



## Presentation to the CESA Infrastructure Conference

**Engineering the future now** 

Durban International Convention Centre 10 March 2023

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A culture of accountability will improve service delivery



## Audit of the delivery of INFRASTRUCTURE [PFMA 2021-22]





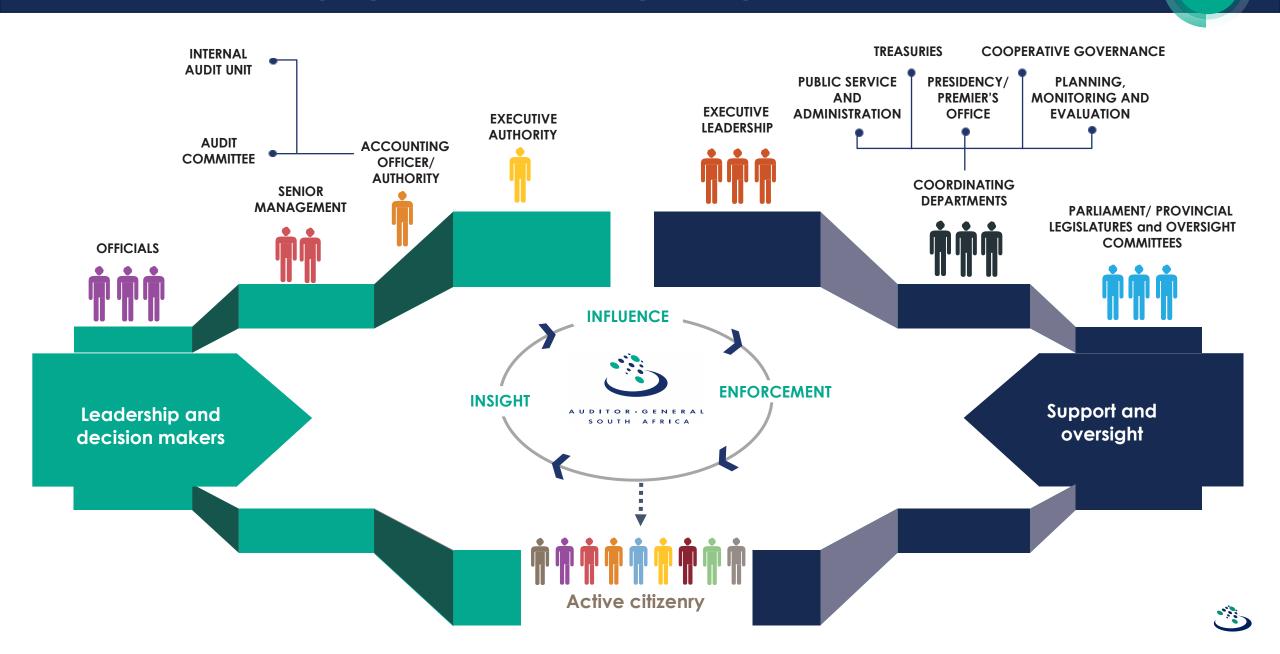
### **VISION**

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

### **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

## All have a role to play in accountability ecosystem



## Impact of infrastructure delivery failures



#### LIVES OF CITIZENS

Existing infrastructure cannot support growing demands for basic services, made worse by backlog in infrastructure provision to citizens.

Government struggles to provide successful and timely infrastructure projects:

- Healthcare facilities
- School infrastructure
- Houses with water and electricity



Citizens spend time and money they could ill afford to access basic services.



Citizens often have to accept poor quality work.



Many revert to service delivery protests to express dissatisfaction and anger.

#### **ECONOMY**

Poor delivery on infrastructure projects and inadequate maintenance have significant cost implications, putting further pressure on the fiscus.

Delayed projects and poor projects management often results in increased cost and financial losses:

- · Standing time
- Extension of time
- Interest
- Remedial work



Risk exists that government properties in poor condition may lead to financial losses.

#### UNEMPLOYMENT

Lack of proper and timely delivery of infrastructure in key sectors hampers government's goal of increasing employment and alleviating poverty.

Economic development depends on functioning infrastructure, yet projects we looked at did not provide

- lasting social and
- economic value to citizens.

Infrastructure investment and development in key service delivery sectors is ideal platform through which to create



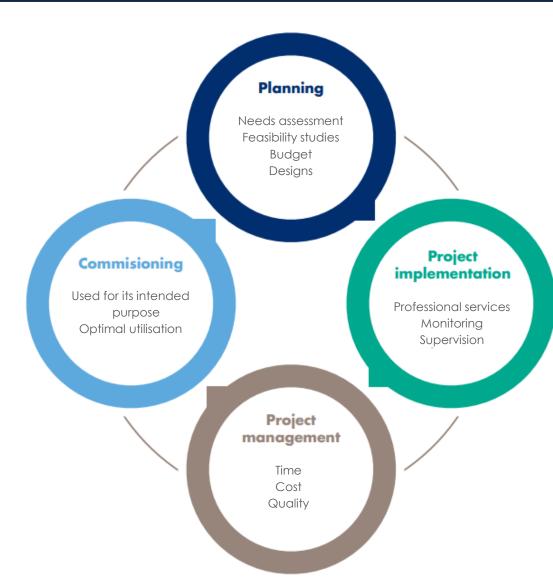
- Meaningful job opportunities
- Improve skill sets of workers



Infrastructure is the lifeline of the country's economy, with investment and delivery on infrastructure having a ripple effect on the prosperity and wellbeing of the country's people



## Project life cycle for infrastructure delivery and scope





Key projects	Public works  16 projects (across provinces)	■ Department of Water and Sanitation	Transport  South African National Roads Agency (Sanral)  2 projects  Total contract value: R2 billion
	<ul> <li>4 projects for Property         Management Trading Entity         (PMTE)</li> <li>Total contract value: R2,1         billion         Condition assessment         (systematic inspection, review         and report on state of         building's structure and         systems):         10 projects</li> </ul>	<ul> <li>Water Trading Entity</li> <li>Trans-Caledon Tunnel Authority</li> <li>6 projects</li> <li>Total contract value: R16,8 billion</li> </ul>	



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



## Audit outcomes on infrastructure delivery

#### **Root causes:**



Lack of effective project planning and adequate coordination



Shortage of project management skills and capacity at department level



Action plans on nonperformance not enforced and consequence not applied



Inadequate coordination and collaboration and deliverables not synchronised



Inspections and maintenance not done and insufficient budget

We audited the infrastructure delivery process of selected projects, and identified deficiencies throughout the project life cycle:

## Inadequate needs assessments and project planning

- Need for project not always id.
- Crucial information for specifications sometimes lacking.
- Delays in providing information such as designs to contractors.



Scope changes, delays, cost increases, cannot provide timely and effective access to finished facilities

## Poor project implementation and supervision

- Projects not properly monitored and supervised.
- Auditees not identifying and dealing with challenges.
- Lack to take decisive action.



Projects already running late, incurred further delays and in many instances increased cost

## Weak project management in terms of time, cost and quality

- Many projects did not achieve planned original completion date.
- Completion dates often revised multiple times yet projects still under construction
- Current expenditure was not always monitored against progress and budgeted funds
- Unsatisfactory work was no always identified



Projects due to be completed years ago still under construction, projects not completed within budget, projects have several construction defects

#### Insufficient coordination among role players

Reactive approach to maintenance

 Project completion, staff appointments and availability of completed infrastructure, resources and municipal services not synchronised to ensure delivery.

The shortcomings hampered government's ability to drive service delivery, economic opportunities and growth

## Inadequate needs assessment and project planning

## WHAT WE FOUND



- scope changes
- cost increases and ultimately
- an inability to provide timely and
- effective access to finished facilities



#### **Examples -**

#### Nkondlo 500 and Goboti 300 housing project

 Study identified difficult terrain, but did not investigate financial implications. Resulting in additional cost of R23,2 million and scope reduction of 200 units.

#### Ntsongeni 130 and Lesseyton 752 housing project

• Study did include different options to deliver the project. Resulting in additional R19,1 million just to access the site.

#### Laerskool Frikkie Meyer

 Poor planning of this 12 month refurbishment, resulted in certain activities to be placed on hold.

Stripped grade R classroom refurbishment delayed





Projects delayed by more than **4** and **6** years respectively (impacting 1 682 beneficiaries).

Reduction in scope impacted **200** original intended beneficiaries that would not have houses built for them.

At the time of the audit, the projects were still not completed.



Construction and refurbishment should decrease classroom overcrowding and an environment conducive to learning and teaching.

These objectives were not achieved, resulted in additional cost, mobile classrooms had to be rented for longer period than planned.



## Ineffective project implementation

# WHAT WE FOUND



Projects not properly monitored and supervised

 projects already running late, incurred further delays and in many instances increased cost

#### **Examples** -

#### **Greenville Hospital Phase 1**

- Contractor delayed the start of the project
- During construction, he showed slow progress due to cash-flow problems, capacity issues and poor-quality work that had to be redone
- Cash-flow problems increased due to late payment by the department.
- The contractor abandoned the site disputing unfair application of penalties.
- Contractor was terminated only 23 months after principal agent recommended termination (due to poor performance).

Slow response by the department resulted in delays and cost increases.



The delay negatively affected operations of the hospital as the prefabricated structures were not completed on time.

Hospital was in very poor state.

Continued delay in providing adequate healthcare to citizens.

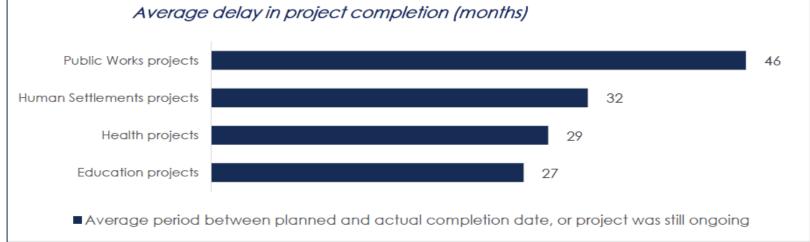


## Ineffective project management

# WHAT WE FOUND



- Weak project
  management in terms
  of time, cost and
  quality
- projects due to be completed years ago still under construction [Time]



Many projects **did not achieve** the planned original **completion date**. In some instances, completion dates were **revised multiple times** yet projects were still under construction at the time of our site visits.

**83%** projects completed late or still under construction after contractual completion date

**34 months** – average delay



## Ineffective project management

## WHAT WE FOUND



- Weak project management in terms of time, cost and quality
- projects not completed within budget [Cost]

## MA

Limited access to efficient and effective healthcare services. Increased pressure on already overcrowded facilities in surrounding area.

#### **Examples** -

#### Dr Pixley Ka Isaka Seme Memorial Hospital

- Project was delayed by 42 months, due to
  - > Change in design,
  - Management proceeded with work even though important construction information was not ready to be issued to the contractor,
  - Supply chain management unit unable to align procurement process with equipment to the construction of the hospital due to capacity constraints.
- Payments increased to R2,3 billion against the R1,9 billion contract value, due to
  - > Delays in furnishing construction information
  - > Approval processes, interest charges, additional work to strengthen ramp, late inclusion of MRI machine



**Steal beams** used to strengthen ramp designed with insufficient load-carrying capacity



## Ineffective project management

# WHAT WE FOUND



Weak project management in terms of time, cost and quality

 projects not completed within budget [Quality]



Poor workmanship will result in work to be rectified.

Contravention of building regulations might mean that certain work has to be demolished and rebuilt.

This will lead to increased costs and delays in training nurses to meet the health needs of citizens.

## Examples -

**Mmabatho Nursing College** 

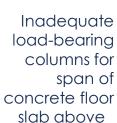


Brickwork incomplete and steel column above upstand beam not within width of beam



Construction of staircase not in accordance with building regulations

Concrete
beams casted
separately in
parts with
visible cracks;
concrete
overlap in
attempt to
repair cracks







## Commissioning

## WHAT WE FOUND



### Insufficient coordination among role players

comprehensive infrastructure delivery is not taking place

## Montrose Mega City housing development

**Examples** -

- Five years since appointment of the developer, only 1 000 (of 13 792) houses had been constructed, but none were 100% complete.
- Although top structures were complete, sewer and electricity bulk lines had not been installed, which meant that units are not ready for occupation.
- The unavailability of bulk services was a municipality competency. No correspondence between the role players on how to rectify to ensure delivery of houses.
- Due to the lack of coordination, completed houses cannot be handed over to beneficiaries, and were exposed to theft, vandalism and deterioration.
- When bulk services become available, the department will most probably have to incur additional cost for damaged infrastructure.



Military veteran completed, not occupied due to bulk sewerage and electricity not connected. The windows were vandalised.



The delays resulted in beneficiaries still not having access to safe, clean and adequate housing.



## Activating the accountability ecosystem – a call to action

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



#### Plan

**Refocus and energise** performance **planning processes** to be comprehensive and aligned to auditees' mandate and the Medium-Term Strategic Framework to ensure that service delivery is planned for and reported on.

### Do / implement

Ensure that vacancies are filled by appointing **capable officials** and ensure **stability in key positions** that will enable accountability.

Maintain a **robust financial management culture**, which includes ensuring effective revenue collection, prudent spending, and the prevention and swift recovery of financial loss and wastage

### Check / monitor

Enable and insist on in-year monitoring **controls** and project management disciplines to achieve planned service delivery on time, within budget and at the required quality

#### Act

Lead by example and ensure that **consequences for non-compliance with legislation and accountability failures** are implemented to enable improved performance and service delivery



## Call to action and role of CESA

### Just as we appealed to you in 2020, we extend the same appeal:

You are citizens before you are professionals and can help to rebuild our country.

Play your part and influence the ecosystem positively to change the lived realities of citizens.

As consulting
engineers, you can
assist in ensuring that
the projects are
properly planned and
there is adherence to
the budgets, timelines
and efficient processes

You have a responsibility in delivering services economically, efficiently and effectively given the state of our country's economy.

Short-termism will ultimately bring business to its knees.

You have and can play a role in influencing accountability within engineering profession and public sector procurement by refusing to allow to be part of wrongful practices to circumvent due process.



## THANK YOU



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