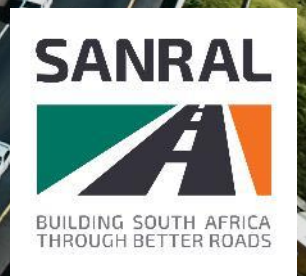







SANRAL NATIONAL ROADS

Louw Kannemeyer





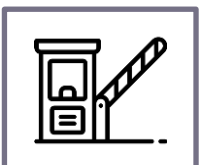


GAUTENG, N3, GILLOOLY'S INTERCHANGE

SOUTH AFRICA'S ROAD NETWORK

	750,000km SA road network 11th longest in the world
	158,124km paved 19th longest in world
	79% of SA roads are gravel
	131,919km of gravel roads are unproclaimed*
	40% to 60% are in a poor to very poor condition

AUTHORITY	PAVED (km)	GRAVEL (km)	TOTAL (km)
SANRAL - 1	26,956	522	27,478
Provinces - 9	41,825	225,756	267,581
Metros - 8	51,682	14,461	66,143
Municipalities - 44 District - 226 Local	37,680	219,223	256,903
Total (288)	158,143	459,962	618,105
Estimated total	158,124	591,876	750,000

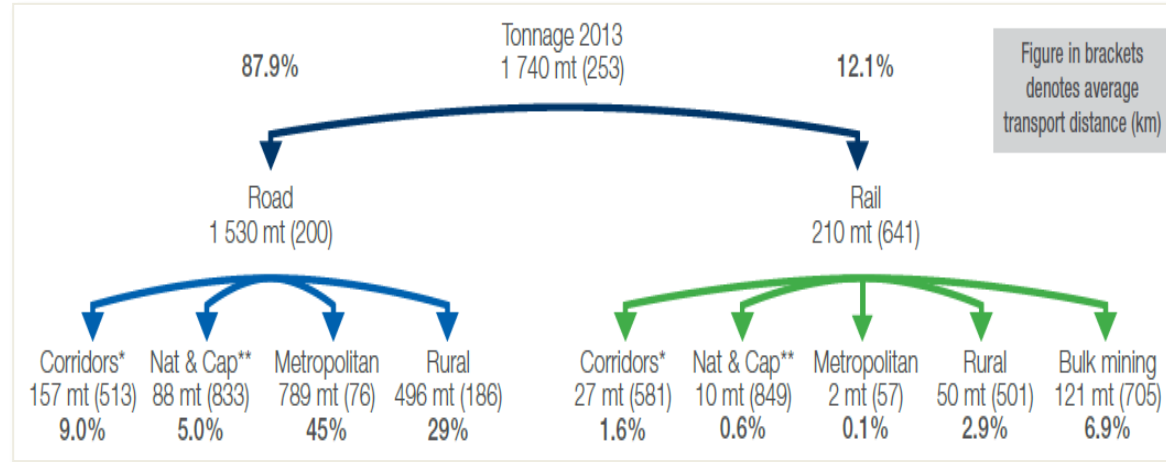
	SANRAL 27,478km network (4,4% of South Africa's total road network)
	SANRAL Roads Carry 34% of all annual vehicle traffic
	SANRAL Roads Carry up to 70% of all long-distance freight
	23,725km (89,7%) SANRAL roads funded by a grant from NT
	2,753km (10,3%) toll roads of which 1,271km is under concession

* *Unproclaimed roads* - Public roads not formally gazetted by any authority.

SOUTH AFRICAN ROAD USE



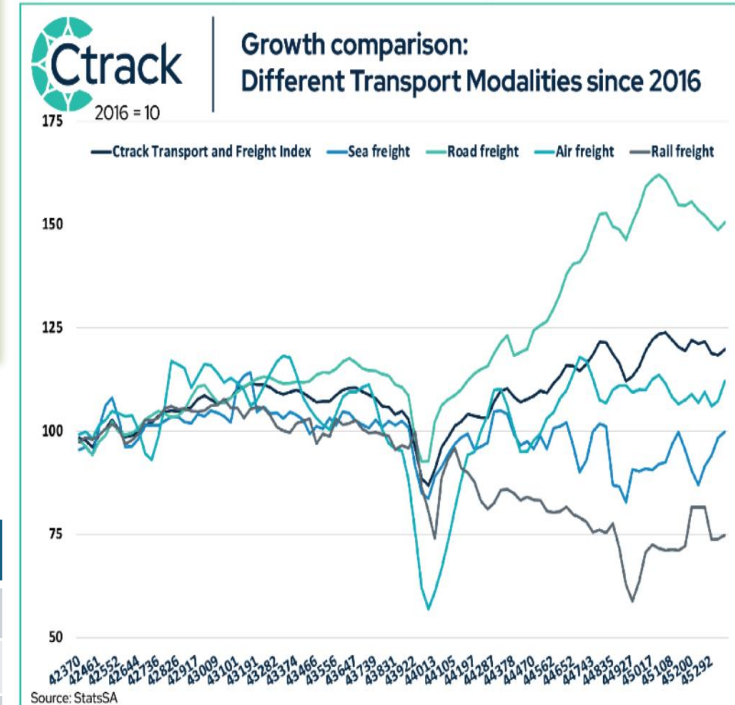
Freight flow on road and rail (10th State of Logistics Survey 2014)



Also important to note that of the person trips recorded in National Household Travel Survey, 2020, by transport modes are as follow:

- Private Vehicles - **43.5%**
- Minibus taxi's (80.2%) - **28.8%**
- Walking - **20.3%** – *Along road corridors*
- Busses (16.6%) – **5.8%**
- Trains (3.2%) - 1.1%
- Other – 0.5%

Mode Choice Factor	Percentage
Travel Cost	30.8%
Travel Time	23.3%
Flexibility	11.9%
Other	34.0%



Roads account for **87.9%** of Freight and **98.4%** of Person Trips

SANRAL ROAD NETWORK

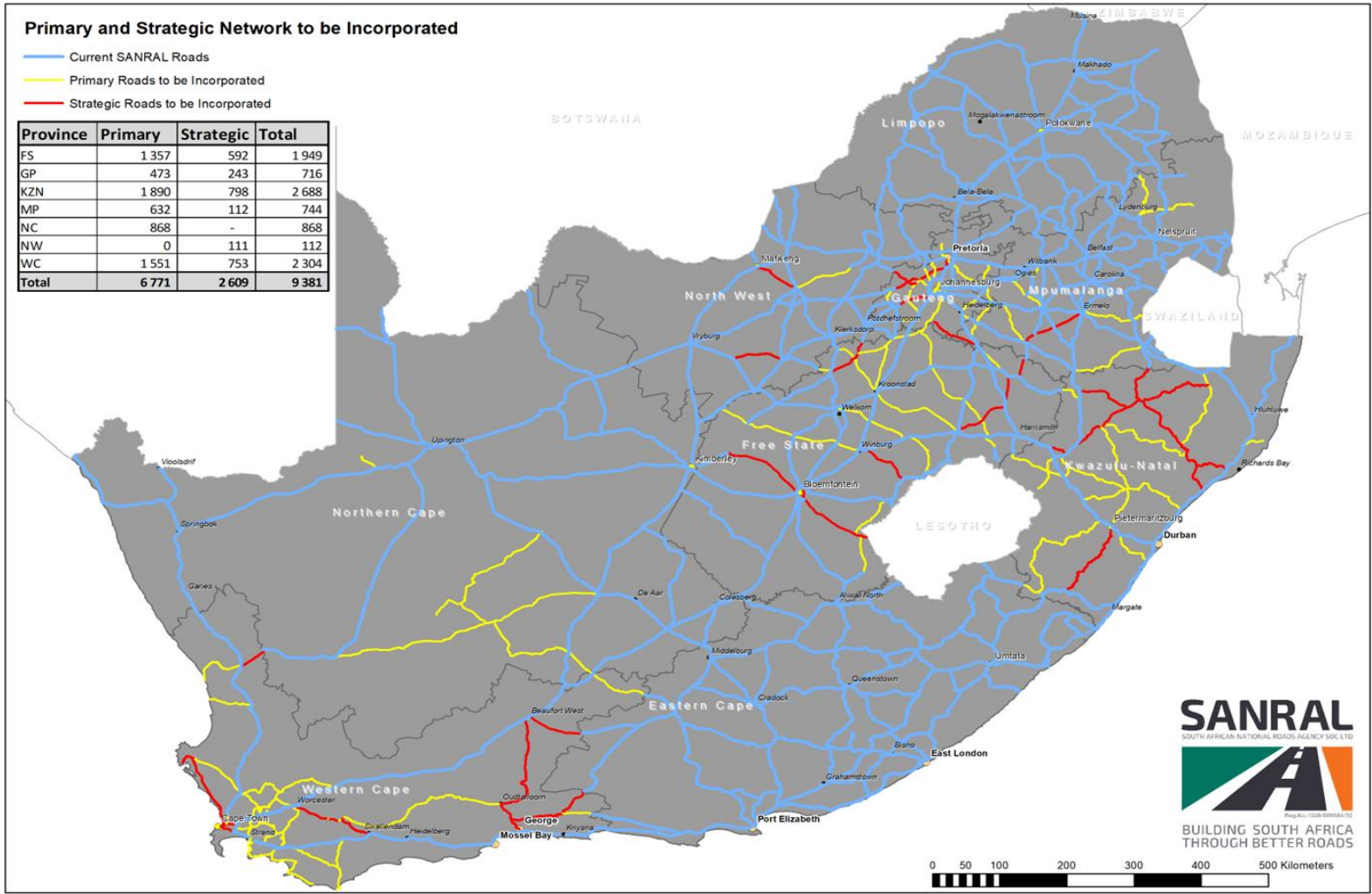
WESTERN CAPE, N1, MAITLAND

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

STRATEGIC AND PRIMARY NETWORK TRANSFERS (± 35 000 km)



Transfer requests are considered based on the Road Classification System from Road Infrastructure Strategic Framework for South Africa (RISFSA)/COTO TRH26, for transfer to SANRAL must have R1 or R2 classification

Province	Length Requested (km)	Length Meeting Criteria (km)
Eastern Cape	1,649	586 (26/02)
Free State	928	659 (22/11)
Limpopo	1,012	753 (22/11)
Mpumalanga	1,041	940 (22/11)
Northern Cape	61	61 (18/10)
North West	367	367 (26/02)
Total	5,058	3,366

- In 2022/23 SANRAL transferred 330km in August 2022 from Eastern Cape, 953km in November 2022 from Northern Cape and 12km from North West in March 2023.
- In 2023/24 SANRAL transferred 600km from Free State another 219km in March 2024.
- In 2024/25 SANRAL transferred 61 km in October 2024 from Northern Cape, in November 2024 659km from Free State, 753 km from Limpopo and 940 km from Mpumalanga. In February 2025 586 km from Eastern Cape and 367 km from North West.

NATIONAL ROAD PROCLAMATION STEPS



1. Premier write to Minister to request transfer in terms of SANRAL Act Section 40(2) – draft letters was previously prepared for each Province by SANRAL and submitted to DOT.
2. Minister Office send received Premier letter to SANRAL for review.
3. SANRAL evaluates requested routes against 35,000 km Strategic and Primary network and if not part of this network against RIFSA Class R1/R2 requirements.
4. SANRAL then prepare evaluation response letter to Minister as well as draft Gazettes for Minister signature where applicable.
5. Minister Office process submission and send signed gazettes back to SANRAL
6. SANRAL then Gazetted roads as national roads.

SANRAL ACTION STEPS ON ROAD TRANSFERS

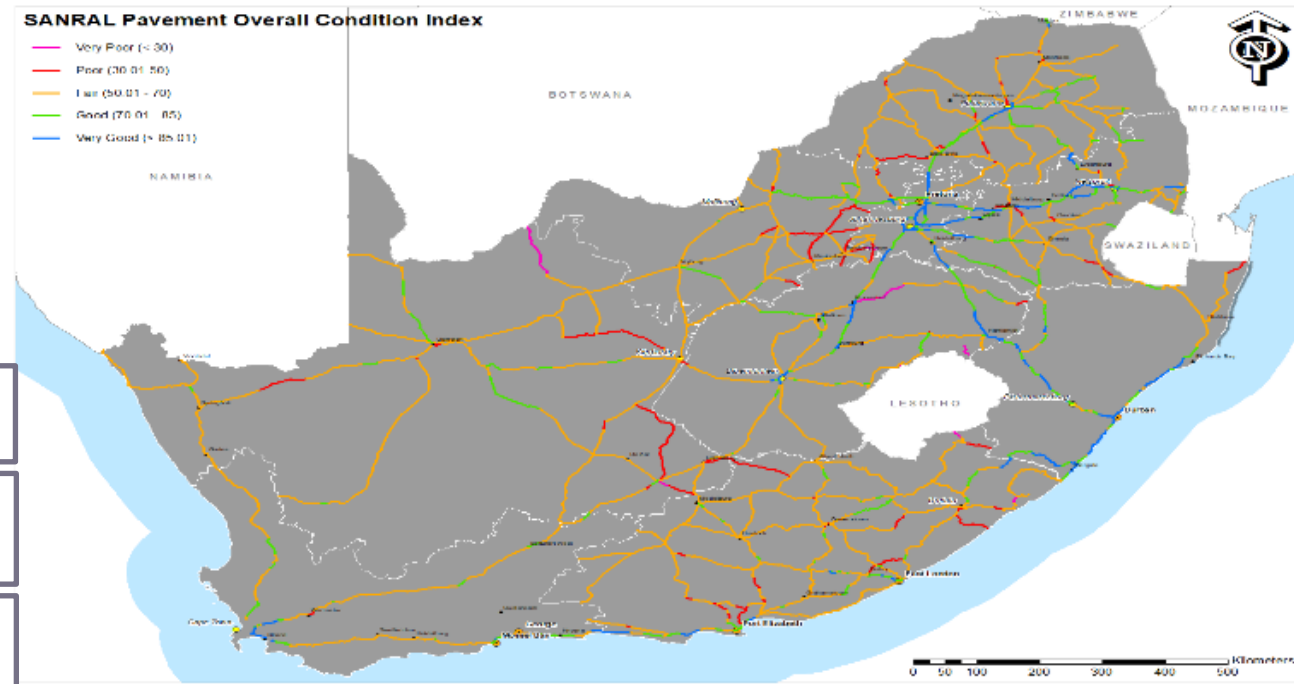
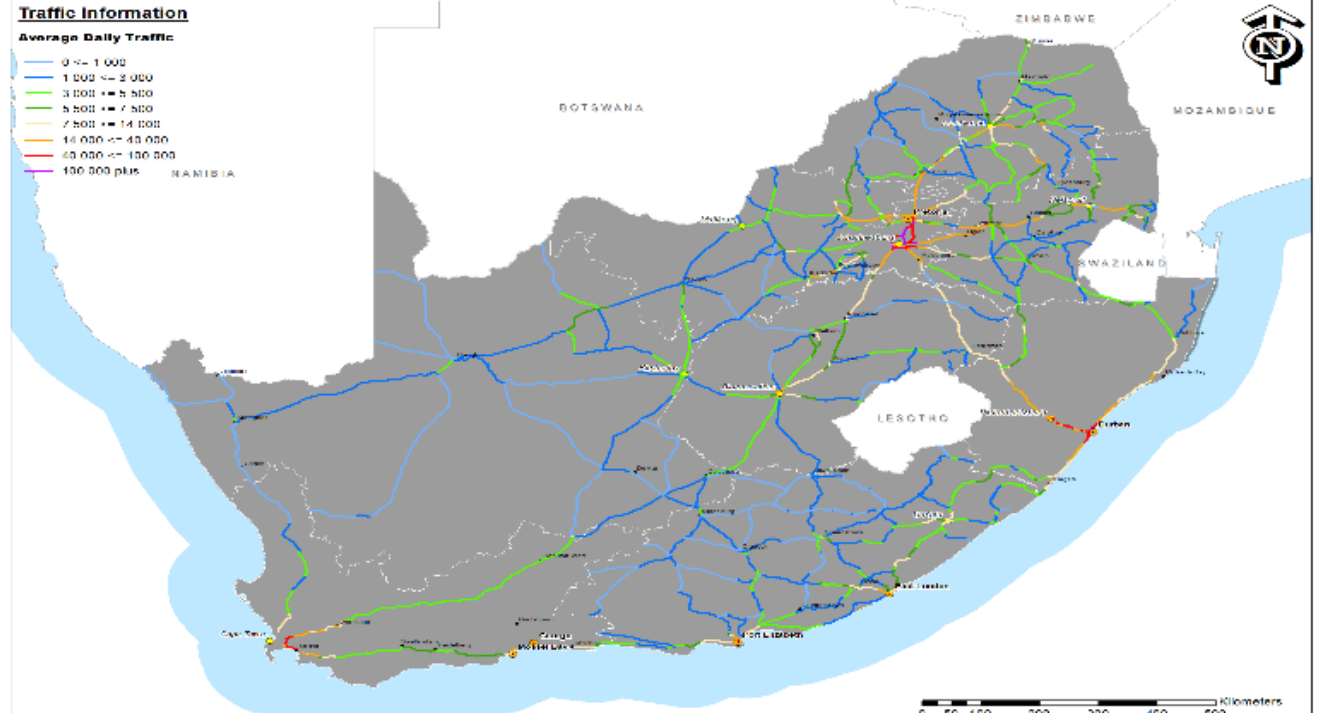


1. **Step 1:** Immediately upon gazette as national road, SANRAL activates urgent Routine Road Maintenance actions on the routes to address routine maintenance backlogs i.e. patching potholes, clearing drains, guardrail repairs, road sign repairs, cutting grass and collecting litter. Budget for this is obtained by reprioritizing existing SANRAL non toll budget allocations.
2. **Step 2:** Once urgent Routine Road Maintenance backlogs has been addressed, SANRAL perform network condition assessments of the transferred roads and bridges and do traffic counts on the corridors.
3. **Step 3:** From the condition and traffic surveys formulate the SANRAL preventative (periodic) maintenance strategies (OPEX) for the transferred roads, with immediate focus on reseals where applicable over 3-year MTEF budget cycle. Budget for this is reprioritized from existing SANRAL non toll budget allocations.
4. **Step 4:** From the condition and traffic surveys formulate the SANRAL strengthening and improvement strategies (CAPEX) for the transferred roads based on available SANRAL non budgets.
5. **Step 5:** As part of annual MTEF budget process SANRAL then make submissions to National Treasury for additional budget allocations based on condition assessment.



SANRAL ROAD NETWORK - BREAKDOWN BY PROVINCE

Province	Paved (km)	Gravel (km)	Total (km)
EC	5,483	402	5,885
FS	3,051	7	3,058
GP	854	0	854
KZN	1,321	0	1,321
LP	4,394	0	4,394
MP	3,387	0	3,387
NC	4,359	113	4,472
NW	2,642	0	2,642
WC	1,465	0	1,465
Total	26,956	522	27,478



SANRAL 27,478 km network
4,4% of South Africa's total road network

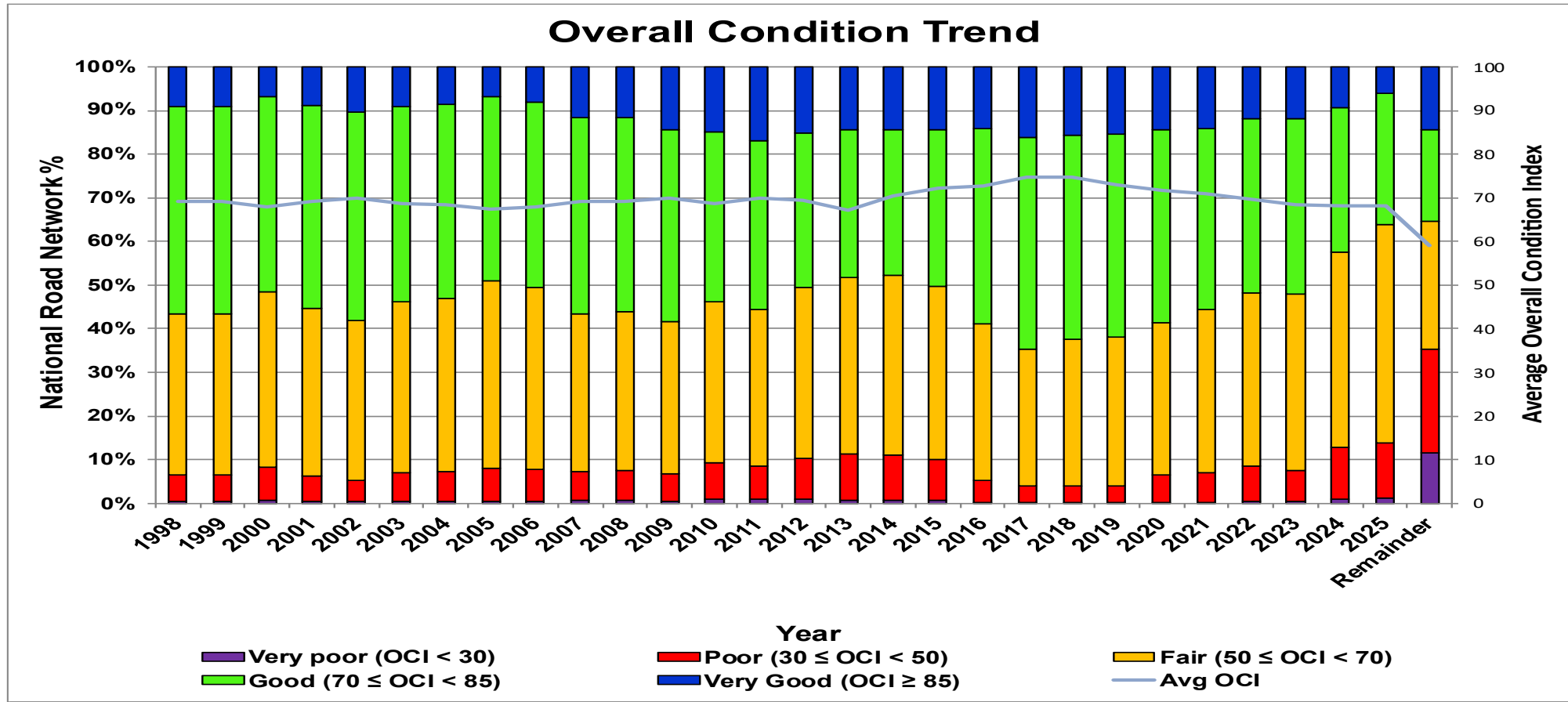


Carries **34%** of all annual vehicle km travelled



Carries more than **70%** of all long-distance freight

MAINTENANCE BACKLOG ANALYSIS



- Currently 3,440km or **13,9%** of SANRAL roads are in poor to very poor surface condition. The international norm for a well-maintained network is 10%. Due to the condition of the 3,923km of provincial roads transferred to SANRAL in the past three financial years. The average OCI of 68.1 is just below the international norm of 70.
- The remainder column shows that the strategic and primary roads under provincial administration is substantially worse (**36.2%** poor to very poor), explaining the immediate negative impact on SANRAL condition trend upon transfer.
- **Based on experience the major part of this negative impact is addressed within 3 years after transfer once all the backlog routine road maintenance and periodic maintenance actions has been implemented by SANRAL**

SANRAL ROAD ASSET MANAGEMENT SYSTEM - ITIS

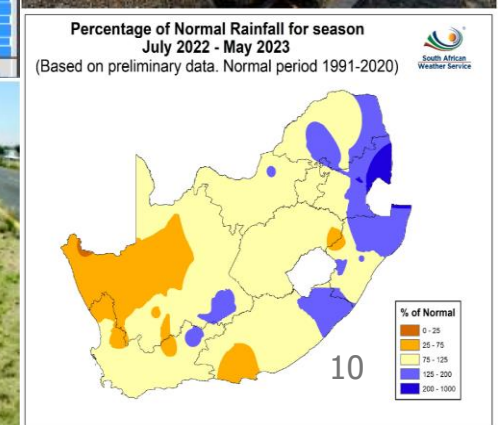
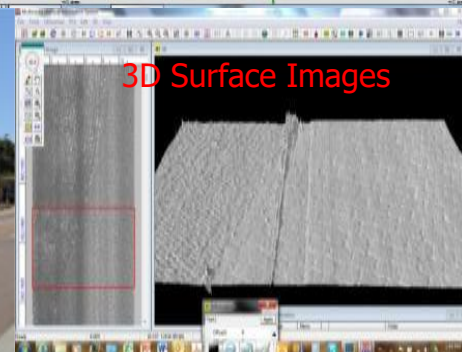
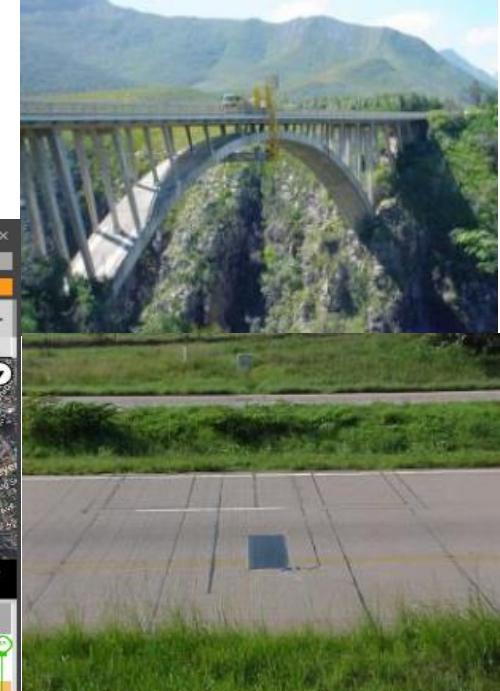
SANRAL in-house asset management system is fully aligned with ISO55001.

Utilises life cycle modelling for project prioritisation.

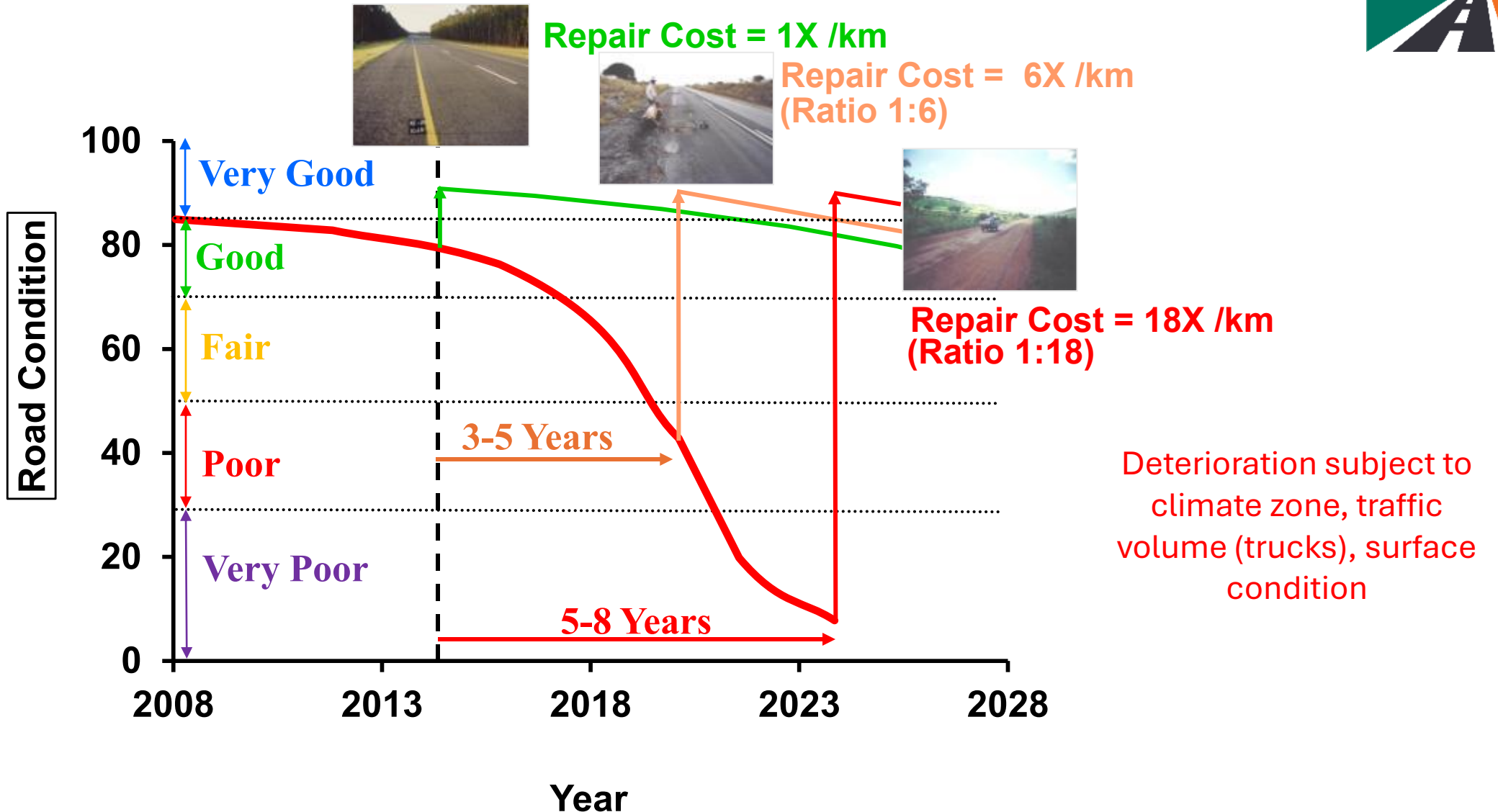
The screenshot displays the ITIS Linear Viewer interface for project N00401E-01. The main view shows a 3D perspective of a road with various data overlays. A popup window titled 'Structure Details' is open, showing the following information:

Structure Type	BR
Structure Number	N004_01E_B357
Condition Index	45
Chavrage	15.4 km
Overall Length	52.8 m
Overall Width	12.5 m
Highest Pier Height	5.33 m
Highest Pier Position	3
Inspection Date	24 November 2011

The interface also includes a sidebar with a list of road sections, a 'Road Viewer' panel with 'Lane P1', 'Lane P2', and 'Lane P3' options, and a data table for 'Traffic Segments ADT' and 'Segment Responsibility'.

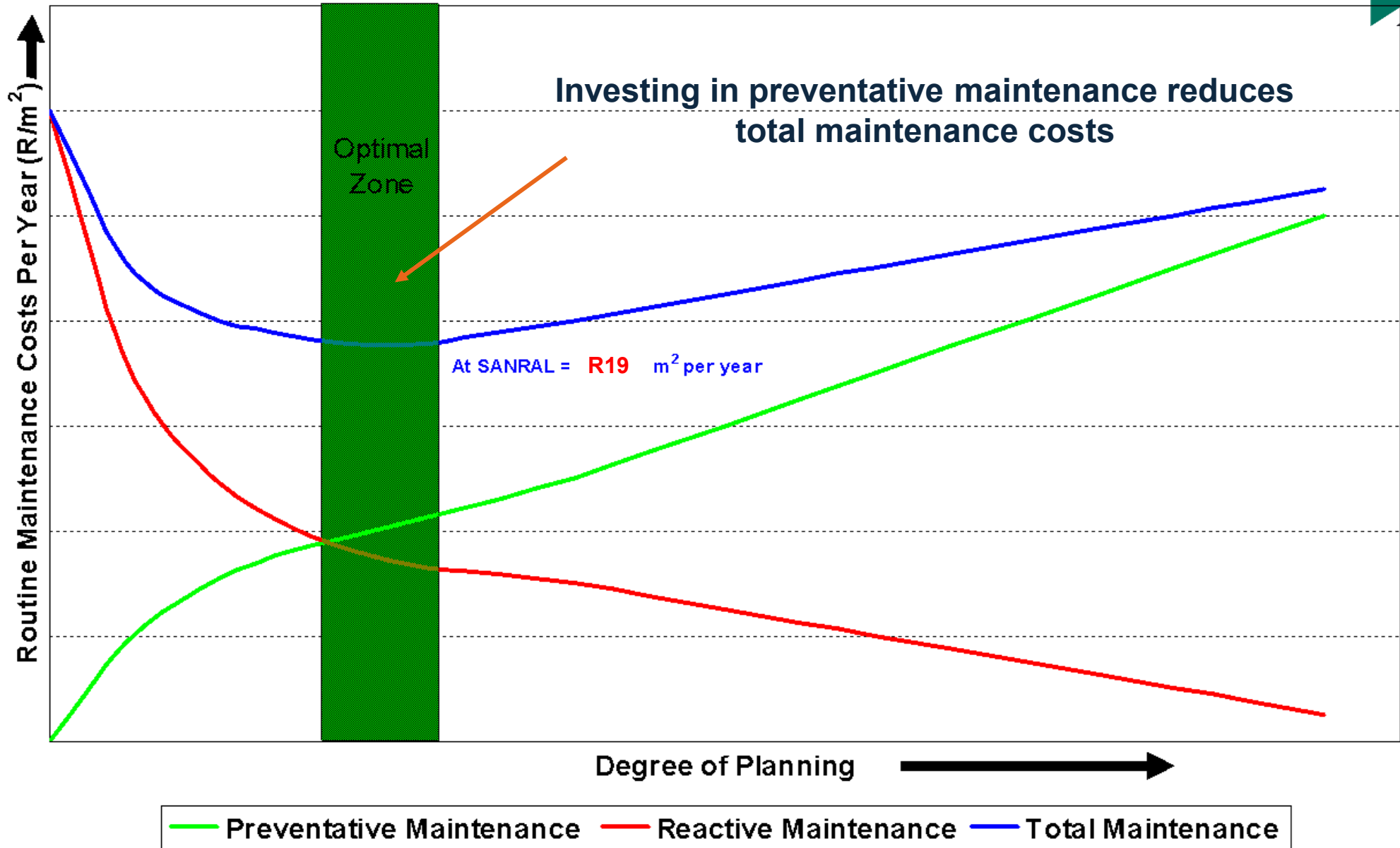


ROAD MAINTENANCE STRATEGIES



1. Preventative maintenance first strategy (SANRAL) allocates budget first or all 1X, then 6X and finally what remains to 18X.
2. Most other authorities follow worst first strategy and allocates budget first or all 18X, then 6X and finally what remains to 1X, RESULTING IN LIMITED OR NO PREVENTATIVE MAINTENANCE UNDER CONTRAINED BUDGET.

PREVENTATIVE MAINTENANCE BENEFITS



SANRAL MAINTENANCE AND BUDGET ALLOCATION PRIORITY



1. Routine operations (OPEX): Includes day-to-day routine activities such as cleaning drains & culverts, vegetation control, line marking, guardrail repair, road sign repair, crack sealing, patching, edge repair, shoulder spot regravelling, shoulder blading. Includes costs associated with operation of Toll Plazas, Weighbridges, Freeway Management.



2. Periodic maintenance (OPEX): Includes periodically scheduled activities such as fog sprays/diluted emulsions/rejuvenators, repair of isolated areas, surface seals and functional asphalt overlays < 50mm in thickness.



3. Special maintenance (OPEX) Repair of selected larger areas followed by surface seals and functional asphalt overlays < 50mm in thickness.



4. Strengthening (CAPEX): Includes increasing the structural capacity of an existing pavement through recycling existing layers and/or adding new granular layers or structural asphalt overlays >80mm thick.



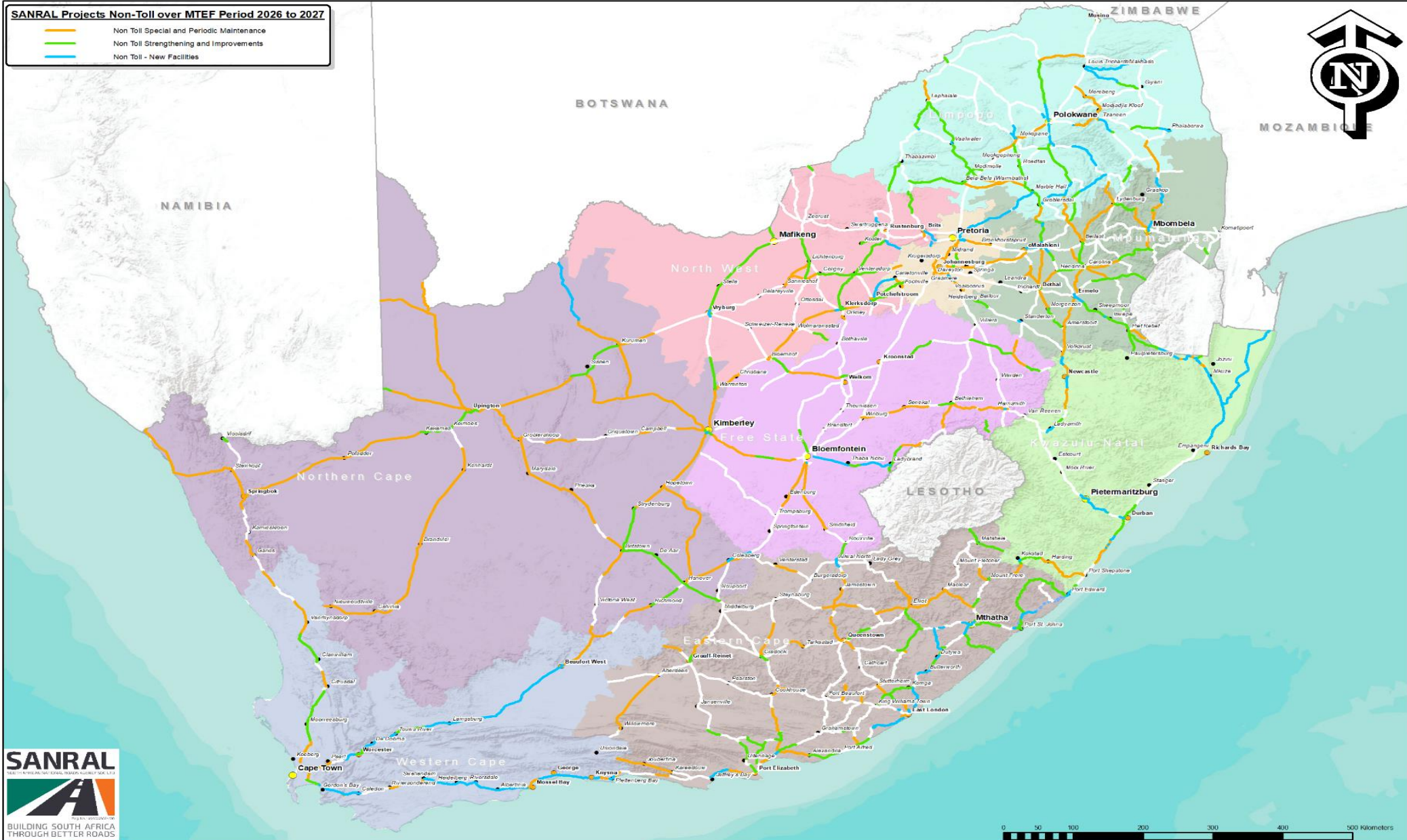
5. Improvements (CAPEX): Works that aim to improve service quality on roads with unacceptable quality. These include measures such as i.e. addition of climbing/passing lanes, addition of paved shoulder and localised geometric and intersection improvements.



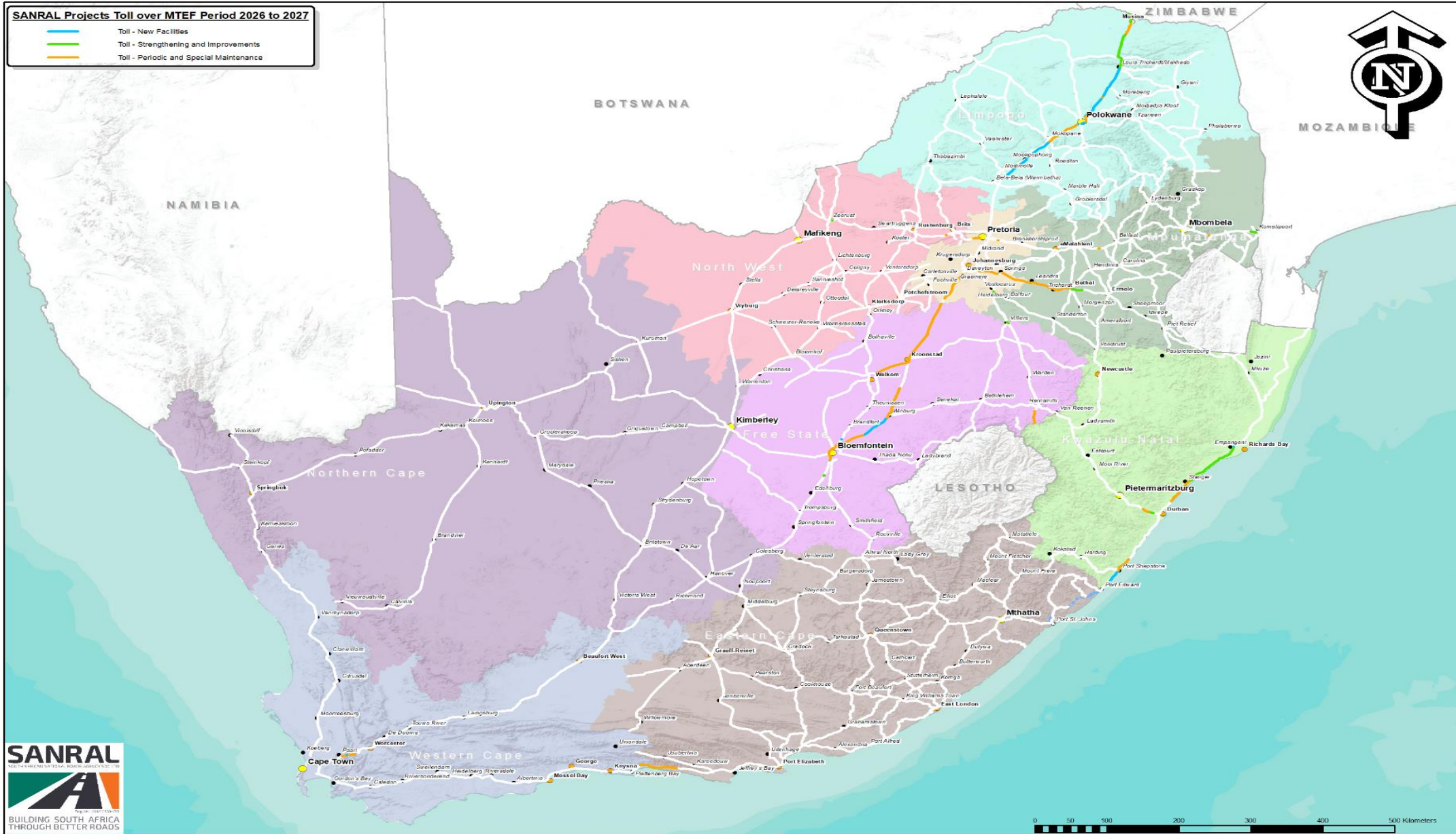
6. New facilities (CAPEX): Works that aim to improve network capacity; includes upgrading single carriageways to 4-lane or dual carriageway road, construction of new roads (brown/green fields construction), and construction of new bridges or new interchanges to replace intersections.



SANRAL 3-YEAR PROJECT PIPELINE – NON-TOLL



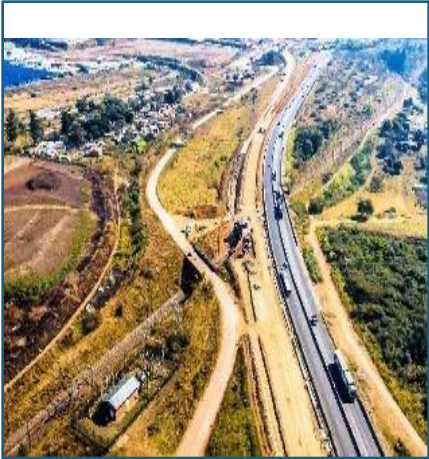
SANRAL 3-YEAR PROJECT PIPELINE – TOLL



SANRAL FLAGSHIP PROJECTS



N2-N3 UPGRADE



The expansion of the N2 and N3 in KwaZulu-Natal:

- 135km of upgrades
- 25 work packages
- 8 work packages in construction
- **Estimate R40 billion**
- **Estimated 17,000 FTE jobs**

MOLOTO ROAD



The upgrade of Moloto Road (R573) Gauteng, Mpumalanga and Limpopo:

- 139km of road improvements
- 17 work packages
- 4 work packages in construction
- **Estimate R11.5 billion**
- **Estimated 6,250 FTE jobs**

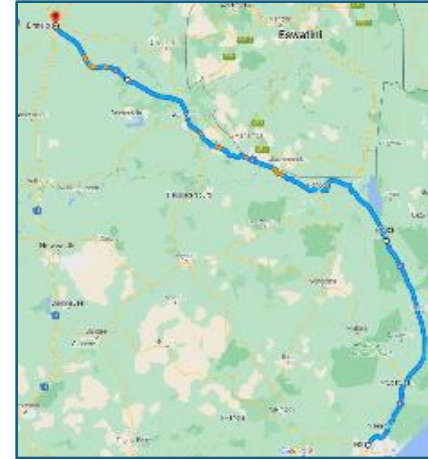
N2 WILD COAST



The N2 Wild Coast Road in the Eastern Cape:

- 112km of new greenfield road
- 9 work packages
- 3 work packages in construction
- **Estimate R23.5 billion**
- **Estimated 8,000 FTE jobs**

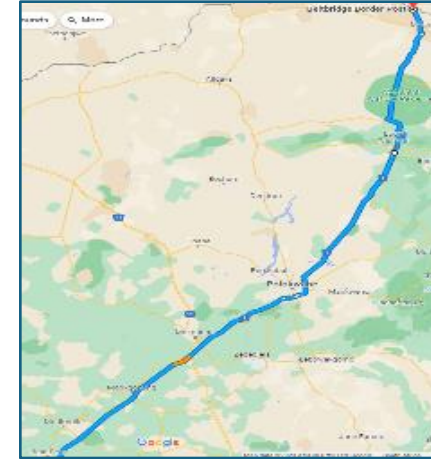
N2 ERMELO TO RICHARDS BAY



The N2 Richards Bay to Ermelo in KwaZulu-Natal and Mpumalanga:

- 415km of upgrades
- 19 work packages
- 2 work packages in construction tender
- **Estimate R48 billion**
- **Estimated 19,500 FTE jobs**

N1 BELLA BELLA TO BEIT BRIDGE



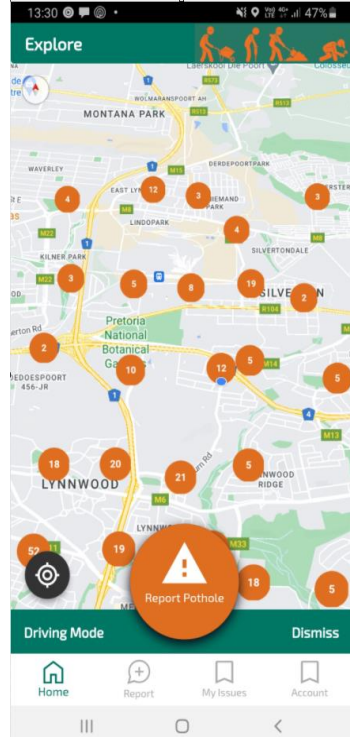
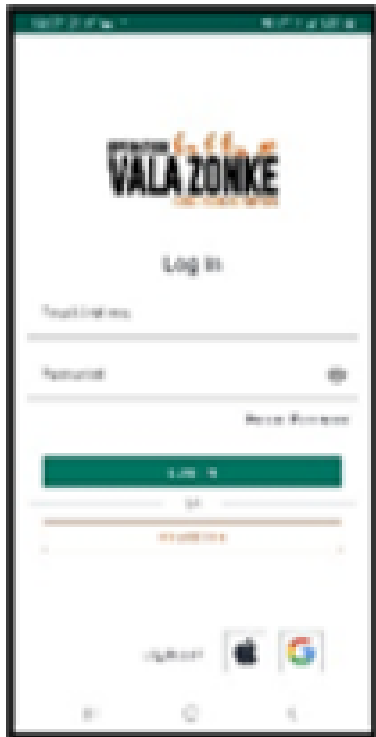
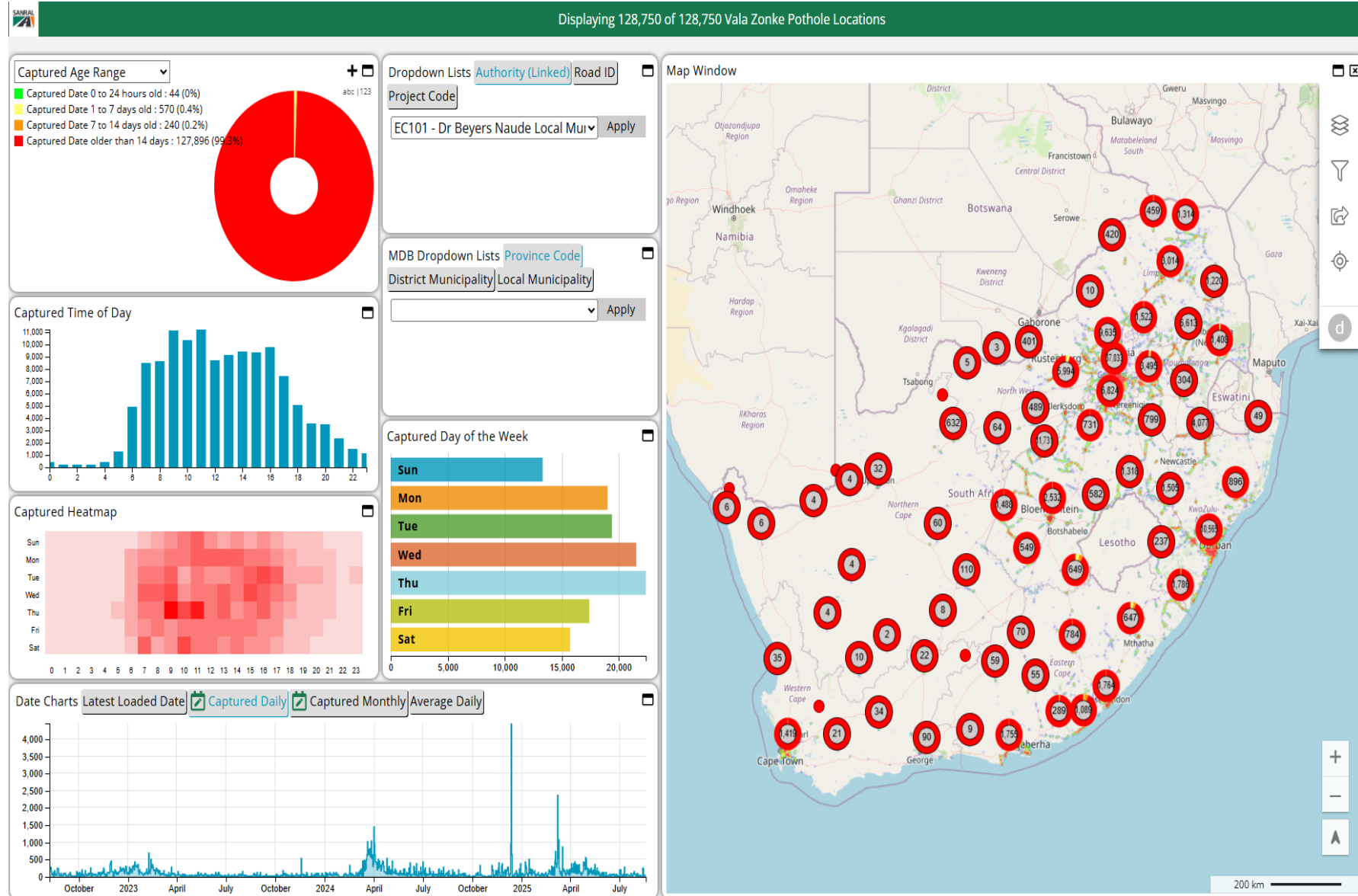
The N1 Bella Bella to Beitbridge Limpopo:

- 380km of upgrades
- 9 work packages
- 1 work package in construction tender
- **Estimate R10.8 billion**
- **Estimated 6,000 FTE jobs**

SANRAL's flagship projects are mostly on the major economic corridors of the country along the N1, N2 and N3 national roads.

Asking the public to assist with reporting of potholes

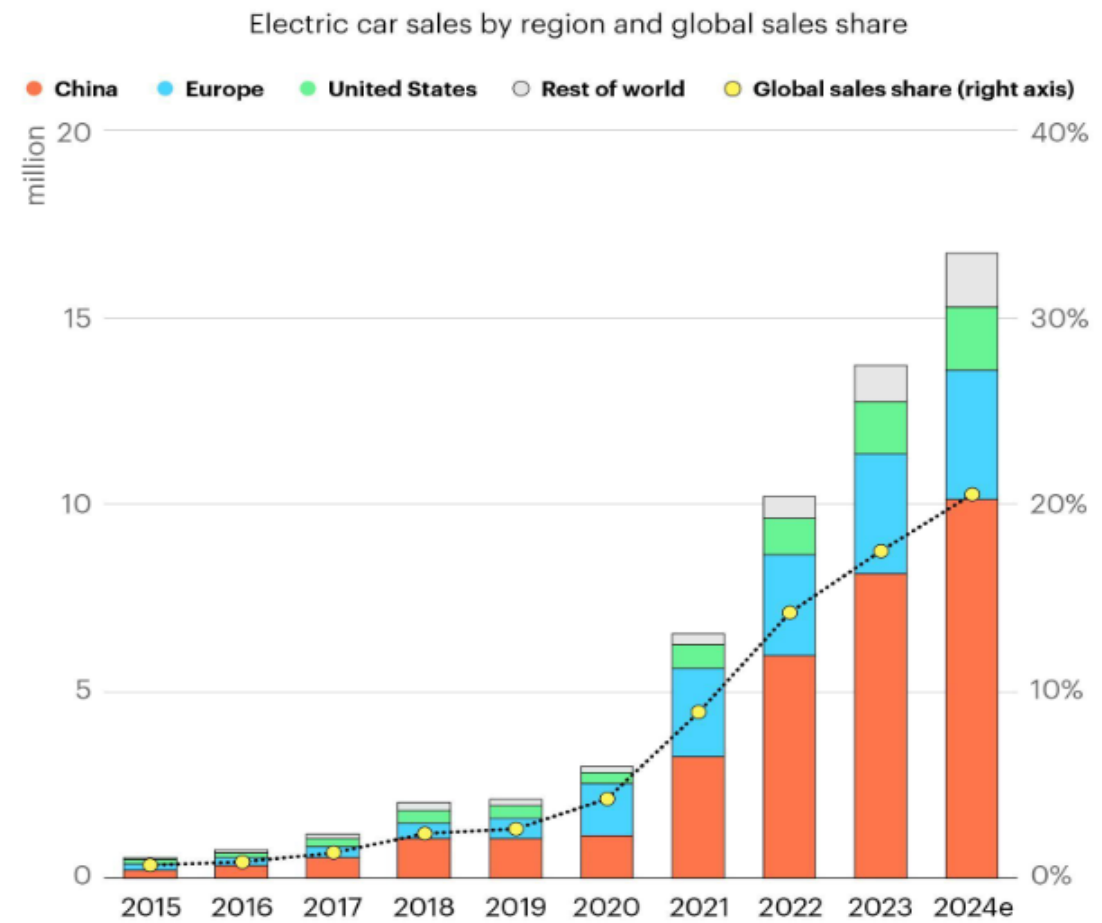
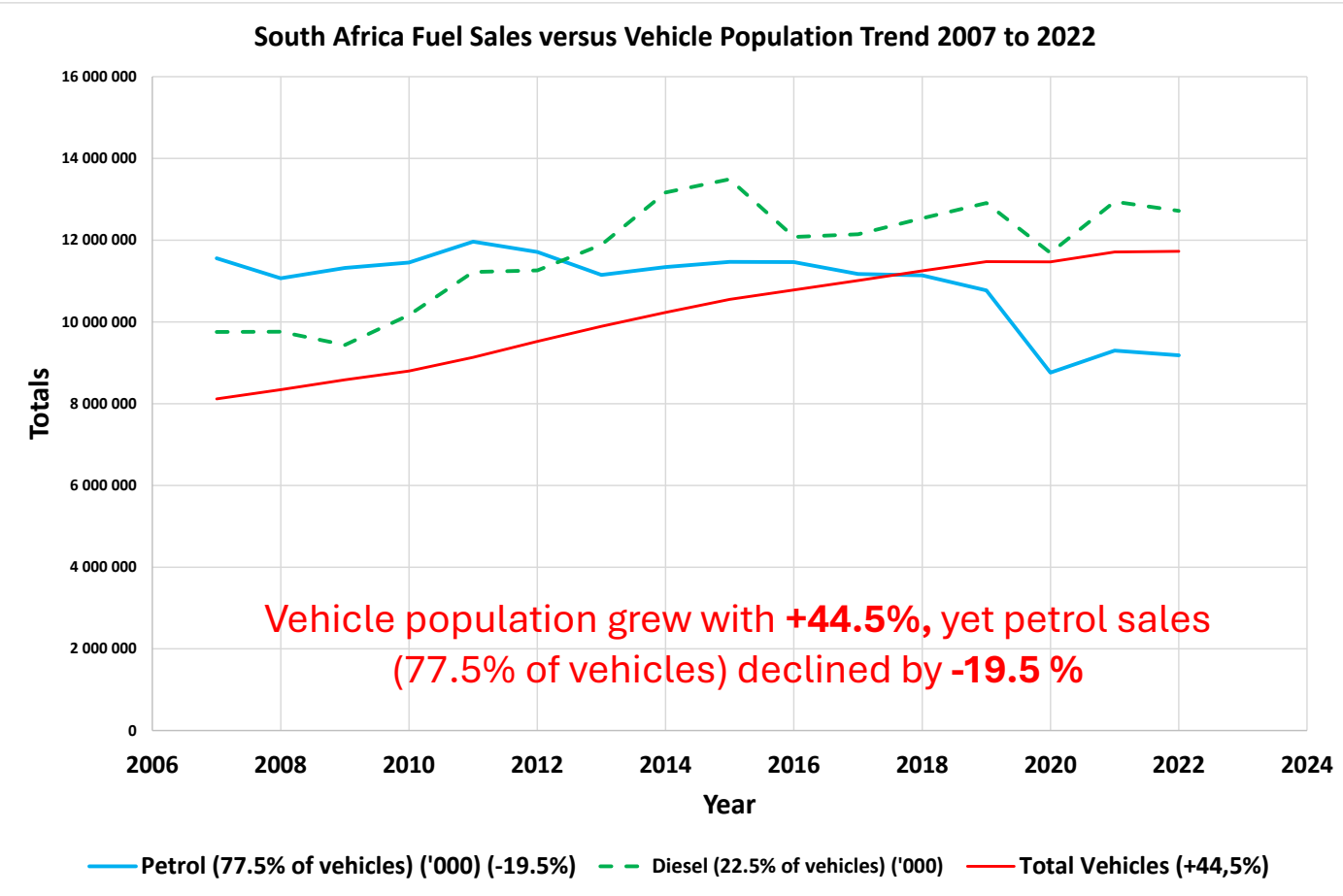
- Download Valazonke APP from iStore and Playstore, log pothole as you drive.
- Help us to help you.



RSA ROAD FUNDING CHALLENGE AHEAD



- Insufficient– **Less than 50% of requirement**
- Current sources of funding – Fuel Levy (R3.95/R3.81) / License or Tolls
 - Old (11 L/100km), New (6 L/100km), Hybrid (2 L/100km), Electric (0 L/100km) ?
 - Old (R43.5/100km), New (R23.7/100km), Hybrid (R7.9/100km), Electric (R0/100km)
 - **Older vehicles (Poor) subsidising New vehicles (Rich) – Toyota Hiace (9.9 L/100 km)**



Need to Find Long Term Road Funding Solution – GPS Road Usage Based ?

THANK YOU

WESTERN CAPE, N2, KNYSNA ESTUARY

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS