improved performance of pavement). This technology is suitable for paved roads as well. Workshops were held and more are planned with both Road Authorities and Consultants to promote the use of TRH24



STRATEGIC ROAD TRANSFERS TO SANRAL

- This initiative creates an opportunity for provincial roads authority to redirect their funds for other provincial roads. Once roads are transferred, the Routine Maintenance Teams are deployed to address maintenance, whilst further assessments take place for medium to long term interventions by SANRAL. Transfers completed - Eastern Cape – 332 km, Northern Cape = 953 km and North West – 37 km.
- Proposed transfers – Free State Province has requested, through the Premier transfer of 4 roads to SANRAL and SANRAL will soon commence with the road assessment process.



DEPARTMENTAL SUPPORT AT MUNICIPAL LEVEL

- ❑ the Department is providing support to all 44 District Municipalities to ensure improvement in their planning by implementing the Road Asset Management Systems (RAMS).
- ❑ It is important that Road Authorities make the right choices i.e. select the right projects and implement the correct maintenance interventions and, in this way, Government's Principle on value for money will be guaranteed.
- ❑ The actual funding support to municipalities for roads and storm water programmes is provided through the Municipal Infrastructure Grant, which is administrated by the Department of Corporative Governance (Cogta).
- ❑ It is important to note that the two Departments are working very closely to ensure that appropriate road infrastructure projects are selected and prioritised based on the Road Asset Management System (RAMS) data.



FURTHER INTERVENTIONS

1. Tighten PRMG Conditional Grant Frameworks

- reallocate funds where there is non-performance and non-compliance;
- withholding of funds when data and other compliance information is not submitted;
- enforce the condition that equitable share budgets should match the PRMG budgets;

2. Engagements with the Provinces

- Ministerial visits to provinces are planned for alignment and escalation of refurbishment of roads and Operation Vala Zonke;

3. DOT interventionist Technical Team

- is being strengthened to support Road Authorities; and
- assist with technical oversight and quality assurance.

4. Incorporation of strategic and primary roads into the national grid

- some provinces have handed over roads (GP, MP, LP, EC, NC, NW, and FS in progress);
- provinces are urged to handover strategic and primary roads to the national grid for better development and management.



Funding Needs to Accelerate the Intervention

- ❑ Additional funding requests required for direct implementation support using the existing Routine Road Maintenance Contractors:
 - Stage One - R1 billion million required for immediate eradication of potholes for the period June to December 2023;
 - Stage Two - R2 billion dedicated funding during the mid-year budget adjustment from January 2024 to March 2024;
 - Stage Three - R 3 billion dedicated funding over the 2024 MTEF

- ❑ Funding re-prioritisation (Provincial Road Authorities):
 - Utilise the PRMG refurbishment component to include eradication of potholes;



2 1 Recommendations

It is recommended that the NCOP takes note:

- ❑ of the presentation outlining the state of the South African road network
- ❑ of progress made in the rollout of the Vala Zonke Pothole fixing programme since the launch in August 2022
- ❑ of the budget needs for “direct intervention” by the National Department of Transport;
- ❑ of the Minister’s engagement with the Premiers to provide capital budgets through equitable share for roads.
- ❑ of further political engagement with Provincial and Local Government to support the implementation of the interventions.



Thank You

