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Public-sector infrastructure update

■ Introduction

This annexure reviews planned public infrastructure spending and associated reforms, and provides an update on the status of major capital projects.

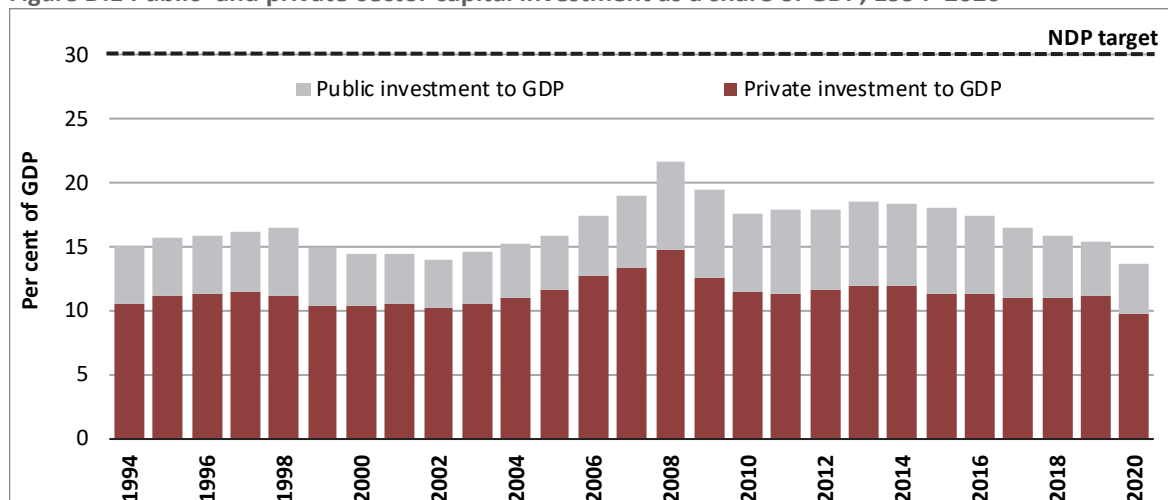
The economic recovery plan announced in October 2020 links infrastructure investment and related institutional reforms to support higher economic growth. Many of these reforms involve pooling resources with the private sector, multilateral development banks and development finance institutions to fund infrastructure investment more effectively. A comprehensive project pipeline appears at the end of the annexure.

■ Trends in public- and private-sector investment

To grow the economy and reduce unemployment and poverty, capital investment by the public and private sectors, which amounted to 13.7 per cent of GDP in 2020, needs to significantly increase. Over the past decade, weak growth, rising spending pressures and the financial support provided to state-owned companies have constrained government's ability to invest in new infrastructure. As a result, capital investment has been adversely affected.

Between 2010 and 2020, public-sector capital investment averaged 5.8 per cent of GDP, while private capital investment averaged 11.2 per cent of GDP (Figure D.1). Total investment is well below the National Development Plan target of 30 per cent – and has been declining since 2015. To reach this target, public-sector investment would need to grow from 3.9 per cent of GDP in 2020 to 10 per cent of GDP by 2030, while private-sector investment in infrastructure would need to grow from 9.8 per cent of GDP in 2020 to 20 per cent in 2030.

Figure D.1 Public- and private-sector capital investment as a share of GDP, 1994–2020



*All GDP data in this annexure is recalculated in line with Statistics South Africa's 2021 rebasing and benchmarking exercise. It is therefore not directly comparable with GDP data from earlier budget documentation

Source: Reserve Bank

Public-sector infrastructure spending highlights

Table D.1 summarises government's infrastructure spending plans for the next three years, combining infrastructure spending estimates at national, provincial and local government level, including state-owned companies and other public entities. Public-sector infrastructure spending over the 2022 medium-term expenditure framework (MTEF) period is estimated at R812.5 billion. State-owned companies continue to be the largest contributor to capital investment, spending a projected R251.7 billion over the next three years. Provinces are expected to spend R185.5 billion on infrastructure over the same period, while municipalities are forecast to spend R194.4 billion.

Public housing built through the *human settlements development grant* in provinces is expected to total R44.3 billion. Although these assets are transferred to homeowners, this spending is a substantial government contribution to the built environment. Spending on economic infrastructure, mainly by state-owned companies, accounts for 77.6 per cent of the medium-term estimate. These funds are used to expand power-generation capacity, upgrade and expand the transport network, and improve sanitation and water services. Social services infrastructure accounts for 18.2 per cent of the total, of which health and education account for 5 per cent and 7 per cent respectively.

To help close the gap between available public resources and the growing infrastructure need, government's economic recovery plan includes immediate measures to boost investor confidence and longer-term reforms to promote sustained economic growth. Higher and more effective infrastructure spending is central to this plan.

Table D.1 Public-sector infrastructure expenditure and estimates

R billion	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	MTEF
	Outcomes			Revised estimate	Medium-term estimates			total
Energy	39.9	26.2	30.0	34.5	35.4	45.2	44.1	124.8
Water and sanitation	27.1	22.5	29.5	33.9	41.4	43.9	45.7	131.1
Transport and logistics	74.4	70.5	58.6	73.8	88.6	106.1	117.1	311.8
Other economic services	13.5	5.7	6.9	23.6	21.9	20.3	20.3	62.6
Health	11.3	12.2	14.7	13.8	14.1	13.4	12.9	40.4
Education	17.2	17.4	14.2	16.4	19.4	18.4	19.1	56.9
Human settlements ¹	15.0	20.9	13.3	13.4	14.3	14.9	15.1	44.3
Other social services	10.1	4.7	4.1	2.2	2.1	1.9	2.0	6.0
Administration services ²	7.7	7.4	12.1	12.0	12.3	11.2	11.2	34.7
Total	216.2	187.4	183.4	223.6	249.6	275.4	287.5	812.5
National departments	13.6	13.8	11.4	14.4	17.5	17.3	17.2	52.0
Provincial departments	59.5	61.0	51.8	60.1	61.0	61.2	63.3	185.5
Local government	61.0	41.2	55.6	62.1	63.0	64.3	67.2	194.4
Public entities ³	9.6	14.5	8.8	21.6	27.3	37.4	43.7	108.4
Public-private partnerships	4.9	5.6	4.9	6.8	7.1	6.6	6.7	20.4
State-owned companies ³	67.5	51.2	50.8	58.6	73.6	88.6	89.5	251.7
Total	216.2	187.4	183.4	223.6	249.6	275.4	287.5	812.5

1. Human settlements includes public housing amounting to R44.3 billion over the MTEF period

2. Administration services includes infrastructure spending by the departments of International Relations

and Cooperation, Home Affairs, and Public Works and Infrastructure, Statistics South Africa and their entities

3. Public entities are financed by capital transfers from the fiscus and state-owned companies are financed from a combination of own revenue and borrowings

Source: National Treasury

Public-sector infrastructure reforms

The National Treasury, Department of Public Works and Infrastructure (DPWI), Infrastructure South Africa and the Infrastructure Fund are undertaking complementary reforms to strengthen the infrastructure value chain. Initiatives include the National Infrastructure Plan 2050, the Budget Facility for Infrastructure (BFI) and the Infrastructure Fund. The DPWI is developing a comprehensive, focused infrastructure plan; Infrastructure South Africa is working to unblock policy and regulatory obstacles to build a credible and bankable pipeline of projects; the BFI is increasing the rigour in the planning and appraisal of projects; and the Infrastructure Fund is increasing skills and capacity in the structuring of blended finance projects, where most of the financing will come from the private sector.

Department of Public Works and Infrastructure

Infrastructure South Africa, housed within the DPWI, is responsible for coordinating the development, management and monitoring of a comprehensive infrastructure pipeline, and promoting infrastructure investment. Part of its work involves unblocking policy and regulatory obstacles to investment and facilitating policy certainty to build investor confidence.

Infrastructure South Africa is developing the National Infrastructure Plan 2050, which was presented to Cabinet in July 2021 and has been gazetted for broader public comment. The plan provides a strategic vision that links the National Development Plan objectives to actionable steps and intermediate outcomes. It aims to increase infrastructure investment, create new jobs through bankable infrastructure projects, and improve governance frameworks that leverage private investment in the development and financing of critical economic infrastructure. Phase 1 of the plan focuses on critical economic network infrastructure in the energy (specifically electricity), digital communications, freight transport and water sectors. Phase 2 will focus on distributed infrastructure and related municipal services.

In 2020, 50 strategic integrated projects were gazetted in terms of the Infrastructure Development Act (2014). A further 12 special projects, of which five had an additional focus on employment, were also identified. The sector updates below outline the infrastructure project pipeline.

■ Sector updates

Water and sanitation

In the water sector, government is prioritising 11 strategic projects with an estimated value of R115 billion. The projects are expected to create about 20 000 temporary jobs during construction and 14 000 jobs during the operational phases.

The second phase of the Lesotho Highlands Water Project, which has an estimated capital investment of R32.6 billion, is expected to be completed in 2027. The Trans-Caledon Tunnel Authority (TCTA) has raised about R15 billion from the Development Bank of Southern Africa, the African Development Bank and the New Development Bank to continue construction on the project.

The TCTA will continue implementing the Berg River-Voëlvlei Augmentation Scheme and phase 2 of the Mokolo-Crocodile River water augmentation project. The Berg River-Voëlvlei Augmentation Scheme has an estimated capital investment of R800 million and is expected to be completed in 2026. Long-term funding for the project is contingent on the conclusion of water supply agreements with water user associations. The Mokolo-Crocodile River project has an estimated capital investment of R12.3 billion and is expected to be completed in 2027. The project is at the procurement stage.

The uMkhomazi Water Project has an estimated capital investment of R23.2 billion and is expected to be completed in 2029. Full water user agreements have been prepared and negotiations with users are under way.

Energy

Three energy projects have been gazetted: the Risk Mitigation Power Purchase Procurement Programme, the Small Independent Power Producer Programme (Small IPP Programme) and the Embedded Generation Investment Programme. A total of 4 579 megawatts (MW) of new generation capacity worth an estimated R90 billion is expected to become available during 2022/23. Private-sector investors will provide the investment capital. The programmes aim to alleviate the current electricity supply constraints, support economic recovery, reduce the use of diesel-based peaking electrical generators and support broad-based black economic empowerment.

The Risk Mitigation Power Purchase Procurement Programme – sponsored through the Department of Mineral Resources and Energy and implemented through the Independent Power Producers (IPP) Office – involves the development, installation and operation of up to 1 996 MW of dispatchable new generation capacity and an investment of approximately R40 billion. A total of 11 preferred bidders were announced, with projects that include technologies such as gas, renewable and battery combinations. The programme is expected to commercially and financially close in the first quarter of 2022 and to become operational in the second quarter of 2023.

The fifth bid window of the Renewable Energy Independent Power Producer Programme for 1 600 MW of onshore wind and 1 000 MW of solar photovoltaic (PV) power was launched in April 2021. More than 100 bids were received and evaluated, and 25 preferred bidders were announced in October 2021. It is expected that these bidders will reach commercial and financial close in the first quarter of 2022 and that the projects will be operational in the third and fourth quarters of 2023, resulting in an investment of about R50 billion.

The sixth bid window for another 2 600 MW of renewables and the first bid window for 513 MW of storage are expected to be put to the market by June 2022. The Department of Mineral Resources and Energy is also working on a gas programme for 3 000 MW of capacity.

The Embedded Generation Investment Programme involves the development, installation and operation of up to 469 MW of solar PV and wind generation projects through an estimated R9.7 billion in subordinated loans and broad-based black economic empowerment funding. This will be done through two components. The first component will provide loans to private-sector solar and wind IPPs. The second component will provide loans to special purpose vehicles established and owned by local community trusts and/or small, medium and micro-sized enterprises so that they can buy and manage equity in local renewable energy sub-projects. The Development Bank of Southern Africa and the Green Climate Fund will administer and manage this programme.

Transport and logistics

The transport sector has 15 gazetted projects to the value of R34.3 billion. The South African National Roads Agency Limited is improving the capacity of several routes on toll and non-toll networks. Thirteen projects with a combined value of about R19 billion have been prioritised and will create nearly 10 000 jobs during construction.

Construction has been completed on the N1 Windburg Interchange to Windburg Station and the N1 Ventersburg to Kroonstad in the Free State, the N1 Polokwane Eastern Ring Road Phase 2 in Limpopo and the N2 Mtunzini Toll Plaza to Empangeni T-Junction in KwaZulu-Natal. The Dardanelles to Lynnfield Park and Cato Ridge routes on the N3 in KwaZulu-Natal are under construction, while several other projects are at advanced stages of procurement.

The Small Harbours Programme aims to revitalise harbours in the Western Cape and develop new harbours in the Northern Cape, Eastern Cape and KwaZulu-Natal. The rollout of this programme is expected to create 5 750 jobs. The new harbours are all in the preparation stage, while the repair and maintenance work is expected to be completed by March 2022. To date, the revitalisation work has created 719 jobs and empowered local small businesses to the value of over R89 million.

Digital infrastructure

The digital infrastructure sector has four strategic integrated projects: the Space Infrastructure Hub, the digitisation of government records, SA Connect Phase 1, and the MeerKAT and Square Kilometre Array (SKA) project. The latter has made significant progress, with civil construction work starting on the MeerKAT radio telescope extension project to add an additional 20 radio telescopes to the 64 existing telescopes. Phase 1 of the SKA radio telescope project, which will build an additional 133 radio telescopes, is in the procurement phase. The construction activities on both the MeerKAT and SKA projects are expected to develop skills and create an estimated 600 jobs during construction and 40 during operation. If funding is sourced by end of the first quarter of 2022, construction will begin by December 2022.

Agriculture and agro-processing

The special projects in agriculture and agro-processing fall under strategic integrated project 23. The Marine Tilapia Project in the Eastern Cape's Mbhashe Municipal District aims to establish a new, sustainable and inclusive green growth aquaculture industry along the east coast, producing low-cost whitefish protein. The project has been delayed due to limited funding.

The African Development Bank has approved a grant to provide transaction advisory services in the preparation of feasibility studies to attract finance to develop two agri-parks: Tsiame Agri-park in the Free State and Springbokpan Agri-park in the North West.

To improve agricultural production and revitalise essential agricultural infrastructure, the Department of Agriculture, Land Reform and Rural Development plans to employ 10 000 extension officers over the medium term. Extension officers support farmers with decision-making by providing them with information on effective and sustainable farming practices. The department will also revitalise enabling agricultural infrastructure, through upgrading 21 fresh produce markets across the country and revitalising five irrigation schemes to make production schemes functional.

Human settlements

Human settlements projects include six Integrated Residential Development Programmes, 10 social housing projects and two high-impact privately led developments. The 18 projects gazetted under the strategic integrated project portfolio have a total investment value of R142 billion and will provide housing for over 170 000 people. The portfolio is projected to create more than 578 000 jobs during development and over 89 000 permanent jobs.

The National Upgrading Support Programme helps provinces and municipalities formalise informal settlements. Over the MTEF period, provinces and municipalities will be assisted with town planning and the township establishment process to formalise an estimated 900 informal settlements and upgrade 180 000 serviced sites with access to municipal services. The upgraded stands will be funded from the *informal settlements upgrading partnership grant*.

Budget reforms

Budget Facility for Infrastructure

The Budget Facility for Infrastructure (BFI) supports quality public investments by improving the planning, technical assessment, budgeting and execution of large infrastructure projects. The facility has helped build a pipeline of projects that have undergone rigorous technical analysis and ensures that the budgeting and commitment of fiscal resources take place in a transparent manner. Since inception, there have been five BFI windows to support large infrastructure projects.

The facility considers the deployment of blended or hybrid financial solutions comprising a combination of grants, debt and equity sources from public and private institutions, and concessional loans from multilateral development banks. Blended finance projects that need fiscal support are linked to the budget process through the BFI. The budget process ensures the selection of projects that balance boosting economic development, job creation and private-sector investment with the country's debt-constrained fiscal position.

In response to two calls for proposals for large infrastructure projects that required budget allocations in the 2021 adjustments budget and 2022 MTEF period, public institutions submitted 61 projects or programmes with a total cost of R506.7 billion and a funding requirement of R82.2 billion. Projects recommended for funding include the George Municipality Water and Sanitation Project, Umgeni Water Project, Social Housing Programme, Olifants-Doorn River Water Resources Project: Raising of Clanwilliam Dam, Phase 1 of the Olifantspoort and Ebenezer Water Supply Scheme Programme and Phase 2 (cluster 2) of the Student Housing Infrastructure Programme. Fiscal support of R6.7 billion was approved for these projects, incentivising the crowding in of private-sector capital.

Project planning and appraisal guideline

Government is increasing public investment to promote economic growth, social development and job creation. However, given the constrained fiscal environment, projects need to be prioritised by economic feasibility. In February 2020, the National Treasury initiated the development of a government-wide guideline to improve the process of appraising and selecting public projects.

The guideline provides project sponsors with simple methodologies to prepare and appraise infrastructure investments. To ensure uniformity, accuracy and ease of project appraisal across all government sectors, the National Treasury has also created a web-based tool that provides standard parameters and economic values that will be used in the appraisal of projects. The tool includes estimates for the economic opportunity cost of capital, foreign exchange premium on non-tradable outlays, commodity-specific conversion factors for tradable commodities, commodity-specific conversion factors for non-tradable services, and the social cost of labour.

A set of case studies will be made available to illustrate the practical use of the concepts in the guideline. Both the guideline and web-based tool will be available on the National Treasury website in 2022.

The Public Procurement Bill

The draft Public Procurement Bill was gazetted for public comment in February 2020. The bill proposes a single regulatory framework for public procurement, which includes procurement of public-private partnerships and infrastructure. The comments received have been incorporated and, once approved, a draft revised bill will be submitted to the National Economic Development and Labour Council for consultation. Thereafter, the bill will be submitted to Cabinet for approval to introduce it in Parliament.

Cities Support Programme and climate change

The National Treasury recognises the risks that climate change presents to the country and is working with partners to ensure that national and municipal infrastructure investments are climate-resilient. In addition, there are opportunities to integrate climate change into infrastructure investments to leverage fiscal resources and mobilise blended finance, create jobs and ensure more resilient, sustainable and productive cities.

The National Treasury's Cities Support Programme is providing pre-feasibility support to metropolitan municipalities to strengthen climate resilience in the design, preparation, packaging and financing of the following projects over the next six months:

- Buffalo City – Energy Storage Facilities
- City of Cape Town – Adderley Street Fountain Liveable Urban Waterways and Urban Flood Risk and Resilience
- City of Ekurhuleni – Kaalspruit Catchment Rehabilitation
- City of Tshwane – Hennops River Rehabilitation
- Mangaung – Bloemfontein Airport Development Node
- City of Johannesburg – Land Remediation and Renewable Energy
- eThekweni – Shongweni Integrated Waste Management Beneficiation Facility.

In addition, the National Treasury is strengthening the integration of climate resilience in the following tools and systems that guide spatial planning, land development and capital infrastructure project delivery:

- Cities Infrastructure Delivery Management System
- Project planning and appraisal guideline
- Catalytic land development guideline
- Metropolitan spatial planning guidelines.

Improving transparency on infrastructure delivery and reporting

The National Treasury extended the scope of the infrastructure reporting model from April 2021 to include national government, and efforts are being made to expand it to local government. The model aims to enhance transparency and uniformity on infrastructure budget analysis and spending reviews across the spheres of government in the following areas:

- **Spatial budget analysis:** The model enables spatial reference of consolidated infrastructure budgets across spheres and sectors. The inclusion of national government infrastructure data will provide a holistic view of government spatial spending priorities and patterns, while the emerging local government component will allow for a comprehensive view of the implementation of the infrastructure budgets across the three spheres of government. All components of the model will be operational by March 2023.
- **Unit costs:** Analysis of unit costs and associated cost drivers across government will be identified and possible remedial actions proposed.
- **Funding policies:** The repository of collated data will strengthen infrastructure funding policy consideration and forecasting.

Through the model, government will for the first time have real-time information on infrastructure delivery, the cost and purpose of each project, and the capability of the implementing agent or department.

The Infrastructure Technical Assistance Facility

The Infrastructure Technical Assistance Facility (ITAF) was designed by the European Union (EU) and the National Treasury to improve the infrastructure policy, regulatory and institutional framework. The ITAF, which is situated within the National Treasury, will complement and catalyse various reform programmes. Its budget, which is funded by the EU, amounts to €9 million over eight years and its objectives include:

- Supporting government to improve regulations and investor compliance with administrative and regulatory requirements to enable infrastructure investments.
- Reviewing the infrastructure sector to identify key shortcomings in project implementation.
- Mobilising infrastructure experts to assist with the development of training materials, skills and institutional capacity.
- Supporting the development of practical plans of action and ensuring integrated planning by departments.
- Increasing public access to relevant infrastructure investment information.
- Improving the monitoring of infrastructure delivery.

Infrastructure Fund

Since inception, the Infrastructure Fund has packaged a number of catalytic programmes and projects with a capital value of R21 billion. Of this, R2.6 billion was approved through the fifth window of the BFI for the Social Housing Programme; Phase 2, cluster 2 of the Student Housing Infrastructure Programme; and Phase 1 of the Olifantspoort and Ebenezer Water Supply Scheme Programme, with the remainder of the funding to be sourced from project owners' equity and the debt capital markets. These projects, along with Phase 2A of the Mokolo-Crocodile River water augmentation project, are being fast-tracked for investment opportunities through innovative financing instruments. These projects are discussed in further detail below.

Social Housing Programme

The Infrastructure Fund partnered with the Social Housing Regulatory Agency and the Department of Human Settlements to address the failure of social housing projects to secure loans despite consolidated capital grant commitments. Through the BFI, funding of R305 million for six social housing projects in four provinces with a capital cost of R1.1 billion was approved. This funding aims to cover the debt and equity shortfalls of private developers to complement 70 per cent of the funding from the consolidated capital grant.

Student Housing Infrastructure Programme

The programme aims to address the acute backlog of student housing in higher education. The Infrastructure Fund, in collaboration with the Department of Higher Education and Training, assisted in the structuring, financing and fundraising for Phase 2, cluster 2 of the programme. Funding of R900 million was approved through the BFI structures for four Phase 2, cluster 2 projects. The remainder of the funding will be sourced from equity to be injected by the post-school education and training institutions, debt financing and support from the Department of Higher Education and Training.

Olifantspoort and Ebenezer Water Supply Scheme Programme

Phase 1 of this programme, valued at R4.5 billion, aims to increase water supply to the Polokwane Local Municipality, Sekhukhune District Municipality and Mopani District Municipality in Limpopo by alleviating current supply shortages that hinder economic development in the area. The Infrastructure Fund, working with Lepelle Northern Water and the Department of Water and Sanitation, fast-tracked the

implementation of the programme. Funding of R1.4 billion was approved through the BFI to fund the social component of the project.

Mokolo-Crocodile River water augmentation project

The project aims to augment water supply to the Waterberg district of Limpopo. It will stimulate socioeconomic development, particularly residential development, mining and electricity production. The Infrastructure Fund is assisting the TCTA to raise R5 billion of its R12.4 billion capital requirements from development finance institutions.

■ Infrastructure Fund project pipeline

The Infrastructure Fund is collaborating with various government departments and other institutions, such as Infrastructure South Africa and the Development Bank of Southern Africa, to prepare four projects with an investment value of R89.2 billion. These include a project to modernise six border posts shared with neighbouring countries; South Africa Connect; phase 1 of the uMkhomazi Water Augmentation Project; and six municipal water and sanitation projects related to the Water Infrastructure Programme.

Tables D.2 and D.3 provide a pipeline of projects at different stages of development. Some projects are still in the early stages of project preparation, while others have been approved for funding and are in the financing, procurement and construction stages.

Table D.2 Projects at advanced stages of preparation

Project name	Project description	Estimate of potential total investment (R million)	Progress to date
South Africa Connect Programme	The programme seeks to ensure universal access to broadband services for all South Africans, prioritising rural and underserved areas	53 000	Feasibility studies completed. Phase 1B cost apportionment being finalised.
One-Stop Border Posts	To modernise border post infrastructure to ensure efficient movement of goods and people through six inland border posts	11 000	Feasibility studies completed. The request for proposal is being finalised for issuance by March 2022.
Phase 1: uMkhomazi Water Augmentation Project	The project aims to bridge the water supply deficit in the Umgeni system in KwaZulu-Natal. Phase 1 consists of bulk raw water implementation by TCTA and bulk potable water implementation by Umgeni Water. Main components are a dam and conveyance infrastructure	23 200	Feasibility studies completed. Advanced stage of environmental impact assessment. Finalising the financial modelling of the project.
Six water and sanitation projects	To improve the integrity of the bulk water and sanitation infrastructure in selected priority district municipalities, to improve supply reliability	2 000	Feasibility studies being completed.
Total		89 200	

Source: Infrastructure Fund unit

Table D.3 Details of six water and sanitation projects

Project name	Project description	Estimate of potential total investment (R million)	Progress to date
Sekhukhune District Municipality			
Steelpoort Wastewater Treatment Works	Development of wastewater treatment works with an estimated capacity of 16 megalitres per day (ML/day)	220	Feasibility
Jane Furse Wastewater Treatment Works	Development of wastewater treatment works with an estimated capacity of 16 ML/day	352	Feasibility
Ugu District Municipality			
uMbango Wastewater Treatment Works	Increase the capacity of the existing wastewater treatment works by 5 ML/day	120	Feasibility
New Melville Wastewater Treatment Works	Implementation of a new wastewater treatment works with a capacity of 1.5 ML/day	80	Feasibility
Vhembe District Municipality			
Musina and Nancefield Wastewater Treatment Works	Implementation of a centralised wastewater treatment works with a capacity of 17.5 ML/day	385	Feasibility
Musina	Implementation of bulk water supply for Musina areas	260	Feasibility
iLembe District Municipality			
KwaDukuza Wastewater Treatment Works	Implementation of 12 ML/day capacity	159	Feasibility
Maphumulo Wastewater Treatment Works and sewer reticulation	Implementation of 1.5 ML/day Maphumulo wastewater treatment works and sewer reticulation	76	Feasibility
Sundumbili Wastewater Treatment Works	Implementation of 15 ML/day Sundumbili wastewater treatment works	190	Feasibility
Sol Plaatje Local Municipality			
Bulk Water Supply Pipeline	Implementation of Riverton and Newton bulk water pipeline	60	Feasibility
Ray Nkonyeni Local Municipality			
Oslo Beach Substation	Implementation of 20 megavolt amperes electricity substation	63	Feasibility

Source: Infrastructure Fund unit

Pipeline of other major public-sector projects

Table D.4 summarises other major public infrastructure projects, some of which are public-private partnerships.

Table D.4 Other major public-sector infrastructure projects

Project name	Project stage	Project description	Estimated project cost
Salvakop Precinct PPP Project	Feasibility	Collaborative project between the three spheres of government to build four government headquarters, commercial buildings and a shelter for the vulnerable	R18 billion
Gauteng Schools PPP Programme	Feasibility	Construction, expansion, refurbishment and facilities management of 64 schools in Gauteng	R4.7 billion
Inkosi Albert Luthuli Central Hospital PPP Project	Procurement	Design, construction, operation and provision of ICT equipment	R10.4 billion
Renewable Energy for Public Buildings	Procurement	Procurement of renewable energy and energy efficiency for public buildings	R55 billion
Kopanong Precinct PPP Project	Procurement	Construction of Gauteng Provincial Government office to consolidate administration function of 19 buildings in the Johannesburg CBD	R6.5 billion
Rural Bridges Programme	Feasibility	Construction of rural bridges in various parts of the country	R7.1 billion
KwaMashu Wastewater Treatment Works	Feasibility	Design, finance, build and operate wastewater treatment works in KwaMashu, eThekweni Municipality	R1.2 billion
City of Cape Town Water Desalination	Feasibility	Desalination of sea water for bulk and reticulation	R2.5 billion
Comprehensive Urban Management Programme	Feasibility	Improvement and maintenance of public spaces in various cities and towns to promote economic growth	R3.3 billion
Limpopo Central Hospital PPP Project	Implementation	Construction of a new 488-bed central hospital in Polokwane, which will form part of an academic health complex attached to the University of Limpopo's medical school	R4.5 billion
Boegoebaai Port and Rail Development PPP Project	Feasibility	Port and rail development in Boegoebaai in the Northern Cape	R13 billion
Gauteng Rapid Rail Network Extension Parts 1 and 2 (Gautrain 2) PPP Project	Feasibility	A two-phase extension of the existing Gautrain rail system	R65.4 billion
Midvaal Electricity Distribution Project	Procurement	Refurbishment and expansion of the existing distribution lines owned by the municipality	R1 billion
Solar Water Initiatives	Feasibility	Rollout of solar water heaters across the residential market through partnering with the insurance industry and banks	R6.8 billion
National Roads Programme – upgrades to existing non-concession national toll roads	Feasibility	Major upgrades to various sections of the N1, N2 and N3	R22 billion
Small Harbours Development Programme	Implementation	Upgrading and refurbishment of 12 proclaimed fishing harbours in the Western Cape, and nodal-based refurbishment and development of new harbours in the Northern Cape, Eastern Cape and KwaZulu-Natal	R7.1 billion

Table D.4 Other major public-sector infrastructure projects (continued)

Project name	Project stage	Project description	Estimated project cost
Expansion of the MyCITI Bus Rapid Transport System in Cape Town	Implementation	Expansion of the MyCITI bus rapid transit system network to areas including Langa, Mitchells Plain and Khayelitsha	R7.1 billion
Tygerberg Hospital	Implementation	Construction of a 550-bed regional hospital	R4.2 billion
Klipfontein Hospital	Implementation	Construction of a new hospital to replace the GF Jooste Hospital	R4.3 billion
Bravos - Berg River Voëlvlei Dam Pipeline (Western Cape)	Construction	Construction of a weir and abstraction works with a pump station on the Berg River, with a 6.3-km-long pipeline to the Voëlvlei Dam	R1 billion
Vaal River System Phase 2	Construction	Bulk water infrastructure development	R32 billion
Makhulu Crocodile Water Project	Feasibility	Bulk water infrastructure development	R15 billion
Olifants Economic Development Project	Various stages	Bulk water infrastructure development	R20 billion

Source: National Treasury