1. SITUATIONAL ANALYSIS

The previous chapters of this Document have described the objectives, processes and focus of the SHSUP and considered the concepts of Sustainable Human Settlements and Sustainability. This next chapter reflects on:

i) The current environments within which the City is operating in terms of prevalent policy and legislative framework – i.e. what governs and regulates contemporary thinking and responses to the issues of urbanisation and housing;
ii) Current development trends both within the City and beyond its borders;
iii) A brief summary of Economic indicators;
iv) Demographic projections and profiles – i.e. what the City can expect in terms of population growth and within which “income” brackets;
v) Prevailing housing trends; and
vi) The prevailing institutional environment with specific reference to the respective housing delivery methods (both formal and informal), funding mechanisms and institutional capacity.

1.1. Policy and Legislative Framework

Annexure B provides a comprehensive overview of the complex and detailed policy and legislative framework that supports the City’s efforts in addressing urbanisation and housing provision.

The tables are set out with a view to highlight the key SHS features and implications for the SHSUP. ***Table B1*** considers a broad, Global / National perspective, ***Table B2*** a Provincial-based assessment and ***Table B3*** a City-wide perspective.

The summary of the overview provided by the tables follows.

Global/ National Perspective

- The Global policy overview introduces the concept of sustainable development as well as acknowledging the need for the active participation of all sectors of society in consultation and decisions relating to sustainable development. The challenge of getting member states to implement policy directives and meet collective targets remains a challenge as implementation is essentially voluntary. The City has begun to interpret sustainability into specific programmes and strategies; however these occur in separate documents and separate independent plans, strategies and actions.

- The global financial crises together with the implications of climate change have necessitated a shift in thinking towards a green economy and better use of ever decreasing natural resources and scarcity of funding and institutional capacity, particularly in developing countries.
- The National Planning Commission Report provides a useful view on the status quo and makes a series of recommendations. However, it is advised that a future requirement to take the recommendations forward would be a specific protocol and strategy to ensure implementation. The City would benefit greatly from the development of a project management toolbox to guide and assist with supplementing low institutional capacity particularly with regards to programme and project implementation and management.
- The Housing Act, Breaking New Ground and Housing Code provide the basis for sustainable housing through the focus on integrated planning; however, a gap exists in terms of not sufficiently defining what is meant by sustainable housing or acknowledging other critical components such as environmental, economic and social aspects of sustainability and equally important the institutional capacity and roles and responsibilities from state to local level and the private sector.
- ***Annexure A's*** supporting paper defining sustainability, sustainable development and sustainable human settlements puts forward a significant argument: that sustainability if properly understood and applied can not only relate to human settlements but to all aspects of sustainability i.e. social, economic, environmental, institutional. The critical role of planning to provide a framework for sustainable development to deal with the impacts of urbanisation is a significant gap. This is needed within which to fit sustainable human settlements together with sustainable strategies for other components of sustainability. SHS can only cover those aspects relating to accommodation and not for example other critical issues such as poverty, which includes issues like water, food, energy security, sustainable mobility and zero waste that are not within the scope of the SHSUP.

Provincial Perspective

- The GGDS, GSDF and Gauteng Vision 2055 address such issues as poverty, inequality and unemployment and others and provides an interpretation for how to guide development. However, some of the policies are not officially finalised nor have they been participated and shared with municipalities. The establishment of roles and responsibilities and accountability is a critical debate which needs to happen across the various governmental spheres as well as establishing the roles of other equally important role players such as the private sector within sustainable human settlements provision.
- Policy and legislation frequently alludes to the upgrading of informal settlements and there have been numerous dedicated programmes towards the eradication and / or upgrading of informal settlements. Backyard shacks have seldom received the same attention or focus as Informal Settlements per-se and the role that this informal housing markets plays in terms of delivery accommodation has often been overlooked.

- The Strategy for a Green Economy provides a fundamental shift to the type of employment that must be created and begins to look at those issues relating to poverty and as well as the implications for housing; however, the spatial interpretation and how it relates to future planning and the built form other than housing, planning mechanisms remains a gap.

City Perspective

- An analysis of development and associated challenges is directly linked to requirements and implications for service delivery within the City. The City has realigned its institutional structure to sustainability in terms of the creation of clusters. The City has a Sustainable Services Cluster which focuses on Resource Sustainability, Environment and a Liveable City.
- Most of the City's policies and strategies do not link to urbanisation and the current urban decay challenges relating to it. An agreed and understood definition of and policy premised on sustainability, sustainable development and sustainable human settlements is needed.
- A need exists to understand the total land need of the City over the short, medium and long term together with a defined vision of the desired urban form in various parts of the City in order to understand where land value needs to be created and captured. This must be factored into future implementation plans for the City in all sectors and service clusters.
- Although the City strives to comply with the provisions and principles of NEMA it has not necessarily sufficiently interpreted these principles spatially. The recently developed Bio-Diversity Plan as a supporting initiative to the Johannesburg Metropolitan Open Space System (JMOSS) will assist in identifying where protected areas should be in the City and where development should be further curtailed in favour of preserved environmental and ecological resources.
- The City's GDS Approach is linked directly to the Integrated Development Plan and manifests itself in terms of the Sustainable Services Cluster. There is a correlation between The Presidency's National Outcome 8: Sustainable Human Settlements and improved quality of household life, and Outcome 2 of the GDS which notes the provision of a resilient, liveable, sustainable urban environment underpinned by infrastructure supportive of a low-carbon economy.
- The City's SHS Indices are a critical tool for assessing the level of sustainability of development prior and post construction. The SHS Indices should be an enforcement, monitoring and design mechanism in achieving the environments the SHSUP is trying to achieve. An important link is needed to the work the City has undertaken on a toolkit to assess the level of decay in parts of the City.
- There is a need for the systems of the City and allocation of both operational and capital budget to link to the plans and strategies or actions required for institutional capacity of the City to be sustainable.

1.2. Development Trends and Potential

This next section considers the prevailing development trends that have been assimilated from the wide range of policy documents and research paper alluded to in Section 3.1 and ***Annexures A and B***. The trends are considered at a Provincial / City Region (Gauteng City Region) and City-wide scale. Additionally, the section concludes with an overview of issues pertaining to land and how the City has begun to understand and document land needs for housing and other purposes to support City initiatives and the implementation of SHSUP.

1.2.1. Provincial / City Region Issues, Opportunities and Trends

The GCR is an intergovernmental process of structured engagement that includes the Gauteng Provincial Government (the GPG), the three metropolitan and the three district municipalities and the local municipalities within the boundaries of the Gauteng Province (refer to **Map 1**). The concept of the GCR is based on an integrated functional economic region that transcends administrative boundaries, and recognises that Gauteng Province lies at the hub of South Africa's globally connected economy. There are some 10.5 million people living with the Gauteng boundaries of the GCR, and an additional 2 million people living within the surrounding provinces of North West (G2055, 2010).

The following section illustrates the context of the GCR by listing the issues, opportunities and trends associated with the region. Integrated Planning has been, and remains the focus of the City Region; this therefore provides a good policy framework to draw from in terms of coordination, integration, service delivery and good governance. It also creates a space to identify the gaps that exist within provincial strategies in terms of indicators and benchmarks related to sustainability and urbanisation.

General

- Rapid population growth and urbanisation translating into an increased demand for services, infrastructure, housing and employment. It is estimated that the population increased by 3.2 million residents between 1995 and 2009, at a rate of 2.6% annually, as compared with the national rate of 0.6%

Socio Economic

- The Gauteng City-Region is not only the most urbanised but also the wealthiest province in South Africa (33% of SA's GDP).
- Findings based on a spatial analysis of poverty indicate a high, but decreasing level of economic segregation in the Gauteng City-Region.
- The spatial analysis confirmed that low-income Africans live disproportionately in deprived neighbourhoods compared to low-income residents of other population groups, limiting their ability to take advantage of economic opportunities and the social networks in less disadvantaged areas.

- The Gauteng City-Region is accepted as South Africa's innovation hub and money-making machine. This creates the opportunity to educate, motivate and ultimately, broaden economic development for SMEs and start-ups.
- Gauteng is a critical role-player in road and rail transportation and logistical support, especially in the sub-continent. The City Deep container depot serves as an important inland port, supporting trade not only in South Africa but in Southern Africa.
- Opportunity to respond and work with informality, taking advantage of the dual economy (formal and informal sector) in the provision of jobs and income generation.

Housing

- Between 1994-95 and 2002-03, almost 1 million housing subsidies were approved in the Gauteng City-Region, and approximately 340,000 public housing units were built under the auspices of the Reconstruction and Development Programme (RDP).
- The housing backlog in the City-Region is estimated to be increasing by over 50,000 units per year.
- The Gauteng City-Region is characterised from high levels of subsidised housing in peripheral zones and a dysfunctional informal / secondary housing market.
- Communities have become trapped in sub-optimal employment circuits and reinforce the spatial mismatch between employment and residences.

Service Infrastructure and Transportation

- Data confirms that the Gauteng City-Region still struggles with considerable service backlogs inherited from the apartheid era. Public transport access is very low, which reduces mobility and raises the costs of transport.
- The Gautrain and Rapid Bus Transport systems are promoting the development of transit-oriented development and the strengthening of public transport nodes.

Spatial Trends

According to the GSDF, 2010:17-18 the land development landscape of Gauteng Province suggests:

- that the remnants of the structural expression of apartheid spatial planning still dominate the built environment;
- the inability of all spheres of government to comprehensively and collectively plan for urbanisation (including property market dynamics);
- the inability of government to measure the extent of urban development and growth universally – with specific reference to the property market;
- the absence of a centralised database;
- the dysfunctional location and consequent ineffective linkages of urban functions and economic opportunities in relation to one another;

- the dominant effect of geomorphologic conditions and mining activities on spatial layout, e.g. dolomite conditions, fragmented settlements;
- an overregulated development environment driving office and industrial developers to locate in municipalities that process the rather cumbersome development-application systems within reasonable timeframes;
- the much more vigorous growth of the tertiary sector of the economy in locations far from low-income areas, and the inability of the tertiary sector to offer job opportunities to the unskilled;
- the higher land prices close to tertiary job opportunities, which make development of low-income housing in these areas impractical;
- a current approach to urban management and spatial planning portrayed in Spatial Development Frameworks which could, if correctly implemented and monitored, deliver the desired urban configuration.

- Population growth has been concentrated in a few locations and has resulted in strong spatial polarisation, urban sprawl and tracts of under-utilised land between main urban centres.
- Residential densities, especially in the three metropolitan municipalities, have undergone an increase in the period 2001-2011. However, this rate has not exceeded the growth in single-dwelling housing during the same period.
- Residential development, especially of a higher density nature, has focused in the northern, north-western and southern sections of the City of Johannesburg; the eastern, south-eastern and southern parts of the City of Tshwane; the areas around OR Tambo International Airport in Ekurhuleni; and the northern section of the Emfuleni Local Municipality.
- Office development is by and large concentrated in the wealthier northern suburbs of the City of Johannesburg, followed by the eastern and south-eastern suburbs of the City of Tshwane, with the Ekurhuleni Metropolitan Municipality a distant third (mainly around Bedfordview).
- The three metros are home to about 90% of all households living in informal settlements in the province (2009-figure).
- The bulk of non-residential future property growth will be concentrated in the three metros, especially the City of Johannesburg and the City of Tshwane, but the lack of available land is beginning to pose a problem in these two municipalities.
- Present trends do not suggest a major movement towards a more sustainable, equitable and inclusive model of economic and spatial development in the province.
  Source: *Gauteng Spatial Development Framework, 2010:17-18.*

1.2.2. City-wide Opportunities and Trends

There are five broad categories of challenges experienced by the City, and in particular the Housing Department. The challenges include:

- **Housing backlog in terms of various demand categories:** The backlog in terms of housing demand shows the inability of the City to deliver housing at scale with the available resources.

There is a need for a framework to facilitate participation of all stakeholders in the delivery of housing or accommodation which complements the available capacity of the City.

- **Environmental degradation and health impacts:** The lack of adequate infrastructure and services with respect to water, sanitation, surface water drainage, solid waste disposal and energy sources has led to cumulative environmental degradation in low-cost housing neighbourhoods over several decades. The impact on the health of households and communities as a result of the above mentioned issues is a concern.

- **Poorly located housing and insufficient provision of services, security and socio-economic opportunities:** Post-1994, State sponsored housing delivery has been predominantly located on the urban periphery where land costs are relatively cheap and yields relatively high. One of the key outcomes resulting from this type of planning has been high transportation costs for households attempting to access socio-economic opportunities. The provision of bulk infrastructure and services to these settlements has been at great cost in terms of both capital and operational expenditure to the City. Additionally, social services have frequently lagged behind the provision of housing units, re-enforcing the communities' need to travel and pay the requisite transportation costs to utilise outlying amenities and services. The SHSUP will aim to provide policy which enables the City and other stakeholders to address this challenge.

- **Unemployment, poverty and inequalities:** High levels of poverty, unemployment, illiteracy, skills deficiency and income inequalities in South Africa are strongly manifested in the City. One of the key impacts of unemployment and poverty is the increased inability of households to pay for housing, infrastructure and services. The continued decline of formal job opportunities and growth in the informal sector creates the need for policy to facilitate accommodation provision of facilitation in the informal market.

- **Cost and financial constraints:** All key stakeholders involved in low-cost housing delivery face major financial constraints in meeting their respective responsibilities. This has been the key factor contributing to the practice of decision-making driven by considering initial-cost as being most important whilst ignoring the long-term costs and life-cycle savings of alternative housing solutions. There is clearly a need for alternative financing mechanisms which provide more flexibility in terms of choices to stakeholders in housing delivery and housing beneficiaries. It is also acknowledged that a need exists to make stakeholders aware of the implications of not applying true life cycle cost approaches in decision-making in housing projects.

- **Deficiencies in current housing practice:** The current housing methods and practices within the City have not always responded effectively to key housing challenges – the quantum of delivery often being the primary driver of locations and projects. Other deficiencies include:

  - Location of new public funded housing in remote sites far from work centres and other socio-economic amenities (Refer to **Map 2**)
  - Developer-focused delivery process

- Lack of synergy with urban development priorities for Johannesburg
- Greenfield-focus with the 'matchbox', “RDP” house-type as the predominant model
- Over-centralised decision-making heavily dependent on the national capital subsidy
- Focus on ownership at the expense of alternatives such as social and rental housing
- Focused on initial cost-saving and ignores life-cycle costs/savings for households and municipality
- Provides no facilitation for alterations by households to suit changing needs
- Unresponsive to emerging needs such as sustainability through bio-physical (resource, environmental and health conservation), socio-cultural (cultural values of household and communities), socio-economic considerations (inequalities in income distribution and opportunities, income generation

Development Issues and Opportunities

- Densification trends are most prevalent within the northern suburbs of the City and within the “ring” of freeways to the north and south of the City. Within these areas, the demands for rezoning (i.e. change of or intensification of land uses and / or subdivisions of properties) are most prevalent.
- New Township development is most prevalent on the urban fringes of the City where agricultural land / holdings within the City’s Urban Development Boundary (UDB) has been transformed into a variety of low-medium density housing schemes. This is particularly prevalent in the on the north-western boundary of the City.
- Development and associated “sprawl” of land uses beyond the UDB has effectively been curtailed given the City’s stance on infrastructure provision and rejecting large-scale proposals beyond the UDB since the early 2000’s. Development that is occurring beyond the UDB is generally responding to existing land use rights / permissions that may be applicable.
- Building activity within the City is premised largely on the Residential market. 50% of all approved Building Applications between 2007-2011 were for New Residential buildings, a further 30% for Alterations to Residential Buildings.
- Previously disadvantaged areas, particularly those to the south and on the urban fringe of the City still reflect lower levels of development and investment than other areas of the City, particularly when compared to the north of the City. Given the reliance on residential development (30-80m^2 residential developments) it can be assumed that much of the development in these previously disadvantaged areas is public sector led or sponsored.
- For the past five years, more than 50% of Residential 3 and 4 rezoning applications (i.e. higher density applications) have been aligned to the emerging Public Transport network and associated nodes – most significantly north of the Inner City. Increased densities along these routes reflect positively on the implementation of the desired urban form as suggested by SDF. High land prices and selling / renting prices in these areas still make it difficult for first-time buyers and lower income families to afford rent / selling prices within these areas however.

- There has been an increased geographical spread between 1994-2010 of properties valued R1mill-R5mill and inversely, the drop-off of properties in more affordable properties below the R1million price 2000-2010. High land prices in emerging areas (e.g. along the Bus Rapid Transit (BRT) routes and Gautrain stations make it difficult for first-time buyers and lower income families to afford rent / selling prices.
- A positive emerging trend is the extensive residential initiatives along the western parts of the mining belt, effectively bridging the historic buffer strip along the mining belt between Soweto and Roodepoort.
- Social Housing projects mostly occur along the east-west public transport corridor between Roodepoort, the CBD and Cleveland towards the east, with the major concentration being located in/around the Joburg CBD.
- The proliferation of informal settlements on the outskirts of the City remains a major concern. At present the City has total of 163 incidences of informal settlements comprising a total of 193,168 informal structures.
- The high prevalence of backyard shacks or rooms in marginalised areas supports the need for alternative housing, and in particular, rental options.
- Large scale private development initiatives are primarily located in the north-eastern (Modderfontein), northern and north-western parts of the City.
- Large scale public-private development projects occur in the northern parts around Cosmo City-Lion Park, Diepsloot and Commercia, as well as the Fleurhof and Devland areas in the southern parts.
- The Inner City remains the most important and diverse economic node in the City. The focus for investment is targeted at infrastructure upgrades, upgrading of public environment and facilities, job creation initiatives such as the Business Process Operations (BPO) precinct and informal market and potentially, the future decking of the rail reserve.
- The Midrand node and the emerging node around Lanseria airport are seen as key job creation opportunities for envisaged future Northern expansion around the Diepsloot area.
- The possibility of creating an Orange Farm commercial and manufacturing zone at the Golden Highway – N1 intersection is to be investigated.
- Urban Agriculture potential of large tracts of land that is geo-technically unsuitable for development should be exploited.
- The Soweto Empowerment Zone, Jabulani node, Kliptown and Nancefield are targeted for significant economic and mixed use development in the Soweto area.
- Future areas along the public transport network where mixed use, mixed income projects will be initiated over the medium term include Nancefield station precinct, Naledi, Merafi, Jabulani, Orlando and Stretford station.
- Development pressure from the surrounding metropolitan areas and municipalities mainly occur at the following locations (these are highlighted in **Map 3):**

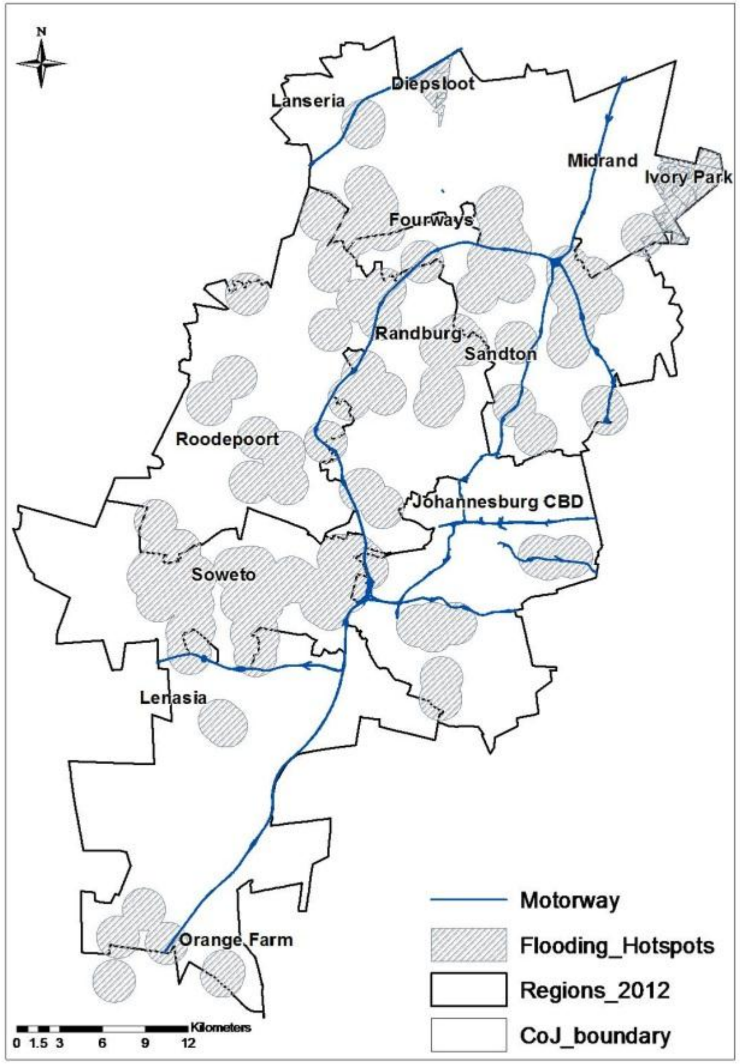
- residential and commercial development pressure from the City of Tshwane in the vicinity of Olievenhoutbosch[(1)] extending north- and southwards along route R55 towards Blue Hills and Carlswald;
- predominantly subsidised housing pressure to the north of Ivory Park, extending from Tembisa in the Ekurhuleni area, westwards towards the Midrand strip[(2)];
- a wide variety of housing projects in the western mining belt of Ekurhuleni in the vicinity of Germiston CBD. These include RDP, IRDP, CRU and Social Housing Projects[(3)];
- emerging commercial and residential development pressure from the Waterfall Node along the R59 Corridor in the Midvaal municipal area towards Joburg and Ekurhuleni[(4)];
- extensive RDP housing development in the Evaton-Sebokeng areas to the south of Orange Farm along route N1 in the southern extents of the City of Joburg[(5)];
- extensive affordable housing development in and around Kagiso along the central-western parts of the City[(6)];
- middle and high income residential and commercial development pressure from Mogale City in the area around the R28 freeway and Hendrik Potgieter Drive intersection (adjacent to Poortview/Ruimsig) [(7)].

Source: *GMS Trends Presentation (2011/12), CoJ Development Planning and Facilitation and Regional Assessments completed by DPF 2011/12*

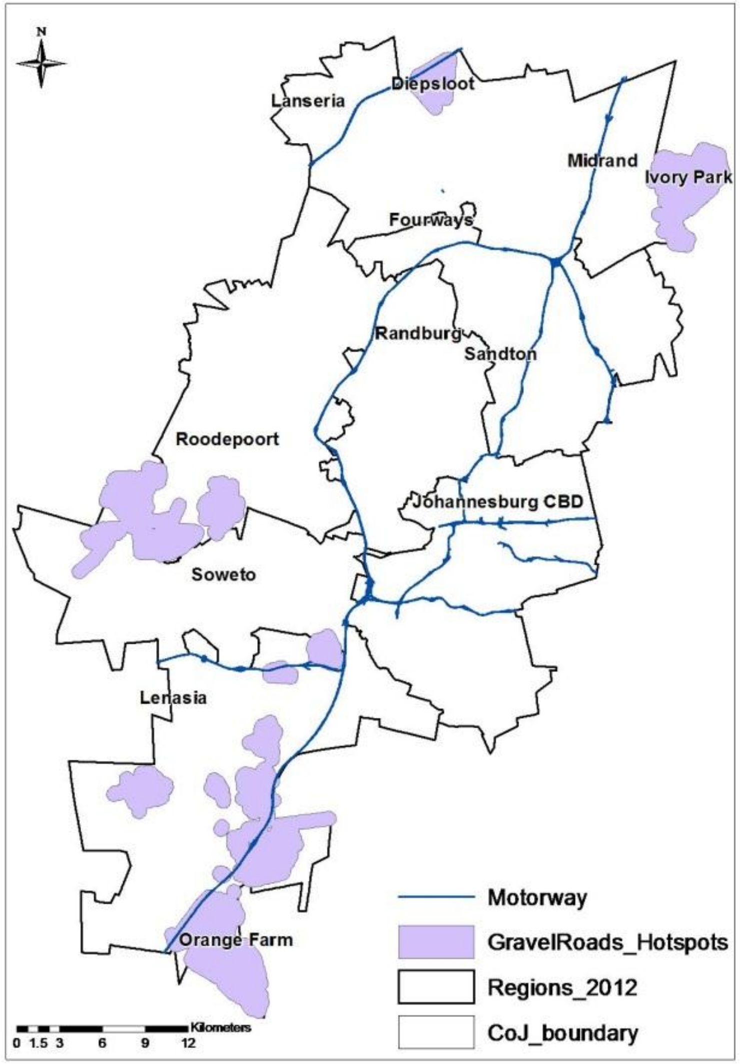
Service Infrastructure and Transportation Issues and Opportunities

- The City of Johannesburg has achieved high levels of service infrastructure coverage, with over 90% of its residents holding access to basic service infrastructure.
- It is anticipated that greater densification in already-existing residential areas will be a slow process, given the city's footprint and widely spread capacity constraints (hot spots) associated with stormwater, road infrastructure, bulk water, sanitation and electricity as depicted in **Maps 4 to 8**. Many of these hot spot areas occur in the GMS High Priority Investment Areas.
- With reference to sanitation backlogs (level of service 1), the current backlog is 106,742 households with an estimated cost to eradicate of R1.2 billion.
- The City has recently introduced its Rea Vaya Bus Rapid Transit system and the Gautrain high-speed rail link is operational, forming the back bone of a future urban public transport system.
- Public transport investment from the City mainly focuses on the implementation of the priority BRT routes as illustrated on **Map 9**, with the future expansion of this system (see green and yellow lines on Map 9) also being considered.
- **Public and private land:** The largest requirement for land within the public sector can be attributed to housing. However, the increasing price and scarcity of developable land demands for the formulation of a land strategy which provides for the land requirements of housing as well as other key departments in the public and private sector. A Land Strategy for the City was approved by its Mayoral Committee during the 2008/09 financial year.

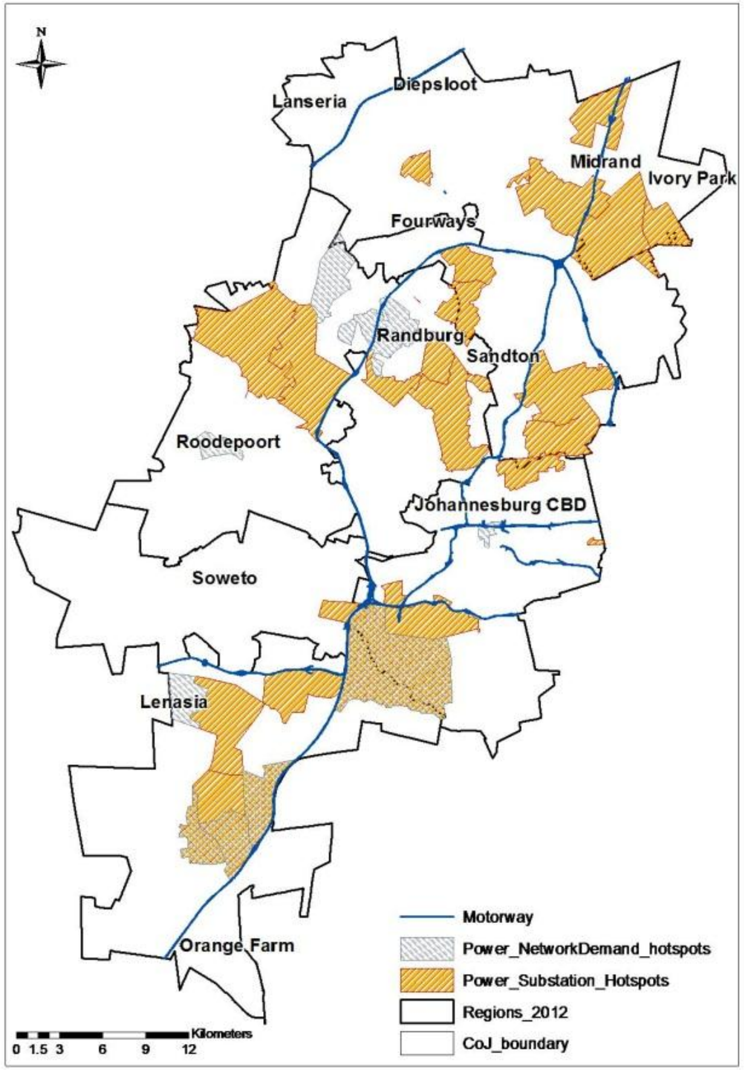
Map 4: Stormwater backlogs



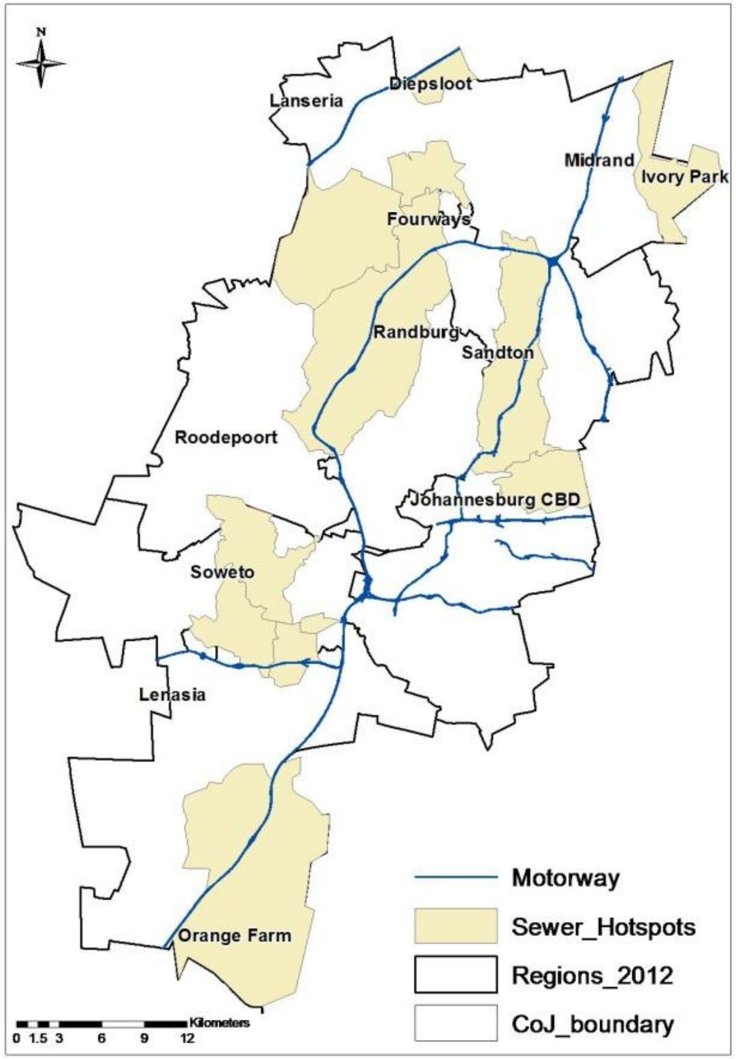
Map 5: Gravel roads backlogs



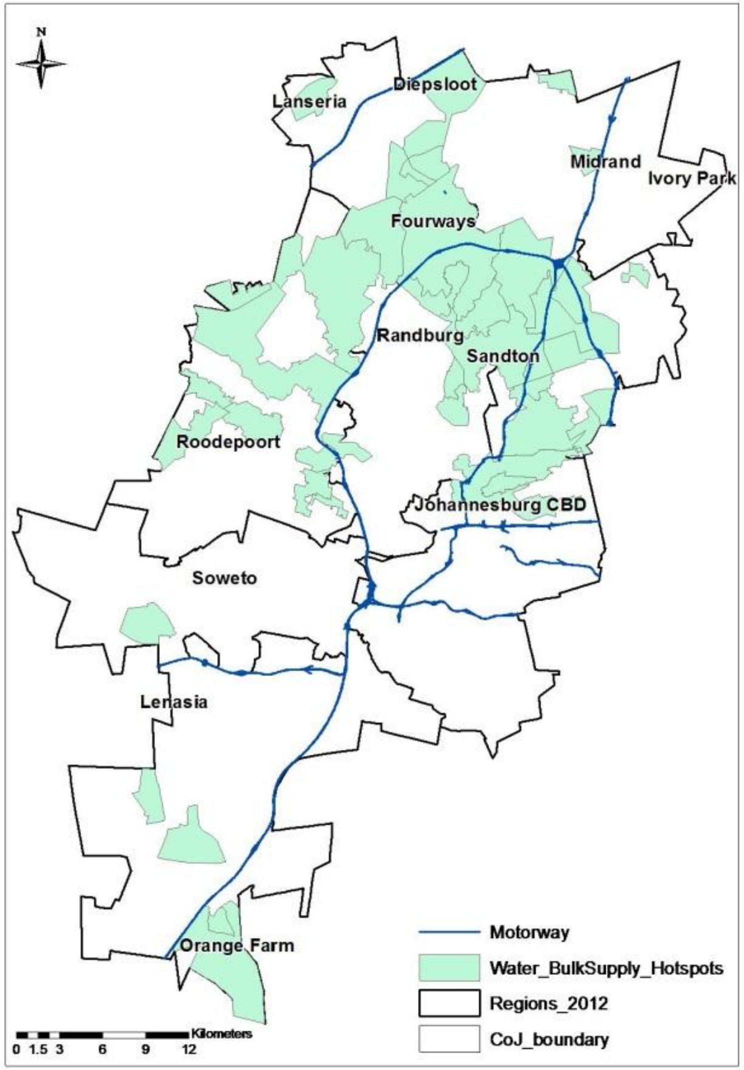
Map 6: Power hot spots



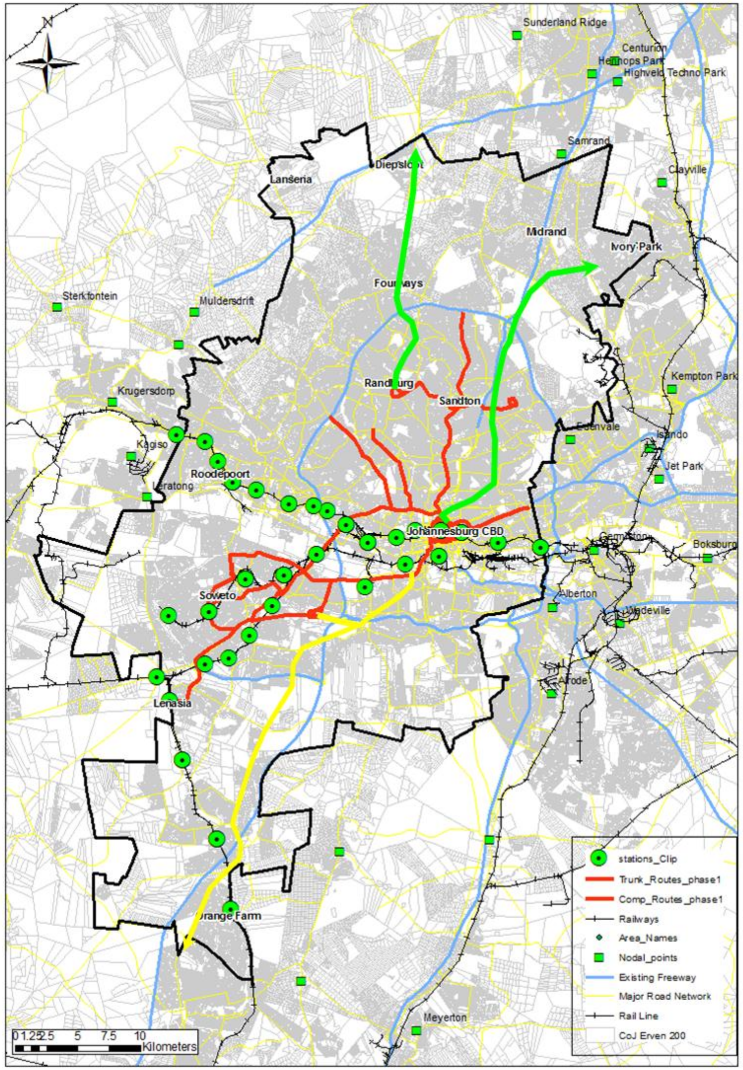
Map 7: Sanitation hot spots



Map 8: Water hot spots



Map 9: Transport and Movement Network



The following issues were highlighted in relation to the Land Strategy and processes related to it:

- A clear need exists for short and long term planning.
- A need to organise, acquire and direct inputs (land, public and private investment), both spatially and by sector as the process of development unfolds in the short to medium term.
- The primary component of the land strategy would be derived from stakeholders such Economic Development, Housing and the Environment driving growth and land demand; while a secondary component for consideration would be the derived need for land in order to provide municipal services and social facilities and amenities.
- After a series of evaluations via satellite photography (2009) and preliminary environmental assessments, the City has earmarked about 140 portions of land as depicted on **Map 10** (± 680 hectares) to support infill, Transit Orientated Development densification for mixed-income / typology initiatives. Characteristically, these portions:
  - are considered to be underdeveloped / vacant;
  - are currently managed via the Johannesburg Property company;
  - have been reserved / protected from alienation via Mayoral Committee and Council Resolution until detailed feasibilities have been completed;
  - are within 1km of the emerging Bus Rapid Transit (BRT) and / or the existing rail station infrastructure; and
  - have been provisionally screened and vetted by the Environment Department (noting that in some cases, more detailed environmental assessments would be required).

1.3. Economic Performance

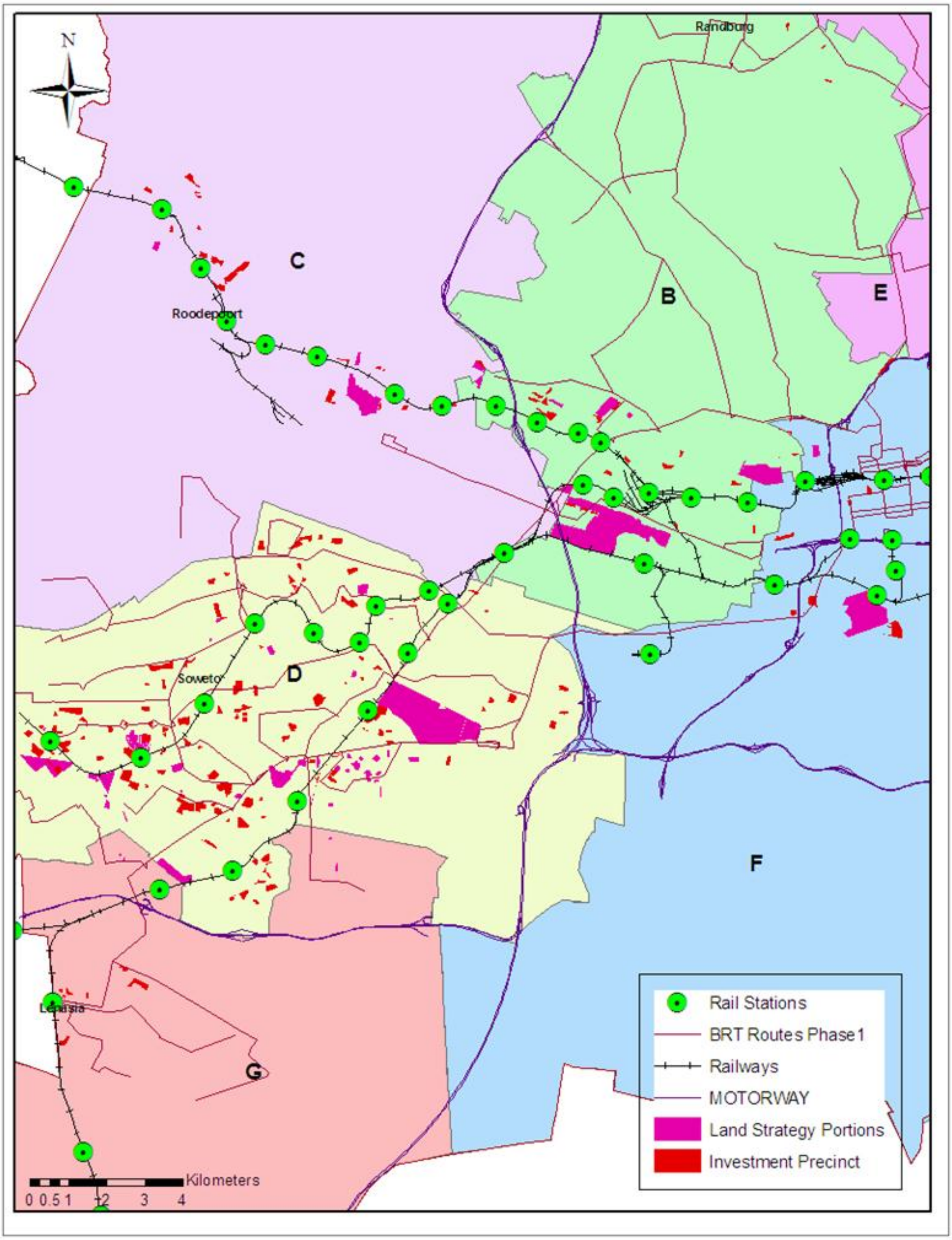
The South Africa economy is currently one of the main economic forces in Sub-Saharan Africa. The economy is currently growing at approximately 2%, with the largest metro's growing at 3-4%, the metro's growth rate are more than 1% to 2% higher than the national growth rate (Cities Network Report). The current pressure on the affordability of housing and residential property will in turn stimulate the residential market in terms of rental stock provision.

A growing stable economy promotes and supports a healthy property market performance and tax base – and vice versa. It is important to provide a brief assessment of the economic climate and the impact thereof on the urban environment in general and residential / housing demand.

The country as a whole faces a challenging economic climate due to the impact of global market and trends and is emphasised by the following criteria:

- The outlook for domestic inflation and economic growth has deteriorated, posing a serious challenge for monetary policy going forward.

Map 10: Strategically City-owned Land



- Inflation is expected to measure 5.5% in the final quarter of 2013. The Bank's forecast of core inflation, which excludes food, petrol and electricity, shows a moderately rising trend, with the peak of around 5.5% expected in the first two quarters of 2013.
- The outlook for domestic economic growth remains subdued. This implies a further expected widening of the output gap during this period.
- The interest rate outlook is of importance as a stable interest rate is positive for home owners, as to unstable interest rates, which is more favourable towards the rental market.

South Africa's current macroeconomic climate poses policy challenges in balancing the response to upward pressure on domestic inflation and weak economic activity. This is proving to be a difficult environment within which to make significant inroads into a persistently high unemployment rate.

Table 2 summarises the key economic indicators of **Johannesburg Metropolitan Municipality:**

Table 2: Key Economic Indicators of the Market Area, 2011

Variable	Market Characteristics
Gauteng Provincial Economic Growth Performance, 1995 to 2011 Johannesburg Economic Growth Performance, 1995 to 2011	• 3.7% per annum • 4.3% per annum
Johannesburg Dominant Economic Contributions, 2011	• Finance, insurance, real estate and business services – 33.5% • Manufacturing – 15.7% • Wholesale and retail trade, catering and accommodation – 14.9% • General government – 13.6% • Transport, storage and communication – 9.5%
Johannesburg Employment Growth (1996-2010)	• Employment growth: 2.7%. • New job opportunities annually: 29 639.