



KNOWLEDGE MANAGEMENT AND INNOVATION (KMI) UNIT

DBSA Research Agenda

THE ROLE OF THE DBSA IN CONTRIBUTING TO URBAN DEVELOPMENT THROUGH SUPPORTING THE IMPLEMENTATION OF THE INTEGRATED URBAN DEVELOPMENT FRAMEWORK

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Acronyms

Term	Definition
BEPP	Built Environment Performance Plan
BSC	Bulk Services Contributions
CIDMS	City Infrastructure Development and Management System
CRR	Capital Replacement Reserve
DC	Developer charges or Development Contributions.
DFI	Development Finance Institution
IDD	Implementation and Delivery Division
IDP	Integrated Development Plan
IIPSA	Infrastructure Investment Programme for South Africa
INEP	Integrated National Electricity Programme
IUDF	Integrated Urban Development Framework
MFMA	Municipal Finance Management Act 56 of 2003
MTSF	Medium Term Strategic Framework
PICC	Presidential Infrastructure Coordinating Commission
SAM	Social Accounting Matrix
STP	Short-term priority
TVET	Technical and Vocational Education and Training
UNS	Urban Network Strategy

Executive Summary

Purpose of report

This report compares the DBSA's current activities and Corporate Plan 2017-2020 to the policy priorities contained in the Integrated Urban Development Framework and corresponding Implementation Plan, identifying areas of alignment and divergence, and proposes additional actions. The report concludes by introducing a concept framework whereby the Bank's activities and disbursement practices can be evaluated against the spatial objectives of the Framework.

Implementing South Africa's 'New Urban Agenda'

South Africa's new urban agenda places urban development front and centre in South Africa's developmental ambitions. However, current patterns of urban development continue to perpetuate inefficiencies which hinder metros' abilities to provide the infrastructure necessary to grow the economy and provide services to its residents. In response to these challenges, Cabinet has approved the Framework as an overarching urban policy which spatially interprets the principles of the National Development Plan. The Framework recognizes that the fate of our cities, and thus our national developmental ambitions, depend on the extent to which all urban development actors align their efforts towards achieving more efficient, compact cities. The Framework's Implementation Plan prioritises large and fast-growing cities, the provision of connective infrastructure and the regeneration of inner cities as short-term imperatives to ensure the fiscal sustainability of infrastructure services, to boost agglomeration economies and to improve productivity by reducing travel time.

The Bank's 'Paths to Victory'

Given the Bank's developmental mandate, its strategic positioning within the global development finance community, and – as infrastructure financier - its de facto albeit indirect influence on the spatial growth of cities, the Bank's role as a critical actor in urban development is reflected in its ambitious corporate strategy. It introduces several 'paths to victory' to greatly expand its financing and implementation role in the successful delivery of economic infrastructure. These paths seek to unlock development and crowd in third party funding by introducing structured products, and de-risking projects through early-stage project planning and implementation support.

Areas of alignment

To what extent are the Bank's current practices and strategy supportive of the objectives of the Framework? The following areas of alignment have been identified: (a) the Bank's focus on large, fast-growing urban centres; (b) its shift from primary energy and water bulk towards connective and link infrastructure; (c) its long-term, evidence-based and analytical approach to quantifying and trading off the economic returns and developmental impact of prospective deals, and (d) the Bank's recognition of the economic logic inherent in and the opportunity associated with spatial targeting instruments such as the Built Environment Performance Plan and the Urban Network Strategy.

Unintended spatial consequences of value capture

However, given the shifting emphasis from general obligation lending towards project-specific lending, the criteria used by the Bank to evaluate projects will likely have spatial implications. Whereas off-balance sheet solutions offer heavily indebted metros an attractive alternative with which to 'catalyse' latent economic potential

without incurring further general debt, land-based financing solutions may favour development outcomes (i.e. location, design and land use mix) which run contrary to the objectives of the IUDF: that is, peripheral greenfield projects that are large, enclosed and car-oriented, and that contain neither an affordable housing component nor significant productive, tradeable and value-adding business land uses. In the absence of clear guidelines and/or cost-benefit decision-making tools, projects funded on this basis is likely to raise the long-term cost of dispersion and fragmentation on the municipality, on households and firms and on the environment, costs which often exceed the project's purported benefits.

Strengthening alignment with Urban Agenda

The following actions are therefore recommended to strengthen alignment with the IUDF and promote more desirable forms of urban development:

1. **Become a champion for the IUDF** by capacitating dealmakers within the Bank to promote both the underlying logic and the spatial tenets of the New Urban Agenda, and actively engage metros in the development of their BEPPs.
2. Introduce and **embed a simple project appraisal rubric** whereby potential and committed deals with a clear spatial dimension (i.e. connective and area-based projects) are evaluated for policy alignment in terms of location, design and land use mix. Package and disseminate this rubric as a planning tool for metros.
3. Progressively **extend the Bank's analytical models** to include a broader estimation of costs and benefits when trading off development impact against financial returns, including, for example, infrastructure lifecycle costs to the municipality, land value impacts, private and public transport costs, resource consumption and carbon emissions.
4. **Support evidence-based project prioritisation** processes by metros by encouraging cities to develop and maintain spatial growth scenarios that align urban growth to infrastructure master plans, and share data-driven planning tools that estimate true fiscal and non-financial costs of project alternatives.
5. **Leverage enhanced cost-benefit intelligence** to strategically crowd-in concessionary finance from international DFIs, aligned to their on-lending conditions. This will improve the Bank's cost competitiveness vis-à-vis commercial banks, whilst favouring projects supportive of the IUDF's objectives.
6. **Strengthen support to precinct management** efforts by advocating for the allocative prioritisation of inner city precincts and the drawing up of precinct level plans in partnership with local stakeholders such as City Improvement Districts, community-based organisations and business chambers. Engage international development finance partners focused on enhancing urban safety.
7. **Strengthen support to the demand side of the inner-city property market**, by partnering with for-profit lenders in residential development who focus explicitly on inner city areas (e.g. Trust for Urban Housing Finance ('TUHF')). Accessing debt capital available at appropriate interest rates allows these entities to increase their loan books, accelerating affordable housing provision and thus improving developmental impact.

1 Introduction

1.1 Introduction

The purpose of this report is summed up by the Chairperson's statement in the DBSA's 2016 Annual Report:

Despite the heavy investments already made, more solutions to support the planning, preparation, financing and implementation are required to address the infrastructure deficits. Linked to the NDP is the Integrated Urban Development Framework (IUDF), which is designed to unlock the development synergy that comes from coordinated investments in people and places. An integrated urban infrastructure policy framework that is resource-efficient and provides for both universal access and more inclusive economic growth, needs to be extensive and strong enough to meet industrial, commercial and household needs, and should also be planned in a way that supports the development of an efficient and equitable urban form and facilitate access to social and economic opportunities. During the forthcoming year, the DBSA must continue to assess opportunities to support the initiatives as well as consider ways to further align its operations to these imperatives.

- Chairperson's statement¹

1.2 Purpose

The IUDF places urban development front and centre in South Africa's developmental ambitions, particularly in her large cities. It recognizes that the current patterns of urban development are inefficient and investments which perpetuate such patterns are inefficient uses of capital.

As part of its dual developmental and financial sustainability mandate, the DBSA aspires to play a greater financing and implementation role in urban development by ensuring successful investment in the economic infrastructure projects necessary to drive economic growth and accommodate urbanization.

To ensure spatial and sectoral coordination, it is necessary for the DBSA to better understand the strategic issues raised in the IUDF within the broader context of rapid urbanization, poor economic growth prospects, policy uncertainty and variable capacity at metro level: what is realistically achievable in the short- to medium-term? Where is growth going to come from? Which sectors should be backed? As a normative policy document, the IUDF (appropriately) doesn't provide detailed guidance to guide difficult trade-off decisions by development finance institutions. This report thus seeks to provide clarity on the questions above.

¹ DBSA, "2016 Integrated Annual Report," 2016.

1.3 Structure and method

The report compares the DBSA's current strategy as introduced in the Corporate Plan to the IUDF policy priorities to identify areas of alignment and divergence. By mapping the overall policy priorities of the IUDF and the short-term objectives of the IUDF Implementation Plan (2017-2020) to the DBSA's strategy, potential roles, actions and partners are identified and omissions (and alternatives) to the current DBSA strategy proposed. The report concludes by proposing a concept framework whereby the DBSA activities and disbursement practices can be evaluated against the objectives of the IUDF.

The report was informed by an evaluation of relevant policy and strategy documents, international and local scholarly literature on development finance and urban development, interviews with five DBSA officials identified by the client and engagements with a sector experts in the property economics and policy space.

1.4 Background

1.4.1 Municipal infrastructure finance: South African context

National Treasury identifies the main infrastructure challenge facing South Africa as "the increased demand for economic infrastructure, ageing assets that require upgrading, rehabilitation or replacement, and changes in the location and nature of poverty."² The scale of the infrastructure gap in South Africa is estimated at R100bln per year, equivalent to 2-3% of GDP³.

The following impediments have combined to impede metros' ability to play their role in addressing this gap:

- The complexities of planning, budgeting, project identification, preparation and implementation
- Insufficient partnership across the planning and project life cycle within and between cities
- Limited partnerships with private investors and developers
- Scant coordination among municipal, provincial and national policy makers⁴
- Inadequate financing of growing infrastructure investment needs

Historically, urban infrastructure investment necessitated by urban growth have been financed on a cost-sharing basis, whether through internally generated revenues or commercial loans, with interest payments shared among all taxpayers. More recently, metros have opted for the sale of bonds, which now accounts for 45% of overall borrowing⁵.

² National Treasury, "Local Government Budgets and Expenditure Review 2006/7 to 2012/13." (Pretoria, 2011).

³ DBSA, "Operating Model Design Initiative : Group Strategy Session," March 2017.

⁴ DBSA, "Large Urban Centre Infrastructure Initiative : Concept Note" (DBSA, 2016).

⁵ Lungisa Fuzile, "Needs and Opportunities for Urban Investment" (Johannesburg, August 2015).

Since the introduction of the MFMA in 2003, the value of outstanding debt by municipalities have grown to R62.3 billion, of which 87% is accounted for by metros. However, new borrowing as a proportion of capital spending has been declining since 2010 as they reach their prudential borrowing limits⁶. There is however scope for municipalities to borrow more to invest in infrastructure that can generate revenues which, if captured, can help pay off the loans.

The financing of growth relies on homebuyers and commercial users paying a large one-time cost (via developer charges or in-kind provision of infrastructure) while exempting existing residents, who (theoretically) paid the cost of incremental infrastructure at an earlier date⁷. An alternative mechanism that is being considered (although not yet applied in South Africa) is land-based financing, whereby the infrastructure cost is recouped by capturing increases in the value of land through land sales or property rates within a demarcated area.

Given the vast differences between municipalities in capabilities and approaches, National Treasury has identified an opportunity for institutional investors to play a bigger role in meeting the growing borrowing requirement of cities in response to pressing need for economic infrastructure and the renewal of existing assets.

Here, large-scale projects are jointly identified using statements of spatial intent such as the Built Environment Performance Plan⁸ which, aligned to the spatial principles of the National Development Plan and IUDF, create a clear line of sight between plans, investment programmes, budgets and projects. These projects can be jointly explored by the private sector, cities and national government to identify profitable urban investment options (e.g. Urban Investment Partnership Conference, August 2015).

A high-level accord or understanding between the finance ministry, the South African Reserve Bank and the heads of the major banks to support stronger growth in development financing and credit extension would be a useful starting point, with the private financial sector being best resourced to be the main player. However, development finance institutions have a **complementary and intermediary role** to play in this, to mitigate risk in municipal finance and the housing “gap market”⁹:

- **Improving the effective demand** through robust financial preparation, project identification, pre-feasibility services and accelerated procurement processes
- Intermediation to **extend debt maturities**, enhance liquidity and expand participation by institutional investors
- **Tools** to match infrastructure costs to beneficiaries (land value capture, more effective use of development charges)¹⁰

⁶ National Treasury, “Local Government Budgets and Expenditure Review 2006/7 to 2012/13.”

⁷ Jan K. Brueckner, “Infrastructure Financing and Urban Development:: The Economics of Impact Fees,” *Journal of Public Economics* 66, no. 3 (1997): 383–407.

⁸ The BEPP is a planning tool aimed at strengthening the overall urban intervention logic to be more outcomes focused. It focuses on measurable improvements to urban productivity through targeted public investment and regulatory reforms.

⁹ Andrew Donaldson, “Nine Steps to Exit Low-Growth Trap and Ignite the Economy,” *The M&G Online*, accessed May 16, 2017, <https://mg.co.za/article/2017-05-12-00-nine-steps-to-exit-low-growth-trap-and-ignite-the-economy/>.

¹⁰ Fuzile, “Needs and Opportunities for Urban Investment.”

However, financing growth when urbanization is rapid and predominantly low-income raises important questions about balancing the pressing need for economic growth-enabling infrastructure on the one hand, and the sustainability of attributing both cost and benefits of specific infrastructure provision and maintenance to its immediate users on the other. This inherent tension is evident when contrasting cities' political agendas, who wish to avoid ringfencing new revenue to fund infrastructure, and DFIs like the DBSA whose ability to crowd-in capital is contingent on ringfencing (e.g. tolling roads, tax-increment financing in demarcated areas, ringfencing development charges, etc.). As metros' balance sheets' ability to take on more debt diminishes, the intractability of this divergence intensifies.

1.4.2 A city perspective on loan finance¹¹

The extent to which the DBSA can leverage its competitive advantage to support urban development in line with national policy is limited since metros generally don't borrow for specific projects but instead borrow to support their capital budgets in general, and specifically to support cash flow when required. It does so to:

- **Minimise cost** of capital
- Ensure **control** over cash flow
- Allow **cross-subsidisation**

The capital finance mix used in each year is managed to minimise the cost of capital and thus the impact on rates and tariffs. Loan intentions are approved by the Council in advance, but the actual loans are taken up on a balance sheet basis and drawn down as and when required by cash flow. Municipalities pay no finance costs on the use of their **Capital Replacement Reserve** ('CRR'), but do have an opportunity cost of investment, which is lower than current interest rates. Hence the CRR is their preferred financing source. One metro also noted that the cost of capital from their **overdraft facility** is also lower than the cost of capital from loans, and hence is the second preference for addressing short-term cash flow. Capital is only borrowed when it is actually required, and therefore needs to be applied directly to the capital projects that is in progress at the time of borrowing¹².

Under the capital accounting model underlying the Generally Recognised Accounting Practice ('GRAP'), **external loans** must be ring-fenced using a memorandum account called the External Financing Fund ('EFF'). Loans taken up are recorded against the EFF and drawn down by municipal departments for capital projects when these are approved. The EFF thus acts as a mechanism for consolidating all long term municipal borrowing and holding this borrowing until it is required. There is therefore little or no link between loans that are taken up, and the projects for which they are used.

General obligation (**on balance sheet**) borrowing, which is the preferred type of municipal loan, means that municipalities can raise debt on the strength or their

¹¹ PDG is currently engaged in a project for National Treasury to assess the use of municipal long term borrowing. Interviews with municipal treasury officials have revealed a City perspective on the type of borrowing that the DBSA is looking to provide, that is useful in the discussion of the implementation of the IUDF.

¹² See limits to municipal long-term borrowing imposed by s46 of the Municipal Finance Management Act 56 of 2003.

balance sheets, and use any revenue stream to repay the loan. Thus, the municipality is able to use debt finance to fund any capital project, whether it is revenue generating or not. In general, funds from the EFF are used for projects that expand the City's rates base, but not exclusively. The linking of a specific loan to a specific project or programme, means that a municipality loses its ability to manage its cash flow and to use the cheapest finance available. These loans also prevent the municipality from funding non revenue-generating projects through loans. These are the main reasons why metros are reluctant to define 'bankable projects' or to take up any **conditional loan funding** from the DBSA or other finance providers.

2 Alignment between current activities and plans of DBSA and policy priorities of the IUDF

2.1 DBSA Corporate Plan

The mission of the DBSA is “to advance the development impact of the region by expanding access to development finance and effectively integrated and implementing sustainable development solutions. DBSA’s mandate is broadly in the DBSA Act and implementing regulations, and is further specified in the Shareholder Compact and in the Corporate Plan. The Shareholder Compact also records key assumptions and principles, including that DBSA will **remain sustainable** while **delivering development impact**. The Corporate Plan defines DBSA’s strategic goals and objectives (see **Error! Reference source not found. Error! Reference source not found.**) as well as performance measures and targets (see

Figure 2 below).

2.1.1 DFI's dual mandate

Development finance institutions (DFIs) are established by governments to fill perceived gaps in financial markets. Yet, in many cases, the nature of these gaps, in particular their root causes, have not been well analysed or understood, which otherwise would have facilitated design of a possibly narrow state intervention to resolve those root causes. Instead, it is common for the mandates of policy institutions to be defined in broad and general terms, particularly in relevant law and implementing regulations¹³.

Broad mandates themselves may be a root cause of the problems encountered by many DFIs. They can enable boards and executive management to pursue a wide range of businesses beyond those originally envisioned by governments. They can make it more difficult to measure board, management and institutional performance.¹⁴ For these reasons, shareholder representatives and finance ministers should define the DFI policy mandate as explicitly and as narrowly as possible. This can be achieved by **Corporate Plans**.¹⁵

The nature of market gaps is by definition dynamic. The boundaries between what is commercially viable and what requires state intervention changes with the evolution of the financial services industry and the needs of users of financial services.¹⁶

In principal, there are several means by which to finance the provision of financial and other services on concessionary terms. In practice, the various means are used in combination, none of which are without their drawbacks:

- finance policy activities by **cross-subsidising** concessionary loans with profits from commercial activities.
- Adopt **soft financial performance targets**, with the differential between market returns and actual returns allocated to cover cost of policy-related activities.
- Administratively reduce the cost of DFI finance through **loan guarantees or soft loans**¹⁷

The goal is to agree and make transparent the source of financing for policy activities and to take complementary steps to mitigate any potential negative consequences.

Once a clear definition of policy mandates and agreement on the means to finance them, the shareholder representative is in a position to agree policy targets, which then allows for the setting of financial and operational targets. **Policy targets** give more detailed specification to the policy mandate, would be expressed as much as possible in quantifiable, measurable terms, including in terms of development outcomes¹⁸.

¹³ David H. Scott, *Strengthening the Governance and Performance of State- Owned Financial Institutions* (World Bank Publications, 2007).

¹⁴ Ibid.

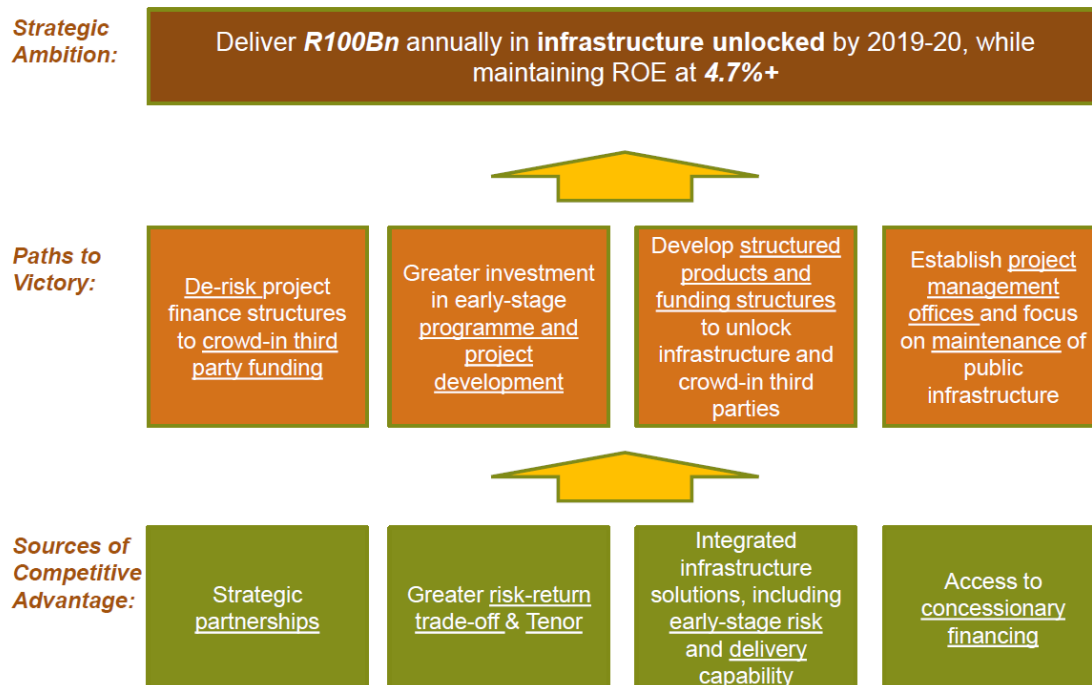
¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

Figure 1 DBSA Corporate Plan¹⁹



2.1.2 High-level strategic ambition

The high-level strategic ambition of the Corporate Plan is to deliver R100bln annually in infrastructure unlocked by 2019-20, while maintaining ROE at 4.7%+ through a combination of disbursements, mobilisation or leverage effects, and catalytic effects²⁰.

Based on the targets contained in the Corporate Plan’s Balanced Scorecard, the growth drivers behind increasing the value of infrastructure delivered is via third party funding by Project Vumela (R20bln) and IDD (R13.1bln), through project preparation and funding by DBSA (R12.5bln), and structured finance (R10bln) (see

¹⁹ DBSA, “Operating Model Design Initiative : Group Strategy Session.”

²⁰ Ibid.

Figure 2 below)²¹. In contrast, disbursements to municipalities and infrastructure sectors will grow in line with inflation over this period²².

2.1.3 Performance targets²³

Total disbursements by the SA Financing Division are targeted to rise from a 2016/2017 forecast of R11.3bln to R15bln by 2019/2020, driven mostly by an increase in the quantum of disbursement to the education, health, housing and water sector (from R1.3bln in 2016/17 to R3.2bln in 2019/2020). Disbursements to metropolitan cities are targeted at around R4.5 billion per year, compared to R1.2 billion for secondary cities and R200 million for under-resourced municipalities (see Figure 3 below).

Exposure to the energy, municipal, roads and transport sectors have been growing in recent years, whereas exposure to education and telecommunications have been minimal. Although exposure to the water and sanitation regional bulk sector has been declining, 16% of its disbursements to municipalities in South Africa fell within the water and sanitation sector. However, it is anticipated that DBSA will shift away from the energy sector and towards transport and water security.

²¹ DBSA, "Corporate Plan 2017/18," 2017.

²² DBSA, "Operating Model Design Initiative: Group Strategy Session."

²³ DBSA, "2016 Integrated Annual Report."

Figure 2. Comparing 2016/17 forecast with 2019/20 target

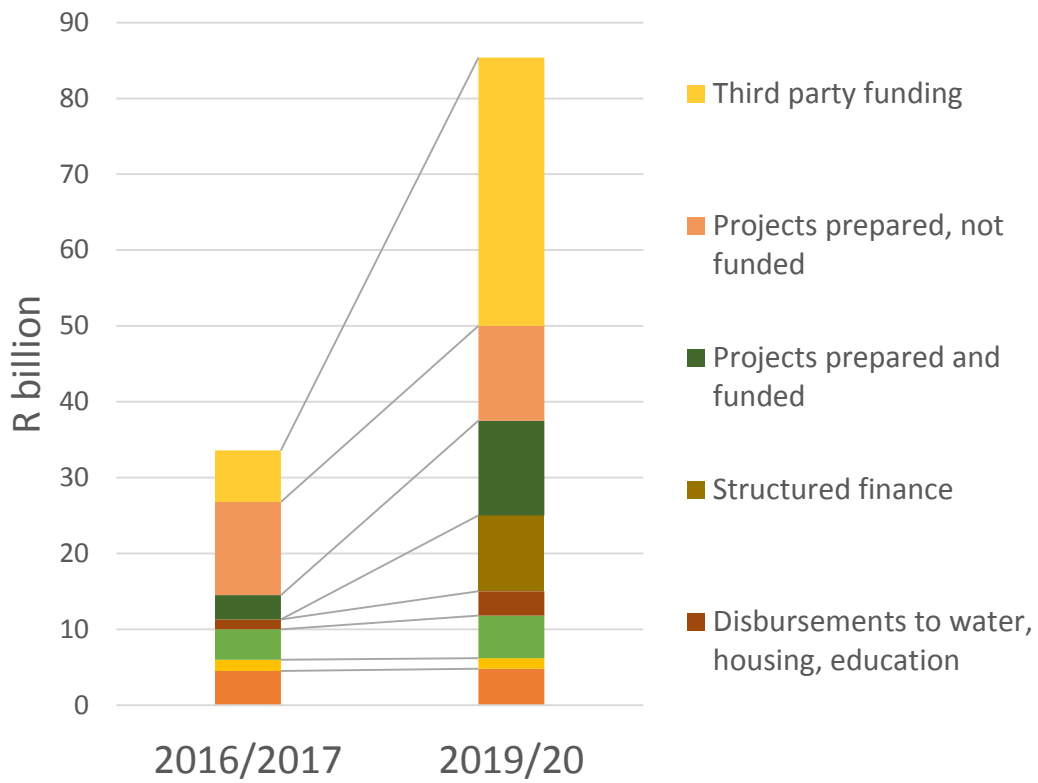


Figure 3. Sector disbursement forecast targets

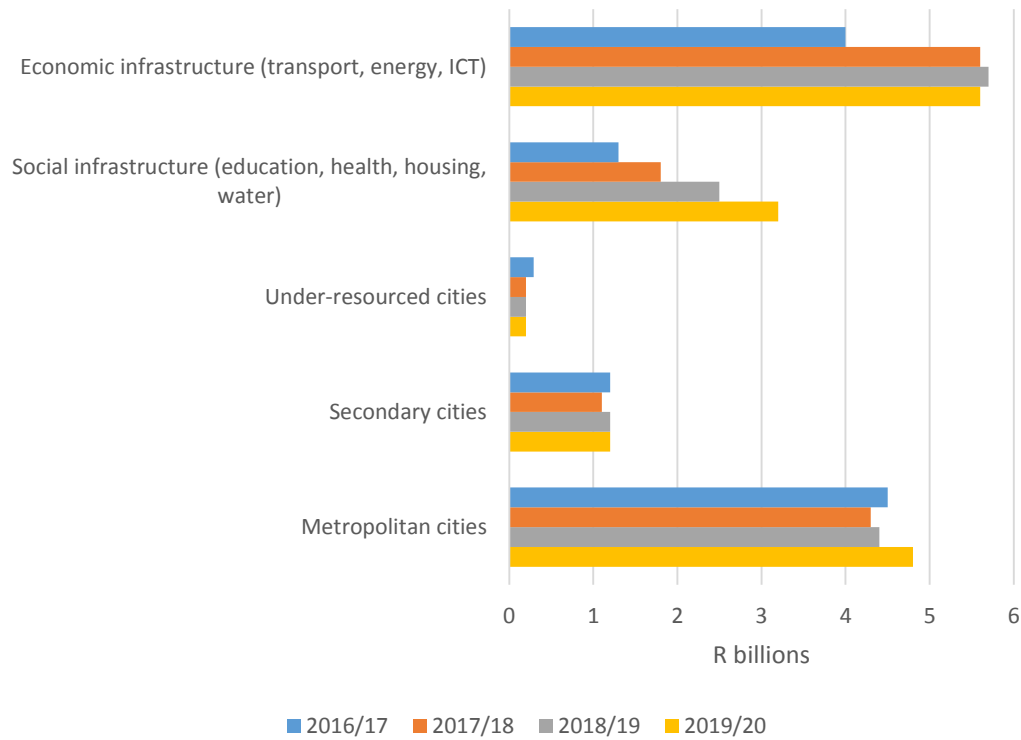
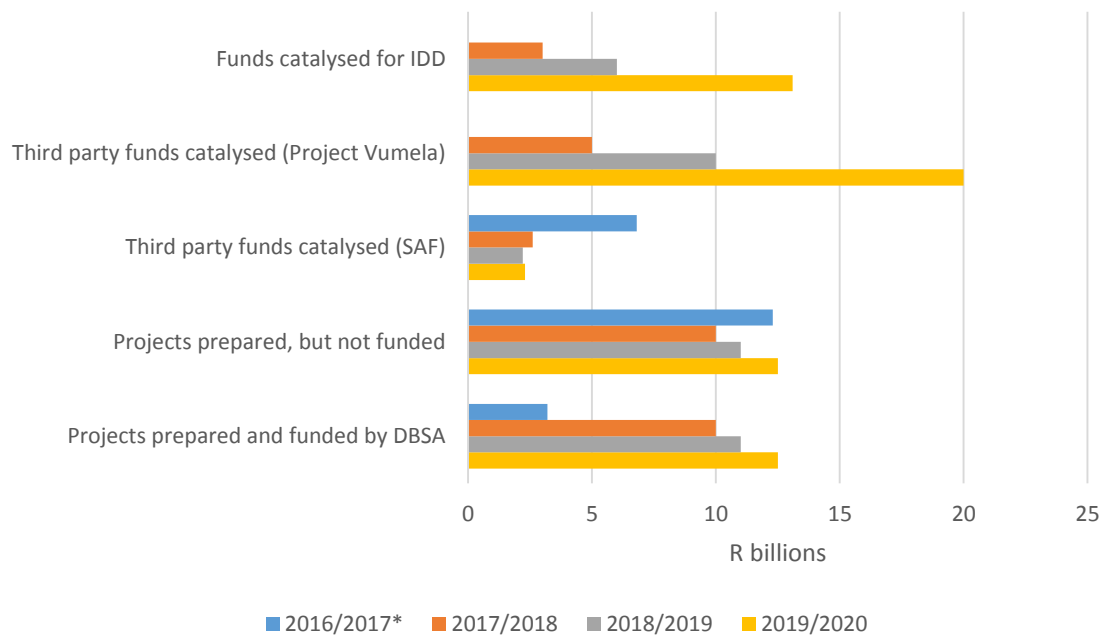


Figure 4. Project preparation, project-specific and third party funding



2.1.4 Paths to victory

Path to victory	Current activities and short-term targets
<p>DE-RISKING THROUGH PROJECT PREPARATION</p> <p>De-risking project finance structures to crowd-in 3rd party funding</p> <p>Greater investment in early-stage programme and project development</p>	<p>Planning support has been provided to a number of municipalities, with the focus to date being to provide skills and capacity to implement infrastructure programmes in the sectors of education, health and housing. This allows the DBSA to report developmental returns-on-investment (e.g. number of schools completed) without financial exposure to these sectors.</p> <p>The DBSA intends to increase the value of projects prepared by the DBSA to rise from R15.5bln (2016/2017 forecast) to R25bln in 2019/20, and greatly increase the proportion of prepared projects which are committed by the DBSA (from R3.2 billion presently to R12.5bln by 2019/20) (see Figure 4 above).</p> <p>Project identification, feasibility assessment, technical assistance, financial restructuring, managing project preparation funds and securing a mandate as lead arranger role for the DBSA. The DBSA is positioned to take on early-stage risk where commercial banks are reluctant to take on this risk by, for example, using project preparation services to support the growth of deal pipeline²⁴.</p> <p>The DBSA administers projects valued at R34 million on behalf of development finance partners as part of the Euro</p>

²⁴ Ibid.

	100 million Integrated Infrastructure Programme Fund for South Africa (IIPSA).
<p>CROWD-IN THIRD PARTY INVESTMENT</p> <p>Develop structured products and funding structures to unlock infrastructure and crowd-in third parties</p>	<p>The DBSA needs to develop and reinforce new products and services to drive greater developmental impact.²⁵ The DBSA aims to increase the value of funds disbursed via structured finance from nil to R10bln by 2019/20, and seeks to develop innovative structured products such as Project Vumela with which to crowd in and additional R20bln by 2019/2020.</p> <p>Project Vumela offers limited recourse project finance aimed at unlocking large scale, catalytic property developments. The focus is on off-balance sheet financing of bulk and link infrastructure identified as bottlenecks to large, integrated development. By pooling risk across projects, the obligation of the municipality to pay for infrastructure on handover is “deferred”. By doing so, the market risk otherwise imposed on the municipality of irregular and uncertain take-up of a given development is removed and pooled by the DBSA across many similar projects countrywide. The cost to the DBSA is recovered by ringfencing the BSCs collected within the demarcated development area over 10-20 years. Other forms of land-based financing will be considered to supplement BSC income as required. This may include tax-increment financing (TIFs), special assessment district, sale of development rights and leveraging municipal real estate. The average transaction size will typically not be less than R500mln²⁶.</p>
<p>INFRASTRUCTURE DELIVERY</p> <p>Establish project management offices and focus on maintenance of public infrastructure</p>	<p>The maintenance and project management office set-up mandates by IDD for under-resourced clients aims to unlock infrastructure valued at between R15-20bln by 2020.²⁷</p>

2.1.5 Strategic partnerships

The DBSA’s competitive position is weakening due to the entrance of new development financiers and the DBSA’s increasing cost of capital. This position is

²⁵ DBSA, “Operating Model Design Initiative : Group Strategy Session.”

²⁶ DBSA, “Project Vumela : A Mechanism for the Funding and Implementation of Municipal Bulk Infrastructure to Unlock Large Scale Property Developments” (unpublished, January 2017).

²⁷ DBSA, “Operating Model Design Initiative : Group Strategy Session.”

turned is weakened further by the impact of a RSA sovereign rating downgrade to the cost of borrowing²⁸.

One of the key thrusts behind the Corporate Plan and its ambitious targets is for the DBSA to exploit its strategic position linking the unique developmental needs and capital financing opportunities associated with South African cities to preferential terms offered by international development finance partners. On the one hand, the DBSA is well-positioned to provide trusted advice to local clients on a cost-recovery basis, guided by its inherent interest in the developmental impact of its activities (arising from its dual mandate). This trusted advice may take the form of early involvement in the drawing up of metros' statements of spatial intent (i.e. BEPPs, IDPs, SDFs) or convening municipal infrastructure investment forums aimed at embedding coordinated planning and implementation practices amongst stakeholders in the urban development space. On the other hand, the DBSA has formal relationships with other DFIs arising from its membership to the international investment club which include the European Investment Bank, the Asian Development Bank, etc. These formal relationships give rise to the structuring of syndicated loans which includes concessionary finance.

Successful examples include the Global Climate Fund, where accreditation has enabled access to US\$10bln committed to support low emissions and climate resilient projects. Projects in energy, water and transport sectors are eligible to concessional funding. One of the challenges has been to align the procedures of municipalities to ensure that they are eligible to access available third party funding²⁹. Secondly, the DBSA administers projects valued at R34 million on behalf of development finance partners as part of the Euro 100 million Integrated Infrastructure Programme Fund for South Africa (IIPSA).

2.1.6 Managing tradeoffs and reporting performance against dual mandate

Performance measures and targets in the Corporate Plan are articulated using a **Balanced Scorecard** (BSC) methodology. The BSC is cascaded from corporate to divisional to unit level. In practice, the shareholder representative defines overall strategic direction, while specific strategic objectives and performance measures and targets are proposed by the CEO, executive management and the Board, and negotiated and agreed with the shareholder representative. Recent objectives of these efforts have been to measure **development outcomes** rather than simply outputs, to better quantify the development impact of projects that have been supported financially by DBSA, and to quantify qualitative aspects of development impact, such as that resulting from the research and policy advice provided by DBSA.

The current BSC defines a total of 25 performance measures associated with the broad strategic goals and specific strategic objectives set out in the Corporate Plan. Performance against each target is rated using a standardized point-based system, and ratings are aggregated using weights assigned to each performance measure. In developing the scorecard, the most critical and high impact short-term performance drivers were identified.

2.2 Integrated Urban Development Framework

The Integrated Urban Development Framework is formally a directive by the National Development Plan to develop an urban development policy that will cater for

²⁸ Ibid.

²⁹ DBSA, "2016 Integrated Annual Report."

urbanization by ensuring proper planning and necessary infrastructure to support this growth, and was formally adopted in April 2016 by Cabinet. The IUDF seeks to foster a shared understanding across government and society about how to best manage urbanization. The IUDF is aligned to the government actions and targets set out in the Medium Term Strategic Framework³⁰ structured around four strategic goals, nine policy levers and associated priorities.

2.2.1 IUDF Implementation Plan

The IUDF is structured according to the nine policy levers, presenting the status quo, as well as opportunities and challenges, and the policy priorities and key actors involved. The accompanying Implementation Plan gives strategic direction, i.e. what needs to be done, when and by whom in order to achieve the goals of the IUDF. The plan will be reviewed every three years, not only to monitor progress but also to reprioritize the programmes and projects³¹. The IUDF principles and priorities should inform and guide long-term development plans and policies, strategic infrastructure investment, regulatory and fiscal instruments, spatial targeting, as well as sector policy documents. This means that all public entities must embrace the IUDF and use its principles in developing plans, programmes and approving projects. The MTSF, the IDPs, the MTEFs, the annual performance plans and service delivery and budget implementation plans must be aligned to the principles and priorities of the IUDF. The IUDF Implementation Plan includes a set of criteria by which to prioritise projects and programmes in the short- to medium-term:

Table 1. Short-term spatial prioritisation criteria

Prioritise municipalities by:	Prioritise projects/programmes which:
<ol style="list-style-type: none"> 1. Existing urban population size 2. Growth rate of urban population 3. Spatial form of existing spatial density patterns 4. Financial, human and technical capabilities and resources for addressing urban challenges 	<ol style="list-style-type: none"> 1. Accommodate urban growth in ways that improve spatial efficiency (i.e. concentrating growth into nodes and corridors) 2. Link areas with rapid transport networks supported by corridors (i.e. Integration Zones) 3. Regenerate inner city and high potential economic nodes

³⁰ Government’s strategic plan for 2014-2019 electoral term. The MTSF sets out the actions government will take and targets to be achieved. It also provides a framework for the other plans of national, provincial and local government. The aim of the MTSF is to ensure policy coherence, alignment and coordination across government plans as well as alignment with budgeting processes. The MTSF is structured around a set of priority outcomes, four of which are pertinent to urban development in general and the IUDF in particular.

³¹ To date a monitoring and evaluation framework for the IUDF has been identified as a need but not yet developed.

2.2.2 Positioning the IUDF within a national spatial policy context

In the absence of a national spatial plan, contradictory spatial agendas and proposals are competing. The tendency for contradictory policies to be pursued is linked to a series of national difficulties, including growing political impatience at the slow pace of social progress. Weak capabilities and mismanagement across government have resulted in coordination failures and poor implementation. One of the visible responses has been the burgeoning interest in urban mega-projects, as political leaders push for major expansion schemes each accommodating tens of thousands of urban residents. The term 'mega-projects' stem from the housing department, referring to individual projects that delivers at least 10,000 units (e.g. Southern Farms with 43 000 units, Rabie Ridge with 15281 units, and Lion Park, 15000 units)³². The department is determined to exploit economies of scale to accelerate the supply of accommodation because of the government's long-established housing programme has 'run into the sand'. Other mega-projects may be up-market, private sector-led such as Waterfall City, Steyn City³³ and Rainbow Junction.

In contrast, the IUDF – developed by National Treasury, COGTA and metros - pushes a different urban agenda, based on longer-term considerations and a broader definition of efficiency. Key objectives include urban integration, compaction and densification by encouraging new housing on well-located land, and improving public transport connections between cities' employment nodes and residential areas. Metros in particular are concerned that mega-projects will divert scarce public and private resources away from core built-up areas, thereby compromising the viability of recent investments in bus rapid transit systems. These mega-projects may jeopardise the long-term financial position of the metros, which have to bear many of the costs of dispersed infrastructure and ongoing service delivery.³⁴

However, it should be emphasized that although these two policy agendas are contradictory, they are not mutually exclusive. Examples of proposed developments which demonstrate economies of scale, whilst being supportive of inward growth agenda include:

- Conradie Hospital site, an in-fill mixed use redevelopment on a 22ha site, close to the geographic centre of Cape Town and only 8km from the CBD which will generate 3608 residential units, of which 50% will be granted-funded.
- Watt Street Interchange in Wynberg, Sandton, is a R460 million major mixed use hub anchored by a BRT interchange, located less than 3km from Sandton CBD.
- Inner City Centrum in eThekweni, a R25bln, a proposed public-private mixed use development abutting Durban CBD that will include 6,000 residential units and 750,000m² of lettable floor area.

For more information on the locational and physical design parameters of development supportive of inner city regeneration and corridor development, see section 2.2.3 below.

³² City of Johannesburg, "Built Environment Performance Plan," 2017.

³³ Ivan Turok, "South Africa's New Urban Agenda: Transformation or Compensation?," *Local Economy* 31, no. 1-2 (2016): 9-27.

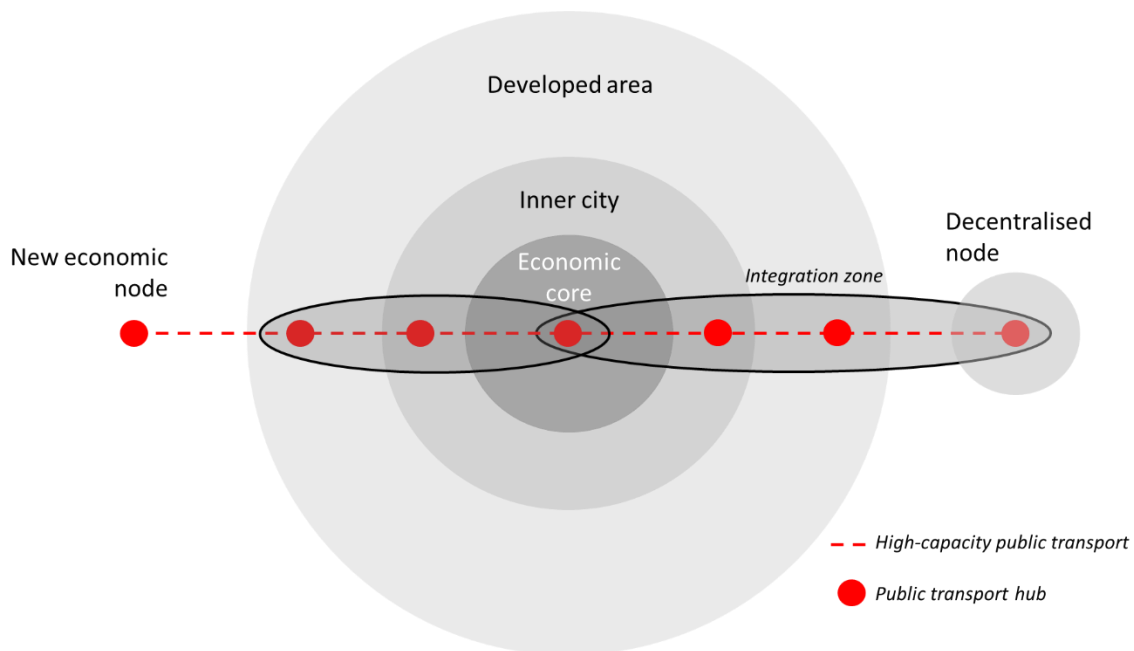
³⁴ Ibid.

Table 2. National policy, IUDF and policy levers

MTSF Priorities	IUDF Priority	Short-term priority criteria	IUDF Policy Levers
<p>1. Addressing spatial imbalances</p> <p>2. Sustainable human settlements</p> <p>3. Job creation and inclusive growth</p> <p>4. Responsible and accountable government</p>	<p>1. Creating a responsive institutional, policy and regulatory environment</p> <p>2. Strengthen intergovernmental planning, budgeting and implementation</p> <p>3. Strengthen urban-rural linkages</p> <p>4. Controlling urban sprawl</p> <p>5. Accelerating upgrading of informal settlements</p> <p>6. Create liveable and safe human settlements</p> <p>7. Create environment conducive for business to flourish</p> <p>8. Job creation</p> <p>9. Strengthen platforms for public participation and communication with stakeholders</p>	<p>1. Accommodating urban growth in ways that improve spatial efficiency (i.e. concentrating growth into nodes and corridors)</p> <p>2. Linking areas with rapid transport networks supported by corridors (i.e. Integration Zones)</p> <p>3. Regenerating inner city and high potential economic nodes</p>	<p>1. Integrated urban planning and management</p> <p>2. Integrated transport and mobility</p> <p>3. Integrated sustainable human settlements</p> <p>4. Integrated urban infrastructure</p> <p>5. Efficient land governance and management</p> <p>6. Inclusive economic development</p> <p>7. Empowered active communities</p> <p>8. Effective urban governance</p> <p>9. Sustainable finances</p>

* Relevant points in **bold**

Figure 5. Spatial targeting within large urban centres



Source: adapted from Urban Network Strategy, by PDG

Spatial targeting is aimed at the prioritisation of built environment investment into a number of priority investment zones that gives rise of an intergovernmental investment pipeline. The short-term priority framework of the IUDF Implementation Plan focuses on the regeneration of underperforming inner cities and the land use intensification of integration zones, where high capacity public transport link cities' economic cores to decentralised economic nodes.

2.2.3 Inner city regeneration and corridor development

Although DBSA plays a significant role in financing economic infrastructure (energy, water and sanitation) and a growing role in connective infrastructure (public transport), to date it has yet to play a significant role in inner city urban regeneration and intensification along higher-order public transport corridors.

Before we evaluate DBSA's current and potential role in this urban context, it is worthwhile to take stock of generic characteristics and constraints associated with intervening in this context:

1. **Unlocking development:** in contrast to peripheral, greenfield development, the provision of bulk infrastructure is often not the only bottleneck inhibiting development within inner city or corridor contexts; development may also be constrained by regulation, uncertain end user demand and location risk. Thus, regenerating inner cities and intensifying corridors requires simultaneous and coordinated finance and implementation support to both bulk infrastructure *and* property development sectors. **Catalytic projects**, introduced by the NDP and the Urban Network Strategy, aims to unlock development by focusing infrastructure spending and urban management efforts on priority areas which - owing to its scale and strategic location - demonstrate economic potential to crowd-in private sector investment whilst generating positive economic spillovers to surrounding neighbourhoods and enhancing the spatial efficiency

of the urban system as a whole³⁵. Whereas the DBSA routinely finances and implements bulk infrastructure, it is not necessarily well-positioned to directly intervene in the property development market (e.g. providing end user finance).

2. **Land use density-public transport co-dependency:** given the relationship between urban form, the long-term sustainability of infrastructure and the overall fiscal health of cities, it may be argued that - in the absence of commensurate intervention in finance gaps in the property development market - an investment strategy that relies solely on infrastructure supply places an absolute limit to the extent to which the overall municipal market will perform and grow. An exemplar of this dynamic is the mounting burden of the BRT roll-out on municipalities arising from poor operational cost recovery, which in turn is a result of low urban densities along corridors.
3. **Programmatic, scaleable intervention:** successful inner city regeneration and corridor intensification consists of a portfolio of projects ranging from large infill projects to small interventions in both 'hard' and 'soft' infrastructure.
4. **Complex stakeholder landscape.** Since urban development within inner city contexts necessarily affects a large number of local and City stakeholders, successful implementation of inner city regeneration requires ongoing investment in soft infrastructure; that is, the *institutionalization* of area-based urban management efforts through the definition of precincts and building consensus on precinct-level plans that define spatial priorities³⁶.
5. **Permeable, integrated design:** spatially transformative development requires permeable designs which are integrated into the surrounding urban fabric. Projects intended to stimulate spatial transformation within the built environment are called 'catalytic' in that they are intended to kick-start a virtuous cycle of market-led investment in property development. This presupposes that projects generate positive externalities to surrounding properties and precincts, whether indirectly (through market signals) or directly (by raising amenity). However, when developments are physically enclosed and impermeable to their immediate environment, these positive spillovers are encumbered and may even result in adverse, shadow effects.
6. **Mixing of activity and incomes:** large-scale developments should accommodate a range of residential, social and job-generating land uses to create vibrant environments, minimize transport costs and contribute to the urban regional system of production. Large, mono-functional residential or retail development sterilizes the public environment, aggravates local and citywide road congestion and does not contribute to the productive base of the economy. Positive developments provide for a range of residential incomes and forms of tenure (e.g. bonded and rental), and incorporates where appropriate space for office and light industrial activities.
7. **Locational, user, technical and regulatory risks:** urban regeneration entails types of risk which needs to be managed proactively, such as locational (urban management) risk, user risks and technical site assemblage. Locational risk entails the effect of prevailing negative perception of dense, inner city living on household location preferences and market demand

³⁵ National Treasury, "Budget Review 2017," February 27, 2017.

³⁶ City of Johannesburg, "Inner City Transformation Roadmap," 2013.

amongst the middle class. Although these perceptions have historical roots in the suburban movement, they are aggravated by concerns about deteriorating management and safety of the public environment, the availability of amenities such as good schools and the effect of residential transience on the development of trust networks. User risks refers to the difficulty encountered to develop an effective, sustainable and scalable operational model to manage rental stock in the South African context. Technical site assemblage refers to the complexities associated with consolidating a number of smaller land parcels within a developed urban context.

8. **Benefits vis-à-vis peripheral mega-projects:** there are certain advantages to infill development and redevelopment, relative to conventional peripheral mega-projects. These include the risk of overstating the effects on social and economic development, the need for and associated financial risk associated with large-scale infrastructure projects, and understating the underlying cost to the environment and to the efficiency of the overall urban system over the medium- to long-term³⁷.

Table X: Network elements, investment profile and interventions

Network elements	Description	Investment profile	Intervention
Core (well-performing, high potential areas)	Well-performing, well-managed areas	High short-term potential, low risk	Market-driven infrastructure provision and refurbishment
Inner city (under-performing, high potential areas)	Under-performing adjacent to economic core or CBD.	High medium-term potential, high complexity	Affordable housing Upgrading and refurbishing infrastructure Redevelopment of obsolete building stock Urban Development Zones Multi-modal public transport precincts and trunk infrastructure
Integration zone	Corridors designated by Metro based on criteria set by	Moderate long-term potential and complexity	Infill development

³⁷ Turok, "South Africa's New Urban Agenda."

(as designated by Metro and National Treasury)	National Treasury. Adopted as part of BEPP.		Upgrading and refurbishing infrastructure Affordable, social and student housing Trunk public transport precincts and trunk infrastructure
New economic nodes (as designated by SDF)	Designated by Metro as part of SDF. High-potential industrial parks.	Low long-term potential and complexity	Industrial parks (e.g. Special Economic Zones, Industrial Development Zones)
Decentralised nodes (in former townships)	Designated as 'Urban Hubs' in BEPP by Metro.	Grant-funded	Subsidy-driven infrastructure provision

Field	Description
Potential	the extent to which the area's locational characteristics are aligned to the typical locational requirements of business activity;
Complexity	the number of stakeholders and legislative obstacles associated with this urban context;
Risk	the risk generally associated with investing in this type of context, typically represented by the capitalization rate.
Intervention	needed the type of capital (i.e. non-operational) investment typically required in these urban contexts.

3 Comparative evaluation of urban development policy

This section compares the current focus and operating activities of the DBSA prescribed by its current mandate and strategy to unlock R100bln by 2019/2020 to the policy priorities for each of the nine policy levers of the IUDF identifying and discussing, in turn, areas of policy alignment and divergence:

3.1 Areas of alignment

Area of alignment	Description
Geographic focus	Large urban centres with high population growth rate, specifically Cape Town, Johannesburg, Tshwane and Ekurhuleni, are prioritised by the IUDF and is identified as key (potential) clients by the DBSA. Yet, DBSA has a reduced competitive advantage / leverage in large metros, compared to secondary cities. Increased competition within their 'home territory' of secondary cities and second-tier metros from commercial banks has however been identified as an 'enterprise risk' ³⁸ .
Economic infrastructure	The DBSA's policy directive of investing in large-scale infrastructure projects, promoting economic growth and crowding-in other DFIs and private sector is aligned to the IUDF's short-term priority of accommodating urban growth through investment in economic infrastructure.
Connectivity	Supporting investment in BRT and rail is aligned to IUDF's short-term priority of linking areas through integrated rapid transport networks. To the extent that high-capacity public transport improvements support densification, engaging this sector also supports the broader objective of more spatially efficient cities.
Time-frames	Municipalities should be able to borrow maturities that match the longer life span of infrastructure and the incremental process of urban regeneration. Whereas commercial banks prefer to offer loans with maturities of 5-10 years, the DBSA can offer loans of upward of 10 years since Basil III capital requirements is not applicable to it. This gives the DBSA a longer-term perspective on the feasibility of projects and programmes, which should include the medium- to impact of capital investment on the medium- to long-term maintenance burden on the city. For this reason, the DBSA should avoid providing capital funding for projects which may not – in the long run – be sustainable from an operations and maintenance

³⁸ DBSA, "2016 Integrated Annual Report."

	perspective and would thus fail a sustainable infrastructure assessment
Innovative financing solutions	The Corporate Plan places significant emphasis on upscaling development impact by setting ambitious targets for the value of 3 rd party funding for innovation projects, from R5bln in 2017/2018 to R20bln in 2019/20. An exemplar of this focus is Project Vumela (Innovation Hub), which provides bulk infrastructure to unlock large scale property developments.

3.2 Areas of divergence

Area of divergence	Description
Location	<p>Do the institutional and market realities facing DBSA 'lock in' a preference for projects which promise cheap land, economies of scale and an enclosed physical design? In other words, is the business model applied by DBSA inherently antithetical to the IUDF's vision of denser, more efficient and more inclusive cities? Does pragmatism dictate that these projects should be accommodated as 'revenue-generators' for metros to cross-subsidize urban development elsewhere? Finally, to what extent does land-based financing solutions 'capture' the direct long-term revenue gains and the indirect economic spillovers for the financier to the detriment of the metro?</p> <p>Large, peripheral, greenfield and enclosed development is a 'market-friendly' development typology given that the projects are easier to execute on cheap, undeveloped land and there are no vested interests to resist change. Starting from scratch avoids the pitfalls of congestion and overcrowding in existing urban settlements³⁹.</p> <p>In contrast, the argument for absorbing growth within established urban fabric is that it is more efficient in terms of using land and other resources, it strengthens the social fabric through incremental schemes, and it addresses the issues of congestion, poverty and other problems directly. Consolidating growth within existing nodes and designated corridors can revitalize older urban districts, modernize worn-out infrastructure and support the operational sustainability of public transport infrastructure⁴⁰.</p> <p>It should be remembered that by using bulk service contributions, municipal income from rates and taxes remains unencumbered to the extent that income derived from BSC is able to cover the cost of the bulk infrastructure provided. Only where market take-up is</p>

³⁹ Turok, "South Africa's New Urban Agenda."

⁴⁰ Ibid.

	<p>below what is expected then the municipality may be liable to use its own funds to repay the outstanding debt to the DBSA⁴¹.</p> <p>Do financing approaches which diversify risk through pooling across multiple projects, geographic areas and development stages help address this problem, by reducing the burden on a particular project?</p>
<p>Physical design</p>	<p>Inner city regeneration requires permeability and other urban design interventions within existing fabric which is not reconcilable with the requirement by DBSA for off-balance sheet projects that the proposed developments are enclosed. In the case of secondary bulk and link infrastructure, demarcating “development areas” are necessary to ringfence revenue (e.g. BSCs, TIFs, etc.) to pay back the loan⁴².</p>  <p>A good example is DBSA’s funding for Rainbow Junction, a R10-12bln large greenfield development driven by the private sector north of Pretoria⁴³. DBSA is providing funding for water and energy. Because it is enclosed, it is possible to ringfence revenue to pay back the loan⁴⁴. Although technically an infill site and supported by public transport, this development does not include an affordable housing component and relies disproportionately on non-tradeable economic activity. Therefore, this development is more likely to draw economic energy away from existing nodes rather than support spatial transformation. Equally, the value created from this development is ringfenced and thus not supportive of cross-subsidising other projects.</p>
<p>Scale of investment</p>	<p>A mega-project is a ‘market-friendly’ development typology given that the projects are easier to execute due to economies of scale. For off-balance sheet lending, projects less than R200mln is not</p>

⁴¹ DBSA, “Project Vumela : A Mechanism for the Funding and Implementation of Municipal Bulk Infrastructure to Unlock Large Scale Property Developments.”

⁴² Tobie Willemse, Large Urban Centre Infrastructure, Telephonic interview, April 2017.

⁴³ Property24.com

⁴⁴ Willemse, Large Urban Centre Infrastructure.

	<p>considered viable⁴⁵ as this is below DBSA’s minimum Return-on-Expenditure requirement.</p> <p>However, inner city regeneration projects typically depend not only on the provision of new infrastructure, but also on the programmatic roll-out of small interventions in the public environment – parks, pedestrianization, street lighting, CPTED (crime prevention through environmental design), etc.</p> <p>For on-balance sheet projects, it may be possible to source in concessionary funding for a program of intervention if the program can be shown to align to the on-lending conditions of international concessionary funding, and the impacts thereof measured.</p> <p>For smaller projects, the DBSA’s role is limited to “mandated lead arranger” and structuring fees unless the lending is pursued with a view to earning distribution and syndication fees as well⁴⁶.</p> <p>An alternative, less common off-balance sheet option is working with City Improvement Districts (‘CIDS’) to develop and finance programmes of urban space interventions within inner city environments, and recover the cost through a land-based financing technique called ‘Tax-increment Financing’. Since this method implies that metros necessarily forgo direct revenues in the form of property rates, it is incumbent for the DBSA to demonstrate that the externalized economic, social and efficiency benefits arising from the development and accruing to households, firms, the municipality and the State, far outweigh the direct cost in foregone revenue.</p>
<p>Coordinated project identification / prioritisation with metros</p>	<p>How can DBSA use its leverage in its engagement with metros to encourage better planning?</p> <p>National Treasury wants DBSA to intervene in metro planning, but metros are resistant. Prioritisation by metros’ leadership are determined by political considerations, not market realities. DBSA can’t put conditions on loans, as they are competing with commercial banks ⁴⁷</p> <p>Currently, DBSA do not prioritise for metros, but rather receive preferred projects from metros. If metros chose to engage the DBSA during the project identification stage, it could appoint transaction advisors to ensure project is bankable. Fortunately, metros are involving DBSA more and more into pre-financing activity. DBSA reviews and provides input into the BEPP⁴⁸.</p>
<p>Project feasibility</p>	<p>Metros are expected to lead on the identification and prioritisation of projects. But in the absence of good data or pre-feasibility</p>

⁴⁵ Ibid.

⁴⁶ “Large Urban Centre Infrastructure Initiative : Concept Note.”

⁴⁷ Tshepo Ntsimane, Metro financing, Telephonic interview, April 2017.

⁴⁸ Tsakani Manyike, Metro financing, Telephonic interview, April 2017.

	<p>evaluation tools and practices, metros’ leadership creates a systemic risk for the metro and their funders.</p> <p>Determining realistic development horizons are important from the perspective of market uncertainty and unknown rates of take-up. Feasibility of developments often hinge off expected rates of take up by the market, and the bulk development contributions which are generated as a result.</p> <p>Operating on an electoral cycle rather than long-term considerations, metro political leadership are often reluctant to subject the projects which they identify and champion to the scrutiny of rigorous feasibility studies based on solid numbers⁴⁹. Crucial details of projects proposed in the IDP and BEPP (incl. feasibility, technical planning, etc.) are typically hard to obtain from municipalities. The supply envisaged by catalytic projects (as proposed by metros) often dwarf the most optimistic projections of market demand, which in turn is driven by macro-economic factors, monetary conditions, economic growth, market- preferences, technology and sector prospects.</p>
<p>Off- and on-balance sheet approaches</p>	<p>Whereas the Corporate Plan prioritises a shift from on- to off-balance sheet lending, there is a risk that – in the absence of appropriate spatial guidelines – that conventional off-balance sheet lending would advantage forms of development (in terms of scale, location and physical design) which run contrary to the principles of the IUDF.</p> <p>Municipal finances are in poor state, and off-balance sheet are politically difficult. This relates to revenue collection and affordability. Ringfencing not liked by cities or Treasury. DBSA’s, cities and Treasury’s priorities are miles apart⁵⁰.</p> <p>With on-balance sheet projects, DBSA relinquishes any influence over the metro in ascertaining the feasibility of a given capital investment programme. Instead, it reviews the credit-worthiness of the metro as a whole, and may in certain instances evaluate the capital investment programme in cases where its scale and risk may have implications for the metro’s overall long-term financial sustainability (e.g. BRT roll-out). From a reporting perspective, the metro would provide high-level technical information to the DBSA about the capital investment programme.</p> <p>On-balance sheet projects don’t depend on revenue cash flow, but rather on capacity of municipality as a whole. Most projects are capex financing, focusing on water, energy, roads, transport, environmental management. Cities don’t have to prove the financial viability of the project, only project description for DBSA’s reporting purposes (to ensure it remains within its mandate).</p>

⁴⁹ Willemse, Large Urban Centre Infrastructure.

⁵⁰ Ibid.

	<p>With off-balance sheet projects, cities fear relinquishing control to an SPV⁵¹. Given that infrastructure provision is highly political, control over technical project decisions and billing practices implies control over votes. This phenomenon manifests as a prevailing bias of vote-getting infrastructure such as RDP houses over 'hidden' investments in network maintenance or the roll-out of prepaid meters. For this reason, one official indicated that whereas the notion of ringfencing makes sense, it is "politically impossible" ⁵².</p> <p>Municipalities prefer to loan on-balance sheet. However, this is not sustainable. Balance sheets are under strain, reaching prudential limits. Need to look at new ways to encourage private sector investment by looking at creating dedicated revenue streams⁵³.</p> <p>What is missing is an off-balance sheet financing solution which doesn't impose the cost of new infrastructure on new residents only, but at the same time is ringfenced to crowd-in funding. Whereas water and energy projects may be funded on a user-pays basis, this is more difficult in the urban regeneration context where the value created by intervention in a dense, urban context is difficult to capture.</p> <p>One proposal, put forward by the Project Vumela initiative, is to ringfence BSCs (i.e. development charges) levied within the development area which is unlocked by the infrastructure constructed. The Project Vumela concept note suggests that BSCs should be supplemented by other income where necessary, such as tax increment financing, special assessment districts, the sale of development rights and leveraging municipal real estate.</p> <p>"Balance sheet capacity: DBSA will free up the balance sheet as much as possible by formulating and implementing the capital management strategy. DBSA will shift focus from delivering infrastructure development via balance sheet lending to catalyzing and crowding in 3rd party capital. This will diversify DBSA's earnings base from interest income to fee income."⁵⁴</p> <p>Expected cash flows from BSCs will be highly irregular and will therefore require an initial funding. BSCs often do not reflect the actual cost of providing the required bulk and link infrastructure.</p>
Affordable housing	<p>The main driver of inner city regeneration is the provision of well-located, medium- and high-density affordable housing, catering for households earning less than R25K per month. This sector is characterized by significant market failure as there is under-supply of affordable housing stock relative to effective demand. It is therefore important to investigate whether the DBSA is well-positioned to enter a sector which has a significant developmental</p>

⁵¹ Willemse, Large Urban Centre Infrastructure.

⁵² Johann Lubbe, Project Vumela, Telephonic interview, April 2017.

⁵³ Ntsimane, Metro financing.

⁵⁴ DBSA, "Corporate Plan 2017/18."

	<p>benefit and is potentially financially sustainable once the market failure has been adequately addressed.</p> <p><i>"We don't directly support specific property developments, or housing developments."</i> ⁵⁵</p> <p>Prior to 2013 the DBSA "burnt its fingers" in the housing sector, by investing in social housing (through the Old Mutual Impact Fund). A subsequent organisational review found that its involvement in this sector resulted in a convoluted portfolio, and that it would be preferable to exclude housing from its core business, which was framed as infrastructure finance only, rather than "superstructure". The prevailing view was that the housing sector was already crowded terrain with various DFIs specializing in that space: National Housing Corporations, various DF corporations dedicated to housing. DBSA should look to complementarities, playing to its strengths - that is, an infrastructure development finance institution.</p> <p>DBSA could better support urban development by looking to complementarities and playing to its strengths⁵⁶ - that is, as an infrastructure development finance institution. For example, the DBSA could complement regeneration by providing necessary infrastructure, such as partnering with metro municipalities and completing loan agreements to buy buses for bus rapid transit.</p> <p>Catalytic housing projects will generally include a range of different housing types and will serve as a critical means to achieve the scale economies required to meet the target of providing 1.5 million housing opportunities by 2019. A number of projects have been driven by the private sector with a focus on public-private partnerships in the delivery of all projects. A strong coordinative effort will be required to see these catalytic projects delivered, especially given the mismatch in constitutional responsibilities for land development and human settlements provision between municipal and provincial spheres of government, and past experiences of the complexities of delivering good IRDP projects timeously.</p>
<p>Coordination with international DFIs</p>	<p>DBSA, unlike international DFIs, doesn't receive government funding, and borrows from capital markets⁵⁷. In some instances DBSA has been able to raise funding from international DFIs on concessionary terms. Strategies of DFI partners are not led by local considerations (i.e. urbanization agenda) but rather international development agendas. Therefore, the extent to which DBSA can crowd in concessionary finance to raise its bargaining power in terms of incentivizing inner city regeneration is limited by the conditions associated with international DFIs who - whilst being able to provide concessionary finance (due to home country</p>

⁵⁵ Lubbe, Project Vumela.

⁵⁶ Ntsimane, Metro financing.

⁵⁷ Ibid.

	<p>subsidies), the terms of this financing are tied to a developmental agenda which, typically prioritises recipient areas in terms of socio-economic status rather than development potential of locations⁵⁸. This is inherently at odds with the spatial tenets of the IUDF which emphasizes the need to invest in inner cities as a means to improve urban efficiency and financial sustainability.</p> <p>For this reason, one DBSA official recommended that the DBSA lobby European funders on the IUDF principles⁵⁹.</p>
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3.3 Summary of comparison

We compare the current focus and operating activities of the DBSA prescribed by its current mandate and strategy to unlock R100bln by 2019/2020 to the policy priorities for each of the nine policy levers of the IUDF to identify where policies are fully aligned, somewhat aligned or divergent.

Table 3. Summary of comparison

	IUDF	DBSA
Fully aligned	<ul style="list-style-type: none"> Large, growing urban centres Economic infrastructure (e.g. regional, primary bulk) Connective infrastructure (e.g. public transport) Long-term timeframes (>10 years) Innovative financing solutions 	
Somewhat aligned	<ul style="list-style-type: none"> Primacy of IDPs, SDFs and BEPPs Unlocking infill developments On-lending conditions of international DFIs 	
Divergent	<ul style="list-style-type: none"> Inner city development Integrated development Brownfield redevelopment Small and large projects Tradeable economic activity Programmatic, area-based On-balance sheet Sector focus on affordable and social housing 	<ul style="list-style-type: none"> Peripheral development Enclosed development Greenfield development Large projects Non-tradeable (e.g. retail) Project-based, a-spatial Off-balance sheet Sector focus on bulk infrastructure

Divergence arises from thresholds imposed by institutional and market realities confronting self-funded development finance institutions seeking to operate within the South African urban development space. Institutional realities include corporate mandate, funding structure and technical capacity of the DBSA and its metro

⁵⁸ Ibid.

⁵⁹ Manyike, Metro financing.

counterparts. Market realities include the bargaining power of the DBSA vis-à-vis its counterparts within the regional and international DFI community, commercial banks, national government and its main clients in this sector – the metros. This against the backdrop of rapid urbanization, metros with uneven capacity and a stagnant economy and household income. These thresholds – which impose range limits to the scale, type and sector of projects which can be supported – largely preclude direct support to one of the IUDF’s identified short-term priorities – inner city urban regeneration and the establishment of new nodes.

That is not to say that the DBSA cannot provide indirect support to this priority:

- Inner city regeneration is also contingent on enhanced connectivity, which is a space in which the DBSA can play a powerful role in its support to BRT roll-out and the upgrading and rehabilitation of inner city infrastructure network capacity and bulk. This is specifically pressing in the water and sanitation sectors.
- Intensification is an important requirement of more efficient cities and regeneration as it allows for more efficient use of existing resources, raises the financial sustainability of public transport, improves the usage and vitality of the public environment and creates demand thresholds for economic activity. To this end, DBSA may be positioned to support large infill and brownfield developments which will indirectly enhance urban intensification.

4 Additional potential contributions of the DBSA

The DBSA has essentially three potential instruments by which to support the IUDF in its short-term priorities – project preparation, on-balance sheet lending and off-balance sheet lending:

4.1 Project identification / prioritisation

In principle, the most direct way the DBSA can support the IUDF is by means supporting cities in project identification processes whether as a discrete process, through capacitation and dissemination of planning tools, or through the bank's involvement in the drawing up of the BEPP. Where a list of projects has already been identified, the DBSA may use a set of criteria (incl. spatial indicators) to prioritise previously identified projects for DBSA should support from a packaging or financing perspective.

The IUDF calls for greater participation by the development finance community in municipal processes, particularly the development of long-term infrastructure plans, and for investors to align their annual plans to the IDP and SDBIP. Unlike other most national sector departments, the DBSA engages directly with local governments rather than indirectly through provincial government. While it is not responsible for policy, regulation and monitoring, it may guide local government planning by leveraging its resources (planning support services, tools and partners) to incentivise better alignment to the spatial tenets of the IUDF.

However, there is an intrinsic tension between the objectives of the DBSA, city planning and finance officials and the political leadership of the metros, particularly in relation to planning horizons, the tolerance for risk, approach to feasibility and the need for fiscal flexibility.

Using the IUDF as a common language with which to promote strategic alignment between the DBSA, the metros and other stakeholders is not sufficient in a context of uneven metro capacity – the DBSA must deploy its competitive advantage as leverage to influence and incentivise metro alignment to the spatial tenets of the IUDF. However, the DBSA's historical competitive advantage of longer tenor and low borrowing cost is eroding amidst competition from international DFIs and commercial banks.

The DBSA can directly support the IUDF through project preparation, where projects are identified or screened using spatial criteria aligned to the IUDF conditions. Here, the DBSA's ability to provide cradle-to-grave services provides it with a unique competitive advantage of competitors. DBSA can appoint transaction advisors to ensure project is bankable. Metros are involving DBSA more and more into pre-financing activity. DBSA reviews and provides input into the BEPP⁶⁰. This is in line with the position of the IUDF Implementation Plan:

"IDPs should not be seen as municipal plans, but rather an expression of all of government and its partners in a local space. This implies that [...] state-owned entities should engage with municipalities before deciding where capital investments will be located, to ensure their investments are aligned to the municipal spatial plans. Equally, municipalities should ensure that their spatial

⁶⁰ Ibid.

and sectoral plans are not developed for compliance, but are credible and aligned to [...] national development priorities and goals.”⁶¹

ACTIONS

- The DBSA should support metros in improving BEPPs towards greater feasibility⁶². It is therefore recommended that the DBSA works closely with SALGA and SACN to support municipalities with the IUDF implementation, assisting with identifying challenges, resource deficits and capacity shortfalls, and then advocating for necessary support. It can share its tools to capacitate cities in optimizing the positive economic externalities accruing from inner city regeneration and investment in connective infrastructure:
 - Right-sizing technical plans to appropriate geographic scale
 - Understand markets (i.e. segments, market structure, costs)
 - Understand the players
 - Influence feasibilities
 - Avoid distorting the market

4.2 On-balance sheet finance

The DBSA does currently not have a cost advantage over other commercial banks when lending on-balance sheet, and thus have no leverage to promote the IUDF objectives by, for example, attaching conditions to the lending or prioritizing particular projects over others. The DBSA can only be competitive in the on-balance sheet lending space by crowding in concessionary finance as part of its offer. However, international DFIs who offer concessionary finance attach on-lending conditions in line with their respective development agendas. These agendas may be oriented towards concerns ranging from environment (e.g. Green Fund) to economic redistribution to health and safety. In order to access this funding, it will be incumbent for the DBSA to evaluate whether and demonstrate the extent to which a given client’s capital investment programme is aligned to the on-lending conditions. However, for the DBSA to perform the role of lobbying international DFIs for concessionary finance on the basis of investment programmes (rather than specific projects), it requires for the organization itself to become an advocate for enhancing the spatial efficiency of South African cities. The spatial efficiency imperative is not only embodied by policies like the IUDF and the NDP, but underlies planning legislation⁶³ and leading empirical work on urban economics.

ACTIONS:

⁶¹ Department of Cooperative Governance and Traditional Affairs, “Integrated Urban Development Framework : Implementation Plan 2016-2019,” 2016.

⁶² Sinazo Sibisi, “DBSA’s Role in Urban Investment,” 2015.

⁶³ The Spatial Planning and Land Use Management Act calls for spatial policy to prioritise, mobilise, sequence and implement public and private infrastructural and land development investment in priority spatial zones in furtherance of spatial efficiency and resilience.

- Incorporate weighted developmental outcomes of intervention as calculated using Social Accounting Matrix to the balanced scorecard.
- Improve eligibility for both internal and external concessionary funding by extending the DBSA's suite of financial 'trade-off models' to include spatial lifecycle effects of urban investment programmes on household incomes and municipal fiscal sustainability (see below).

4.3 Off-balance sheet finance

The DBSA can directly support the IUDF through off-balance sheet lending, where projects are identified or screened using spatial criteria aligned to the IUDF conditions. Here, the DBSA's ability to deploy structured products as part of a project development pipeline may give it a competitive advantage. However, there are three challenges which arise with this approach:

1. metros have been loath to ringfence revenue since it constrains the metros' future ability for internal cross-subsidisation.
2. the need to capture value within a demarcated area may favour a particular development typology (e.g. spatial location, physical design and land use mix) which may inhibit the catalytic potential of the development
3. there are limited examples of potential projects that are both feasible and catalytic, particularly in light of adverse economic conditions nationally.

This model is well-suited to finance large-scale investment in regional and primary bulk economic infrastructure, and is aligned to the IUDF objective of implementing the economic infrastructure necessary to accommodate urbanization. Can DBSA overcome problems with off-balance sheet financing solutions by identifying and motivating for particular projects on the basis of positive externalities captured by society-at-large. In poorly-located sites where value creation is ringfenced, there is risk that all value created is captured within the demarcated area, and accrues the investor. However, in well-located development, the argument for broader fiscal and socio-economic benefits may be estimated and demonstrated. In this situation, a win-win situation may arise where both the lender, the municipality and households benefit from the development.

However, there are only limited examples / opportunities for the off-balance sheet funding model to support the IUDF objectives of connective infrastructure, inner city regeneration and corridor intensification: public transport and catalytic projects.

As discussed earlier, these two categories of projects are mutually supportive: in the long term, public transport isn't sustainable without catalytic projects, and vice versa.

Certain local conditions need to be in place for the DBSA to finance catalytic projects:

- where capital is required to unlock the development
- where the metro is not able to provide the capital due to risk or lack of revenue
- where the project is not a budget priority
- where the project is not a municipal responsibility (e.g. water boards)
- the project falls inside an approved Integration Zone

Where these opportunities do arise, the DBSA has an opportunity to support metros in identifying, prioritising and packaging these projects in line with the objectives of the IUDF (see M&E framework below), and use its institutional advantages to de-risk these projects for either municipalities or developers (see Project Vumela).

ACTIONS

- refine and implement concept M&E framework to align and monitor DBSA project identification / screening with IUDF spatial tenets
- de-risk or offer concessionary terms for 10 projects or programmes which demonstrate the highest return-on-investment using extended trade-off model.

4.4 DBSA as champion for more efficient, compact cities

The DBSA should assume the mantle of the IUDF urban agenda when engaging cities in developing their BEPPs, or when lobbying international DFIs for concessionary finance. This role requires for the organization itself to become an advocate for enhancing the spatial efficiency of South African cities.

The spatial efficiency imperative is not only embodied by policies like the IUDF and the NDP, but underlies planning legislation⁶⁴, leading empirical work on urban economics and spatially-intelligent fiscal impact modelling work commissioned by the Finance and Fiscal Commission⁶⁵, the City of Cape Town⁶⁶ and others⁶⁷.

At its heart, the spatial efficiency argument is premised on the recognized need to balance the efficiency of development processes with the efficiency impacts of urban form on households and firms (e.g. potential travel costs and distances to work, and the knock-on effect for disposable incomes and consumption), on the fiscal implications of local government over the lifecycle of infrastructure, and on the health of the overall economy (e.g. transport costs and congestion)⁶⁸.

More compact spatial form does not only lead to cost savings, but enhances economic productivity and access since economic effects of investment are transmitted in space and attenuate over distance and mediated by transport networks. Concentrating economic activity in space generates super-linear returns-on-investment as a result of agglomeration and urbanization economies. However, in order to ensure that concentration doesn't generate diseconomies of agglomeration (i.e. congestion), it is critical to invest in connective infrastructure to extend economic spillovers geographically and reduce the cost of transport on households. Furthermore, intensification places additional demand on the public environment, thus requiring additional urban management efforts. The process of intensification (which take generations) and the provision of connective infrastructure (which can happen within a few years) are mutually enabling and should happen in a planned, incremental way.

⁶⁴ The Spatial Planning and Land Use Management Act calls for spatial policy to prioritise, mobilise, sequence and implement public and private infrastructural and land development investment in priority spatial zones in furtherance of spatial efficiency and resilience.

⁶⁵ The City Efficiency Costing Model was initially developed by PDG to calculate the costs of a hypothetical South African city under various growth scenarios.

⁶⁶ A citywide spatial costing tool quantifying capital and lifecycle operating cost and benefits accruing to municipalities, households, firms and the State based on alternative spatial growth scenarios has been applied to Cape Town 2032 growth scenarios.

⁶⁷ A Fiscal Impact Tool has been developed by PDG to estimate lifecycle costs and benefits pertaining to specific projects, and have been successfully applied to evaluate large projects such as Cornubia and Pelikan Park in Cape Town.

⁶⁸ Turok, "South Africa's New Urban Agenda."

Claimed benefits arising from spatial efficient urban form includes⁶⁹:

- a reduction in the need for car travel
- reduced energy consumption and emissions
- a reduction in upfront cost of new construction of infrastructure
- a significant increase in property rates compared to conventional suburban development

ACTIONS

- Appointing an in-house urban economist with planning background. Building internal capacity to determine location potential. Reviewing and commenting on BEPPs, IDPs, spatial plans.
- Providing guidelines / toolkit for metros to conduct in-house pre-feasibility of projects
- Needs to investigate BRT's role in inner city regeneration, and the long-term financial feasibility of BRT from operational cost perspective and impact on city's overall financial sustainability.

4.5 Extend DBSA's trade-off model to include spatial effects and full-cost accounting

The DBSA cannot directly influence project identification (and thus specific developmental outcomes) through on-balance sheet lending since – unlike concessionary DFIs - it doesn't have the cost advantage to attach its own lending conditions. There is also no evidence that the DBSA offers concessionary finance for metro projects, irrespective of their developmental potential. In some instances, the DBSA offers implementation support for social infrastructure programs on a cost-recovery basis.

It is not self-evident whether its limited cost advantage is constrained by the limitations of the non-spatial, linear financial analysis model that is run by the DBSA's corporate finance division and used as a key tool used by DBSA for managing and balancing the tradeoffs in delivering concessionary finance and other services to targeted groups, while assuring of financial sustainability. Its scenario analysis capacity is used to assess the potential impact of policy decisions on the bank's long-run financial performance and sustainability. The implicit objective inherent in the model is to maintain the real value of capital. The model has been used, for example, to test the viability of the shareholder representative's desire that DBSA direct more funding to infrastructure in poorer municipalities and communities, and on more concessionary terms. The model can be used to assess different pricing policies for developmental activities.

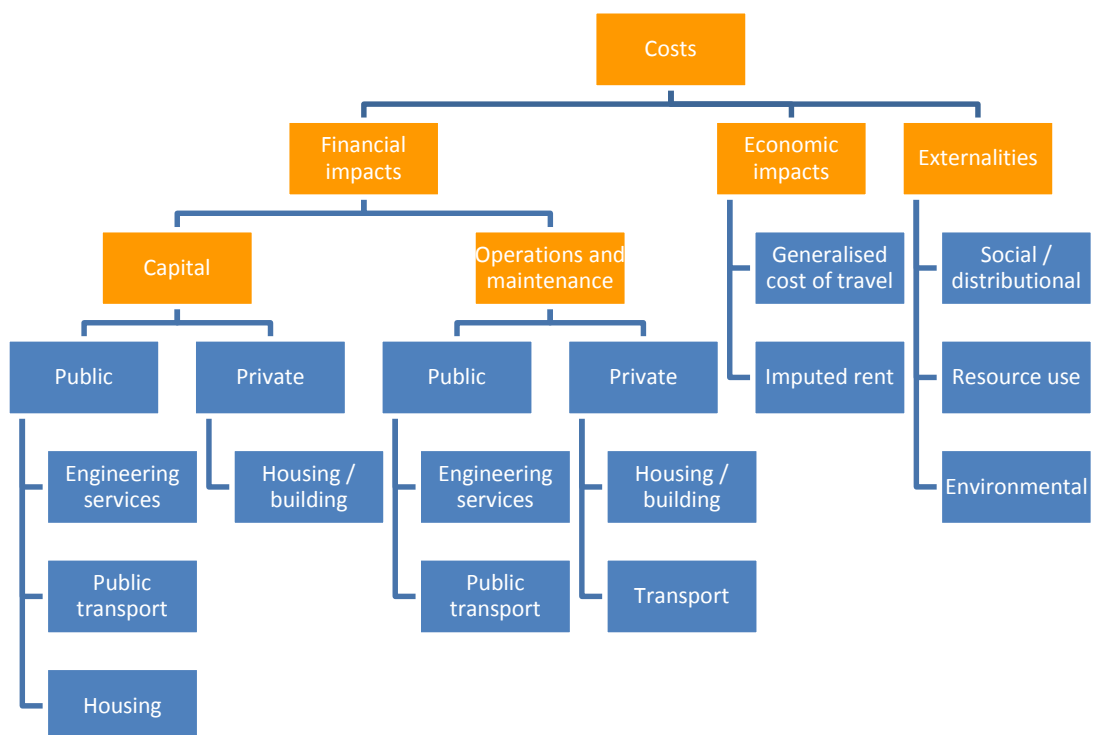
DBSA also used to report on the non-financial impacts and outcomes of its lending utilizing **Social Accounting Matrix models** (SAM). The SAMs took into account the

⁶⁹ National Treasury, "Integration Zone Planning Guidelines: Outcomes-Based Transit Oriented Development," April 2017.

linkages of DBSA projects with others, such as through the purchase of materials, hiring of workers, etc.

The benefits of direct and indirect lifecycle benefits of compact, connected urban growth (compared to conventional, sprawling urban development) is subject to quantification via spatial urban modelling. These impacts range from lifecycle financial savings (capital and operating), to economic impacts and environmental (e.g. CO2 emissions) and social externalities⁷⁰. In the urban development space, extending the analytical model to include the citywide and fiscal impacts⁷¹ of spatially efficient intervention may go some way to justify more competitive (if not concessionary) terms to metros whose programs meet the necessary spatial criteria. Adopting an evidence-led approach to quantifying intervention based on full cost accounting may well set a precedent which may assist the DBSA in crowding in external concessionary funding.

Figure 6. Typology of impacts of urban development scenarios



By developing capacity in this field and promoting more sophisticated urban modelling by metros, the DBSA may be better positioned to secure concessionary finance, whilst guiding the way metros identify and prioritise projects towards more efficient and fiscally sustainable spatial outcomes.

Other tools which are publicly available and that should be considered include:

⁷⁰ Sibisi, "DBSA's Role in Urban Investment."

⁷¹ Frank Cumming, "Enabling TOD and Urban Regeneration in an Age of Austerity: Beyond Planning" (Western Cape Property Developers Forum, Cape Town, 2017).

- **City Infrastructure Delivery and Management System** which aims to improve long-term infrastructure planning and asset management. This system will start operating in 3 metros in 2017/18, and will be phased in for other cities. Government is exploring how to better use the grant system to provide cities with incentives to improve infrastructure delivery.
- **National Treasury Integration Zone Planning Guidelines**
- **SACN Transit Oriented Density Framework**
- **Urban Hub Toolkit**

ACTIONS

- Develop and disseminate tools to model impact
- Lobby international DFIs on IUDF urbanization agenda
- Demonstrating the efficiency benefits of inward growth / good urban form to metros (as part of ongoing capacitation)
- Systematising and disseminating information with regards to realistic economic forecasts rates w.r.t take-up rates
- Support metros in improving spatial data and revenue collection.

4.6 Support inner city precinct management

Relative to peripheral greenfield development, unlocking infill development or redevelopment of existing precincts is impeded by a complex stakeholder landscape. However, amidst deteriorating urban management conditions across South African cities, effective precinct management is an increasingly important determinant of locational feasibility and thus private sector investment. Although metros and other public sector services play an important role in effective precinct management, support and ownership by local stakeholders such as City Improvement Districts and property owners ultimately determine the success of these initiatives. Although the DBSA's role in urban development leans towards the financing of bricks-and-mortar intervention in infrastructure, it should consider extending its reach towards the enablement and harnessing of local efforts to improve the public realm within inner city environments, particularly in public transport precincts.

Urban management efforts typically hinge on the incremental enhancement of routine operations (e.g., community mobilisation, eliminating problem buildings, illegal dumping, by-law enforcement, visible policing, managing informal trading activity, investment promotion, youth training programs, etc.).

However, there are several important entry-points for the DBSA to support these efforts:

PLANNING SUPPORT ACTIONS

- When engaging metros in the development of their BEPPs, advocate for the prioritisation of inner city precincts and offer planning support to the drawing up of precinct level plans in partnership with local stakeholders such as City Improvement Districts, community-based organisations and business chambers. Practical areas of support may include contributing towards the development and implementation of a land release policy, and the identification of suitable land for development. Similarly, the DBSA could conduct, at risk, an audit of infrastructural services within inner city, and assist in the development of an inner city infrastructural services master plan.
- Lend technical expertise in the improvement of revenue collection systems to ensure that long-term urban management efforts are financially sustainable.

HOUSING MARKET ACTIONS

- Strengthen linkages between DBSA and for-profit lenders in residential development that focus explicitly on inner city areas (e.g. Trust for Urban Housing Finance ('TUHF')). Accessing debt capital available at appropriate interest rates allows these entities to increase their loan books, accelerating affordable housing provision and thus improving developmental impact.

CAPITAL IMPROVEMENTS ACTIONS

- Engage international development finance partners focused on enhancing urban safety, which typically requires a holistic response that encompasses the upgrading of the public environment through pedestrianization, street lighting and furniture, paving and quality open spaces, the installation of a network of CCTV cameras and monitoring facilities, the upgrading and rehabilitation of ageing infrastructure, and the provision of trading facilities to accommodate and regularize informal trading activity and business incubation. Local precedent already exists in the partnership between the German Development Bank ('KfW') and the Western Cape government in the form of the Violence Prevention through Urban Upgrading ('VPUU') programme. Similarly, GiZ (German Technical Assistance) provide technical support for violence prevention efforts.

4.7 Sector focus

The comprehensive review of sector prospects is given in Appendix X, which evaluates both demand, interdependencies and long-term potential of respective sectors in the urban development space. The table below provides a summary of this evaluation, with **bold indicating current priority area** (as indicated by exposure), and asterisk future growth sector (based on evaluation of demand).

Table 4. Sector priorities

Sector	Growth potential in metros	Metro-wide (non-spatial)	Recovery	Connective (network infrastructure)	Recovery	Area-based	Recovery
Electricity	*	Regional and primary bulk (e.g. IPPs)	BUC	Step-down, sub-stations; link infrastructure	BSC	Reticulation Meters Demand mgmt.	SLP TAR
Water and sanitation	**	Regional and primary bulk (e.g. dams, desalinization).	BUC	Conveyancing Reservoirs	BSC	Reticulation Water meters	SLP TAR
Road and logistics	**	Tolling national roads	UC	Tolling local roads Freight rail	UC UC	Local system upgrades	BSC LBF
Public transport	***	Fleet Facilities	PG	BRT lanes* Commuter rail	PG UC	Trunk stations* Precinct (re)development* Urban mgmt.*	LBF SUB
Housing and catalytic projects	***	End user finance*				Mixed use mega-projects Social housing* Student housing* Affordable housing*	BSC LBF SUB SLP

BUC

Bulk usage charge (e.g. raw water abstraction charge)

Aligning DBSA Corporate Plan to IUDF Implementation

UC	User change (ticket fare)
BSC	Bulk services contribution (capital)
TAR	Tariffs (operating and maintenance)
SLP	Sale of land or property
SUB	Subsidy or grant
LBF	Land-based financing
PG	Patronage Guarantee
PR	Property rates

5 Mapping high-level IUDF-DBSA alignment and potential DBSA roles*

Table 5. DBSA’s potential role in relation to three high-level IUDF short- to medium term priorities.

IUDF Short-term Priorities	Sectors	Role of DBSA
Accommodating urban growth through efficiencies	Water security	Large revenue-generating regional bulk infrastructure (e.g. Large Urban Catalytic Infrastructure)
Linking areas with rapid transport networks	Bus rapid transit	Off-balance sheet projects which prioritise development projects close to BRT trunks
Regenerating inner city and	Infill projects	Residential / mixed-use infill (brownfield) (e.g. Project Vumela)
	Inner city Affordable housing	Supporting CIDs and urban regeneration programmes Concessionary finance to incentivise affordable housing within infill mega-projects
High potential economic nodes	Catalytic industrial	Enclosed, greenfield industrial developments close to areas of poverty or in support of corridor intensification

* see Annexure E for detail on short-term priorities

6 Monitoring and Evaluation Framework

6.1 Current approach to M&E

6.1.1 Performance outputs

Performance measures and targets in the Corporate Plan are articulated using a **Balanced Scorecard** (BSC) methodology. The BSC is cascaded from corporate to divisional to unit level. In practice, the shareholder representative defines overall strategic direction, while specific strategic objectives and performance measures and targets are proposed by the CEO, executive management and the Board, and negotiated and agreed with the shareholder representative. In developing the balanced scorecard, the following principles were applied:

- Identify the most critical and high-impact short-term performance drivers to achieve the long-term DBSA strategy
- Key measures of interest to the DBSA Board
- Ability to assess performance annually.

The current BSC defines a total of 25 output measures associated with the broad strategic goals and specific strategic objectives set out in the Corporate Plan, structured along the 3 themes:

- Financial perspective
- Learning and growth perspective
- Internal process perspective

Performance against each target is rated using a standardized point-based system, and ratings are aggregated using weights assigned to each performance measure. In developing the scorecard, the most critical and high impact short-term performance drivers were identified.

Although the balanced scorecard is key towards disbursement (e.g. measuring third party investment, crowding-in, it does not explicitly measure developmental outcome or contribution (in this case) to urban development or spatial transformation as defined by the IUDF. Furthermore, the balanced scorecard does not pull through to individual performance.

6.1.2 Managing trade-offs

A key tool used by DBSA for managing and balancing the tradeoffs in delivering concessionary finance and other services to targeted groups, while assuring of financial sustainability, is a detailed **financial analysis model** run by DBSA's Corporate Finance Division. Its scenario analysis capacity is used to assess the potential impact of policy decisions on the bank's long-run financial performance and sustainability. The implicit objective inherent in the model is to maintain the real value of capital. The model has been used, for example, to test the viability of the shareholder representative's desire that DBSA direct more funding to infrastructure in poorer municipalities and communities, and on more concessionary terms. The model can be used to assess different pricing policies for developmental activities.

6.1.3 Measuring developmental outcomes

Although the DBSA has sophisticated financial and econometric tools available to manage trade-offs and estimating developmental outcomes, it is unlikely that these tools are equipped to quantify the full lifecycle developmental impacts of interventions within an urban system. As previously discussed, these impacts are characterized by spatial effects (e.g. shadows, spillovers), non-linear network effects (e.g. congestion, system feedback) and distributional effects between households. However, specifying an urban development impact model for an urban system has large up-front costs and informational requirements.

6.2 Proposed M&E methodology

Since no framework has been developed to date for the government to monitor the implementation of the IUDF, an M&E framework concept is introduced below as a straightforward interim measure with low informational demand that would serve to monitor the role of the DBSA in the implementation of the IUDF:

- It relies on established causal assumptions about spatial criteria and overall system efficiency.
- It focuses on project location, land use mix, project value and proximity to higher-order public transport as primary project parameters to be evaluated
- It does not estimate the system impact of the project, but rather provides a rubric for appraising projects.

This proposal should be prepared in a way that as far as possible is compatible with the monitoring and evaluation steps government will follow on the IUDF.

This is a concept design for an M&E framework aimed at guiding DBSA in aligning its project prioritisation practices in large urban centres with the spatial principles identified in the Integrated Urban Development Framework. This concept is built on joint planning, monitoring and evaluation between the DBSA and its metro clients, and based on data which is already routinely reported on for both on- and off-balance sheet projects.

If applied effectively, the framework should allow the DBSA to assess progress towards the fulfilment of the IUDF's implementation plan's short- to medium-term spatial priorities for large urban centres (see Figure 5. Spatial targeting within large urban centres above). It would also assist the DBSA in its engagement with metro clients on the priorities and the underlying rationale.

Although the wording in the concept framework is specifically geared at municipal finance deals, it is recommended that this gets extended to engagements along the development pipeline, from project identification to project packaging, to financing and implementation, per functional unit within the organogram.

The National and Provincial Government have adopted a programme-based approach to monitoring and evaluation. This model involves the formulation of a programme theory (also referred to as theory of change) as part of the planning of the intervention.

It can be summarized as follows:

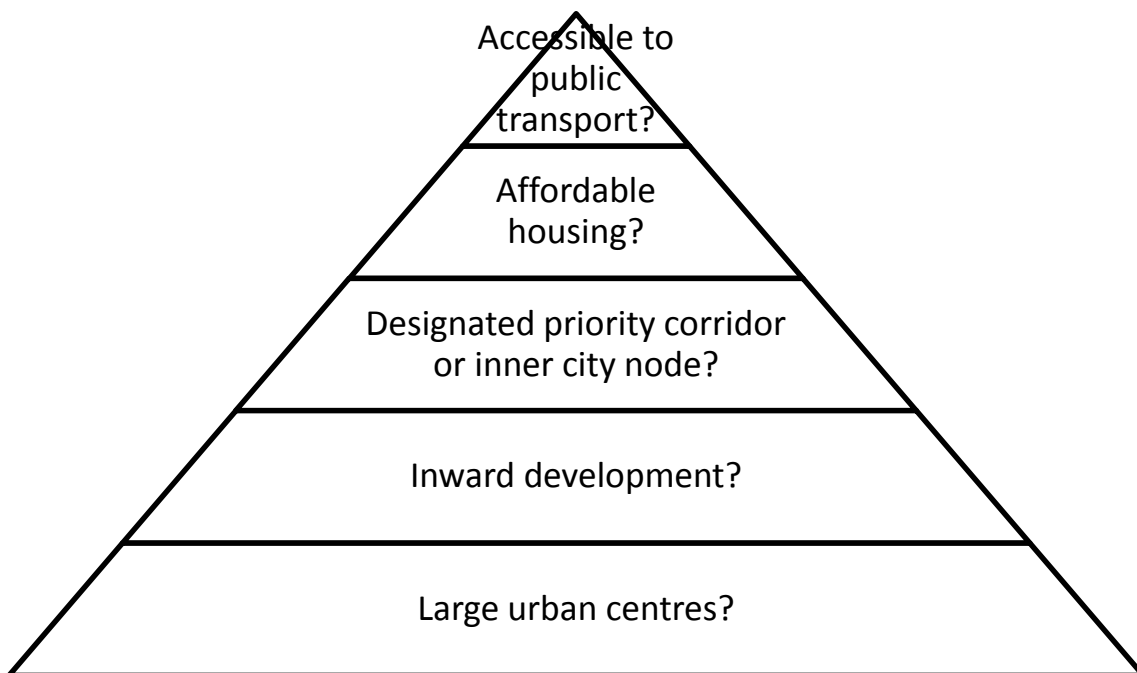
If the development finance institutions align their planning and implementation support, and lending practices in large urban centres, as governed by Corporate Strategy (with partners as appropriate) to the IUDF Implementation Plan, it should lead to the intended MTSF priorities insofar they relate to urban development.

6.3 Potential indicators

6.3.1 Short-term M&E

Indicators should evaluate disbursement practices in the project identification and prioritisation phase. In the case of area-based projects⁷², a simple set of spatial indicators are proposed:

Figure 7. Rubric for appraising projects



6.3.2 Rubric for appraising projects

As a proportion of the value of all deals facilitated or financed by the DBSA and third party funders, the value of deals which meets the following Boolean conditions (e.g. TRUE / FALSE):

1. Where the infrastructure catchment area or development area unlocked by the project falls within or partially within one (or more) of the metropolitan

⁷² Project refers to a spatially discrete intervention. Programmatic interventions (i.e. consisting a number of projects) should be evaluated wherever possible on a project-by-project, location-by-location basis. Projects that are not spatially discrete (e.g. non-spatial projects or projects at citywide or sub-metropolitan scale) should be excluded from this evaluation.

boundaries of the **four priority cities** as identified in the IUDF Implementation Plan: Johannesburg, Tshwane, Cape Town and Ekurhuleni.

20%

2. Where at least 50% of overall development being unlocked within the first 10 years of project completion (as measured by land extent, dwelling units or internal floor space), is located **within the existing urban fabric**, rather than an outward extension of the urban footprint or located beyond the existing urban footprint, OR at least 25% of development being unlocked within the first 10 years of the project (as measured by dwelling units or internal floor space) involves the redevelopment of existing buildings.

20%

3. Where the infrastructure or user catchment area benefiting from or development unlocked by the project falls within, or overlaps substantially with, an **Integration Zone** (as formalized in the BEPP) OR an Urban Development Zone.

20%

4. Where at least 25% of the residential dwelling units unlocked within the first 10 years of the project falls within the **affordable housing** segment (that is, affordable to households earning less than R25 000/pm as in ZAR 2017).

20%

5. Where the infrastructure or user catchment area benefiting from or development area unlocked by the project is within 800m of an operational **high-order public transport facility** (i.e. commuter rail station or BRT trunk route).

20%

100%

The total value of metro deals (incl. third party funding) * (% score)

Total value of metro deals (incl. third party funding) per reporting period

(please see Annexure D below for concept M&E framework)

6.3.3 Long-term M&E

The spatial indicators listed above provide short-hand proxies based on a set of causal assumptions about the relative benefits of developing in a particular location. However, given the complexity of large urban systems characterized by feedback and non-linear interdependencies, both area-based and connective interventions are prone to unintended consequences (i.e. feedback effects). It is therefore recommended that the DBSA lead international best practice and develop or acquire evidence-led tools which capture the full developmental impact of respective projects, given their parameters and their location. A single tool can be developed by which the impact of a given infrastructure project or a given development, (given its

location), on the medium-term capital and operating costs and benefits on the municipality, the State, the household and the firm can be estimated. These impacts may arise as a result of the project itself, but also on the citywide urban system (e.g. the impact of BRT on commuting patterns, and therefore private transport operating costs over 20 years). It is recommended that the DBSA engages National Treasury's CSP in this regard to explore coordinated efforts at developing and standardizing these tools. This may also serve as an important planning tool which can be embedded in metros as part of the DBSA's planning and implementation support services.

Potential long-term indicators may include any combination of the following:

Table 6. Potential long-term indicators

	<i>Households / businesses</i>	<i>City</i>	<i>State</i>
Capital cost	<ul style="list-style-type: none"> Property purchase, including land, buildings, internal infrastructure and bulk infrastructure (Development Charges) 	<ul style="list-style-type: none"> Capital cost of all municipal service infrastructure Top up on housing subsidies to cover actual subsidised housing cost 	<ul style="list-style-type: none"> Capital cost of national and provincial infrastructure (roads, health and education) Capital grants for housing and municipal infrastructure
Capital revenue	<ul style="list-style-type: none"> Property asset appreciation 	<ul style="list-style-type: none"> Capital grants Development charges 	<ul style="list-style-type: none"> <i>None</i>
Operating cost	<ul style="list-style-type: none"> Building maintenance and insurance Property rates Service charges (tariffs) Transport costs <i>Economic transport costs</i> 	<ul style="list-style-type: none"> Operating costs of all municipal services, including municipal transport (IRT) 	<ul style="list-style-type: none"> Operating grants Operating costs of parastatal and provincial transport services
Operating revenue	<ul style="list-style-type: none"> Imputed rent 	<ul style="list-style-type: none"> Property rates Service charges (tariffs) Operating grants 	<ul style="list-style-type: none"> <i>None</i>

6.4 Implementation plan

The DBSA must collate a spatial database of projects and the development unlocked by the project. This spatial database should include essential project information such

as the number of dwelling units built and the relevant housing sector and the commercial and industrial floor space developed (from which employment densities may be applied). Spatial data should be evaluated against designated priority areas as identified by the cities, such as Urban Edges, Integration Zones, Urban Development Zones and Public Transport priority areas.

ACTIONS

- Dedicate GIS capacity within the DBSA.
- Assign GIS capacity within DBSA and engage with municipalities to obtain the relevant spatial data layers. This should include:
 - Existing urban footprint
 - Existing integration zones
 - Urban Development Zone
 - Integrated Public Transport Network
 - Infrastructure catchment layer showing relationship between bulk, link and catchment areas.
- Prepare spatial layer which corresponds with the spatial elements referred to in the project appraisal rubric (see section 6.3.2 above).
- Conduct baseline assessment of deals-to-date, locating these projects in space (as point features) and evaluating them in terms of the spatial criteria. This will allow for the establishment of baselines and targets.
- Ensure that the locational and other project information typically reported by municipalities enables the DBSA to populate all the relevant fields.
 - Phasing and projected development take-up rates
 - Residential housing mix (e.g. % affordable)
 - Value of development unlocked
- Systematically evaluate current deals, proposed deals and potential deals (as listed in IDPs, BEPPs, SDFs) to evaluate current performance and rate the spatial alignment as part of the routine screening of municipal projects.

6.5 References

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Annexures

A. Documents to be reviewed

Strategy documents	<ul style="list-style-type: none">• Annual Report 2015-16• Corporate plans and strategies of the DBSA• Integrated Urban Development Framework• Integrated Urban Development Framework Implementation Plan 2016-2019
Interviews	<ul style="list-style-type: none">• Tshepo Ntsiimane. General Manager of Metros, Water Utilities and Education in the SA Financing Division• Johann Lubbe. Deal Originator in the Project Preparation Unit.• Tskakani Manyike. Senior Investment Officer: Metros in SA Financing Division• Tobie Willemse. Transformation Analyst in Strategy Division• Seison Reddy. Manager: Transport and Logistics in SA Financing Division• Sibongiseni Mdladla. Development Planner. Infrastructure Delivery Division

B. Sector prospects

The high-level strategic ambition of the Corporate Plan is to deliver R100bn annually in infrastructure unlocked by 2019-20, while maintaining ROE at 4.7%+. In order to identify long-term growth prospects and interdependencies, we evaluate the demand and prospects of key infrastructure and development sectors relevant to metros.

Infrastructure sectors

Networked urban infrastructure needs to be managed: they must be designed, built, operated and replaced. Typically, just the energy, waste, water and sanitation are responsible for 10% of gross geographic product or nearly 50% of the city budget. Infrastructure systems typically have a long lifespan and, as a result, they commit built environments to certain patterns of production and consumption for many years.⁷³ According to a 2012 study by the DBSA, the total value (in 2013 Rand) of capital investment in municipal infrastructure (excl. roads and public transport) required to meet infrastructure demand between 2014-2024 is R659bn, with a shortfall of R227bn. The municipal finance gap, after taking into account grants, borrowing and other external sources, is estimated to peak in 2017 at R38 billion⁷⁴.

Meanwhile, large conditional grants to municipalities are being trimmed, including the human settlements development grant, the water services infrastructure grant, the public transport network grant and the municipal infrastructure grant⁷⁵. Funding for Strategic Infrastructure Projects 7 ('SIP 7'), which refers to 'integrated urban space and public transport programme, was trimmed between 2014/15 and 2015/16, and SIP 6 ('Integrated municipal infrastructure project' was trimmed this year.

Water and sanitation

25% of the overall projected capital cost requirement relates to investment in new water infrastructure, followed by new sanitation infrastructure. Despite the significant funding gap between the required capital investment and fiscal/donor sources, there is a shortage of bankable water projects. This is because the demand for these infrastructure categories is mostly derived from growth in low income households in cities (and thus eligible for capital grant funding).

Electricity

The DBSA has committed and invested in excess of R10bn in the Renewable Energy and Independent Power Producers Programme, and have crowded in R169.9bn private sector funding⁷⁶.

Looking ahead, demand for electricity is dominated by non-residential users, and is subject to demand management measures (e.g. off-grid generation) and price elasticity, both of which raise the risk of stranded assets. However, electricity generation is not a municipal responsibility (although interest in independent power generation may elevate the role of municipalities in this sector).

⁷³ Ian Palmer, "South Africa's Urban Infrastructure Challenge," n.d.

⁷⁴ DBSA, "The State of South Africa's Economic Infrastructure: Opportunities and Challenges." (Halfway House: Development Bank of South Africa, 2012).

⁷⁵ National Treasury, "Budget Review 2017."

⁷⁶ "Large Urban Centre Infrastructure Initiative : Concept Note."

**Table 7. Projected capital investment demand in municipal infrastructureT
(2014-2024)⁷⁷**

	Backlogs	Growth	Rehabilitation	Total
Water	R26bln 9%	R162bln 57%	R97bln 23%	R285bln
Sanitation	R24bln 13%	R102bln 54%	R64bln 34%	R190bln
Electricity	R26bln 15%	R74bln 42%	R76bln 43%	R176bln
TOTAL	R77bln	R344bln	R238bln	R659bln

Public transport

Over next three years, R142 billion will be spent by National Government to support affordable public transport, of which R19.7 billion will be in the form of direct grants to local government for improvements to the public transport network⁷⁸.

The performance of public transport systems show why changing South Africa's urban form is vital for more productive and sustainable cities. The BRT systems set up in major South African metros are making operational losses significantly higher than anticipated. The cost of operating transport systems creates a large and growing financial burden for cities. Low urban densities, high early morning and late evening one-way demand peaks and poor seat turnover combine to push cost recovery rates well below 50%⁷⁹. Although intermediate efficiency-enhancing measures are being implemented to varying degrees of success, over the long-term the costs of urban public transport will depend on intensification in existing nodes and corridors, as required by the IUDF (see section X below).

i. Property development sectors

Affordable and student housing

Globally, structural drivers (e.g. demographic, economic and technological) are transforming the nature of work and the preferences and behaviours of households.

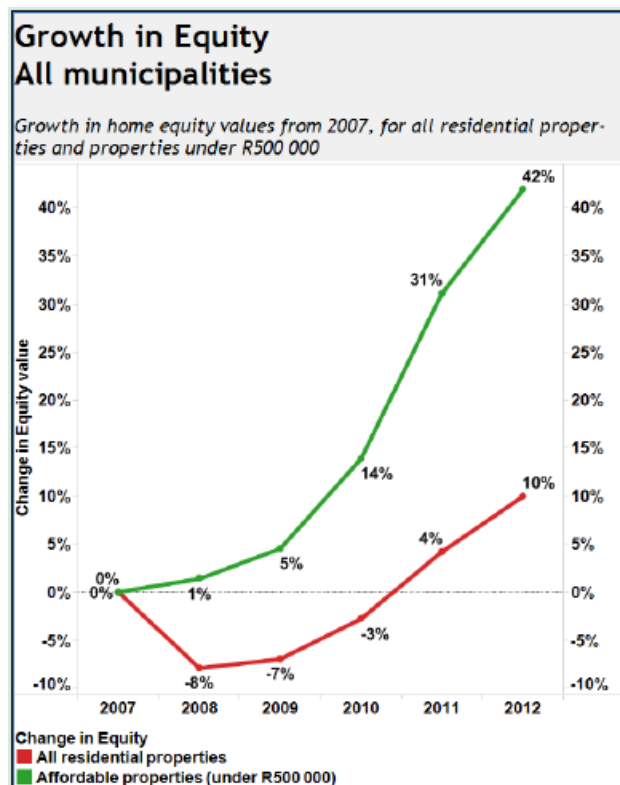
⁷⁷ DBSA, "The State of South Africa's Economic Infrastructure: Opportunities and Challenges."

⁷⁸ National Treasury, "Budget Review 2017."

⁷⁹ Ibid.

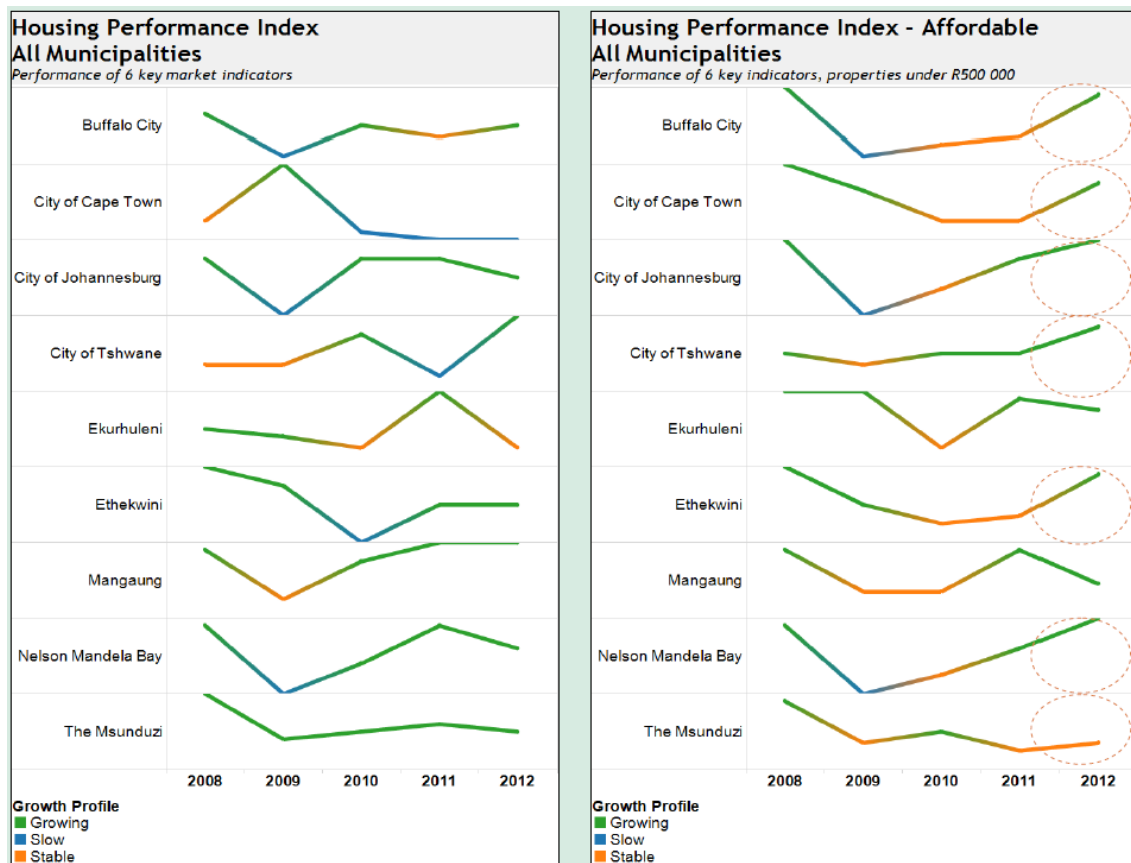
This is in turn impacting on the property market, which is increasingly driven by education, leisure and housing rather than retail, office and industrial space. The most promising property market sectors according to a 2017 European survey is student housing, private rent residential and affordable housing⁸⁰. Internationally and in South Africa, affordable housing (i.e. households earning between R3 500 and R25 000 pm) is identified as a leading driver of market-led property development. Affordable housing markets are often perceived as weak, stagnant and risk. However, a very different reality appears when key market indicators on affordable housing markets are isolated and compared to overall markets.

Just as homeowners use equity to expand their housing options, investors can more accurately assess the market feasibility of development by tracking the growth and availability of homeowner equity at neighbourhood level. Homes worth less than R500,000 typically have fewer loans, a faster-growing value, and an initial housing cost that was low or free. Since 2008, the affordable housing market has grown faster than the overall housing market in seven out of nine metros tracked by the Centre for Affordable Housing Finance⁸¹.



⁸⁰ Francois Viruly, "A Reflection on Transit Oriented Development through a Market Perspective" (Western Cape Property Developers Forum Conference, Cape Town, 2017).

⁸¹ Centre for Affordable Housing Finance, "Understanding Housing Markets in Cape Town, South Africa : Expanding Affordable Housing Markets" (Johannesburg, n.d.).



The residential housing sector, particularly public housing, is a potentially powerful and under-supplied spatial instrument to achieve better spatial efficiency, including the sustainability of network infrastructure.

Outcome 8 of the Medium-Term Expenditure Forecast (MTEF) sets a delivery agenda for 2014-2019 which targets 110 000 loans for affordable-gap housing, of which 40 000 is supported by DFIs and an additional affordable housing units 35 000 to be provided through the private sector.

The affordable housing finance sector is supported by three main development finance institutions (DFIs): the National Housing Finance Corporation (NHFC), the Rural Housing Loan Fund (RHLF) and the National Urban Reconstruction and Housing Agency (NURCHA), described above. Each of these DFIs has a specialized area of operation within the housing finance arena. Beginning in 2008, at the request of Cabinet, National Treasury undertook a review of these DFIs and recommended that that they should be merged into a singular human settlements development finance institution, commonly referred to as the Human Settlements Bank (HSB).

Not recommending direct home loans but perhaps re-evaluating its contribution to Old Mutual Impact Funds in its efforts in this field and supporting households (via appropriate institutions) to access the equity value of their RDP house (which constitutes 24% of the total residential property market in South Africa) by selling the property to another low income family who buys the house with an individual subsidy. The original seller uses the proceeds as a down-payment on an affordable market home.

Rehabilitation and maintenance

Although backlogs continue to be a concern and a political priority, a more critical issue is that of the condition of South Africa's existing infrastructure assets, much of which is nearing, or have reached, the end of their useful lives. The main infrastructure assets created in the 1970s and 1980s, have useful lives of around 30 years, and will soon require replacement. There is inadequate attention to operation and maintenance of infrastructure, or provision for asset replacement. Although municipalities receive inter-governmental transfers for capital expenditures to extend service delivery, these are not matched with expanding operating budgets derived from local tax bases to adequately manage and operate both the old and the new infrastructure.

	ASPATIAL		SPATIAL		
	BULK	NETWORK	AREA-BASED		
GEOGRAPHY / SCALE	CITYWIDE	CONNECTIVE	CORE IZ (INNER CITY)	CORRIDOR IZ (DECENTRALISED)	TOWNSHIP HUBS
FINANCING SOLUTION	<ul style="list-style-type: none"> • Long-term loans • Off-balance sheet 	<ul style="list-style-type: none"> • Long-term loans • Off-balance sheet 	<ul style="list-style-type: none"> • PPPs • Off- and on-balance sheet 	<ul style="list-style-type: none"> • On-balance sheet with concessionary finance from international DFIs 	<ul style="list-style-type: none"> • Implementation support • Cost-recovery
LOAN RECOVERY	<ul style="list-style-type: none"> • Bulk usage charge (regional bulk) • Development contributions (primary, secondary bulk) • Normal tariffs (operating) 	<ul style="list-style-type: none"> • User charges • Patronage guarantee 	<ul style="list-style-type: none"> • Land-based financing mechanism within demarcated area (e.g. TIF) • Development contributions • De-risking with municipal land 	<ul style="list-style-type: none"> • De-risking with municipal land • TIF linked to BRT roll-out 	<ul style="list-style-type: none"> •
POLICY DIRECTIVES	<ul style="list-style-type: none"> • Large-scale infrastructure projects, including regional and primary bulk 	<ul style="list-style-type: none"> • Invest in large-scale transport 	<ul style="list-style-type: none"> • Crowd-in DFIs and private sector (e.g. IIPSA, Euro 100mln) 		<ul style="list-style-type: none"> • Provide direct implementation support for social infrastructure projects on full-cost recovery basis
SECTORS	<p>Trading services</p> <ul style="list-style-type: none"> • Energy generation • Water and sanitation • Telecommunications 	<ul style="list-style-type: none"> • Public transport • Freight transport • Road infrastructure • Energy/water transmission • ICT 	<ul style="list-style-type: none"> • Inclusionary / affordable housing • Green technology • Upgrading / refurbishing network infrastructure to support densification • Brownfield development 	<ul style="list-style-type: none"> • Social housing • Infill development 	<ul style="list-style-type: none"> • Clinics • Schools • Local ICT • VPUU
IUDF SHORT-TERM PRIORITY	<ul style="list-style-type: none"> • Support cities to promote economic growth 	<ul style="list-style-type: none"> • Linking urban growth to improve efficiencies 	<ul style="list-style-type: none"> • Regenerating inner city 	<ul style="list-style-type: none"> • Regenerating other potential economic nodes 	
SPECIFIC INTERVENTIONS	<ul style="list-style-type: none"> • IPPs • Bulk Water Augmentation Systems • Desalinisation / aquifer extraction / water treatment. 	<ul style="list-style-type: none"> • Recapitalisation of commuter rail network • Road infrastructure improvements • Technology-driven TDM projects • Freight network 	<ul style="list-style-type: none"> • Support market-led development of affordable housing / rental stock near places of employment to promote job-house balance (thus reducing transport demand) 	<ul style="list-style-type: none"> • Affordable housing provision in well-located areas (e.g. in and around public transport nodes). • Social housing • Student accommodation • Infill/brownfield redevelopment 	<ul style="list-style-type: none"> • Development finance for anchor projects to assist in achieving critical mass

C. Area-based IUDF interventions

Table 8. Area-based IUDF interventions

<i>Network elements</i>	<i>Description</i>	<i>Bulk intervention</i>	<i>Connective intervention</i>	<i>Area-based intervention</i>	<i>Investment profile</i>
Economic core	Well-performing, well-managed high-potential areas	Regional and primary bulk • Water • electricity	• Market-driven infrastructure provision and refurbishment		High short-term potential, low risk
Inner city	Under-performing, high potential areas adjacent to economic core or CBD.		Public transport • Public transport hubs • PT precincts • Trunk infrastructure	• Affordable housing • Upgrading and refurbishing infrastructure • Redevelopment (UDZ)	High medium-term potential; high complexity
Integration zone	Corridors designated by Metro based on criteria set by National Treasury. Adopted as part of BEPP.		• Fleet Services • Primary and secondary bulk	• Infill development • Upgrading and refurbishing infrastructure • Affordable, social and student housing ⁸²	Moderate long-term potential, and complexity
New economic nodes	Designated by Metro as part of SDF. High-potential industrial parks.		• Primary and secondary bulk • Internal circulation	• Industrial parks (e.g. Special Economic Zones, Industrial Development Zones)	Low long-term potential and complexity
Decentralised nodes	Designated as 'Urban Hubs' in BEPP by Metro.			• ICT, VPUU, social infrastructure	Grant funded. Cost-recovery.

Potential the extent to which the area's locational characteristics are aligned to the typical locational requirements of business activity;

Complexity the number of stakeholders and legislative obstacles associated with this urban context;

Risk the risk generally associated with investing in this type of context, typically represented by the capitalization rate.

Intervention needed the type of capital (i.e. non-operational) investment typically required in these urban contexts.

⁸² Identified as priority sector by National Treasury

D. Concept M&E Framework

IUDF Goal	Indicator	Definition	Weight	Baseline	Target	Data source
Large urban centres	<ul style="list-style-type: none"> Projects inside large urban centres supportive of urbanisation and economic growth 	Where the infrastructure catchment area or development area unlocked by the project falls within or partially within one (or more) of the metropolitan boundaries of the four priority cities as identified in the IUDF Implementation Plan: Johannesburg, Tshwane, Cape Town and Ekurhuleni.	20%	•	75%	•
Spatial efficiency	<ul style="list-style-type: none"> Infill or redevelopment projects supportive of spatial efficiency through densification 	Where at least 50% of overall development being unlocked within the first 10 years of project completion (as measured by land extent, dwelling units or internal floor space), is located within the existing urban fabric, rather than an outward extension of the urban footprint or located beyond the existing urban footprint, OR at least 25% of development being unlocked within the first 10 years of the project (as measured by dwelling units or internal floor space) involves the redevelopment of existing buildings.	20%	•	50%	•
Inner city regeneration	<ul style="list-style-type: none"> Corridor projects supportive of metro spatial priorities 	Where the infrastructure or user catchment area benefiting from or development unlocked by the project falls within, or overlaps substantially with, an Integration Zone (as formalized in the BEPP) OR an Urban Development Zone.	20%	•	50%	•
Affordable housing	<ul style="list-style-type: none"> Supportive of well-located affordable housing 	Where at least 25% of the residential dwelling units unlocked within the first 10 years of the project falls within the affordable housing segment, or where the development unlocked by (that is, affordable to households earning less than R25 000/pm as in ZAR 2017).	20%	•	25%	•
Connectivity	<ul style="list-style-type: none"> Accessible projects supporting of public transport 	Where the infrastructure or user catchment area benefiting from or development area unlocked by the project is within 800m of an operational high-order public transport facility (i.e. commuter rail station or BRT trunk route).	20%	•	%	•

E. Mapping national priorities, IUDF short-term priorities, corporate action plan and new actions

MTSF Priority	IUDF Priority	IUDF Levers	Key Actions	DBSA Corporate Plan Actions	Potential DBSA roles, actions, partners
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<p>5.1 Addressing spatial imbalances in economic opportunities</p>	<p>5.1.1. Creating a responsive institutional, policy and regulatory environment</p>	<ul style="list-style-type: none"> • Integrated urban planning • integrated transport and mobility • integrated and sustainable human settlements • effective governance. 	<ol style="list-style-type: none"> 1. Finalise institutional arrangements in respect of key Ministry responsible for coordinating government-wide strategic spatial planning and sectoral alignment 2. Finalise a National Spatial Development Framework (NSDF) 3. Review and strengthen current planning frameworks to focus on developmental outcomes 4. Amend the IGR Framework Act (IGRFA) Develop implementation protocols for spatial contracts for priority areas especially in metros, intermediary cities and fast-growing towns, within the adopted long-term development plans and infrastructure plans 	<p>Secure implementation mandate from institutions</p> <p>Advise, plan and prepare infrastructure projects for investment and delivery</p> <p>Greater investment in early-stage programme and project development</p>	<p>DBSA as champion of IUDF's 'compact cities' agenda:</p> <ul style="list-style-type: none"> • promote IUDF's compact city agenda (and not mega-projects agenda) when commenting on National Spatial Development Framework, or reviewing, commenting on BEPPs, IDPs, spatial plans • appoint in-house urban economist and develop in-house capacity to evaluate investment programmes and projects in relation to spatial tenets of IUDF • extend trade-off model to include spatial efficiency benefits of compact cities. • commission/conduct specialist papers promoting / building the business case for inner city regeneration
	<p>5.1.2 Strengthen intergovernmental planning, budgeting and implementation</p>	<ul style="list-style-type: none"> • integrated transport and mobility • integrated sustainable human settlements • integrated urban infrastructure sustainable financing. 	<ol style="list-style-type: none"> 5. Develop and implement consolidated local area plans for each of the catalytic projects including SIPs. 6. Strengthen alignment between various SIPs, especially those in urban spaces and their related infrastructure 7. Align capital investments and plans in respect of priority economic zones (identified as per the IDZs, IPAP etc.). Provinces to work with municipalities to ensure alignment of national, provincial and local investments. 8. Develop institutional model(s)/mechanisms to facilitate regional development 9. Improve/develop long-term development plans and infrastructure plans for intermediate cities and fast-growing mining towns and regions. 	<p>Advise, plan and prepare infrastructure projects for investment and delivery</p> <p>Assist metros in identifying bankable, catalytic economic infrastructure projects in large urban centres.</p> <p>Establish Project Management Offices (PMOs) and focus on maintenance of public infrastructure</p> <p>Develop structured products and funding structures to unlock infrastructure and crowd-in third parties</p> <p>De-risking project finance structures to crowd-in third party funding</p>	<p>DBSA as champion of IUDF's 'compact cities' agenda:</p> <ul style="list-style-type: none"> • work closely with SACN and SALGA to support municipalities with the IUDF implementation • share tools to capacitate cities to understand markets and locational drivers of urban growth <p>Support new greenfield industrial nodes on cost-recovery or off-balance sheet basis, where:</p> <ul style="list-style-type: none"> • proposed node demonstrates underlying potential, falls within Integration Zone and contributes to productive industrial base of economy (e.g. manufacturing, not warehousing)

	5.1.3 Strengthen rural-urban linkages	<ul style="list-style-type: none"> Urban planning urban infrastructure transport and mobility 	<p>10. Identify and package development programmes for prioritised medium and small towns within adopted SDFs and local economic development plans</p> <p>11. Improve infrastructure and services of strategic facilities, e.g. in community and service centres, as part of the revitalisation of small towns and government precincts.</p>		
	5.1.4 Controlling urban sprawl		<p>12. Fast-track the implementation of SPLUMA through: enforcing the urban development boundaries/urban edges/developing lines; locating all new investments within prioritised nodes or identified strategic plans, as per municipal plans; and ensuring that land use schemes encourage mixed use development and higher densities, etc.</p> <p>13. Develop implementation protocols and streamlined processes to govern release of all strategic land by government (including municipalities) and state owned entities.</p>	<p>Project preparation:</p> <ul style="list-style-type: none"> early stage development de-risking projects crowding in 3rd party funding 	<p>DBSA as champion for IUDF's 'compact cities' agenda by:</p> <ul style="list-style-type: none"> providing guidelines and toolkits for metros to conduct in-house pre-feasibility of projects extend financial analysis (trade-off) model to incorporate spatial efficiency benefits of project proposals prioritising projects (by means of project appraisal rubric) which fall within existing urban edge and/or are predominantly infill rather than urban extension. Re-think disbursement or project support which reinforces spatial fragmentation (e.g. peripheral, mono-functional mega-projects).
5.2 Sustainable human settlements and improved household quality of life	5.2.1 Accelerate the upgrading of informal settlements	<ul style="list-style-type: none"> integrated sustainable human settlements 	<p>14. Identify priority informal settlements in targeted municipalities, package development interventions, and facilitate social compacts for the upgrading of the priority informal settlements</p>		
	5.2.2 Create liveable and safe human settlements		<p>15. Develop and implement norms and standards for municipal, health and safety services and public spaces in all residential developments</p> <p>16. Strengthen capacity to enforce planning, health and safety and other land-use regulations and by-laws</p> <p>17. Develop and implement inner-city revitalisation programmes, including a special</p>	<p>Project preparation:</p> <ul style="list-style-type: none"> Early stage development De-risking projects Crowding in 3rd party funding <p>Continue / expand lending to roll-out of bus rapid transit.</p>	<p>The DBSA should</p> <ul style="list-style-type: none"> support metros in improving BEPPs towards greater feasibility. work closely with SALGA and SACN to support municipalities with the IUDF implementation, assisting with identifying challenges, resource deficits and capacity shortfalls, and then advocating for necessary support.

			fund to support inner-city regeneration and urban renewal in the prioritised urban areas.		<ul style="list-style-type: none"> • share its tools to capacitate cities in optimizing the positive economic externalities accruing from inner city regeneration and investment in connective infrastructure. • prioritise project opportunities which meet IUDF spatial principles for off-balance sheet funding • engage non-metro stakeholders in urban development space, specifically: <ul style="list-style-type: none"> ○ precinct management (CIDs) ○ affordable housing
5.3 Job creation and inclusive growth	5.3.1 Create a conducive environment for business to flourish	•	<p>18. Develop and implement norms and standards for efficient processing of business applications, including provision of services and infrastructure to businesses.</p> <p>19. Ensure provision of enabling infrastructure and provide support services for small, micro and informal businesses</p> <p>20. Improve dialogue and communication with the business sector, and promote partnership programmes</p>	<p>Form strategic partnerships on both the deal and funding side.</p> <p>Partner with organisations with similar development mandates.</p>	<p>Engage urban stakeholders other than metros</p> <ul style="list-style-type: none"> • Support CIDs and Special Rating Areas in urban management efforts. • Support metros in improving billing data in support of revenue collection. • Strengthen linkages between DBSA and for-profit lenders in residential development that focus explicitly on inner city areas (e.g. Trust for Urban Housing Finance ('TUHF')).
	5.3.2 Job creation	•	<p>21. Invest in economic infrastructure, capacitate economic development units with the right skills and ensure that programmes such as the EPWP and CWP are directly linked to improving the economic potential of areas</p> <p>22. Implement support programmes targeting community-based enterprises and other livelihood initiatives (such as panel beaters, mechanics, hairdressers, cell phone repairers, artists, recyclers, waste pickers, street traders etc.)</p>	<p>Continue investing in revenue-generating economic infrastructure, specifically in water security.</p>	<p>Incorporate developmental impacts (from Social Accounting Matrix) and spatial efficiency impacts (from extended 'trade-off' model) into Balanced Scorecard.</p>

<p>5.4 Responsive and accountable local government</p>	<p>5.4.1 Strengthen platforms for public participation and communication with all stakeholders</p>	<ul style="list-style-type: none"> empowered, active communities. 	<p>23. Conduct customer satisfaction surveys 24. Develop and implement public engagement and communication strategies to augment the ward committee system, including improving the use of technology to communicate with communities, residents and other stakeholders 25. Develop customer complaint mechanisms 26. Involve communities in neighbourhood planning, implementation and monitoring projects 27. Strengthen partnerships with other non-governmental institutions through the National Urban Forum and other mechanisms</p>	<p>Collaboration with government and non-government partners to support project preparation and implementation and identify prospects for funding. This is achievable through MOAs with MISA, GTAC, PGs and Private Sector to crowd in skills, funds and prospects for funding and non-financing support.</p>	<p>Engage urban stakeholders other than metros</p> <ul style="list-style-type: none"> Support CIDs and Special Rating Areas in urban management efforts.
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