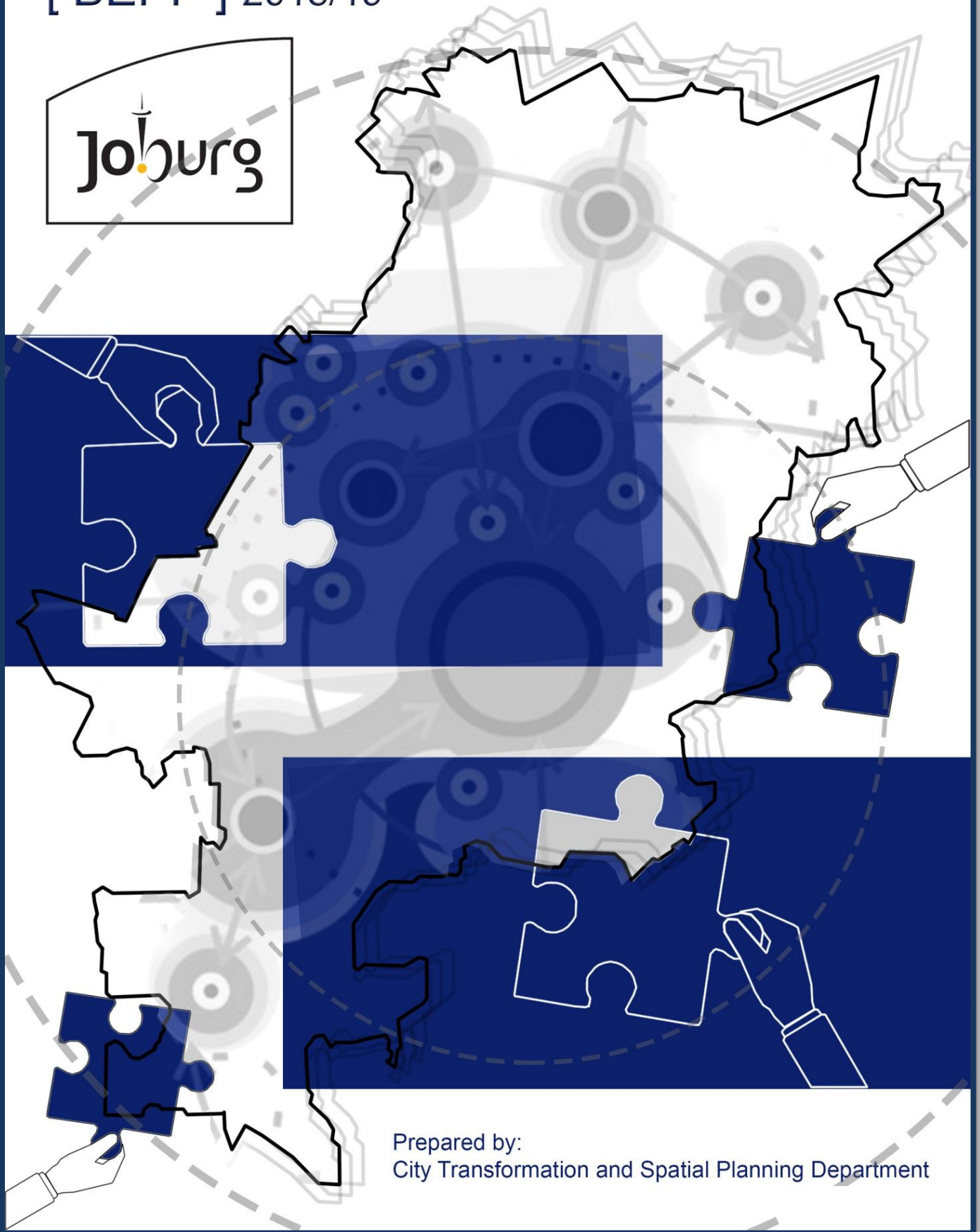


Built Environment Performance Plan [BEPP] 2018/19



Prepared by:
City Transformation and Spatial Planning Department

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List of Acronyms

ABMF	Area Based Management Framework	JOSHCO	Johannesburg Social Housing Company
BEPP	Built Environment Performance Plan	JPC	Johannesburg Property Company
BEVC	Built Environment Value Chain	JSIP	Johannesburg Strategic Infrastructure Platform
BRT	Bus Rapid Transit	MFMA	Municipal Finance Management Act
CBD	Central Business District	MMC	Members of the Mayor Committee
CID	City Improvement District	MTREF	Medium Term Revenue and Expenditure Framework
CIF	Capital Investment Framework	NDPG	Neighbourhood Development Partnership Grant
CIP	Consolidated Infrastructure Plan	NMT	Non-Motorised Transport
CIPA	Capital Investment Priority Area	PICC	Presidential Infrastructure Coordinating Commission
CoJ	City of Johannesburg	PRASA	Passenger Rail Agency of South Africa
COSO	Committee of Sponsoring Organisation	RDP	Reconstruction and Development Programme
CRUM	Citizen Relation and Urban Management	RSDF	Regional Spatial Development Framework
DORA	Division of Revenue Act	SAF	Strategic Area Framework
GCR	Gauteng City Region	SCM	Supply Chain Management
GDS	Growth Development Strategy	SDBIP	Service Delivery Budget Implementation Plan
GMA	Growth Management Area	SDF	Spatial Development Framework
GMS	Growth Management Strategy	SHSUP	Sustainable Human Settlement Urbanisation Plan
GRAS	Group Risk and Advisory Services	SIP	Strategic Integrated Project
HSDG	Human Settlement Development Grant	SIPTN	Strategic Integrated Public Transport Network
ICDG	Integrated City Development Grant	SPLUMA	Spatial Planning Land Use Management Act
IDP	Integrated Development Plan	STIA	Spatially Targeted Investment Area
INEG	Integrated National Electrification Grant	TOD	Transit Oriented Development Corridor
ISO	International Organisation for Standardization	UDB	Urban Development Boundary
IPTN	Integrated Transport Network	UDF	Urban Development Framework
ITN	Integrated Transport Network	UJ	University of Johannesburg
JDA	Johannesburg Development Agency	USDG	Urban Settlement Development Grant

Table for words used interchangeably.

SDF	BEPP
Deprivation areas	Marginalized areas
Corridors of freedom	Transit Oriented Developments (TODs)
Transformation zones	Integration zones
Unlocking Soweto as a True City District	Hub
Inner City (metropolitan core)	CBD/ Inner City
Consolidation Zone	Marginalized areas plus established sub-urban areas
Urban Development Zone	Integration zones

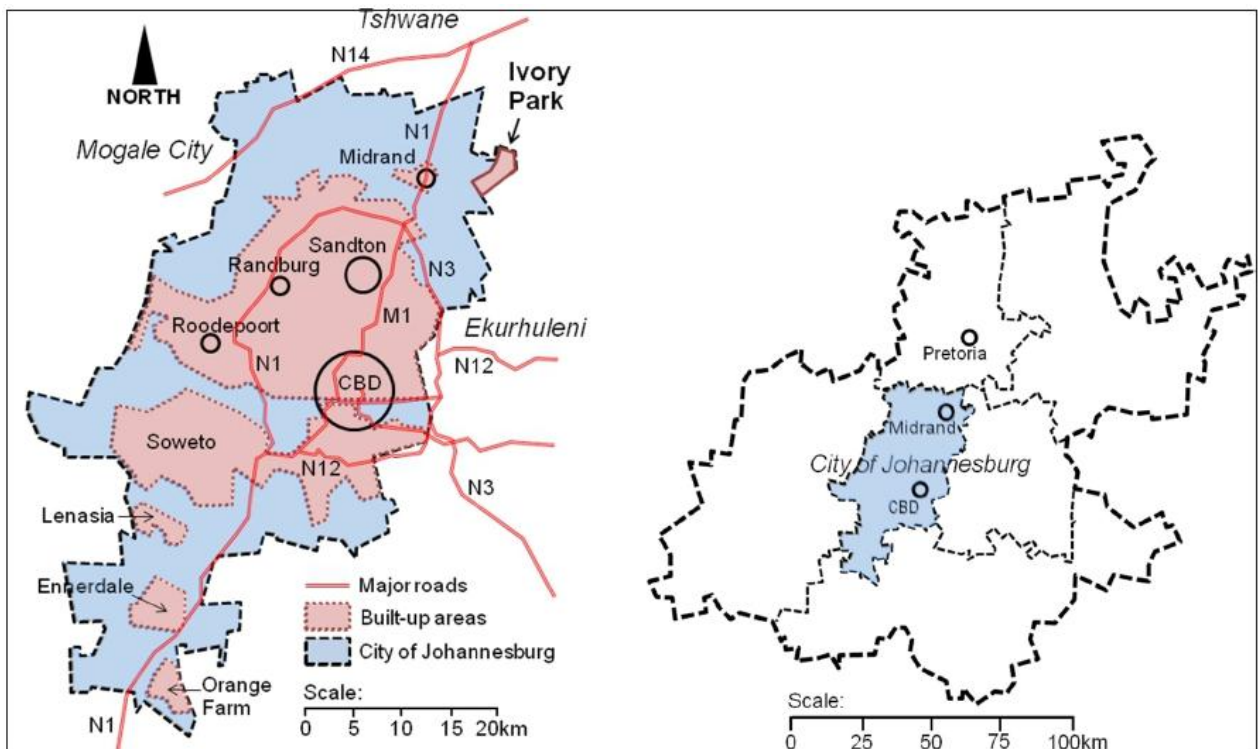
Confirmation of Adoption

City of Johannesburg Metropolitan Municipality Council resolution stating the adoption of the BEPP 2018/19 is attached and submitted to National Treasury by 31 May 2018 in compliance with the DORA (see attached Council resolution).

SECTION A

1. INTRODUCTION

The City of Johannesburg (CoJ) is a vibrant and culturally rich city, located at the centre of South Africa’s economic heartland, Gauteng province (see **Map 1: CoJ locality map in Gauteng Province**). CoJ struggles with the typical concerns associated with developing countries such as rapid population growth, contributing to massive urban poverty, housing shortages, infrastructure backlogs, and environmental degradation. This is a result of migrants (nationally and internationally) seeking political asylum, economic refuge and economic opportunities. The estimated population for the CoJ is at 5.05 million people (2017), which makes it the biggest metropolitan municipality by population size in South Africa. It is projected that the population could increase from the 5.03 million people (2018) to 5.4 million (2021) and to 7.6 million (2037). CoJ residents make up 36% of Gauteng’s population, and 8% of the population of South Africa. A great deal of the city’s population is young; a third of its residents are under 35 years of age.



Map 1: CoJ locality map in Gauteng Province

CoJ was said to be contributing around 15% of national Gross Domestic Product (GDP) in 2016, as well as the number of jobs it economy provides (2.04 million employed people which is 41.64% of the total employment in Gauteng). CoJ has, for much of its history, been a magnet for entrepreneurs and work seekers in South Africa. However, over the past couple of years, growth in crucial job creating industries such as manufacturing and mining has declined significantly. This, compounded with the low economic growth in the city has contributed to the high rate of unemployment. This requires the city to pursue *inter alia* extensive investment in old and new infrastructure to support economic growth and create jobs. CoJ has an inequality and poverty

challenge and the ability of the city to drive a pro-poor agenda depends primarily on sustainable economic growth and a distribution of the benefits of growth. Given the rate of population growth and high structural unemployment, stronger economic growth is required to deal with the challenge of poverty.

CoJ is not immune to the impact of shifts in the global economy. With a global economy influenced mainly by shifting economic centres, new technology and fiercely competitive markets, the current trend in city is slower economic growth in many of its business sectors. As such CoJ's ability to deliver on its social and economic goals is impacted by the developments in the larger global economic context. Thus CoJ's baseline economic growth is projected to reach 2.6% in 2021 from an average of 1.2% in 2018. The combined effect of slow economic growth and fewer jobs presents the challenge of social instability, which is characterised mainly by high levels of crime. In order to achieve the political target of 5% economic growth in 2021, several bold but pragmatic solutions will need to be adopted. A thriving private sector, and a city that attracts local and foreign investment are key to addressing the triple challenges namely unemployment, poverty and inequality thereby paving the path towards the City achieving the 5% growth target.

The CoJ continues to fight unemployment, which is one of the major problems facing South Africa as a whole. Unemployment is currently at 29.6% and youth unemployment estimated to be approximately 40% (Stats SA, QLFS 2017 Q3). In CoJ, the finance sector is the biggest employer in the region accounting for 26.6% of total employment, followed by the trade sector which employs 21.1% of the formal sector workers. The agricultural sector employs the least share of the formal sector workers with only 0.4% (IHS Markit, 2017). The informal sector employs almost 285 000 people in Johannesburg. The biggest number of informal economy jobs is generated in trade.

CoJ explores the following innovative approaches to stimulate growth:

- Catalytic development projects which change the economic growth and investment narrative for the city, including rejuvenation of the inner city.
- Deepening and broadening small business development, township economy and local spatial economic development in the city
- Expanding economic opportunities for young people and empowering the poor to transform their own lives
- Pursuit of investors of defined profiles (industry, value chains and type of investor) and understanding and offering them what they need.

- Attracting firms focusing on both domestic and export markets for goods and services
- Measures and investment to make the city function better and improve the locational offering for business in terms of attractiveness to work and live.
- Differentiation of the city from the rest of the country and other Metros to attract a larger share of the available investment pool.

The economic growth resulting from such measures should result in meaningful redress by expanding social support, providing access to services, investing in spatial development, addressing homelessness and landlessness, building inclusive communities and advancing human capital by the poor.

CoJ has a fragmented urban form. The city's current urban form is a consequence of apartheid planning that contributed immensely to fragmentation of the city, with race-based townships deliberately developed on the periphery of the city, away from opportunity and resources. Accordingly, CoJ places of work are far from where the vast majority of the city's population lives. The historical north-south divide has contributed considerably to increased travel times given the reality that a large number of people live in the south of the city, commuting to jobs that are located predominantly in the north. The inner city is centrally located, closer to economic activity in the north, with demand for housing steadily increasing and now outpacing supply. The CoJ's spatial vision envisaged by the Spatial Development Framework (SDF) 2040 is creating a compact polycentric city with a dense urban core linked by efficient public transport networks to dense, mixed use, complimentary sub-centres, situated within a protected and integrated natural environment. This will address fragmentation, spatial disconnection, limited land use diversity, spatial inequality and job-housing mismatch which are a country-wide challenges. Addressing aforementioned challenges will result in achieving the desired spatial destination for South Africa envisaged in the National Development Plan (NDP) 2030. Thus the city spatial direction contributes immensely to the achievement of the greater vision of the province and the country.

CoJ faces a number of transport challenges. Key public transport interventions such as the Gautrain (a provincially led project) and the Rea-Vaya Bus Rapid Transport (BRT) system (a City-led initiative) have laid the foundation for a new era of mass public transport, but the use of these interventions is still relatively low when compared to other modes of transport such as minibus taxis. According to the GCRO's 2015 Quality of Life Survey, a majority (44%) of CoJ residents commute with taxis. However, the mini bus taxi sector is often seen as being unstable and often besieged with violence and crime. This is followed by 31% who utilise their private cars with only 0.6% and 0.3% who use of BRT and the Gautrain respectively. The increased use of private cars

and taxis has resulted in increased traffic congestions and the City's transport sector continues to be the highest (38%) carbon emitter when compared to other sectors such as the industrial (28%) and the residential (26%) sectors.

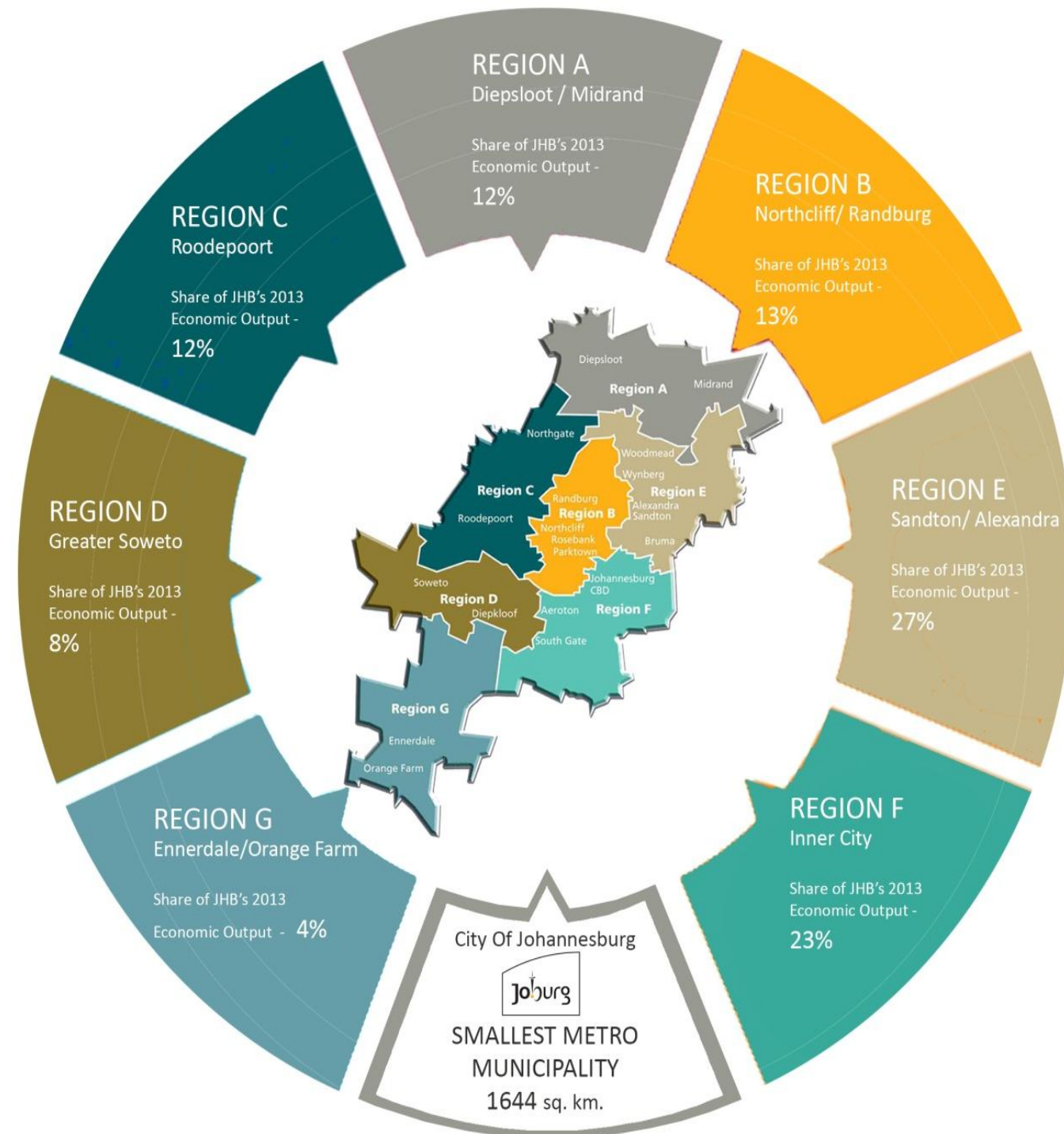
The strategic importance of the Johannesburg inner city is in its location in an economically valuable part of the city. It is strategically located in an area with high rental apartments, business centres, and major transportation and economic nodes. In addition, the inner city provides marginalized communities – particularly from the south of the inner city - an entry point into the formal economy. It is home to the Gauteng Provincial and CoJ Metropolitan governments, and to some of the most established businesses in the country. The inner city boasts the biggest transport node in Africa, with trains, busses and up to 4 000 taxi's bustling through the city on a daily basis culminating at centres such as Park Station.

The inner city has a large asset base, with much of its service infrastructure under-utilised and in decline. The inner city is rich in cultural, sporting and heritage assets, including some of Johannesburg's most important facilities and venues, such as the University of the Witwatersrand, the Civic Theatre and Ellis Park stadium amongst many others. Thus making the City an outstanding investment destination, offering the best access to markets across Africa, an investor-friendly environment, a stable democracy as well as excellent telecommunications and road infrastructure.

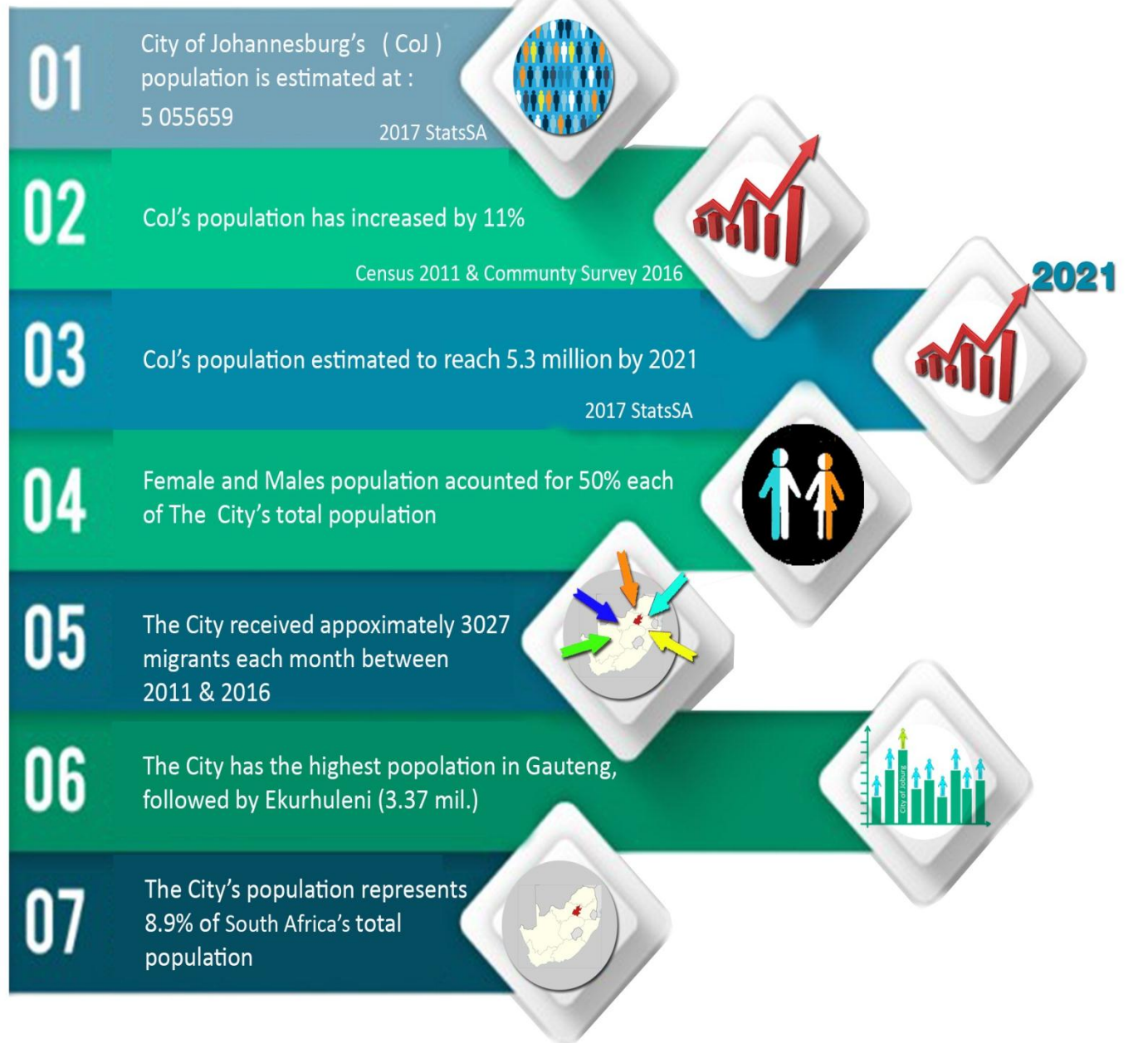
The housing backlog remains a major concern for the City. The formal dwelling backlog (number of households not living in a formal dwelling) is currently the highest backlog at 19.43% or 311 222 households. In 2006 the number of households not living in a formal dwelling stood at around 260 000 whereas in 2016 it reached 311 000. To add to this, not only has the number of households living informally increased but the backlog as a proportion of total household dwelling units has been growing at a rate of 1.81% annually. Ensuring residents live in formal dwellings offers a means to assure that people are getting basic services (water, electricity, waste removal). Improving housing provision is therefore a central driver unpinning many of the City's plans.

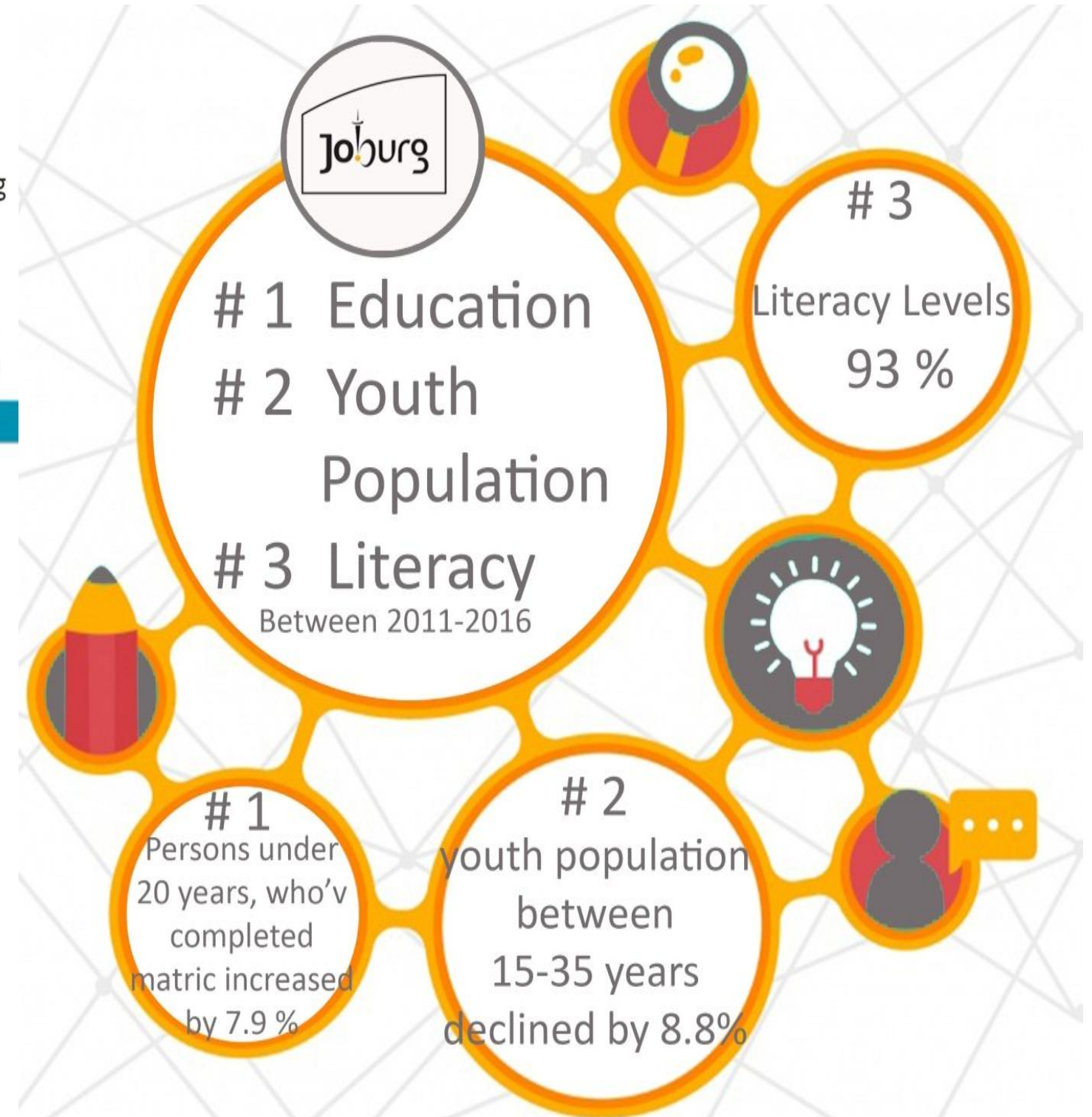
1 290 000 households or 80.58% of all households in the City live in formal dwellings. This leaves a total number of 289 000 (18.02% of total households) living in informal dwelling units, while a small proportion, 1.4%, live in either traditional or other types of dwelling units.

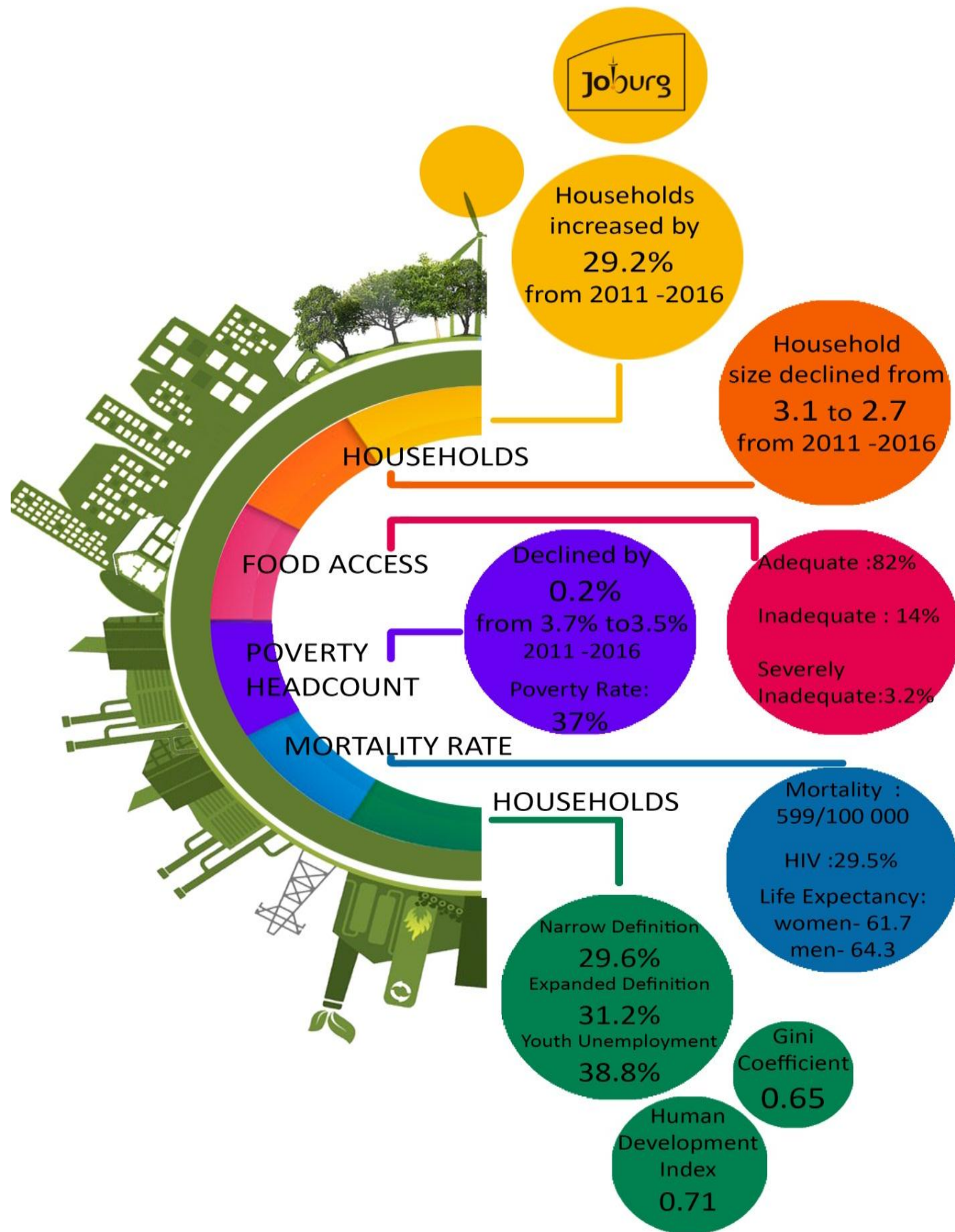
Figure 1: City of Johannesburg in Summary



City Of Johannesburg







01 ACCESS TO PIPED WATER
2011 - 98.6%
2016 - 98.5%
% INCREASE - -0.1 %

02 CONNECTION TO ELECTRICITY
2011 - 90.8%
2016 - 98.0%
% INCREASE - - 0.8 %

03 FLUSH CHEMICAL TOILET
2011 - 90.5%
2016 - 91.2%
% INCREASE - 0.7%

04 HOUSHOLDS IN INFORMAL SETTLEMETS
2011 - 17.4%
2016 - 18.0%
% INCREASE - 0.6%

05 HOUSHOLDS IN FORMAL SETTLEMETS
2011 - 81.4%
2016 - 81.3%
% INCREASE - -0.1%

06 REFUSE COLLECTION
2011 - 95.3%
2016 - 95.3%
% INCREASE - NONE

City Of Johannesburg

1.1 Long term vision

The 2018/19 BEPP Review marks the first iteration of the Integrated Development Plan driven by the new administration elected by the residents of the City of Johannesburg in the 2016 Local Government Elections: a DA-led coalition government.

The DA-led coalition government has proposed a new vision for the City of Johannesburg in order to deliver on its mandate for change:

Vision:

“A Johannesburg that works, is a South Africa that works”.

Mission:

“To create an enabling economic environment by making Joburg more responsive in the delivery of quality services.”

The long-term plan of the City is to realise the City’s Vision in the Growth and Development Strategy 2040 (GDS 2040) which is under review. This change ushers in more than just a new administration, but a new strategic direction for the City in response to the mandate received by the coalition and their strategic partners. As the foundation for this strategic direction, the Mayor has adopted 5 pillars for his administration in order to address the challenges facing the City:

1. A growing, diverse and competitive economy that creates jobs;
2. Enhanced, quality services and sustainable environmental practices;
3. An inclusive society with enhanced quality of life that provides meaningful redress through pro-poor development;
4. Caring, safe and secure communities; and
5. An honest, transparent and responsive local government that prides itself on service excellence.

In addition to the 5 pillars, the Mayoral Committee adopted a set of 9 priorities as an expansion of this strategic focus:

1. Promote economic development and attract investment towards achieving 5% economic growth that reduces unemployment by 2021.
2. Ensure pro-poor development that addresses inequality, poverty and provides meaningful redress.
3. Create a culture of enhanced service delivery with pride.
4. Create a sense of security through improved public safety.
5. Create an honest and transparent City that fights corruption.
6. Create a City that responds to the needs of citizens, customers, stakeholder and businesses.
7. Enhance our financial sustainability.
8. Encourage innovation and efficiency through the Smart City programme.
9. Preserve our resources for future generations.

In driving transformative agenda in the 2018/19 financial year that brings about change and making a real difference for the residents of Johannesburg, the City has identified key non-negotiable that will form the basis of the interventions and programmes the City will pursue for the remainder of the term. The City has taken these values and priorities and developed the *Diphetogo Project*. In SeSotho, *Diphetogo* means

transformation, real changes. It demands that the City ensures residents and stakeholders of Johannesburg experience exceptional service standards.

1.2 Climate change Adaptation framework

SOUTH AFRICA AND JOHANNESBURG APPROACH TO CLIMATE CHANGE

South Africa's approach to climate change flows from the National Climate Change Response Policy or simply Climate Change White Paper. An exhaustive consultation process that started during the 2005 National Climate Change Conference preceded the development of the White Paper. This process was concluded successfully with the approval by cabinet in October 2011 in time for the COP17. The White Paper aims to reduce the rate at which climate is changing to levels that occur naturally, and especially reducing the atmospheric concentrations of Greenhouse Gas (GHGs) – mitigation, and responding to adverse effects of climate change – adaptation. The two instruments: mitigation and adaptation are universally accepted approaches to tackling climate change. Johannesburg climate change programme is in line with these imperatives. Furthermore, the programme is aligned to the 2040 GDS outcome that seeks to achieve provision of a resilient, liveable, sustainable urban environment underpinned by infrastructure supportive of a low-carbon economy. The following are the flagship projects that transition Johannesburg through the passage to the Joburg 2040 GDS vision:

Transport

- Implementation of the Rea Vaya Bus Rapid Transit System the first ever for Africa which has displaced over 500 taxis and minibuses and is used by over 50 000 patrons daily.
- It is estimated that if 15% of existing car users who live within 500m of the Rea Vaya corridors switch to the new system, there will be savings of 382 940 tons of carbon dioxide (CO₂) equivalent emissions by 2013.
- With the full implementation of Bus Rapid Transit it is estimated that the City will save 1.6 million tons of carbon dioxide equivalent emissions by 2020.
- Promotion of walking and cycling: Walking and cycling replaces car use which is more environmentally friendly and leads to a reduction in greenhouse gas emissions. The City has implemented the construction of cycling lanes along major routes in areas around the CBD.

Existing Buildings

- Five municipal buildings have been retrofitted with energy efficient lighting with a total saving of 100 tons of carbon dioxide.

- One hundred and four municipal buildings have been identified to be retrofitted under a larger energy efficiency building retrofit programme. This building retrofit programme will include lighting, cooling, and heating systems.
- Energy audits are currently being conducted in these buildings.

Water

In a bid to encourage the reduction of water demand the city has embarked on an operation “gcina-amanzi” (Zulu word for save water) programme aimed at converting conventional to prepaid meters.

Waste Management and Energy Supply

- Waste minimization project through: reduce, re-use recycle and recover.
- The yield of electricity to be produced from landfill gas project in the 5-landfill sites is higher than expected.
- Already, since the start of the flaring of methane gas at Robinson Deep landfill site, the daily pumping of landfill gas at Robinson Deep is at 1500 cubic meters per hour and should rise to 3000m³ when the flare is operated at full capacity.
- This translates into 5MW of renewable electricity which will provide power for approximately 4-5000 houses reducing the greenhouse potential of landfill gas by approximately 149,000 tons of CO₂ per annum
- All five of the city’s landfill sites, Marie Louise, Robinson Deep, Ennerdale, Linbro Park and Goudkoppies will, in the near future, be converted from methane gas flaring to power generation sites and will be producing approximately 19mW of electricity which can supply 12 500 medium-size households over 20 years and beyond

Outdoor Lighting

- Nelson Mandela Bridge as another City Power’s initiatives has been retrofitted with 60 street lights of 9 watts of light emitting diode (LED) which replaced 150 watts metal halide gas lights in order to save energy and thereby saving costs.
- City Power also switches off the lights at Nelson Mandela Bridge, Queen Elizabeth Bridge, Orlando Stadium and Orlando West Regional Park during “Earth Hour” as a symbolic gesture to address Climate Change.

Urban Land Use

- The main challenge to biodiversity within the City of Johannesburg like the rest of the Gauteng Province of the Republic of South Africa is rapid urbanisation.
- The influx of people into the City of Johannesburg also results in the establishment of informal settlements.
- These settlements crop up in any open space including wetlands and riparian zones.
- This results in loss of critical biodiversity areas and poor catchment integrity due to pollution and siltation resulting from the removal of vegetation from the river banks.
- Alien vegetation is also a challenge within the City of Johannesburg.

Solutions

- As one of the 21 Pioneer Cities of the ICLEI Local Action for Biodiversity Programme (LAB) the City of Johannesburg has conducted its Biodiversity Assessment.
- It went further to develop the City of Joburg Biodiversity and Action Plan 2015.
- Through Johannesburg City Parks the City has partnered with the Working for Water programme in controlling alien vegetation within municipal owned entities.

Human Settlements

Cosmo City Climate Proofing Project which involves the provision of low pressure solar water heaters to over 1000 low income households including the provision of energy efficiency lights and planting of fruit trees.

Food and Agriculture

Tree planting and greening programmes

- The City has made an impactful progress with its greening programme. This includes the 200 000 trees that have been planted since 2006.
- The project largely complemented the award winning Greening Soweto campaign aimed at developing and upgrading world-class parks in areas such as Soweto, Orange Farm and Cosmos City.
- These projects have led to an improvement in air quality in the city, and have acted as a catalyst in developing civic ownership, resulting in a decrease in littering, vandalism and dumping in parks.
- Furthermore, there has been rehabilitation of the southern catchments, park developments in disadvantaged areas, and the provision of green servitudes and ecological assessments of the City's catchments.

Food Gardens

- Overconsumption of processed foods has led to over consumption of fossil fuels. Organic food gardens produce fewer greenhouse gases and are better for the environment and our health.
- Organic food gardens are started at schools and communities. Prior to starting up the organic food garden youth and communities are trained to develop and sustain the garden thereby alleviating poverty.
- This project also allows community members to generate income through the production and sale of vegetables.
- A total of 30 vegetable gardens were developed within the City of Johannesburg, predominantly in schools, between 2010 and 2011. The project is aimed at supplementing the school feeding programmes and affords city parks a vehicle to grow green minds and hearts.

JOHANNESBURG, LOCAL AND INTERNATIONAL COLLABORATIONS

C40 cities represent a collective global population of about +300 million people. These cities are engines of economic growth collectively generating 18% of global GDP and 10% of CO₂ emissions. C40 cities find themselves having to balance the need to grow their economies on the one hand, and to curb anthropogenic (man-made) greenhouse gases emissions on the other. Having said this in May 2013, global CO₂ emissions reached a milestone level of 400ppm (parts per million). In 2005, when Intergovernmental Panel on Climate Change (IPCC) fourth assessment report (AR4) was released there were 379ppm CO₂ concentrations in the atmosphere. The (AR4) stated unequivocally that the increase of CO₂ concentrations in the atmosphere is as a result of human activities.

C40 announced at the global Rio+20 climate summit that C40 cities' existing actions would reduce global annual GHG emissions by 248 million tons in 2020, with the potential to reduce over 1 billion tons by 2030. Currently C40 cities have performed nearly 5000 climate change actions spanning a range of sectors. Most of these actions are focused more on mitigation initiatives, and C40 Mayors implemented only 450 adaptation actions. Climate Change adaptation seeks to address the challenges related to: risk of flooding; tropical cyclones; heavy rainfall urban heat island.

A more visible and memorable collaborative action yet, that seeks to address the climate change challenges mentioned above was the signing of the Adaptation Charter during the COP17 by over 11000 cities including all South African cities. The Adaptation Charter was a pioneering effort of South African government, South African Local Government Association (SALGA), South African Cities Network and ICLEI. Together, these stakeholders convened a local government summit during the COP17 in Durban, and at the end all cities committed themselves to the charter.

CLIMATE CHANGE ADAPTATION

Currently the EISD is busy with the update of the 2009 climate change adaptation plan. As a summary, the 2009 adaptation plan highlighted the following climatic risks and associated impacts to the City:

- Increase in Heat-Related Deaths
- Increased Energy Demand
- Increased Water Demand (within the CoJ)
- Biodiversity Impacts on Disease Vectors (Health Risks)
- Urban Flood Risk - Damage to Water
- Supply & Sanitation Infrastructure
- Urban Flood Risk - Damage to Property,
- Personal Injury and Impacts on Livelihood
- Urban Flood Risk - Increased Road
- Accidents and Traffic Congestion
- Urban Flood Risk to Electrical & Telecom Infrastructure
- Disruption to Water Security (arising from outside the CoJ)

The current process to update the plan has not changed this climatic risk profile of the city. The process of reviewing the climate adaptation plan is not yet complete, as a result, the City in the interim have instead produced what is now called the climate change adaptation framework. The framework will be later refined to a fully-fledged adaptation plan. This framework contains 6 key focus areas that will require adaptation action by the city. These areas are:

- 1. Climate change adaptation governance:** Low levels of mainstreaming climate change responses across the City, lack of integration of climate change responses into City Key Performance Indicators (KPIs), under-resourcing of climate change adaptation, and job insecurity.
- 2. Water scarcity:** Aggravated by droughts, water pollution, and increase in water demand.
- 3. Floods and storm water:** Caused by heavy rains and increased runoff, and aggravated by old drainage infrastructure, inappropriate infrastructure in some areas, settlements in low lying areas and wetlands and rising groundwater levels.
- 4. Heat waves, human and environmental health:** Negative human health, animal and vegetation impacts of increased temperature, heat islands and heat waves.
- 5. Informal settlements and urbanisation:** Human settlements in climate vulnerable areas (especially exposed to floods) and affecting wetlands, increased urbanisation and associated pressure on urban infrastructure and ecological resources.
- 6. Infrastructure:** Roads, bridges, drainage systems and buildings that are either too old, or in need of

repair, no longer adequate or do not factor in energy efficiency and extreme weather events.

An attempt has been made to define activities against all the 6 key focus areas and apportion each activity to a department or entity. Here is an example on governance:

Activities	Departments responsible
Involve the leadership of the City in the development and implementation of the Plan and its approval to make the Climate Change Adaptation (CCA) Plan a Strategic Document	EISD, Mayoral Committee, Council (NB), Regional Directors and Ward Councillors. Involve Executive & Managing Directors to ensure implementation at entities and departments.
Make the CCA Plan easy to understand and relevant to the City's social and economic development agenda	EISD, Relevant MFS and Departments
Establish and operationalise structures that will integrate and coordinate the mainstreaming of the CCA Plan into relevant implementation plans of the City	EISD, Relevant MFS and Departments
Integrate climate change adaptation into IDP linked to Key Performance Indicators	EISD, Relevant MFS and Departments
Provide necessary human and financial resources for the implementation of the CCA Plan (including use of the Disaster Relief Fund where appropriate)	Mayors Office, Group Finance
Design and implement climate and climate change impact data management systems across the city	EISD, JRA, EMS, Dept of Housing, JCPZ, JDA
Draw and share best practice, innovations and lessons learnt from other cities	EISD

Mainstreaming Climate Change into the BEPP

At the beginning of the adaptation plan review and update process, the BEPP as a critical policy lever was not interrogated. The city support programme from the National Treasury initiated a process to repurpose the BEPP so that it takes into account climate change adaptation and particular resilience concerns. Treasury have conducted a climate change screening exercise, and below is a summary of their findings about findings. *Please note: Ms Anthea Stephens presented the summary from the National Treasury. This is for illustrative purposes, and should you wish to publish the information, please contact her.*

Analysis of framework: COJ

- Review of IDP, SDF & BEPP against framework

Considerations for Integrating Climate Change in City Planning	City of Johannesburg
Climate risks: Understand and incorporate climate risk and vulnerability in city plans	Low
Project pipeline: Prioritise projects and programs that strengthen climate response efforts	Med
Strategic outcomes: Climate change is a strategic priority in city institutions, budgets and KPIs	Med

Guiding Factors for Analysis of Local Government Instruments		Plan	3
1	Takes into account climate change vulnerabilities and risks in the municipality during the lifespan of the planning instrument	IDP	Yes
		SDF	Partly
		BEPP	No
2	Identifies specific municipal assets and services likely to face the greatest impact from climate change	IDP	No
		SDF	No
		BEPP	No
3	Takes into account major sources of greenhouse gas emissions from within the municipality within the domain of the planning instrument	IDP	Partly
		SDF	Partly
		BEPP	No
4	Articulates (relevant) desired outcomes for climate change responsiveness in the municipality (either adaptation or mitigation or both, as the case may be)	IDP	Yes
		SDF	Partly
		BEPP	No
5	Contains (or directly supports) projects that are responsive to climate risks and vulnerabilities and help achieve the articulated adaptation outcomes	IDP	No
		SDF	No
		BEPP	No
6	Contains (or directly supports) projects that target greenhouse gas emissions levels and help achieve the articulated mitigation outcomes	IDP	Yes
		SDF	Yes
		BEPP	No
7	Reflects formal commitment and political buy-in at the municipal level for climate change response	IDP	Yes
		SDF	Yes
		BEPP	No
8	Estimates and/or earmarks additional investment and finance needed for climate change elements of the instrument, above business-as-usual allocations	IDP	No
		SDF	No
		BEPP	No
9	Identifies implementation responsibilities, partners, and governance arrangements for climate change components	IDP	Yes
		SDF	No
		BEPP	No
10	Includes climate-specific M&E indicators (if the instrument has a self-contained M&E framework), or includes climate related indicators from local govt. M&E frameworks	IDP	Yes
		SDF	No
		BEPP	No

- *“The City of Johannesburg needs to build resilience to more heavy rainfall events, and be better prepared for flooding. It also needs to respond to the growing threat of high temperatures and heat waves (exacerbated by the urban heat island effect), as well as public health challenges fuelled by climate change.*
- *There is a need to evaluate whether the 2009 strategy and action plan had a tangible effect on city governance and administration, as well as in increasing the adaptive capacity of Johannesburg and reducing vulnerability. Given the advances in climate change science since the strategy was developed, the city recently embarked on the creation of a climate change strategic framework. This revised document may be a useful tool to ensure greater mainstreaming moving forward.*
- *Johannesburg has taken a number of important actions to respond to climate change. However, there are gaps in reflecting the prioritization of climate change across the three key strategic planning documents. Input from stakeholders in Johannesburg suggests that the city has been able to mainstream climate change into the implementation and periodic review and updates of its IDP and SDF, since both documents articulated the need for further mainstreaming. Moving forward, the city intends to devote greater attention to climate change adaptation / resilience, which historically had received less emphasis in planning and budgets than mainstreaming.” – Anthea Stephens*

Currently Treasury are conducting interviews with critical sectoral personnel in the City with the view to explore in detail some of the issues highlighted in the table above.

Currently the Environmental Infrastructure Service Department (EISD) is busy with the update of the 2009 Climate Change Adaptation CCA Plan. The 2009 CCA Plan highlights the following climatic risks and associated impacts to the City:

- Increase in Heat related deaths;
- Increased energy demand;
- Increased water demand;
- Biodiversity impacts on disease vectors (health risks);
- Urban flood risk - damage to water;
- Supply and sanitation infrastructure;
- Urban flood risk - damage to property;
- Personal injury and impacts on livelihood;
- Urban flood risk - increased road;
- Accidents and traffic congestion;

- Urban flood risk to electrical and telecommunication infrastructure; and
- Disruption to water security (arising from outside the CoJ).

1.3 Spatial Development Framework 2040

The Johannesburg Spatial Development Framework (SDF) 2040 is a metro-wide spatial policy document that identifies main challenges and opportunities in the city, sets a spatial vision, and outlines strategies to achieve that vision. The framework was approved by Council in June 2016 after extensive public participation and through collaboration between the City of Johannesburg, UN Habitat, The Urban Morphology and Complex Systems Institute, Iyer Urban Design and the French Development Agency. The SDF is described by the Municipal Systems Act (MSA) (Act 32 of 2000) as a component of Integrated Development Planning for municipalities. More recently, it has been mandated by the Spatial Planning and Land Use Management Act (SPLUMA) (Act 16 of 2013). The SDF is influenced by the following:

Plans and strategies informing the SDF

- The Growth Management Strategy (GMS), which determines where, and under what conditions, growth can be accommodated, in order to achieve the desired urban form presented in the SDF.
- The Sustainable Human Settlement Urbanisation Plan (SHSUP),
- The Economic Development Strategy 2015.
- The Regional Spatial Development Frameworks (RSDFs) provide an area-specific interpretation of the SDF and GMS for each of the 7 Administrative Regions. The Department of Development Planning refers to these policies to assess development applications received by the City. This provides guidance to achieve the desired urban form for the City.
- The Capital Investment Framework (CIF), through the application of the strategies and guidelines of the SDF, is the component of the IDP by which the City identifies and prioritises capital projects from which the medium-term capital budget for the City is finalised.
- Precinct Plans and Urban Development Frameworks (UDFs) provide detailed design and infrastructure requirements and associated policy for localised areas and defined sections of the City (respectively). The Strategic Area Frameworks (SAFs) for the

Transit Orientated Development Corridors (ToD's) formerly known as Corridors of Freedom fall within this category of plan; and

- The Strategic Integrated Transport Plan Framework and the Integrated Transport Network Plan.

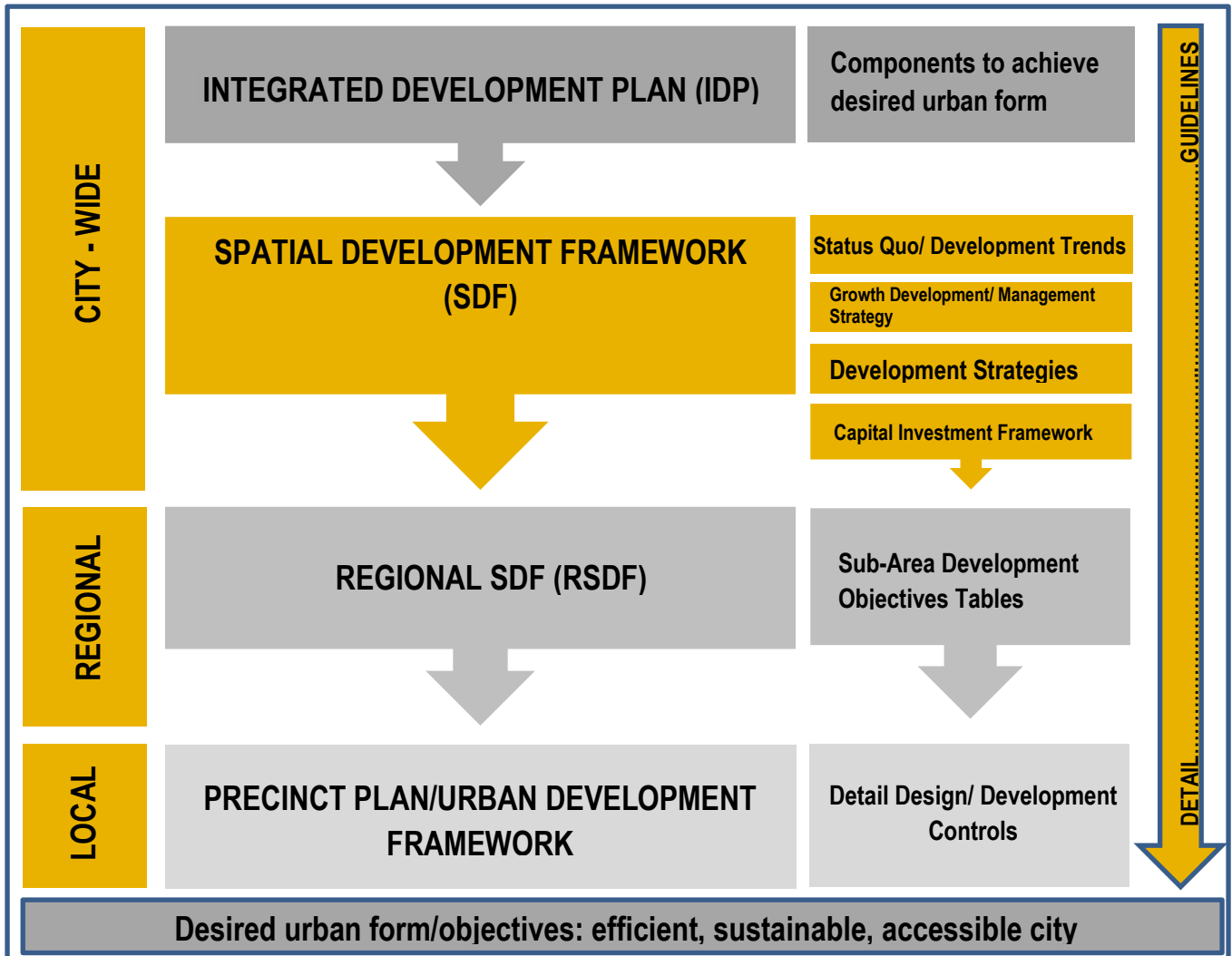


Figure 2: Spatial Policy in relation to the IDP

1.3.1 Transformation Agenda: towards a spatial just city

The Johannesburg SDF 2040 defines the priority transformation areas to be used in the City's capital investment prioritisation model (Johannesburg Strategic Infrastructure Platform – JSIP). This ensures that infrastructure investment is directed to priority areas as defined in the SDF.

The core objective of the SDF 2040 is to 'create a spatially just city'. The SDF 2040 is premised on the notion of spatial transformation, defined through the principles of equity, justice, resilience, sustainability and urban efficiency which the SDF seeks to translate into a development policy.

The Johannesburg SDF 2040 is not a static master plan; it is rather a dynamic model of strategic planning that will be cyclically reviewed, adjusting the focus and direction based on city transformation that takes place on the ground.

1.3.2 Spatial vision: A compact polycentric city

The vision is based on a modelling exercise testing three development scenarios, each hypothesising the growth of Johannesburg from 4.3 million to 7 million people by 2040. The first model describes a scenario with dispersed, sprawled growth. The second describes a 'linear development' scenario where future development occurs along an expansive public transport network (corridor development) linking all marginalised areas of the city, through vast development corridors to the inner city. The third scenario is 'a compact polycentric model' which concentrates growth in a compact urban core and around priority transformation areas and key urban and transit oriented development nodes. The compact polycentric city model performed significantly better than the other two in terms of economic, environmental and social indicators.

Therefore, the spatial vision of the SDF 2040 is a compact polycentric city. Here the Inner City would form the strong urban core linked by efficient public transport to dense, mixed use (residential and commercial), sub-centres, situated within a protected and integrated natural environment.

The spatial transformation vision of the SDF 2040 seeks to create a spatially just city. The plan is premised on the principals of equity, justice, resilience, sustainability and urban efficiency which it seeks to translate into a development policy. A compact polycentric City encompasses the above principals. It seeks to bring jobs to residential areas and housing opportunities to job centres. It will create complete, walkable nodes where people can live, work and play that are efficiently connected by public transport. It will bridge spatial and social barriers and build a framework for a spatial just city. To facilitate the spatial transformation needed in the city, the SDF 2040 endorses the following intertwined concepts of the new image of Johannesburg:

- **Compact city** – combining density, diversity, proximity and accessibility, reducing distances, travel times and costs, bringing jobs and social amenities to single use, marginalised residential areas, reducing energy consumption and infrastructure costs.
- **Inclusive city** – ensuring balanced service provision (hard and soft) and opportunities for all by diversifying land uses, promoting social mixing and bridging social, spatial and economic barriers.
- **Connected city** –enhancing public transit, walkability and ICT infrastructure at provincial and urban scales to re-connect the city, starting from 'Transit Oriented Developments' (previously known as Corridors of Freedom) to street and neighbourhood-level connectivity.
- **Resilient city** – building a metropolitan open space system as a protection buffer, preserving valuable green infrastructure and areas of high agricultural potential,

promoting sustainable energy use, reinforcing the urban development boundary and protecting biodiversity resources.

- **Generative city** – focusing investment in transformation areas and nodes towards: achieving positive social, economic and environmental returns on investment; spurring economic growth and job creation and enhancing public space and promoting sustainability (social, environmental and economic).

1.3.3 The Spatial Framework

The spatial framework for Johannesburg 2040 builds on the spatial vision for the future city as a Compact Polycentric City. The framework entails a series of strategies and interventions in focus areas and at a city-wide scale. The spatial framework envisions Johannesburg as a hierarchy of dense mixed use transformation areas, corridors and nodes, that integrate the natural ecological system as a structuring layer, and that are connected by an efficient public transit system.

In realising a compact polycentric city form and ensuring transformation, the SDF identifies the following layers of focus for which it outlines development strategies:

An integrated natural structure

The natural environment is an essential element in the structuring of the future city. It is the environment around which all planning, development and land use decisions should be made. The natural structure should be seen as an irreplaceable city asset that provides valuable ecosystem services and not merely as unused land available for development. Protecting these areas is not done for the sake of conservation alone, but to make surrounding developed parts of the city more sustainable, liveable and valuable (socially, financially and in terms of green infrastructure). As such, the protection of the City's natural assets must be a starting point for all development.

Transformation Zone

The Transformation Zone includes areas where investment is prioritised for future urban intensification and growth, as they have the capacity to trigger positive effects on a metropolitan scale. The Transformation Zone also indicates areas where the development of detailed spatial plans, where they do not exist already, will be prioritised.

Strengthening the metropolitan core – Through Inner City Transformation Roadmap and Inner City Housing Implementation Plan, building on the opportunities of the inner city as a dense economic core of the city and tackling issues of fragmented developments, crime, 'bad buildings' and lack of affordable housing. The strategy suggests creating compact precincts of inclusive residential densification structured around public transit and economic activity. An investment programme in social facilities and engineering infrastructure to support development is critical. It further supports economic growth in the Inner City through various measures. The strategy proposes consolidating the Inner City through a public space/street network and expanding it towards the southern industrial area and the Turffontein.

Transit Orientated Development Corridors (The Corridors of Freedom) – Consolidating growth and development opportunities around existing and future public transport nodes, starting from the Transit Oriented Development linking Soweto, through the Inner City, to Sandton (along Empire-Perth and Louis Botha Avenues) and linking Turffontein into the Inner City. This will also include a focus on Transit Oriented Development nodes at Rea Vaya, PRASA and Gauteng stations.

Unlocking Soweto as a True City District – Diversifying and intensifying Soweto to address its largely residential nature by developing mixed land uses (particularly economically productive, job creating ones) and social services, making use of its good street pattern and public transport network. The strategy is to develop Soweto into a series of self-sufficient mixed-use nodes (starting around public transit stations and nodes) as drivers of economic growth and job creation, allowing Soweto to function as a liveable city district in its own right with access to jobs and the full array of urban amenities.

Developing a Randburg-OR Tambo Development Corridor – Establishing a strategic connection between the northern parts of the city (Randburg, Sandton and Alexandra) and Ekurhuleni (OR Tambo Airport and its surrounding Aerotropolis) incorporating the Modderfontein, Frankenwald and surrounding areas; develop Alexandra into an intensive, liveable mixed-use area well-connected into the surrounding urban opportunities: creating a regional logic for the development of strategic land parcels using current development dynamics to drive growth and reduce expansion pressure on the periphery.

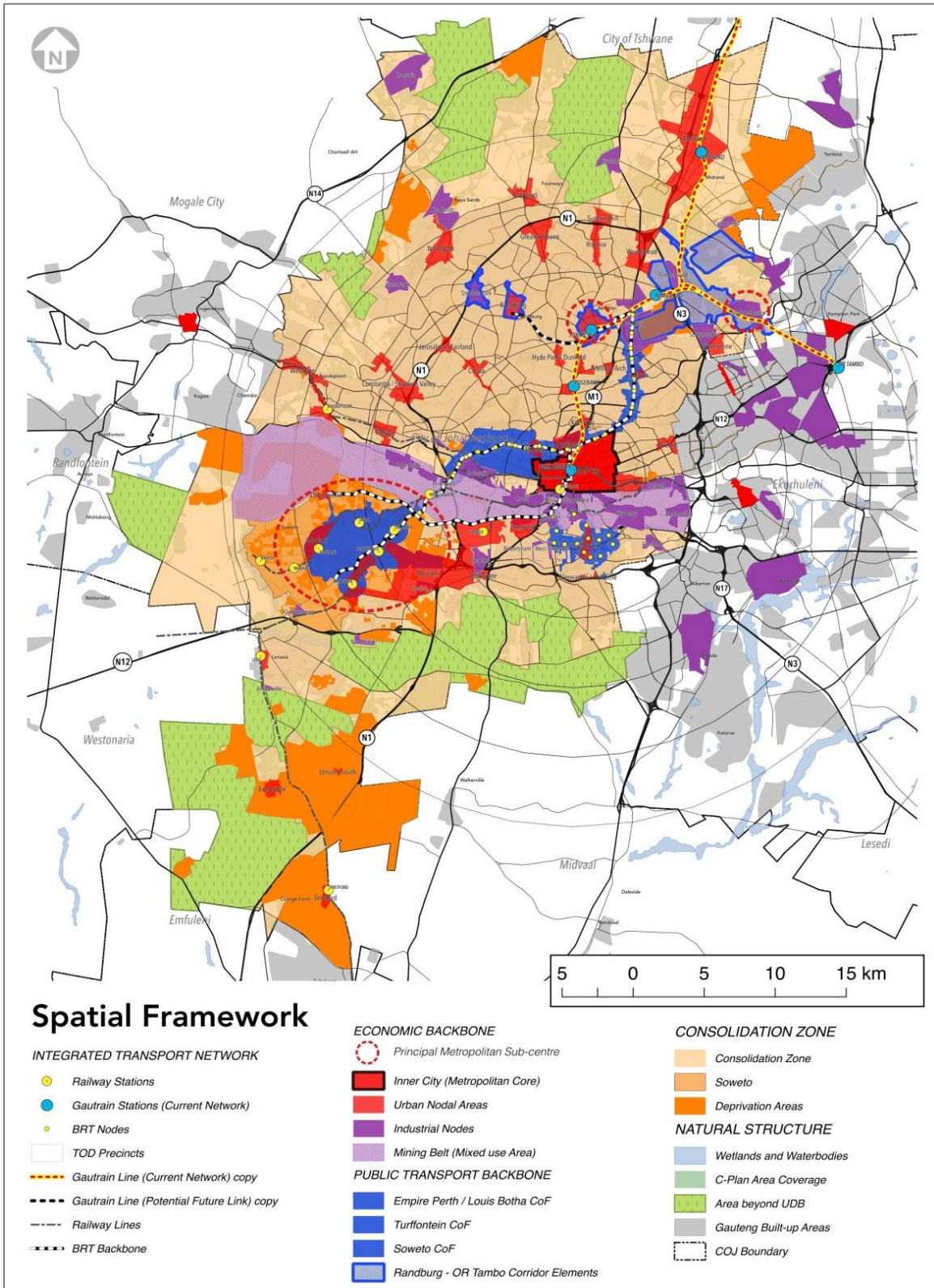
Unlocking the Mining Belt – This historical spatial discontinuity presents significant opportunities for development and public open space that could integrate the north with the south of Johannesburg and improve cross-border linkages with Ekurhuleni and the West Rand. By identifying strategic interventions along the belt – road linkages, mixed use redevelopments, rehabilitation of degraded and damaged land – this feature could become one of inclusion.

Consolidation Zone – This area (neither within the Transformation Zone, nor outside the urban development boundary) is viewed as a focus of urban consolidation, infrastructure maintenance, controlled growth, urban management addressing backlogs (in social and hard infrastructure) and structural positioning for medium to longer term growth. The policy intent in these areas would be to ensure existing and future development proposals are aligned as far as possible with the broader intent of the SDF, specifically in terms of consolidating and diversifying development around existing activity nodes and public transport infrastructure. In this broad area, new development that does not require bulk infrastructure upgrades should be supported, however underserviced parts of the city (informal settlements and marginalised areas) should receive investment.

The Spatial Economy - The previous SDF defined a number of metropolitan, regional, district and neighbourhood nodes as catalytic areas for growth in the city. Added to these are TOD nodes. These will be supported as focal points for growth in the city through extended development rights (in terms of density and land use mix) and through significant

infrastructure investment by the city. Nodes should develop into compact, walkable, liveable, mixed use and mixed income areas. Industrial nodes will be a focus of future job creation, as well as diversification.

Reinforcing the Urban Development Boundary and defining development zones - Re-emphasising the Urban Development Boundary (UDB) and limiting new development outside of it and protecting the natural environment. Emphasis is on ecological resource protection and management, food production, low intensity social services and amenities, agriculture related investment, leisure and tourism and green energy initiatives. In addition to the UDB, two other development zones are introduced, the priority and consolidation zones, discussed above.



Map 2: Spatial Framework

1.3.4 Implementing the SDF: Capital Investment and Growth Strategy

The spatial framework above, along with the spatial policies and design guidelines, will be implemented through a targeted capital investment and growth strategy.

1.3.4.1 Capital Investment Focus

The main purpose of the SDF is to provide clear direction for future growth through development policies and strategies. The implementation of the SDF in order to achieve the desired outcome takes place at mainly two levels:

Firstly, the implementation of state and private sector development initiatives is overseen by the city as part of its regulatory functions for approval of development. The implementation and application of the Spatial Framework intent, policy guidelines and requirements and various legal and policy mechanisms directs the development initiatives to ensure compliance and achievement of overall goals and outcomes of the SDF.

Secondly, the implementation of the SDF relies on infrastructure capital investment that supports the growth directions and ambitions for future development. The SDF guides both private and public investment in bulk infrastructure and services. Public sector investment in infrastructure and services represents the most significant portion of capital investment in the city and the link of the spatial framework with the capital investment programme is essential for successful implementation.

This aspect of integrated spatial and investment planning is well established in Johannesburg. A well-established institutional capital budget process that ensures alignment to the strategic growth objectives and spatial plans has been established within the City administration. The process also ensures compliance with the requirements and regulations of the MFMA and the guidelines of National Treasury. The process consists of a number of extensive consultations between all departments and entities responsible for capital investment and the Planning Department, who is the custodian of the SDF and related development strategies and also coordinate and direct the capital planning process and formulation of the capital budget (section 14 outlines the process in detail).

1.3.4.2 Capital Investment Framework

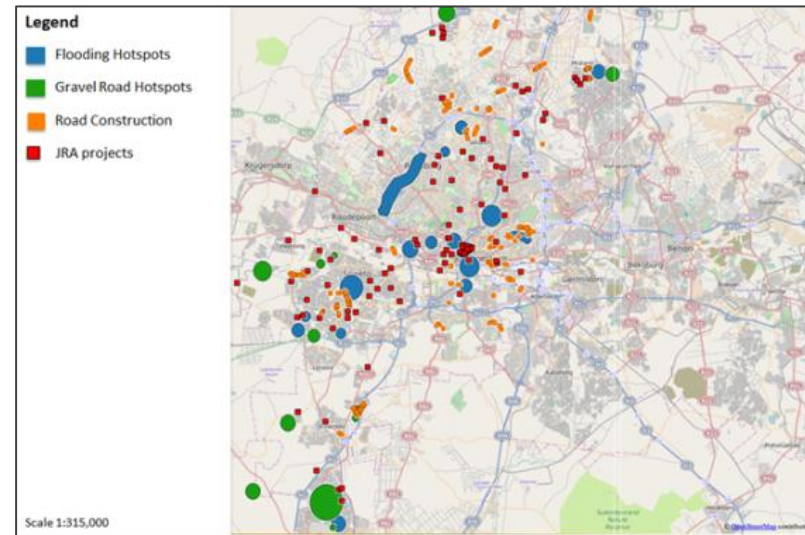
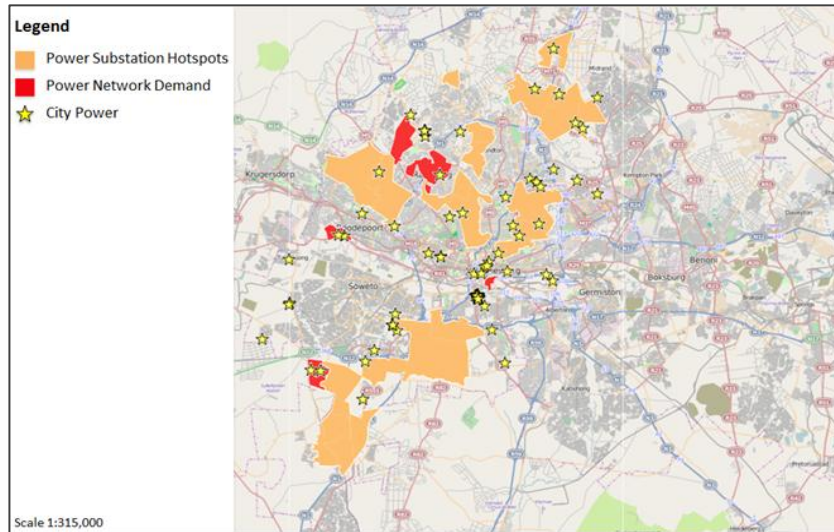
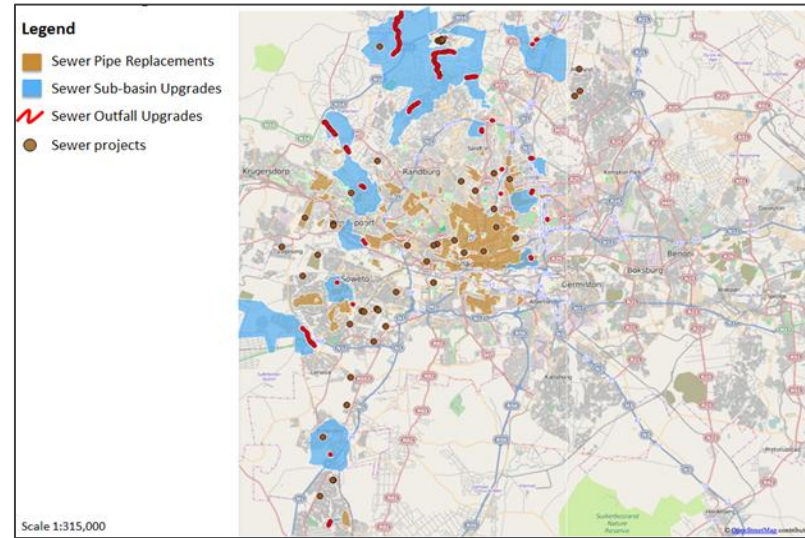
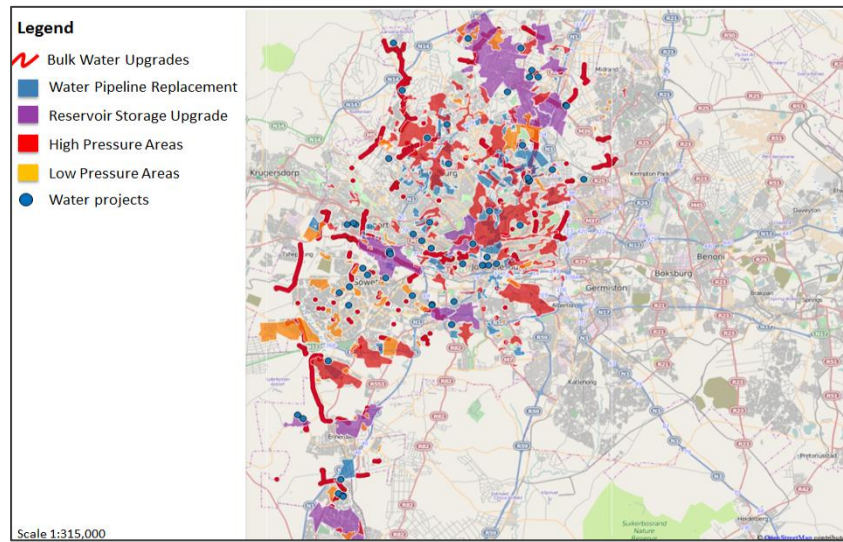
There are broadly three main categories for capital investment that contribute to the overall strategy and the Capital Investment Framework.

a. Engineering Infrastructure: Optimisation Strategy

The CIP aim to assist in forecasting future demand for engineering infrastructure and to integrate planning, implementation and management of infrastructure and related programmes, to ensure sustainable and cost-effective infrastructure delivery and operational practices. The CIP’s optimization strategy was developed to determine savings in engineering infrastructure investments by minimising the overlap between bulk refurbishment projects and bulk capital projects within the same asset class. In some instances, maintenance work is required on a specific piece of infrastructure to keep it functional and an upgrade is planned shortly after the maintenance work, which would result in the refurbished infrastructure’s being replaced. The strategy is therefore based on the principle that: it is valuable to align refurbishment with upgrades to maximise the return on investment by saving on the cost of refurbishment. The value from the exercise is a direct saving in refurbishment cost which would be wasted otherwise. The CIP phase 1 investigated the bulk infrastructure components and was able to make a 30% saving on the refurbishment budget. This provides for a significant portion of the budget to be re-invested. The following table presents the potential cost saving for the relevant sectors. The percentage saving per sector indicates the saving compared to the total 20-year refurbishment budget. The overall saving compared to the sectors combined budget is also indicated.

Table 1: Investment optimisation strategy savings amount per sector

Sector	Savings amount	Percentage saving
Water	R60 655 766	36%
Sanitation	R52 535 400	32%
Electricity	R52 535 400	25%
Total	R165 726 566	30%



Map 3: Infrastructure Hotspots (Water, Sewer, Power, Roads)

b. Financial information on the Infrastructure Investment

Well-functioning infrastructure has always been very important to both the local economy and the society. Both components require infrastructure to enable people to work and live in a sustainable and functional environment. This information will be discussed further in section E

2. The purpose and role of the BEPP

The Built Environment Performance Plan (BEPP) for the CoJ is a requirement by the Division of Revenue Act (DoRA) (Act no 3 of 2018), in respect of infrastructure grants related to the built environment of metropolitan municipalities. The CoJ first compiled the BEPP for the 2011/12 financial year as part of the motivation to seek the Urban Settlement Development Grant (USDG) (formerly known as the Municipal Infrastructure Grant - Cities). The document provides a brief strategic overview of the City's built environment and related capital investment. It provides a framework to measure and monitor the built environment. The BEPP is a long-term outcomes based strategic plan to be revised on an annual basis. Its primary purpose is to facilitate the spatial integration and transformation of the City through strategic programmes. The BEPP indicates how the City applies its capital financing including grant resources and other sources of finance. Other monetary components that are indicated within the BEPP include fiscal and regulatory instruments, incentives within its jurisdiction intended to impact on the outcomes of these interventions.

2.1 The purpose of the BEPP

The BEPP is a document that seeks to strengthen government relations between the City, Gauteng Province and relevant National Departments. Furthermore it intends to provide better clarity in relation to the link between capital budgeting and various other resources allocated to the City. In turn the municipal plan provides a guideline for future Provincial and National Government programmes and funding. The BEPP is meant to complement existing strategic and spatial documents within the City, specifically the Growth and Development Strategy (GDS) – Joburg 2040, the Integrated Development Plan (IDP), the Spatial Development Framework (SDF) 2040, and the Service Delivery Budget Implementation Plan (SDBIP), see *Figure 2: Strategies and processes that inform the BEPP*, since the 2014/15 financial year, the BEPP acts as a motivation for a 'basket of grants' and not only the USDG.

NAME OF GRANT	PURPOSE OF GRANT
Integrated City Development Grant (ICDG)	To provide a financial incentive for metropolitan municipalities to integrate and focus their use of available infrastructure investment and regulatory instruments to achieve a more compact urban spatial form.
Urban Settlement Development Grant (USDG)	Supplements the capital revenues of metropolitan municipalities in order to support the national human settlements development programme focusing on poor households
Human Settlements Development Grant (HSDG)	To provide for the creation of sustainable human settlements
Public Transport Network Grant	To provide for accelerated planning, construction and improvement of public and non-motorised transport infrastructure
Neighbourhood Development Partnership Grant (NDPG)	To support and facilitate the planning and development of neighbourhood development programmes and projects that provide catalytic infrastructure to leverage third party public and private sector development towards improving the quality of life of residents in targeted under-served neighbourhoods (generally townships)
Integrated National Electrification Grant (INEG)	To implement the Integrated National Electrification Programme by providing capital subsidies to municipalities to address the electrification backlog of occupied residential dwellings, and the installation of bulk infrastructure and rehabilitation and refurbishment of electricity infrastructure in order to improve quality of supply.

Table 3: Municipal Grant Allocations to Municipalities – Division of Revenue Act.

The BEPP 2018/19 and the basket of grants will be aligned through:

- i. The Identification of priority areas for infrastructure delivery within the City of Johannesburg;
- ii. An amendment of conditions and output indicators used to measure the performance of the grants that highlight critical inter-dependencies such as the number of housing opportunities provided within 500m of a public transport;
- iii. Inclusion of provisions in DoRA relating to the alignment of infrastructure grants to a pipeline of prioritised projects;
- iv. Introduction of fiscal and regulatory instruments to catalyse private sector investment;
- v. Improving the management of strategic precincts and public transport operations within the urban network.

In addition to the above highlighted functions, the BEPP 2018/19 provides the baseline for human settlement indicators devised by National Treasury. It also measures urban integration within the City over an extended period of time. Future revisions of the BEPP will report on progresses of the discussed indicators to illustrate successes and areas that require more work.

2.2 Positioning the BEPP in the Municipal System

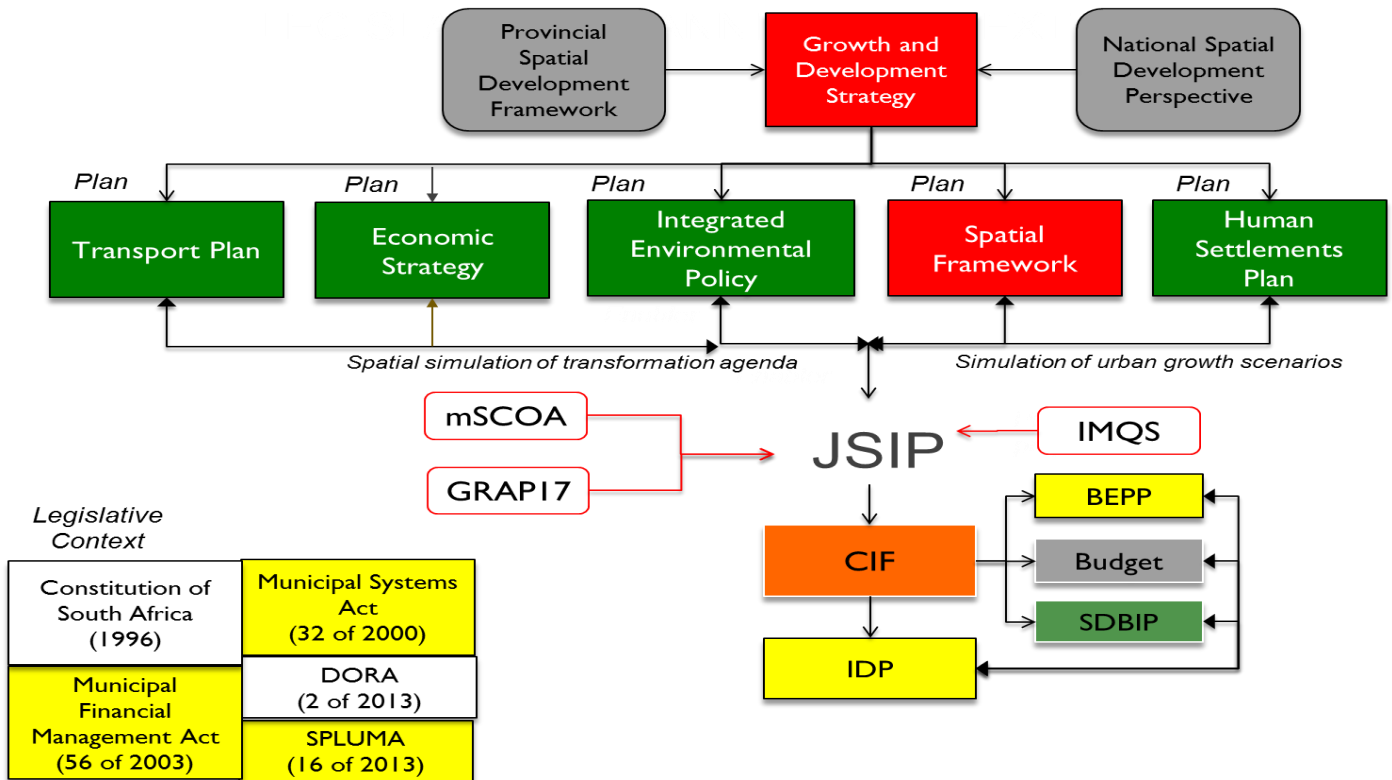


Figure 3: Strategies and processes that inform the BEPP

The Spatial Planning & Land use Management Act (SPLUMA) requires that the SDF has a Capital Investment Framework (CIF) to show how the municipal budget is implementing SDF priorities. The BEPP is designed to link the IDP/SDF to the municipal budget, it is a response to the challenge of misalignment of planning and the weak linkage between monitoring, planning and budgeting frameworks. It sits within the municipal planning system and bridges the gap between planning intention and implementation programmes and corresponding resource allocation, within a clear outcome led approach consistent with higher order plans and their governing legislation in the system

Alignment of SDF, IDP, BEPP and BUDGET

SPATIAL ELEMENTS	SDF	IDP	BEPP	BUDGET
UNS strategy	√	√	√	
TODs	√	√	√	√
Urban Management	√	√	√	√
Catalytic projects		√	√	√
Deprivation areas	√	√	√	√
Climate Change	√	√	√	√
Process plan		√	√	√
Spatial Model (polycentric compact city)	√	√	√	√
Capital investment	√	√	√	√

Table 4: Alignment of SDF, IDP, BEPP and Budget

The table above confirms alignment between the SDF, IDP, BEPP and Budget in respect of the spatially targeted areas and the catalytic urban development programmes. The City's Growth and Development Strategy (GDS) and IDP are the primary point of reference for the Medium term budget.

The BEPP approach is to align, integrate and prioritise the spatial investment programs of the key sectors of the economy, transport and housing. The BEPP is intended to be a reference point for municipal, provincial and national spheres and all key stakeholders to make informed decisions and investments in the built environment and for these role players to align their plans and budgets in support of positive metropolitan outcomes.

2.3 Planning and regulatory reforms

National Treasury has indicated that Metro, and other municipalities have often raised the reporting burden that they experience from a myriad of national departments and agencies. This spaghetti system has been found to be duplicative, fragmentation, insufficient co-ordination. The intention of this Circular 88 project has been to bring rationality, integration and co-ordination. It also lays the case for a common shared platform for intergovernmental reporting for cities. The city has adopted the MFMA circular 88 indicators which are covered in business plans, IDP and are to be reported in SDBIP. Eighty five percent (85%) of all Circular 88 outcome indicators covered in either one of the strategic plans and some Circular 88 indicators are external data sources which are yet to be confirmed.

3. THE BEPP METHOD: AN OUTCOMES LED BUILT ENVIRONMENT VALUE CLAIM

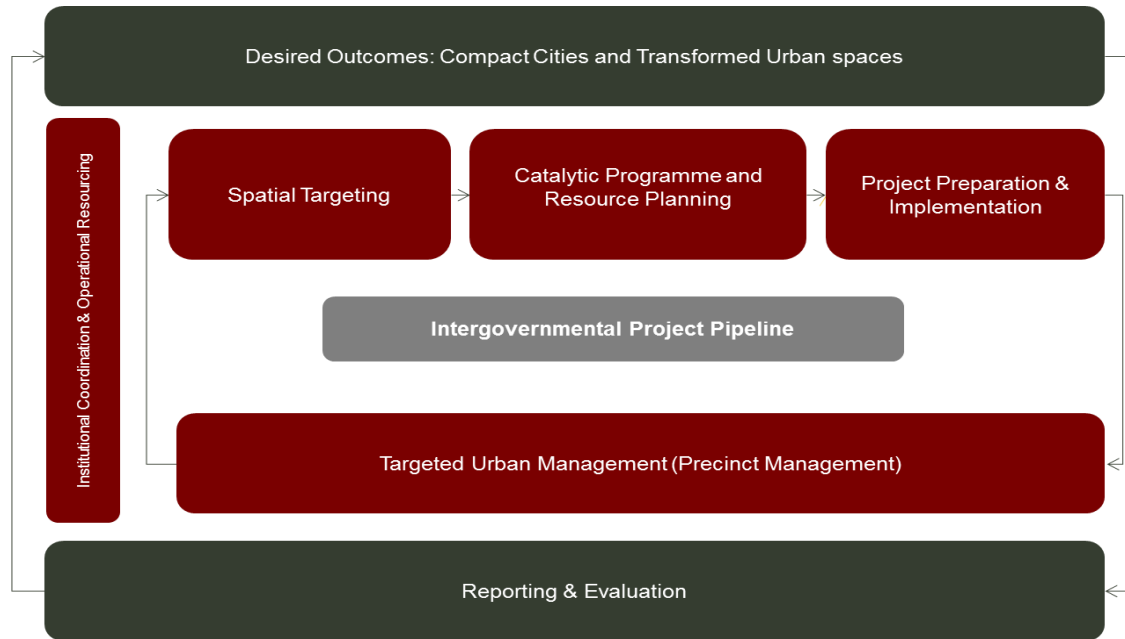


Figure 4: Built Environment Value Chain

The focus for the BEPP of the 2018/19 Medium Term Revenue and Expenditure Framework (MTREF) is to strengthen the overall application of the Built Environment Value Chain (BEVC) through:-

- a. Clarifying development objectives, strategies and targets relative to agreed productivity, inclusion and sustainability outcomes.
- b. Consolidating spatial planning, project preparation and prioritisation via transit-oriented development plans and programmes in prioritised integration zones.
- c. Establishing an actionable intergovernmental project pipeline of catalytic projects via a portfolio management and project preparation tools.
- d. Clarifying long term financing policies and strategies for sustainable capital financing of the intergovernmental project pipeline.
- e. The content of each section is presented to address concerns and to provide particular information requested by National Treasury.

3.1 Institutionalisation of the BEPP Method



Figure 5: Planning, budgeting and implementation process

Figure 5 above illustrates the manner at which the city links planning and budgeting to achieve desired outcomes. The city begins with the planning phase where all role players in the project including implementing agencies come together to formulate sound programme implementation plans which covers all the gaps that might be experienced during the rolling out of plans. Gaps identification process is done through indebt analysis of challenges of similar projects which have been rolled out in the past. The planning process is followed by the facilitation to ensure that all the implementing agencies carry out the implementation as envisaged in the planning process. The last step to this process is urban management which basically refers to the long term management and running of facilities implemented as a result of the planning process. It is critical to have a direct link between planning, budgeting and outcomes if the city's long term objectives are to be realised.

Planning is implemented through the capital budgeting process through its prioritisation of projects linked to the spatial plans. All the plans (including financial plans) are guided by the City's strategic vision contained in the SDF. The implementation of plans is facilitated by the development planning department.

BEPP Process

This phase entails the approval of the 2018/19 BEPP, IDP Review, the Budget, Municipal Entities Business Plans, the Institutional Service Delivery Budget Implementation Plan (SDBIP) and Tariffs by Mayoral Committee and Council. COJ’s BEPP approval process is aligned to City’s Budgeting process to ensure the alignment with the Budget, IDP and MSDF.

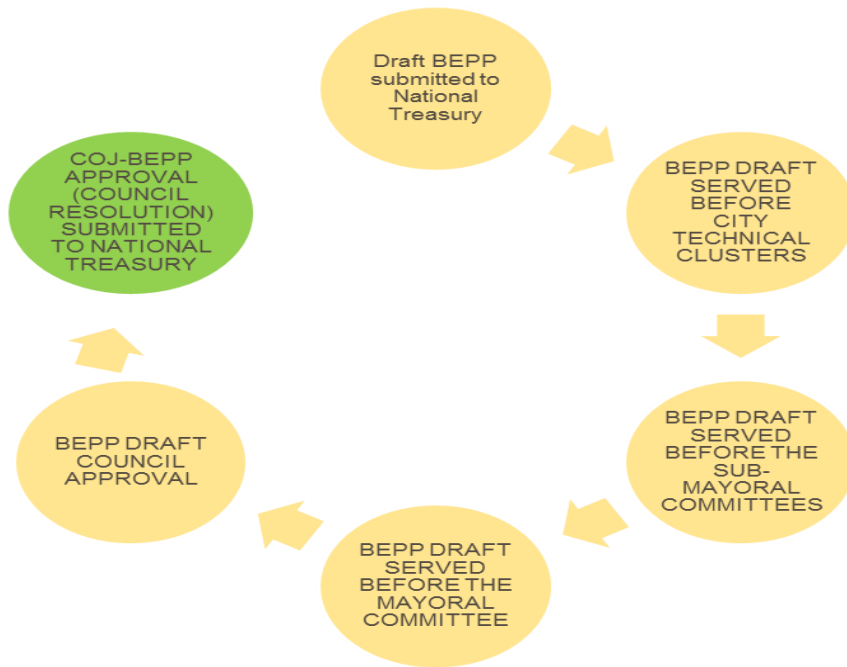


Figure 6: CoJ BEPP approval process

Summary of the 2018/19 City of Johannesburg BEPP process¹

The table below provides the timeframes for the key milestones and process within the work-streams outlined above

Key milestones and Processes	Timeframes
Human Settlement Intergovernmental and Budgeting (National Treasury Workshop)	23-25 August 2017
National Treasury joint session on Built Environment Grants Frameworks between national sector departments and Metros	Mid-September 2017
National Treasury Planning Alignment Task facilitated planning meetings between sector departments/SOEs/Provincial Governments and Metros	September 2017
National Treasury PTNG Hearings	September-October 2017
Review of SDF guidelines, production of Technical notes and knowledge products relating to BEPP and Planning Reforms	September-October 2018

¹ The dates are subjected to slight alterations.

Submission of Process Plan for formulation of BEPP 2018/19 MTREF	2 October 2017
CoJ workshop with CSP coordinator (National Treasury) on the tracking of catalytic programmes and projects	October 2017
Medium Term Budget Policy Statement	25 October 2017
Preliminary allocation letters issued to Departments by National government	27 October 2017
Budget Lekgotla I	7-9 November 2017
BEPP technical committee	7 November 2017
Technical Budget Steering Committee (<i>TBSC Hearings: IDP, Budget, Tariff, SDBIP and BEPP</i>)	27-28 November 2017
Final allocation letters issued to Departments by National government	
Budget Steering Committee (<i>BSC Hearings: IDP, Budget, Tariff, SDBIP and BEPP</i>)	17-18 January 2018
Mid-year budget review	01-02 February 2018
CoJ Mid-year Review	26 January 2018
BEPP technical committee(Preliminary)	February 2018
Budget Lekgotla II	13-15 February 2018
Mayoral Committee (Table IDP, Budget, Tarrifs, SDBIP and BEPP)	8 March 2018
Council (Table IDP, Budget, Tarrifs, SDBIP and BEPP)	20 March 2018
Draft BEPP submission	31 March 2018
Budget Benchmarking Meeting	17-18 April 2018
Incorporation of benchmarking comments/ Draft BEPP comments	April 2018
Draft BEPP presented to CoJ Technical Cluster	9 April 2018
Governance Sub-Mayoral Committee: draft BEPP, final draft Budget, IDP and Tariffs	23 April 2018
Human and Social Development Sub-Mayoral Committee: draft BEPP	23 April 2018
Sustainable Services Sub-Mayoral Committee: draft BEPP	24 April 2018
Economic Growth Sub-Mayoral Committee: draft BEPP	24 April 2018
Mayoral Committee (Final IDP, Budget, Tarrifs, SDBIP and BEPP)	8 May 2018
Council(Final IDP, Budget, SDBIP and BEPP)	25 May 2018
Council approved BEPP	31 May 2018
Annual BEPP Evaluation Workshop	28 June 2018
2018/19 BEPP Evaluation Report finalised	31 July 2018

Table 5: timeframes for the key milestones and process within the work-streams

SECTION B

3.2 SPATIAL PLANNING AND PROJECT PRIORITISATION

a) Central Business District/ Inner city

The CBD remains an important area of economic, residential and social interaction catering for a diverse range of incomes, cultures and races – incorporating both the formal and the informal sector in complex relationships. The key policy guiding the City’s engagement with the CBD is the Inner City Road Map. The Inner City has had a relatively short but turbulent history. It has witnessed gold rushes, building booms, decline and capital flight, and large-scale regeneration. Today the inner city is a crucial hub within a sprawling metropolis of multiple centres. The role of the Inner City remains the key metropolitan node, as confirmed in the CoJ SDF 2040.

The inner city is unique. It is already a place of opportunity for the poor and the wealthy for income and housing, and is to a large extent a place of inclusivity, as an example to other Cities in South Africa. It attracts great investment from both private and public sectors, and is a retail and transportation hub serving a market that stretches across the sub-continent. This role as a place of opportunity for informal traders to Johannesburg Stock Exchange listed companies is critical to the growth of the South African economy. This inter-relationship between small enterprises and large must be protected to ensure a continued vibrant economy.

However, the inner city also faces severe challenges. Despite positive advances in many precincts, the issues of crime, grime and urban management still need urgent attention. The prevalence of bad buildings, where management and maintenance of buildings is severely lacking, remains one of the root causes of these issues. These bad buildings are one of the only places in the inner city that poorer residents can find afford to live, but in inadequate housing conditions. Aside from the lack of decent inclusionary housing, other major challenges include unsustainable and underperforming urban services like electricity and sewerage, and an undersupply of public space, education and health facilities. In dealing with these issues the city of Johannesburg has introduced ‘*Buya mtheto*’ programme as well as the ‘*A re sebetseng*’.

The Inner City Transformation Roadmap is the statement of intent for Inner City and the approved policy of the City to guide the regeneration of the Inner City. It puts forward a clear vision, aligned with the City’s Growth and Development Strategy (GDS). Several long-term outcomes make up the vision for the inner city, represented as five ‘pillars’ (see section 4, below). Each pillar has clear outcomes and outputs, each of which has a lead City department or unit. The Roadmap Implementation Plan is the extensive list of these outputs, and is the working document for initiating and tracking the outputs set out by the Roadmap. The Implementation Plan

Vision for the inner city

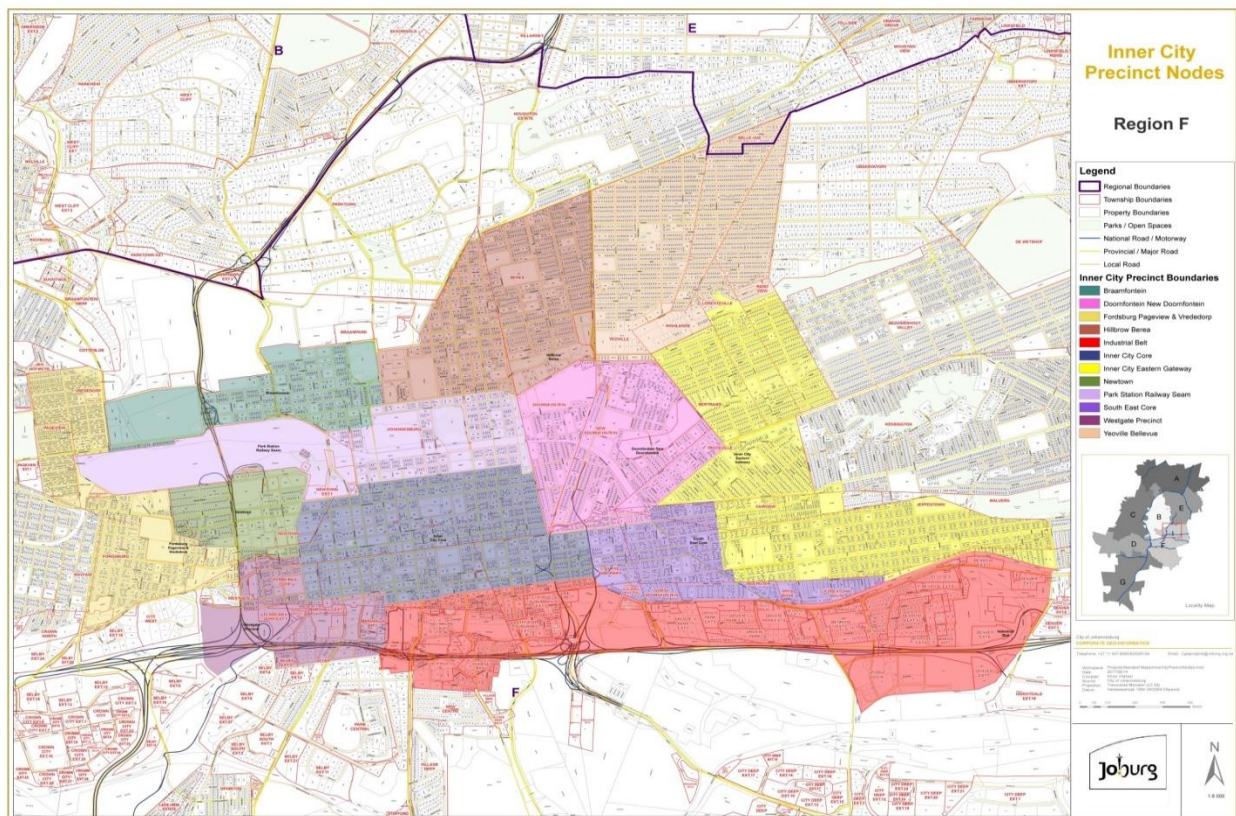
A place of opportunity: a well-governed, transformed, safe, clean and sustainable inner city of Johannesburg, which offers high quality, sustainable services; supports vibrant economic activity; and provides a welcoming place for all residents, migrants, commuters, workers, traders, investors and tourists.

consolidates capital interventions, and strategies for urban management and municipal services, focused in priority areas.

The Inner City Roadmap Office oversees implementation, and is based in the Office of the City Manager.

- **An Area-Based, Partnership Approach**

The City and key private stakeholders have planned, upgraded and managed several precincts in the inner city through an area-based approach. This focused attention has been highly successful. Inner City is officially defined by the Urban Development Zone (UDZ). Property developers receive tax relief if building within this boundary.



Map 4: Map showing the Urban Development Zone, the official boundary of the inner city and the twelve precincts of the Inner City.

An analysis has been conducted on all precincts in the Inner City, as illustrated in the table below. The table below (Table 4: Current priority precincts, the challenges and priority spatial interventions) outlines key interventions required in each precinct of the Inner City over the medium term. There are three priority precinct that have been put forward in order to ensure a co-ordinated implementation across departments to maximise outcomes, namely The Inner City Eastern Gateway, which includes Bertrams, Jeppestown, Troyeville, Greater Ellis Park and New

Doornfontein; Park Station Railway Seam; and The Westgate Precinct. The rationales for the selection of three precincts are as follows:

- Planning and Intelligence in place;
- Ripe for re-development and investment;
- High impact – favourable yields; and
- Market is ready.

This does not mean that other precincts will not receive investment, as is currently taking place and continues to take place, but rather catalytic and co-ordinated interventions will take place in these three priority precincts as a priority. Assessment of the priority precincts will take place on an annual basis.

Table 6: Current priority precincts, the challenges and priority spatial interventions

Priority	Inner City Precincts	Location Potential	Current Performance	Appropriate Area-Based Strategy	Stage of Intervention
1	Inner City Eastern Gateway	High	Low	<ul style="list-style-type: none"> • Regeneration Strategy: <i>Aim to stimulate a market response in the Property Sector</i> <i>Employ supportive planning, institutional and fiscal tools to create certainty and market confidence</i> <i>Play a Facilitative Role for investors</i> <i>Match policy implementation timing to market Business Cycles</i> <i>Establish a project-delivery body empowered and resourced to move fast</i> 	<input type="checkbox"/> Planning – completed <input type="checkbox"/> Capital Investment <input type="checkbox"/> Development Facilitation <input checked="" type="checkbox"/> Operational Urban Management
2	Park Station-Railway Seam	High	High	<ul style="list-style-type: none"> • Growth Management Strategy: <i>Aim to mitigate the impact of crowding due to favourable location</i> <i>Manage the type, rate, extent and quality of urban growth</i> <i>Address infrastructure bottlenecks</i> <i>Improve Public Transport Level of Service and Pricing</i> <i>Use Public Land to address gaps and ease congestion</i> <i>Stricter by-law enforcement and planning control</i> 	<input type="checkbox"/> Planning - Review previous planning done to inform further Capital Investment <input type="checkbox"/> Capital Investment <input type="checkbox"/> Development Facilitation <input checked="" type="checkbox"/> Operational Urban Management
2	Inner City South West	High	Low	<ul style="list-style-type: none"> • Regeneration Strategy: <i>Aim to stimulate a market response in the Property Sector</i> <i>Employ supportive planning, institutional and fiscal tools to create certainty and market confidence</i> <i>Play a Facilitative Role for investors</i> <i>Match policy implementation timing to market</i> 	<input type="checkbox"/> Planning Continue planning... <input type="checkbox"/> Capital Investment <input type="checkbox"/> Development Facilitation <input checked="" type="checkbox"/> Operational Urban Management

Priority	Inner City Precincts	Location Potential	Current Performance	Appropriate Area-Based Strategy	Stage of Intervention
3	Fordsburg, Vrededorp & Pageview	High	Low	<ul style="list-style-type: none"> Regeneration Strategy - <i>Aim to stimulate a market response in the Property Sector</i> <i>Employ supportive planning, institutional and fiscal tools to create certainty and market confidence</i> <i>Play a Facilitative Role for investors</i> <i>Match policy implementation timing to market Business Cycles</i> <i>Establish a project-delivery body empowered and resourced to move fast</i> 	<input type="checkbox"/> Planning – Completed <input type="checkbox"/> Capital Investment <input type="checkbox"/> Development Facilitation <input type="checkbox"/> Operational Urban Management
3	Inner City Central Core	High	High	<ul style="list-style-type: none"> Growth Management Strategy <i>Aim to mitigate the impact of crowding due to favourable location</i> <i>Manage the type, rate, extent and quality of urban growth</i> <i>Address infrastructure bottlenecks</i> <i>Improve Public Transport Level of Service and Pricing</i> <i>Use Public Land to address gaps and ease congestion</i> <i>Stricter by-law enforcement and planning control</i> 	<input type="checkbox"/> Planning – Ongoing <input type="checkbox"/> Capital Investment – Ongoing <input type="checkbox"/> Development Facilitation - Active <input type="checkbox"/> Operational Urban Management
4	Braamfontein	High	High	<ul style="list-style-type: none"> Growth Management Strategy <i>Aim to mitigate the impact of crowding due to favourable location</i> <i>Manage the type, rate, extent and quality of urban growth</i> <i>Address infrastructure bottlenecks</i> <i>Improve Public Transport Level of Service and Pricing</i> <i>Use Public Land to address gaps and ease congestion</i> <i>Stricter by-law enforcement and planning control</i> 	<input type="checkbox"/> Planning – Ongoing <input type="checkbox"/> Capital Investment – Ongoing <input type="checkbox"/> Development Facilitation - Ongoing <input type="checkbox"/> Operational Urban Management
4	Hillbrow & Berea	High	High	<ul style="list-style-type: none"> Growth Management Strategy <i>Aim to mitigate the impact of crowding due to favourable location</i> <i>Manage the type, rate, extent and quality of urban growth</i> <i>Address infrastructure bottlenecks</i> <i>Improve Public Transport Level of Service and Pricing</i> <i>Use Public Land to address gaps and ease congestion</i> <i>Stricter by-law enforcement and planning control</i> 	<input type="checkbox"/> Planning - Review previous planning work done <input type="checkbox"/> Capital Investment - Review gaps <input type="checkbox"/> Development Facilitation <input type="checkbox"/> Operational Urban Management
4	Newtown	High	Medium	<ul style="list-style-type: none"> Growth Management Strategy <i>Aim to mitigate the impact of crowding due to favourable location</i> <i>Manage the type, rate, extent and quality of urban growth</i> <i>Address infrastructure bottlenecks</i> <i>Improve Public Transport Level of Service and Pricing</i> <i>Use Public Land to address gaps and ease congestion</i> <i>Stricter by-law enforcement and planning control</i> 	<input type="checkbox"/> Planning - Review previous planning work done <input type="checkbox"/> Capital Investment - Address Gaps esp. Newtown West <input type="checkbox"/> Development Facilitation –

Priority	Inner City Precincts	Location Potential	Current Performance	Appropriate Area-Based Strategy	Stage of Intervention
4	Industrial Belt	Low	Low	<ul style="list-style-type: none"> Repositioning Strategy <i>Aimed at repositioning the Economic Role of the area</i> <i>Work collaboratively with local stakeholders</i> <i>Addressing regulatory and infrastructure barriers to econ repositioning</i> <i>Ensure Land Use Rights and Land Parcel sizes are appropriate for new econ role</i> <i>City to take a leading role by injecting Public Investment to prompt the turnaround</i> <i>Addressing any prevailing blight through urban management is essential</i> 	<input type="checkbox"/> Planning - Start with Planning. <input type="checkbox"/> Capital Investment <input type="checkbox"/> Development Facilitation <input type="checkbox"/> Operational Urban Management
5	Yeoville & Bellevue	Medium	Low	<ul style="list-style-type: none"> Repositioning Strategy <i>Aimed at repositioning the Economic Role of the area</i> <i>Work collaboratively with local stakeholders</i> <i>Addressing regulatory and infrastructure barriers to econ repositioning</i> <i>Ensure Land Use Rights and Land Parcel sizes are appropriate for new econ role</i> <i>City to take a leading role by injecting Public Investment to prompt the turnaround</i> <i>Addressing any prevailing blight through urban management is essential</i> 	<input type="checkbox"/> Planning - Review previous planning work done <input type="checkbox"/> Capital Investment - Review gaps <input type="checkbox"/> Development Facilitation <input type="checkbox"/> Operational Urban Management

A key success factor in regeneration initiatives so far has been the development of partnerships for collective definition of the problems, and for the pooling of resources from the public and private sectors. The Inner City Roadmap has supported the establishment of the Johannesburg Inner City Partnership, which a broad representative group working with the City to together resolve Inner City challenges. This approach is to be entrenched in the future. Nevertheless, the challenge is to balance these outcomes, while minimising trade-offs. There has been significant criticism of several developments for forcing out the poor directly with evictions, or indirectly through a hike in the cost of accommodation, services and retail opportunities. The City will

strive to balance the outcomes found in the Clean and Safe Inner City pillar (such as addressing the issue of bad buildings) with the outcomes of the Inclusive Inner City pillar (such as facilitating the provision of appropriate affordable housing).

- **Budget**

The Inner City is the City's high priority area and the MTEF prioritises budget allocation for regeneration of the Inner City. Budgets are prepared and confirmed on an annual basis, with approval from Council, however on a board level the Inner City will receive approximately R1.5 Billion in Capital Investment over the next three years from 2018/19- 2020/21.

- **Roadmap Pillars and Key Interventions**

The City's interventions in the current term involve both capital projects and urban management strategies, working towards strengthening the five long-term outcomes or 'pillars' as set out in the Inner City Roadmap. These include:

1. Well-Governed Inner City
2. Clean and Safe Inner City
3. Sustainable Inner City
4. Productive Inner City
5. Inclusive Inner City

Interventions include large and small scale capital investments such as in the Johannesburg International Transport Interchange, further housing development of existing buildings through the Johannesburg Social Housing Company (JOSHCO) and public open space along the green link from End Street South to Pullinger Kop parks as well as re-development of Jeppe Park. While operational interventions include additional shifts for Pikitup staff to improve the cleanliness of the Inner City, interventions to improve public safety through further visible policing and CCTV systems and extended health care services at primary health care clinics. The Inner City Roadmap has some success in co-ordinating activities in the Inner City under these 5 pillars. To further these successes the Office of the City Manager put in place a more streamline institutional structure to ensure outcomes based approach to dealing with Inner City issues. This is illustrated in figure 6 below:



Figure 7: streamline institutional structure to ensure outcomes based approach to dealing with Inner City

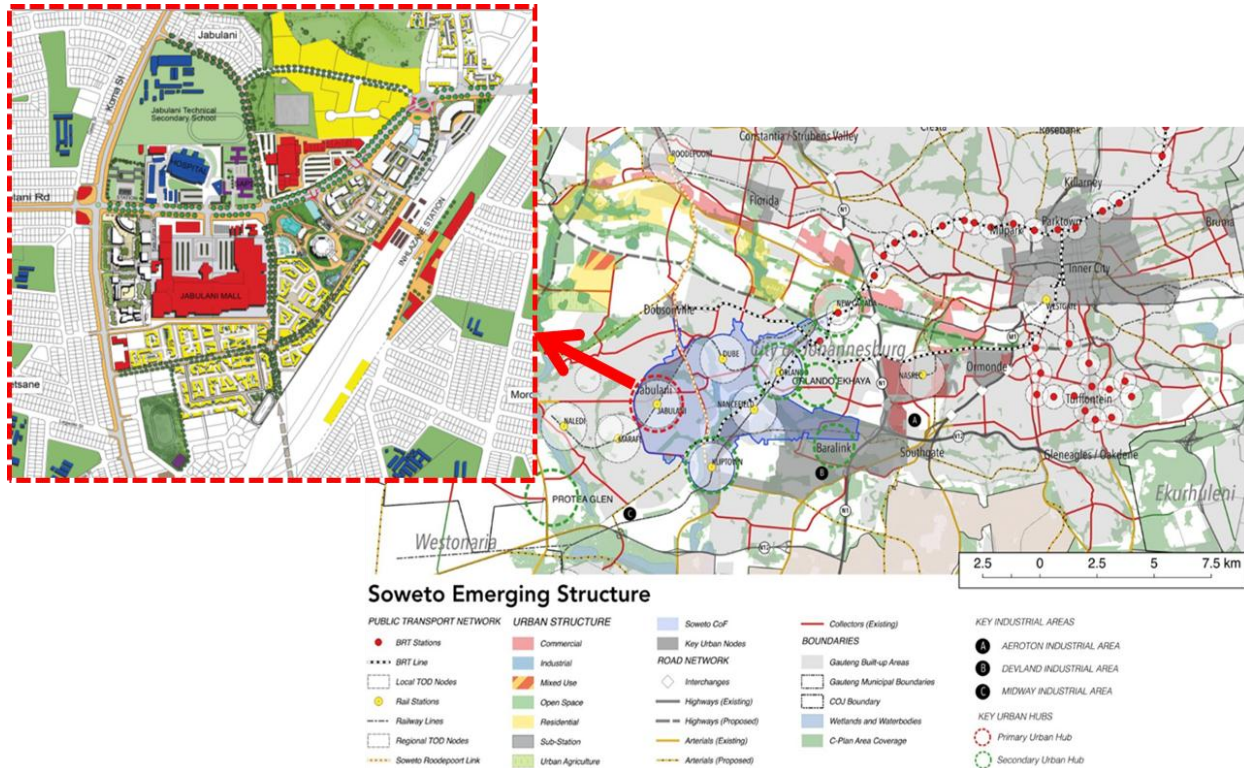
With the political will and the streamlining of institutional and reporting structures, bigger impacts on the improving the Inner City is expected. The continued transformation of the Johannesburg Inner City will not be possible without the collaboration and cooperation of key stakeholders in residents, the private sector and civil society organisations. The City of Johannesburg looks forward to strengthening these partnerships going forward, to ensure the inner city reaches its full potential as a *place of opportunity*.

b) Urban Hub

Unlocking Soweto as a True city District

Soweto is a densely populated area, housing more than a third of the city’s population with evidence of a growing middle class. The low density built form leaves spaces for densification strategies, especially around defined nodes, both mixed use and TOD. Therefore there is a need of creating Soweto into a compact principal Metropolitan sub-center. A series of Soweto’s regional connections need to be strengthened in order to connect Soweto to the metropolitan core and other sub-centres. The connection of key nodes within Soweto such as Jabulani to Kliptown and Bara Central to Nancefield station is essential in strengthening the economy and connecting people and places. The aforementioned will transform Soweto into a liveable city district that is connected internally and externally. The intended outcome is to create a strong secondary economic centre (i.e urban hub) with strong links to the main economic city centre; but in itself a place where people and jobs are in close proximity.

Jabulani



Map 5: Jabulani Cultural Precinct in Soweto

The City’s plans for the precinct are defined in detail in the Jabulani Cultural Precinct: Urban Design Report and Urban Design Framework. The City’s objectives for the future development of Jabulani are:

The creation of unique public spaces and defined walkable connections to surrounding activities in order to provide safe and secure environments for the user while emphasising and enhancing a sense of place-identity.

The Priority intervention programmes in Jabulani as defined in the Urban Design Framework are:

- Transportation - pedestrian movement; Inhlazane Train Station; taxis; bicycle lanes
- Open Space - Jabulani Amphitheatre Park; Water Tower Park; Jabulani Flats Park; pocket parks
- Retail and Commercial Opportunities – Formal and informal enterprise development
- Integration of institutional Uses within Jabulani

These priority interventions will assist in the establishment of mixed-use environments that transform the node into a sustainable, vibrant and high density zone with improved public and NMT transport connections. The aforementioned connections will further enhance push and pull factors between Jabulani, surrounding areas and the greater City of Johannesburg.

Sustainability is viewed in economic, social, environmental and physical terms, as it applies within the node and to the broader context of Jabulani. Reinforce the functional integration of major public transport points to the greater urban context as well as their effectiveness within the node.

Nancefield Transit Oriented Development

The objective of developing Nancefield station as a TOD is to realise a vibrant, economically viable urban environment; intensification of land use and residential densification; and attract private sector investment (*Figure 17: Nancefield TOD project masterplan*).

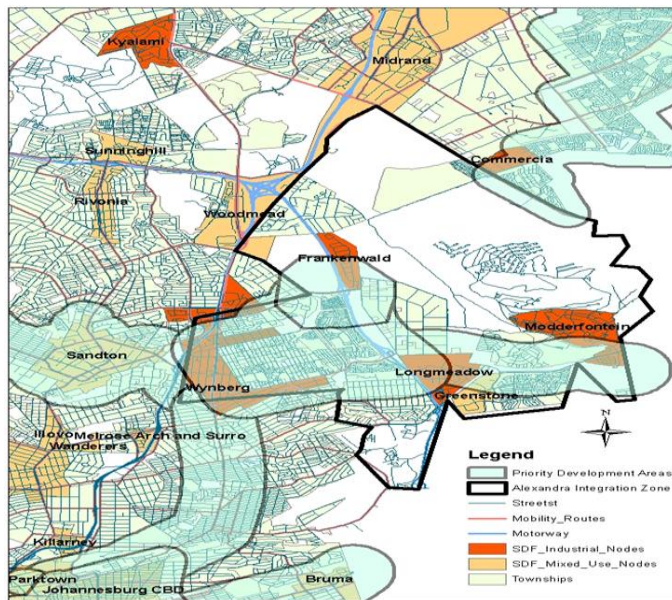


Map 6: Nancefield TOD project masterplan

The project has commenced with the implementation of infrastructure upgrades to improve movement and connectivity within the precinct and to the surrounding areas. Infrastructure upgraded include paving, safety fencing, lighting, traders’ stalls, landscaping and street furniture which has made the public environment safer for walking, trading and cycling. Other components of TOD corridor such as medium-high density housing planning is at the advanced stage. The construction of bulk engineering infrastructure to support medium-high density housing is complete.

Alexandra

Alexandra Hub includes: Alexandra, Marlboro, Far East Bank, Marlboro Station and Wynberg. It is proposed that this area be expanded to include the Farm Frankenwald, the Linbro Industrial Node, Linbro Park Agricultural Holdings, Westfield, Modderfontein Land Holdings, Buccleugh, Farm Rietfontein and Farm Waterfall holdings east of the N1 Highway (*see Error! Reference source not found. 18: Alexandra Integration Hub*). The SDF review proposes the development of this area as part of a connection to the Aerotropolis.



Key elements within this hub include:

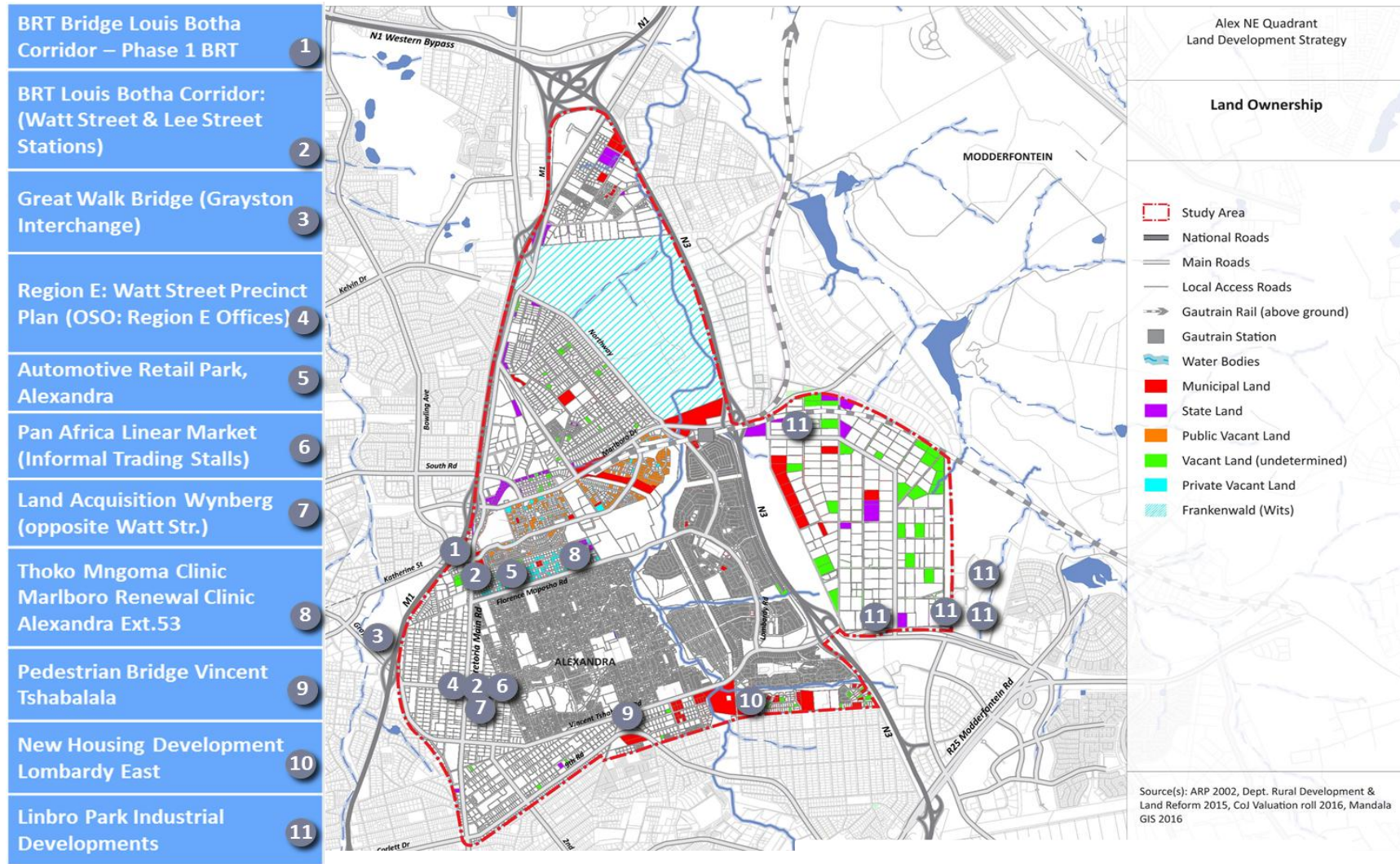
- The Louis Botha Corridor
- The proposed Randburg – Sandton – Marlboro Corridor
- Watt Street node around Rea Vaya BRT interchange
- Marlboro Station node around Rea Vaya station and social housing
- The proposed Modderfontein mixed use node

Map 7: Alexandra Integration Hub

The reasons for proposing the above include:

- Industrial areas in the vicinity are well located in relation to the Province’s network of highways and are well located to access OR Tambo Aerotropolis. Certain industrial areas have suffered due to illegal occupation of factories;
- The implementation of the Louis Botha Avenue Transit Orientated Development Corridors formerly and the subsequent Randburg/ Sandton-Marlboro corridor (with its extension to Ivory Park) will intersect the area in question increasing the potential for transit orientated development within the zone;
- In terms of integrating the dispersed urban fabric that comprise the Gauteng City Region, the development of the zone in question is critical to ensure a more coherent urban form. However to achieve this, significant public investment is required to address the barriers to this integration, in particular: the N3 Highway, the M1 Highway, the Linbro Park Landfill Site, transmission line servitudes, the Gautrain Railway Servitude and a lack of pedestrian access routes and associated facilities. Already the two new bridges over the M1 which focus on pedestrian and other NMT movements is addressing this;
- The introduction of bus rapid transit related development will improve the affordability of movement to and from this area;
- The Zone in question is the location of the last remaining large portions of undeveloped land in the east of the City. It is critical that this land be developed in a sensitive manner and integrates new development with the existing urban fabric;
- In addition the zone is the location of large public and private institutions and land owners. The potential to negotiate public/private partnerships for the development of the area is higher than in other areas within the City; and

- The development of the integration zone could better integrate Ivory Park with the City of Johannesburg through the extension of Marlboro Drive through the Modderfontein land holding.



Map 8: Location of projects (CoJ & Private) within greater Alex

3.2.1 Integration Zone

Integration zone can be defined as conglomeration of all the priority areas within the City. These zones are characterised by high intensification of land uses and medium - high density residential developments associated with Transport Oriented Development Precincts as well corridors defined in various City's spatial plans. The previous BEPP's identified the City's development corridors as the primary network including the Transit Orientated Development Corridors and the Mining Belt as the integration zones.

In interpreting municipal plans, specifically the spatial plans of the City as captured in the SDF in terms of the Urban Network Model, it is acknowledged that the spatial realisation of the SDF is too detailed for prioritising medium to long term qualitative change in the built environment. To this end the Priority Transformation Areas, previously known as Capital Investment Priority Areas (CIPAs), (see *Map 5: Economic Zones, Priority Development and Integration Zones*) were developed. The Priority Transformation Areas define the primary network for the City. The city's Priority Transformation Areas provides the basis for prioritising and re-directing the City's capital budget for the medium to long term. The Priority Transformation Areas are:

- Inner City (the CBD);
- Transit Orientated Development Corridors (ToD) with a focus on the Louis Botha, Perth-Empire, Turffontein and Mining belt Corridors as well as the East West corridor from O R Tambo in the longer term;
- The mixed-use and industrial nodes;
- The Marginalised/Deprived former black townships of Ivory Park, Diepsloot, Alexandra, Soweto and Orange Farm where the highest levels of deprivation and the highest population densities are located within the City (the secondary network); and,
- Informal Settlements.

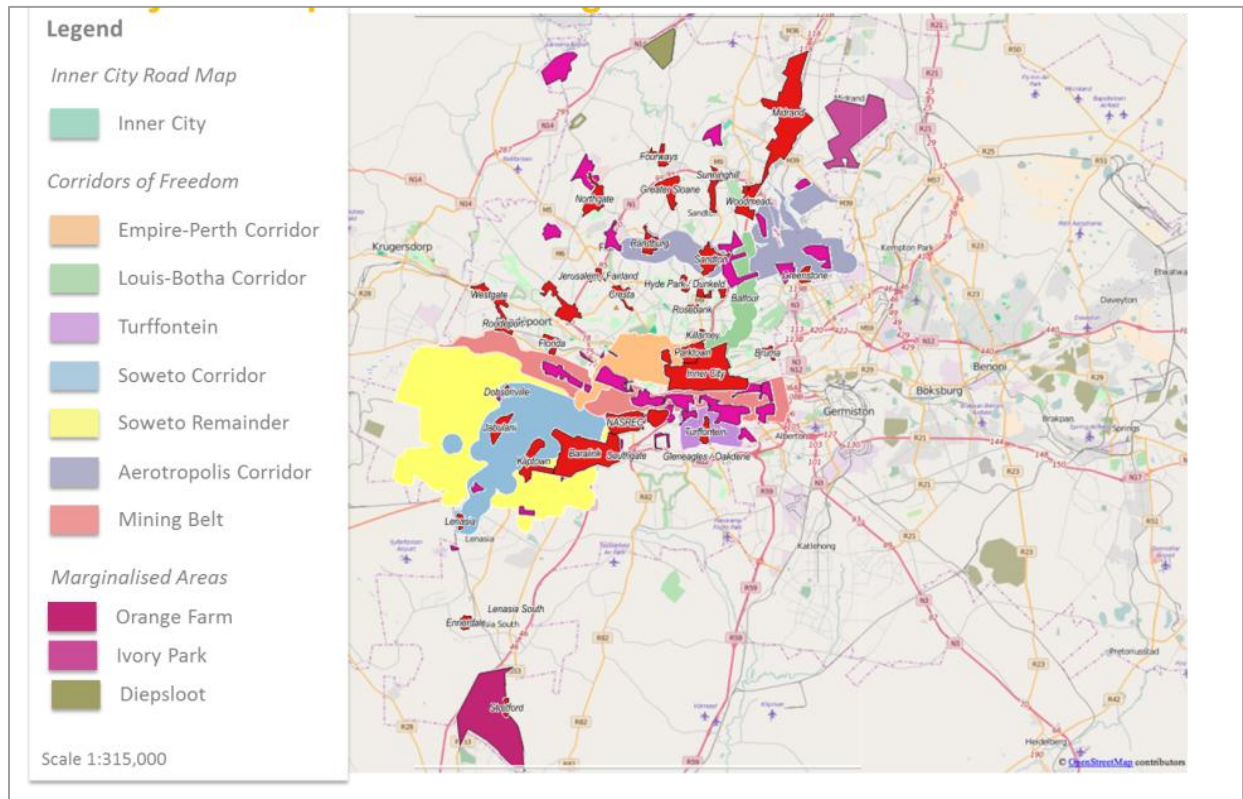
Detailed plans for the integration zones have been compiled in the form of Strategic Area Frameworks (SAFs) as detailed below. The City has acquired land along transport routes and stations, within corridors, in order to achieve its vision of high intensity mixed use developments.

(i) Improve infrastructure capacity for development in strategic growth areas

This category of investment targets the transformation zones and strategic economic nodes to ensure adequate capacity for development to accommodate urbanisation and economic growth needs. Development programmes in the transformation zone require additional capacity to implement the respective development strategies and accommodate intensification and densification and to ensure better functionality of the urban system.

The transformation areas are the main focus for future development through urban intensification and expansion and thus are high priority areas for growth enabling capital investment. Each of the programmes that make up the transformation zone already have detailed development frameworks and precinct plans to guide capital investment. Investment in

these areas covers the full range from engineering infrastructure to social infrastructure and facilities. Transit Orientated Development Corridors (formerly The Corridors of Freedom) and Inner City have clear investment programmes, with funding allocations in the MTEF, that will ensure the desired urban structure and developmental outcomes are achieved.



Map 9: Economic Zones, Priority Development and Integration Zones

Another priority for intensification and expansion is investment to support economic growth centres in terms of the Johannesburg Economic Strategy. Investment in economic infrastructure will support and safeguard the current economic backbone of the city and ensure growth and expansion possibilities and the creation of jobs. The investment focus on the nodes is also of strategic importance for the deprivation area programme to ensure more economic growth and job opportunities in close proximity of economically marginalised areas. Where economic nodes form part of the transformation zone such investment is already integrated in the respective development programmes.

There will never be adequate funding available to cover all the competing infrastructure and development needs across the whole city. Thus the JSIP and the associated capital investment planning process assist the city to find the best balance between the different competing interests and ensure that the optimal mix of investment to secure and improve the current asset base and achieve the objectives for upgrading and development of deprived areas and future development aspirations and needs of the city.

Even though broad priority areas for investment have been identified, funding availability, economic growth rates and practical considerations require that development and growth have to be managed. The concept of growth management firstly requires that growth and investment have an area based focus in order to consolidate a range of investments that will have a catalytic effect. This area based focus has already been defined in the detail plans that support the transformation zone. The second implication of growth management is the phasing of growth and the timing of investment that will release new growth opportunities. It is therefore important that growth trends be monitored and interpreted to influence policy and investment decisions. Growth management is also linked to the SDF development indicators that will provide a measure of the success in relation to the intended development outcomes and targets. This would then allow for future adjustments of investment policy to be more responsive to prevailing conditions and development objectives.

The SDF integrates all the urban components of infrastructure, transport, housing and economic development to provide the basis for targeted capital investment to achieve current and future development outcomes and targets.

(ii) Possible Incentives and Institutional Mechanisms in Corridors

Transit Orientated Development Corridors is defined as a programme through which the City will use *public investment in transportation, engineering and social infrastructure, administrative levers* (such as policies and incentives) to directly intervene in the locational decisions that are made by both the state and the private sector, to reconfigure the City's urban form.

Possible Incentives and Institutional Mechanisms in Corridors

Whilst the issue of incentives to promote intensification and redevelopment within the Transit Orientated Development Corridors are still to be developed further, best international practice suggests a range of incentives that have been used internationally as a means of promoting development:

- International Best Practice Inclusionary Housing Incentives
- Tax incentives for the construction of affordable housing (US)
- VAT reduction on renovation of affordable housing (UK)
- Provide affordable housing on non-residential land (London)
- Density bonuses (US)
- Decreasing administration costs, regulations and processing times (land use planning processes) (Malaysia and Canada)
- Direct subsidies and grants (Malaysia)

The aforementioned incentives have attracted developers to develop in the Corridors. For example, Louis Botha Avenue is seeing a new boom of affordable housing developments that are taking place in Houghton Estates, Orange Groove, Orchards, Rouxville, Highlands North,

Bramley and Kew with the aid of the Johannesburg Development Agency and Development Planning introducing developers (refer to pg. 149 of 2017/18 BEPP for possible Incentives for Transit Orientated Development Corridors)

3.2.1.1 Louis Botha Corridor

This corridor connects the Inner City (CBD), Alexandra and Sandton. The corridor is located in the central eastern area of the City; primarily in Administrative Region E. In terms of the Strategic Area Framework the plan identifies priority precincts and projects. The Corridor is focused on Louis Botha Avenue, which becomes Old Pretoria Main Road north of Alexandra.

The Louis Botha Strategic Area Framework is the City's Guide for the short to medium term development of the Corridor. The priority precincts comprising of mixed nodes proposed by the Louis Botha Strategic Area Framework are: Marlboro, Wynberg, Balfour park and Orange Grove (See *Figure 8: Priority Development Areas within the Louis Botha Corridor*). These are mixed nodes located along the Louis Botha Corridor. These precincts are located in the vicinity of proposed BRT Stations. It is in these areas where intensification of land uses (such as residential, economic and social uses) are encouraged the most.

The key interventions planned for the corridor in the short to medium term are:

- Infrastructure capacity for densification
 - Power- R75,000,000.00
 - Water- R65,000,000.00
 - Sewer- R25,000,000.00
 - Roads- R32,953,800.00
- Transport infrastructure (Bus Rapid Transit infrastructure for Louis Botha) including the Watt Street interchange and Freedom walk at Wynberg will cost approximately R2 billion, this project is to be funded out of the Public Transport Network Grant (PTNG)
- Patterson Park redevelopment and facilities – R32 million
- Marlboro Housing – R414 million

The Bus Rapid Infrastructure for this corridor is currently being implemented. A detailed list of projects for the Louis Botha corridor for the MTEF is detailed in section D.

Main Objective of the Corridor

The main objectives of the current initiative is to optimise development in and around high intensity movement corridors, to create more inclusive and accessible opportunities for the residents of Johannesburg and create economies of scale that are attractive to investors. The future vision is premised largely on theories and best practices around the notion of Transit Oriented Development of TOD, which seeks to create urban spaces with a vibrant mix of high density residential developments, office, retail and recreational spaces within walkable precincts anchored by transit facilities, serviced by high quality social amenities.

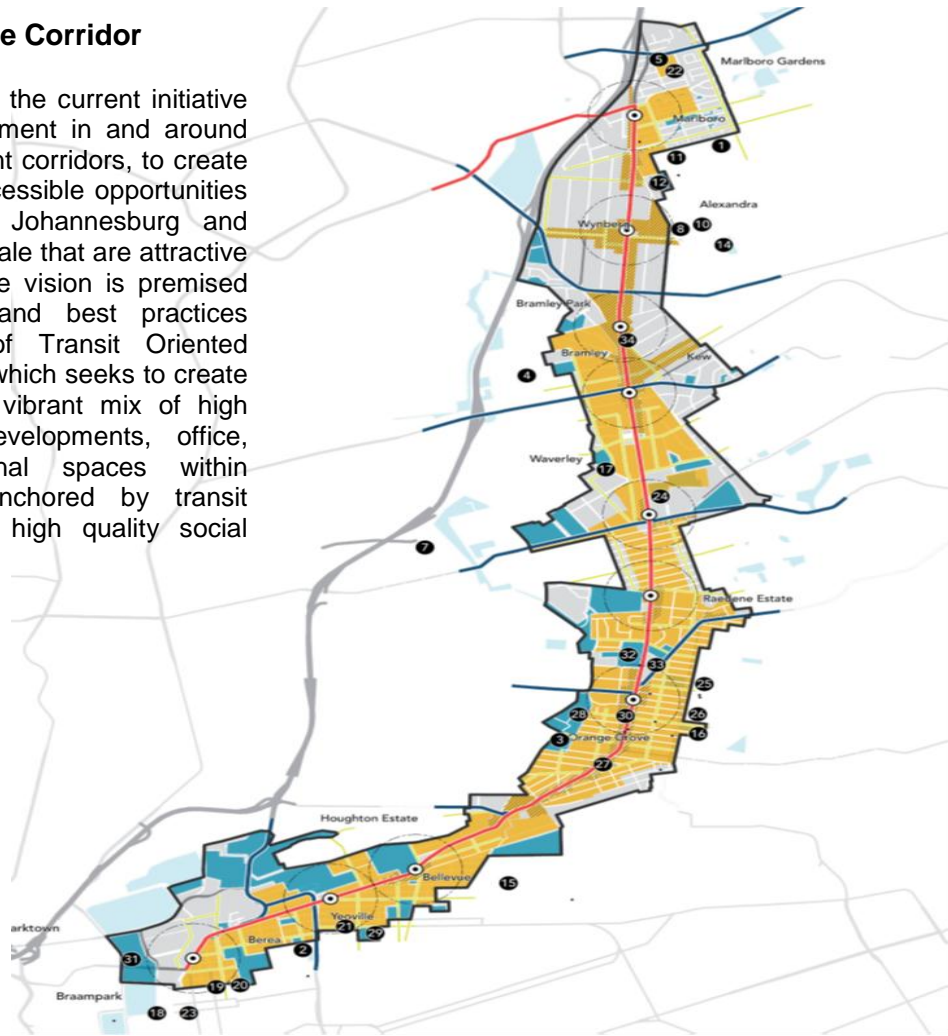


Figure 8: Priority development areas within the Louis Botha Corridor

Projects within the corridors:

- Balfour Park Precinct Plan Kick Start Zone
- The Alexandra Great Walk
- The Marlboro/Alexandra Automotive Hub
- Esselen clinic
- Orchards Clinic
- Paterson Park: Various Developments
- Watt Street Interchange

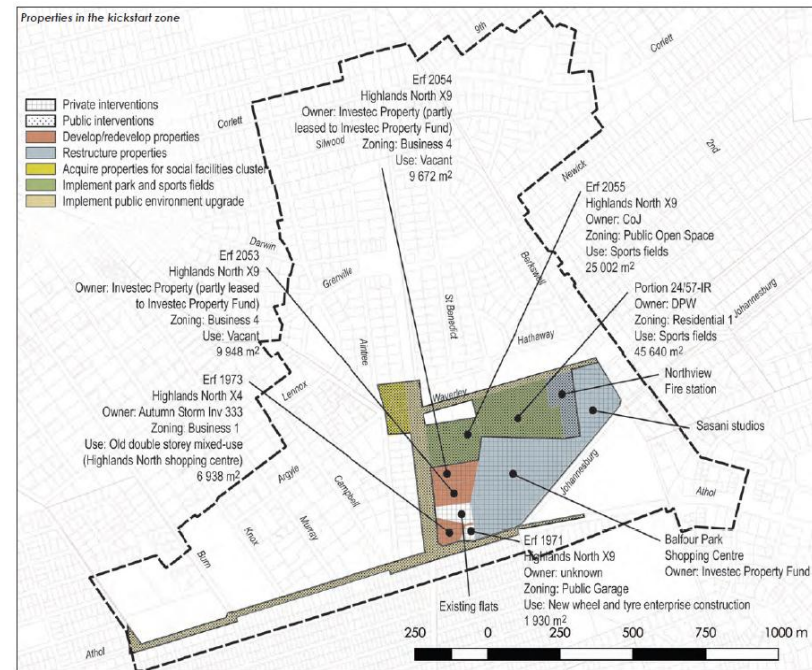
BALFOUR PARK PRECINCT PLAN KICK START ZONE

Promoter/Project Owner: City of Johannesburg & JDA

Budget: R1.5 million

Status: in process. Designs to be finalised by end of May 2018

This project focuses on public environment upgrades as identified in the Balfour Park Precinct plan along Athol St and Louis Botha Ave centred around the BRT station at this junction. The aim is to make the area a walkable, pedestrian oriented environment. The project incorporates a number of professionals that are conducting studies on traffic impact, pedestrian flow, how people use the spaces along these routes, and the creation of new public spaces along the route. A round of public participation with key stakeholders was conducted in June 2017 and another round with the proposals as well as public art inputs will commence January 2018. This projects is adding value to the community as they have been involved in the conceptualization and final outcome of the project



THE ALEXANDRA GREAT WALK

Promoter/Project Owner: City of Johannesburg & JDA

Budget: R130 million

Status: in process. Finalised March 2018

This project focuses on pedestrian movement between Alexandra and Sandton - this eliminates vehicular to pedestrian conflict. The community is receiving the projects well as it shortens the distance they have to walk to Sandton Central, creates safer pedestrian spaces and provides for alternative modes of transportation.



THE MARLBORO/ALEXANDRA AUTOMOTIVE HUB

Promoter/Project Owner: City of Johannesburg DED & JDA

Budget: R13 million

Status: in process. Estimated completion time, June 2018

The development of the Alexandra Automotive Industrial Node is modelled on an industrial cluster model. A typical establishment and a vibrant successful motor industry cluster, comprising of motor dealers, fitment centres, spares shops, glass fitment, panel beaters, auto electrical, workshop, licensing and licence plates, upholsterers, a petrol station and fuel depot. The project will provide a range of automotive services. The aim is to create quality, sustainable jobs and develop viable small businesses. Encourage private sector investment in a strategic sector of the economy, and act as a catalyst for the industrial regeneration of the township. To unpack potential that will stimulate local economic development by offering employment opportunities to the residents of the neighbouring low-income township of Alexandra

The building of local businesses will attract the development of infrastructure in the township.



ESSELEN CLINIC

Promoter/Project Owner: City of Johannesburg & JDA

Budget: R18.9 million

Status: Complete

The objective is to transform the way Esselen Clinic delivers health care to the community, hence we need to upgrade the building, reorganise the space, as well as put in place new facilities.



PATERSON PARK: VARIOUS DEVELOPMENTS

Promoter/Project Owner: City of Johannesburg, City Parks, JPC & JDA

Budget: +/- R95.5 million

Status: projected end date December 2022

Paterson Park is a vast municipal owned property that is approximately 13 hectares and is currently being redeveloped to include a range of mixed uses.

The aim for this area is to create a vibrant high density mixed-income precinct within high quality public environment

Residential densities range from 250 to 600 du/ha with heights varying from 2 to 12 storeys. Majority of the development will be social housing, however Victoria Ext 3 will be reserved for market related housing development with 20% inclusionary housing.

The following activities are currently underway on the site:

- Construction of social facilities and infrastructure
- Finalisation of town planning applications to finalise land use rights and tender out some of the residential components
- Relocation of depots currently on the site in order for land release for mixed-use and residential developments
- Upgrading of main park as well as Short Street park and exposing of stormwater channel (to be completed June 2018)
- Public environment upgrades to complete precinct, including links to Grant Avenue

Paterson Park Regional Context

CURRENT DEVELOPMENTS



Local Initiatives

1. Proposed residential densification: Louis Botha Corridor of Freedom
2. BRT mixed use node development
3. New Community Centre
4. Parkland Area: Redevelopment & Upgrading of Paterson Park
5. Residential densification and retaining approximately 40% as a public park
6. Mixed use development, including residential
7. Houghton development – apartments and hotel
8. Orchards Clinic
9. Grant Avenue High Street upgrade



WATT STREET INTERCHANGE

Promoter/Project Owner: City of Johannesburg, JPC, JRA & JDA

Budget: +/- R 161 921 000

Status: undergoing town planning application. Plan to break around end of 2018

The aim is to create a vibrant public space environment which:

- Provides walking and cycling facilities within proximity of the interchange –integrating with “The Great Walk”
- Provide an underground public transport interchange – BRT system
- Provision of a mixed use development- offices, apartments and retail
- To ensure the development is easily accessed by walking/cycling and through public transport
- To revitalize space by providing different land uses on the identified project which will result in sustainable environmental, social and economic spaces
- Size of the subject area is 2.7ha located along the Louis Botha Corridor at the gateway into Wynberg and Alexandra area

The main challenge experienced on Watt Street Interchange is that of power capacity. There is insufficient power capacity to support both the private and public developments on both portions of the land. There has also been an issue of the town planning process, that of servitudes that ought to be cancelled and rezoning process. However a conclusion was reached between the land use department and the private developers on a way forward that benefits all which are involved.



Proposed Watt street interchange development



3.2.1.2 Empire Perth Corridor

The Perth Empire Corridor connects the CBD and Soweto - the largest collective of former black townships in the City- to the south-west. The Corridor follows Empire Road – Stanley Avenue – Kingsway – Perth Road – Harmony Street – Fuel Road – Commando Road – New Canada Road – Main Road (Figure 10: Proposed Perth/ Empire Corridor Strategic Area Framework identifying key features of the corridor).

The Empire - Perth Development Corridor is one of the “TOD Corridors”, that set out to provide residents and travellers freedom of choice, freedom of movement, and most importantly, connections to employment opportunities and economic freedom. The objectives of the corridor are to:

- Create safe pedestrian and cycle crossing across a very busy intersection: Objective not achieved yet on current intersection location.
- Connectivity to the surrounding areas to create walkable neighbourhoods: Objective achieved.
- Serve as landmark and the creation of a “special place” along the Empire-Perth Development Corridor: Objective not achieved yet on current intersection location.
- Attract a land use response to the pedestrian movement and transform to provide: Objective not achieved yet on current intersection location.
- Activation along the main walking lines: Objective not achieved. Partly achieved – There has been some informal activation which is not a result of the bridge concept.

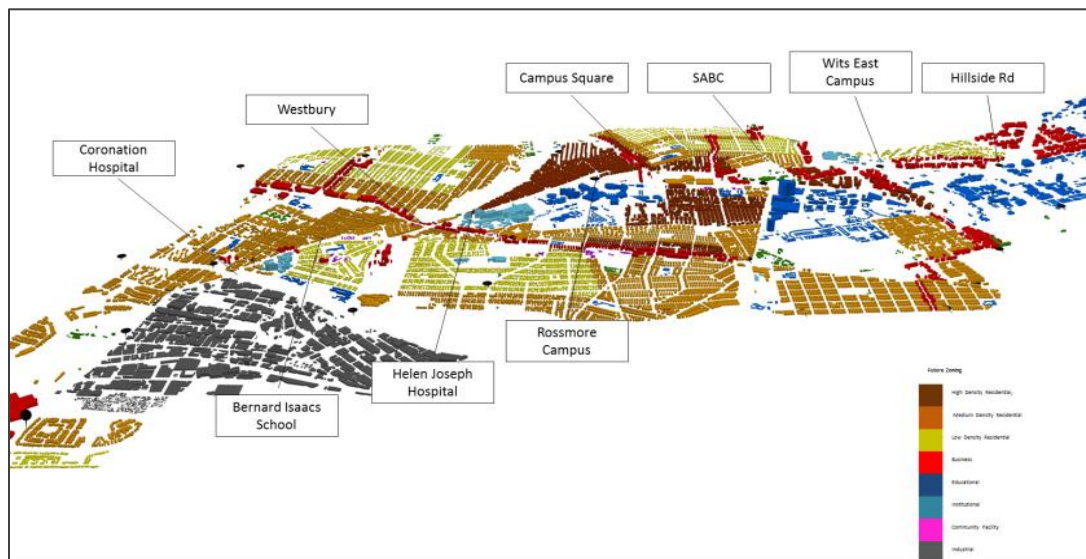


Figure 9: Proposed Perth/ Empire Corridor Strategic Area Framework identifying key features of the corridor.

Nodes within this corridor include Parktown, Auckland Park (including Melville), Milpark, Brixton, Martindale and Industria as well as other neighbouring industrial nodes (e.g. Croesus).

The area is characterised by institutions that are critical to the City, the Country's economy and society. These include the University of Witwatersrand; SABC; the University of Johannesburg (Auckland Park Campus); Helen Joseph Hospital and Coronationville Hospital. The corridor also includes a number of poor communities situated in two informal settlements: Westbury, Pennyville and Noordgesig.

The RSDF: Region B and Perth/Empire Strategic Area Framework is to guide the City's development approach to the area. The proposed 'basket' of service interventions is intended to support the strategic intensification of land uses (such as high residential densities, economic and social services) within the Corridor.

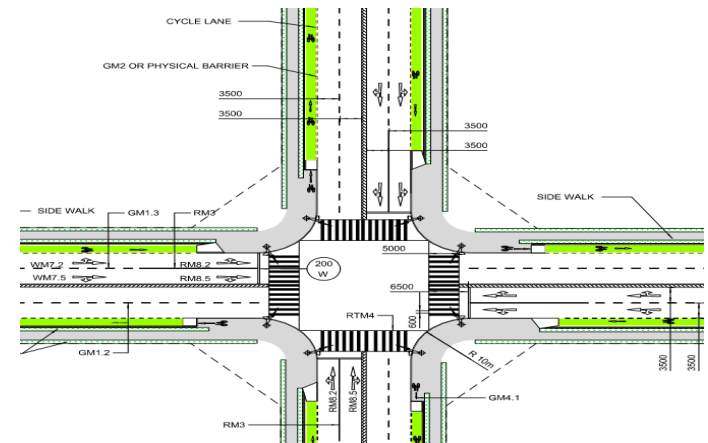
Key Projects required for the corridor to realise its development potential include:

- Increased Infrastructure capacity for densification
 - Power- R190,060,000.00
 - Water- R40,000,000.00
 - Sewer- R20,000,000.00
 - Roads- R126,600,200.00
- Westdene dam Redevelopment – R21,970,000.00
- Westbury redevelopment including social facilities – R175 million
- Pennyville Housing – R140,000,000.00

The BRT infrastructure for this corridor has already been implemented. Detailed Project lists arising from the redevelopment of the Corridor are listed in Section D.

a. Design and implementation of a public transport and pedestrian facilities

Project Name	Estimated Budget '000	Estimated Completion	Project Progress ^{b.}
Softer Campus Square upgrades (Widening side roads; provision of taxi lay-byes)		May 2018	Drawings not approved by JRA
Milpark NMT & Frank Brown Park	R 10 000	May 2018	On-track
Milpark Bridge	R 21 141	September 2018	On-track



The Construction of pedestrian crossing at Campus Square is intended to enhance pedestrian experience and alleviate risks to safety. This piece of infrastructure will serve the purpose of safe pedestrian and cycle crossing across a very busy intersection and will connect the surrounding areas to create walkable neighbourhoods. The bridge will also act as a landmark and the creation of a “special place” along the Empire-Perth Development Corridor. It is envisaged that the adjoining land uses will also respond to the pedestrian movement and transform to provide activity along the main walking lines

Capital expenditure budget has since been diverted to other Non-Motorised Transit interventions in Milpark and Auckland Park due to public sentiment that the bridge intervention was premature at the time of public engagement on its detailed designs. Softer interventions proposed for the current crossing but still not commenced. The other interventions include public environment (sidewalk improvement) upgrades in and around the Auckland Park and Milpark area

The other interventions contribute significantly to the main objectives of the TOR corridors mainly:

- Freedom of choice: The sidewalk improvements have enhanced walkability and make walking more desirable as choice.
- Freedom of movement: Seamless sidewalk improvements along main walking desire lines create a complete movement line/loop.
- Connections to employment opportunities and economic freedom: Improvements facilitate better connections to the retail nodes, employment and activity nodes of Campus Square, Milpark/Stanley mixed use node, University of Johannesburg/Wits, Lancet Laboratories, Resolution circle, Milpark hospital, Melville (7th Avenue) activity spine.



3.2.1.3 Turffontein Corridor

Turffontein is located to the south of the CBD on the southern edge of the mining belt. The Turffontein Corridor is different from the two corridors detailed above. Initially, the corridor was to be focused on Booyens Road/ Klip Rivier Drive and Rifle Range Road and the link to the existing BRT Route on Soweto Highway and the desire lines through to the Johannesburg South. However, due to urban decay being experienced in Turffontein and the potential for densification within the suburb, it was decided that the broader Turffontein area would form the focus of the Strategic Area Framework. Unlike the Louis Botha and the Perth/Empire Corridors no proposed Bus Rapid Transit system traverses the study area. The existing Soweto Highway leg of the Rea Vaya systems serves the edge of the Turffontein corridor. The Transport Department is considering implementing a managed lane to improve the reliability and speed of existing Metrobus and mini bus taxi services along this corridor.

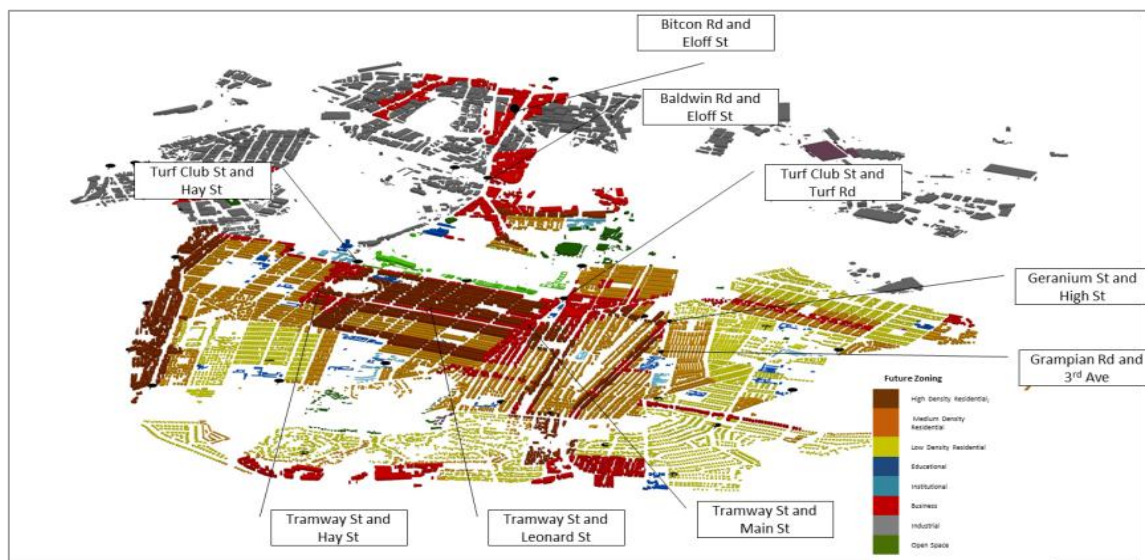


Figure 10: Turffontein Corridor Strategic Area Framework indicating key roads in the area

Turffontein and neighbouring suburbs, have a significant immigrant population which in part is due to the proximity to the CBD. A further noticeable trend has been an increase of poverty within the area. Despite the above mentioned, there is still a lively and important trade and associated commercial component within the area especially in the established industrial and activity streets. Structuring elements of the study area include: west-east railway line, the M1 and M2 Highways, mine dumps, the Robinson Landfill Site, the Turffontein Race Course, Wemmer Pan and Moffat Park.

Focal points for the Turffontein Strategic Area Framework include:

- Stafford Rail Station in Booyens Industrial Township;

- Wemmer Pan and associated open spaces and community facilities; and
- De Villiers Road and Rotunda Park within Turffontein.

The key service related projects to facilitate the redevelopment of Turffontein are:

- Infrastructure capacity for densification
 - Power- R1,887,306,000.00
 - Water- R86,947,000.00
 - Sewer- R25,000,000.00
 - Roads- R48,373,600.00
- Linear Central Park and community facilities – R30.6 million
- Rental and Social Housing – R269 million
- Wemmer Pan Redevelopment – R28 million

The list of service related projects is detailed under section D.

3.2.1.4 Mining belt

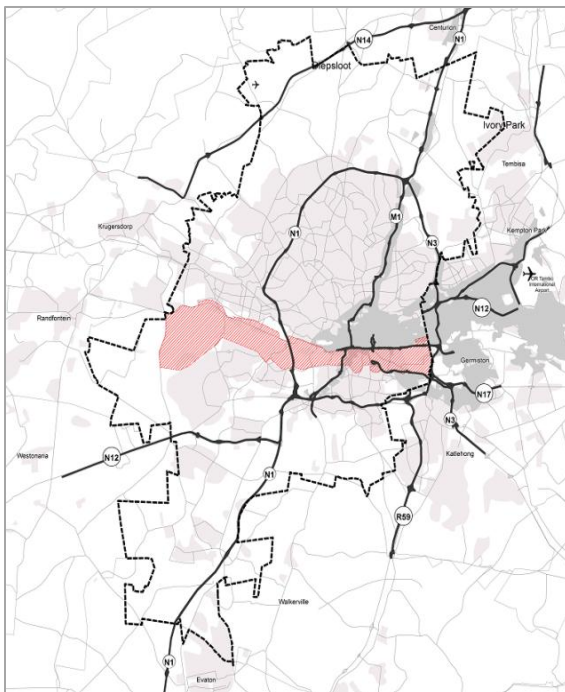


Figure 11: Mining Belt Broad Location

The Mining Belt provides the opportunity of integrating the north with the south, thus creating a strong east-west interrelationship. This is an area that runs across the City's borders in a west to east direction immediately south of the Central Business District, per *Figure 12*. The Spatial Development Framework defines the Mining Belt as an area for large scale redevelopment through the execution of commercial and residential developments.

The mining belt provides for an exclusive opportunity in restructuring the City given its proximity to structuring elements such as major routes, engineering services, etc. It is the most prominent feature of urban fragmentation in the city. It is therefore the main focus of re-stitching the urban fabric by breaking down the physical barriers it land over 33 years.

There are a number of key opportunity areas along the mining belt. These include the potential to integrate marginalised townships of Soweto with the broader urban and economic opportunities around Roodepoort towards Mogale City, and its role in facilitating the southern

expansion of the existing Johannesburg Inner City area. However the developments need remain cognisant of the challenges that are prominent in the area such as the following:

- Acid Mine Drainage;
- Under-mining;
- Wind-blown particulate matter from mine dumps which creates an urgent need to remove mine dumps;
- Poor road and rail access into the mining belt (poor north-south linkage into the area);
- Decline of industry within certain townships;
- Re-mining at certain points along the mining belt which has delayed the redevelopment of areas within the zone; and
- Location of poor communities within certain existing townships, hostels and informal settlements along the mining belt in hazardous locations.

Key opportunities in this zone:

- Improvement and expansion of the logistics port at the City Deep in line with the SIP2 priorities;
- Expansion of the Joburg Market in order to improve the City's food security and look at opportunities to expand food processing enterprises within the area;
- Transnet's on-going capital reinvestment programme to revitalise rail infrastructure and improve the quality and reliability of trips for commuters accessing the CBD especially from Soweto and Germiston;
- Two of the current Transit Orientated Development Corridors namely, the Perth-Empire Corridor and the Turffontein Corridor, traverse the zone. The interventions proposed in terms of the Strategic Area Frameworks for the Corridors could act as catalysts for a broader intervention within the mining belt zone;
- Significant areas of open land that have potential for redevelopment; and
- Willingness of owners to investigate proposals to redevelop the mining belt.

The scale and complexity of the challenges and opportunities within the mining belt need a coordinated response from all stakeholders. It is for this reason that it is proposed that the area is packaged as an integration zone for special intervention.

3.2.1.5 Developing a Randburg-OR Tambo corridor

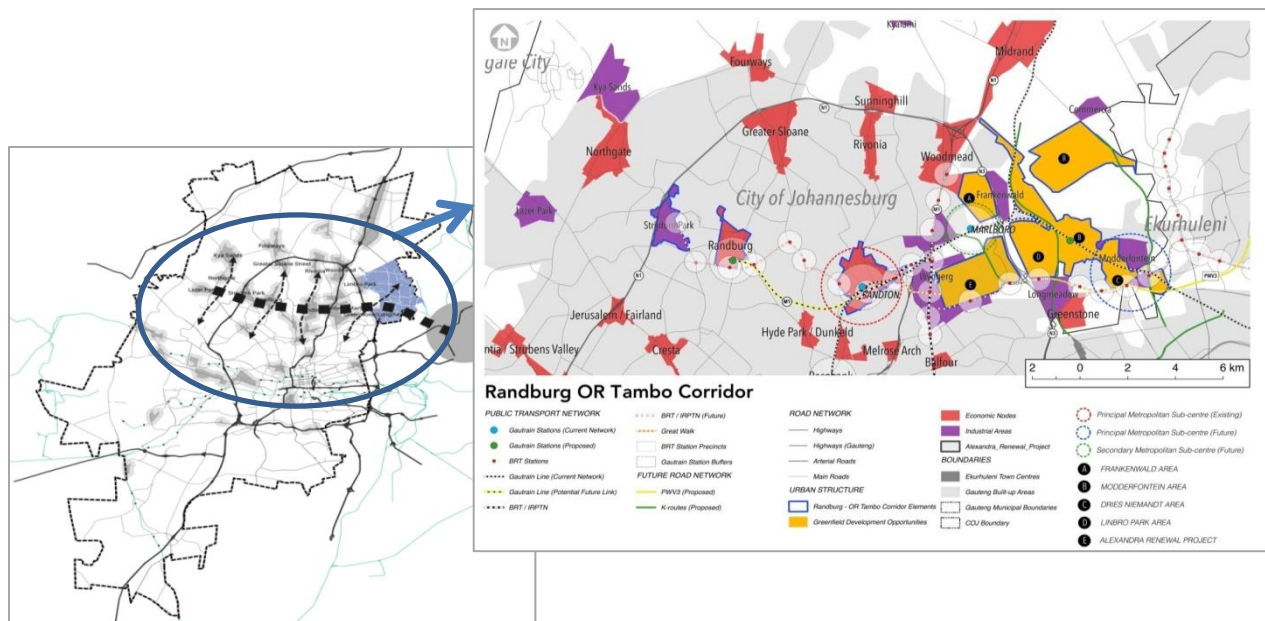


Figure 12: Conceptual Representation of the Randburg-OR Tambo Corridor

The rationale behind the Randburg-OR Tambo corridor is to create a strong east-west development corridor in the north of the city with a broader city region focus, while capitalising on the opportunities for infill development in the vacant tracts of land along this corridor. This corridor would also intersect with the north-south Transit Orientated Development Corridor along the Louis Botha Corridor, which links from Soweto past the Inner City into Sandton; thus strengthening connectivity to the metropolitan core and other principal metropolitan sub-centres. Currently east-west connections are limited in the north, despite the City of Johannesburg and Ekurhuleni containing strong economic and growth areas in this region. In City of Johannesburg, Randburg and Sandton are well established and growing, and in Ekurhuleni the aerotropolis around OR Tambo is receiving significant attention and investment, to support established areas such as Kempton Park and Edenvale. At the same time, there are a number of opportunities in strengthening links between the two metropolitan areas. This includes the significant transit infrastructure planned in the area, including Johannesburg and Ekurhuleni BRT systems and the existing Gautrain link (with additional new stations) that provides an efficient transport link across the two metros.

The Randburg- OR Tambo Corridor is still in the conceptual phase and envisioned for the long term, a lot of work still needs to be undertaken. It is envisaged that in the future a Strategic Area Framework (SAF) will be developed for the Randburg- OR Tambo Corridor. The aim of the SAF will be to define the future development vision for the planning area, as well as the mechanisms which are required to achieve this future end state.

3.2.2 Marginalised Residential Areas

Deprivation areas, formerly known as marginalised areas in the City of Johannesburg are often located outside of the transformation zones as indicated in the SDF 2040 however this does not mean that the areas will be neglected. Deprivation areas are familiarised by a large portion of Johannesburg's population, these areas have been classified as deprived areas because they do not hold the qualities of sustainable and liveable neighbourhoods such as informal settlements and low income formal areas.

The deprivation areas located outside of the Transformation zones have been a focal point of concentration on the basis that the configuration of the surrounding areas offers opportunity for growth that will improve connectivity and functionality at a local scale. Hence investment in these areas are to be focused on addressing inequality and to create a liveable area. Deprivation areas have been categorised; each category contains its own spatial context, opportunities and potential as identified in the SDF namely:

- Ivory park
- Diepsloot
- Orange farm

i. Development strategy for Deprivation areas

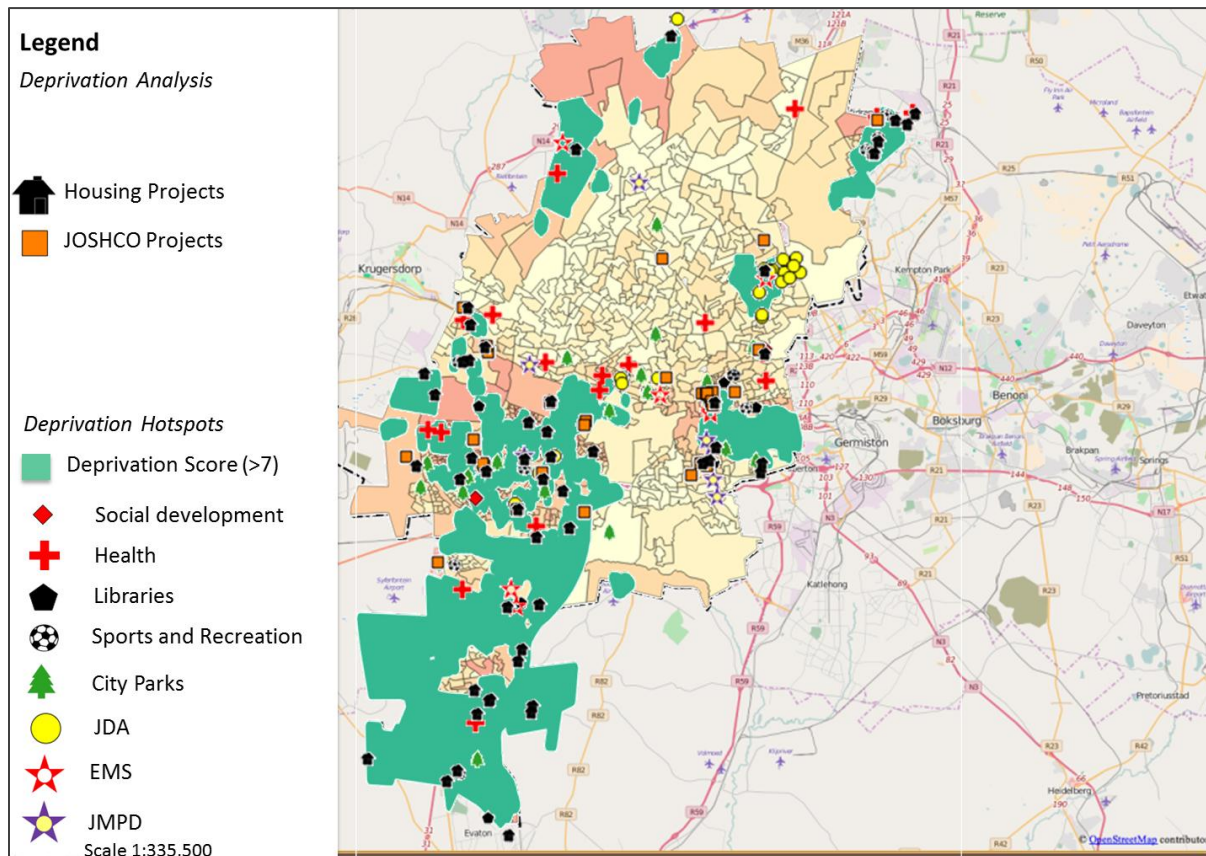
The strategy implies that connections from deprivation areas to local and regional centres of employment should be strengthened and that new development required to alleviate the housing need in the area is focussed within walking distance from employment centres and public transport stations. The nature of these developments should be higher density typologies with associated public and social facilities and a structural logic that supports walkability and access.

No substantive development requiring bulk infrastructure upgrades within the Consolidation Zone will be supported unless it supports compact city principles.

The focus of development strategy is to create liveable lower to medium density suburban areas that are well-connected to areas of higher intensity through transit infrastructure, without the need for additional investment in service infrastructure. The city will therefore allow new developments that promote the goals and meet the requirements of the SDF, but do not require extensive bulk infrastructure upgrades. Maximise the potential of the deprivation areas within the context of their distinct characteristics.

ii. Infrastructure investment to deal with backlogs in deprivation areas

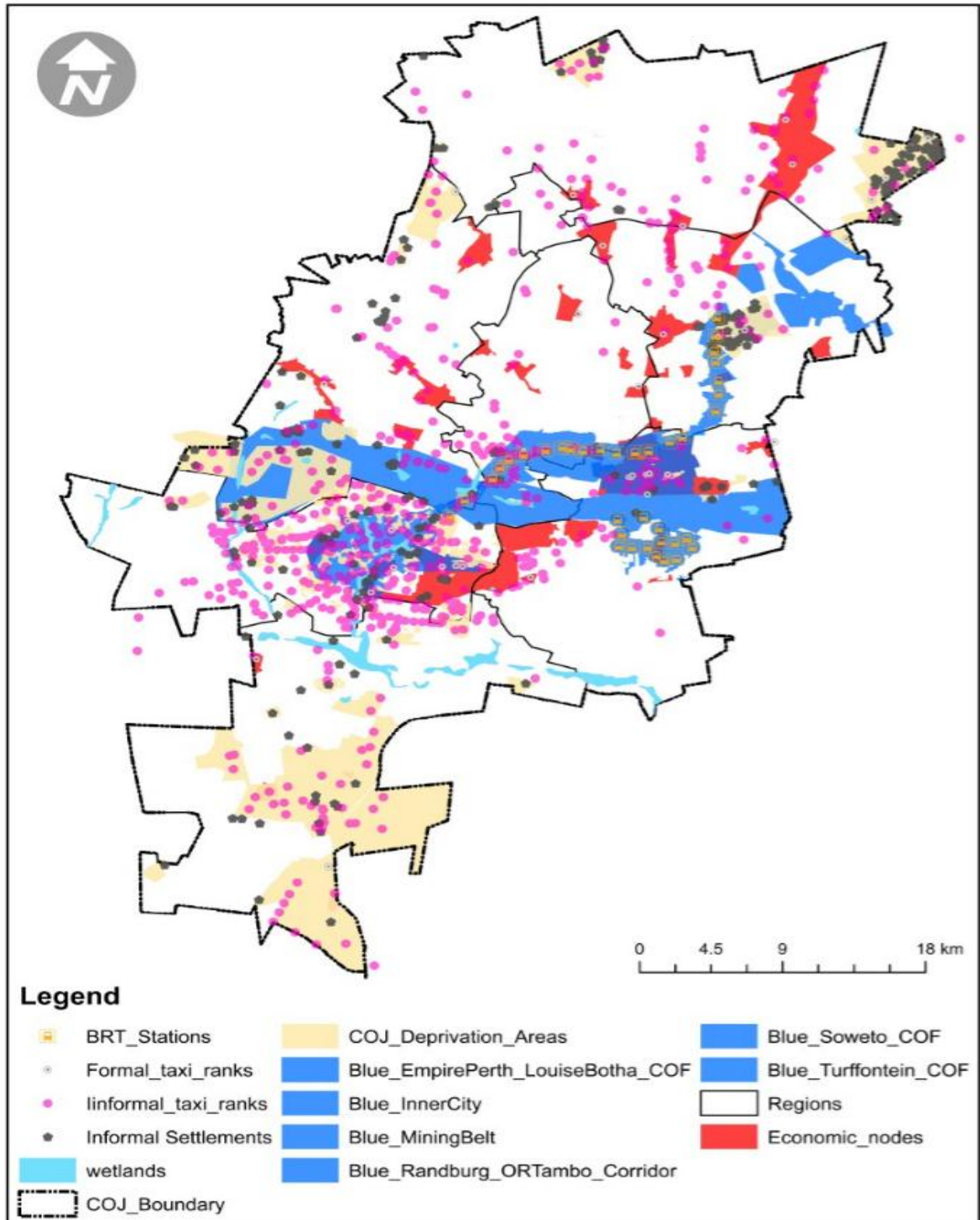
This investment is specifically focused on eradicating backlogs and deficiencies of engineering and social infrastructure related to the deprivation areas. Investment in these areas also needs to address the structural and built form aspects that have been raised in the SDF. Infrastructure investment is therefore targeted at resolving problems specifically related to the deprivation areas and at the same time create sustainable and liveable settlements as an outcome.



Map 10: Investment related to Marginalised Areas

3.2.2.1 Informal Settlements

Cities such as Johannesburg have the enormous challenge of improving the lives of those living in informal dwellings and closing the gap between rich and poor. If Johannesburg is to become an inclusionary arrival city, it needs to make space for the urban poor majority through good planning initiatives such as densification, diversification and integration. There is an existing housing backlog in the city, while the population is growing: those who are informally housed in often inadequate living conditions. Informal dwellings include informal settlements, informal backyard dwellings, and formal buildings that are informally occupied. While these areas are often well located (areas on that people have chosen to live there) they are often poorly serviced (if at all), living conditions are often inadequate, and they can pose risks to their inhabitants, from fire to flooding, illness and crime. The Sustainable Human Settlement Urbanisation Plan (March 2012) compiled for the City’s Housing Department, provides an overview of the spatial location and characteristics of informal settlements in Johannesburg. The CoJ informal settlement database identifies each informal settlement by name and spatial referencing, and links the settlement to a dataset with attributes (such as number of units, ownership, infrastructure, category – i.e. relocate, in-situ upgrade, regularise, project linked).



Map 11: Informal Settlements in CoJ

Analysis of Informal settlements in the city of Johannesburg as represented in Map 8 above, discloses the relationship of Informal settlements to public transport and areas with economic opportunities. In some instances one can draw information on how these informal settlements were established looking at various factors such as locality, availability of public transport and where economic opportunities area located. Detailed analysis from map 8 illustrated how informal settlements are spread throughout the city. There are 80 informal settlements within the integration zone (the blue colour on the map), 162 informal settlements outside the integration zone, 23 informal settlements within the economic nodes and 164 informal settlements within the marginalised areas. A large percentages of informal settlements are located in Region A; Zandspruit followed by Region E; Alexandra.

The City of Johannesburg reiterates the position supported in national policy (e.g. Breaking New Ground, the National Development Plan, National Development Outcome 8 and the National Upgrading Support Programme) and City of Johannesburg Policy (e.g. SHSUP and the City's Informal Settlement Regularisation Policy) that in-situ upgrading of informal settlements should be the first option for intervention, with relocation only applied where upgrades are not possible and where the land inhabited is unsuitable for human habitation. When relocation is necessary, distances should be kept to a minimum (within 2 km). Moving people far from where they live moves them away from the opportunities, livelihoods, relationships and amenities that prompted them to locate there in the first place. The outcome of the Formalization and Regularization of Informal Settlements Programme being undertaken is that informal settlements will be mostly upgraded in-situ. Most of these settlements are situated within otherwise established formal settlements, but there are some that are located peripherally or in isolation from the larger urban areas. The danger is that their regularisation could further entrench the geography of poverty. However, due to historical processes of development and engagements with the affected communities the City is obliged to continue with the upgrading process – unless the supply of well-located medium to high density projects can be rolled out at scale.

Informal settlements strategy

In November 2014, the department did an in-depth audit and it was discovered that there were two hundred and sixty three informal settlements (263) of which, thirty seven (37) have been relocated and forty five (45) have been formalized, the balance is therefore hundred and eighty one (181) informal settlements with an estimated 167942 informal structures. Currently the city has identified and prioritised 51 well-located informal settlements for upgrading by providing access to basic services and security tenure per beneficiary for the next MTREF (2017/18-2019/20). Annexure A (Informal Settlements Plan) details out the city's informal settlement plan with regard to the prioritised informal settlements.

The following are some of the informal settlements the city is addressing:

Table 7: Some of informal settlements the city is addressing

REGION	NAME	MAP REFERENCE	UISP PHASE	KEY ISSUES TO BE SOLVED
D	Ezimbuzini	Erf 11909 Orlando West	Relocation	Planning underway for partial in-situ upgrade as well as possible relocation for overflow
A	Thabo Mbeki	655 Ivory Park Ext 2	In-situ upgrading	No key issues
	Rugby Club	Randleases Ext. 5	Relocation	No key issues
	Zandspruit Transit Camp	Portion 71/191 IQ of Farm Zandspruit	Responsibility of province or unknown	No key issues
	Itsoseng	133/191-IQ	Relocation	No key issues
G	Dark City/ Poortjie	Poortjie	In-situ upgrading	Spills over into Emfuleni; Consultants have been appointed
E	Organic Market	Bramley View	Responsibility of province or unknown	No key issues

3.2.2.2 Other marginalised residential areas

Backyard units

Most of the City's 320 652 backyard units are located in Region A (34%) and Region D (44%). Backyard units represent a far greater challenge to the municipality due to the scale and the complexity of regulating the phenomenon. Informal back-yarding must also be addressed where it yields sub-standard living conditions. The aim here should not be to do away with back-yarding. The practice of backyard rental housing provides valuable income for home owners, provides affordable shelter for the urban poor, and densifies low density urban areas. The City should see the process of back-yarding as a positive one that can be adapted and improved to maintain livelihoods and provide affordable housing in the city in a way that provides an adequate standard of living, access to economic opportunity and improved quality of life for low income urban dwellers. There is a definite correlation between backyard units and better located areas with infrastructure, such as Alexandra, Ivory Park and Diepsloot, as well as Soweto, compared to Region G that only accommodates 10% of all backyard units.

Housing Strategy

Johannesburg population is growing rapidly and is estimated to be at 5.8 million people by 2020. Population growth is one of the major drivers of the demand for housing. The effective demand for housing in 2020 is estimated at 400,000 new units excluding existing backlogs. Assuming that 30% of this demand is for low income housing then 120,000 units are needed by 2020. At the current cost of supplying an RDP house (R250 000 per structure, including bulk) this equates to R30 billion which is the size of the total National South African budget for housing. This delivery rate is unprecedented and requires extra-ordinary intervention.

Table 8: Site and Services in informal settlements across the city

PROJECT NAME	Total Estimated Project Cost R 000	Budget2018/19 R 000	Budget2019/20 R 000	Budget2020/21 R 000
Site and Services - Formalisation of informal settlements across the City. Renewal Bulk Infrastructure JOHANNESBURG F City Wide	213 958	118 500	30 000	65 458

Arguably a new system for delivery is required. The current state-led, private contractor built model has been prone to corruption, poor industry standards, lack of oversight and governance and poor quality construction.

The City of Johannesburg housing strategy is aimed to rigorously address the challenges of multiple, diverse and often conflicting housing needs, desires and aspirations that are besetting housing in the City. The Strategy is the user-beneficiary, it is has a concise understanding of the user of public housing which opens up opportunities for innovation.

The Housing Strategy objectives are organized into the following thematic areas that capture key challenges that the current housing supply presents:

- Financing and Affordability:** - A key mandate for state supplied or aided housing models is their practicality and implementable nature. Given that from the problem statement it is clear that government cannot fund the construction of much needed housing or manage housing stock alone, innovative financial instruments, partnerships and plans will have to be sought that will most likely hinge on creative engagement of the private and non-profit sectors.
- Need and Demand:** - In South Africa, the need for shelter is recognized as constitutional right especially in the cases of marginalized groups who are never likely to be able to afford their own accommodation through gainful employment. The City has a duty to creatively, consistently and practically provide shelter for all citizens, with a special emphasis on these vulnerable groups. Effective economic demand for housing is a key lever for the City to afford and subsidize housing projects and must be understood and engaged in all its complex and shifting contexts. The difference between need and demand is critical and will create a more effective delivery model.
- Existing Deficiencies of the Housing System:** - Given the problem statement, not only is it clear that the existing housing policies as implemented are incapable of delivering the required quality and quantity of housing needed presently, but is also inadequate at fostering the research, innovation and problem solving required to face future housing challenges. A focus on user-beneficiary experience and the design of the entire neighborhood environment is important.

The outcomes of the Housing Strategy are to:

- Promote diversified financing and affordability
- Meaningfully engages private sector and leverages the expertise of residential and property management companies in the sector.
- Optimises revenue gains from existing state housing models such as; social housing, Community Residential Units (CRU) and other models.
- Provides a clear framework for revenue enhancement that can be ring-fenced within the municipal budget for cross-subsidising indigent households housing needs. This promotes overall sustainability in the housing system.
- The models must attract investment and must be promoted. This ensures that investors can find niche investments across the supply chain².
- Identifies specific points along the supply chain where investment interventions can be introduced.
- Ensure effective needs and demands are met
- Ensures various alternative housing products are brought to market, so that state subsidy costs can be reduced and delivery can be fast tracked while still ensuring that housing meets health and safety regulations.
- Ensures that housing products differing in Tenure and Typology are targeted at measured social groups with specific needs.
- Provides a diversity of rental options at various price points focused user-beneficiary needs
- Makes adequate provision for transitional and short term rental.
- Ensures that 'at risk' user-beneficiary groups such as elderly, homeless, disabled and child-headed households also receive housing support.
- Addresses existing deficiencies of the current housing system
- A scalable, efficient housing system that delivers quality homes and is user-beneficiary focused.
- Clearly identifies, understands and defines user-beneficiary needs and addresses these needs through concise policies.
- Ensures diverse supply mechanisms by bringing a range of stakeholders into the supply, management and delivery of housing.
- Product innovation: develops an enabling environment for product innovation, research and development in the design, architecture and construction of public sector housing.
- Introduces proactive enterprise supplier development that contributes to direct and indirect jobs, giving access to various enterprises. As part of the supplier development system,

² The success of many city economies has been targeted investment promotion of key industry sectors. Examples include; electronics industry in Seoul, textile industry in Hanoi.

identifies support to artisans and fabricators who can play a significant role in the manufacture of alternative housing products and solutions.

- Mechanisms needs to be put into place to enable local labour and contractor support for those living in informal communities who can play an important role in actually building their own houses, possibly also looking into an engagement with the City of Johannesburg's EPWP (produce a set of recommendations for that departments liaison with the Housing department).
- Provide recommendations for revisions to town planning systems that will encourage an enabling town-planning framework across various scales. The town planning legislative environment must support and promote the housing policy through various land based incentives/schemes and regulations and accordingly guidelines should be written so that the relevant City branches can work together on this task.

Consultants were appointed early in January 2018 and are currently finalizing the first draft Analysis Report of the housing strategy. The target date of completion is June 2018.

A flexible housing policy scalable enough to unanticipated future changes in housing demand or needs and that speaks the current housing crisis will benefit the City by ensuring that housing supply meets relative demand efficiently across a range of innovative housing typologies; clarify the housing demand – need and supply; and diversify the current suppliers of housing based on changing demand pattern across a range of income levels and suitable for a range of users.

3.2.3 Economic nodes

The City of Johannesburg has been described as "a developmental local government" that aims to improve the quality of life of all its residents. Vital to this are its on-going urban regeneration and renewal projects. Development nodes are identified and steps are taken to upgrade the area, supporting local business and encouraging economic and social development investments. There are two developed and detailed category of nodes which contributes vastly to the economy of the city. Priority Economic Nodes are areas that are recognised as existing as well as up-and-coming vibrant economic nodes that could substantially contribute towards the City's economic growth and development goals. These areas require significant infrastructural upgrades and basic service delivery to unlock its inherent potential.

Spatial Logic of Priority Nodes

The Spatial Development Framework 2040 seeks for a compact polycentric urban form that is ideal for economic efficiency, social-economic inclusivity and connectivity. As one of the many means of achieving this urban form, the City of Johannesburg in consultation with its SDF nodal strategy and hierarchy of nodes classification, identified several priority nodes and integration zones that are instrumental to the progressive realization of this desired morphology. *Map 9* illustrates the COJ priority Nodes in relation to the SDFs desired urban form.

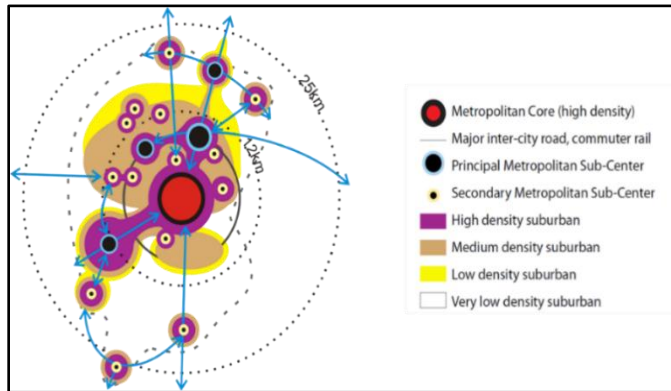
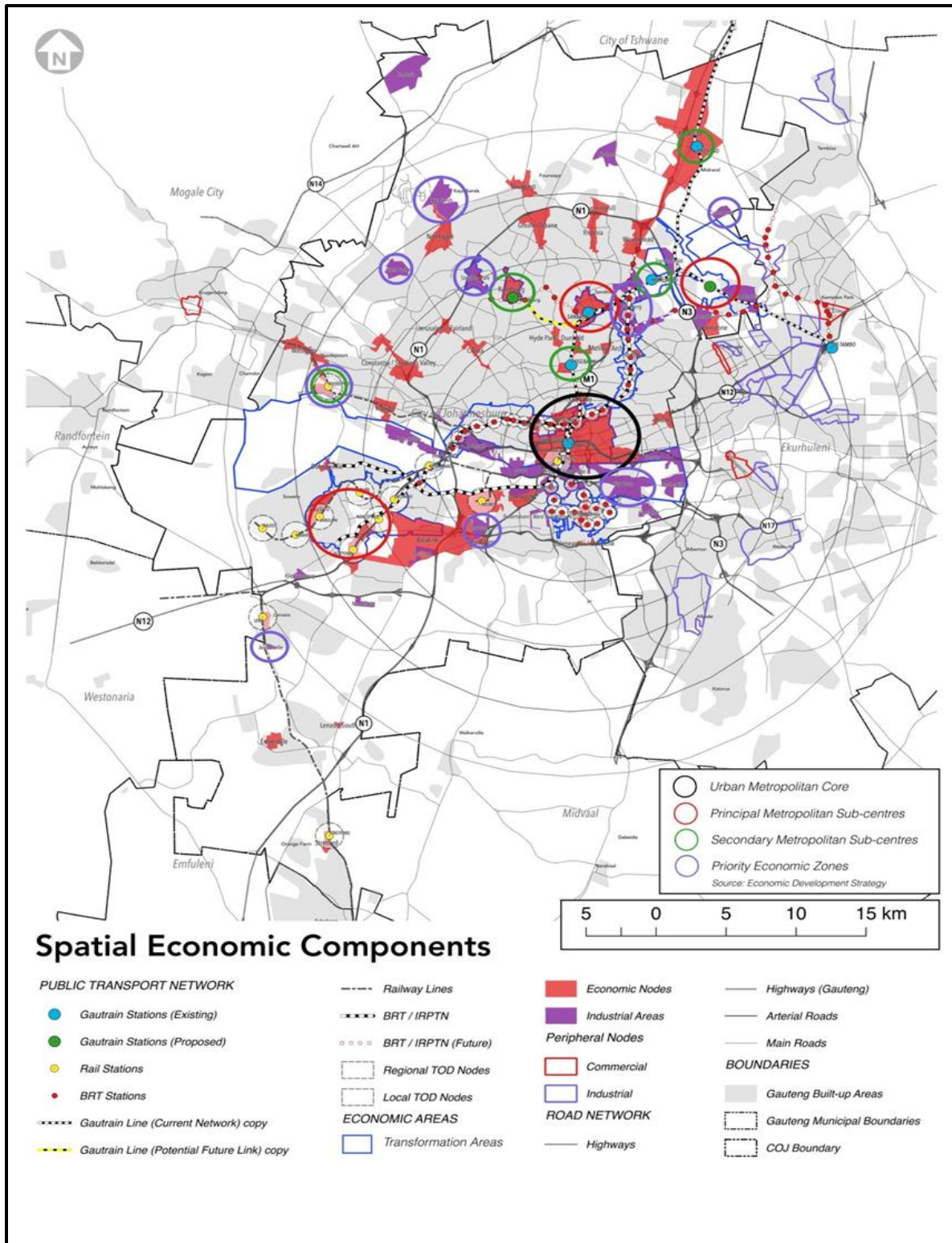


Figure 13: Desired Urban Morphology

Moving a level down from the spatial logic of the priority economic nodes, a host of studies, spatial analysis and GIS model builders have been done, that supplements the spatial logic and gauges the economic performance of the priority nodes based on a numerous suitability indexes and analysis that will be mentioned in detail in this section.



Map 12: City of Johannesburg Priority Nodes

City of Johannesburg draft Nodal review

The City of Johannesburg has recently embarked on a proposed review of its nodes in response to the SDFs assentation that a nodal review process is to be followed in which boundary changes and additions will be considered. The process will include urban modelling exercise and public participation on proposed nodal additions and/ or amendments.

The analysis will create an index, scoring all parts of the City in terms of Urban Potential and Connectivity. Those areas that score highest will inform the location of high intensity nodes, with those that score low indicating areas where development should be restricted. Importantly too, it is indented that a gradient of intensity is created across the City, to prevent high intensity development happening within nodes, and low intensity immediately outside them. A density and intensity gradient should be allowed, radiating outward from areas of high urban potential and connectivity.

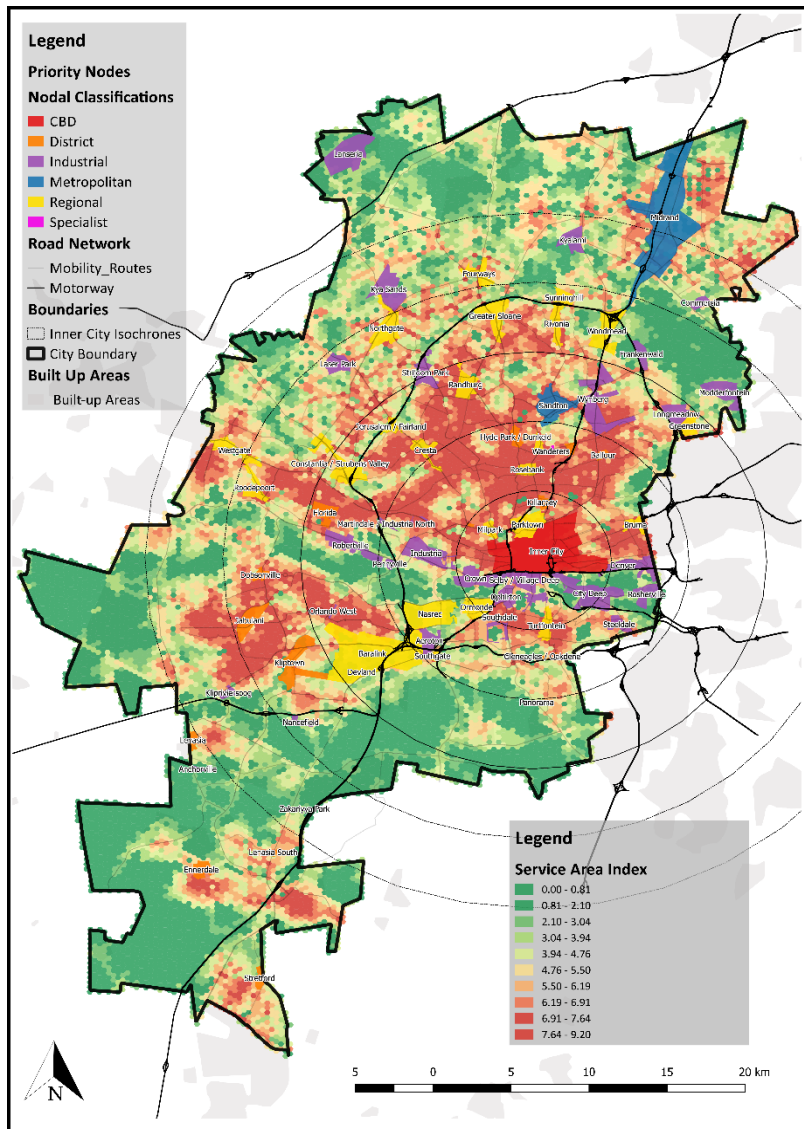
The urban potential model will use a grid of 400m by 400m hexagons (easily walkable units) to create the index. Each hexagon will be given a local walkability score and a wider walkability score: of what can be accessed within 1km will include:

- Economic activity (the location of jobs and businesses);
- Public transit (train and BRT stations);
- Public open space;
- Social infrastructure (health, education, public facilities);
- Capital projects of the City;
- Infrastructure capacity (water, sewage and electricity); and
- Land use mix.

The outcome from the proposed nodal review analysis will in addition gauge the economic performance of The City of Johannesburg Priority Nodes based on its urban potential and subsequently will justify the rationale of its spatial logic as a Priority Node. This grain and scale of analysis will provide good detail for developers and land use planners within the City to drive development where it will be most effective in meeting the goals of the SDF, and limit development where the opposite is true.

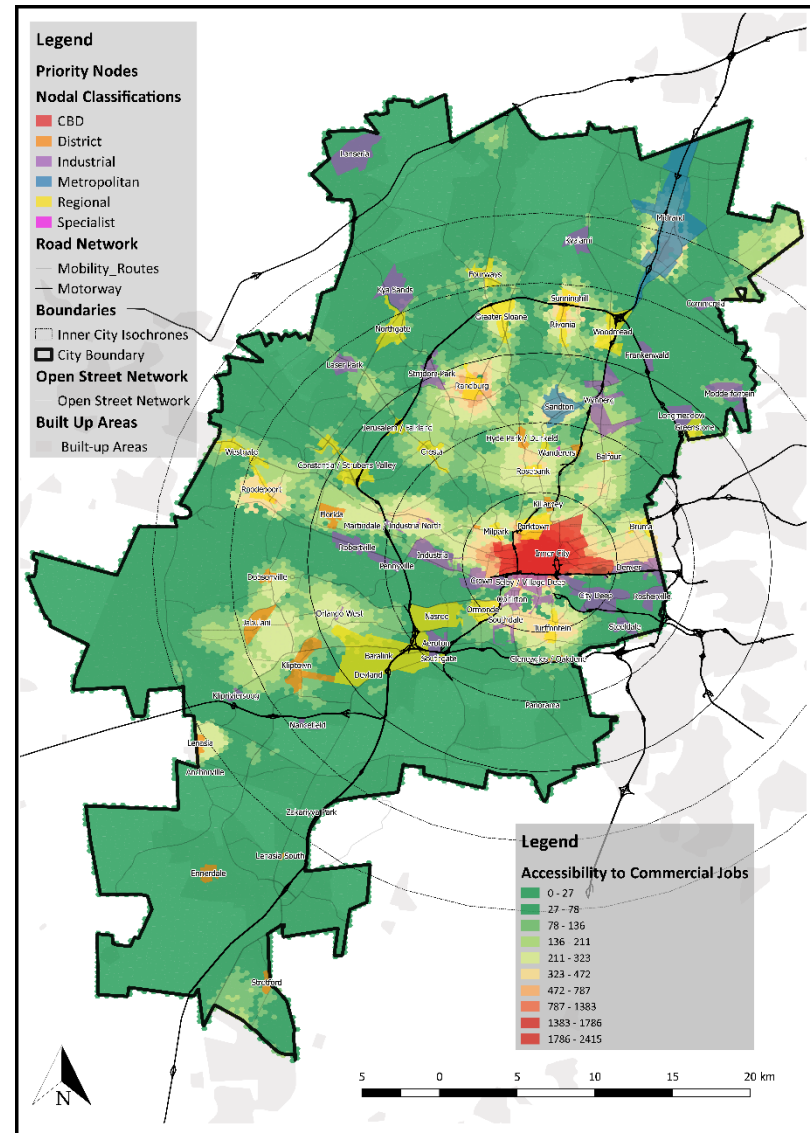
Map 14: Service Area index

Illustrates the level of connectivity and walkability within the City based on its road network density. The service area analysis shows spatially the performance of areas within the city that have an ideal urban potential for users to connect and access a range of urban facilities within a 2km walking distance from the Hex Bin



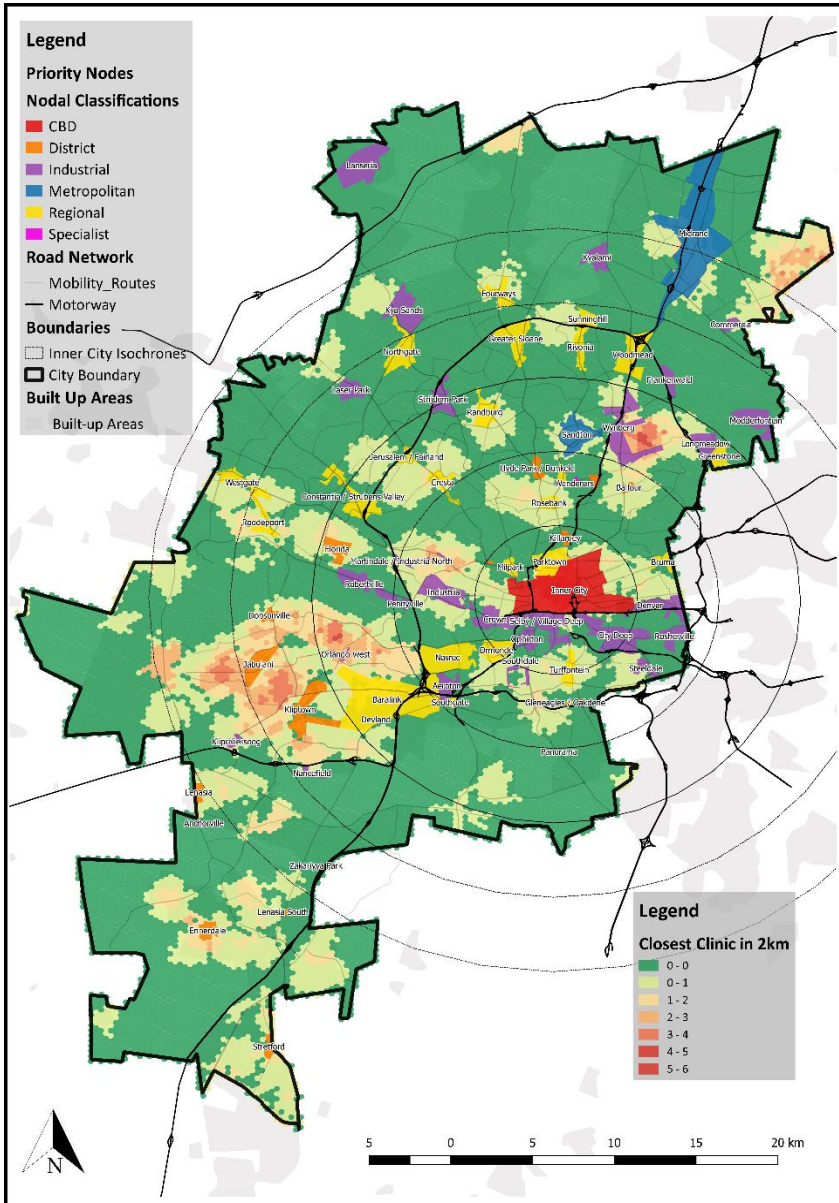
Map 13: Accessibility to Commercial job

Illustrates city wide the gradient performance of areas in terms of accessibility to commercial employment. In addition, further analysis of the map shows spatially the densification of job opportunities and the Priority Nodes Relation to these areas



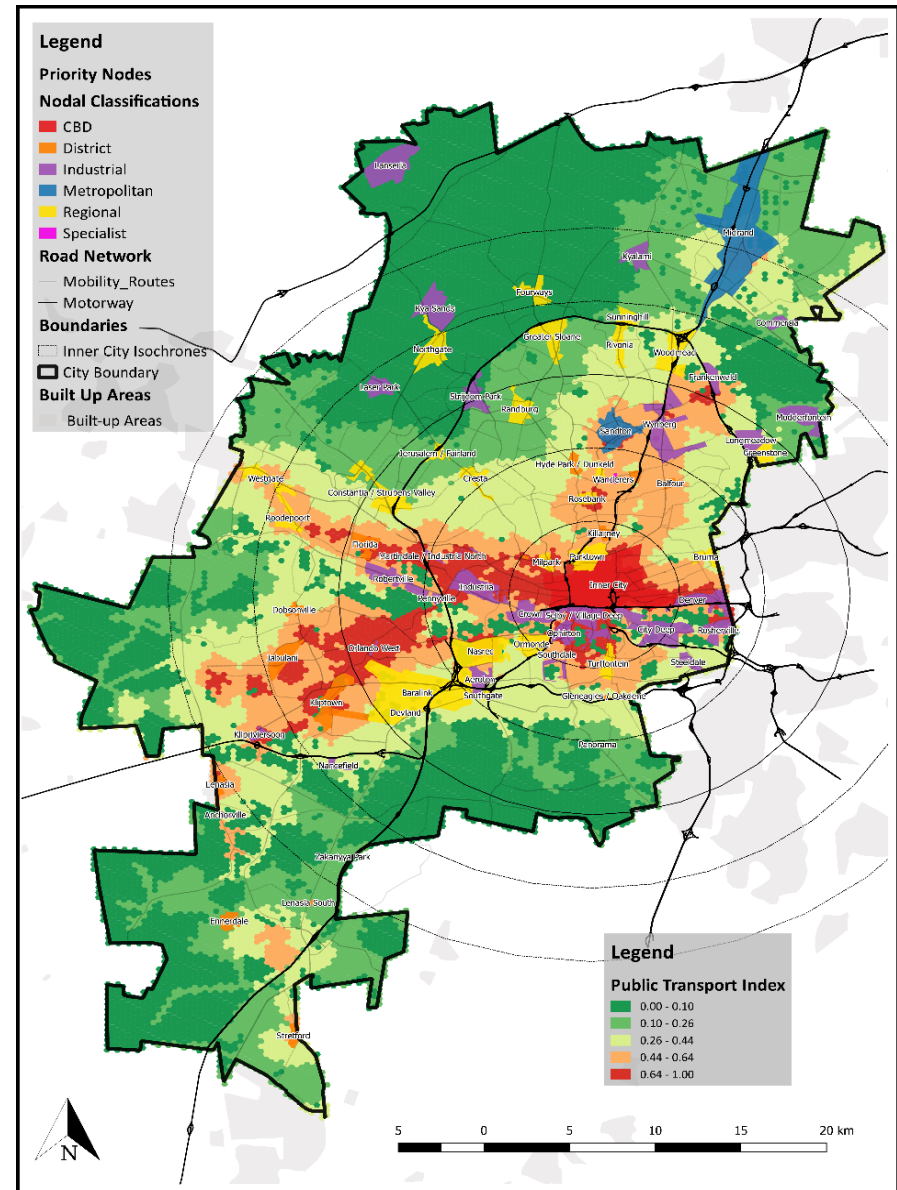
Map 15: Closest Clinic in 2km

Illustrates spatially the performance of the city in terms of clinics concentration and accessibility.



Map 16: Public Transport Index

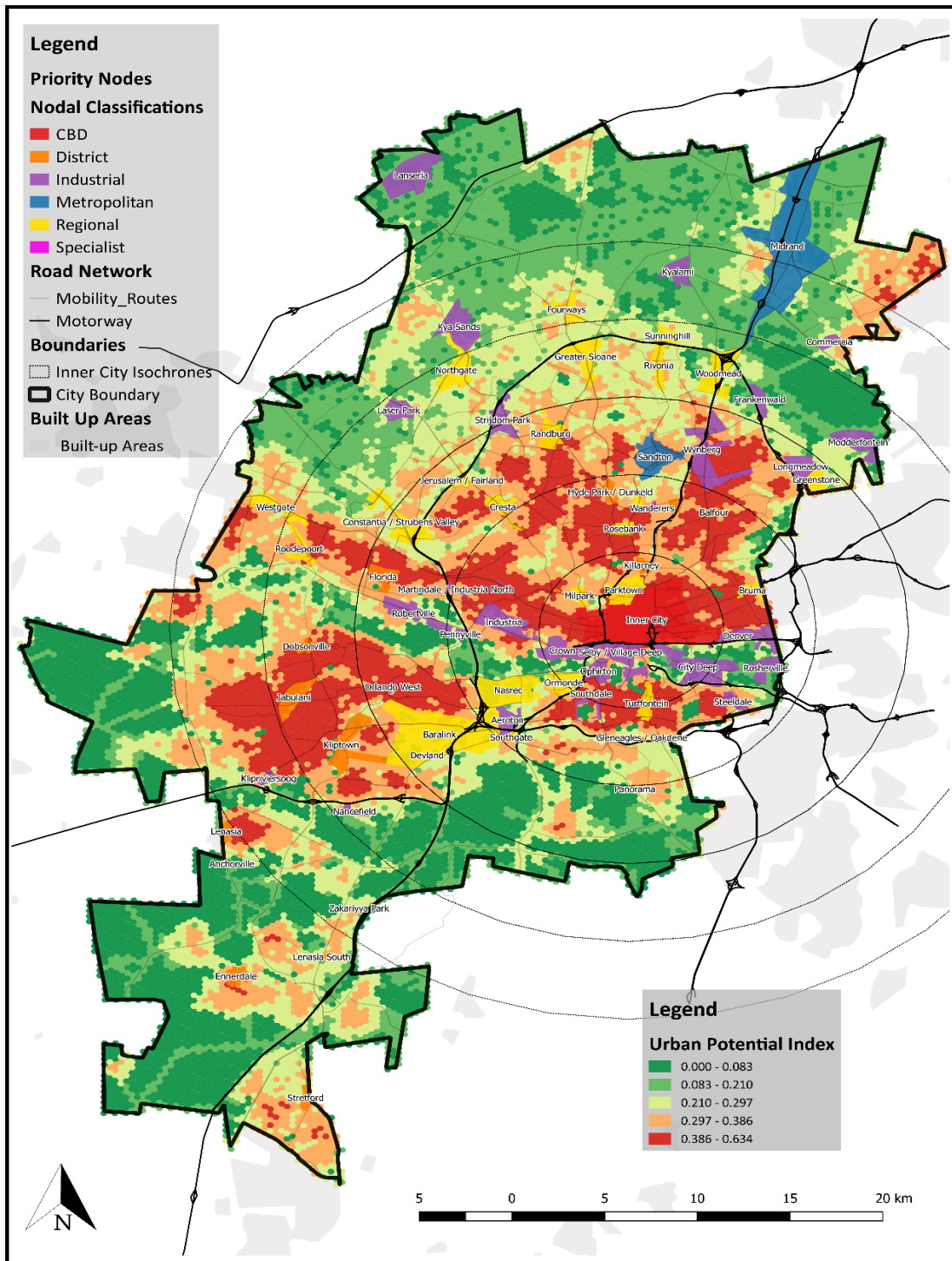
Illustrates spatially the performance of the city in terms of its concentration and accessibility to public transport facilities within the priority nodes which showcases the accessibility and connectivity of the Priority Nodes



Map 17: Urban Potential Index

The Urban Potential index model aggregates and reclassifies all the social-economic and demographic analysis into one final model that classifies the levels of urban potential across the city

The Map below illustrates spatially the performance of the city in terms of accessibility to a basket of services, employment opportunities and social facilities in conjunction to population densities and other demographic data. The urban potential model analyzed in conjunction with the priority nodes spatially justifies the priority of these nodes based on its urban potential



The nodal review will give a sound, city wide analysis of economic performance and development potential across the entire Metropolitan Municipality based on urban form (connectivity and accessibility, density). This grain and scale of analysis will provide good detail for developers and land use planners within the City to drive development where it will be most efficient and effective in meeting the goals of the SDF, and limit development where the opposite is true. The nodal review forms a strong part of the implementation and refinement process of the SDF. Based on thorough evidence based planning and public participation, the policy will sharpen the tools and focus of the SDF to manage growth in a sustainable and inclusive manner. It is intended that the policy will be completed in 2017 for adoption by council within the year, or in early 2018.

The nodal review policy will be used to ensure that areas of greatest potential are maximised through strategic intensification and mixed used developments particularly in areas that are well located.

Economic Development Strategy for the City of Johannesburg

The City of Johannesburg has a recently approved Economic Strategy which is anchored on five dimensions, including:

- Industrial transformation
- Spatial transformation
- Global identity transformation
- Competitive market transformation
- Institutional transformation

The broad economic strategy is progressing through more detailed, spatially targeted plans in consultation with Development Planning and other departments in the city. The success of these plans is vital in transforming Johannesburg into a spatially just city. These plans, along with the nodal review that will follow this SDF, will identify key areas of economic growth potential or need, and put in place mechanisms to accelerate job creating economic growth. Importantly too, these plans will look to support Small, Medium and Micro-sized Enterprises (SMMEs), including those in the informal economy.

The City's current economic development blueprint is the *Fifteen Point Economic Development Plan of 2014*. The Plan has the 2011 *Joburg 2040* City Vision as its foundation and is informed by the *City Economic Development Strategy of 2008/2009*, and the *City Economic Transformation Policy Framework of 2011*. The Plan is also informed by National and Provincial imperatives, policies, and plans including the *National Development Plan* and *New Growth Path*.

Johannesburg's 15 Point Economic Development Plan (2014)

AGENDA 1: Improving Overall Competitiveness of the City

- Benchmark City processes and efficiencies against competitors and target best practice benchmarks.
- Fast-track City decision-making on portfolio of key economic projects

- Ensure effective research, intelligence gathering and investment decision making criteria in identifying and prioritising City expenditure.
- Include community co-production of goods and services for the City to create jobs and incomes and incubate new business.

AGENDA 2: Undertaking an Industrial-Spatial Economy Programme

- Ensure complete suppliers to regional and local commercial markets. (Sufficient volume for cluster formation and value addition) Initial focus “Green Economy”.
- Improve City regulation for Green Economy, buildings, housing and infrastructure.
- Focus economic development initiatives on specific value-chains and linkages across value-chains.
- Adopt a sector strategy/investment portfolio approach to spatial planning and release of zoned land.
- Establish a long-term investment strategy and financing mechanism -early stage and development financing partnerships.

AGENDA 3: Improving Role-player Accountability and Implementation

- Ensure interventions accommodated by MFMA and procurement and SCM strategy.
- Seek co-management of interventions with key economic stakeholders.
- Develop joint programmes with universities, HEI’s, science / technology centres in Joburg.
- Strengthen economic strategy coordination across City Depts. and entities.
- Ensure active City-Business forums: senior-level participation and focus on key-project portfolio.
- Establish Competitiveness

Five strategy interventions to achieve *breakthrough* in economic development

1. *Service Delivery for Business*
2. *Creation of Priority Economic Zones in the City.*
3. *Creation of Business Clusters in Priority Sectors and Areas.*
4. *Fast-track Decision Making for Large, Job-Creating Investments.*
5. *Establish Additional Small and Medium Size Enterprise Hubs in the City.*

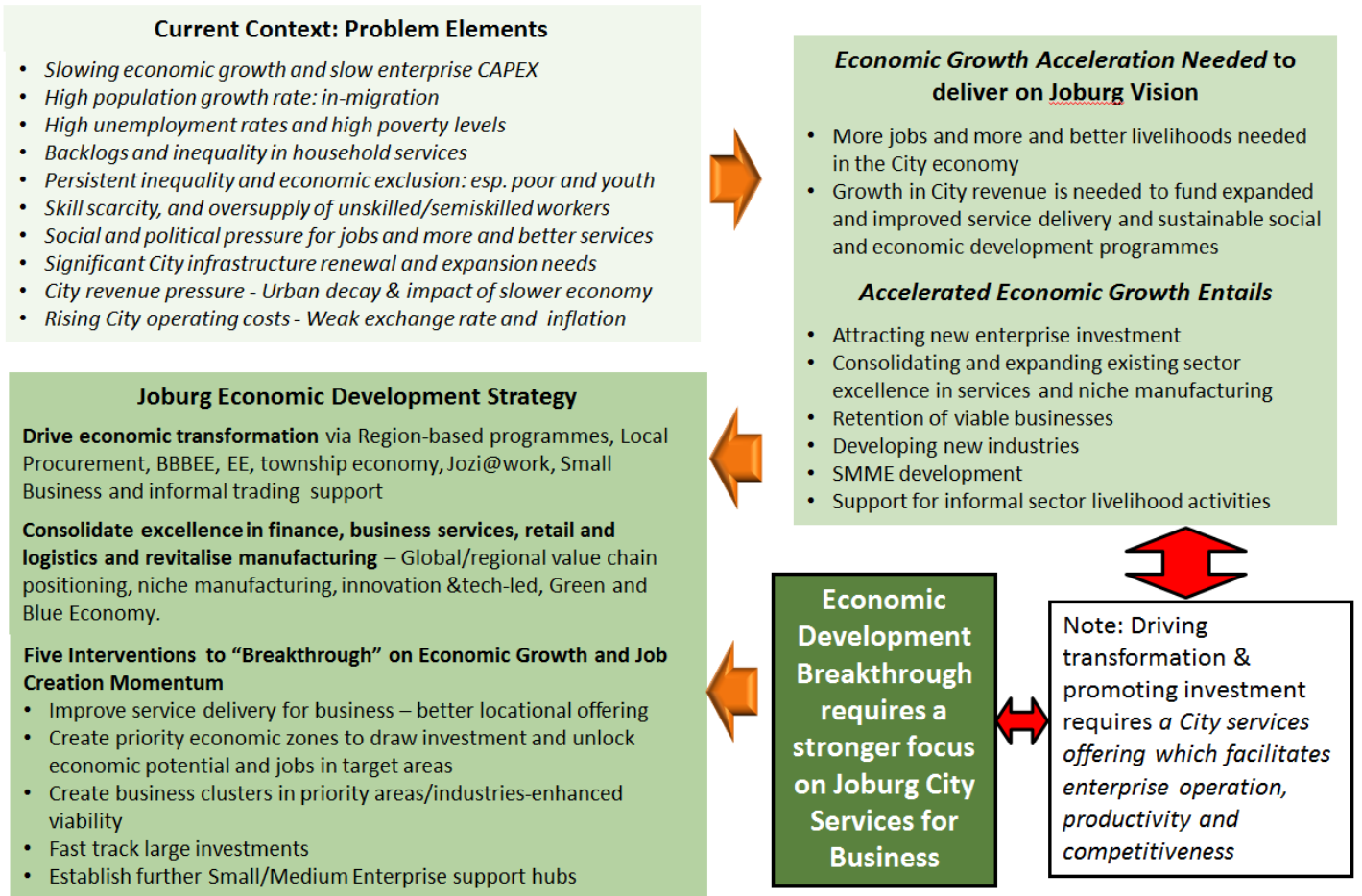
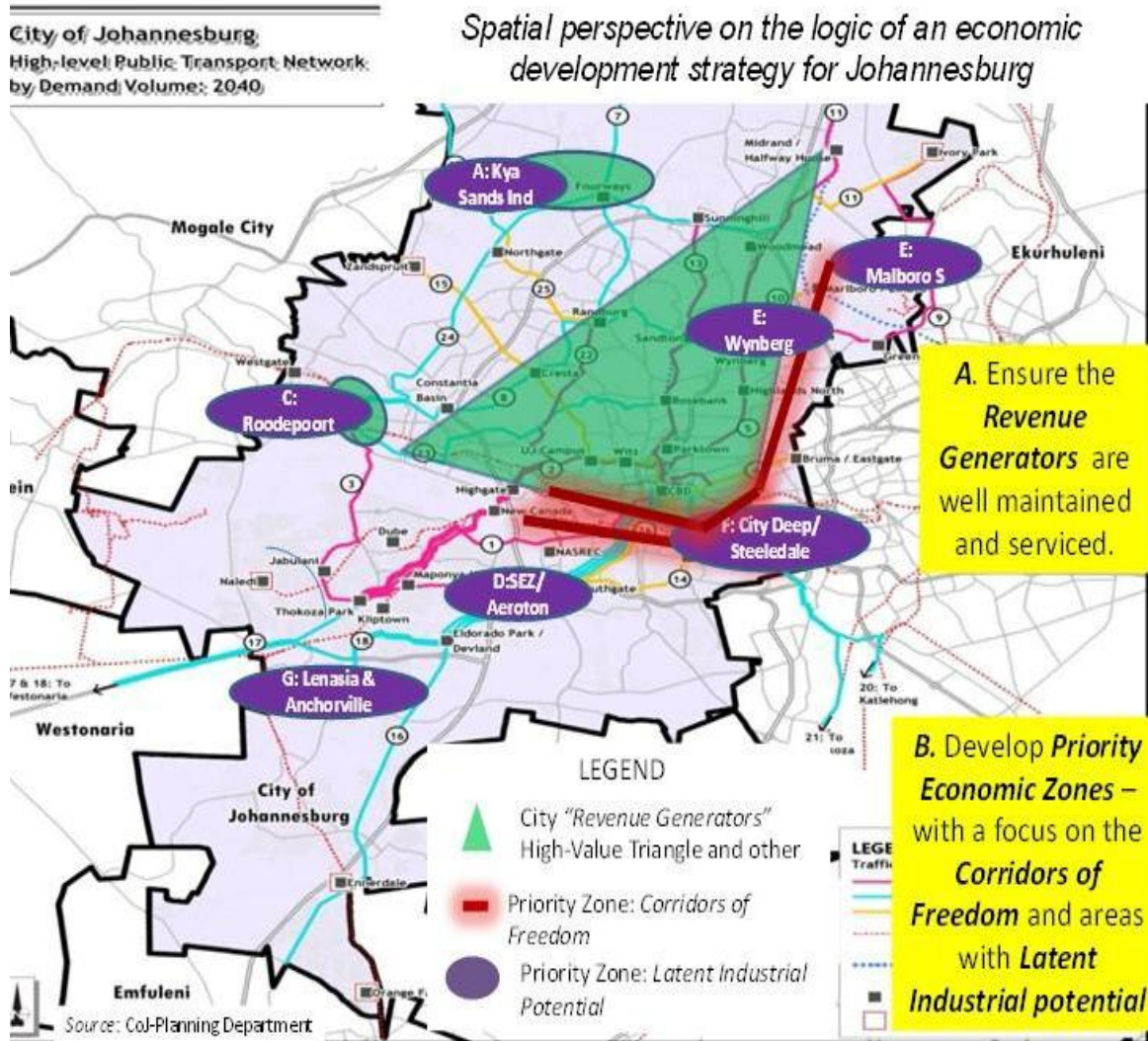


Figure 14 Five strategy interventions to achieve breakthrough in economic development



Map 18: Spatial perspective on the logic of an economic development strategy for Johannesburg

Planning for priority spatial targeting areas

The planning for the spatial targeting areas is a crucial point of planning in the city of Johannesburg

The SDF 2040 as a metro-wide spatial policy identifies main challenges and opportunities in the city. These include marginalised (deprivation areas) residential areas, informal settlements and economic nodes. In addressing the aforementioned challenges, the city wide strategy contained in the SDF 2040 caters for priority precincts, economic nodes, deprivation areas and informal settlements within and outside the integration zones by responding to the mayoral objectives, particularly the following objectives:

1. Promote economic development and attract investment towards achieving 5% economic growth that reduces unemployment by 2021
2. Ensure pro-poor development that addresses inequality and poverty and provides meaningful redress

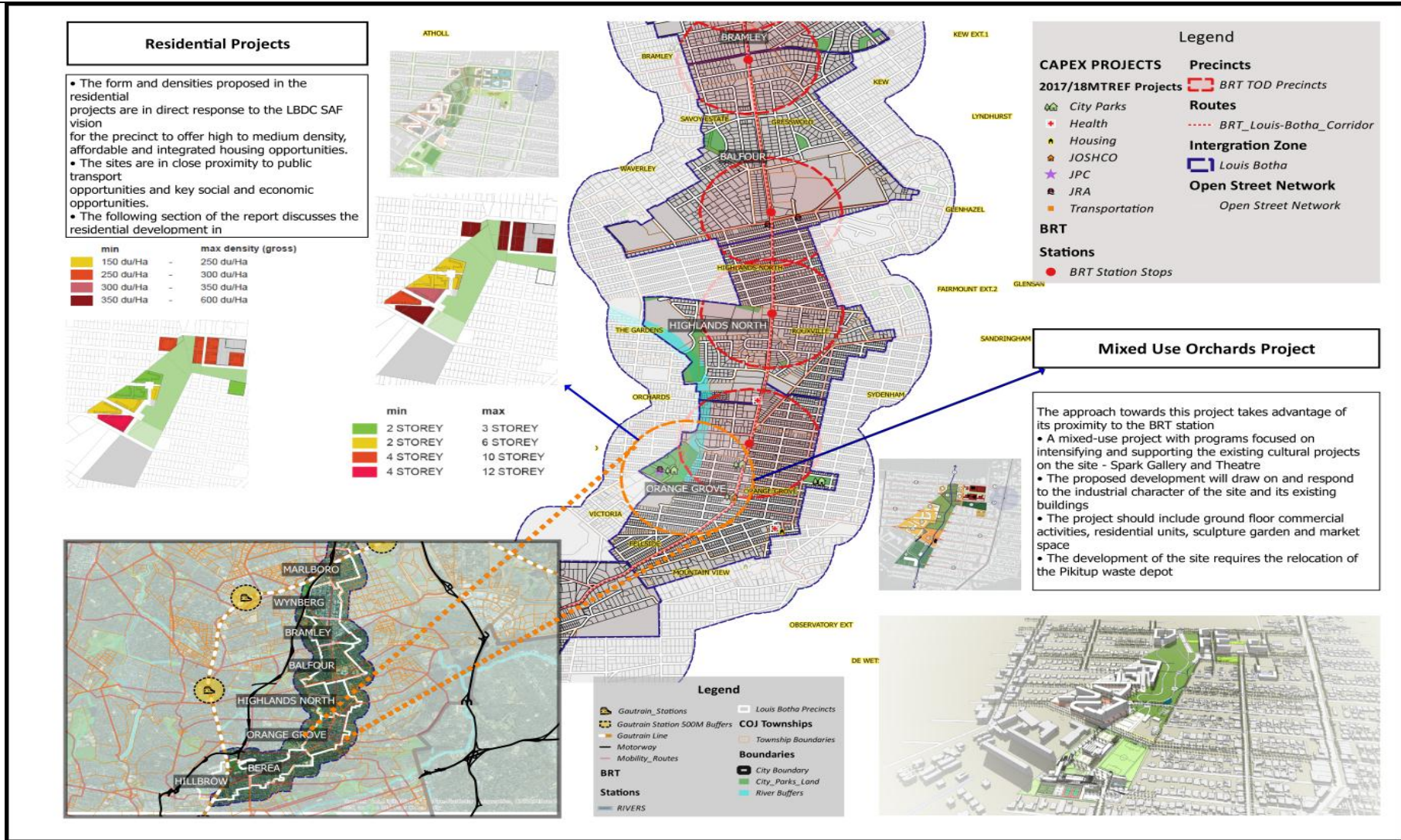
3.2.4 Strengthening credible public transport and housing plans and their alignment with one another and spatial targeting areas

The Transit Orientated Development Corridors, undertaken by the city of Johannesburg is seen as one of its many apparatuses in restructuring the city into a strong dense integrated economic centre that has been mandated by the SDF. The TODs achieve this principle by aligning institutional development framework policies such as the “Sustainable Human Settlement Urbanisation Plan” with public transportation strategies in the same orbit. The TOD strategy ensures that high density residential developments are located in close proximity to public facilities, jobs and social amenities, owed to the greater developments rights that TOD strategies offer around major public transportation precincts. The TOD development rights incentives assist significantly in progressively meeting the various categorical socio-economic demands that addresses spatial inequalities by enabling people to work live and play in the same environment.

- **Patterson Park**

Patterson Park showcase is a prime example of a consortium of social services, public amenities and inclusive housing developments that are integrated along major transit routes and public transport facilities. The Patterson Precinct is a direct beneficiary of the overarching Louis Botha integration zone and as result is equipped with an urban form that promotes efficient and effective accessibility to job opportunities and social amenities not just from a local scale, but a regional and city scale.

In addition to its advantageous connectivity and accessibility competencies, the Patterson Park Precinct in conjunction with Louis Botha corridor offers economic and housing inclusivity as it can accommodate users from the from the Alexandra informal settlement that is located east of the Wynberg Precinct. All in all, the Paterson Park Precinct is the ideal showcase of an alignment of transportation, housing and public services planning in one bask



Map 19: Patterson Park showcase

IPTN

Since 2003 Johannesburg has made a concerted effort to develop transport and land-use plans that support the spatial restructuring and integration of the city. It has sought increased densification of corridors and nodes, and aimed to attract new developments around public transport infrastructure, particularly Rea Vaya and Gautrain as well as Metrorail stations.

Transit Oriented Development (TOD) was formally adopted as a planning strategy in 2008 and received increasing momentum with the Transit Orientated Development Corridors (ToD) initiative in 2013. The Empire/Perth, Louis Botha and Turffontein corridors have been prioritised for corridor development.

The Sustainable Human Settlement Urbanisation Plan (SHSUP) approved by Mayoral Committee in 2012 is a plan to accommodate an additional one million households based on current backlogs and future demographic projections. The plan recognises a role for both formal and informal housing in meeting this demand. It provides strategies for residential densification, and possible locations for future housing development. The Spatial Development Framework approved in 2016 continues to prioritise development along public transport corridors and key nodes with a focus on:

- Strengthening the Metropolitan core, the CBD as a dense economic core of the City;
- Empire/Perth corridor from Soweto to the CBD prioritising nodes at PRASA and Rea Vaya stations including Orlando, Westbury, Melville (UJ) and Auckland Park;
- Louis Botha corridor from the CBD to Alexandra prioritising nodes at Paterson Park, Bramley and Alexandra/Marlboro;
- Turffontein corridor from the CBD South prioritising the area around Rotunda Park and South Hills;
- The “mining belt” from Roodepoort through to City Deep to integrate the north and south of the City;
- An “Aeropolis Corridor - east/west corridor from OR Tambo airport, to be developed through the developed Modderfontein Site, Linbro Park, Alexandra, Wynberg, Sandton and Randburg.

The efforts to restructure the City over the last decade have been slow to bear fruit. Private investment in the form of densification, urban renewal, redevelopment and new infill development has been taking place in the public transport nodes and corridors, but mainly in the north of the city - the Johannesburg CBD, Rosebank and Sandton, and the Gautrain stations in these areas have been attracting very large private sector developments.

The SDF now gives greater development rights to areas immediately around all BRT, PRASA and Gautrain stations (500m walking distance from the stations). This is intended to increase density around stations, increasing ridership and making them more viable, and more importantly, giving more people walking access to public transit infrastructure. This in turn gives residents of the city quicker and more affordable access to jobs, amenities and services.

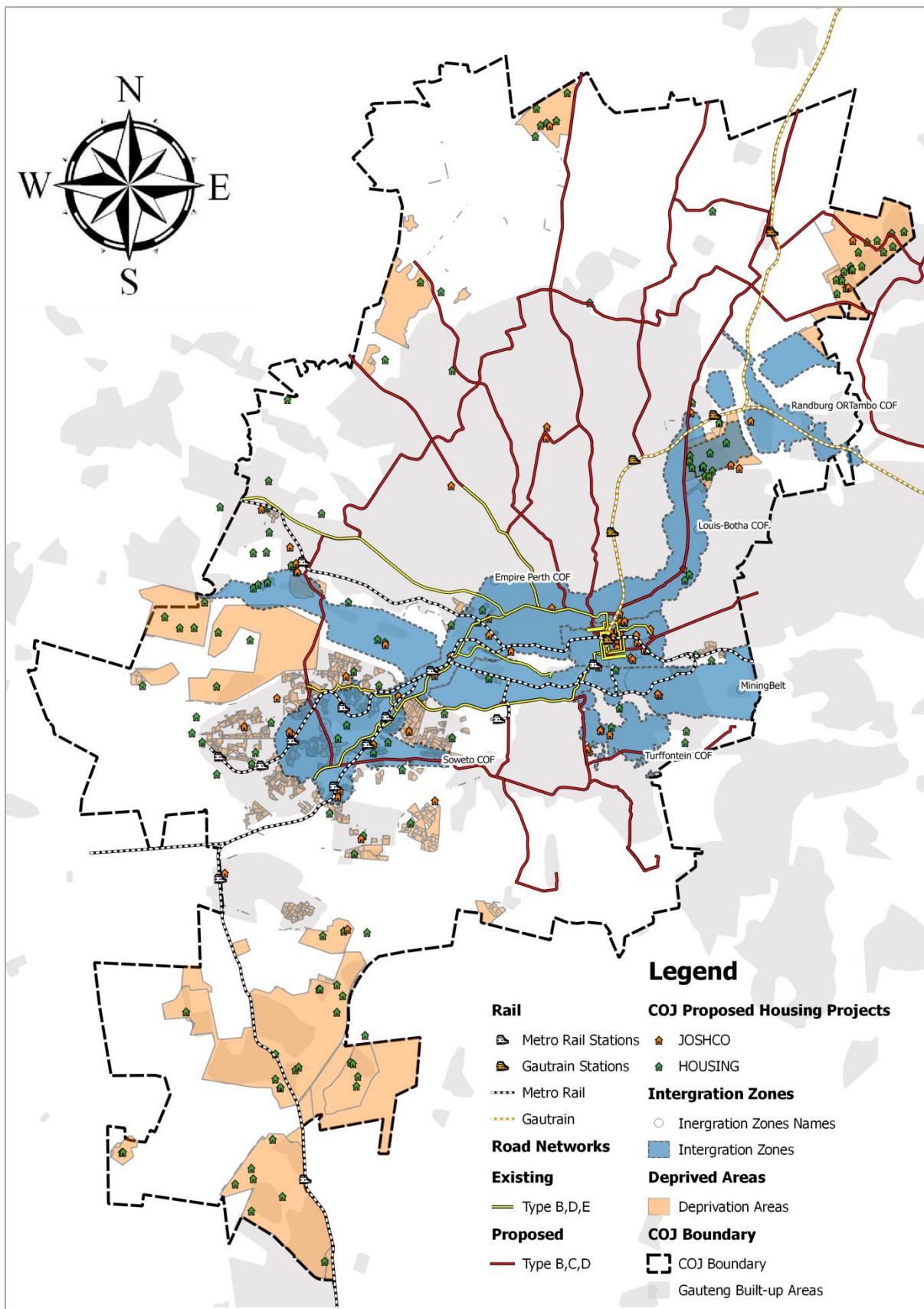
Investment along BRT routes is not as intensive as that being stimulated around Gautrain stations. Evidence is emerging however that more and more development rights are being

taken up, especially in the Louis Botha Corridor. Various mechanisms are in place to accelerate this growth such as the special development zones in Orange Grove and Brixton. Added to this is a drive by land use planning to expedite development and rezoning applications in the Transit Orientated Development Corridors (ToD) formerly Corridors of Freedom.

The SDF is also looking to prevent car oriented sprawl on the outskirts of the City. The Spatial Planning and Land Use Management Act (16 of 2013) and a constitutional court judgement of 2010 now give municipalities the sole function of making land use decisions. It is anticipated that this will give Johannesburg more control in directing development into core areas of the city, and indeed to transit nodes. A vast disparity remains in terms of growth in the north versus the south of the city.

The city centre has densified dramatically to nearly 39 000 persons/km². Demand for housing there has steadily increased and now outpaces supply. There is in fact considerable overcrowding in particular neighbourhoods. This is a positive development for transport as it is centrally located in relation to travel destinations.

The Transit Orientated Development Corridors (located within Transformation Zones) is one of the few instruments that the city holds that has as one of its intentions to align housing developments and public transport. The city's housing strategy supports the SDF in ensuring that programmes deliver the range of housing typologies in the areas identified for residential densification. The location of future housing developments to meet the demand across socio-economic categories should be located close to urban amenities, including economic activity, public transport and jobs. As such the SDF defines the Transformation Zone as the primary focus for public and private delivery of large-scale housing developments in the City, whereas housing development in the Consolidation Zone is subject to a range of conditions to ensure sustainable development takes place.



Map 20: Proposed Housing and Transportation Routes

Integrated Transport Planning

The primary objective of the Integrated Transport Network (ITN) Plan is to define a long term transport network that incorporates, on an integrated basis, all modes of transport including public transport, private transport (freight and private cars) and non-motorized transport.

This network plan can then guide investment decisions, operational planning, transformation initiatives and budget required in the short, medium and long term. The plan caters for a wide range of demand realities and can be flexible over time – as demands change and more resources may be available for greater changes in the transport network. However it still ensures rapid transit over long distances to address our apartheid spatial legacy which has created long travel times.

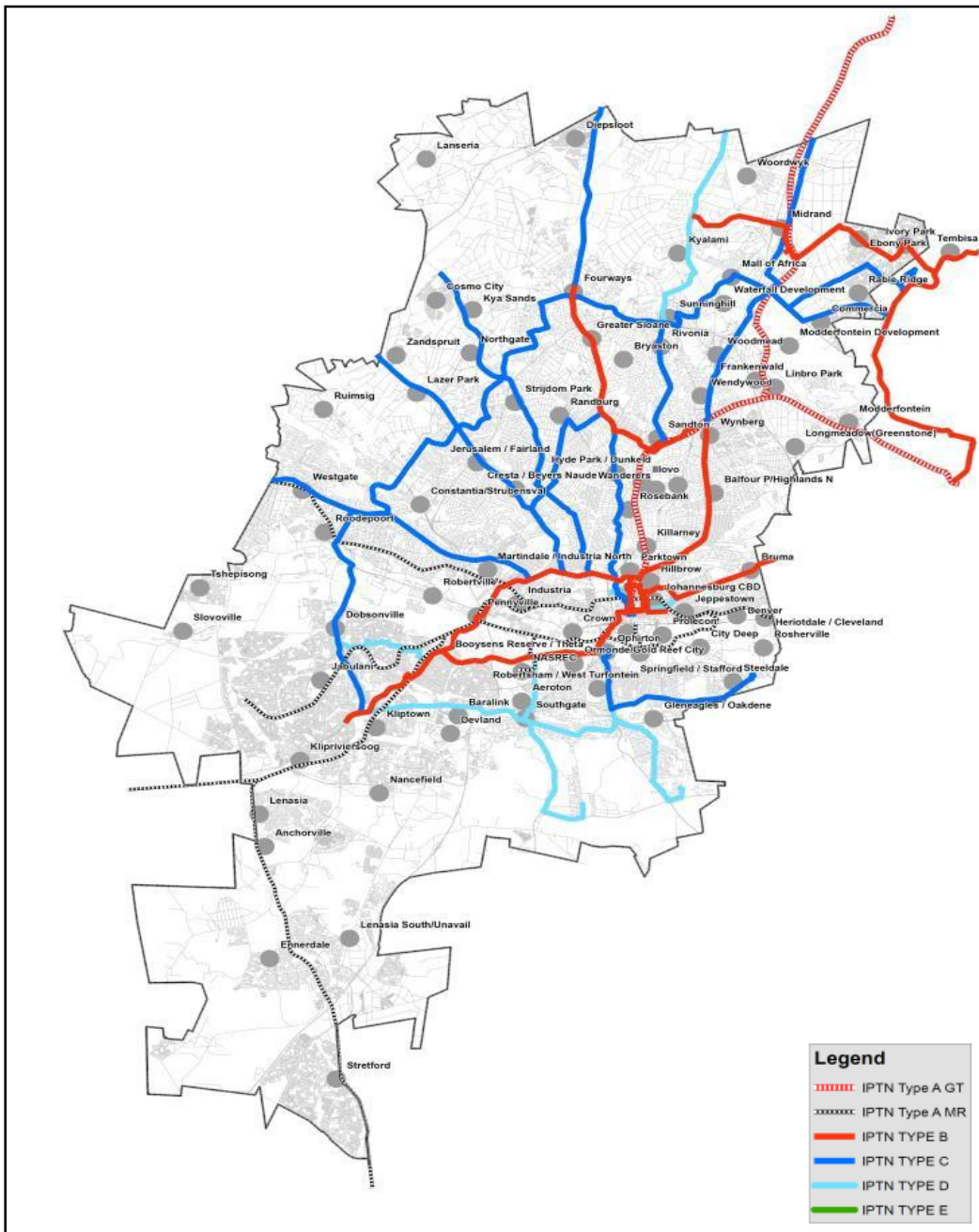
In defining the below Strategic Network and determining modal choice, consideration was given to:

- Employment and population projections:
- Present and future demand ;
- Redressing spatial inequality; and
- Present and future land use.

It was also assumed that new development zones of huge growth would have a high (65%) public transport usage; and that the overall higher densities in the city and focus of development along public transport routes would change the trip length distribution previously assumed in the model. The model was adjusted to change the distribution of trip length, resulting in a mean modelled trip length of 19km.

The public transport morning peak hour demand is predicted by the modelling to total some 617,000 passengers in 2040, compared to 298,000 in 2010. Public transport demand in Johannesburg is thus projected to more than double over the next 25 years.

Map 17 below, shows the major routes and corridors for 2025 network as per the network hierarchies.



Map 21: SIPTN 2025

The City's intention to create an Integrated Transport Network, where each mode is assigned an appropriate role, requires a very well-regulated system with a significant degree of control. With the Integrated Transport Network plan, the City is in a strengthened position to act as a transport authority, being able to determine which routes can be operated by which modes to ensure that there is an integrated transport provision and advise the PRE, PRASA, GMA accordingly.

Table 9: Proposed IPTN Hierarchy

MODE CATEGORIES	TYPOLGY	DEMAND	MODE	FUNCTION AND FEATURES
Rail Public Transport Network	SIPTN-Type A	9000-15000	Gautrain, Metro Rail	<ul style="list-style-type: none"> ○ To move people quickly from area of high residential to areas of employment/income opportunities ○ Limited stops. (closed stations)
Rapid Road Public Transport Network (High Capacity)	SIPTN-Type B	6000-9000	Bus Rapid Transport, Light Rail	<ul style="list-style-type: none"> ○ Corridors of Freedom, mixed use development , three story residential ○ To move people quickly from area of high residential to areas of employment/income opportunities ○ Limited intersections and right turns so buses can be relatively speedy ○ Limited mostly closed high or low floor stations
Road Public Transport Network (Medium Capacity)	SIPTN-Type C	3000-6000	Bus Rapid Transport	<ul style="list-style-type: none"> ○ Corridors of Freedom and areas where the City want s o densify along the corridor ○ Mixed use development, Three story residential, social housing along corridor. ○ Fairly frequent closed and opens low floor stations and some stops
Road Mixed Traffic Public Transport Network (Medium to Low Capacity)	IPTN-Type D	1000-3000	Bus (Double Decker, Standard)	<ul style="list-style-type: none"> ○ Frequent stops with shelters ○ Some public transport priority ○ On street stopping by public transport vehicles ○ Low to medium density
Road Mixed Traffic Public Transport Network (Low Capacity)	IPTN-Type E	500-1500	Bus (Standard, Mini bus)	<ul style="list-style-type: none"> ○ Frequent stops with lay bye es and shelters ○ Low to medium density
Road Mixed Traffic Public Network (Demand Driven)	IPTN-Type F	<500	Bus, Taxi, Demand responsive (e.g. ehailing)	<ul style="list-style-type: none"> ○ Low to medium density ○ Mostly stops or e-hailing

SECTION C**3.2.5 Precinct Planning**

According to the BEPP guidelines, Precinct Planning follows on from the identification of Integration Zones and the confirmation of prioritised TOD precincts within these zones and more specifically within the spatial structuring elements of the zone. They are the basis for project identification, project pipelining or programming and project preparation. For this purpose the CBD/inner city will be used to elaborate the concept of precinct planning.

The inner city of Johannesburg is located within the city's Region F. The inner city encapsulates the identity of Johannesburg in the minds of travellers and investors. The inner city has six very different sectors, Joburg Town, the CBD still home to corporates and the main shopping area; Diagonal Street, Braamfontein to the north, home to Wits University, the Nelson Mandela Bridge and an office mecca; Newtown, close to the city is the cultural and musical heartbeat; Fordsburg to the west is home to the Asian quarters; The Fashion District to the east, incorporates Jewel City; Maboneng Precinct which is on the eastern edge, is the art sector and lastly Ellis Park, the famous rugby stadium, is surrounded by the still to be upgraded areas of Hillbrow, Berea, Doornfontein, Bertrams and Troyville.

The inner City also functions as an important residential neighborhood. It is extremely diverse with areas ranging from severely degraded residential areas such as Bertrams, to the somewhat stable commercial area of Braamfontein. Covering 7 million m² of floor space and 3 million m², the inner city is a just part of the sum of the City of Johannesburg as a whole. Johannesburg has always been at the center of innovation, dynamism, vibrancy, and cultural exchange. The inner city is a key driver of development in the city. It is therefore an asset that the country cannot afford to let waste.

Inner City challenges:

The Inner City has faced significant challenges over time. Chief among these are overcrowding and lawlessness, with residents falling victim to property hijackers and slumlords. Other developmental challenges include:

- An uncontrolled influx of people in the Inner City
- Illegal dumping
- A housing backlogs
- A rise in illegal occupation in key residential areas
- Urban decay
- Shortage and poor maintenance of social amenities (clinics, recreation centers and sporting facilities)
- Traffic congestion in the CBD
- Rise in hijacking of buildings
- Street trading

The City is however, focused on tackling these challenges and developing the inner city into a centre of economic development and growth through the Inner City Revitalisation Programme.

Strategic location

The inner city is positioned in an economically valuable part of the city. It is strategically located in an area with high rental apartments, business centres, and major transportation and communication nodes. In addition, the inner city provides marginalised communities – particularly from the south of the inner city - an entry point into the formal economy. It is home to the Gauteng Provincial and Johannesburg Metropolitan governments, and to some of the most established businesses in the country. Johannesburg inner city is a hive of diverse economic activity, close to transport nodes, schools, places of work, entertainment and shopping. It also boasts the biggest transport node in Africa, with trains, busses and up to 4 000 taxi's bustling through the city on a daily basis culminating at centres such as Park Station and Ghandi Square.

Transport

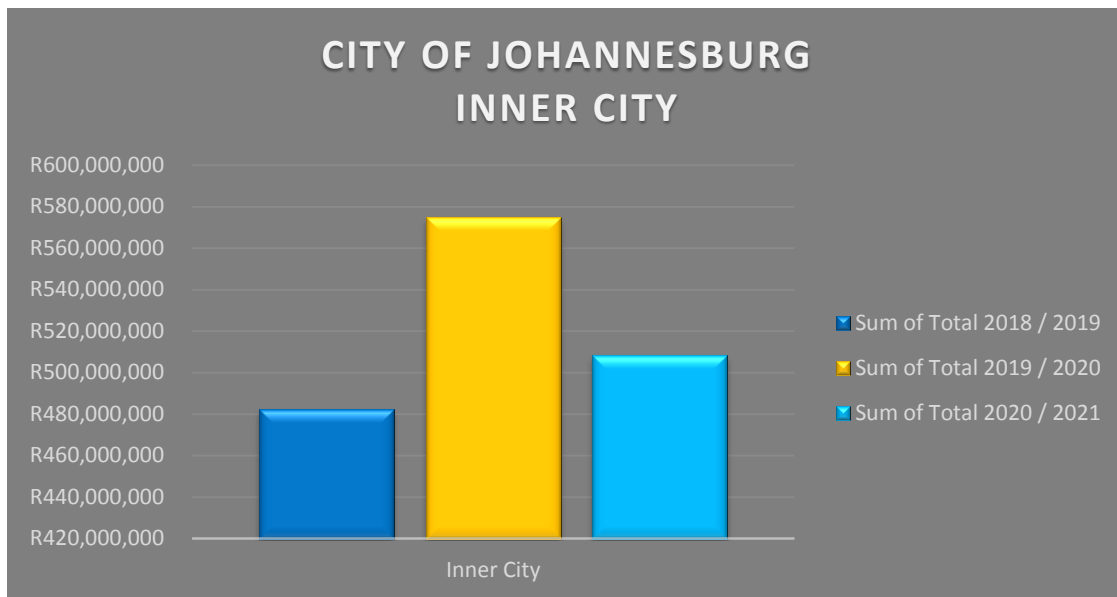
It is the major public and quasi-public transport hub in Johannesburg, with over a million people travelling into the inner city every day to work, trade, conduct government business, and onward travel. Johannesburg's inland port, the largest in Africa and fifth-largest in the world, handles 30% of the country's exports

Infrastructure

It has a large asset base, with much of its service infrastructure under-utilised and in decline. The inner city is rich in cultural, sporting and heritage assets, including some of Johannesburg's most important facilities and venues, such as the University of the Witwatersrand, the Civic Theatre and Ellis Park stadium amongst many others. The city is an outstanding investment destination, offering the best access to markets across Africa, an investor-friendly environment, a stable democracy as well as excellent telecommunications and road infrastructure.

Economic generator

It is the heart of the city, and its image, vitality, success and well-being are representative of the whole of Johannesburg. It is often viewed as being a significant incubator and location for small medium micro enterprises because of its role as an economic generator and vibrant retail and trade centre. Joburg's economy has recorded consistently high growth rates and has been a net creator of employment, with all the large banks, insurance companies and many Information and Communications Technology companies located in the inner city.



Budget allocation for the Inner-city.

The inner city revitalization is being prioritized to restore the core of Johannesburg, and stimulate economic activity in the hub of the South African economy, the budget allocation as per the graph above illustrates how much funds will be spend in 2018/19 financial year which is approximately R482 273 969 . It is in this regard that we continue to focus on addressing the scourge of hijacked properties and lawlessness.

We are building from the initiatives embarked on in 2016/17 financial year including the appointment of 1500 JMPD recruits; the improvement of cleaning levels especially in the Inner City; functional road and traffic signage and increasing the number of building and environmental health inspectors. Law enforcement still needs to be strengthened in outdoor advertising, vandalism and theft of the City's infrastructure, and bypassed meters. The City has elevated the levels of service delivery through extending operating hours in clinics and libraries; capacitation of the Johannesburg Roads Agency amongst others. Through the Group Forensic Investigation Services, we remain committed to effectively dealing with corruption and fraud.

3.3 CATALYTIC URBAN DEVELOPMENT PROGRAMME

3.3.1 Intergovernmental Project Pipeline

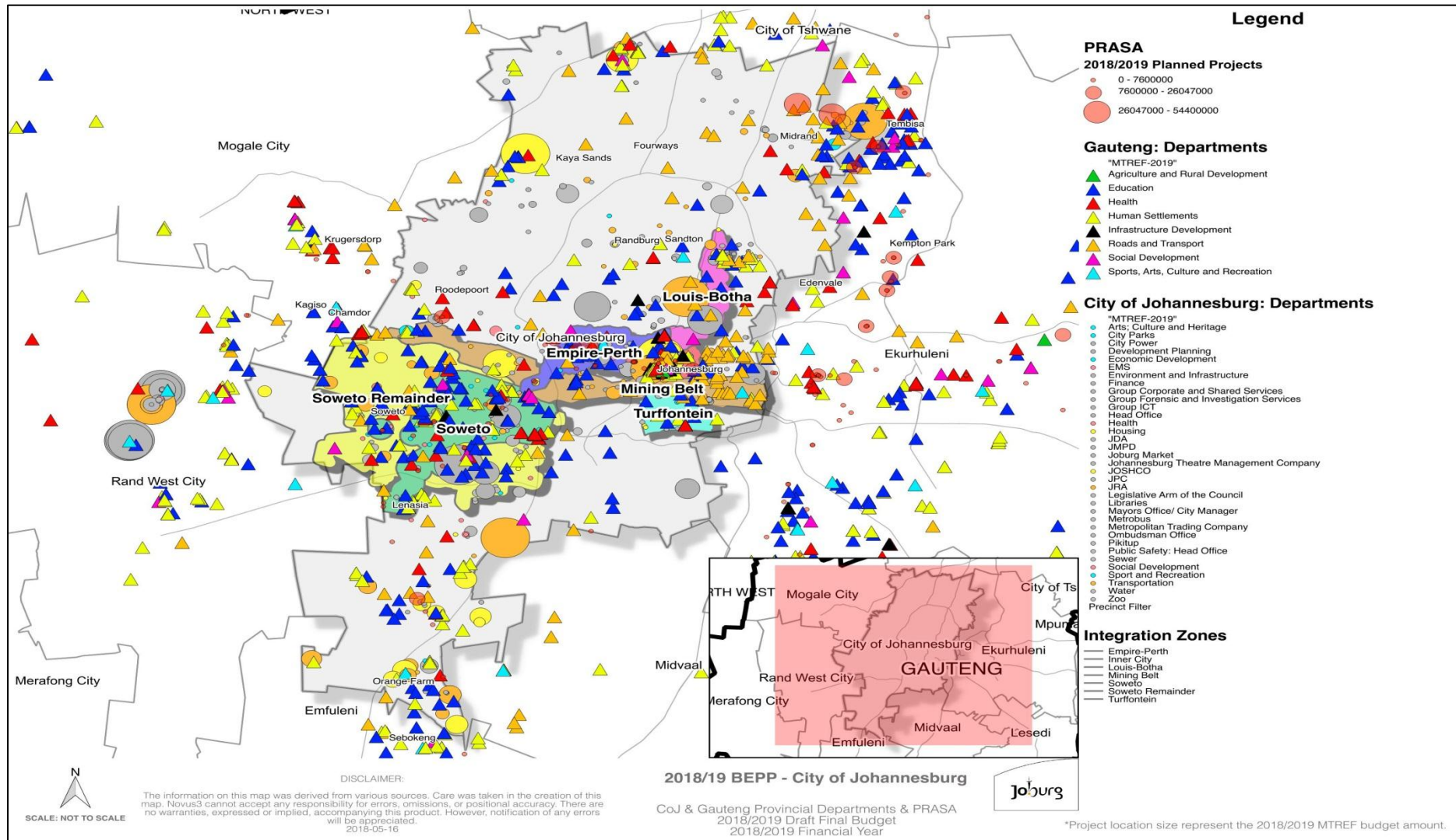
The City of Johannesburg's core objective is to ensure that the implementation of intergovernmental projects by all spheres of government result in sustainable development. Gauteng Provincial Government is using the Infrastructure Reporting Model (IRM) to implement their infrastructure projects, which are reported the Gauteng provincial Treasury. The Provincial Treasury has taken provincial budgeting a significant step towards significant integration of provincial budgets in order to achieve provincial outcomes. This model has benefitted CoJ in that it has facilitated access to more provincial budgets and has begun a process of budget mapping. This has resulted in the City establishing a relationship with the

Province for joint planning, budgeting and implementation of projects which benefits both Province and the City.

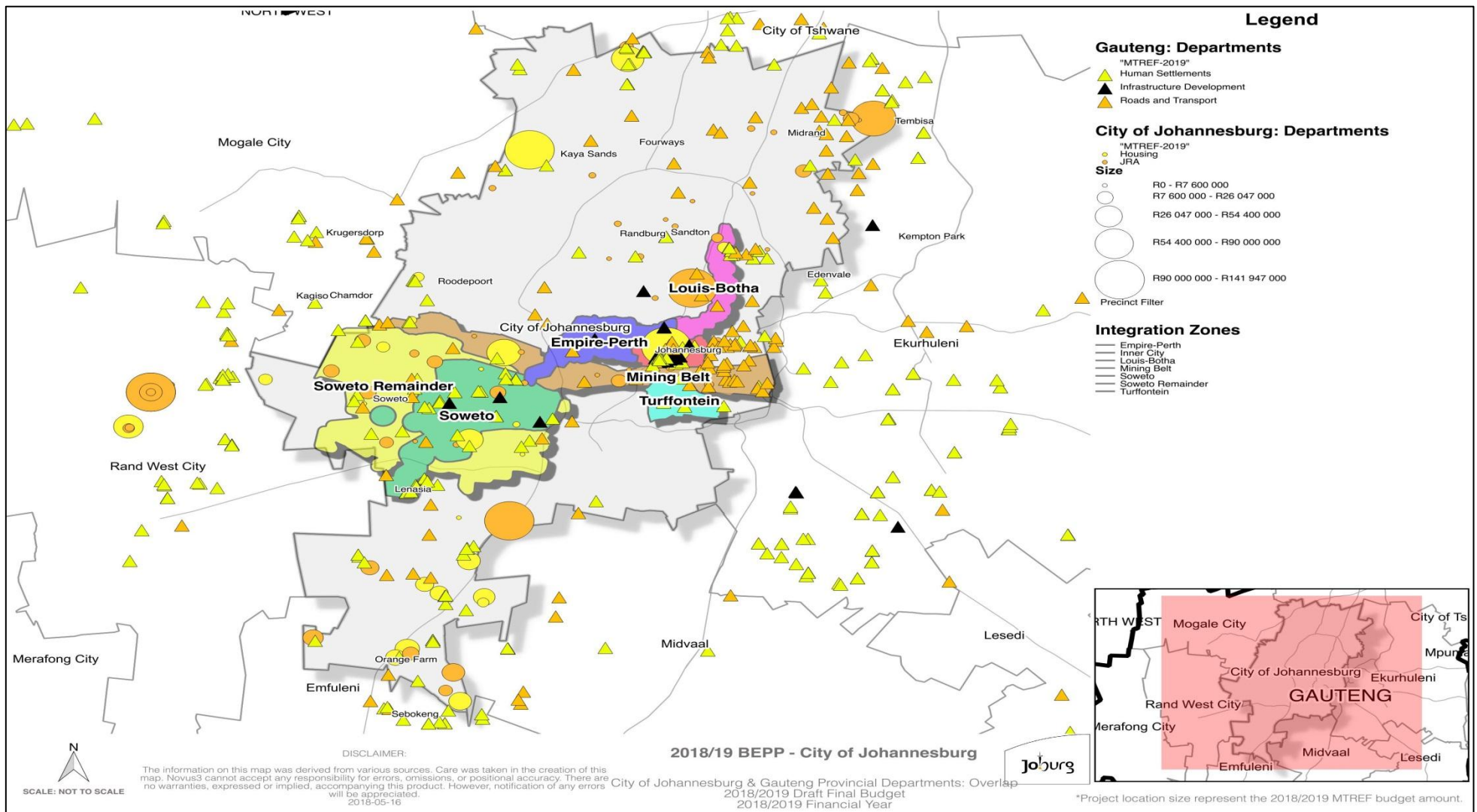
The Provincial government has included their MTEF 2018/19-20120/21 planned projects across the following sectors:

- Education
- Health
- Human Settlements
- Infrastructure Development
- Roads and Transport
- Social Development
- Sports, Arts, Culture and Recreation

The national government pockets are shrinking and there is a nationwide call for government departments at different levels, along with cities/ municipalities, to work together to prevent wasteful expenditure. Maps 18 & 19 (*Intergovernmental Projects*) below illustrate all the projects that the City of Johannesburg and Gauteng Provincial Government have allocated draft budget to for execution. The alignment of draft budgets shows intergovernmental co-ordination between the City and Province in planning and implementation of projects to avoid wasteful expenditure.



Map 22: Intergovernmental Projects



Map 23: Housing and Transportation projects budget between Gauteng province and the City of Johannesburg

Engagements with National Department of Public works (DPW)

The City is having ongoing engagement with the National Department of Public works with regard to national social facilities such as Magistrates Courts, Home Affairs Offices and leasing of buildings. DPW has advised the city to identify priority precincts outside the Inner City, and the city chose Soweto, particularly Orlando East where DPW can intervene. No commitment has been made to date. See annexure D for evidence.

Engagements with Gauteng Provincial Governments

The Gauteng Office of the Premier has offered to assist the three Metropolitan municipalities namely City of Johannesburg, City of Tshwane and City of Ekurhuleni with regard to joint planning with the Gauteng Provincial government Gauteng Metropolitan municipalities. The purpose is move away from sharing of intergovernmental pipeline projects to joint planning which must happen from project identification to project implementation. Terms of Reference with Gauteng Office of the Premier for the Tri-Metro (namely City of Johannesburg, City of Tshwane and City of Ekurhuleni) joint planning task team/committee to ensure that the set goal of interactive joint planning materialises. The Terms of Reference binds the Heads of Planning units within the Metros to ensure amongst other things joint planning of cross-boundary projects from project initiation until completion takes place. There are ongoing engagements. See annexure D for evidence.

The City has an agreement with Gauteng Department of Roads and Transport in respect of the management of the subsidised bus contracts in the City. The National Land Transport Act (Act 5 of 2009) regards the cities as “Contracting Authorities” which then means that the Province cannot on its own contract the Bus Operators in terms of this legislation, hence this Intergovernmental authorisation agreement, see annexure D for the agreement.

The Johannesburg Social Housing Company SOC Limited is mandated to provide and manage affordable rental housing for the lower income market as an integral part of efforts to eradicate the housing backlog of the City. JOSHCO is in receipt of grants from SHRA as well as subsidy from Gauteng Department of Human Settlements for financial assistance in delivery for social housing. See attached annexure D for the agreements.

Engagements with PRASA

The City is having on going engagements with PRASA through the IPC on various projects around public transport. There was an engagement with PRASA in relation to SIP 7 with Development planning. See annexure D attendance register.

3.3.1.1 City-wide perspective of the Intergovernmental project pipeline

There are numerous City-Wide projects that seek to achieve the Mayoral objectives (see *table 7: City wide catalytic projects*) and spatial focus areas guided by the City’s strategic vision contained in the SDF 2040.

Table 10: City wide catalytic projects

PROJECT NAME	DIVISION	PROJECT TYPE	ESTIMATED TOTAL COST TO THE CITY
Watt Street Interchange/ Great Walk (Louis Botha)	JPC	Infrastructure	R 95,000,000.00
Milpark (Empire Perth)	JDA/ Transport	Infrastructure	R 65,000,000.00
City Deep Hub	-	Feasibility study	R 4,000,000.00
Jabulani Mixed Use Node	JDA	Infrastructure	R 76,500,000.00
Nancefield Mixed Use Node	JDA	Infrastructure	R 136,233,000.00
Total			R 376,733,000.00

SIP 2: The Durban-Free state – Gauteng Logistics and Industrial Corridor

This SIP is mainly designed based on location and aims to unlock the Durban, FS and Gauteng logistics and industrial corridor.

The City has put a budget aside for the redevelopment of the City deep in land Logistics Port in the medium term budget. However if this facility is to fulfil its potential as a key piece of economic infrastructure, significantly more investment will be needed, together with coordinated interventions from all relevant stakeholders. The champion for SIP2 within the City of Johannesburg is the Transportation Department.

SIP 7: Integrated urban space and public transport programme

This SIP is designed to address the spatial fragmentation caused by apartheid which resulted in certain areas not having appropriate infrastructure services.

This SIP7 is of concern to the City. The champion for SIP7 in the City is the Development Planning Department. The policy that outlines the City's approach to this SIP as well as the City's approach to informal settlements and backyard shacks is outlined in: SHSUP, the City's Integrated Transport Plan (particularly through implementation of the Rea Vaya BRT bus network) as well as in the SDF. Presents the list of SIP projects as communicated to PRASA, which is the lead agent for SIP 7 on behalf of the PICC.

Mandate of SIP 7:

- Create sustainable urban settlements.
- Integrate land-use with public transport.
- Land-use corridor densification.
- Integrate previously separate and racially based settlements in 12 major urban areas.
- Housing densification, in filling and access to services.
- Provide viable mass transit and integrated public transport systems (reduce public transportation costs and time and promote green urban development)
- Accelerate infrastructure projects supporting sustainable urban settlements and associated bulk infrastructure

Table 11: Mega projects for SIP 7

PROJECT NAME	PROJECT IMPACT	ESTIMATE PROJECT COST TO THE CITY
Lufhereng Mixed development typology project	Sustainable Human settlement	R 1 000 000 000
Greater Kliptown re-development mixed typology project	Sustainable Human Settlement	R 500 000 000
South Hill mixed development typology project	Sustainable Human Settlement	R 200 000 000
Diepsloot Mixed development typology Project	Sustainable Human Settlement	R 600 000 000

Institutional Arrangements

Through the assistance of National Treasury, the three metropolitan Municipalities in Gauteng have established a tri Metro joint planning task team / or committee to establish ways of conducting interactive joint planning with Gauteng provincial departments. This is because Planning projects initiated at provincial level occur in the municipal space and often rely on provision of municipal engineering services, which then causes the Municipality to divert their basic engineering budget. Interactive planning with provincial departments will be of great value to both parties as they will be able to influence each other's budgets and plans, especially at the initiation phase, which will in turn address the issue of shrinking national budget envelop.

3.3.1.2 Intergovernmental project pipeline within the catalytic urban development programme

Institutional Arrangements

Various departments are executing planning and implementation of projects in the priority spatial targeting areas. These departments are as follows:

- **Development Planning:** The department has a vision of a spatial form and functionality that embraces the principles of integration, efficiency and sustainability, and realises tangible increases in accessibility to amenities, opportunities and quality of life for all communities, especially the poor. The department is the key to spatial and settlement transformation within City of Johannesburg, thus it identifies and undertakes planning of projects to be implemented by the City, guided by the spatial direction of the City.
- **JDA:** Is responsible for project implementation on the ground on behalf of the City.
- **Finance Department:** The finance department is the engine providing strategic financial leadership to the City of Johannesburg, thus the department ensures there are funds available for the implementation of the project.

- **Engineering Departments (Internal/external):** Ensures that there is bulk infrastructure available to support the development and undertake maintenance thereof.

Institutional arrangements are dependent of the project type and the magnitude. Below is an example of an institutional arrangement which shows various departments that should work together to achieve the vision of the project. With each project social development and urban management are the key focus. This figure 15 shows how projects programmes according to relevant departments and advocates for the inclusion of private sector players.

An example of the City generic institutional arrangement

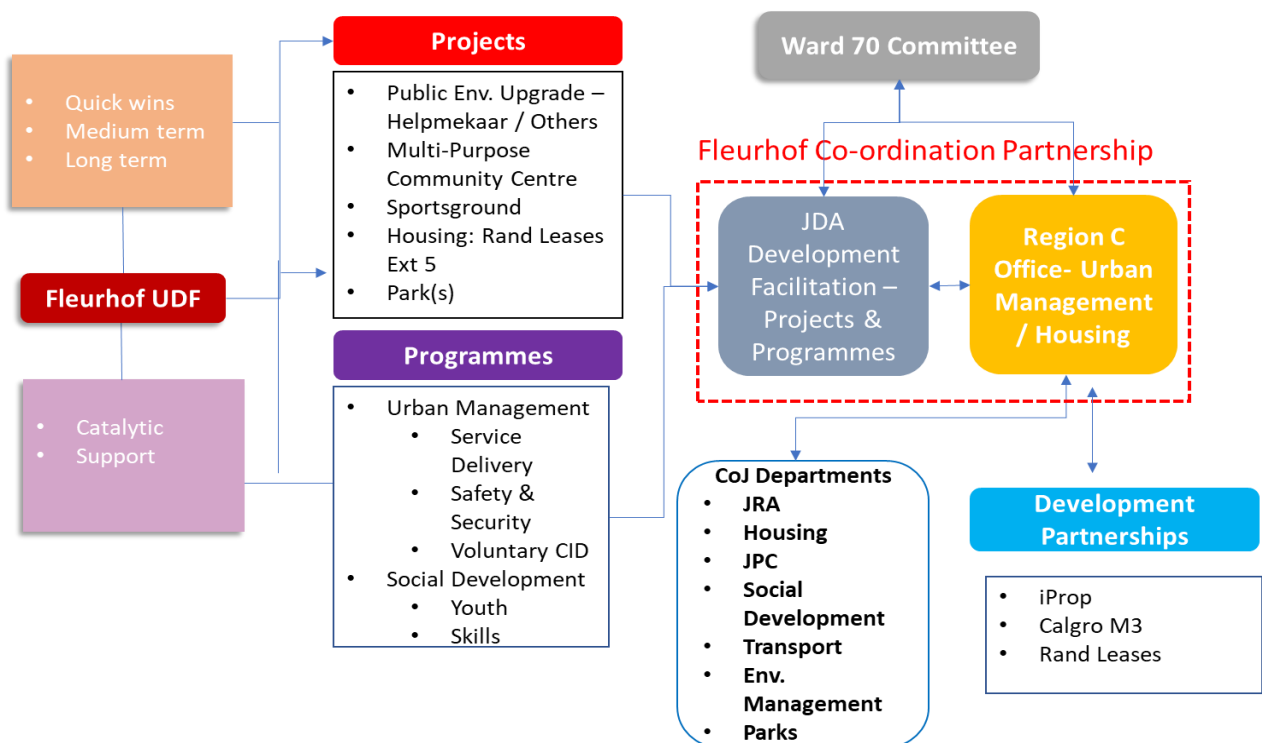


Figure 15: Institutional arrangement for Fleurhof UDF

The City has centre for engineering which deals with Project packaging. The method that is followed for projects and programme preparations immates for the IDP process and programme integration (leadership oversight) meetings, where the departments and entities will package them in order to minimize or avoid redoing the works. Furthermore, before budget can be allocated, the acquisition workshop will be conducted to address the state of readiness and to avoid the risk of non-expenditure especially on the capital grants

Below is an example of how JDA, which is the implementing agent for the city, does the project and programme preparations. JDA structures its business plan as aligned to the City of Johannesburg programmes which provides ease of reporting and monitoring of performance on projects delivery.

SDF Priority Transformation areas	Corresponding JDA Regional Programmes	JDA Development Programmes
Strengthening the metro core	Inner City and the Old South (including Turffontein and Mining Belt)	<ul style="list-style-type: none"> • Programme 1: Inner city transformation Programme • Programme 2: Strategic economic node programme • Programme 3: Public infrastructure delivery programme • Programme 4: Greater Alex and Alexandra Renewal Programme (ARP) • Programme 5. Economic Empowerment Programme
Unlocking Soweto	Greater Soweto (including Lenasia, Eldorado Park, Nancefield)	
Consolidating public transport backbone	The Corridors of Freedom: Empire-Perth Corridor and Louis Botha Corridor	
OR Tambo Corridor	Alex and the OR Tambo Corridor (includes Randburg, Sandton, Cosmo City, Modderfontein, Frankenwald)	
Addressing marginalization	Marginalized Areas – Diepsloot, Ivory Park, Orange Farm	

Table 12: SDF Priority Transformation Areas and Corresponding JDA Development Regions and Programmes

The JDA's approach towards area-based development covers the following five practices and services:

1. **Development identification and project packaging** - Identifying strategic opportunities to respond to the CoJ's focus area by bringing together all relevant stakeholders and parties to the initiative, and developing an implementation plan.
2. **Development and project facilitation and co-ordination** - Working with various stakeholders and parties to ensure that they are undertaking their roles as expected and required.
3. **Overall development implementation involving capital developments** - In ensuring that the development is implemented as planned, JDA may oversee specific project management functions within a development, while retaining overall accountability as a development manager. Through local beneficiation, in terms of small, medium and micro enterprise (SMME) and entrepreneurial support, the JDA aims to increase the number of local emerging contractors used in capital projects carried out in the various communities, as well as the number of local construction jobs created.
4. **Post implementation support and sustainability** - Complement any capital development or investment with urban management initiatives and models.
5. **Impact Assessment / monitoring and evaluation** - Analyse, review and quantify private sector investment in various JDA intervention areas, and assess the socio-economic impact of these interventions. This is achieved through, among others, analyses of property market trends and factors that influence investor interest in JDA development areas. Value for money assessment.

The JDA has aligned the main elements of our work and highlights the flow between them:

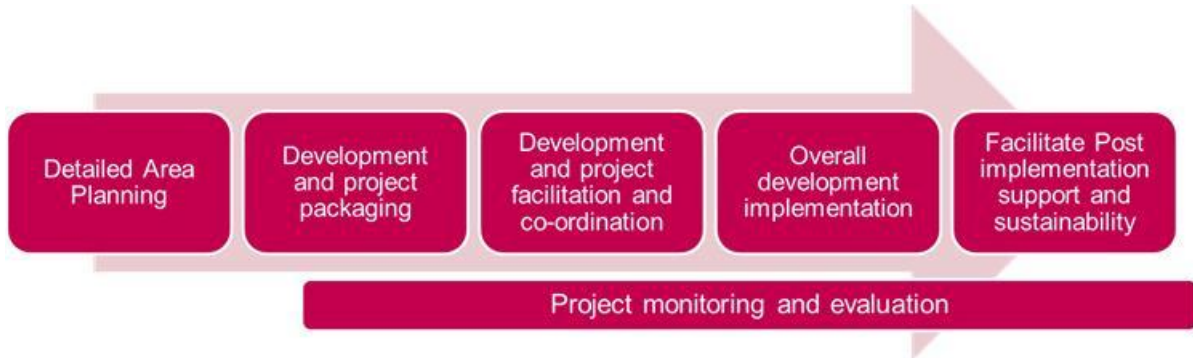


Figure 16: Development Process / Lifecycle

The following figure 17 below unpacks the JDA’s value creation process to illustrate how the JDA has aligned its activities and efforts to achieve expected results by structuring the main elements of our work.

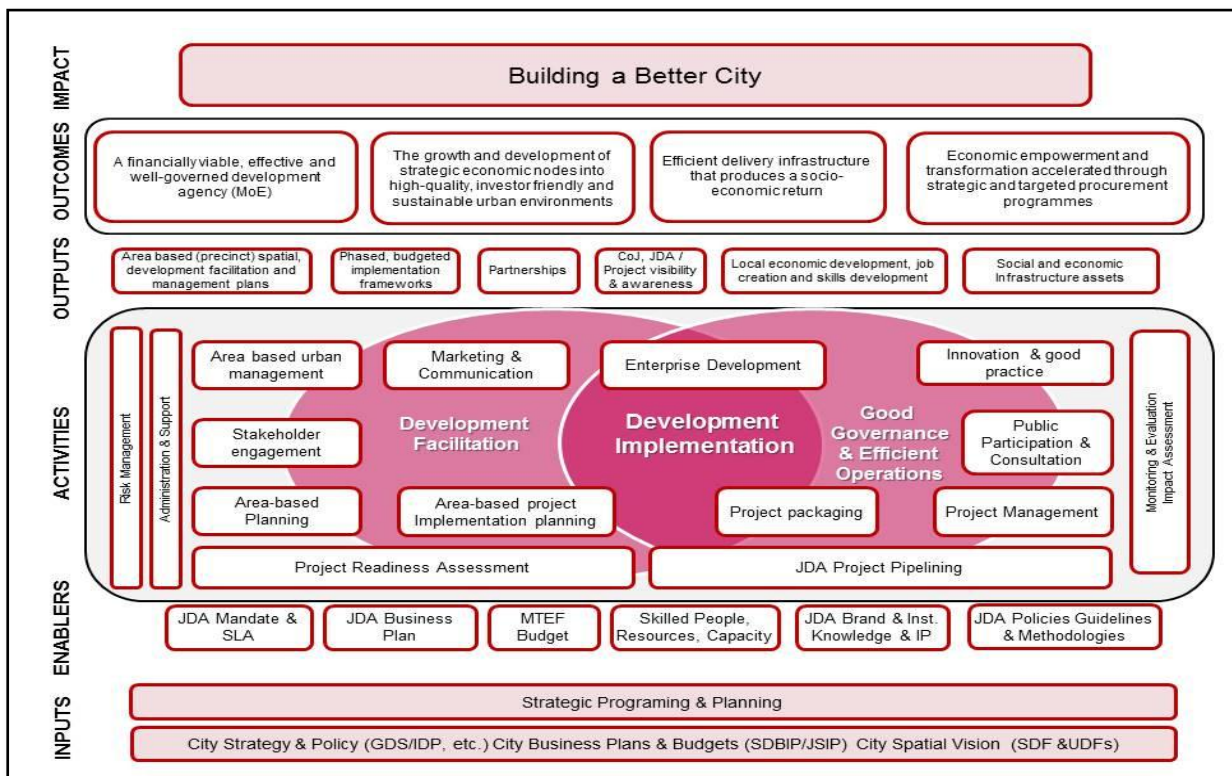


Figure 17: JDA’s Value Creation Process

Figure 17 as indicated above outlines, the processes that a project within a city undergoes from planning by officials and community through public participation process to implementation. Key role player are identified and the coordination thereof is illustrated in this figure on how the actual project will play a bigger role in the vision of the city.

The JDA is accountable to the Department of Development Planning and the Member of the Mayoral Committee for Development Planning, who exercises political oversight and to whom the JDA submits compliance reports in respect of its performance scorecard. The JDA

relies on the Department of Development Planning for direction on its contractual obligations contained in the service delivery agreement, and on the Member of the Mayoral Committee for its political mandate and oversight. The Group Governance unit provides corporate governance and related support, including financial sustainability and compliance reporting and review.

The Council's Portfolio Committee on Development Planning provides political oversight of the JDA's activities and functions. The JDA also falls under the Economic Development Mayoral Cluster Committee, which ensures that the work of the other departments and entities mandated with spatial transformation and economic growth of the city is integrated and coordinated. The JDA coordinates its area-based development activities and other catalytic interventions with the Department of Development Planning and engages with client departments in the design and construction of infrastructure assets.

Risk management

This is an ongoing process and is discussed in details in section E.

3.4 CATALYTIC URBAN DEVELOPMENT PROGRAMME RESOURCING

3.4.1 Long term financial sustainability

The financial development plan has been reviewed in line with historic performance trends and the local government regulatory framework, and used to confirm both the adjustment budget and the 2018/19 budget indicatives. The outcomes of the process were used to inform the resource allocation process. The funding model still relies heavily on revenue generated from trading services through tariffs, supported by grants and loans. Built into the models are modules that recognise constraints as a result of existing commitments and the projected financial position. Optimisation as a modelling technique was used to arrive at budget limits that put the organisation at a sound financial position. The modelling process also shed light on the performance of major revenue sources in relation to capital investments made, providing a rich background of evaluating budget proposals.

The Capital Investment Framework (CIF) is the framework through which the City identifies and prioritizes capital projects for implementation in the forthcoming financial year and the relevant medium term budget. Over the past years, aspects of the framework have been used to develop various modules of the City's infrastructure planning tool, (JSIP).

Capital investment is addressed within the budgeting process and is driven by the following:

- The Growth and Development Strategy;
- The Mayoral Priorities;
- Key IDP Interventions;
- The Spatial Development Framework;
- The Growth Management Strategy; and
- Capital Investment Framework

The City has a long term financial sustainability plan which ensures that there is continuity in implementing projects which will result in achieving the long term strategic vision of the City in the Growth and Development Strategy as well as Spatial Development Framework. Some of the projects are identified through the IDP participation process.

Strengthening the Link between the City's Capital Budget and Spatial Planning

In order to understand the link between the City's Capital Budget and Spatial Planning, it is critical to note the following.

- Implementation of ideal spatial plans generates demand for infrastructure.
- The demand for infrastructure exceeds supply as evidenced by the existence of infrastructural backlogs.
- The City's capital budget should be viewed as a supply side measure intended to ensure the availability of infrastructure.

Given that the useful life of infrastructure is long term in nature, the City takes a long term view in its funding. The City has a Financial Development Plan (FDP) which is a strategic modelling tool intended to give a long term view of the City's finances with the underlying goal of ensuring long term financial sustainability in implementing capital and operating mandates.

FDP outputs include 10 year projections for Opex and Capex. The first 3 years of the projections serve as the starting reference points for determining the sustainable Capex budget over the MTREF. Key variables considered in determining the level and composition of the City's Capital Budget include the following among others:

- Current Debt levels, Maturity Profile of Long Term Debt and Available Capacity to sustainably accommodate new debt.
- Revenue Projections
- Free Cashflow Projections
- Level of Surplus Cash Reserves
- Limitations on Indebtedness as contained in current loans agreements.
- Capital Grants Projections
- Depreciation vs Asset Renewal and Replacement requirements
- Macroeconomic variables (GDP growth rates, inflation rates, interest rates etc.)

The City's FDP projections and Capital Budget, therefore sequentially determine the amount available to spend on spatial planning. While allocation to catalytic projects is currently done within the confines of the gross capital budget, the JSIP platform is utilized to ensure that Capex is allocated to high impact projects.

Given the persistent nature of infrastructure backlogs and limited balance sheet capacity, the City is currently exploring how best to utilise alternative off balance financing mechanisms to alleviate the backlogs.

COJ ASSET MANAGEMENT APPROACH

As part of the CIP, the city undertook an assessment of the current status of asset registers and business processes relevant to asset creation, disposal, rotables, etc. An implementation framework has been developed in line with the findings and work has already begun to ensure alignment between business processes, asset registers and the GIS system. Bulk assets in the register will be created in the GIS and linked to the same asset number as displayed in the register. Infrastructure asset management in the city is guided by:

National Treasury's Municipal Budget Circulars

National Treasury's Municipal Budget Circular for the 2014/15 MTREF period, required municipalities to secure the health of their asset base (especially the revenue generating assets) by increasing spending on repairs and maintenance. If the budgeted amount for repair and maintenance is less than 8% of the PPE asset carrying value, as recorded on the last financial statements, then the Circular requires the municipality to provide a detailed explanation and assurance disclosure to confirm that the budgeted repair and maintenance amount is adequate to secure the ongoing health of the entity's assets. Asset renewal as well as repair and maintenance of existing assets have since been receiving adequate attention.

mSCOA Requirements for Asset Maintenance

The Municipal Standard Chart of Accounts (mSCOA) regulations were gazetted on 22 April 2014, making the application for mSCOA to local government a legislative requirement with effect from 01 July 2017. This specified norms and standards for the recording and the collection of local government budget, financial expenditure and non-financial information, thus impacting on the 2017/18 annual financial statements and audit of all municipalities. The objective is to provide a national standard for the uniform recording and classification of municipal budget and financial information at a transaction level by prescribing a standard chart of accounts. The city has since embarked on a programme to ensure uniformity in reporting, performance measurement and compliance in respect of asset data.

Cities Infrastructure Delivery and Management System (CIDMS)

The CIDMS principles include:

- ✓ Standardising and using improved definitions for the asset management life-cycle activities that take place such as operations, maintenance, repairs, major repairs, preventative maintenance, renewal, rehabilitation, upgrades, replacement, alterations and/or refurbishment, which will presumably now involve the definitions provided in the CIDMS.
- ✓ Standardising the definitions for the terms capex and opex, including the allocation of each of the asset management life-cycle activities to one of these accounting categories, which will presumably now involve the definitions and allocations provided in the CIDMS.
- ✓ The relationship between, and information contained in, the required *Asset Management Plans*, *Asset Maintenance Plans* and *Operation and Maintenance Plans* needs to cover the following aspects:

- Utilise the initial life-cycle planning information to ensure budgetary provision for adequate funds to ensure that existing assets continue to perform at the planned levels and standards of service;
- Understand the criticality of the asset for municipal service delivery;
- Understand the affect the required maintenance levels and activities will have on the asset performance and/or the visual appearance of the asset, with the necessary response time stipulated to prevent failure;
- ✓ To identify the higher-priority maintenance tasks in the maintenance strategy, which will enable maintenance efforts to be focused on these areas if the available resources fall below the planned levels;
- ✓ To identify the routine inspections and services that are required to able target actions to be taken in a timely and cost-effective manner; and,
- ✓ To identify and assess the cumulative effect of deferred maintenance, including the impact on the budget, as this will have a significant bearing on the formulation of the asset plans and budgets that are input into the IDP.

Accounting Standards Board (ASB) Requirements for Asset Maintenance

The Accounting Standards Board (ASB) issued amendments to GRAP 17 to ensure that, from the 30 June 2017 financial year end, repair and maintenance expenditure for PPE assets should be disclosed in the annual financial statements, either as part of the disclosure notes or on the face of the Statement of Financial Performance. This changes the past practice where repair and maintenance has not been shown as a line item in the financial statements, but it has been budgeted for as a separate line-item. At present, the emphasis is on properly repairing and maintaining assets, so the sufficiency of the expenditure on repair and maintenance is assessed as a percentage of the asset value by users of financial statements.

Business Transformation Project- Infrastructure Asset Management

The City needs a central repository of data to produce meaningful, justifiable budgets for capex- and O&M work in the City. This data should be coming from the asset registers, whether financial or technical. The Business Transformation Project is an opportunity for the City to establish part of the required infrastructure asset management system within the SAP environment. In general, this necessitates the following programme activities which will be undertaken to ensure that the project is successful:

The City needs to establish an asset management system that consolidates all infrastructure asset data at the enterprise level for unified planning and subsequent reporting. A vision for the future operation is shown schematically on the figure below, where each area needs to be standardised across the City (as far as possible) considering the existing format and approach with the addition of the *municipal Standard Chart of Accounts* (mSCOA) and CIDMS requirements. This *Asset Management* activity will address both capital and operational expenditure requirements.

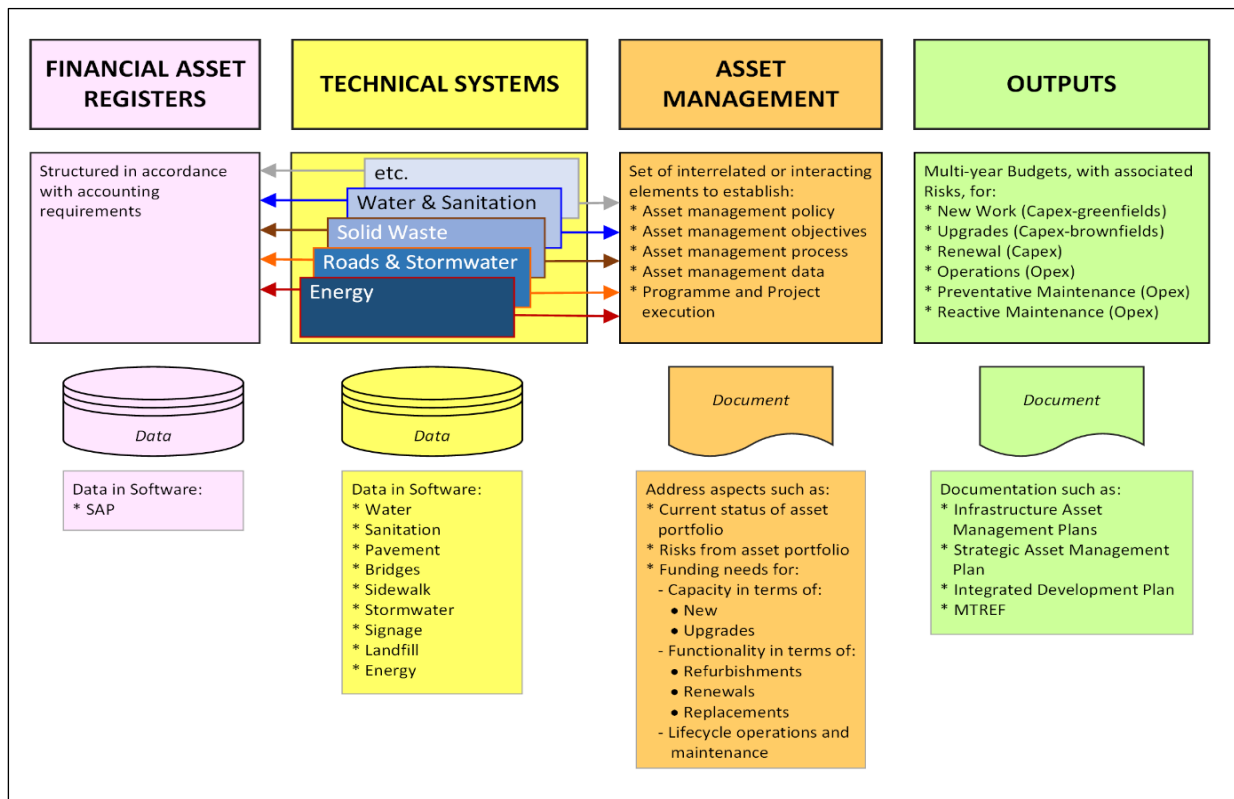


Figure 18: Asset Management activity

The City is in the process of:

- ✓ Defining the requirements for the AM system covering the process, the data, the application and the people;
- ✓ Understanding what can be done using the “vanilla” format of the SAP-application and confirming the scope for the SAP Business Transformation Project;
- ✓ Defining the functionality to be provided by other computer applications and arranging for that to be done, including all hardware and network arrangements;
- ✓ Confirming the availability of the existing data and arranging for any additional data that is required to be collected and captured;
- ✓ Ensuring that the operational processes are defined and that the personnel have the necessary knowledge to apply these processes with the technical tools that are being made available; and,
- ✓ Testing the business readiness and the implementation of the information systems.

ENGINEERING INFRASTRUCTURE: OPTIMISATION STRATEGY

Well-functioning infrastructure has always been very important to both the local economy and the society. The robustness of infrastructure systems can be judged by their capacity to accommodate change over time. Our current infrastructure increasingly fails to meet demands. Facilities are ageing; their levels of service, reliability and performance are decreasing and increasingly their outputs as a result of failure, escape into natural environments and fragile ecosystems causing further harm. The current challenge facing the City is to shape the infrastructure in a manner that clearly benefits the city today and meets the demands of future generations; supports a sustainable environment; promotes energy conservation; provides protection and resilience to the infrastructure; accelerates economic

growth; creates new jobs; and, as a whole, results in the city becoming more economically competitive.

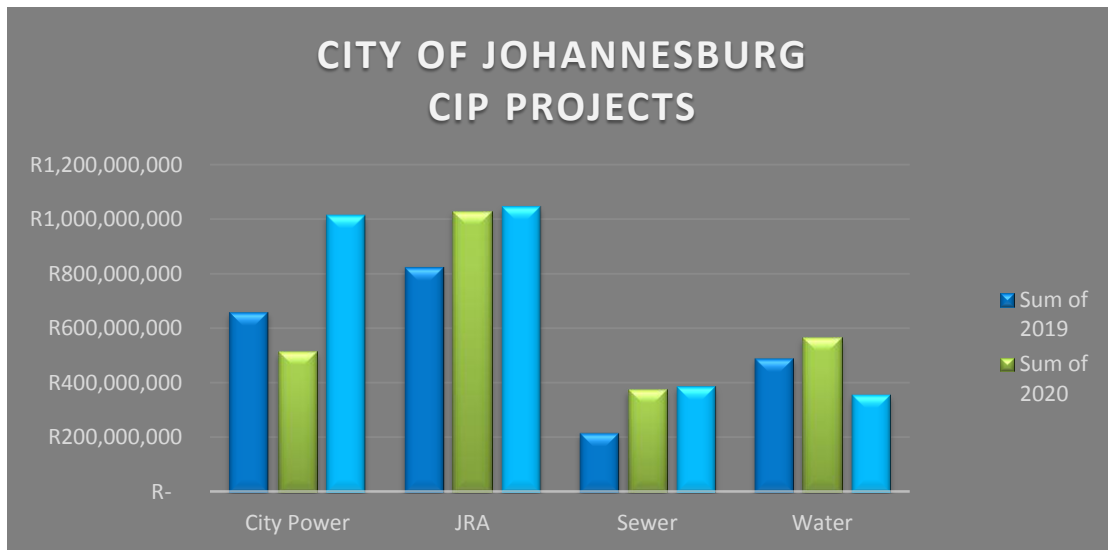
The CIP aim to assist in forecasting future demand for engineering infrastructure and to integrate planning, implementation and management of assets and related programmes, to ensure sustainable and cost-effective infrastructure delivery and operational practices. The optimization strategy was developed to determine savings in engineering infrastructure investments by minimising the overlap between bulk refurbishment projects and bulk capital projects within the same asset class. In some instances, maintenance work is required on a specific piece of infrastructure to keep it functional and an upgrade is planned shortly after the maintenance work, which would result in the refurbished infrastructure's being replaced.

The strategy is therefore based on the principle that: it is valuable to align refurbishment with upgrades to maximise the return on investment by saving on the cost of refurbishment. The value from the exercise is a direct saving in refurbishment cost which would be wasted otherwise. CIP investigated the bulk infrastructure components and was able to make a 30% saving on the refurbishment budget. This provides for a significant portion of the budget to be re-invested, preferably for infrastructure projects. The following table presents the potential cost saving for the relevant sectors. The percentage saving per sector indicates the saving compared to the total 20-year refurbishment budget. The overall saving compared to the sectors combined budget is also indicated.

Sector	Savings amount	Percentage saving
Water	R60 655 766	36%
Sanitation	R52 535 400	32%
Electricity	R52 535 400	25%
Total	R165 726 566	30%

Table 1: Investment optimisation strategy savings amount per sector

Funding is required for the current ageing and new infrastructure. As with any city, funding shortfalls exist which require prioritisation of the infrastructure requirement. The prioritisation is fundamental to where investment occurs first. As such, a financial model is developed to cater for the overall infrastructure investment analysis, modelling of the identified projects and a comparison of required funding vs the available funding.



Budget allocation for CIP projects

The Graph above indicates how much the city will be spending on basic engineering services for the next MTEF which is approximately 27% of the total Capex. JRA is consuming more of the city’s CIP budget, given the nature of their work.

SECTION D

3.4.2 Resourcing the intergovernmental project pipeline

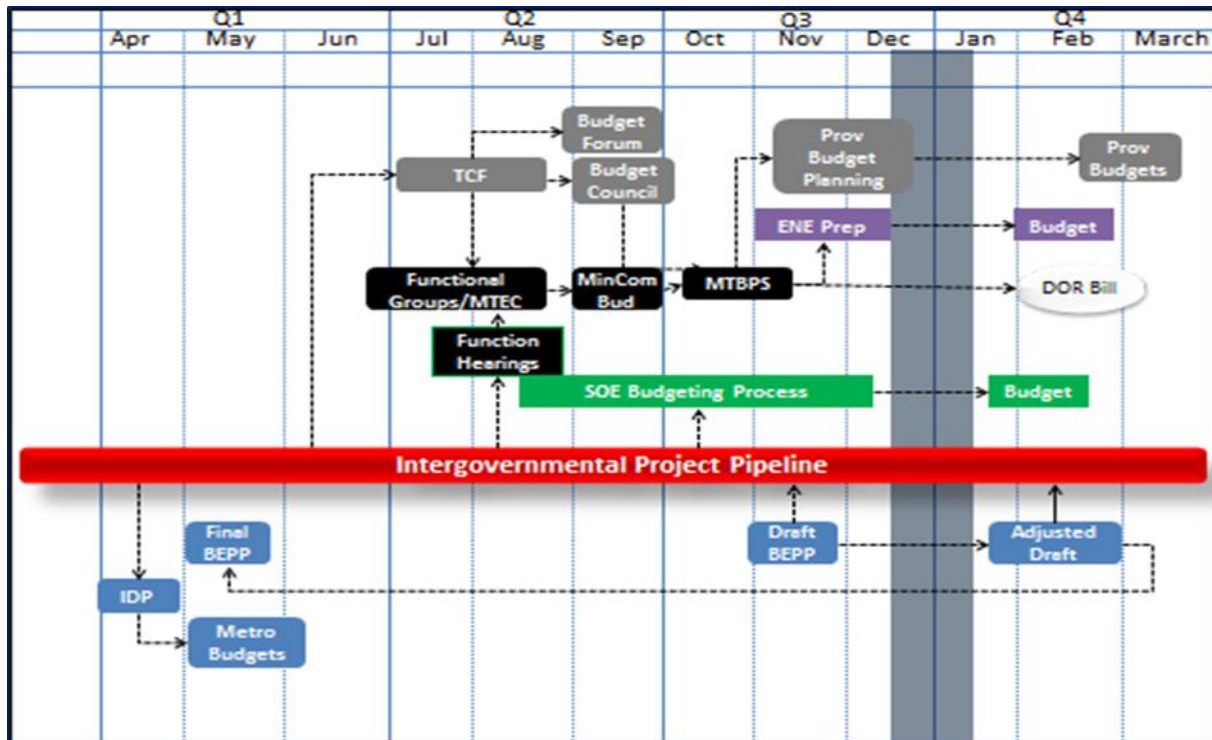


Figure 19: Inter-Governmental Planning Alignment (source: BEPP guidance note)

One of the challenges encountered through joint planning is misalignment of timeframes between metros and Provinces given that their budget processes are different. It is noted that the link between the BEPP Process and the annual national budget cycle is being strengthened on an ongoing basis. This is being achieved through aligning the time frames for the development and submission of Medium Term Strategic Plans and/or Annual Performance Plans of the relevant National and Provincial departments and state-owned entities to the BEPP planning timeframes, and having a structured process and mechanism/s for joint inter-sphere planning and budgeting as part of the general annual budget process led by National Treasury.

3.4.3 Resourcing the Metro’s project pipeline

Capital budgeting process

Demands placed on the City’s capital budget far exceed available resources. As such the City has to be strategic in its choice of projects, identifying only those critical projects that need to be undertaken in a given financial year. The total capital budget for the City is obtained from a number of different sources. It is funded from the tariffs, the rates base, bulk

service contributions external loans, national department grants and loans and provincial department grants and loans.

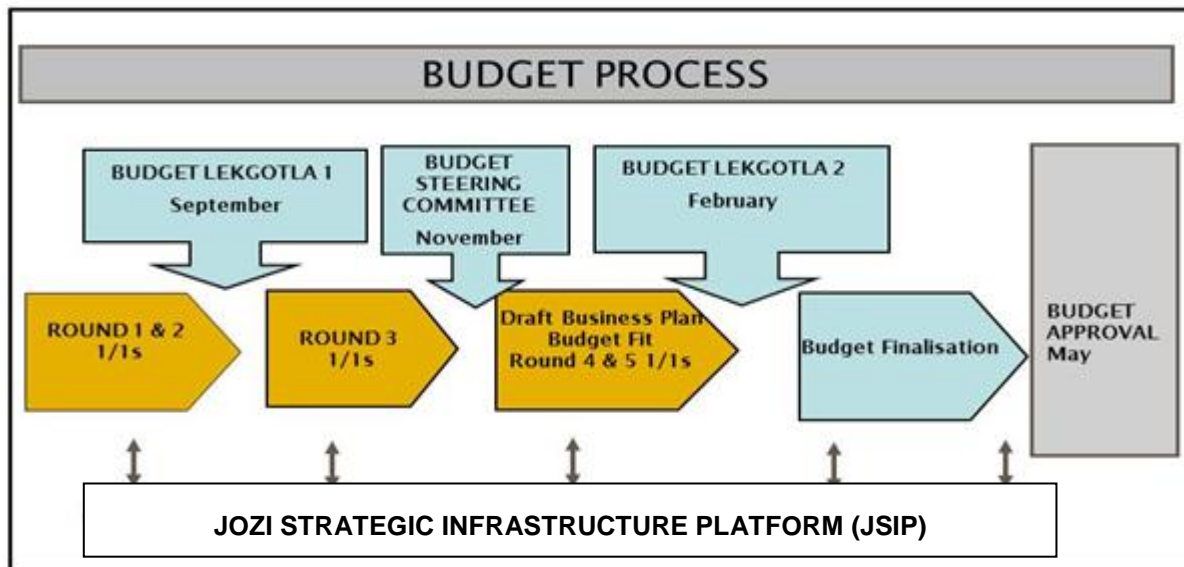


Figure 20: City of Johannesburg Capital Budget Process

In order to assist in prioritising capital projects to come to a consolidated list of capital projects to be undertaken, the City uses the Jozi Strategic Infrastructure Platform, known as JSIP. This live Internet database requires Departments and Entities to accurately capture and locate capital projects. Departments and Entities are requested to answer a range of questions relating to the project's impact on, and implications for: economic growth, social investment, finances, the environment, sectorial investment and the Extended Public Works Programme (EPWP). Responses to these questions, combined with the location of the project, are then used to prioritise the projects in question. The greatest weighting in the prioritization model is given to projects located within Priority Transformation Areas. Once this technical project prioritisation process has been undertaken the engagements are then held with the department or municipal owned entity concerned and the list of capital projects is discussed and confirmed.

Opportunity is provided for these divisions to present their own critical projects from the list of projects they captured on JSIP which may differ from the priority list generated on JSIP, so that these can be considered by the Budget Lekgotla for approval and implementation in the third financial year of the Medium Term Expenditure Framework (MTEF) financial year.

It is a programme based approach that considers:

- Specific area development programmes as defined by Priority Transformation Areas
- General area programmes
- Strategic growth support programmes (for example public transport based interventions)
- General themed programmes that fall outside of the area based programmes such as:
 - Informal settlement programme
 - Sustainable human settlement programme
 - Infrastructure backlog and refurbishment programmes (related to hotspots)

- Water
- Sewer
- Power
- Storm water
- Roads

Once a Budget Lekgotla representing the legislature and the executive has pronounced on the draft capital budget indicatives, the draft list of capital projects is produced from JSIP. A preparatory Technical Budget Steering Committee and a subsequent Budget Steering Committee (BSC) have been established in terms of the Municipal Budget and Reporting Regulations of the MFMA. The two Budget Steering Committees assess and comment on the Business Plans, including capital budget proposals, of the Departments and Entities for the medium term expenditure framework. This interaction assists the administrative heads of the City to make informed decisions on the allocation of the budget at a second Budget Lekgotla.

It is through this capital budgeting process that the strategic policy of the City outlined in the GDS, IDP and the Priority Transformation Areas, as well as the practical requirements of the Entities and Departments are condensed into a list of capital projects that the City will execute in the three year period.

The Budget Office fulfils the financial management function of monitoring the budget. The Directorate assesses the financial performance of the entities and departments, reports on financial progress and makes recommendations on the expenditure patterns and future allocations of funds.

The capital budgeting process and infrastructure is set to change through:

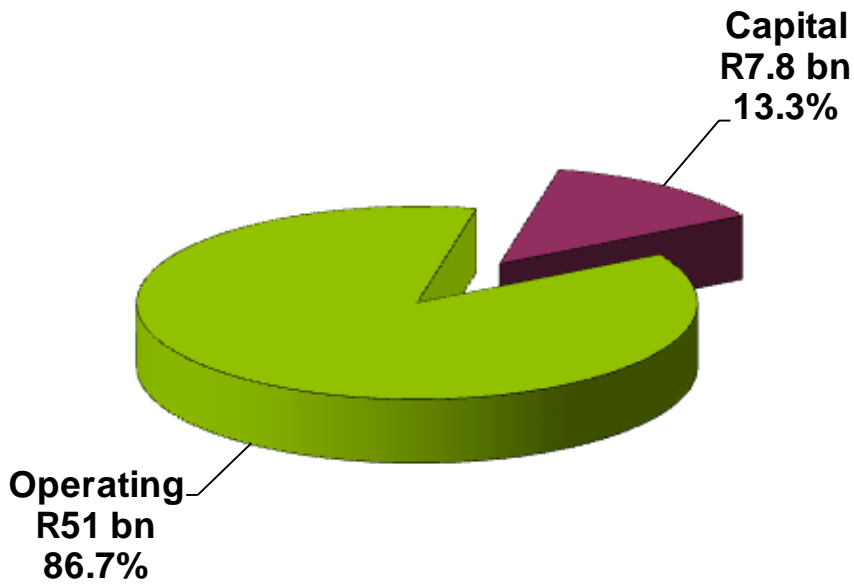
- The establishment of the Engineering Centre of Excellence in the Office of the Chief Operating Office which will provide support to existing engineering capacity.
- The implementation of the Consolidated Infrastructure Plan which amongst its aims will improve asset management coordination in the City of Johannesburg.

3.4.2.1 Budget alignment

The City's capital budget planning is directly aligned to the City's development strategy and priorities referred to in the Joburg 2040 Growth and Development Strategy, the Integrated Development Plan (IDP) and the Spatial Development Framework 2040 (SDF) to ensure the City achieve its vision.

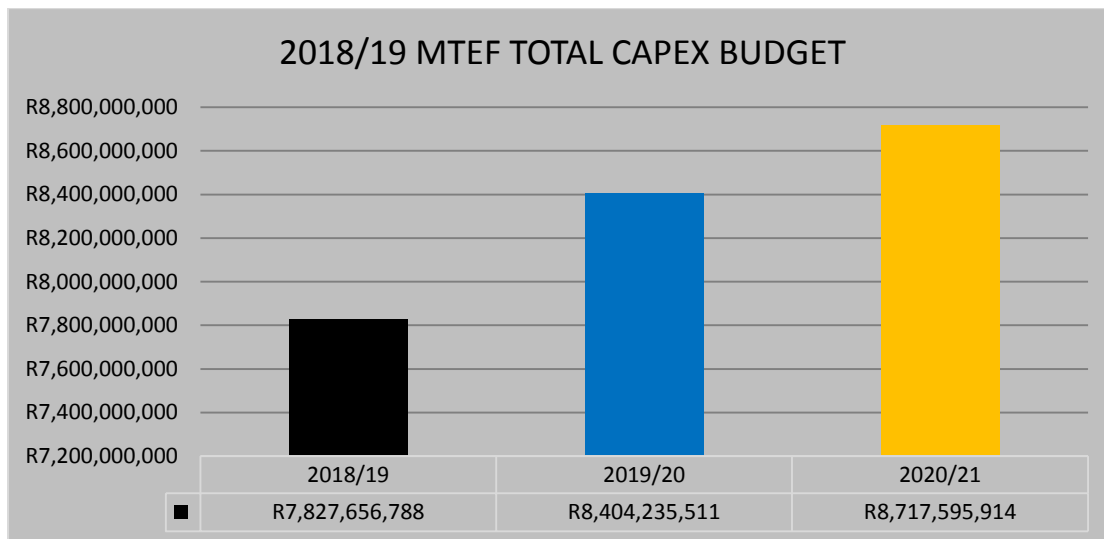
A summary of the operating and capital budgets

In 2018/19, the City's total budget amount to approximately R58.8 billion, the split between operating and capital are as follows:

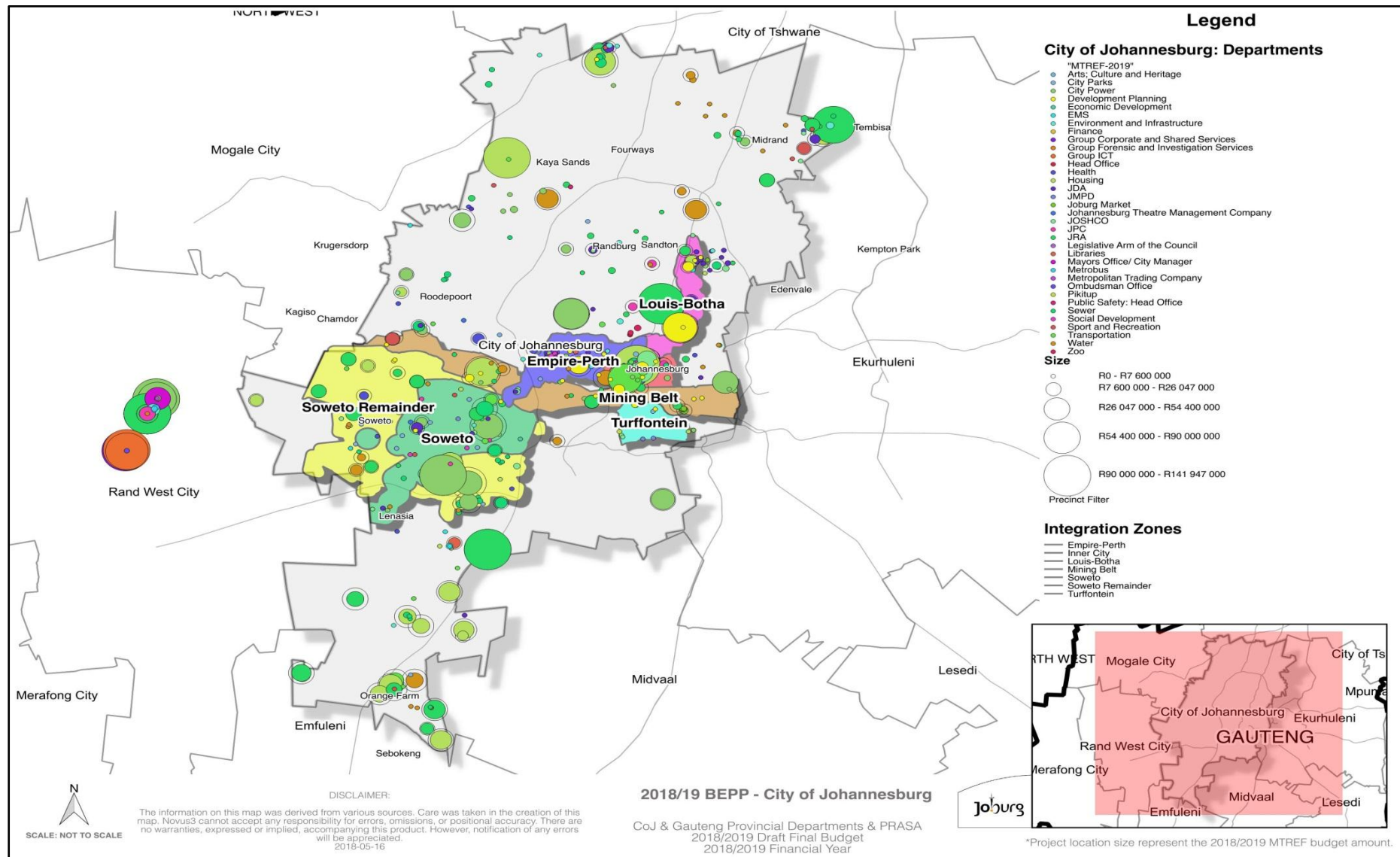


Allocation of Capital Budget to each spatial targeting area (Annexure 3)

The total 2018/2019 – 2020/2021 MTEF capital budget allocation for the City is approximately R25.4 billion over the next three-year period. See *graph 1: Total Capex – 2018/19 MTEF below.*



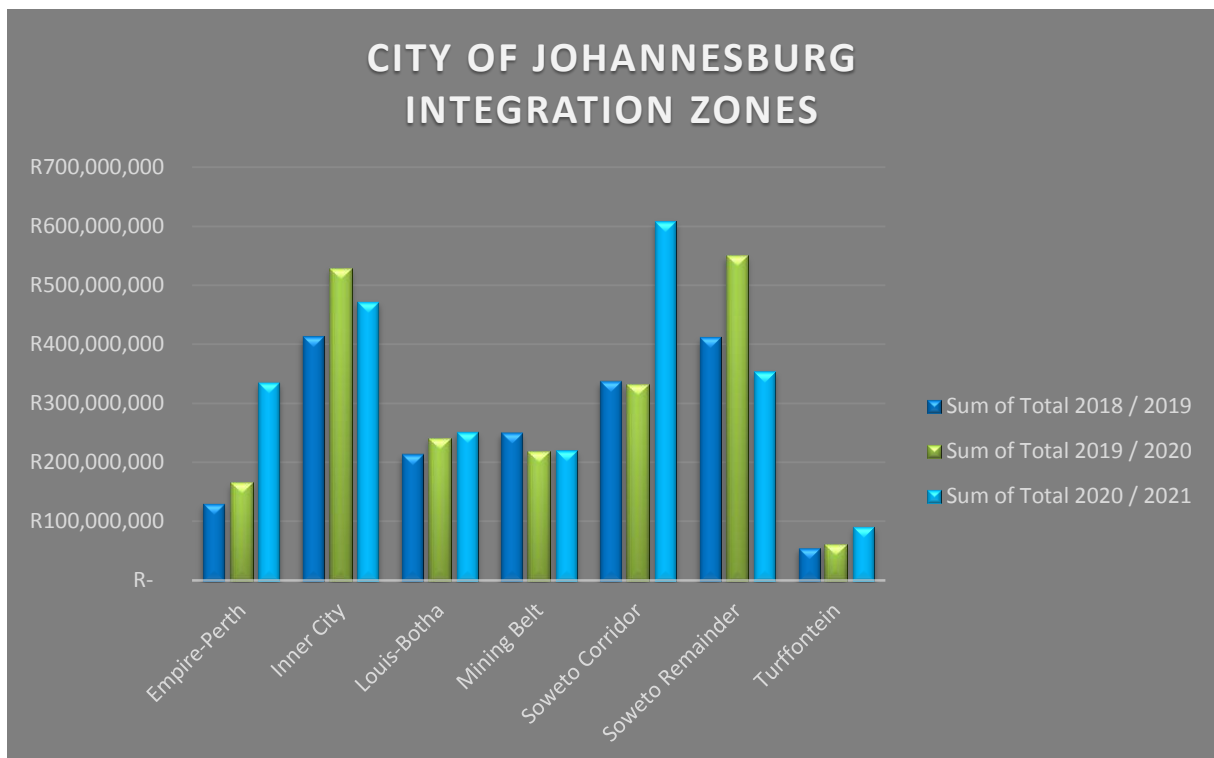
Graph 1: Total Capex - 2018/19 MTEF



Map 24: 2018/19 CoJ approved draft budget

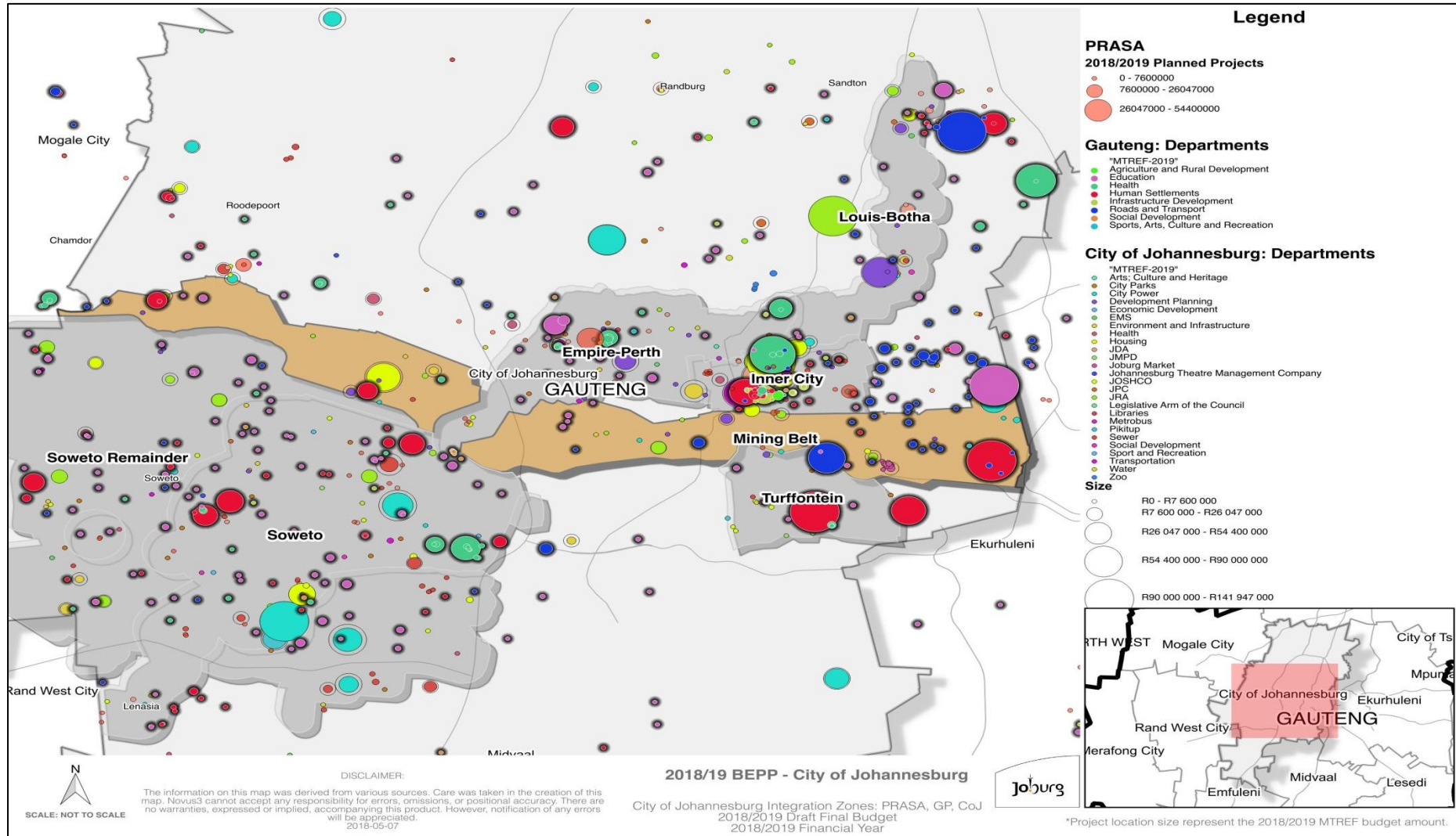
Integration Zone Other Capital

Integration Zone receive approximately 22% of the total MTEF capex. There is therefore a need for alignment to the strategic areas identified for development and investment, mainly the Inner City, Transit Oriented Developments, Deprivation Areas and secondary economic nodes. (See graph 2 below). Investment in these areas includes both refurbishment and replacement of existing infrastructure and new infrastructure. Graph 2 shows that most investments for the 2018/19 financial year will concentrate mainly in the Inner city followed by Soweto remainder.

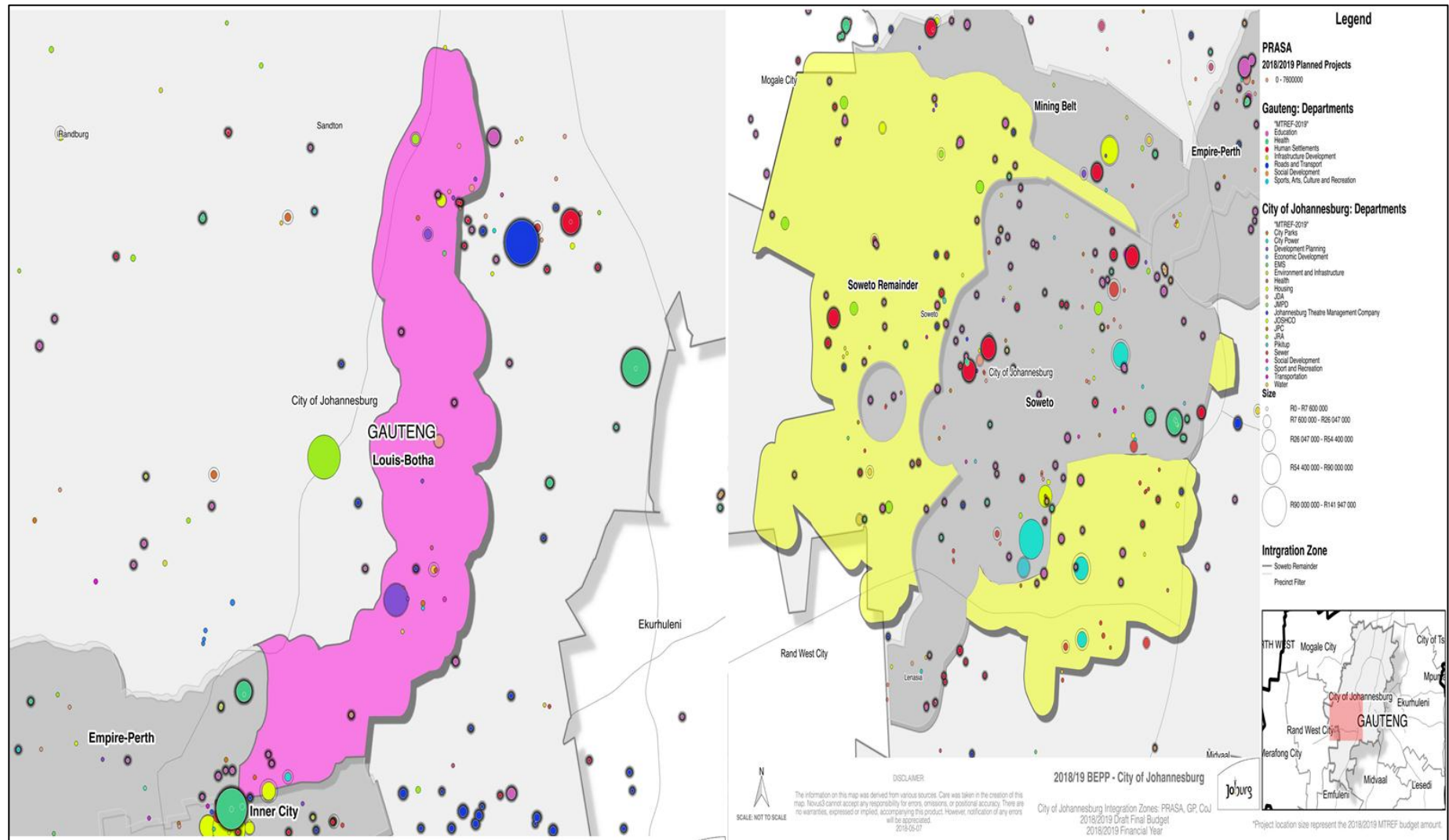


Graph 2: Capital budget allocation per Integration Zone

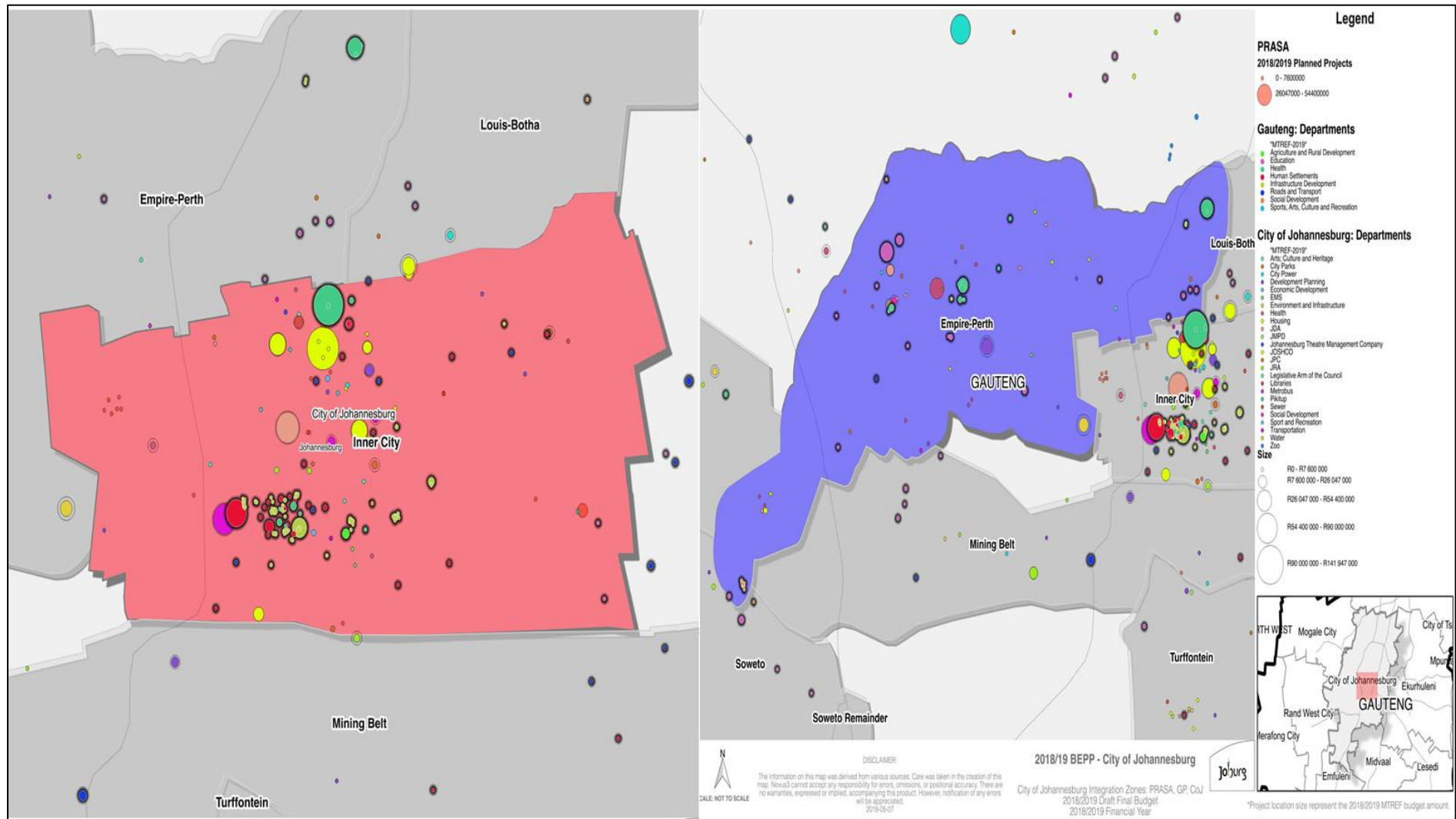
Map 25: Capital budget per Integration Zone (a) and (b) indicates the allocation of 2018/19 MTEF draft budget of various departments to different projects per Integration Zone. The maps further show projects within and outside of the city’s priority areas. This indicates the City’s commitment to bringing change by improving service delivery and ensuring pro-poor development addressing inequality and poverty. Map 25 (a) and 25(b) must be read in conjunction with Annexure B: Detailed project list per integration zone.



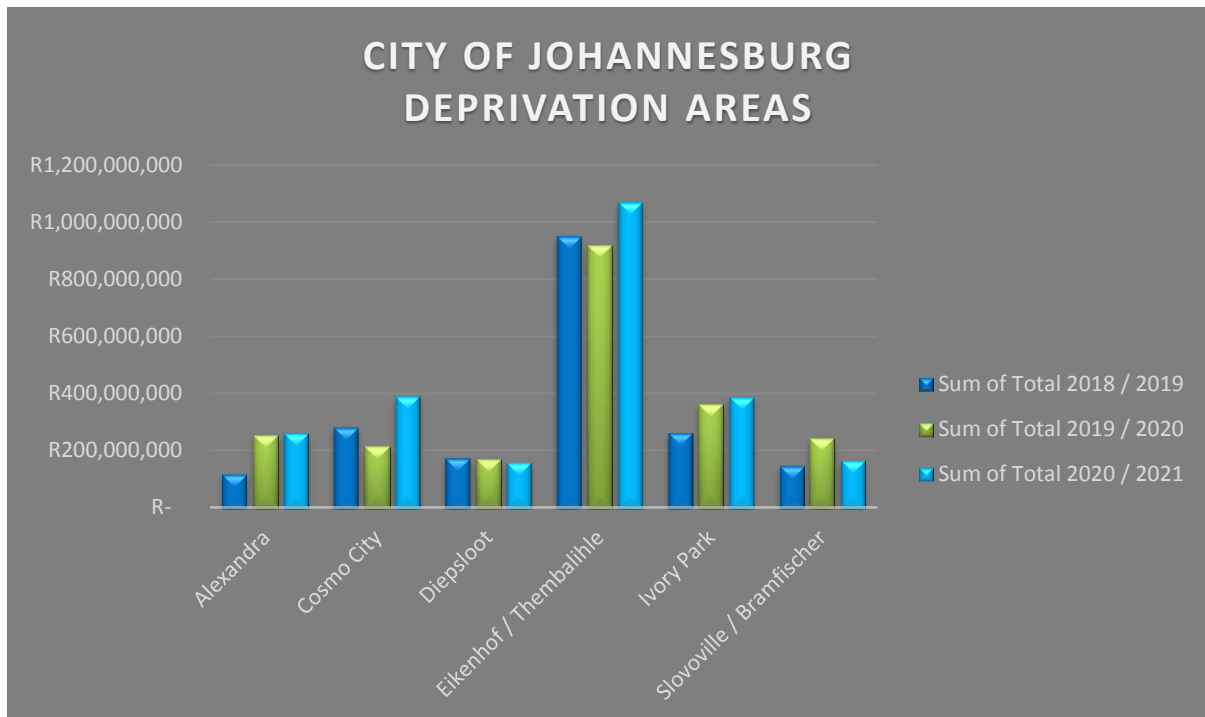
Map 25(a): Draft budget per Integration zone



Map 25(b): Draft budget per integration zone

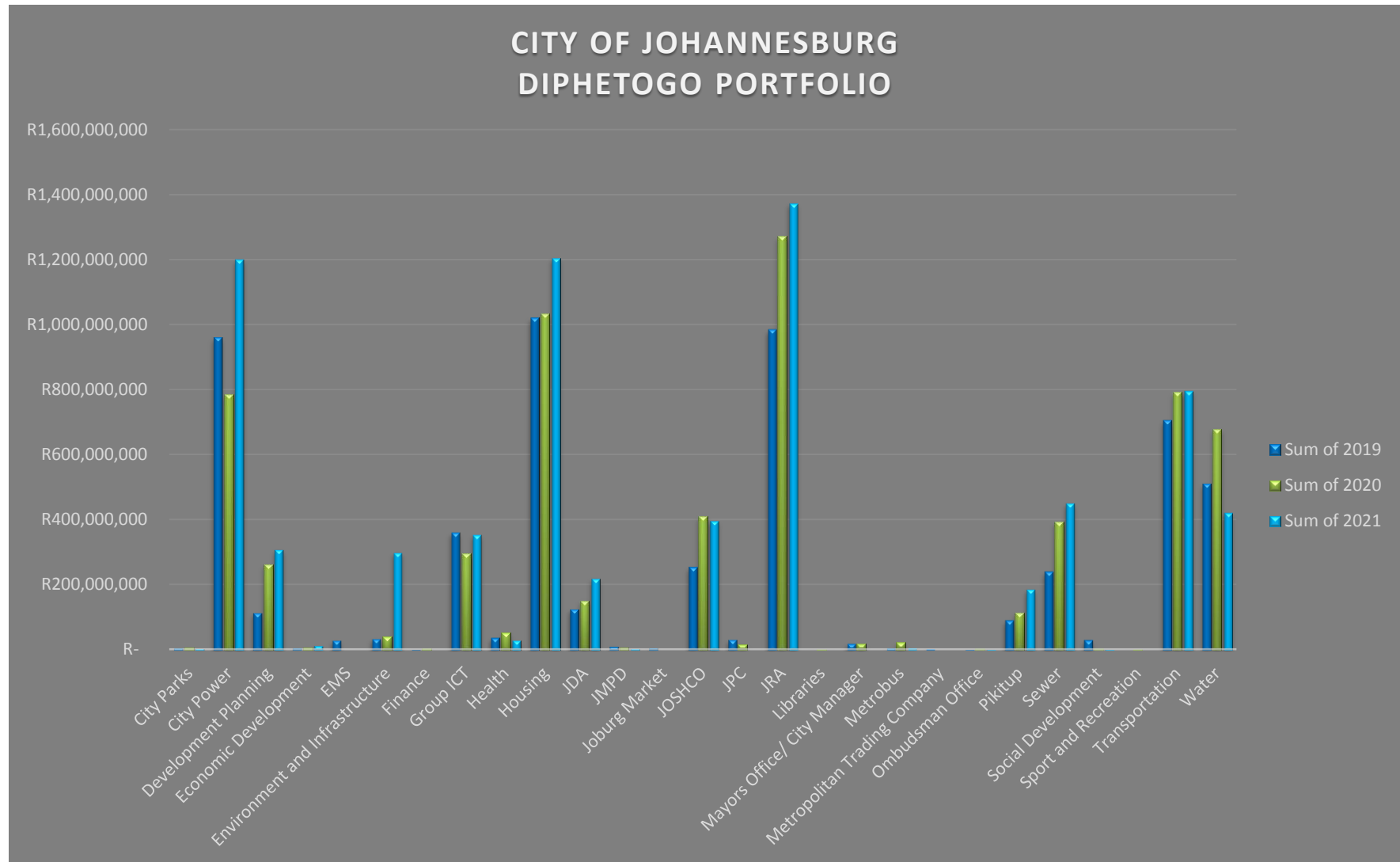


Map 25(c): Draft budget per integration zone



Graph 3: Budget allocated in Deprivation areas

The above graph shows the Budget allocation in Deprivation areas, which indicates that indeed the City is committed in serving the needs of the people located in areas far away from economic activities. The *Dipheto* programme is illustrated in graph 4, where various divisions in the City are committed in achieving the desired objectives of the programme. In analysing the graph, JRA is delivery greatly on this project which, might be because most of the projects executed by JRA are centred on basic services (roads, stormwater and associated services) which are necessities in these communities.



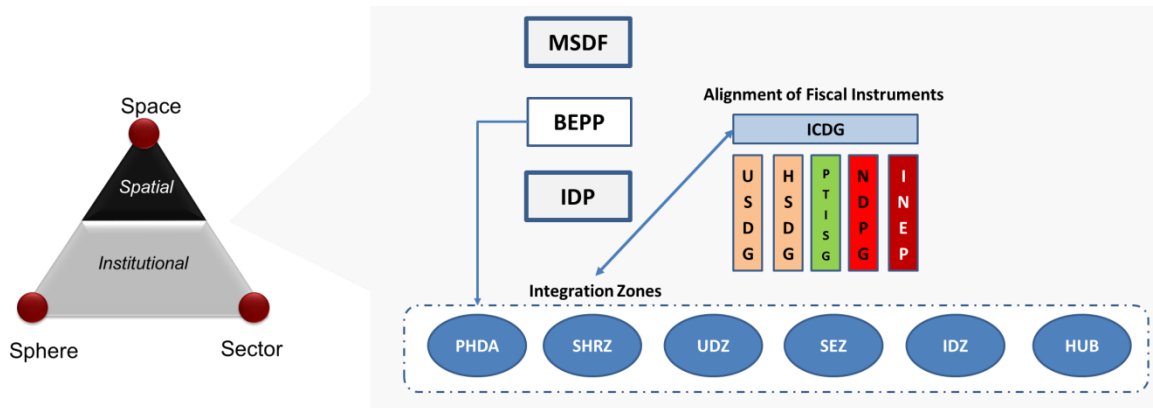
Graph 4: DiphetoGo portfolio

3.4.2.2 Grant alignment

Metropolitan built environments rely on a number of inputs such as sector policies and related conditional grants, private sector investments, integrated planning, etc. Grants have started playing a more prominent role in recent years relative to other sources of funding for infrastructure development. Grants are generally sector driven reflecting national priorities, however, the implementation of grants has a spatial impact that is evident in the urban form. The BEPP will focus on aligning the various built environment grants within the municipal space as reflected in the diagram below. The alignment will be driven in different ways:-

1. Spatial targeting via the Urban Networks Strategy;
2. Amendment of conditions and output indicators used to measure the performance of the grants that highlight critical inter-dependencies *viz.* number of housing opportunities provided within 500m of a public transport access point rather than just counting housing opportunities;
3. Inclusion of provisions of the Division Of Revenue Act (DORA) relating to the alignment of infrastructure grants to fund a pipeline of prioritised projects;
4. Institutionalising co-ordination and planning between the relevant spheres and sector departments through the BEPP process;
5. Influencing planning practice at the metropolitan sphere to drive improved co-ordination between local government functions and departments;
6. Introduction of fiscal and regulatory instruments to catalyse private sector investment; and
7. Improving the management of strategic precincts and public transport operations within the urban network.

Figure 15: Alignment of built environment grants



Infrastructure Grants	ICDG - Integrated City Development Grant USDG – Urban Settlements Development Grant HSDG – Human Settlements Development Grant PTISG – Public Transport Infrastructure Grant NDPG – Neighbourhood Development Partnership Grant (CG) INEP – Integrated National Electrification Grant
Spatial Targeting Instruments	PHDA –Provincial Housing Development Area SHRZ – Social Housing Restructuring Zone UDZ – Urban Development Zone SEZ – Special Economic Zone IDZ – Industrial Development Zone
Plans	BEPP - Built Environment Performance Plan MSDF - Metropolitan Spatial Development Framework IDP – Integrated Development Plan UNI – Urban Network Identification ³

Table 13: Built Environment Grants

The performance of the built environment is a local outcome that is significantly impacted by national and provincial grants as well as private sector and household investment. However, the mix of investment in the built environment changes, the outcome is always primarily a local outcome, notwithstanding the policies, funding and spatial perspectives of the different spheres and associated state-owned entities. The manner and pace in which metropolitan municipalities lead the development of the built environment will positively or negatively impact on facilitating the investment of the other spheres of government and the private and household sectors, and ultimately determine the extent of spatial restructuring and impact on urban form.

3.4.2.3 Operational Resourcing

The proposed operating revenue budget is approximately R53.3 billion and the operating expenditure budget is R51.7 billion for the 2018/19 financial year. Revenue is increasing by

³ The UNS has been approved by the Mayoral Committee.

11.9% and expenditure by 10.3% over the 2017/18 financial year. The table below set out the Medium Term Revenue and Expenditure Budget for the 2018/19- 2020/21 financial years

The level of capital expenditure and borrowing are based on affordability, prudential indicators and sustainability (debt ratio, current ratio, operating surplus and the impact or return of the capital investment on the operating account). The table below reflects the medium term capital budget over the next three years.

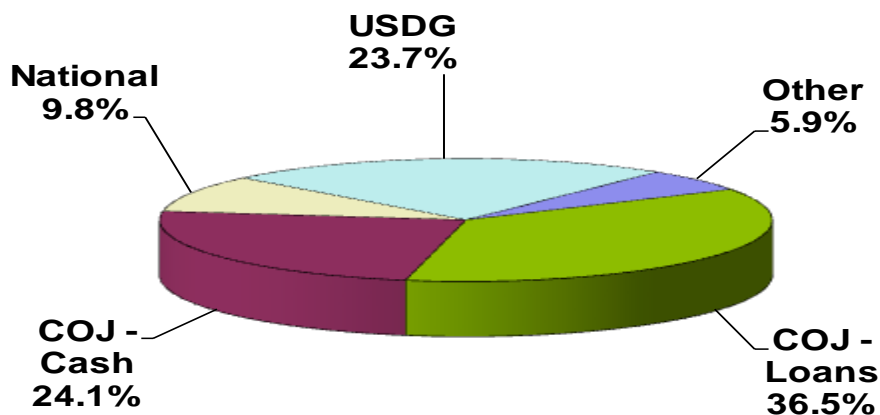
Funding source	Adj Bud 2017/18 R 000	Budget 2018/19 R 000	Budget 2019/20 R 000	Budget 2020/21 R 000
Loan funding	2 998 386	2 849 726	2 265 939	2 197 261
CRR and surplus cash	1 290 986	1 883 016	3 162 005	3 542 821
Grants and contributions	2 751 698	3 077 494	3 105 920	3 278 393
Total	7 041 070	7 810 236	8 533 864	9 018 475

Table 14: Funding Sources

The capital budget of the City projects a spending plan of approximately R25.4 billion over the next three-year period. The capital budget for the 2018/19 financial year amounts to approximately R7.8 billion. Approximately R4.6 billion of the capital budget will be funded by the City and R3.1 billion from grants and public contributions.

Funding Sources for 2018/19

The city is using various funding sources for their expenditures. The diagram below illustrates how much each funding source contributes to the bigger pie of the city.



- R2.9 billion of capital will be funded from loans.
- R1.7 billion of capital will be funded through cash surpluses.

- R0.8 billion will be funded from grants received from National (PTIS – R627 million, NDPG – R40.1 million, Integrated City Development Grant – R63.5 million and National Electrification – R31.3 million).
- R1.9 billion will be funded through the Urban Settlement Development Grant (USDG).
- R463.3 million will be funded from other sources (public and bulk service contributions).

The City has a USDG plan which illustrated how the grant will be used across all services relating to Human settlements. It is understood that the aim of the grant is to encourage cities to be productive developers of infrastructure by mobilising domestic capital while at the same time addressing and re-dressing the location of development. See **Annexure E** for the USDG plan.

Institutional arrangements for Capital Programme Management

The section above outlined recent interventions undertaken by the City to promote integrated planning at an institutional level. The City acknowledges the importance of aligning its budget to support the realisation of the City's vision.

The City's capital budget planning is directly aligned to the City's development strategy and priorities referred to in the Joburg 2040 Growth and Development Strategy, the Integrated Development Plan (IDP) and the Spatial Development Framework 2040 (SDF).

The Capital Investment Framework (CIF) reflects the medium term (3 year) investment priorities of the City. The Capital Investment Framework is a component of the City of Johannesburg's Integrated Development Plan (IDP). The CIF is guided by the City's obligations through Chapter 5, Section 26(i) of the Municipal Systems Act (Act 32 of 2000). This requires local government to present "a financial plan, which must include a budget projection for at least the next three years". The CIF reflects the proposed capital investment over the 2018/2019, 2019/2020 and 2020/2021 medium term period. The main objectives of the CIF are to:

- Ensure the improved management of the City's existing infrastructure;
- Contribute towards the eradication of service delivery backlogs, especially in poor and marginalised areas by prioritising capital projects in these locations;
- Improve new service delivery through infrastructure and services that are planned, delivered, and managed in a structured manner;
- Prioritise projects and programmes through a strategic and spatially-linked information system known as the Joburg Strategic Infrastructure Platform (JSIP) in the context of a constrained capital budget;
- Direct future public and private investment, by aligning capital budget requirements of departments and entities to priority areas, defined in the Joburg 2040 Growth and

Development Strategy (GDS), Spatial Development Framework 2040 and the Integrated Development Plan.

The implementation of the SDF and the development strategy of the City takes place at two key levels as far as capital investment is concerned.

Firstly state and private sector developments are overseen by the City through its development approval process. The intent of the Spatial Development Framework is realised through the application of policy and legal guidelines, requirements and mechanisms to direct development towards achieving its overall goals and outcomes.

Secondly the implementation of the SDF relies on capital investment in infrastructure. This investment guides growth directions and ambitions for future development. Through guiding public investment in bulk infrastructure and services the SDF will in turn guide private investment and development in the City. Public sector investment in infrastructure and services represents the most significant portion of capital investment in the City and the direction the spatial framework provides for the capital investment programme is essential for successful implementation.

Spatially guided investment planning is well established in Johannesburg and is the focus of this chapter. The Built Environment Performance Plan (BEPP) provides detailed evidence of the strategic integration of capital investment programmes with development strategy and spatial plans. The BEPP incorporates the Capital Investment Framework and the Consolidated Infrastructure Plan (CIP) that focus primarily on engineering infrastructure related to asset management plans and future bulk requirements.

Along with aligning spatial policies and goals with capital investment, the capital budget process ensures compliance with the requirements and regulations of the Municipal Finance Management Act (MFMA) and the guidelines of National Treasury. The process consists of a number of extensive consultations between all departments and entities responsible for capital investment and the Development Planning Department. Development Planning is the custodian of the SDF and related development strategies and also coordinates the capital planning process and formulation of the capital budget. This technical process is overseen by and reports to a leadership process consisting of a number of Mayoral Lekgotlas, Budget Steering Committee sittings and ultimately Mayoral Committee and Council approval of the three year budget. To support this process the City had developed and implemented a software model, the Joburg Strategic Infrastructure Platform JSIP, which provides:

- A consolidated database of all infrastructure project requirements across the City.
- A sophisticated prioritisation model underpinned by strategic spatial directives (SDF), asset management requirements (CIP) and the growth and development strategies of the City.
- A 3 year Medium Term Expenditure Framework (MTEF) linked to financial sources and budget allocations for prioritised projects over multiple years. The budget is further broken down into spatial development programmes like the Corridors of Freedom, Deprivation Areas, Inner City (Urban Core) and various asset management programmes.

- Project implementation tracking and reporting system.

The IDP is seen as the underlying master plan to all planned expenditure in the City. This means that there needs to be integration between planning, budgeting, implementation and projects progress tracking. In responding to the aforementioned, the City has JSIP where projects needs are captured; analysed against community needs obtained from IDP public participation; and categorised into departmental or entity focus areas that are most likely to address challenges / effectively implement projects in line with the City's long term strategic vision contained in the Growth & Development Strategy and Spatial Development Framework 2040.

The City is compelled to have a MTEF for 3 financial years by the MFMA. The challenge however associated with drawing up the MTEF is to accurately and comprehensively predict the future status of the City's cash flow taking into consideration the strategic direction of the municipality, backlogs, technical reports, the community, the councillors, etc. JSIP has two basic steps that aid to accurately and comprehensively predicting the future cash flow namely:

- Assess the future cash-flow based on the current financial situation – In this scenario, the financial health is tested against accepted and described norms and standards including but not limited to gearing ratios, liquidity ratios and possible funding shortfalls (existing and/or future); and,
- Stress-testing and future proofing of the proposed budget - This method allows for a more sustainable approach towards approving budgets by providing insight into the most likely financial impact going forward.

SECTION E**3.5 IMPLEMENTATION**

The implementation of the capital budget programme is further enhanced through activities of the Strategic Project Management Office (SPMO) to create the necessary capacity required for implementation and assessment of the impact of the proposed investments. From March 2017, there will be a further re-capacitation of the SPMO by increasing its personnel numbers to ensure continuity as the establishment phase is completed. At this stage, a set of practice notes on various areas of infrastructure delivery, and temporal dashboard are a few deliverables from this process. The existence of the SPMO completes the value chain between infrastructure planning and delivery by integrating all components in the value chain, and further linking them with various planning instruments.

The establishment of the Strategic Programme Management office is premised on the following:

- The substantial increase in COJ investment in capital projects
- The complex and diverse nature of the City's capital programme
- Higher risk of programme and project failure associated with increased capital investment
- The need for effective city-wide coordination of programme implementation
- The potential savings and cost avoidance through more efficient capital allocations and improved performance
- Increasing the Return of Investment.
- Ensuring the delivery of programmes and projects within time, cost, quality and other development targets.

Central Business District

The City's interventions in the Central Business District are diverse and concern the full range of municipal services. Coordination of interventions occurs through the Region F Administrative Office in conjunction with the Citizen Relation and Urban Management (CRUM) Department. Key departments and municipal owned entities responsible for interventions in the Inner City at present are:

- The Johannesburg Development Agency
- The Johannesburg Property Company
- The Department of Economic Development
- Johannesburg Social Housing Company (JOSHCO)

The City's commitment to prioritise the CBD is long term, and recognises the dynamic nature of change within the area as well as its importance to the broader City.

Urban Development Zones

Currently the City of Johannesburg has an Urban Development Zone (UDZ) designated for the Inner City which was promulgated on October 14, 2004. The instrument was due to expire in 2014 but has been extended until 2020.

The tax incentive offered within the UDZ comes in the form of an accelerated depreciation deducted from the UDZ eligible taxpayer's taxable income, thus reducing the taxpayer's payable tax.

The deduction is applicable in respect of:

- erection, extension or improvement of or addition to an entire building;
- erection, extension, improvement or addition of part of a building representing a floor area of at least 1 000 m²; or the purchase of such a building or part of a building directly from a developer on or after 8 November 2005, subject to the requirements that:
 - The developer has erected, extended, added to or improved the building or part of the building representing a floor area of at least 1 000 m².
 - The developer has not claimed any UDZ allowance in respect of the building or that part of the building.
 - In the case of the improvement of a building or part of a building, the developer has incurred expenditure in respect of these improvements equal to at least 20 per cent of the purchase price paid by the first purchaser in respect of the building or part of the building.

In the Inner City the UDZ has attracted investment that exceeds R11 000,000,000.00 and has created more than 80,000 temporary construction jobs. It has assisted in creating the following quality precincts: Maboneng, the Turbine Square, the End Street residential precinct, the Braamfontein University City, the Rooftop Gardens, the ABSA Campus and the Bank City Foyer.

The City is seeking to extend the Urban Development Zone concept to include emerging hubs in marginalised areas to strengthen the City's secondary network and to assist in 'innovatively connecting Joburg's low-income earners to the City's knowledge economy and opportunities'. Areas under consideration for such an intervention include Orange Farm, Kliptown, Alex proper and Eldorado Park. Engagements with the relevant business organisation operating in these areas have been initiated.

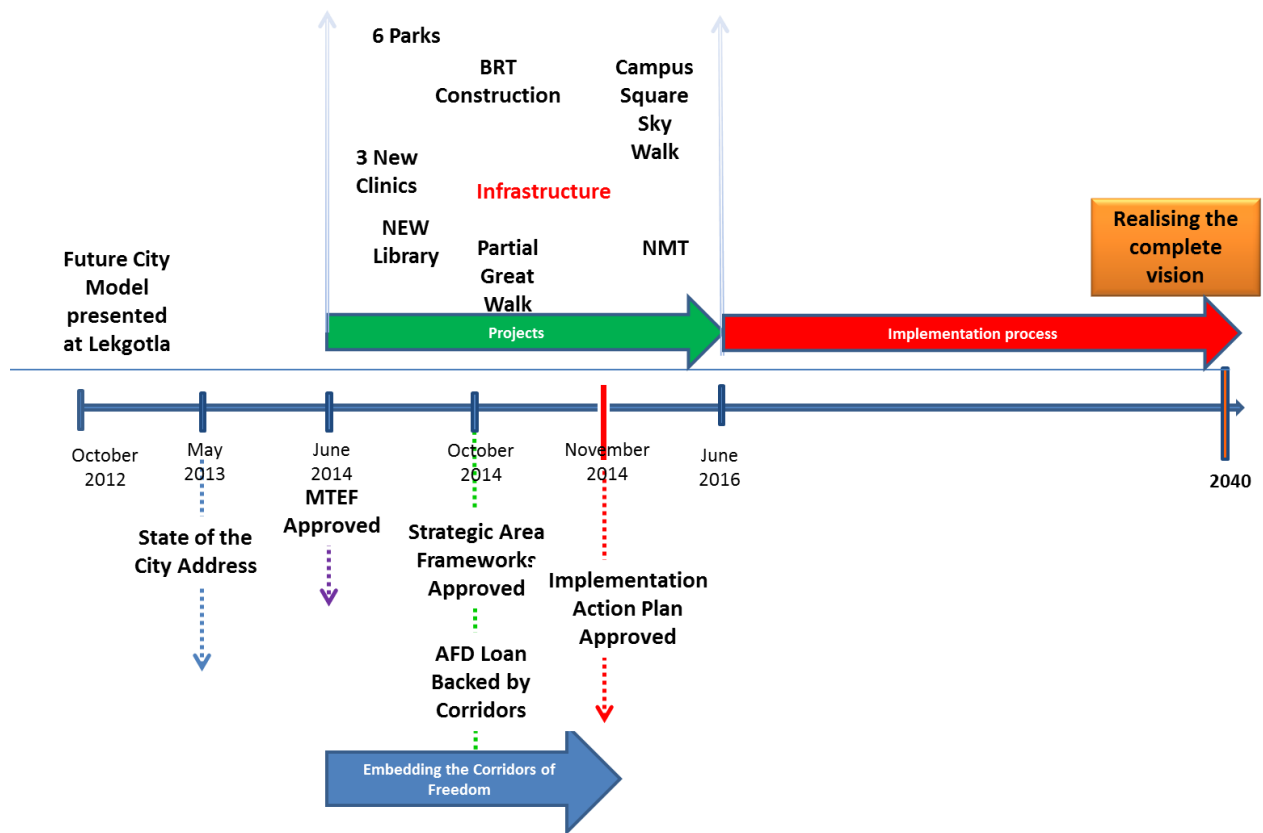
In addition the City is seeking to extend the UDZ to certain hubs associated with the Transit Orientated Development Corridors (ToD) and identified Integration Zones.

Transit Oriented Development Corridors

As already mentioned each corridor has a basket of services interventions ranging from social infrastructure to housing projects. The number of social facilities proposed in the

corridors will cater for the increased densities in them and the population increase projected for the city. The CSIR study that was done in the city in 2012 to model the need and accessibility of social facilities and services also pointed out some facilities that are required in the city, the proposed interventions in the corridors are also looking at addressing such.

The three Corridors detailed above are short to medium term projects that will require significant capital outlay. A broad implementation strategy for these Strategic Area Frameworks (SAFs) is in place, the MTEF capital expenditure has been approved by council and the implementation of some capital projects is already underway as outlined in section B of this document and will be undertaken by responsible departments and municipal owned entities.



Error! Reference source not found. Figure 21: Building the corridors 2012-2040

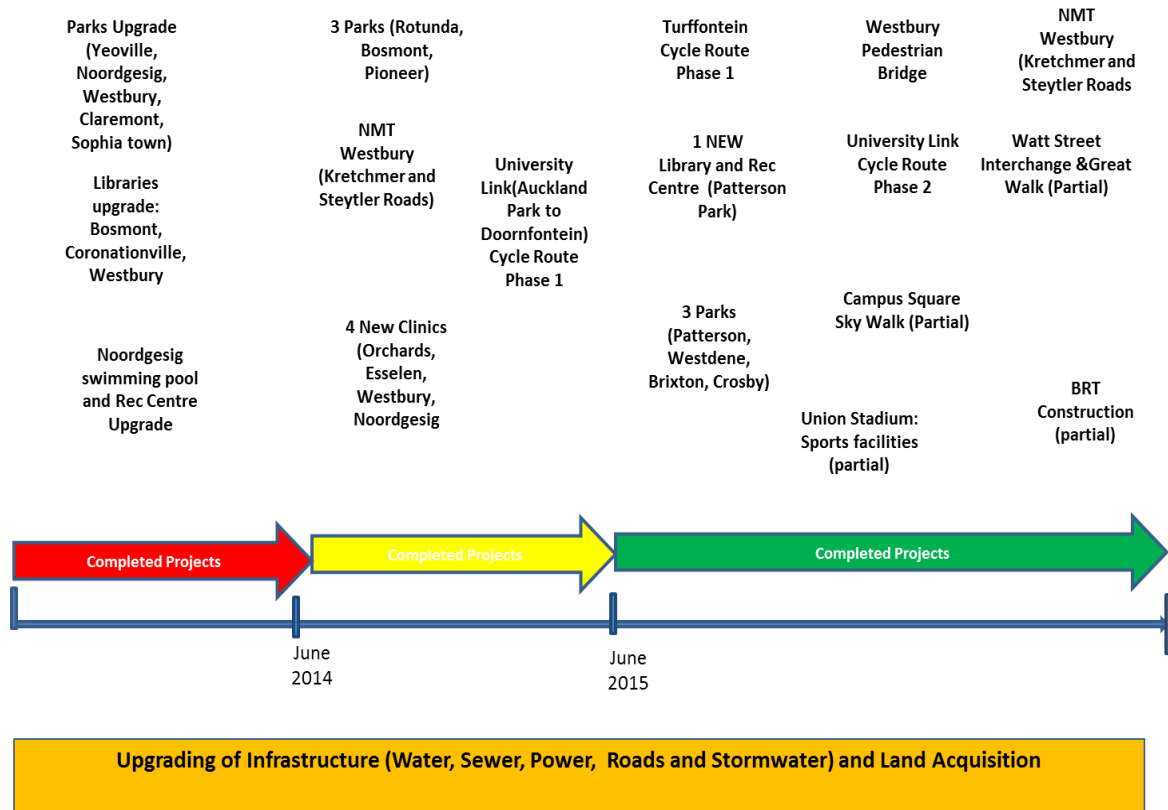


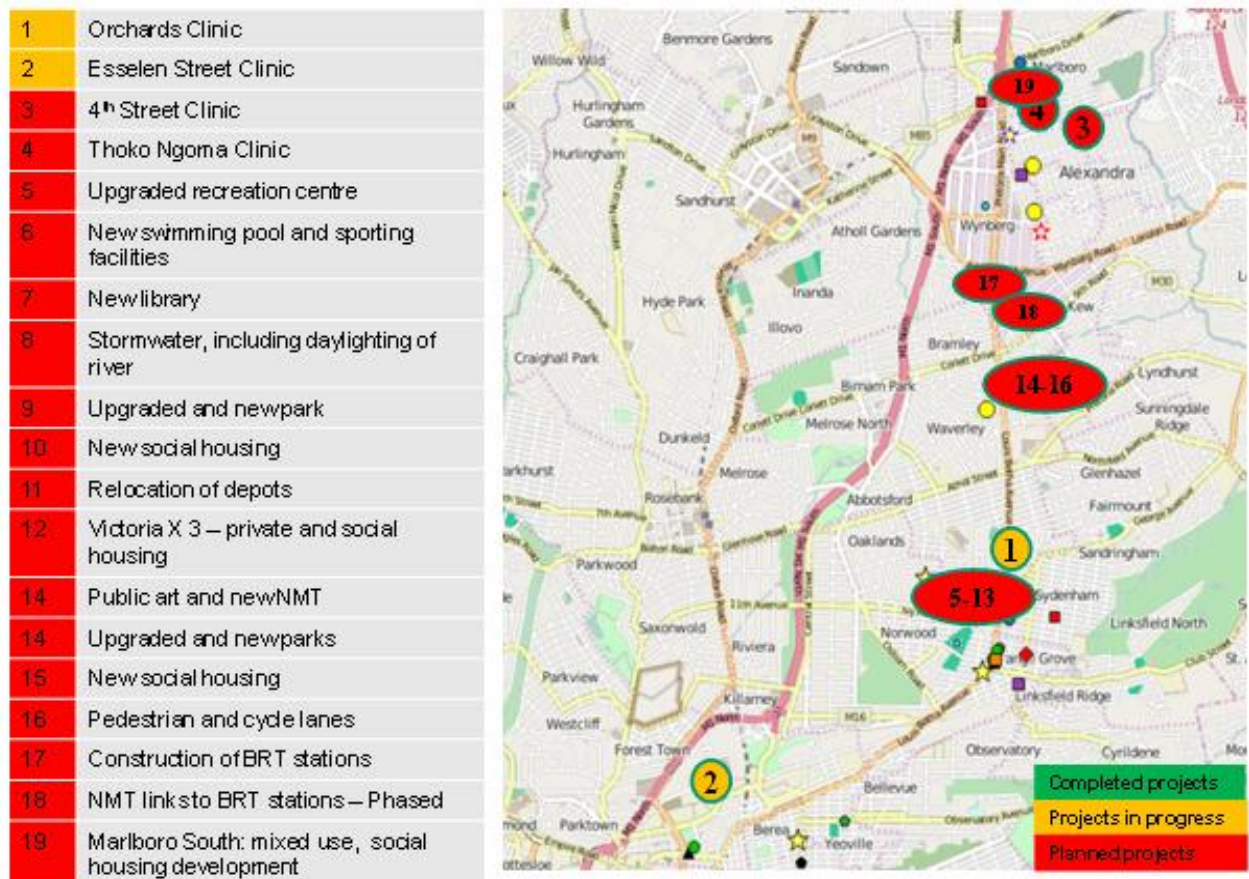
Figure 22: Corridor Projects up to June 2016

Louis Botha Implementation

The Bus Rapid Transit Infrastructure for this corridor is currently being implemented and to date, projects in Local Area 3, for Patterson Park have commenced.

Some of the infrastructure projects in the corridor are:

- Power: Upgrade Kelvin/Sandringham OHL to be Commissioned 2016
- Power: New Sandringham Sub-station to be Commissioned 2018
- Sewer upgrades of 14.8km of sewer lines is in the initiation phase
- Sewer: Northern WWTW (460MI) capacity is in the construction phase
- Water upgrades to create 3 PRV zones for pressure management, 37.5 MI and 16.7 km pipelines is in design phase



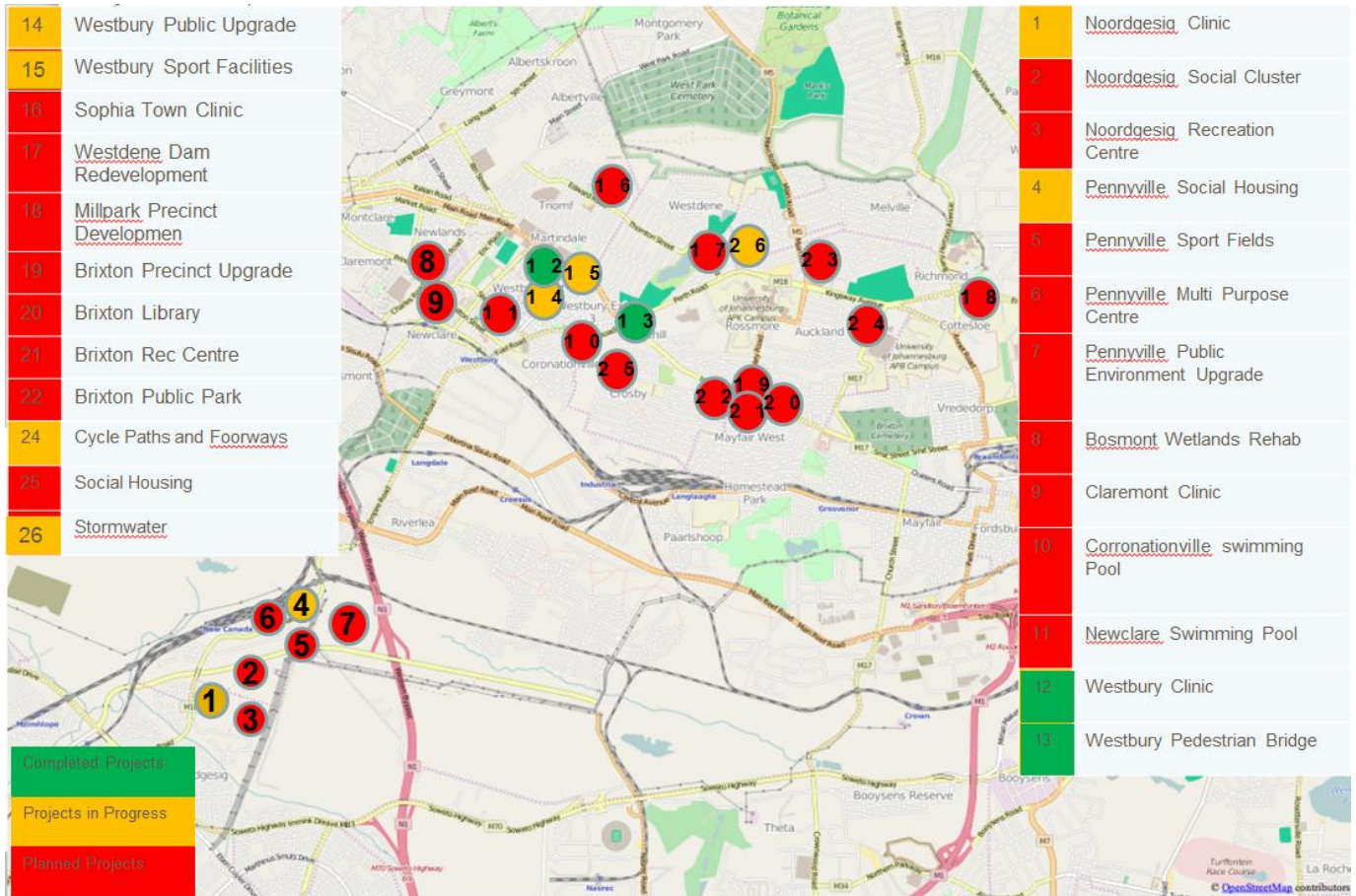
Map 26: Louis Botha – Infrastructure- Social

Empire-Perth Implementation

The BRT infrastructure for this corridor has already been implemented. In the Knowledge Precinct only catalytic projects to support interventions in Empire Perth corridor were identified. A precinct plan was never drafted and NMT projects have been 100% completed. The pedestrian bridge design has been finalised and the process of selecting a contractor will begin soon.

Some of the infrastructure projects in the corridor are:

- Hurst Hill Substation upgrade to be completed in 2018
- Water upgrades of 7.6km water pipelines, 26 Ml Reservoir, 2Ml Tower the project is in design phase
- Sewer upgrades of 5.2km of sewer lines which is in initiation phase
- Sewer: Bushkoppie WWWTW (200 Ml capacity) is in construction



Map 27: Empire Perth-Infrastructure- Social

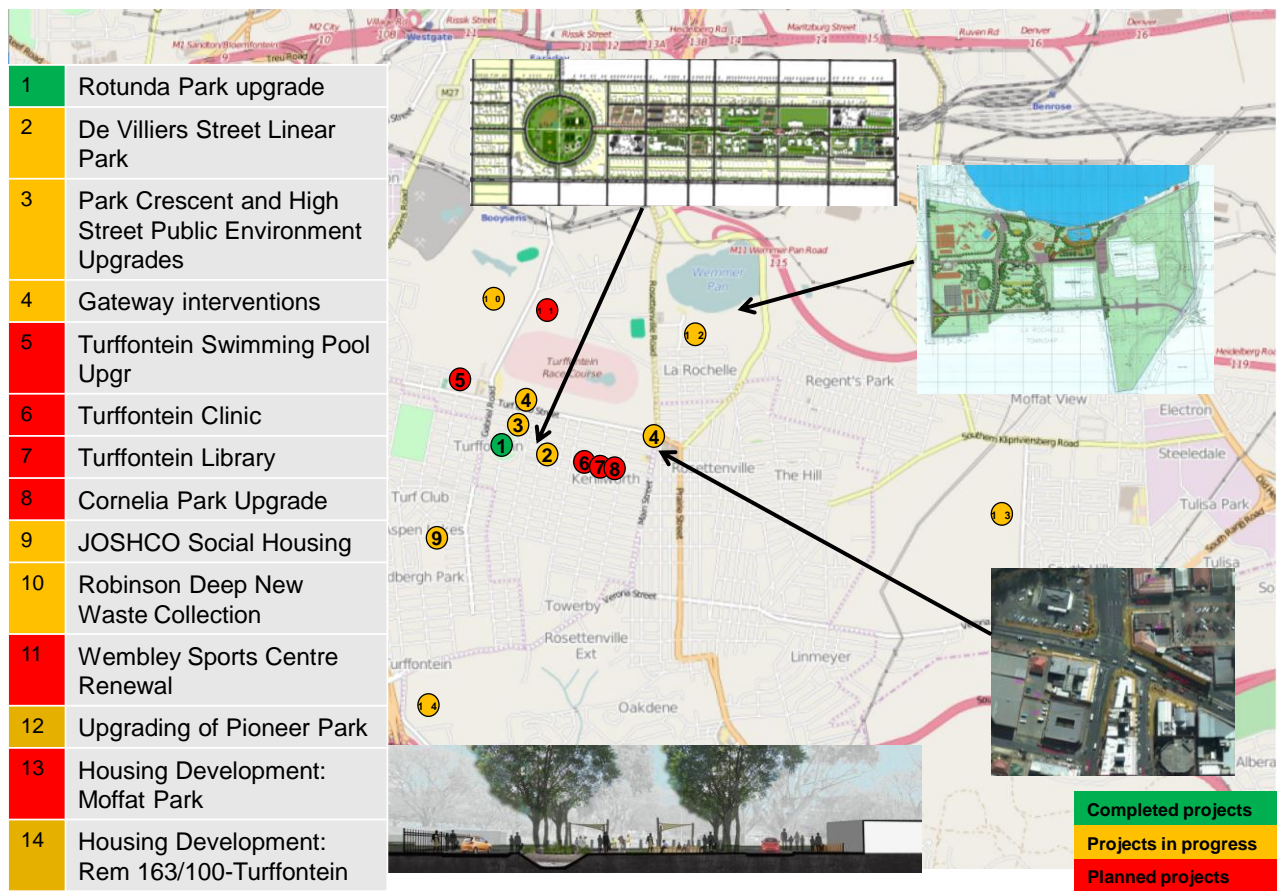
Turffontein Implementation

The Rotunda Park Precinct is currently being implemented by the JDA, and is in the first of three implementation phases. This phase includes the following projects which are being catalysed:

- High Street North and Northern Gateway;
- Park Inner Crescent and;
- Eastern Gateway.

Some of the infrastructure projects in the corridor are:

- Power: Upgrade Wemmer S/S to be Commissioned 2021
- New Oakdene Sub-station to be Commissioned 2020
- Water upgrades to install a pump station, a 2.5MI Tower and 9.7 km of water pipelines which is in the design phase
- Sewer Upgrades of 7.4km of sewer pipelines the project in in the initiation phase



Map 28: Turffontein- Infrastructure- Social

Special Development Zones

As part of the City’s efforts to fast track development within the Transit Orientated Development Corridors (ToD) the City’s Development Planning Department through the Land Use Management Directorate is in the process of developing a tool which can be used in assessing development applications specific to the corridors.

Realising the full development potential and envisaged outcomes of the Strategic Area Framework (SAF) for Mining Belt West Development Corridor is an urban development process that will take decades to unfold. Whilst there is still work to be done with regards to overall implementation mechanisms to realise the vision of the SAF, the specific projects and proposals resulting from this exercise begin to suggest a specific range of functional requirements that must be addressed if implementation is to succeed. Broadly speaking, these can be considered in terms of the following areas:

- Project Planning
- Project Implementation
- Project Facilitation
- Urban Management

The successful development/ re-development of the mining belt will to a large degree be dependent on the extent to which all stakeholders can be brought together to properly address development issues/ constraints and to align and synchronise the phasing of development in order to enhance the efficiency and sustainability of all investments and development in the area.

City will put in place an institutional structure for the mining belt to facilitate proper communication and alignment of development among various stakeholders. The City Transformation Department should take the lead in this initiative and will act as interface between various line function departments from all three spheres of government and local private stakeholder groups. Figure 20 below represents the proposed institutional arrangement structure.

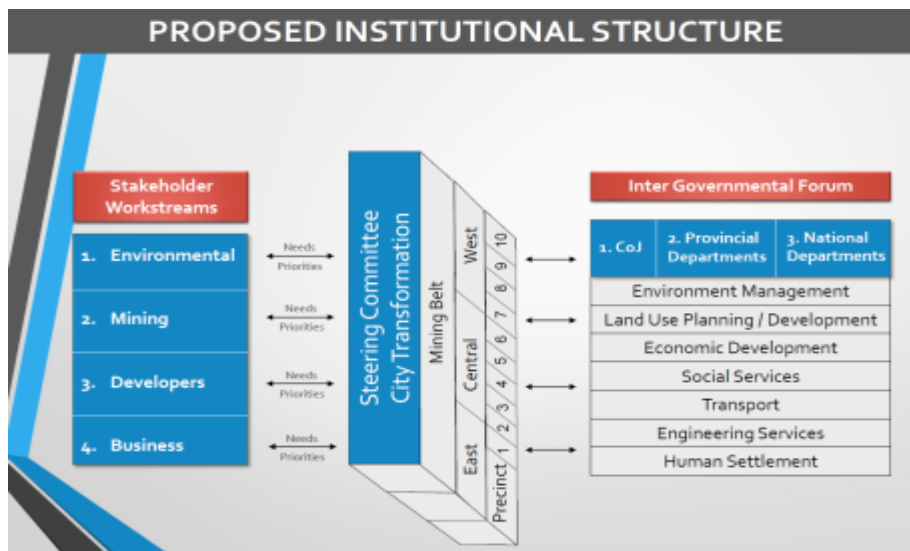


Figure 16: Proposed Institutional Structure

Members from the Inter-Governmental Forum will be responsible for a variety of public functions and investment including environmental and land use planning and management, provision of social and engineering services and infrastructure, transport, housing etc.

Local private stakeholders will form four distinct work streams:

- **Environmental** to look at the demarcation rehabilitation and management of the regional open space as a collective;
- **Mining** which will include CRG and West Wits currently still actively mining in the areas as well as the two companies focusing on Slimes Dam/ Tailings reclamation (ERGO and Mintails);
- **Developers** and their respective needs, and development priorities in various parts of the mining belt; and
- **Business** representing all enterprises currently operating in the study area.

As illustrated on Figure 25 engagement can be at the level of the mining belt as a whole, for a specific sub-region in the mining belt area (e.g. East, Central or West) or for a specific precinct/ functional area within the mining belt. The current NASREC ICT Inter Governmental Steering Committee is a good example of an initiative at the precinct level.

Jabulani

The roll out of interventions relating to Jabulani as defined in the Design Framework will be undertaken in the next 3-6 year period through the coordination of the Johannesburg Property Company, the Johannesburg Development Agency and the Development Planning Department.

There are several phases of implementation currently underway in Jabulani to give effect to the precinct plan. Phase 4 includes the construction of Legogo Road and construction of the new water tower link road. This phase is progressing well with the contractor on site and construction at 25%. Phase 5 includes Concept design, detailed design and construction of Bolani road between Koma and Legogo road was finalised.

For Phase 6, entailing the construction of a multipurpose sports facility within the precinct, the concepts designs are approved.

Phase 7 includes a site investigation and preliminary design of a bridge over the railway line to connect Jabulani to Jabavu (and the east of Soweto), with the Transport Study underway in quarter 3 to investigate this option. The majority of stakeholders such as PRASA and other property owners have been consulted, and a meeting with taxi associations scheduled for the end of the 3rd quarter.

JPC is furthermore implementing projects during 2016/17 to enhance the Cultural precinct by upgrading the Amphitheatre, including creating of public spaces around the Amphitheatre and Soweto theatre. This includes constructing an art wall created by local artists to commemorate the heritage aspects of the site.

Financial information on the Infrastructure Investment

Well-functioning infrastructure has always been very important to both the local economy and the society. Both components require infrastructure to enable people to work and live in a sustainable and functional environment. The robustness of infrastructure systems can be judged by their capacity to accommodate change over time. Our current infrastructure increasingly fails to meet demands. Facilities are ageing; their levels of service, reliability and performance are decreasing and increasingly their outputs as a result of failure, escape into natural environments and fragile ecosystems causing further harm. The current challenge facing us is to shape the infrastructure in a manner that clearly benefits the city today and meets the demands of future generations; supports a sustainable environment; promotes energy conservation; provides protection and resilience to the infrastructure; accelerates economic growth; creates new jobs; and, as a whole, results in the city becoming more economically competitive globally.

The CIP Phase 3 year 2 focused on the sector master planning for the different asset classes or engineering services; water and sanitation, roads and storm water, electricity and solid waste to provide financial information on the infrastructure investment requirement. The planning included future projections for both capacity increases and functionality. The output is a detailed and consolidated financial requirement for engineering services.

Funding is required for the current ageing and new infrastructure. As with any municipality, funding shortfalls exist which require prioritisation of the infrastructure requirement. The prioritisation is fundamental to where investment occurs first. As part of financial infrastructure investment analysis, the identified projects will be modelled, required funding compared to the available funding, prioritised and smoothed to deliver a proposed infrastructure investment profile. The analysis of required versus available funding is done in the financial model to deliver two scenarios, in the first part of the document, as to the time it would take to implement the required projects at certain budgets. The prioritisation across sectors will be done in the JSIP, which is the permanent home of the infrastructure projects.

The City's funding envelope is indicated through its Financial Plan that is updated every financial year. The 2015/16 Financial Plan indicates the available funding for capital infrastructure. The following table presents the most recent figures that are applied in the calculations for the financial analysis.

Land Strategy: Transit Orientated Development Corridors (ToD)

Purpose of the strategy

The formulation of a comprehensive Land Strategy for the Transit Orientated Development Corridors (ToD) is a critical requirement for the successful implementation of the Corridors. This strategy deals with the acquisition of land for a range of uses, including social and affordable housing, but also a disposal strategy that outlines how and when land assets can be disposed of to support the outcomes of the Corridors. The strategy should also outline the approach towards holding and managing the properties within the portfolio. The Johannesburg Property Company (JPC), together with the Development Planning Department, is currently working on this Land Strategy. The City has however already initiated a land acquisition process to acquire strategically located properties within the three corridors.

Land acquisition processes

Council approval has been obtained by JPC in 2014 to acquire land portions the City will need to implement various projects within the Corridors over time. This allows JPC to acquire on behalf of the City at market related values on a willing buyer / willing seller basis. The City is currently not expropriating land in the Corridors.

Properties that have been purchased are leased, demolished, maintained or secured in order to avoid them becoming illegally occupied and vandalised until such time as the properties are developed by the City.

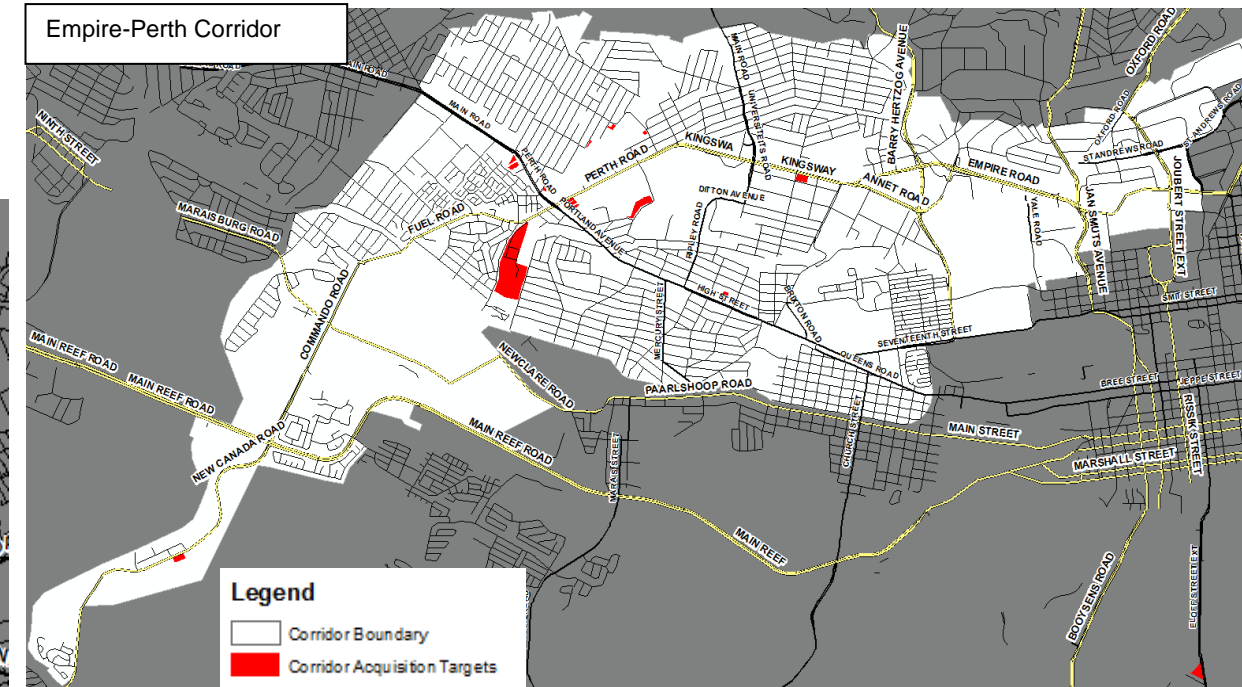
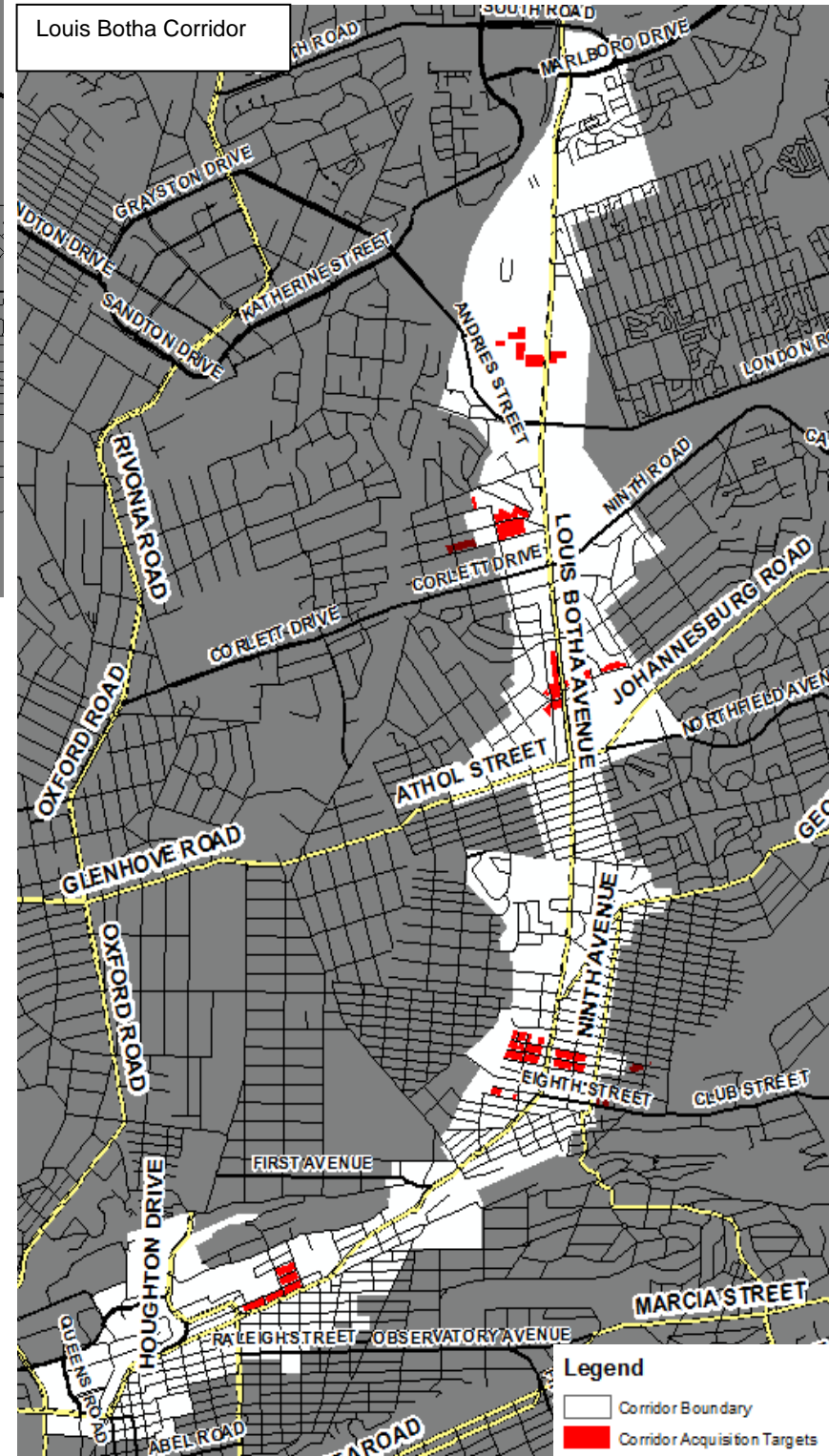
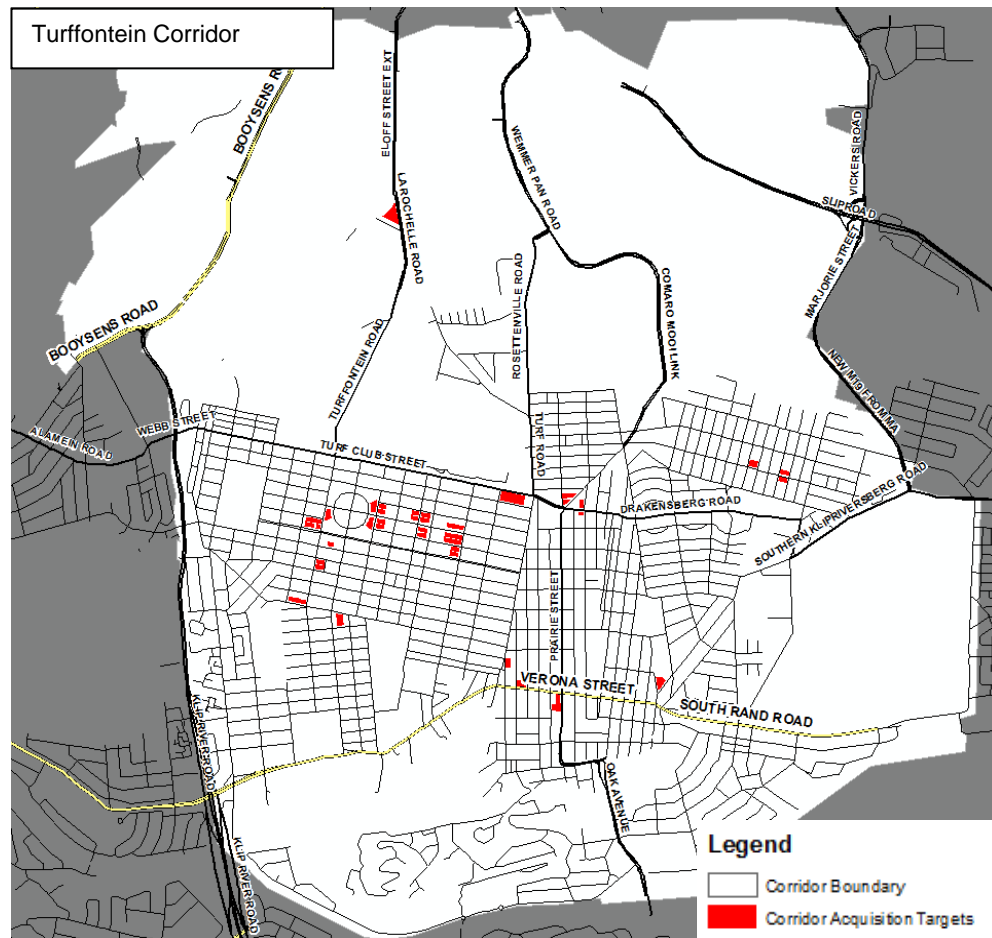
JPC has also approached Provincial Government to acquire identified provincially owned land (in the Empire-Perth Corridor). Province has indicated that these properties would be donated to the City. Despite this positive reaction, it has since been discovered that some of the land portions in the process of being donated to the City already have provincial projects underway on the sites. JPC and the City are endeavouring to resolve some of these uncertainties.

Land owned by parastatals such as Transnet has also been identified for acquisition or land availability agreements, but the City has not been successful in getting support or meaningful engagement for these processes from such entities.

Properties for acquisition

The City's Development Planning Department has identified properties within the Strategic Area Frameworks which the JPC will be required to acquire on behalf of the City at market related values on a willing buyer / willing seller basis over the medium term. See figure below:

Map 29: Corridors Acquisition Targets



Three phases of acquisition have been identified per Corridor (acquisition is also linked to budget availability per annum). The phasing relates to the City's identification of priority precincts for implementation. For example, a precinct such as Orange Grove in the Louis Botha Corridor is targeted for a range of City interventions in the short term, which includes piloting the Special Development Zone (the new zoning mechanism discussed above) and bulk infrastructure investment. Properties in Orange Grove have been targeted for Phase 1 acquisition so that the City has land holdings for development within this priority precinct. The future use of these properties will be in line with the intentions of the Strategic Area Frameworks and may include developments such as new or expanded social amenities, public spaces and social housing.

In terms of the Acquisition Strategy, properties that are underutilised and have lower property valuations are targeted. A clustering of properties is also targeted for greater impact, with consolidated sizes of 2000m² or more to improve project viability.

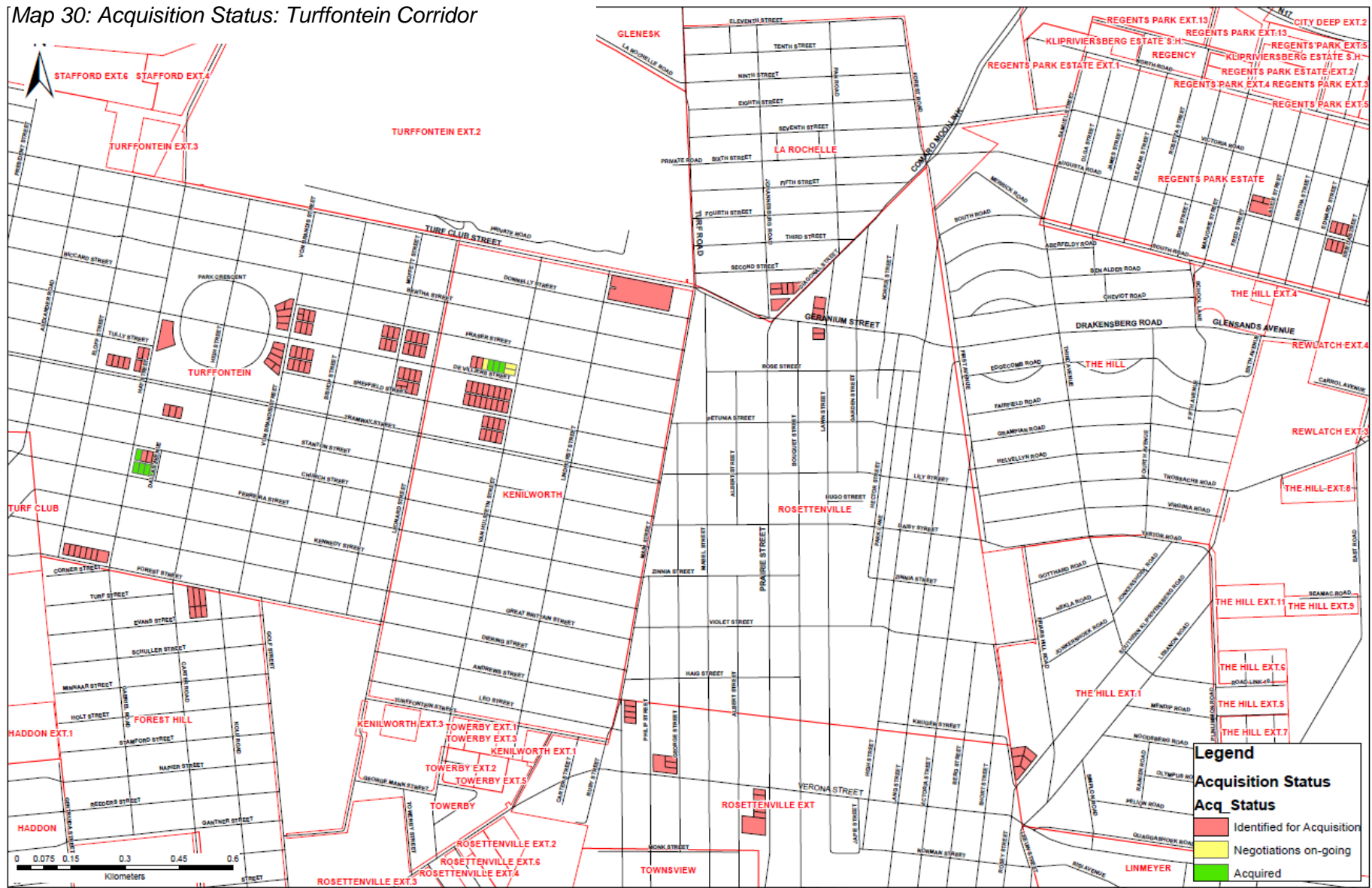
Implementation of the strategy

A budget of R40 000 000.00 was made available in 2014/15 and R68 000 000.00 in 2015/16 for acquisition purposes. More funding will be made available in subsequent years to ensure that the acquisition process continues. Map 31 and Map 32 indicates the land that has been acquired to date or where negotiations are underway.

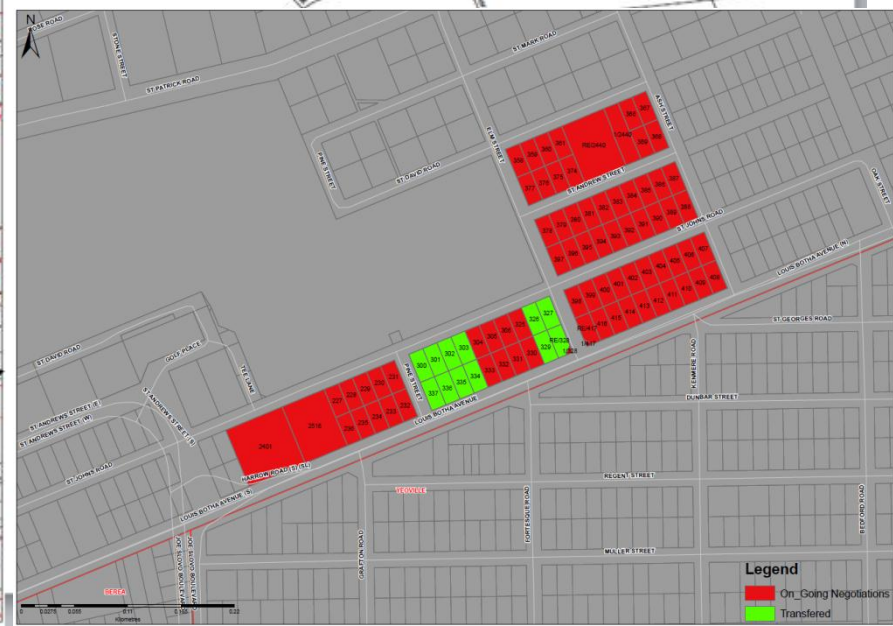
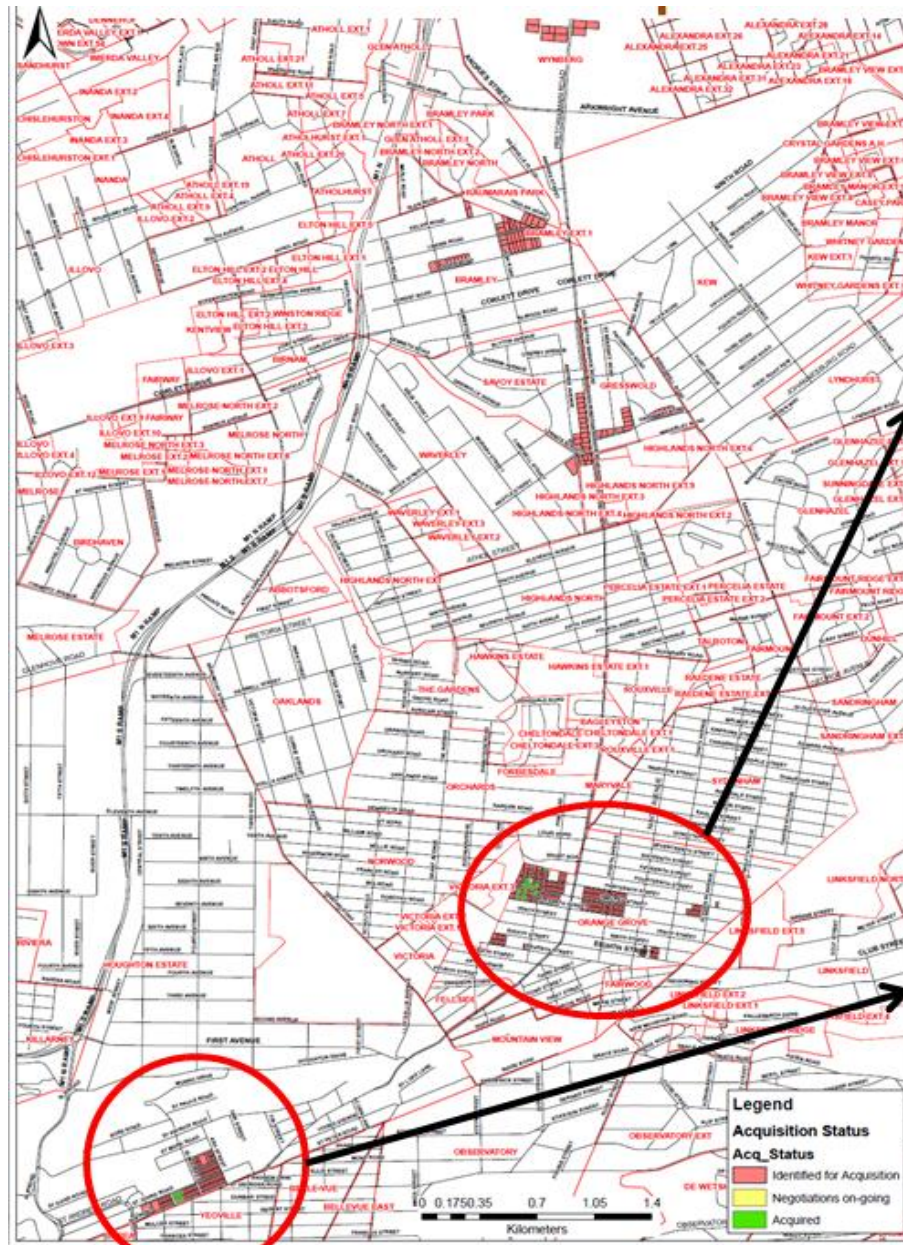
The properties acquired are being linked to City projects – i.e. new social housing projects and/or social facilities.

A critical component of the success of the Corridors is increasing the range of housing typologies and affordability. The City is currently working on a strategy to increase the number of social and affordable housing units within the Corridors – the release of land to social housing institutions forms part of this strategy.

Map 30: Acquisition Status: Turffontein Corridor



Map 31: Acquisition Status: Louis Botha Corridor



Supply chain management and procurement plan

The City has a Supply Chain Management Policy adopted in terms of Section 111 of the Municipal Finance Act (56 of 2003) and speaks to the City's processes and procedures relating to the procurement of services. Since its adoption by Council in 2006 the policy has been updated a number of times through Council resolution.

While the details of the policy have changed the broad framework of the policy remains. The Policy sets out the Institutional arrangements for supply chain management within the City including the delegation of supply chain management powers and utilities, sub-delegation, reporting requirements and performance management.

In addition the policy provides:

- A system for acquisition
- Procurement mechanisms for goods and services
- General conditions applicable to the consideration of written quotations
- Circumstances whereby deviations from the procurement mechanism might be considered
- Details for the nature and functioning of the Supply Chain Management Committee System
- Details for supply management and development
- Procedures for penalties for abuse of the supply chain management system
- Procedures for Inventory Management
- Procedures for Asset disposal
- Procedures for Risk Management.

Risk Management

The objective of risk management is to enhance standardised decision making and integrated planning on risk management principles and practice across the City, in order to;

- ensure efficient, effective and economic mitigation of risks City-wide
- achieve a better understanding of risk management for competitive advantage
- ensure safeguarding of assets (tangible and intangible)
- improve capabilities for resilience
- allocate and manage resources more efficiently

Through Group Risk and Advisory Services Department (GRAS) the City receives independent advisories and assurance services promoting good governance practices in relation to effective implementation of Enterprise Risk Management principles across the City. The City has developed and implemented the following: Risk Management Plan, Risk Management Framework and Policy in order to enhance the effective embedding of Risk Management processes in the City. The Risk Management Framework and Policy are aligned to international best practice such as Committee of Sponsoring Organisation (COSO) and International Organisation for Standardization (ISO), this is to ensure a holistic approach on risk management environment, including improvement of risk treatments/response strategies across the City

In 15/16 the focus on risk management processes within the City has been;

- Risk profiles at organizational level (City level)
- Core Departments and Municipal Owned Entities' strategic risk profiles
- Information and Communication technology (ICT) governance risk
- Fraud risk profiles
- Compliance risk profiles
- Risk Appetite and Risk Tolerance Statement for the City
- Property Risk Assessment

The City applies an integrated approach to enterprise risk management by linking the significant risk exposures to City's strategic objectives/long-term goals, Mayoral priorities and GDS2040 outcomes. The risks are categorised and prioritized in accordance to probability and severity. The City utilises risk matrix to guide the priority levels for each risk as outlined below;

IMPACT	5 Critical	LO W	MEDIU M 10	HIGH 15	VERY HIGH 20	VERYHIG H 25
	4 Major	LO W	MEDIU M 8	HIGH 12	HIGH 16	VERY HIGH 20
	3 Moderat e	LO W	MEDIU M 6	MEDIU M 9	HIGH 12	HIGH 15
	2 Minor	LO W	LOW	MEDIU M 6	MEDIU M 8	MEDIUM 10
	1 Rare	LO W	LOW	LOW	LOW	LOW
		1 Rar e	2 Unlikely	3 Possible	4 Likely	5 Almost certain
LIKELIHOOD						

Table 15: Risk Management

3.5.1 Regulatory reforms

In most cases, particularly in developing countries, municipalities are dependent on government grants which are not sufficient to address Sustainable Development Goals (previously known as Millennium Development Goals). National Treasury is emphasising that the national public funding envelope is shrinking and municipalities must leverage alternative sources of funding to meet their investment needs. To the City of Joburg, this means that the city needs to re-evaluate how business is done to attract investments. Regulatory reforms are therefore required to stimulate investment or remove barriers to investments in municipalities. According to the World bank, municipalities are encouraged to establish innovative ways to compete economically and attract investment.

3.5.1.1 Dealing with Construction permits

A construction permit is an official approval from the local government or agency that allows a contractor to proceed with a construction project? It is to ensure that the project plans comply with local standards for land use, zoning and construction. The standards are intended to ensure the safety of current and future owners and occupants and provide enforcement of zoning and land use policies.

To obtain a construction permit, a process needs to be followed to ensure that all relevant departments affected provide inputs, the public is protected from faulty building practice and proper permits are issued. It is often viewed or even experienced by developers that the procedure followed is too complicated or costly. In 2015 the city of Johannesburg had a 141 days (4months and 2weeks) turnaround time on construction permits, which is viewed to be lengthy and would be discouraging to a potential investor. The City deliberated on key interventions as stated below to deal with this issue.

Key interventions:

- **Peer learning review:** premised on an appreciation of the complexities of local government in ensuring legislative compliance and operating efficiencies. Different municipalities excel in different aspects of executing their responsibilities. in this aspect city of Joburg will engage with comparable peers to learn, benchmark and test envisaged system and process interventions
- **Re-engineering for efficiency:** this will sharpen the City” views of the customer experience and on the basis of that introduce re-engineer identified processes and workflows. There are 3 critical customer touch point which re-engineering will focus on:
 - **Plan submission:** entails finalization and dissemination of a new submission
 - **Plan administration:** plan management system, IT support, client communication
 - **Building Inspection and issuance of occupancy certificate:** quality assurance in building inspections and reinforcing quality control
- **Business Interoperability and interfacing:** based on the appreciation of the complex governance model introduced by the city being organized with Municipal Owned Entities and the need to streamline the back office interface between various

city Departments and MOEs without burdening the client with having to navigate these complexities.

- **Delegation of Authority and risk classification:** the City will reconsider, confirm and communicate its system of delegation of authority and responsibility. This will be informed by legislative requirements as well as operational consideration. An important step in this will communicating key accountability points to the public in order for clients to direct their queries and or requests for interventions appropriately and efficiently.
- **Decentralisation:** given that the city has 7 administrative regions, the intervention will explore and set in motion a process of decentralizing the plan submission and approval process.
- **Going Digital:** this is for client to be able to submit electronically and for the city to process and finalise plans on the same platform. The City has a strong GIS capabilities and as such using geo-referenced site inspections technology is goal within reach.
- **Human Resource Capacity:** there are 3 sub-interventions to this point
 - **Continued management support**
 - **Culture and change management**
 - **Skills development:** focus on targeted skills development interventions, entails training and exposing key personnel to cutting edge developments in the industry.
- **Document Standardisation:** will encourage familiarity and ease of understanding and use by clients and staff. This includes pre-submission checklists, application forms, schedule of required documents, processing clock etc.

3.5.2 Dealing with Electricity

According to the World Bank Enterprise Surveys (2017): 31% of firms worldwide identify access to electricity as a major constraint. The lack of access to electricity and unreliable supply is the fifth biggest obstacle faced by firms worldwide. The city of Johannesburg is continually growing in terms of population size and this puts pressure on existing engineering infrastructure which is not dealt with will affect businesses in the city. With this in mind Johannesburg City power has outlined the reform action plan as follows.

Key intervention:

- **City power new connections:** for connections of this nature where the area is already zoned and reticulated for the desired capacity, it is possible to remove the design fee step and submit the final quote. This will reduce the number of payments from 2 to 1 and also result in a saving of 7 days in the procedure.

3.5.3 Dealing with registering property

Property registration is essential for asset management, it records matters concerning ownership, possession and other rights. Registered property enables increased financing and growth. Secure property rights lead to increased investment with greater credit potential and more affordable finance. Unregistered property is dead capital, real estate holders will not risk investing on the property as it possess risk on lenders and government loses out on tax income. The City of Joburg has deliberated on the following key intervention to ensure that

the process of registering property servers the public better and is able to attract potential investors.

Key intervention:

- Implement a fully automated clearance process
- Implement a fully automated refund process
- Revised staffing structure
- Improving success rate of system interfaces from land information system (LIS) to the billing system or specifically the deeds and valuation update interfaces. This will reduce processing timeframes for the Land Transfer process and will also allow the refund of overpayment in a shorter timeframe. The interfaces success rate is currently at 60% and interface error require extensive manual intervention which extends processing time frames.

The identified interventions mentioned above will improve the general doing of business by the municipality. It will also improve the people's view of the functioning of the Municipality which will indirectly impact on their willingness to pay their rates and taxes. This will further invite investors into the space since there is ease of doing business in the Municipality. These interventions will also improve the way in which the city is collecting revenue.

Evidence of key land use management interventions.

- **Development mechanisms**

The City of Johannesburg has identified the development of the Corridors of Freedom as one of its key priority programmes in order to facilitate spatial restructuring in an interventionist manner. The intention is to optimise development in and around high intensity movement corridors in order to create more inclusive and accessible opportunities for the residents of Johannesburg and create places and spaces that are intense and attractive to investors and future residents alike.

As part of achieving the desired outcome to implement the Transit oriented Corridors, the formulation of development mechanisms was identified as a critical action to enable accelerated achievement of the development vision. The main aim of the development mechanisms is to incentivise, enable and fast-track development within the corridors. The Special Development Zone was identified for short term implementation. The mechanism is premised on the concept of proactive zoning whereby the developers do not have to undertake the technical studies or processes such as motivating and advertising which are ordinarily required in the development application processes, specifically rezoning processes. The city is piloting this innovative mechanism in three priority precincts namely: Orange Grove Precinct in the Louis Botha Development Corridor as well as Brixton and Knowledge Precincts in the Empire Perth Corridor. This will be prior to rolling it out to other priority precincts within the corridors

The purpose of the SDZ:

To integrate and interrogate the Urban Design proposed by the respective Strategic Area Frameworks to ensure it is positive and practically implementable.

- To develop feasible and market related development models that can be employed in the ensuing redevelopment.
- To interrogate the current services, water, electricity, sewer, stormwater and natural assets to determine if they are adequate for the proposed densities and to design for additional capacity where needed.
- To be inclusive and allow everyone to be part of the re-development process at various economic scales. This will allow not only big commercial developers but also private house owners to take part and reap economic benefit from the redevelopment of the area.
- To develop such that a significant part of the historic character of the Neighbourhood survives through projects that protects and adapts the wealth of historical buildings.
- To encourage inclusivity so that the existing close knit community benefits from the densification of the neighbourhood.
- To develop in such a way that it accommodates sub-economic settlement patterns as well as ownership and leasing models that are currently manifesting in the city. This will ensure economic inclusivity from future and current residents.
- To develop and densify in such a way that it stimulates not only the growth of the community but also the growth of the neighbourhood's local economy. Thus providing future and existing residents with more economic opportunities and in so doing result in a more sustainable and rejuvenated neighbourhood.

The benefits for developers (including single land-owners) are substantial if they adhere to the development models and the development guidelines.

- no re-zoning process required since the re-zoning for this project will cover the entire identified area including all of the possible land-uses and densities.
- no Heritage Impact Assessment required since one was done for the entire neighbourhood. It provides clear provisions for identified buildings of historical value and will have to be adhered to.
- no Traffic Impact Assessment required since one was conducted for the Special Development Zones. The required interventions will be implemented by council as density targets are reached incrementally.
- no need for an Environmental Impact Assessment since one was conducted on the maximum achievable densities determined by the Urban Design Framework.
- all neighbourhood infrastructure and services will be upgraded by the Council to accommodate all of the intended development.

ORANGE GROVE

Orange Grove is one of the older suburbs in Johannesburg, located on the northern side of the Witwatersrand, along the Louis Botha corridor. This corridor links Thembisa and Alexandra to the Johannesburg Central Business District. The neighbourhood has a fine grain of historical houses tightly packed on small erven arranged along narrow streets. In recent years the character of the neighbourhood has changed with residents erecting high walls and fences as a response to the high crime rate experienced.

BRIXTON AND KNOWLEDGE PRECINCTS

The Empire-Perth corridor is one of the City of Johannesburg's priority development corridors supported by a BRT Route, which links Soweto with Parktown. This section of the corridor is located between the established neighbourhoods of Auckland, Westdene, Melville and Rossmore. It also houses large institutions like SABC, Helen Joseph Hospital and the UJ Kingsways Campus. Brixton along with Auckland, Rossmore, Melville and Westdene is a historical neighbourhood with a rich history. The study area, comprising of these neighbourhoods is situated to the south of the Empire-Perth Corridor of Freedom. Brixton takes its name from the London suburb of the same name.

These neighbourhoods with the exception of Auckland Park, all have a fine grain with small tightly packed erven arranged along narrow streets with historical houses. In recent years the character of these neighbourhoods have changed with residents erecting high walls and fences as a response to the high crime rate experienced.



Orange grove	Brixton and Knowledge Precincts
HERITAGE NETWORK	
<p>Due to the historic nature of Orange Grove there are a lot of historically significant buildings which must be protected in the neighborhood from an urban design perspective. Most of the original houses in the neighborhood must be seen as an enormous asset which should be restored and retained as far as possible whether they are classified as historical or not. This is to ensure a part of the history and character of the neighborhood is retained for future generations. Classified historical buildings also provide exciting opportunities for re-purposing and adaptive re-use.</p>	<p>Due to the historic nature of Brixton and Empire Perth there are a lot of historically significant buildings which must be protected in the neighbourhood from an urban design perspective. Most of the original houses in the neighbourhood must be seen as an enormous asset which should be restored and retained as far as possible whether they are classified as historical or not. This is to ensure a part of history and character of the neighbourhood is retained for future generations. Classified historical buildings also provide exciting opportunities for re-purposing and adaptive reuse.</p>
TRANSPORTATION NETWORK	
<p>The integrated transport plan addresses both the mobility through and the accessibility of the neighbourhood providing various routes that focus on different modes of travel including public transport systems, privately owned vehicles, non-motorised transport like pedestrian routes and cycle lanes. These routes have been integrated to provide efficient movement both within the precinct and through it</p>	<p>The integrated transport network plan addresses both accessibility of and mobility through the neighbourhood providing various routes focus on different modes of travel including public transport systems, privately owned vehicles, non-motorised transport like pedestrian routes and cycle lanes. These routes have been intergrade to provide efficient movement both within the precinct and through it.</p>
PUBLIC SPACE	
<p>With the increase of people and activities there will be a greater need for the provision of sizeable public space in the station nodes and throughout the neighbourhood. This will be dependent on projects that materialise. The inclusion of public open spaces will be incentivised for future developers along the corridor.</p>	<p>With the increase of people and activities there will be a greater need for the provision of sizeable public space right in the station nodes and throughout the neighbourhood. This will be dependent on what projects materialise. The inclusion of public open spaces will be incentivised for future developers along the corridor</p>

LAND USE NETWORK	
<p>The proposed land use network is geared to provide fully integrated mixed-use zones around BRT stations. These nodes will act as the heart of activity for the neighbourhood with accommodation, retail, recreation as well as offices and educational users. The rest of the neighbourhood is envisaged as a dense and tightly knit residential area with dispersed neighbourhood convenience shops, occasional pubs, places of worship, educational facilities as well as restaurants.</p>	<p>The integrated transport plan addresses both accessibility of and mobility through the neighbourhood providing various routes that focus on different modes of travel including public transport systems, privately owned vehicles, non-motorised transport like pedestrian routes and cycle lanes. These routes have been integrated to provide efficient movement both within the precinct and through it.</p>
GREEN SPACE	
<p>The insertion of green spaces as well as clear green links and better access into the existing parks to accommodate more activity and provide more opportunities for residents will have a long-term impact on the quality of the lives of the residents in the neighbourhood</p>	<p>The insertion of green spaces as well as clear green links and better access into existing parks are considered as an important priority. Upgrading of existing parks to accommodate more activity and provide more opportunities for residents will have a long-term impact on the quality of the lives of residents in the neighbourhood.</p>

- **Bylaw for enforcement**

It is a form of delegated legislation. Municipal by-laws are public regulatory laws, which apply in the Joburg area. Bylaws cover various local government issues such as public roads, parking grounds, public open spaces, street trading, public health, cemeteries and crematoria, emergency services, culture and recreation services, and encroachment on property.

SECTION F**3.6 Targeted Urban Management**

Urban Management relates to the Municipality's responsibility for the day-to-day operations of the City, effective Urban Management also requires the involvement of the private sector, and of neighbourhood or community organisations.

The South African Cities Network SACN (2009) suggests that the functions of urban management in relation to the private sector include:

- Demarcating and regulating private spaces and ensuring that these spaces are clearly defined and demarcated;
- Service private spaces with connections to essential public services and utilities, such as water and electricity, maintain these services, and ensure that payment is made for such services.

Failure of the above has implications for property values and the ability of land and building assets to fulfil their potential value.

In terms of public spaces, the SACN suggests three primary functions of effective Urban Management:

- Regulate public spaces and maintain their public nature/utility;
- Improve, enhance and maintain public spaces and infrastructure, including public spaces, sidewalks, roads and parks;
- Govern public spaces through government, private and community inputs.

Failure to carry out these functions could result in public spaces becoming increasingly dysfunctional and alienating, with spaces becoming contested, or dormant.

Pernegger (2008) has suggested concept of Urban Management that sees a bottom level as consisting of simple, but highly visible, management functions, such as cleaning of storm water channels, fixing potholes and removing litter.

A second level deals with the enforcement of bylaws such as illegal dumping and informal trading, both of which have had a significant impact in the Turffontein Study Area.

The third level is about policing and crime prevention, whilst the highest levels are concerned with place-making and marketing the managed area to outsiders.

The shift from the lower levels (Getting the Basics Right) to the higher levels (Offering a Premium Service) requires not only increased budgetary allowances, but also a more integrated and focussed approach to service delivery, which itself is a challenge given the multiplicity of operators and service providers involved. The success of the identified integration zones and urban hubs is dependent on the success of Urban Management Systems provided by the private sector and local government.

The City has begun a process of redesigning the Area Based Management Framework (ABMF). The framework is a governance tool through which CRUM will support management and maintenance of public assets and ensure safe quality service provision in the region. In parallel to this, the private sector has provided urban management strategies through the development of City Improvement Districts (CIDs); CIDs follow similar principals to Pernegger (2008). It is therefore essential that the day-to day management ensures that the mixed-use, higher density, vibrant areas function well.

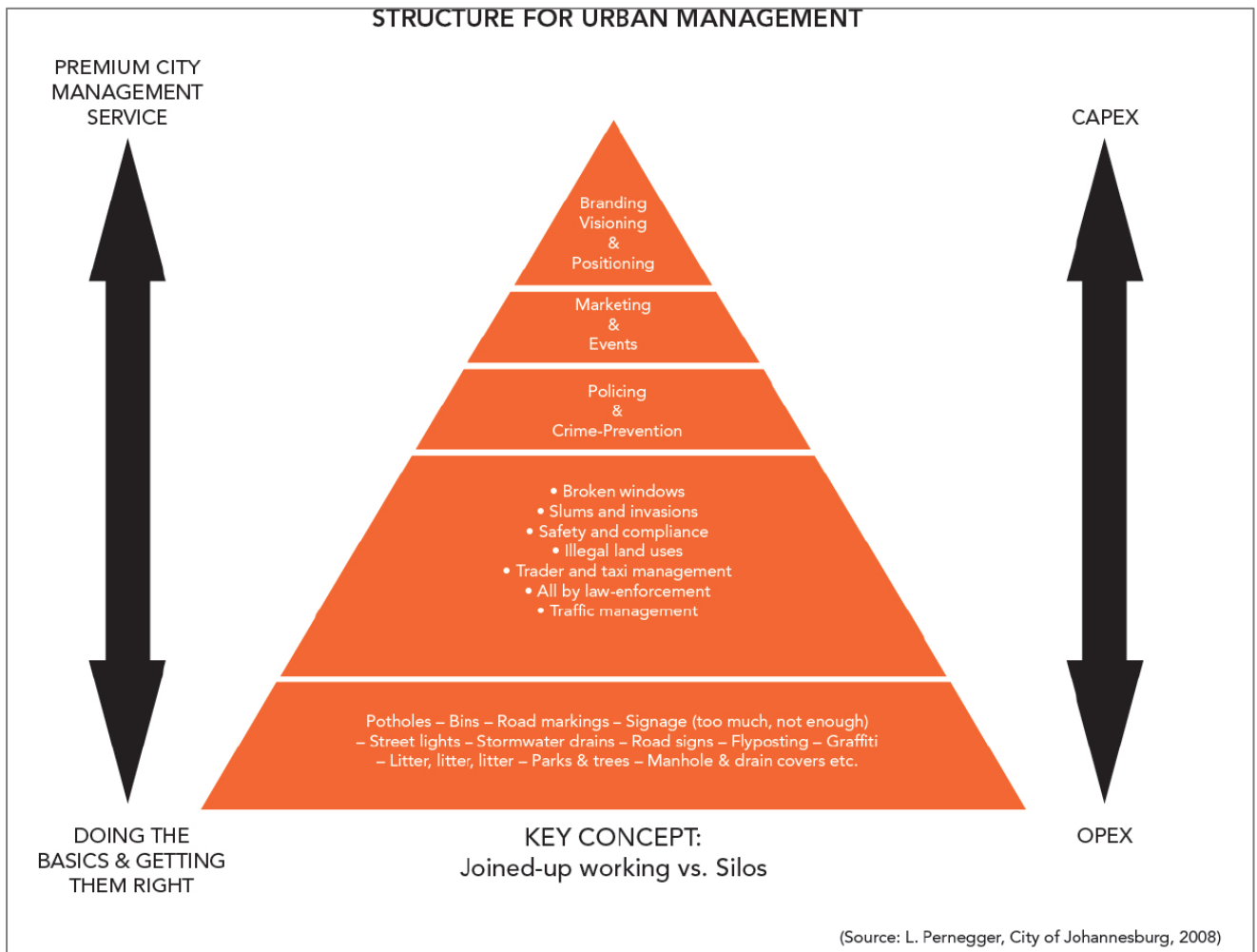


Figure 23: Structure for Urban Management of the Corridors

The ABMF is highly dependent on intergovernmental relation which plays a role in the design, implementation and development, maintenance and management of the area with a focus on safety. The framework reflects on the issues raised by those affected in the area, whether public or private stakeholders, and will then attempt to find through a collective method by the various stakeholders, a way forward for addressing any developmental or management challenges.

The ABMF will over time, the proposed period is in the medium term, become a business plan for management of the area as soon as solid partnerships have been established between the stakeholders and interested and affected parties. For example, the Louis Botha Avenue Corridor ABMF focuses on local area 3, which includes Orange Grove, Fellside,

Mountain View and Orchards. Through analyses and guidance from the Strategic Area Framework, the ABMF seeks to achieve the following:

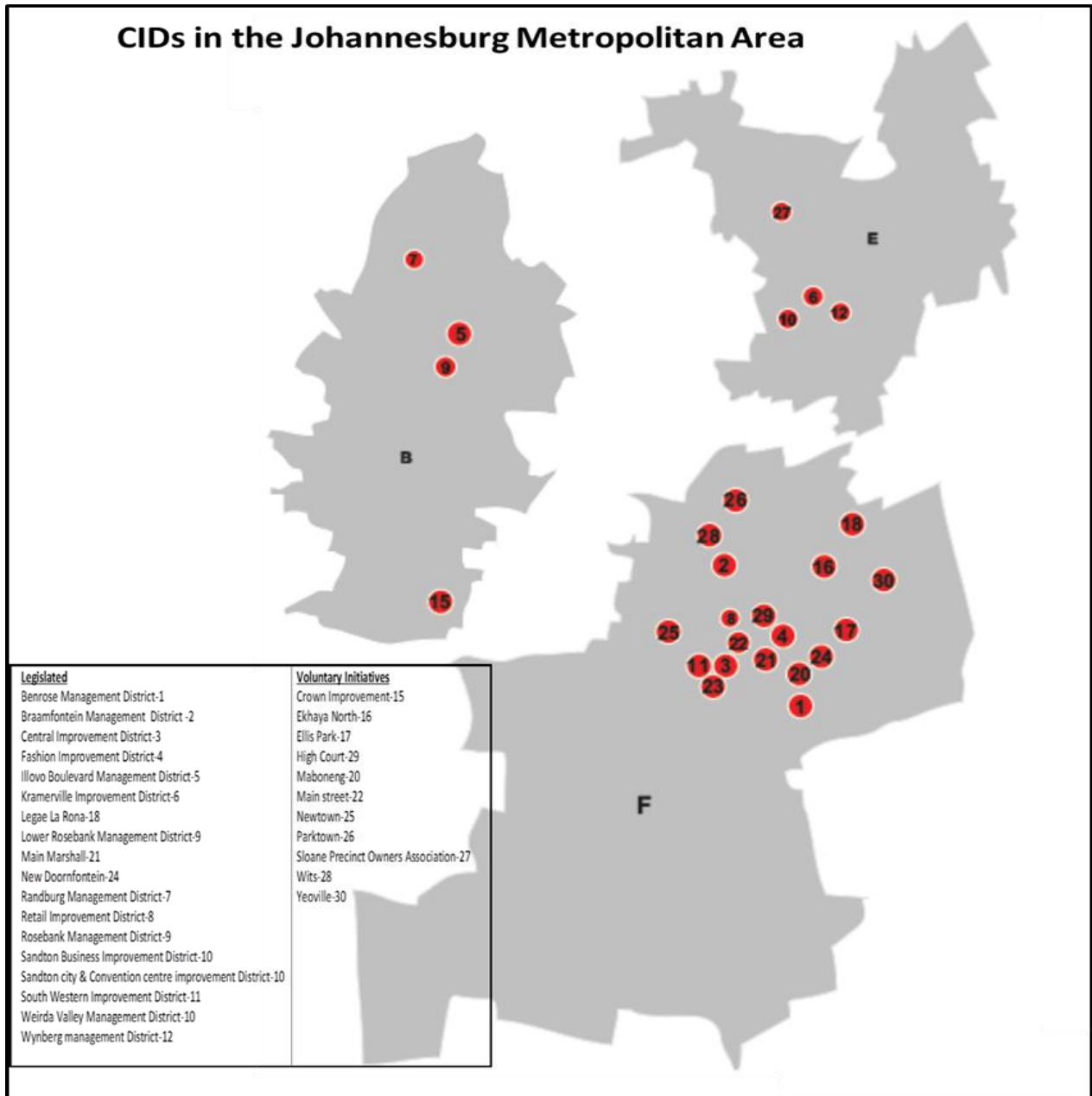
- Investment in bulk infrastructure
- Releasing and developing municipal land
- Expanding and improving public transit infrastructure and facilities
- Investing public funds in public environment upgrading
- Development of privately owned properties into intensive mixed land uses
- Place making interventions
- Increasing land value capture around transit facilities
- Activation through programming and community mobilisation
- Safe efficient and sustainable public spaces and transit hubs

In achieving the above objectives, the ABMF is to outline actions that will be taken in the short to long term interventions and actions as decided upon by the stakeholders and role players. The short term actions of the ABMF for local area 3 include addressing traffic congestion, engineering issues associated with road diversions, liquor outlets/restaurants/pub enquiry and education campaign, town planning law enforcement case consolidation and building control case consolidation.

The City's urban management strategy within the integration zone is slightly different to what the private sector offers through CIDs. CIDs are geographical areas in which the property owners determine and agree to fund supplementary and complementary services to those normally provided by local government in which to maintain and manage the public environment at a superior level and thus enhance the investment. Supplementary services include safety and security patrol officers, pavement cleaning, litter collection, maintenance of public space and removal of illegal posters amongst many other services. Whilst complementary services might include heritage initiatives, tourism initiative, informal sector strategy, precinct plans and city policy business attraction, branding, marketing the CID precinct area and where possible CIDs work closely with council to find effective solutions to parking and traffic solutions (Kagiso Urban Management). The City of Johannesburg's CIDs are voluntary CIDs predominantly located within the city's growth nodes such as Sandton Improvement District, Braamfotein Improvement District, Upper and Lower Rosebank Improvement District are a few amongst many others.

The municipality is working together with the Johannesburg City Improvement District (CID) Forum which represents and promotes Sustainable Place Management and Urban Management institutions, initiatives and individuals throughout Johannesburg. In this forum, City Improvement Districts in Johannesburg can share information, follow international trends and keep track of issues that have an impact on City Improvement Districts as a collective. Each City Improvement District is unique but collectively they are all affected by the decisions of Council and the public sector. CIDs in Johannesburg are currently managed as voluntary initiatives following the 2015 Supreme Court of Appeal judgment in the case of Randburg Management District vs West Dunes Properties. Voluntary establishment has no standing or legislative backing and thus is reliant on the goodwill and consistency of its constituent

property owners to remain viable. COJ took the decision in June 2016 that Management Districts should be legislated under Section 22 of the Municipal Property Rates Act, 2004 (Special Rating Areas) and are therefore establishing a new Special Rating Area By-Law and Special Rating Area Policy which is in the process of being approved by council.



Map 32: CIDs in City of Johannesburg

A Re Sebetseng programme

The city has adopted a programme called A Re Sebetseng which means “let’s work’ – as a component of the city’s urban management programme. It is a monthly Johannesburg city-wide cleaning campaign. The campaign strives to create a cleaner and safer environment by encourage all of Johannesburg residents to take care of the spaces around them. A Re

Sebetseng seeks to promote a culture of reducing, re-using, and recycling waste to ensure that Johannesburg becomes one of the cleanest cities in Africa.

The campaign takes place on the third Saturday of every month and in line with the City's by-laws which aims to address issues of littering, illegal dumping, and overloading of bins, that cause dilapidation of open spaces and lead to the manifestation of pests. The campaign is facilitated by Pikitup, but it is the responsibility of all Councillors, city departments, and regional offices to drive the programme. Plastic bags and gloves are distributed at walk-in centres, clinics, libraries, and participating businesses. Filled bags are collected on the same day by Pikitup.

Operation Buya Mtheto

The operation's main focus is to ensure that by-laws are adhered to by all in the City and that the rule of law becomes the order of the day. The City will be working with all law enforcement agencies across all wards of the city and conducting spot "raids" on a daily basis to ensure law breakers are brought to account. This will include an aggressive focus on collecting monies from accounts that are in arrears, preventing illegal connections, guaranteeing residents' safety through upholding by-laws, and ensuring strict financial oversight with regards to credit control policies. It affirms the current administration's commitment to restoring respect for the rule of law in the City. It is a joint operation by all key City departments including Disaster Management, Environmental Health, Social Development, Infrastructure Services, the City's legal department, Development Planning, and JMPD to name a few.

In the 2016/17 financial year the City embarked on initiatives to recruit 1500 new JMPD officers; have a cleaner inner city; functional road and traffic signage and increasing the number of building and environmental health inspectors which are still continuing. Nonetheless law enforcement still needs to be strengthened in outdoor advertising, vandalism and theft of the City's infrastructure, and bypassed meters. The City has elevated the levels of service delivery through extending operating hours in clinics and libraries; capacitation of the Johannesburg Roads Agency amongst others. Through the Group Forensic Investigation Services, we remain committed to effectively dealing with corruption and fraud.

These are complemented by the game changers we have identified through the Dipheto.

The 2018/19 budget is centralized around three core principles:

- Strengthening the existing revenue capacity and fiscal efforts by improving the culture of payment, ownership of revenue activities, efficiency of customer service and improving meter reading performance throughout the city;
- Improving the capacity to spend especially on grant funding in the implementation of the City's capital programme; and
- Managing the cost of governance in relation to the implementation of programmes and intensifying austerity measures in both the operating and capital budget planning processes;

Institutional Arrangements and Capital Budgeting Process

In 2006, the City implemented a governance model that separated legislative and executive functions. The intention was to provide better oversight of the executive by the legislature through a clear delineation of powers.

Legislature

The City's legislative functions include the approval of by-laws, policies, the IDP of the City, tariffs and the City's budget. The council, led by the speaker, also seeks to ensure community and stakeholder participation. Ward councillors and elected ward committees through the Office of the Speaker facilitate the City's participatory processes. Finally, the legislature provides an oversight function through the work of Section 79 committees. The committees determine priority areas for oversight which is guided by the Mayoral Priorities. Other measures of oversight include the use of questions by individual councillors to hold the executive to account, as well as the use of motions to ensure debate on critical issues.

The Executive

Integration and implementation of institutional action through coordinated strategies occurs through the Executive.

The Executive includes:

- The Executive Mayor and his Chief of Staff,
- The Members of the Mayoral Committee (MMCs) assigned to individual sector departments, who together with the Mayor form the link between the executive and the legislature
- City Manager and Group Functions
- Departments,
- Municipal Owned Entities and their Boards.

In order to facilitate improved City governance the City is in the process of undertaking an institutional review of the Executive. Phase one (2011) focused on the high-level design of the City and ensuring alignment of the city's structure to the City's long-term strategy (Joburg 2040) and dealt with the institutional arrangements (i.e. number of departments and municipal owned entities, respective mandates and the interface thereof). It intended to strengthen accountability, oversight, corporate governance and leadership visibility, enhance service delivery and strategy alignment.

Phase two of the institutional review is currently underway and focuses on putting the high-level design into operation. Under this phase departments are aligning to the new high-level design. This phase also focuses on the restructuring of the entities so as to ensure that all legal and compliance requirements are fulfilled.

Aspects of the institutional review that specifically seek to improve coordination and planning within the executive have focused on introduction of Group Functions and Clusters.

Group functions play an oversight role to sector departments or municipal owned entity's activities. The Offices act as strategic partners to the sector departments and municipal

owned entities with an emphasis on providing strategic leadership and ownership of associated group policy, ensuring standardised implementation of functions and the oversight of the drafting of relevant policy, guidelines and standards.

The **Group functions** that have been established are:

- The Group Chief financial officer
- The Group Corporate and Shared Services (human resources, labour relations Office of the Chief Information Officer/Information Technology)
- The Group Strategy Co-ordination and Relations responsible for oversight, co-ordination and management of the key group policies (including the Integrated Development Plan), strategies and tactical plans to ensure effective and optimal service delivery.
- Group Communications and Tourism
- Group Legal and Contracts manages legal issues such as setting legal and contracts policy
- The Group governance function which provides support in protecting the City's interests with regards respective municipal owned entities.
- The Group Assurance Services has two clear and distinct functions: audit and forensics and risk and compliance.

The **Cluster approach** is intended to coordinate the City's programmes around a set of outcomes outlined in the Joburg 2040 strategy and the 9 Mayoral priorities in order to integrate service delivery. Functions of the clusters include:

- Identifying priority multi-sectoral programmes for co-ordination and integration
- Ensuring overall co-ordination and alignment of service delivery between departments and municipal owned entities within the cluster
- Providing guidance and oversight in the implementation of service delivery programmes
- Overseeing the development of business plans for cross sectoral programmes
- Overseeing the allocation and use of resources for identified programmes
- Monitoring the progress and impact of identified programmes; and
- Advising the mayoral committee on progress in the implementation of service delivery programmes within the respective clusters.

SECTION G
4. THE MONITORING AND REPORTING FRAMEWORK

This section discussed the framework for measuring progress in achieving a quality built environment within the City of Johannesburg. It presents the broader set of indicators provided by National Treasury.

The BEPP planning process is “outcome-led” in that it responds to agreed indicators and targets for improved built environment performance. The City of Johannesburg is part of the development of the BEPP indicators. The indicators are subject to refinement by National Treasury in collaboration with the municipalities. A set of five outcome areas, together with general results statements and associated indicators to measure performance against them, have been defined (Table 10: Integrated outcome and results statement).

Table 16: Integrated Outcome and Results Statement

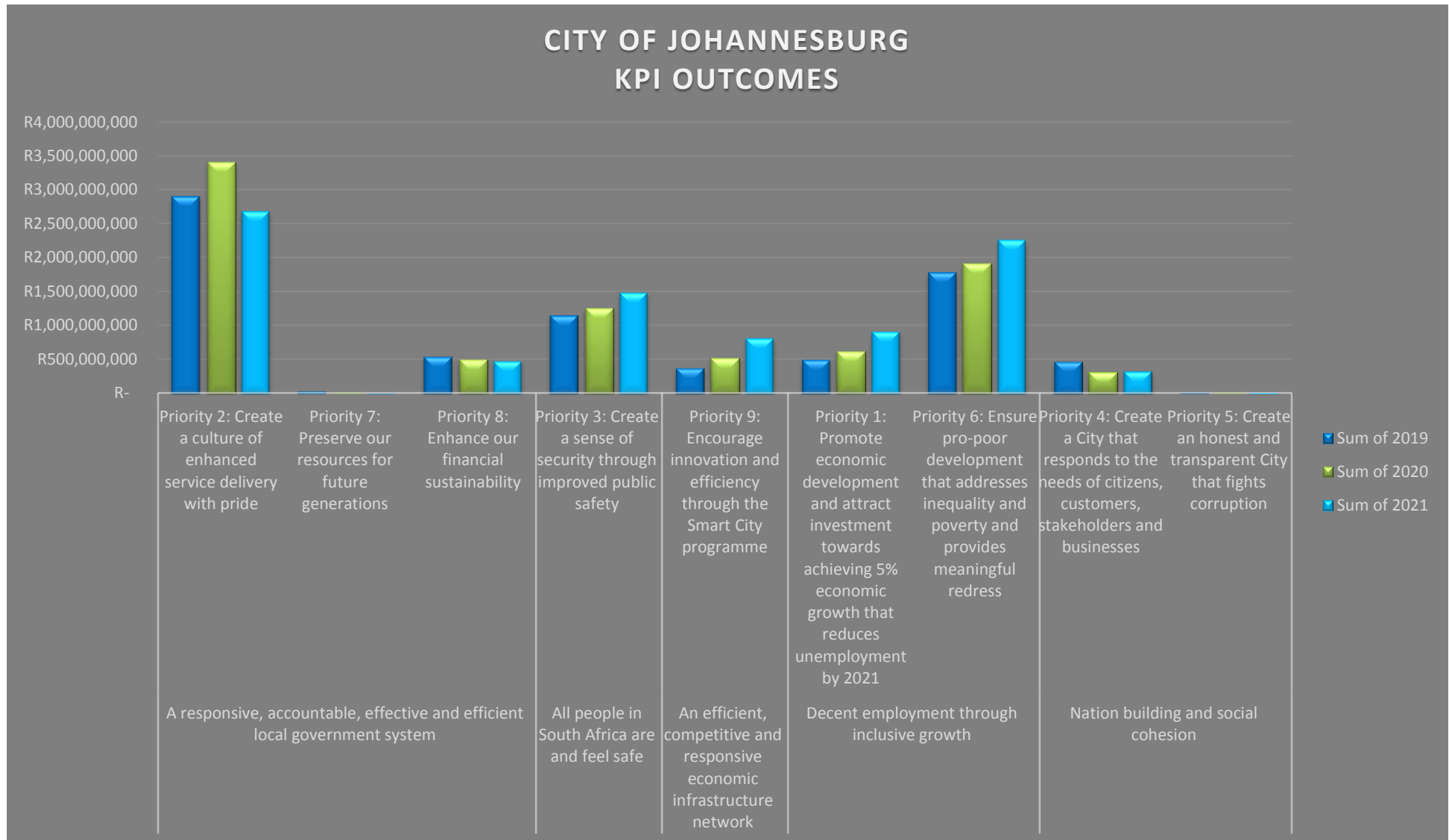
Outcome Area		Result Statement
Well-governed Cities	WG13	Percentage change in the value of properties in Integration Zones
Compact Cities and Transformed Urban Space	CC1	Hectares approved for future development outside the 2015 urban edge as a percentage of Hectares allocated for future development as defined by the 2015 SDF.
	CC2	Number of land use applications processed in integration zones as a percentage of the total number of land use applications submitted city-wide.
	CC3	Number of building plan applications processed in integration zones as a percentage of the total number of building plan applications city-wide.
Inclusive Cities	IC1	New subsidised units developed in Brownfields developments as a percentage of all new subsidised units city-wide
	IC2	Gross residential unit density per hectare within integration zones
	IC3	Ratio of housing types in integration zones
	IC4	Ratio of housing tenure status in integration zones
	IC5	Ratio of land use types (residential, commercial, retail, industrial) in integration zones
	IC6	% households accessing subsidy units in integration zones that come from informal settlements
	IC7	Number of all dwelling units within Integration Zones that are within 800 metres of access points to the integrated public transport system as a percentage of all dwelling units within Integration Zones
	IC8	Percentage share of household income spent on transport costs for different household income quintiles city-wide
	IC9	Capital expenditure on integrated public transport networks as a percentage of the municipal capital expenditure

Outcome Area		Result Statement
	IC11a	% learners travelling for longer than 30 minutes to an education institution
	IC11b	% of workers travelling for longer than 30 minutes to their place of work
Productive cities	PC4	Commercial and industrial rateable value within integration zone for a single metro as a % of overall commercial and industrial rateable value for that same metro.

Annexure C contains the indicators in a format as prescribed in the Guidelines for BEPP 2017/18 – 2019/20. The city is still in the process of obtaining some of the information which will assist in populating data for all of the indicators as prescribed. It is envisaged that in the next update of the BEPP the data will have been gathered and reliable reporting on the indicators will commence. As noted above some of these broader built environment indicators are captured under other priority areas in the SDBIP of the City.

Evaluation of the city's performance

The City is indeed addressing the mayoral priorities as identified. It is evident from the allocation of budget by the City to projects that seek to achieve 9 mayoral priorities (see *graph 5: KPI outcomes*). The graph below shows that priorities 2 and 6 consumes a higher percentage of the capital budget as they address service delivery with pride and ensuring pro-poor development addressing inequality and poverty. This goes to show the city's commitment to bring about change as per the objectives of Diphetogo.



Graph 5: City of Johannesburg KPI outcome

5. CONCLUSION

With so many competing infrastructure and development needs across the city, and a finite capital budget, it is inevitable that trade-offs through prioritisation have to be made. The JSIP and the associated capital investment planning process assist the city to find an optimal balance in infrastructure delivery to secure and improve the current asset base, achieve the objectives for upgrading and development in deprived areas and accommodate the future development aspirations and needs of the city.

While broad priority areas for investment have been identified, funding availability, economic growth rates and other practical considerations require that development and growth have to be managed. The concept of growth management firstly requires that growth and investment have an area based focus in order to consolidate a range of investments that will have a catalytic, multiplier effect on returns (social, environmental and financial). The second implication of growth management is the phasing of growth and the timing of investment that will release new growth opportunities. It is therefore important that growth trends be monitored and interpreted continually to influence policy and investment decisions. Growth management is thus linked to the SDF development indicators that will provide a measure of the success in relation to the intended development outcomes and targets. This would then allow for future adjustments of investment policy to be more responsive to prevailing conditions and development objectives.

The City, in its draft budget has aligned itself to the strategic objectives of the National Government within the context of the Gauteng City Region (GCR). The City priorities are supported by the strategic objective which aims to establish the City as a leading metropolitan government that proactively contributes to and builds a sustainable, socially inclusive, locally integrated and globally competitive GCR.