

INFRASTRUCTURE *Dialogues*

2017/18 – THE DEVELOPMENT OF INFRASTRUCTURE FOR INNOVATION AND TRANSFORMATION

Crowding in Infrastructure Investment - How can we be 'smart catalysers'? 18 May 2017

Introduction – Crowding in Infrastructure Investment

The main objective underpinning South Africa's infrastructure development is the achievement of transformation for inclusive growth. Citing the 2017 Budget Review, the country needs transformation that opens a path to inclusive economic growth and development. Broad-based transformation should promote growth, mobilise investment, create jobs and empower citizens. *It must create new resources to support social change, including assets and livelihoods for the majority.* The budget plays a central role by promoting redistribution and directing scarce resources towards catalytic investments in human and physical capital however, it depends on private sector resources to finance investments.

South Africa has had several years of very low growth and the public sector struggles to finance both an infrastructure backlog, and its new infrastructure development plans for social and economic growth. Based on the Gauteng Infrastructure Master Plan, the province has an infrastructure deficit in excess of R 5 trillion.

Had it sufficient public capital, government would have been in a favourable position to attract and crowd-in private funding. Given the shortage of public funds, mobilising private sector resources is an extremely difficult, yet critical, task. Public Private Partnerships (PPPs) is key for the timeous development of infrastructure that will address government's objectives and unlock economic growth.

This Dialogue explored the concept of crowding-in infrastructure investment, by way of sharing and discussing lessons learned from PPP-driven infrastructure projects. It also highlighted potential new ways to catalyse economic development, looking at current practices of developing and financing infrastructure from multiple public and private sources in South Africa.

Programme and Panellists

Dr. Geci Karuri-Sebina of the South African Cities Network welcomed the audience to the 43rd Infrastructure Dialogue. Acknowledging that the multi-stakeholder platform was in its eighth year, she confirmed that it remains a source of valuable information and reference. Stakeholders continue to receive topics of importance and interest. The challenge is to advance discussions to provide greater insights that address the issues, and bring about real and sustainable change. **Richard Goode** of the Development Bank of Southern Africa (DBSA) introduced the topic and panel members, and facilitated the discussions. He noted that the DBSA, as a partner of the Infrastructure Dialogues, is specifically interested to see how we can be smart in catalysing the crowding-in of funds for infrastructure development that will stimulate economic growth.

Matt Jackson	<i>Urban Planner, Johannesburg Development Agency</i>
Nathaniel Munetsi	<i>Head of Structured Finance, Gauteng Infrastructure Financing Agency</i>
James Aiello	<i>Senior Advisor, Transaction Advisory Services with the Government Technical Advisory Centre's PPP Unit, National Treasury</i>

Warrick Lord	Chief Executive Officer, Cato Ridge Logistics Hub Consortium and Chairperson of the South African Property Owners Association Developers Committee
Zodwa Mbele	General Manager, Finance of the Development Bank of Southern Africa

Overview



INNOVATIVE SOLUTIONS, ENSURING TRANSFORMATION & SUSTAINABLE CHANGE

- Spatial Targeting & Transit-oriented Development
- Greenfields Development

How do we leverage public funds and grants, making sure innovative and cost-saving initiatives are workable and implemented effectively by crowding-in private resources, both financial and technical? ?

1. Approaches to Infrastructure Development

The Dialogue emphasised two ways of approaching infrastructure development.

1.1 Spatial targeting, and transit-oriented development

One way to achieve the country's main objectives of inclusivity and economic growth, is to use spatial targeting, and transit-oriented infrastructure development

The City of Johannesburg uses this approach. Essentially, it identifies particular spatial areas that have high density, and surround quality transport systems, and walkability. Developments in these areas focus on land-use around transit corridors and transit stations, allowing moderate to high-density developments where pedestrian-oriented and mixed communities can live, work, and play inclusively. The City uses well-developed, visionary, precinct-plans and spatial development frameworks typically based on a 20-year horizon, to direct its spatial targeting.

The City of Johannesburg's Corridor of Freedom is an example of such a development.

Corridor of Freedom

- *Example of a development within the City of Johannesburg based on spatial targeting, and transit-oriented development*

Corridor of Freedom lies along Louis Botha Avenue, and links the Inner City to the most viable economy in the country – Sandton. Johannesburg's old-fashioned spatial planning allows for the linking of the Inner City to the northern suburbs, with a string of developments and entry corridors to the east and west. A number of logistics parks exist on the eastern side. When establishing these logistics hubs, the city's first step, was to define priority nodes within the corridors. The spatial area of Linbro Park on the eastern side offered an economically viable area suitable for a logistics hub.

Following the Linbro Park development, nodes of intensity along the Louis Botha corridor became a priority. The City created spatial development frameworks and precinct plans based on the idea of transit-oriented developments. The main objective was to link Hillbrow with Alexandra. As the corridor is located between a knowledge economy and a logistics hub, there were sound locational reasons for setting up businesses, or providing accommodation, however there was no emphasis placed on economic development around the corridor. As a result, the City did not leverage opportunities for economic growth.

1.2 Greenfield development

Within development there is an on-going tug-of-war between existing infrastructure corridors and Greenfield development. While the Corridor of Freedom promotes location and economic growth within an existing infrastructure, a Greenfield development such as Lord View Industrial Park in Midrand, seizes opportunities to develop economic nodes on the edge of fast growing residential or industrial areas.

Although both forms of development seek economic progress, they are in competition for scarce capital. Furthermore, there is division between municipal resources for service delivery, and the effective management of locations. When crowding-in private investment, decision-makers must account for all objectives to ensure sustainable inclusivity, the upliftment of communities, long-term cost-savings and economic benefits for various groups of people.

Greenfield development requires longer traveling time and has limited access to different modes of transport. Land identified by spatial targeting that falls within an existing infrastructure and market, might be initially more expensive than land identified for Greenfield development, however, it allows for quick uptake of leases without the cumbersome statutory process to render the Greenfield development land usable. Over time, this approach to development proves itself more affordable because of the existing supporting infrastructure, and it offers more opportunities for further economic growth. Decision-makers must understand the market and follow what it dictates in terms of economic growth opportunities.

From this discussion, came the comment that South Africa has followed too much of a sprawling, urban development model over the past 20 years, developing vacant land that did not benefit the majority of people within communities. In addition, capital markets increasingly challenge the long-term values of property developments produced by the sprawling method. Operational cost of Greenfield developments also become the responsibility of municipalities that in most cases cannot afford it.

Nevertheless, South Africa has the availability of vacant land and Greenfield development will continue to form part of the mix. The Dialogue posed a challenge to the Banking Association of South Africa (BASA) to develop and implement different policies for the financing of Greenfield sites.

2. Public Private Partnership driven infrastructure projects

The PPP concept is not new to South Africa. It has been in practice for more than 20 years and there are examples of successful and less fruitful projects from which governments and other stakeholders can learn. PPPs are key in crowding-in funding and infrastructure. Done in the right way, they have the potential to bring about significant change, and stimulate further growth and development for a broad spectrum of people.

There are currently a number of institutions and agencies, at all levels of government, focusing on how to make PPPs work in South Africa.

One such agency is the Gauteng Infrastructure Financing Agency (GIFA), established to assist the Gauteng Provincial Department and Local Governments in the province with the preparation of infrastructure projects. The focus of the provincial government is to ensure the bankability of key projects and to attract private investment. Funded by the Province, GIFA is involved with projects from concept development right through to financing. The past five years saw the generation of a pipeline of projects to the value of R 37.5 billion that will benefit from and are marked for PPP. Scheduled for implementation in the next two to three years, the projects fall into various industry sectors.



The Johannesburg Development Agency (JDA) works in close collaboration with the City's Transformation and Spatial Planning Directorate and Department of Development Planning, looking after infrastructure development within the city. The Government Technical Advisory Centre is another institution that focuses strongly on the development of PPPs. A project currently under assessment for PPP development is the redevelopment of six major South African border posts. In addition, there are infrastructure projects initiated by the private sector that comply with the requirements of a PPP or have a form thereof.

2.1 PPP LESSONS LEARNED

The Dialogue shared information about successful PPPs. It recommended that Government examines and learns from South African and international case studies and determines what would be most viable.

Successful Examples of Water Management PPPs in South Africa

Mbombela and Ilembe water projects are two successful PPPs in South Africa that are approximately 19 years old and still in operation. Offering complete water services, these two examples demonstrate how private funding can be leveraged if a project is properly developed, and efficiently managed.

Government, who was unable to offer a State guarantee, initially approached 14 banks for private funding of these projects. Only one bank accepted the contract as a guarantee, and became part of the initiative. Today, banks and other potential investors are looking for opportunities to be part of these type of projects. Given efficient management, the private sector is eager to participate.

The City of Johannesburg is in dire need of advanced bulk infrastructure in its wastewater treatment sector. Public private cooperation and investment offers the potential for the development of sustainable solutions. Government should urgently investigate the Mbombela and Ilembe cases and apply the principles to get PPP working in this sector.

Successful Example of a Waste Management PPP in San Mateo County, California, United States

San Mateo County, home to 14 cities, lies south of San Francisco. The only flat land in the county is the bay itself, where the water meets the land. More than 20 years ago, each city built their landfills at the edge of the bay, all along the main road leading into San Francisco. Not only did this cause pollution of the water and shore, but the area looked messy and dirty. In order to get the private sector involved, the government set up a PPP that had the mandate to locate and establish a fully licensed, multi-year, multi-generational landfill inland. All refuse needed to be collected from the 14 cities and deposited in the landfill. A solution was developed, and a tender process used to appoint the service providers.

This PPP continues to operate successfully today. The County's original landfill site now has businesses and residential houses built on it.

2.2 PROJECTS NECESSITATING PPP SOLUTIONS

- **Affordable Housing**

With its tremendous scope, affordable housing is an important sector for PPP; however, there are major challenges to overcome.

In the Gauteng Province, there are new built projects, of which 87% are residential and 13% are for mixed use. The 13% are ground-floor buildings with a street edge. It is important to promote inclusivity by providing different living and economic opportunities for a wider group of people, the developers' challenge lies in the terms of the type of buildings required.

The majority of new-built projects target households that earn less than R7000 per month. These rentals do not receive assistance from Government. It is private entrepreneurship producing space in the affordable housing market, at a lower cost than Government's development cost. This is a significant example that demonstrates that spatial targeting results in leveraging the market and the private sector. It is not always an easy road, there are difficulties and issues between planners and developers; however, these are normal and part of the business environment.

In most instances, real estate products lock the market into particular directions that are either Living-Standards-Measures-based, or are accessible only to a very narrow market segment. There is an example of new buildings erected in Sandton. While inner-city stock offers the potential for redevelopment into residential buildings, the potential of the new buildings in Sandton once their current leases expire, is unknown. Up to now, South Africa has not yet succeeded in producing real estate with spaces that allow different developments and change over time.

The residential sector in the inner-city looks at two options: building refurbishment, targeting bulk buys at low cost pricing, ideally under R5000 per unit, and then markets them at R7000.

In Alexandra there are 500,000 people living in environments built on grid structures similar to Parkhurst or Norwood. The suburb however does not present the same economic value and opportunities for growth. Currently there are approximately eight families per stand, paying rentals varying between R2000 to R4000 per month, which makes a strong argument for unlocking the economic potential of the area by catalysing and igniting opportunities for growth, rather than relocating the residents elsewhere. This would require the design of buildings and developments that look different to what we are used to seeing, and creating real-estate products geared towards stimulating economic growth that will benefit a wide variety of people.

In terms of density, the City of Johannesburg is targeting 200 dwelling units per hectare in Alexandra, and in Hillbrow, this figure goes up to anything between 500 and 1000. For the city to be functional, providing the opportunities needed, 250 dwelling units per hectare is the minimum threshold. In practical terms, this is achievable through the building of three-to-four-storey buildings on a hectare of land, with 80 to 100% coverage. The challenge comes in the promotion and adoption of a different way of living. These options for city infrastructure development are easier and cheaper than developing vacant land. When comparing to Greenfield development, as was discussed, the evaluation of the total cost over time is important.

The biggest challenge in the City of Johannesburg's spatial planning framework is the potential opposition from mega-settlements, to developmental ideas in place where infrastructure and resources already exists.

- **Energy Generation through Rooftop Photovoltaic (PV) Initiatives**

Government has energy generation Rooftop PV projects in the pipeline. The purpose of these initiatives is to leverage off the space available on government-building rooftops, so that those buildings energy-usage becomes largely self-sustainable. Heating and cooling of government buildings such as hospitals consumes huge amounts of energy. With these initiatives, government will not only be able to save on electricity but also conserve energy for the country for future use. This forms part of the renewables energy drive, estimated to generate 350 MW of electricity on an annual basis.

The issue, however, is how do we leverage grants from Provincial Treasury to make sure that these cost-saving initiatives are implemented effectively, and crowd-in private resources, which are much needed, not only in terms of financing, but also technical capability?

From the round table discussion, came the concern, that if 350MW of electricity was generated by renewables, that it would directly increase electricity cost to South African citizens due to the lower demand for Eskom electricity. The response by the panel was that although South Africa might have enough electricity for our present needs, estimates indicate that as the economy grows the demand for electricity will go up. Government together with industry needs to plan and develop the right solutions for future demand. It is necessary to optimise the energy mix and evaluate best solutions for future energy generation. Eskom, City Power and other stakeholders will need to be properly coordinated to resolve this matter.

- **Waste Management**

Gauteng metros are facing huge problems in terms of available land-use for waste landfills. One of the metros has less than 7 years of space left. There are ideas around the conversion of waste into energy. The Province however needs the right technical skills to come up with smart solutions to handle and manage waste, while also creating economic opportunities around it.

- **Public Schools**

The demand for education in Gauteng far outweighs the current supply. Over the next two years, the Province will be rolling out 120 new projects for schools. This will come at a budget of approximately R7 billion.

- **Logistics Hubs**

With City Deep experiencing severe pressure due to congestion, two new logistics hubs are planned, one on the Vaal and the other on the West Rand. These are purely private sector driven initiatives.

- **Public Hospitals**

The public hospital sector needs new hospitals and existing public hospitals need rehabilitation. The requirement for funding is extensive, placing additional pressure on government funding. In order to fund this sector, private investment and PPPs will have to form part of the solution, and it will be pertinent to look for innovative ways to leverage government funding. The province currently receives grants and transfers of



approximately R10 billion, which raises the question of how we leverage off this R10 billion to fund these projects? We need new, creative, innovative and sustainable solutions.

- **Border Posts**

The Department of Home Affairs is looking to redevelop six border posts. This initiative should establish a re-usable template for PPPs to change and modernise infrastructure (such as other border posts that need refurbishing) that will greatly improve operations. The Capital outlay for the six border posts is estimated at approximately R 6 billion.

- **Gautrain Expansion**

The expansion of the Gautrain that was scheduled to take place in two years' time, needs to be brought forward due to a peak in demand for this mode of transportation. This involves two projects, the acquisition of 48 new cars and the addition of seven depots and two operating lines. The infrastructure development for these depots offers unparalleled opportunities for PPPs focused on land development based on the transit-oriented model. People should be able to commute safely between home and Gautrain stations by foot, bicycle or bus transit.



- **Kopanong**

The Kopanong project involves the merging of 19 provincial government buildings into one, newly established, governmental centre in the inner city of Johannesburg. State-owned entities do not have to comply with the same PPP rules and regulations as some governmental entities do. Transnet approached the Government's Technical Advisory Centre, to help SOEs to put together a private sector participation framework that will mirror the robustness of the ITAC PPP framework, but that will not be as time-consuming. The Dialogue noted that South Africa's PPP framework, based on frameworks adopted in England, needs reviewing.

- **Cato Ridge Inland Port Development**

The Cato Ridge project focuses on integrated development, with Transnet developing the inland port as well as all ancillary infrastructure, to alleviate the logistics constraints at the Durban port, which sometimes brings the whole corridor to a halt.

3. Requirements

3.1 The right objectives

The Dialogue highlighted specific requirements to address in order to get PPP working in South Africa and achieve infrastructural objectives.

Firstly, it is necessary to evaluate the current structures and objectives of critical role players.

The JDA is dependent on funding for the development and management of projects and as a result it leads to disadvantageous behaviour. Projects are chased and put together as quickly as possible, and before the real value of

the infrastructure is realised and incorporated into the broader project scope, the agency has moved onto the next project. Sustainability and integrated economic growth are not achievable if the infrastructure project development's objectives of being productive and inclusive, shift to that of increasing numbers and capital spend.

In the development of any infrastructure project, it is critical to evaluate all the technical and practical requirements and to look for spin-off opportunities. This entails coordination with other project developments and bringing in economic and financial advisors at the planning phase of development. What the country needs is a centre of expertise that can provide direction, guidance and help to unlock and open doors to the market place and communities, for sustainable and dynamic on-going development. The financing of such a centre should be independent of project funding.

Associated with the idea of a centre of expertise, the Dialogue raised the question whether politicians or high-level government officials should champion and coordinate infrastructural projects. The Corridors of Freedom for example, a grand vision for the city of Johannesburg, lacks in providing access to, and stimulating, opportunities in the market place.



3.2 Technical and financial input

In many projects, there is still a big divide between the planners, developers and financial people. All parties involved need to work together from the start of a project. They need to ask the right questions early on, and define financial requirements and mechanisms upfront. GIFA endeavours to involve all stakeholders, technical and financial contributors as well as potential financiers, right from the beginning. Projects incorporate their input while management of expectations happens early on.

3.3 Effective land use

The Gauteng Provincial government has plenty of land available. In the Innovation Hub in Pretoria, for example, Government has set land aside for enterprise buildings. Government provides the land while the private sector gets the opportunity to put up top structures and rent out buildings to entrepreneurs and developers. The purpose behind this project is to catalyse an economy directly surrounding this infrastructure for the set-up of new businesses and the creation of employment. This is an example of how to leverage off government land, and create value around infrastructure projects. The pursuit of similar initiatives should happen.

A delegate said that in order to determine the land that is owned, and what land is available for the leveraging for infrastructure, government must do a proper land audit. It is also important to understand the dynamics related to the precinct as it is now, and to distinguish where and how to start with development. There is a lack of proper understanding of factors that have an impact on a precinct.

3.4 Private sector buy-in

Projects from the private sector are a valuable source of learning. It is important to consider and take into account, the fundamentals and requirements in PPPs initiated by government. The key ingredients for the private sector to buy in are:

- The rules of the game need to be set up-front and then cast in stone. Pre-defined goals at the outset of a project give it direction and carry it through difficult times. We cannot change the rules and goal posts every time that there is a governmental change. The five-year rolling cycle in government has an adverse impact on PPPs. Creating and observing policies that clearly define rules and objectives will rectify this. Having a firm foundation will foster a sense of security and trust, and the PPP can focus on the long-term vision.
- The private sector has to work on a return-on-investment model and needs sustainable income and growth over time. The Johannesburg Stock Exchange (JSE), however, looks at performances and shares values on a daily and monthly basis. PPPs should look at potential long-term growth.
- There needs to be an equal match between partners in terms of thinking and the approach to development and service delivery. The private sector's mandate is to deliver as quickly as possible and realise a return on investment while government's agenda focuses on spatial change, transformation and green development among others. When the parties around the table have completely different agendas, inertia creeps in, stalling decision-making and work. In such an environment, people are also reluctant to trust and rely on each other, which is a pertinent for the successful outcome of a PPP. Both the public and private sector needs to focus on sharing information and knowledge, aligning objectives and working as a team. Partnerships need to have a clear direction and a meeting of minds. Both sides need crucial skills. These ingredients form true partnerships.



3.5 Changing environment demands change

From a technology point of view, we live in a radically changing environment. It is important that we keep pace with these changes. For this purpose, it is necessary to have a thought-process inside the public sector, and that government adopts an attitude of change. We need to continuously evaluate what we do, and look for new and innovative ways.

Transit-oriented development should also include the movement of goods, and address the logistics problems the country is facing. South Africa's logistics costs are significantly higher than most countries.

The energy sector, for example, is seeing a major shift from reliance on utilities to self-generation. A new set of technological options are available that should be investigated and incorporated where it is more affordable and has the ability to catalyse economic growth.

Attracting financing where it comes to new technologies could be an issue, as there needs to be a level of certainty. The communication and sharing of all solutions' elements, including pros and cons, is important. All parties need to understand that in many instances there are no perfect answers, however, that should not deter decision-making and

progress. The right decision is the one that accounts for all factors, and focuses on inclusivity, economic development and sustainability.

The recent downgrade will have a negative impact on the cost of funding. Promoters of projects may want to take a wait and see approach. From borrowers' points of view, there might be defaults. However, the country will have to find solutions to overcome these issues to move forward.

To be successful in a changing landscape demands flexibility. Breaking things down into phases, or bite-sizes, makes them manageable.

3.6 Approach to Corporate Social Investment

Rather than focusing solely on the tax benefits of CSI, businesses need to incorporate social responsibility into their company's values, and approach to doing business. Having a long-term social responsibility plan, with clearly defined beneficiaries situated in your surrounding communities, could result in your client-base doubling over the next ten years.

Land developers need to be inclusive and sensitive to communities in which they operate and must ensure that the development is not an isolated event. Continuous development around the initial development will result in the multiplier effect where the employment or upliftment of one individual has an impact on others in their family and raises the quality of living for the whole community.

3.7 Skills requirements

There are many projects but few are bankable. Project preparation requires crucial skills in order to make it bankable. The DBSA offers technical skills and services in project preparation. Once a project is affordable, the DBSA helps to leverage funding. Investors are looking for long-term investment opportunities, with revenue streams clearly defined over 20 years.

Government needs to adopt the approach of seeking advice from the private sector and being serious about applying legislation. By doing the basics, and applying existing procedures, many issues can be resolved.

PPPs need dealmakers and negotiators to make it happen externally. Internally it is important to have a strong leader, a champion of a project, and externally we need the right role-players. Role-players should be free to choose the way they operate.

3.8 Minimise bureaucracy

South Africa should allow the private sector to take initiatives and run with it, even if the government is not part of it, providing tax offsets and benefits. Steyn City is a good example where bureaucracy was set-aside, and approval was given. Crowding-in private investment is important to eradicate red tape that the private sector struggles to deal with. South Africa needs to leverage the willingness to participate and ideas generated in the private sector.

3.9 The necessity for trust

Trust is an important element in getting many projects off the ground. When presented with win-win solutions, parties, especially government, are suspicious, and many such initiatives stall due to a mistrust. Government needs to understand their role in enabling the economy and the capital market sector to operate. The private sector is the property developer, and government should



not take over this role. Creating this understanding is part of the training process.

3.10 Balance competing factors

In many developments, there are competing elements. It is important to bring those elements together; however, this requires smart thinking. In the case of social housing, for example, government provides funding for development in the form of grants, but it should also consider lowering the cost of land. This will enable competition and crowd-in private investment. In many such projects however, the opposite happened, and potential participants were crowded-out due to unaffordability. Instead of enabling wider participation, government tried to drive development.



The development along the Louis Botha corridor happened over a long period. That caused a lot of disruption to the community. Government's goal was to encourage SME and small business development however, in reality; many small businesses did not survive. It disrupted the real-estate business model that worked well for this particular sector in Johannesburg over a long period.

It is critical to carefully assess the social objectives, and ensure testing of the potential outcomes prior to development. If the objective is to catalyse development and growth, it is important to look for various ways to stimulate SME and small business development, and to choose appropriate interventions.

There should also be a balance between social and economic objectives. The focus should also be to help existing SMEs to develop further. South Africa tends to look at the construction industry as the vehicle to establish new SMMEs however; in the process, many other SMMEs risk disruption and destruction.

A PPP is a structural legal engagement between different sectors that results in social and economic growth. The produced real-estate products are also forms of a PPP where municipalities have land-use objectives that blend with available capital to stimulate further development.

4. Funding

In most cases, capital employed for new infrastructure development is in the form of bonds listed on the debt market. Municipal Bond markets that are independent from the country's investment-grade-rating are the most viable tools in which to raise capital for the growth of cities. Municipalities' rates bases also offer a secure form of income.

However, in a project underwritten by the JDA and in which the DBSA has partnership, the JDA had to go to the international debt market to obtain a low-enough rate that was affordable. Where bonds are available to cities and municipalities for growing infrastructure, the DBSA should consider their rate's affordability. This funding should come from within South Africa, and not from international markets.

A leading auditing firm under direction of GIFA came up with a tax-based increment financing solution.



Uniform or similar asset classes, for example, Waste Energy Projects can create Infrastructure Bonds and Project Bonds that can catalyse new businesses and entrepreneurship.

The JSE has adopted these types of bonds and will list their requirements once the process of approval is finalised in September 2017. Infrastructure and Project Bonds are ring fenced, and distinguished from general bonds in that they require a revenue flow. The anticipation is that there will be a huge demand for these type of bonds. Insurance companies, pension funds and long-term investors are looking for security and safe places to invest. When accurately put together and properly listed, project bonds provide a very important additional mechanism for those investors.

The question is how do we implement it and make sure that it is workable? We should come up with pilot studies to test the feasibility.

In the United States, tax increments are an effective and relative easy way of raising funds. If you take an undeveloped tract of land, or land that is in a deteriorated state, that has an almost-zero tax base, and build on it without having to pay taxes, it reflects an increase in value of the land for a certain number of years. Income can then be utilised to develop the business.

The City of Johannesburg has a project financed with tax increments that could provide an example for tax increment funding applicable at a much broader level.

Green Bonds that have gained significant international traction are also a sensible option in South Africa as we are a water-constrained country. Germany and The Netherlands are keen to promote Green Bonds that allow for, and require the use of green technology in South Africa. The Gautrain is an example of a project that would qualify for that.

5. Conclusion

PPPs are essential in crowding-in infrastructure and unlocking economic growth and development opportunities. The right approach, skills, proper planning and effective execution are critical in ensuring positive PPP outcomes for the achievement of change and transformation that will benefit all South African citizens.

In the development of funding mechanisms innovation is needed. South Africa should prioritise options that will increase private investment and catalyse sustainable development.

South Africa has successful PPPs and that together with international best practices should serve as a foundation of knowledge and insight into what works and how to implement and manage PPPs effectively. Where it makes sense, PPPs should be developed for operations and services that can easily and efficiently be duplicated.



Crowding in Infrastructure Investment - How can we be 'smart catalysers'?

Speaker Biographies

Zodwa Mbele

Zodwa is the General Manager: Finance (also Acting Chief Financial Officer (CF)) of the Development Bank of Southern Africa. Zodwa is a Chartered Accountant with at least 20 years of professional services and corporate experience, including a previous stint at the DBSA in the International Finance Division responsible for originating deals, due diligence up to achieving the financial close. Zodwa was the CFO and Director for Alexkor SOC, CFO and Financial Director TUMS (Pty) Ltd and Executive Project Finance & Treasury at the Trans-Caledon Tunnel Authority (TCTA). As Executive: Project Finance and Treasury at TCTA, she was responsible for commercially structuring and fund raising for mega infrastructure projects. Other than Project Finance and Treasury, the position included liaising with Credit Rating Agencies, Capital Market (including international DFI's, Local Commercial Banks and Asset Managers) and leading international roadshows together with CEO.

Nathaniel Munetsi

Nathaniel is the Head of Structured Finance at Gauteng Infrastructure Financing Agency. Nathaniel has 14 years of experience in project and infrastructure finance, involved in different stages of project finance including ideal origination, credit risk analysis and due diligence, deal structuring and financial closure. Currently Head of Structured Finance at GIFA, National also worked for the European Investment Bank, where he was involved on a number of infrastructure projects in Southern Africa and Indian Ocean. He holds an Honours Degree in Business Studies (majoring in Finance and Banking), Diploma in Financial Management and is in his 3rd year towards a Masters in Business Leadership with Unisa.

Warwick Lord

Warwick is the CEO of the Cato Ridge Logistics Hub Consortium and chairperson of the South African Property Owners Association (SAPOA) Developers Committee. Warwick obtained a B Com from Stellenbosch University, post graduate degrees from the University of Cape Town and University of Johannesburg, did his articles in accounting with KPMG in Johannesburg and became a CA(SA) in 2006. Starting in 2007, Warwick developed the Lords View Industrial Park, a 130 hectare industrial land development in Midrand. Lords View has attracted the following international companies to the park: Unilever, The Foshini Group, The Lazer Transport Group (Stutaford Van Lines, Pickfords), Grandmark International and Cochrane. In 2015 he started the development of the Cato Ridge Logistics Hub in partnership with Inkanyezi Yezulu (Pty) Ltd.

Matt Jackson

Matt is an urban planner working at the Johannesburg Development Agency. He has been employed to work with private sector investors, NGO's and communities to support the conceptualisation and pre development phase of new property development projects, social and affordable housing developments, and community driven initiatives within neighbourhoods. He performs his role along the Louis Botha Corridor of Freedom in close collaboration with the City Transformation and Spatial Planning directorate and the City of Johannesburg Department of Development Planning. Prior to joining the JDA, Matt worked as a land development planner for one of Johannesburg's leading precinct development companies.

James Aiello

James is a consultant with the title of Senior Advisor, Transaction Advisory Services with the Government Technical advisory Centre's PPP Unit at National Treasury in South Africa. James' African expertise in accessing private sector financing for infrastructure dates from 1998, when he was Chief of Party to the joint USAID – National Treasury initiative that created the Municipal Infrastructure Investment Unit. Among the projects initiated during that period are the Mbombela water services concession and the Ilembe water services project, both of which are still in operation. The Midvaal municipality electricity distribution PPP assessment is one of his current major municipal infrastructure assignments. James is currently working with the Johannesburg Stock Exchange to develop listing and trading requirements for PPP Project Bonds. This work has led to his involvement in the development of Tax Increment Financing for public services infrastructure at the municipal and national department levels. Among other initiatives, he is the National Treasury Advisor to the Gautrain Management Authority, the governing body of the Gautrain Rapid Rail System and is also currently advising on the assessment of whether the redevelopment of six major South Africa's Border Posts should be as a PPP. He engages in many PPP training initiatives, the most recent being for the nations of the Democratic Republic of Congo, Malawi, Tanzania and earlier this year, Uganda.