



AUDITOR - GENERAL
SOUTH AFRICA

Infrastructure Audit Insights

Infrastructure Indaba

20 March 2024

Audit insights outlining the infrastructure challenges

A culture of accountability will
improve service delivery





MISSION

The Auditor-General of South Africa has a constitutional mandate and, as the supreme audit institution of South Africa, exists to strengthen our country's democracy by enabling oversight, accountability and governance in the public sector through auditing, thereby building public confidence



VISION

To be recognised by all our stakeholders as a relevant supreme audit institution that enhances public sector accountability



Damaged works due to prolonged projects



Infrastructure problem statement



- South African infrastructure **is at the edge of collapse** evident by **poor quality housing**, numerous **unoccupied state properties** that are dilapidated, **inability to develop and maintain water infrastructure** to deliver quality water, **vandalised road and rail infrastructure** which makes accessibility and mobility of the citizens and business costly and lastly **poorly maintained facilities** to enable key service delivery such as education and health.

THE NEGATIVE IMPACT on the lived reality of South Africa's people is the most important story represented by the numbers, findings and audit outcomes.



Crossing rivers without bridges and the Welisizwe bridges



Peeling due to high moisture



Mamelodi magistrate court project on hold



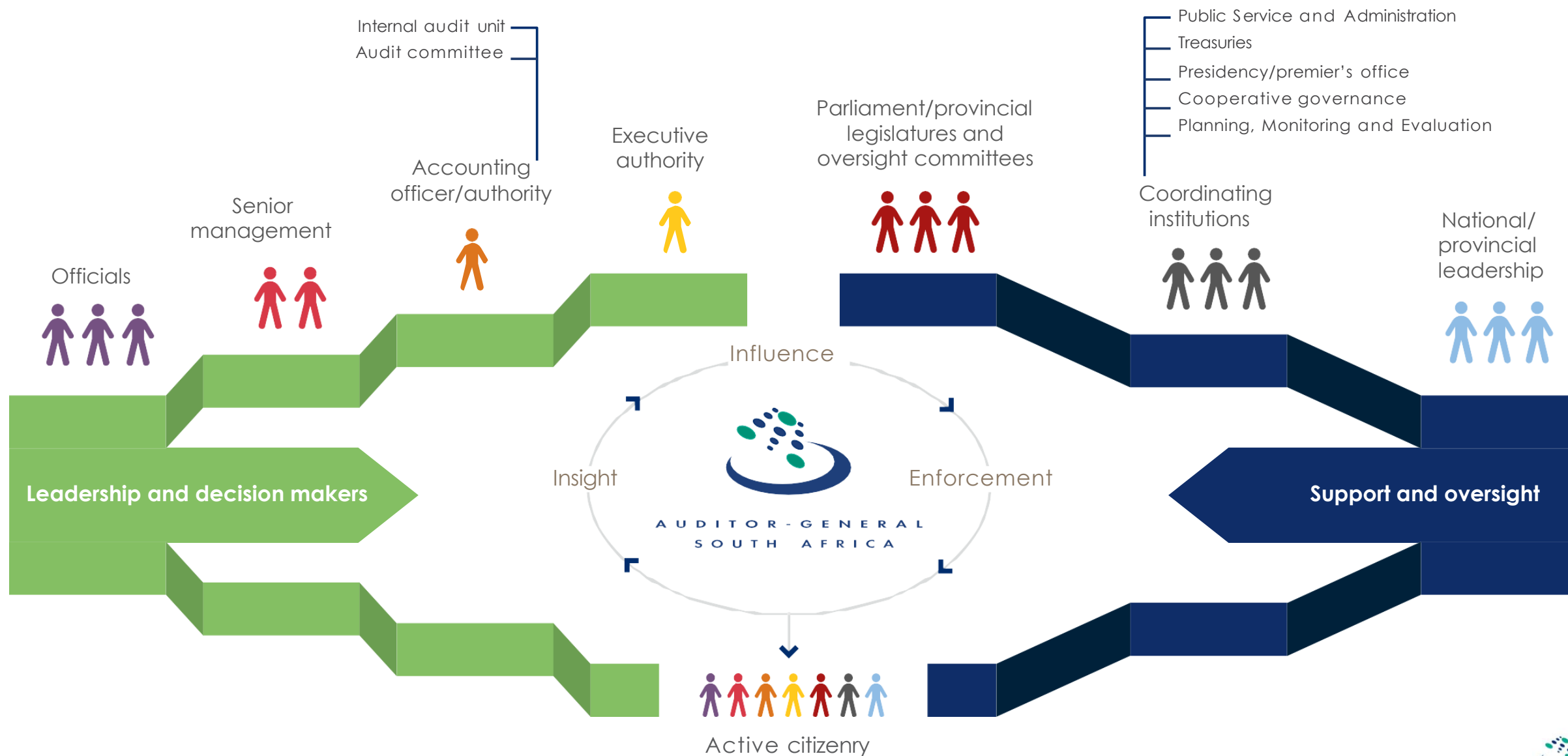
Construction project on hold



Blocked drains

All have a role to play in accountability ecosystem

4



Infrastructure ecosystem



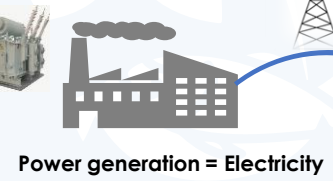
Air



Goods

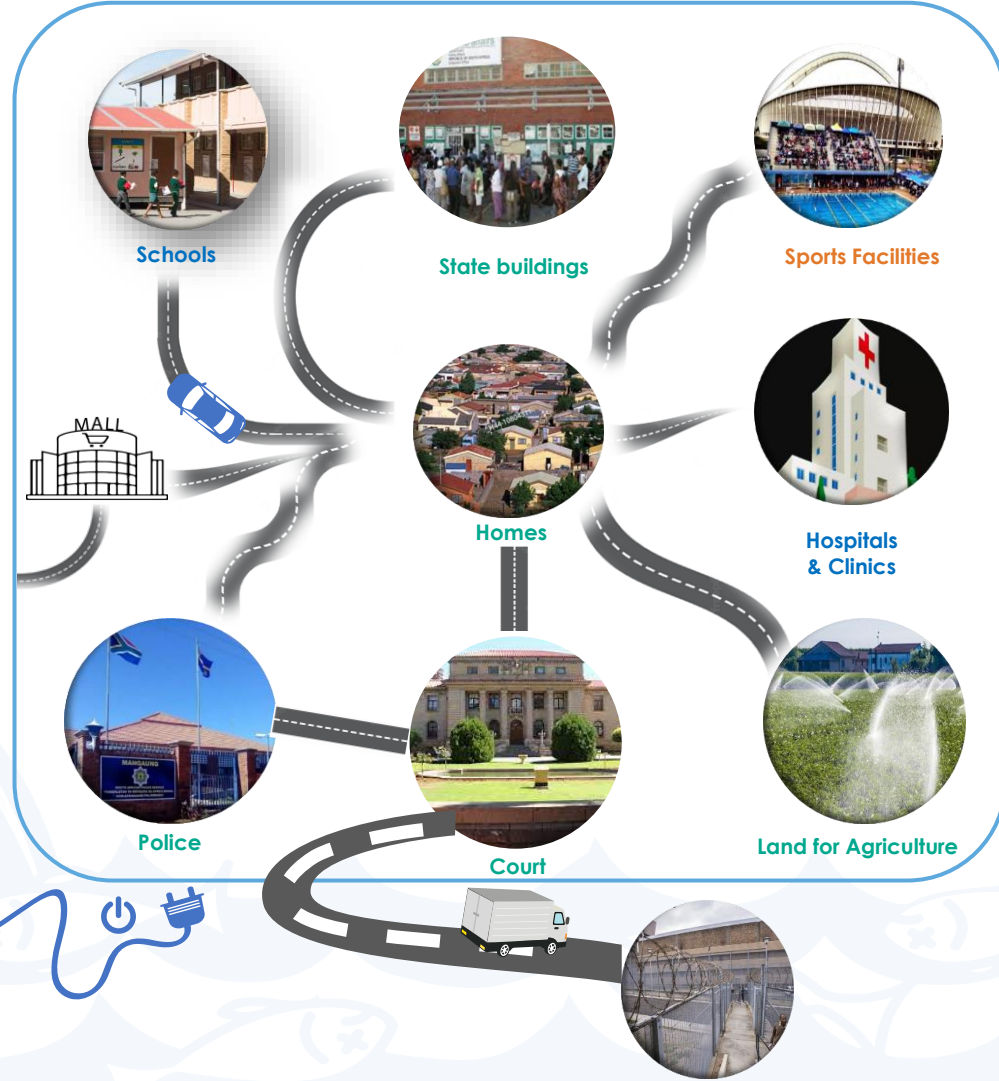


Road & Rail



Power generation = Electricity

Business Centres



Schools



State buildings



Sports Facilities



Hospitals & Clinics



Land for Agriculture



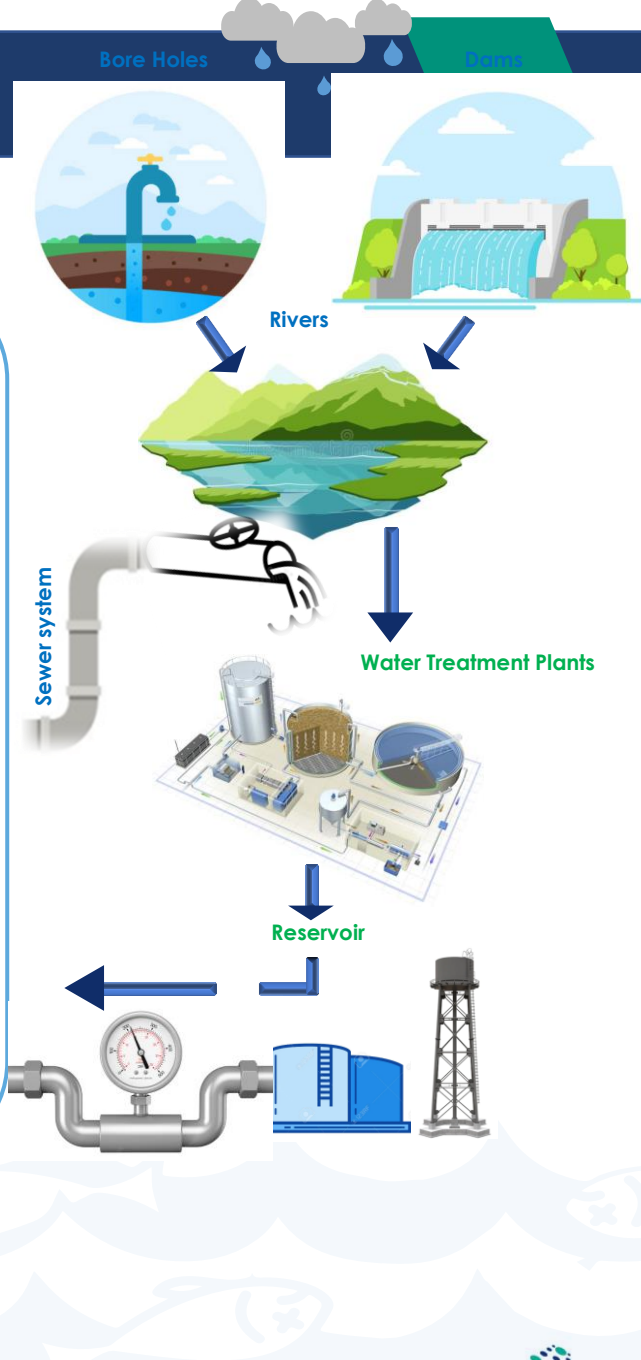
Court



Police



Prisons



Bore Holes

Dams




Rivers




Water Treatment Plants

Reservoir

Sewer system



Key projects	Education 	Health 	Human settlements 
	<ul style="list-style-type: none"> 35 projects (National and across provinces) 	<ul style="list-style-type: none"> 35 projects (National and across provinces) 	<ul style="list-style-type: none"> 27 projects (across provinces)

Key projects	Government buildings 	Water 	Transport 
	<ul style="list-style-type: none"> 18 projects (across provinces and Property Management Trading Entity) 	<ul style="list-style-type: none"> 4 projects (2 projects each at Water Trading Entity and Trans-Caledon Tunnel Authority) 	<ul style="list-style-type: none"> 18 Projects (across provinces, SANRAL and Transnet)



Although **each sector has a unique set of circumstances**, **infrastructure investment** in these sectors is **exposed** to the **same challenges and inefficiencies**.

What we found

We audited 137 projects and 82% had one or more findings

- 93 (68%) – **delayed**
- 66 (51%) – **cost overruns**
- 44 (32%) – construction work **not at required level of quality**
- 13 (9%) – complete infrastructure **not put to use** within reasonable time

Root causes

- **Inadequate coordination**, collaboration and deliverables not synchronised in ecosystem
- Failure to conduct **proper needs assessment and feasibility study**
- **Lack of accountability to implement action** on non-performance of contractors / service providers
- **Inadequate monitoring and enforcement by regulatory bodies** in infrastructure



Loretlweng Primary School (NW Department of Education): Abandoned building works and collapsed building walls and roofing



Vlakkeland (Paarl) housing project (WC Department of Human Settlements): Houses founded at incorrect level – vulnerable to stormwater flooding

Impact



Project delays on completing healthcare facilities resulted in communities travelling to other health facilities for medical treatment



delays in refurbishment of schools resulted in learners attending overcrowded schools, which negatively affects quality of learning



Slow delivery of housing projects resulted in communities intended to benefit continuing to reside in poor and unsafe environments



Insufficient road and rail infrastructure for public and freight transport, affecting all other sectors including tourism and police



Residents resorting to drinking unsafe water, water shortages and poor water quality, as well as negative impact on other sectors such as agriculture, health and education



Delays in delivery of infrastructure by public works compromise service delivery by user departments



Increased cost and financial losses

Average delay in completion of projects

Water	Health	Education	Human settlements	Transport	Government buildings
17 months	36 months	30 months	45 months	13 months	46 months



Impact on the citizens (social impact)

9



Health

LP - Maphutha L Malatjie Hospital - Project delay - The hospital has no X-ray machine at Maphutha L Malatjie, patients have to be transported to another hospital which is 13km away.

NW - Rapulana Clinic - 24-hour emergency services and maternity obstetric services could not be provided, when patients require these healthcare services, they are referred to Mahikeng Hospital or the Montshioa Stade Community Health Centre, which are located 20 kilometers and 21 kilometers respectively from the Rapulana Clinic

GP - Mayibuye clinic has not been completed due to the accounting officer's failure to appoint a replacement contractor since August 2021. This has resulted in the dilapidation of the infrastructure and nearby communities are travelling to other health facilities for medical treatment.



Education

EC- Dinizulu SSS - The new ablutions at the school are not complete (5-year delay). The learners are still using the old, dilapidated ablutions, which are not enough and not in good structural and functional condition.

Kidston primary school - The practical completion of the school was achieved on 29 October 2021; however, in 2023, the school was still not yet optimally utilized as it was accommodating 492 out of 974 of its full capacity.



Public Works

KZN - Vryheid District Office - The Infrastructure is not being utilised for its intended purpose even though it's ready for use and had a huge budget spent

MP - Upgrade of Road D4407 Road D4416/2 and Road D4416/2 - The residents residing parallel to the road under construction are inconvenienced by the delay of the project as they cannot easily access their homes due to the works such as exposed excavations.



Human settlements

KZN - Umbulwane - There were additional (18,5 years) experienced due to unavailability of land and changes to the site layout plan which occurred at the start of the project.

The delay in the project resulted in three completed houses and completed gabion structures (barriers for flooding of the housing development site) being vandalised.



Roads and transport

GP - Sebokeng driver learner testing station has not been completed due to the accounting officer's failure to appoint a replacement contractor since August 2019. This has resulted in the vandalism of infrastructure and nearby communities now incur more than R100 in transport to other driver learner testing stations.



What we found (additional examples)

What we found:

- Failure to conduct a **proper needs assessment** and **feasibility study** led to delays in the completion of projects.
- **Delayed projects** resulting in increased cost and financial losses:
- There was Ineffective **monitoring of project milestones**, project cost and build quality.
- Payments made to consultants **are not aligned** with ECSA guidelines.
- **Excessive variations** made without prior approval

Cause:

- **Failure** to conduct proper needs assessment and feasibility study.
- **Lack of accountability** to implement action on non-performance of contractors and professional service providers.
- Failure to adequately review **project claims** by project managers before approving payments.

Ripple effect:

- Project delays result in project overruns – **Putting pressure on fiscal.**
- Deterioration of roads used by motorists and citizens leads to **road accidents.**

Upgrade of R23 creates 270 job opportunities in Standerton area



R23 section 2 road rehabilitation project



Examples of what we found

KZN: Pilot pothole project using infra-red technology on roads

Inadequate planning for the pilot pothole project, inadequate needs assessment, and no market-related analysis:

The objective of the pilot pothole project using infra-red technology was for the repair of potholes on roads in the KZN province which was not a new or specialised service to the KZN DoT. Thus undertaking this project **without any market-related analysis** between conventional/alternative pothole repair methods is a significant lapse in controls to ensure value for money is obtained at a reasonable price.

FS: Upgrading Kroonstad to Steynsrus road

Remedial works and/or re-work 6km on subbase emanating from failure to protect the work on site

The total amount of R8 146 502 that relates to the **remedial works** constitutes fruitless and wasteful expenditure as it emanates from failure to protect the works on site.

Good Practice: SANRAL

- SANRAL follows a life cycle maintenance strategy that entails **proactive maintenance**. SANRAL invests more in maintaining the road infrastructure to increase the life span of the assets.

WC - The Transhex housing project



Figure 1 & 2: : Cracks on honeycombing underneath the staircase



EC - Mbizana Ebenezer Project

Figure 3: Water penetration on internal walls



EC - Eyabantu SSS

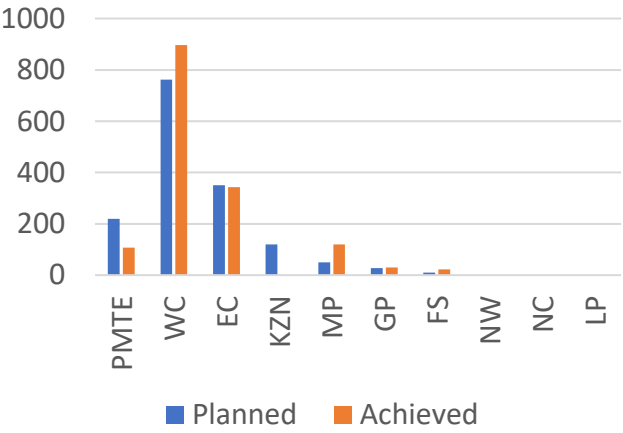
Figure 4: new ablutions were vandalised as there is no security/guard



Lack of condition assessment- resulting in inadequate maintenance plans

Condition assessment by the auditee

Condition assessment



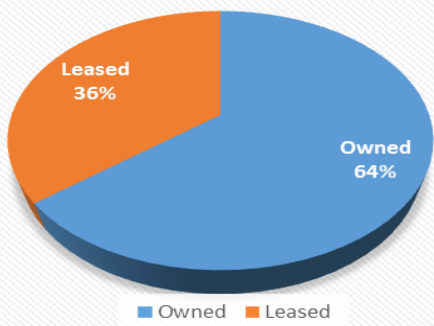
- In the current year the sector has 11 6 428 properties but managed to perform condition assessment on 1 519 properties. It therefore remains a concern that not all buildings will be subject to a conditional assessment every 5 years. As required by GIAMA.
- As a result of not performing these conditional assessment, most of the building are not assessed, which results in money spent on reactive maintenance that does not improve the overall condition of buildings.

- For example, a condition assessment was performed on the New Brighton Police Station in October 2022, and it was found that it is in poor condition. It was recommended that the walls should be demolished and reconstructed. However, PMTE has not done any maintenance on this building.

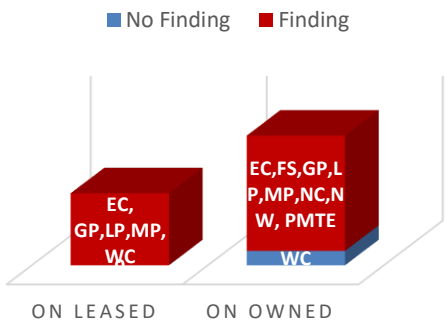


Condition assessment by the AG

Number of buildings



PROVINCES WITH FINDINGS



This indicates that the department is not doing condition assessments on time to identify the maintenance needs required resulting in the state buildings being in dilapidated state.

Example of building visited by the AG team at Old Parliamentary Village



Condition of leased properties

One of the MTSF goals of the Public Works sector is to provide a dignified client experience for its user departments and where they are not able to provide this from their asset register they sector leases from private landlords.

There are concerns noted from user departments where the quality of leased buildings, especially those provide key service delivery are in poor condition.

We have noted instances where even the leased buildings are not in good conditions

KwaThema Police station- PMTE

The KwaThema police station under the JHB region has been in poor condition for years. This has been the only police station in the area since 2004,

however now **Holding cells cannot be used and there is no area to detain criminals.**

The **charge office is not safe to use** therefore they use a room at the back where there isn't enough space and there isn't any privacy, where required.

There are **numerous safety issues** identified ranging from **electrical faults**, exposed electrical wires, **sewage blockages** and **damaged ceilings** which pose risks to both the community and the police officials.



Roslyn Police Station- PMTE

The Roslyn police station in the PTA region also has similar issues where doors don't have handles, sewage blockages, mould on walls dilapidated or leaking roof.

A bigger safety concern is that **criminals are detained in chairs as there is no holding cells** and **ammunition room door handle is broken therefore guns are kept in a room only locked with a padlock**, this poses a safety hazard.

Further the building caught fire in the last 2 years however there is no proof that fire extinguishers are maintained



Mould and moisture forming on the kitchen cell wall and paint peeling from the slab



This is the door to the firearms room (storage) and the handles are not working hence this method of chain and lock is used .



Student housing programme

- Aim to provide additional 300 000 student beds at 26 universities and 50 TVET colleges over 10 years.
- Managed by Development Bank of Southern Africa and Department of Higher Education and Training through MoA agreed in July 2019
- 5 936 of 6 248 planned student beds were added in 2022-23 (cost of R1,52bn by March 2023); three projects were completed within budget – two were completed before planned completion date and one 13 days later

Institution name	Budgeted value	Actual expenditure	Completion date
University of Western Cape (UWC)	R670 m	R516 m	February 2023
North-West University (NWU)	R462 m	R455 m	August 2022
Nelson Mandela University (NMU)	R573 m	R551 m	January 2023

Key elements that contributed to project success:

- Appointment of competent and experienced contractors and agents through proper procurement processes
- Collaboration between contracting department, implementing agent and SIP team in reviewing actual work done against invoices before payment
- Monthly project steering committee meetings to allow proactive oversight and monitoring of challenges and to enable such challenges to be addressed speedily



North West University: Completed complexes



Nelson Mandela University: Bird's eye view of site looking at university – yellow number blocks (1 to 6) completed for occupation on 17 February

Improved enforcement, coordination and communication required –

Analysis of delayed projects

- Same contractors in delayed/ cancelled projects in more than one province in the same sector, and across the key service delivery Health and Education Sectors.
- Several contractor/ consultant combinations are involved in multiple delayed projects.

CIDB Analysis

- Certain contractors received payments in the current year that appears in excess of their CIDB limit range. **(refer to example 02)**
- Certain contractors received payments in the current year while their CIPC status are indicated as dormant.

Examples

Example 01:

- **Same repairs** were performed by multiple suppliers at a PMTE owned property over a 12-month period. **77 suppliers** were identified to be involved in the repairs and maintenance.
- PMTE received a **high number of orders (86)** with the same project description (repairing of roof) and the expenditure incurred in the financial period amounted to **R31 688 158**
- Risk: This is a **fraud risk indication**, which emanates from unscheduled maintenance. As PMTE is more reactive to maintenance issues, this gives an opportunity to create more orders for the same service.

Example 02:

- A payment of **R5 190 813** was made to the contractor with CIDB grading 3 on a construction of road project.
- Based on the CIDB requirements, grade 3 contractors are allowed to tender for contract with a maximum value of **R3 000 000**.
- Risk: Excessive variation orders (or extension of time with costs) which increase the contract value to exceed the contractor's CIDB limit and potential inability to deliver / on-time/ quality.

Impact

- Undue exposure of the system to fraud risks due to weak controls to manage unscheduled maintenance projects.
- More pressure to fiscus due to increased project costs due to delays.
- Compromised quality of work produced by which leads to a high number of significantly delayed projects and cancelled projects.

Improved service delivery enabled by capable, cooperative, accountable and responsive institutions delivering on their mandates

Activate the accountability ecosystem to address the current realities

1 Culture of no accountability and consequences

2 Ineffective resource management

3 Inadequate intergovernmental planning, coordination and support

Our recommendations

Professionalisation of public sector – qualified and competent officials equipped to perform public function conscientiously and with strong sense of public service and ethical disposition.

Requires support for implementation of professionalisation framework built on meritocracy (merit-based management).

Executive authorities and committees in parliament and legislatures should insist on timely and credible reporting and accountability and should play oversight role effectively and with greater impact.

Institutions with mandate for **monitoring and enforcement** should play their part to ensure accountability and consequences.

Coordinating institutions should intensify interventions to improve intergovernmental planning and coordination to ensure service delivery is planned for in integrated and effective manner, and accounted for transparently in performance reports.

Effective use of **audit committees and internal audit units** to improve governance.

Improved **quality of spending** through a focus on economy, efficiency and effectiveness





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