Joburg

REGIONAL SPATIAL DEVELOPMENT FRAMEWORK (RSDF)

CITY OF JOHANNESBURG: ADMINISTRATIVE REGION 6 AND REGION 10

JUNE 2003

(REVIEW OF THE 2001 APPROVED LIDP)



CITY OF JOHANNESBURG: ADMINISTRATIVE REGION 6 AND REGION 10

JUNE 2003

ANNEXURE TO METRO CITY OF JOHANNESBURG SPATIAL DEVELOPMENT FRAMEWORK - SUBMITTED AS A COMPONENT OF THE IDP IN TERMS OF THE MUNICIPAL SYSTEMS ACT, 2000

(TO BE SUBMITTED TO MEC: DPLG FOR APPROVAL AS A COMPONENT OF THE CITY OF JOHANNESBURG LAND DEVELOPMENT OBJECTIVE, COMPLYING WITH ALL SPECIFIED PUBLIC PARTICIPATION AND OTHER REQUIRMENT, IN TERMS OF THE DEVELOPMENT FACILITATION ACT, 1995)

TABLE OF CONTENTS

					Page Nr.
1.	INTRO		N		1
	1.1	Purpos	e of the	LIDP Review.	2
	1.2	Public	Participa	ation.	3
	1.3	Disclai ∉# ∉#	mer and Documo Maps.	rider statements for: ent.	5
	1.4	Interpro	etation /	use of the RSDF document.	6
2.	REGIO	NNAL AI	NALYSIS	8	8
	2.1	Location.			
	2.2	Alphabetical Suburb List and Sub-Areas.			9
	2.3	2.3.1 2.3.2 2.3.3	Spatial Region Socio-E	e Regional Profile. Location. al Role of Soweto. Economic Profile. of Soweto.	14 14 14 17 18
	2.4	Service 2.4.1	Social 3 2.4.1.1 2.4.1.2	frastructure. Services. Clinics. Libraries. Sports and Recreation.	18 18 19 19 20
		2.4.2	2.4.2.2 2.4.2.3	ucture. Roads and Storm water. Water and Sanitation. Waste Management. Electricity.	20 21 22 23 24
	2.5	Regional Characteristics, Trends and Implications. 2.5.1 Land Use Management.			26 26
		2.5.2	2.5.2.2 2.5.2.3	nment. Parks and Open Spaces. Water Courses and Wetlands. Red Data Species. Flora and Fauna.	27 27 27 28 28

		2.5.3	Economic Development.	29
		2.5.4	Housing and Settlement. 2.5.4.1 Informal Settlements.	30 31
			2.5.4.2 Formal Settlement.	32
		2.5.5	Transportation. 2.5.5.1 Current Planning and Construction Initiatives.	33 34
			2.5.5.2 Trends.	34 34
			2.5.5.3 Development Direction.	35
			2.5.5.4 Implications.	36
3.	POLICI	ES AND	STRUCTURING ELEMENTS	37
	3.1	Strategi	ic Spatial Elements.	38
	3.2	Movem	ent Systems.	38
	3.3		Development.	39
		3.3.1	General Principles.	40
			The Nodal Study.	44
		3.3.3	Management of Nodes.	44
	3.4		able Neighbourhoods.	46
		3.4.1	Density Policy.	47
		3.4.2	Settlement/Housing.	49
	3.5	Environ	iment.	53
		3.5.1	JHB Metropolitan Open Space System.	53
		3.5.2	5 1 1	55
		3.5.3		55
		3.5.4	General Development Guidelines.	57
	3.6	Corridor Development.		58
	3.7	Design	Guidelines.	60
		3.7.1	General Design Criteria.	60
		3.7.2	Building Standards.	60
		3.7.3	Neighbourhood Character, Site Layout,	
		074	And Landscaping.	60
		3.7.4 3.7.5	Safety and Security Parking and Vehicle Access.	61 61
		3.7.5	Variety and Density.	61
		5.7.0	variety and Density.	01
	3.8	Urban [Development Boundary.	62
		3.8.1	Criteria for Development within the	
			Urban Development Boundary.	63

		3.8.2	Subdivision of land outside the Urban Development Boundary.	64
4.	REGION	NAL SPA	TIAL DEVELOPMENT FRAMEWORK.	65
	4.1	Develor 4.1.1 4.1.2	oment Direction, Hot Spots, and Interventions. Priority Linkages. A Consolidated Approach.	66 68 68
	4.2	Sub-Are	ea Suburb Lists.	70
	4.3	Sub Are	ea Development Control Tables.	72
5.			OPMENT PROGRAMMES AND CROSS/ SUB-PROGRAMMES.	98
	5.1	Introdu	ction.	99
	5.2	Manage	ment Programmes	99
	0.2	5.2.1	City Foundations Master Programmes (City Present)	100
			Established Areas Programmes. Conservation Programme.	100 100
		5.2.2	Metropolitan Development Master Programme. (City Past).	101
			Consolidation Programme.	101
			Upgrade and Redevelopment Programme. Settlement Programme.	101 102
		5.2.3	Strategic Interventions Master Programmes (City Future).	102
			New Opportunity Areas Programme.	102
			The Mobility and Connectivity Programme.	103
			Economic Growth Programme.	103
	5.3		nme Prioritisation and Alignment	104
	5.4	Soweto	Consolidation Sub-Programme.	108
		5.4.1	Sub-Programme 1: Soweto Consolidation Programme.	108
	5.5	Indicati	ve Projects.	115
6.	APPLIC	ABLE P	OLICIES AND PRECINCT PLANS	118

6.1	Listing of Existing Precinct Plans and Policies Affecting the Region.	119
6.2	Required Precinct Plans.	120
TERMS	AND ABBREVIATIONS	121
7.1	Abbreviations.	121

LIST OF MAPS

7.

The following maps have been inserted after the page numbers listed below.

MAP 1A and Map 1B Locality Map	7
MAP 2 Sub-Areas	13
MAP 3A and Map 3B Regional Analysis Plan	36
MAP 4 Conceptual Regional Spatial Development Framework	70
MAP 5 Programme Areas	103
MAP 6 Regional Development Programmes (Public Open Space)	117
MAP 7 Regional Development Programmes (Gravel Roads)	117
MAP 8 Regional Development Programmes (Public Lighting)	117
LIST OF TABLES	

The following figures are included on the page numbers listed below.

Table 1: List of Townships	7
Table 2:	

REGIONAL SPATIAL DEVELOPMENT FRAMEWORK. 2003 ADMINISTRATIVE REGION 6 AND REGION 10

Profile of Soweto	16
Table 3: Libraries	18
Table 4: Informal Settlements	31
Table 5: List of Projects	107

SECTION ONE

INTRODUCTION

1.1 Purpose of the LIDP Review

The Local Integrated Development Plans 2002/03 (LIDPs) for the City's Administrative Regions, were approved by Council during November 2001 and March 2002.

Subsequently, they were also submitted as Land Development Objectives (LDOs) in terms of the DFA, 67 of 1995, and submitted to the MEC of the Provincial Department of Development Planning and Local Government for approval as required by the Gauteng Land Development Objectives Regulations, 1996.

It was also approved by Council as an integral component of the spatial component of the City's Integrated Development Plan (IDP), as required by Section 26(e) of the Municipal Systems Act, 32 of 2000.

The content of the spatial plan is further spelled out in terms of the Local Government: Municipal Planning and Performance Management Regulations, 2001 (Government Notice 22605, 24 August 2001) which stated that a Spatial Development Framework (SDF) reflected in a municipality's Integrated Development Plan (IDP) must (summary):

- ∉ Give affect to the Chapter 1 principles of the Development Facilitation Act.
- # Set out objectives that reflect the desired spatial form of the municipality.
- # Contain strategies and policies regarding the manner in which to achieve the objectives.
- # Set out basic guidelines for a land use management system.
- # Set out a Capital Investment Framework for the municipality's development programs.
- # Contain a strategic assessment of the environmental impact of the spatial development framework.
- # Identify programs and projects for the development of land within the municipality
- # Provide a visual representation of the desired spatial form of the municipality, including:
 - Identification of where public and private land development and infrastructure investment should take place;
 - Delineation of the urban edge if feasible;
 - Strategic interventions;
 - Priority spending areas.

The LIDPs represent a local perspective of the City's SDF and reflect the detail of the above-mentioned issues as they impact on the regions. The purpose of the review is therefore to:

- ∉# Fulfil the legislative requirements of review (as stated above) of both the MSA and the DFA,
- # Provide a more detailed reflection of the SDF objectives, strategies and policies as they impact on local area planning,
- # Capture the most updated information in terms of developmental trends, issues and community needs, and

Add value to the budgeting and spatial development processes within council.

Furthermore, the position of the LIDPs in terms of the level of plans in the City is indicated in the following diagram:

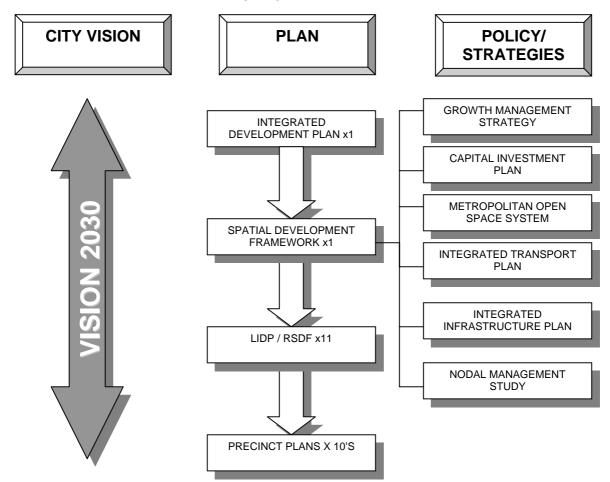


Figure 1 : HIERARCHY OF PLANS

1.2 Public Participation Process – 2002/3

The aim of the public participation conducted during the LIDP review was to provide to the public:

- # Feedback on developmental and process issues
- # Investigate capital investment requirements and service delivery shortfalls,
- # Present information on current Service and Infrastructure provision, backlogs and capacities,
- # Technical Task Teams regional/ depot information (attained from meetings with Depot/ Regional UAC officials, stakeholders, bi-lateral focus groups, central UAC strategic management), and feedback to the

public so as to together form a development thrust/ direction and priorities for the Regions' future expectations and growth,

Opportunities for debate, discussion, and information sharing; all this through presentations, workshops, and written submissions.

The following diagram illustrates the process.



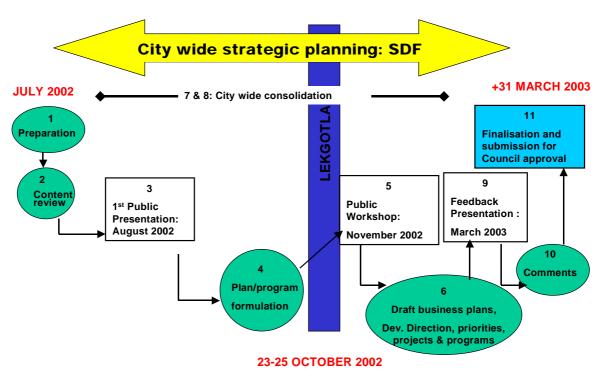


Figure 2 : LIDP PROCESS

Public meetings were advertised in the press and through all the Regional Office/ Ward Committee structures. Invitations by means of e-mail, press releases, notice boards, etc. were also issued. Consequently, all meetings were well attended by Councilors, Ward Committee members, UAC central and depot officials, Council Central Department and Regional officials, property owners, developers, stakeholders and interested parties.

In order to ensure that the public participation process in compiling the RSDF was participated with the community, the established Ward Committees were used as the communication channel to the people. In the compilation of the Greater Soweto RSDF, three different sets of workshops were held. Region 6 and Region 10 were dealt with separately but the findings and implications that emerged were consolidated into one document – the Greater Soweto Regional Spatial Development Framework.

Public participation was undertaken via workshops on the following dates:

In Region 6;

Workshop 1 was held on the 24th August 2002.

Workshop 2 was held on the 5th October 2002.

Workshop 3 was held on the 8th March 2003.

In Region 10;

Workshop 1 was held on the 31st August 2002.

Workshop 2 was held on the 6th October 2002.

Workshop 3 was held on the 8th March 2003.

Besides the 'mass regional public presentation meetings, and workshops', bilateral/ one-on-one meetings were held with stakeholder and/ focus community groups and Ward Committees. These included Ward Committee portfolio heads and members, Councilors, developers, major land or mining house owners, residents / ratepayer and civic associations, action groups, forums, etc. Most of these meetings were held after normal working hours at venues convenient to the focus group/s.

To attain legitimacy and uniformity of the processes, future participation will be facilitated via Ward Committee structures as legislated in the Municipal Systems Act.

1.3 Disclaimer and Rider Statements for :

∉# Document

- This document (now known as the RSDF Regional Spatial Development Framework) is the successor to the LIDP for the respective Region approved late 2001/ early 2002.
- This document subscribes to the vision, planning principles, structuring elements, policies, and bylaws of the CoJ, and where ambiguities arise they shall prevail.
- This document subscribes to the legislative prescriptions of National and Provincial tiers of Government, and where ambiguities arise they shall prevail.
- This document is submitted as annexure to the SDF which is a component of the IDP in terms of the MSA requirement as well as a component of the SDF which is the LDO submission to the MEC-DPLG in terms of the DFA
- This document is superseded (over-ridden) by precinct plans and project lists and programmes, policies, studies sub-programmes, projects-business plan approvals which may be approved by Council subsequent hereto.

∉# Maps

- The maps and plans contained within the RSDF are strategic / conceptual and does not suggest a site-specific representation level (unless stated as such under a precinct plan).
- The maps/ diagrams / graphic representations are merely conceptual indication of the desired future functioning within the region/ city, and in order to achieve the desired functioning/ goal; projects, sub-programmes, and programmes should be accordingly rolled out.
- Any delineation of a line which may have a perceived site specific interpretation should not be construed as such (unless stated as such under a precinct plan).
 - The Administrative and Sub-Area boundary lines are merely administrative and/or planning tools and is not meant to be interpreted as a form of division.

1.4 Interpretation/ use of RSDF Document

Should one wish to investigate a potential change in land use, be it for whatever use or intensity, one should do so according to the simplified procedure as illustrated below. As demonstrated below, the RSDF is not the sole mechanism in determining the suitability of any potential change in land use, but should be used in conjunction with requirements as may be determined by infrastructure, etc which are not contained within the RSDF. This diagram is by no means a comprehensive guide, but merely gives guidance on which course of action to follow should one wish to investigate any potential change in land use.

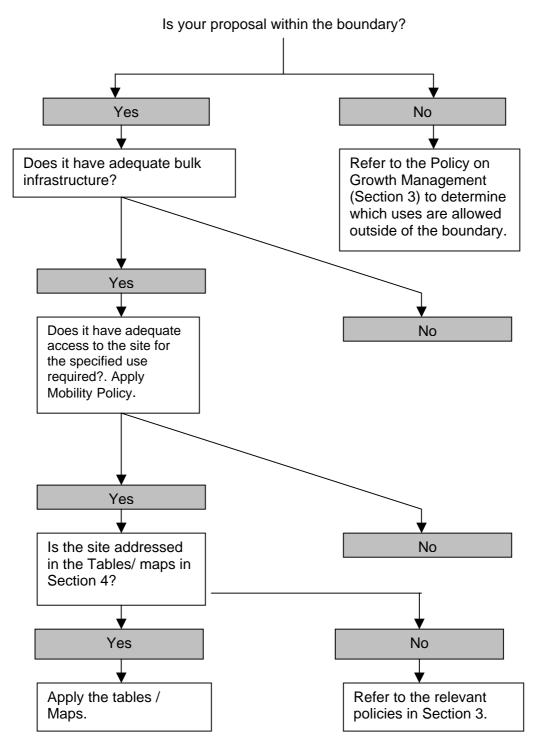


Figure 3 : INTERPRETATION / USE OF RSDF

SECTION 2

REGIONAL ANALYSIS

2.1 LOCATION

Region 6 and Region 10 are two of the eleven administrative regions in the City of Johannesburg, located approximately 15km south west of the Johannesburg Central Business District and approximately 10 km south of the Roodepoort Business District. Region 6 and Region 10 form the Greater Soweto Area and will be referred to as such. (Refer to Map 1a and 1b.)

2.2 ALPHABETICAL SUBURB LIST AND SUB AREAS

In order to deal with the formulation of objectives, strategies, interventions and guidelines at a more detailed and local level, the Greater Soweto Area was divided into 16 Sub-Areas. (Refer to Map 2.) Specific townships and suburbs were grouped into sub-areas, based on the following criteria:

- š Homogeneity in residential density and character;
- š Land use homogeneity;
- š Natural/environmental features;
- š Economic investment;
- š Residential character; and
- š Arterials and through roads.

It must be stressed that these sub-areas are for planning purposes only and do not reflect an additional boundary or point of separation within Greater Soweto Area. It is purely from a planning point of view to make the area more manageable and approachable.

Table 1: Represents a complete alphabetical list of townships in the Greater Soweto Area.

Table 1

TOWNSHIP NAME	SUB-AREA
ARMADALE	Sub-Area 13
BRAM FISCHERVILLE EXT.1	Sub-Area 15
CHIAWELO	Sub-Area 8
CHIAWELO EXT.2	Sub-Area 8
CHIAWELO EXT.3	Sub-Area 8
CHIAWELO EXT.4	Sub-Area 8
CHIAWELO EXT.5	Sub-Area 8
COMPTONVILLE	Sub-Area 13
DEVLAND	Sub-Area 13
DEVLAND EXT.1	Sub-Area 13
DEVLAND EXT.2	Sub-Area 13
DEVLAND EXT.6	Sub-Area 13
DEVLAND EXT.9	Sub-Area 13
DEVLAND EXT.14	Sub-Area 13
DEVLAND EXT.15	Sub-Area 13
DEVLAND EXT.16	Sub-Area 13
DEVLAND EXT.27	Sub-Area 13
DHLAMINI	Sub-Area 8
DIEPKLOOF EXT.1	Sub-Area 2

DIEPKLOOF EXT.2	Sub-Area 2
DIEPKLOOF EXT.3	Sub-Area 2
DIEPKLOOF EXT.10	Sub-Area 2
DIEPKLOOF ZONE .1	Sub-Area 2 Sub-Area 2
DIEPKLOOF ZONE .2	Sub-Area 2
DIEPKLOOF ZONE .3	Sub-Area 2
DIEPKLOOF ZONE .4	Sub-Area 2
DIEPKLOOF ZONE .5	Sub-Area 2
DIEPKLOOF ZONE .6	Sub-Area 2
DOBSONVILLE	Sub-Area 3
DOBSONVILLE EXT.1	Sub-Area 3
DOBSONVILLE EXT.2	Sub-Area 3
DOBSONVILLE EXT.3	Sub-Area 3
DOBSONVILLE EXT.4	Sub-Area 3
DOBSONVILLE EXT.5	Sub-Area 3
DOORNKOP	Sub-Area 6
DOORNKOP EXT.1	Sub-Area 6
DUBE	Sub-Area 4
ELDORADO PARK	Sub-Area 10
ELDORADO PARK EXT.1	Sub-Area 10
ELDORADO PARK EXT.2	Sub-Area 10
ELDORADO PARK EXT.3	Sub-Area 10
ELDORADO PARK EXT.4	Sub-Area 10
ELDORADO PARK EXT.5	Sub-Area 10
ELDORADO PARK EXT.6	Sub-Area 10
ELDORADO PARK EXT.7	Sub-Area 10
ELDORADO PARK EXT.8	Sub-Area 10
ELDORADO PARK EXT.9	Sub-Area 10
ELDORADO PARK EXT.10	Sub-Area 10
EMDENI	Sub-Area 6
EMDENI EXT.1	Sub-Area 6
JABAVU	Sub-Area 4
JABAVU EXT.1	Sub-Area 4
JABULANI	Sub-Area 5
KLIPRIVIERSOOG	Sub-Area 10
KLIPRIVIERSOOG ESTATE S.H.	Sub-Area 10
KLIPSPRUIT	Sub-Area 11
KLIPSPRUIT EXT.1	Sub-Area 11
KLIPSPRUIT EXT.3	Sub-Area 11
KLIPSPRUIT EXT.4	Sub-Area 11
KLIPSPRUIT EXT.5	Sub-Area 11
KLIPSPRUIT WEST	Sub-Area 10
KLIPSPRUIT WEST EXT.1	Sub-Area 10
KLIPSPRUIT WEST EXT.2	Sub-Area 10
LENASIA EXT.1	Sub-Area 14
LENASIA EXT.3	Sub-Area 14
LENASIA EXT.5	Sub-Area 14
LENASIA EXT.13	Sub-Area 14
MAPETLA	Sub-Area 8
MAPEILA MEADOWLANDS	Sub-Area 3
MEADOWLANDS EAST ZONE 1	Sub-Area 3
MEADOWLANDS EAST ZONE 2	Sub-Area 3
MEADOWLANDS EAST ZONE 3	Sub-Area 3
MEADOWLANDS EAST ZONE 4	Sub-Area 3
MEADOWLANDS EAST ZONE 5	Sub-Area 3
MEADOWLANDS EXT.11	Sub-Area 3

MEADOWLANDS WEST ZONE 6 Sub-Area 3 MEADOWLANDS WEST ZONE 7 Sub-Area 3 MEADOWLANDS WEST ZONE 8 Sub-Area 3 MEADOWLANDS WEST ZONE 9 Sub-Area 3 MMEDOWLANDS WEST ZONE 9 Sub-Area 3 MMEDOWLANDS WEST ZONE 10 Sub-Area 3 MMEDOWLANDS WEST ZONE 10 Sub-Area 3 MOFOLO NORTH Sub-Area 4 MOFOLO NORTH Sub-Area 4 MOFOLO SOUTH Sub-Area 4 MOLAPO Sub-Area 6 MOROKA Sub-Area 6 MOROKA Sub-Area 6 NALEDI Sub-Area 6 NALEDI EXT.1 Sub-Area 6 NALEDI EXT.2 Sub-Area 10 NATURENA EXT.5 Sub-Area 13 NATURENA EXT.6 Sub-Area 13 NATURENA EXT.13 Sub-Area 13 NATURENA EXT.14 Sub-Area 13 NATURENA EXT.15 Sub-Area 13 NATURENA EXT.16 Sub-Area 13 NATURENA EXT.17 Sub-Area 13 NATURENA EXT.18 Sub-Area 13 NATURENA EXT.20 Sub-Area 2 ORCANDO Sub-Area 2 NOORDGESIG EXT.1 S	MEADOWLANDS EXT.12	Sub-Area 3
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PROTEA GLEN EXT.11 Sub-Area 7		
PROTEA GLEN EXT 12	PROTEA GLEN EXT.11	Sub-Area 7
	PROTEA GLEN EXT.12	Sub-Area 7
PROTEA INDUSTRIAL PARK Sub-Area 7	PROTEA INDUSTRIAL PARK	Sub-Area 7

PROTEA NORTH	Sub-Area 7
PROTEA SOUTH	Sub-Area 7
RACECOURSE	Sub-Area 10
RIVASDALE	Sub-Area 13
SENAOANE	Sub-Area 8
SLOVOVILLE	Sub-Area 15
SLOVOVILLE EXT.1	Sub-Area 15
TLADI	Sub-Area 6
THULANI	Sub-Area 15
TSEPISONG	Sub-Area 15
ZOLA	Sub-Area 6
ZONDI	Sub-Area 6

The following townships (suburbs) have been grouped together to form sub-areas.

SUB - AREA ONE

Baralink, Power Park, Power Park Ext 2.

SUB - AREA TWO

Noordgesig, Noordgesig Ext 1, Orlando, Orlando West, Orlando West Ext 1, Orlando West Ext 2, Orlando West Ext 5, Orlando East, Diepkloof Zone 1, Diepkloof Zone 2, Diepkloof Zone 3, Diepkloof Zone 4, Diepkloof Zone 5, Diepkloof Zone 6, Diepkloof Ext 1, Diepkloof Ext 2, Diepkloof Ext 3, Diepkloof Ext 3, Diepkloof Ext 3.

SUB - AREA THREE

Dobsonville, Dobsonville Ext 1, Dobsonville Ext 2, Dobsonville Ext 3, Dobsonville Ext 4, Dobsonville Ext 5, Meadowlands, Meadowlands Ext 11, Meadowlands Ext 12, Meadowlands West Zone 6, Meadowlands West Zone 7, Meadowlands West Zone 8, Meadowlands West Zone 9, Meadowlands West Zone 10, Meadowlands East Zone 1, Meadowlands East Zone 2, Meadowlands East Zone 3, Meadowlands East Zone 4, Meadowlands East Zone 5, Mmesi Park.

SUB - AREA FOUR

Mofolo North, Mofolo Central, Mofolo South, Molapo, Jabavu, Jabavu Ext 1, Moroka, Moroka North, Dube.

SUB - AREA FIVE

Jabulani.

SUB - AREA SIX

Emdeni , Emdeni Ext 1, Naledi , Naledi Ext 1, Naledi Ext 2, Tladi, Zola, Zondi, Moletsane, Doornkop, Doornkop Ext 1.

SUB - AREA SEVEN

Protea Glen, Protea Glen Ext 1, Protea Glen Ext 2, Protea Glen Ext 3, Protea Glen Ext 4, Protea Glen Ext 5, Protea Glen Ext 11, Protea Glen Ext 12, Protea North, Protea South, Protea Industrial Park.

SUB - AREA EIGHT

Chiawelo , Chiawelo Ext 2, Chiawelo Ext 3, Chiawelo Ext 4, Chiawelo Ext 5, Mapetla, Phiri, Senaoane, Dlamini. **SUB - AREA NINE**

Kliptown.

<u>SUB – AREA TEN</u>

Eldorado Park , Eldorado Park Ext 1, Eldorado Park Ext 2, Eldorado Park Ext 3, Eldorado Park Ext 4, Eldorado Park Ext 5, Eldorado Park Ext 6, Eldorado Park Ext 7, Eldorado Park Ext 8, Eldorado Park Ext 9, Eldorado Park Ext 10, Klipspruit West, Klipspruit West Ext 1, Klipspruit West Ext 2, Racecourse, Klipriviersoog Estate, Nancefield Ext 1, Klipriviersoog.

SUB - AREA ELEVEN

Pimville Zone 1, Pimville Zone 2, Pimville Zone 3, Pimville Zone 4, Pimville Zone 5, Pimville Zone 6, Pimville Zone 7, Klipspruit , Klipspruit Ext 1, Klipspruit Ext 3, Klipspruit Ext 4, Klipspruit Ext 5.

<u>SUB – AREA TWELVE</u>

Open space system including the Klipspruit and Klipriver catchments areas.

<u>SUB – AREA THIRTEEN</u>

Armadale, Devland, Devland Ext 1, Devland Ext 2, Devland Ext 6, Devland Ext 9, Devland Ext 14, Devland Ext 15, Devland Ext 16, Devland Ext 27, Naturena, Naturena Ext 5, Naturena Ext 6, Naturena Ext 11, Naturena Ext 13, Naturena Ext 17, Naturena Ext 19, Naturena ext 20, Naturena Ext 25, Naturena Ext 26, Rivasdale.

<u>SUB – AREA FOURTEEN</u>

Lenasia Ext 1, Lenasia Ext 3, Lenasia Ext 5, Lenasia Ext 13.

<u>SUB – AREA FIFTEEN</u>

Agricultural Land extending until the urban boundary.

<u>SUB – AREA SIXTEEN</u>

Bram Fischerville Ext 1, Slovoville, Slovoville Ext 1, Doornkop new extensions, Thulani and Tsepisong.

2.3 SUMMARY OF THE REGIONAL PROFILE

Soweto's roots extend back to the early days of Johannesburg. The first early isolated developments started around 1904, but it was exactly 50 years later and within a 12-year development boom, when much of modern-day Soweto was produced. The name 'Soweto' is an acronym of South Western Townships. Surprisingly, for such a well known area, the name is relatively recent, being first adopted on 4 April 1963, following a competition by the City Council to give the townships "an identity of their own and rid them of the impersonal name of South Western Bantu Townships..." (Star, 16 Jan, 1963).

Historically, there was an unwillingness to recognise townships as permanent and integral parts of the city. The principle of racial segregation was entrenched in the constitution of the Union of South Africa in 1910 and was supported by subsequent laws and regulations such as the Natives Land Act (1913) and notably, the policy of Separate Development introduced after 1948. Paradoxically, the Act represented the first consolidated attempt to deal with housing and urbanisation problems in black areas. In later years, it was used as a means for influx control - thereby restricting and controlling rural-urban in-migration and its associated urbanisation pressures.

Since 1994, the Soweto Boundary Area has expanded both northwards and westwards with the establishment of new townships like Protea Glen, Slovoville and Tsepisong to the North.

2.3.1 SPATIAL LOCATION

Soweto is spatially isolated by a number of barriers:

- ## The mining belt in the north where mining and ancillary uses are located. The area is largely undermined and includes large portions of vacant land and land encumbered by slimes dams and mine dumps. It should be noted that the mining belt has been excluded from the RSDF (LIDP) boundaries. However, this land is considered strategically important in integrating Soweto and for future expansion northwards.
- # The vacant land separating the eastern sector of Soweto with Nasrec.
- \notin # The highway system in the east formed by the N1.
- # The Klip River and floodplains separating Soweto from Lenasia to the south as well as the N12 Potchefstroom Highway.
- # Large tracts of mainly agricultural land with intermittent dolomite to the west.

2.3.2 REGIONAL ROLE OF SOWETO

Greater Johannesburg, located in central Gauteng Province, is the most dominant urban area in the country. The Greater Soweto Area in turn, is the most dominant part of Johannesburg in terms of scale and size of population as well as international recognition. The ripple effect of problems in the Greater Soweto Area is huge as the events of 1976 showed and its success or failure is critical to the success of the Region.

The Greater Soweto Area plays an important role in the regional space economy of Gauteng. This regional significance relates to a range of factors including its:

∉# Size and composition:

The Greater Soweto Area covers 153 km² and accommodates over 1 million residents making it the largest township area in South Africa. It contains 43% of the population of Johannesburg. (LIDP, 2002).

∉# Primacy as a dormitory area which supplies labour throughout the region: Four out of five workers are employed outside Soweto. People daily migrate out of Soweto to surrounding regional centres, some as far a field as the East Rand and Lekoa-Vaal. The nine hostels (historically for municipal workers and migrant mine labourers), housing approximately 50 000 workers, reinforces this dormitory status.

Location and spatial dislocation in the regional economy:

Separating Soweto from the Johannesburg and Roodepoort town centres is the mining belt (now largely mined) running East West along the gold-bearing reef. Except for a strip along Main Reef Road, the land is largely undeveloped at present and forms a physical barrier between Soweto and areas to the north. To complicate matters, the area is also inundated with areas of dolomite that prevent any future expansion and development. To the east are large tracts of land where development was prohibited in the past. Lenasia lies to the south, separated from Soweto by the Klip River and its floodplain. The western frontier comprises smallholdings and mining uses but offers some scope for expansion.

Eastwards, the large tracts of vacant land towards Nasrec isolate Soweto. Current development plans include the Sojo development initiative that seeks to upgrade the area, making it economically and commercially attractive and acting as the key linkage to integrate Soweto and Johannesburg.

Whilst there are many major roads on the periphery of Soweto, few provide direct connections into the area with even fewer connecting Soweto areas separated by the Klip River flood line and railway line. The historical reasons for this are obvious, but the consequences are that Soweto is a town turned in on itself - a ghetto, with few regional connections. This isolation has had a profound negative economic impact on Soweto.

∉ # Role in the regional economy:

Three-quarters of Sowetans hold unskilled, manual jobs while only 10% hold management or professional jobs. The manufacturing sector, which employs much of this labour, is generally in decline, with the only increases being found in the north-east of Gauteng, around the Kempton Park area.

The economy of the Greater Soweto Area has always been closely tied to that of the Johannesburg Metropolitan Area, and the CBD in particular. The CBD has historically been the focus for all transport routes from Soweto. Nearly 30% of Sowetan residents travel daily to the CBD to work and almost 50% of those who have employment, work within the Johannesburg area.

Current trends indicate that Southgate is the main draw card in the South for most Sowetans. The extent to which Southgate functions as a draw card can be attributed to its location, safe ambiance and range of facilities. Areas such as the Dobsonville Shopping Mall tends to be less successful due to its isolated location, vacant land surrounding the area, which is compounded by the incompatible land uses. The competition between the local spaza shops and local amenities versus the large overheads demanded from being located in a shopping mall can be attributed to the lack of large neighbourhood retail facilities.

∉ # Role in the social economy:

Due to its size and dormitory status, Soweto has built up a significant role in the regional social economy. The largest hospital in the southern hemisphere, Chris Hani Baragwanath Hospital, is in Soweto. It offers a range of services to local, metropolitan, regional and Southern African patients. Other medical facilities are clustered around the hospital including the Lesedi and Lillian Ngoy (dental) Clinics, the St. John's Eye Hospital and South African National Tuberculosis Association (SANTA).

Soweto is also the home of some well-known tertiary educational institutions. For example the Funda Centre, now a regional centre for adult education, and Vista University, established in 1982.

∉ Role as a symbolic site of struggle and freedom:

Soweto is a significant regional cultural and heritage venue with important economic and tourist potential. The Soweto Uprising of 16 June 1976 put Soweto in the international spotlight. Important sites include the Hector Peterson Memorial, Freedom Square, and Nelson Mandela's home.

∉ Regional Policy Context

In 1996, the Gauteng Province prepared a provincial development plan known as the Gauteng Spatial Development Framework (GSDF). The plan aims to guide growth and development in accordance within the principles of the Development Facilitation Act (DFA) and the Reconstruction and Development Programme (RDP).

The broad policy guidelines adopted (and most have relevance to Soweto) are as follows:

- 1. To contain urban sprawl, encourage infill and densification.
- 2. To enhance transportation linkages.
- 3. To maximise the economic energy generated by transport routes while integrating lower income areas into the functioning of central urban area.
- 4. To integrate low income areas by promoting transportation and land use linkages.
- 5. To integrate residential and economic development.
- 6. To conserve natural resources.
- 7. To uplift areas of economic decline.
- 8. To maximise the potential of rural areas.

Specific development issues raised by the GSDF analysis, for example settlement patterns, economic development, and land use trends, have relevance for Soweto and need to be addressed by the RSDF. These include:

- 1. The linkage between the areas to the north and south of the mining belt.
- 2. The role of the tertiary sector in relation to spatial development of central Gauteng.
- 3. The dominance of new low-income housing locating in and around Soweto.
- 4. The declining economic base to the West coupled with the increase in low income housing in this sub-region.

- 5. The centralisation of economic activity and growth trends Eastwards and northwards (Johannesburg-Pretoria).
- 6. The declining employment in sectors which employ semi-skilled and unskilled workers.
- 7. The changing role of the Johannesburg CBD and the need for it to perform new functions related to the requirements of the surrounding population.
- 8. The poor East-West linkages and general lack of urban integration of areas like Soweto.

2.3.3 SOCIO ECONOMIC PROFILE

Soweto is highly urbanised. With the exception of hostel dwellers and informal settlement residents, most residents were born in an urban area and a third of the population were born in Soweto. Soweto's population is composed of different ethnic and language groups. English is the most widely spoken and read language, followed by Zulu (40% of households), Sotho (24%), Tswana (12%) and Xhosa (9%). Eldorado Park has a 50/50 English/Afrikaans split.

The size of Soweto's population has long been debated. Census figures tend to underestimate the population, as informal settlements were excluded. However, the following estimates tend to confirm that Soweto's population is just over 1 million. Varying estimates include the following:

1996 Census (Statistics SA 1996):	1 026 873
(Including Eldorado Park and Nancefield)	
Soweto in Transition, 1997:	1 084 921
2000 Estimate (Igoli 2010):	1 222 119
2010 Projection (Igoli 2010):	1 254 285

Soweto's population growth rate per annum for 1991-1996 was 2%, which is higher than Johannesburg's projected population growth rate for 2000-2010 of 0.9% per annum (Igoli 2010, 2000). Half Soweto's population is under the age of 25, a figure that is older than expected by developing world standards, indicating a trend towards stabilisation. Gender distribution is evenly balanced (51% female and 49% male), indicating a relatively mature population. As seen from the low projected population figure, AIDS is likely to have a significant impact as an estimated 17% of the population are infected with the disease. (LIDP, 2002).

2.3.4 PROFILE OF SOWETO

Area	153km²		
Population	1 084921 (1996 Census).		
	1 029485 (Wits University, 1997).		
	1 222 119 (Igoli 2000).		
2010 Projection	1 254 285 (Igoli 2000).		
	Half the population under 25 years of age.		
	51% female with 49% male.		
Unemployment	The Region still has one of the highest unemployment rates at \pm 45% of the existing population (especially the youth).		
Household income	76% of the population earn under R1 500. per month.		
	Only 9% earn over R1 500. per month.		
	Only 2% earning over R3 500.		
Economy	66% of the population is employed but only 40.5% aged 16 or over are employed full time.		
	Most people work outside of Soweto, 21.4% work in Soweto with 84% of		
	disposable income being spent outside of Soweto.		
Health	17% of the population is infected with Hiv/aids.		
Housing	50% of population live in Council houses, 11% in privately owned		
	dwellings, 27% in Backyard shacks, 5% in informal settlements and 4% in hostels, 80% of Sowetans live in houses with 3 rooms or less.		
	Council houses have an average of two people living in a room, private		
	dwellings have 1 person per room and other types of housing have 3		
	persons per room.		
Services	91% of houses have electricity. 58% of the population has piped water in		
	dwelling units (this figure is likely to be much higher as the statistics were		
	not fully inclusive of formal areas e.g. Dobsonville, Eldorado Park.) 37%		
	have piped water on site and 5% use public taps. 97% of the population		
	have access to flush or chemical toilet. 76% of Council houses have only		
	a outside toilet.		
Transport	85% of the total passenger movement is out of Soweto. Taxi's are the		
	most prevalent mode and account for 60% of total passenger volume.		
	Highest passenger volume is on Soweto highway (26%) Only 9% use rail		
	service.		
Education	The mean level of education of adults is between std 6 and std 7.		
Facilities	9 public libraries.		
	25 clinics plus Chris Hani Baragwanath and private medical facilities.		
	340ha of parkland, most of which is undeveloped.		

2.4 SERVICES AND INFRASTRUCTURE

The situational analyses of Region 6 and Region 10 per development sector is dealt with in this section. Plan 3A and Plan 3B depict the regional analysis and areas of intervention.

2.4.1 Social Services

The distribution and quality of social facilities in Soweto is uneven. Ideally, the provision of services should be at a neighbourhood level (e.g. library to serve 35 000 people according to the CoJ Department of Social Services standards). In reality, these standards are difficult to achieve due to budget constraints. This dilemma is worsened by the demand for facilities that the new housing developments are placing on already existing services.. There is a lack of a hierarchy of facilities in Soweto, in particular, facilities, which could service large districts. This limits the optimisation of both land and infrastructure. A policy of one-stop facilities has been adopted by Council to provide a balanced, multi-purpose mix of facilities at centralised and easily

accessible points. The undersupply of facilities has given rise to small-scale, sometimes informal enterprises which fulfil a need *e.g.* crèches and medical facilities.

Facilities are provided based on a ratio of every 35 000 people but with the high level of backyard shacks and illegal occupancy, this often culminates in the over utilization and inadequacy of the facility. Keeping with Council policy, there is an effort to promote multi-use facilities such as Naledi Multi-Purpose Hall and Emdeni Library. Jabulani Node that seeks to provide a full range of social facilities from a pay-point to a city hall. All of which seek to reduce the operational and maintenance costs that are associated with rapid urban expansion. There are 61 school facilities in total and an investigation is currently underway that examines the feasibility of renovating the underutilised and vacant school buildings into social facilities. It is critical that the findings and proposals of the study will receive the support from the Gauteng Department of Education.

The Department of Social Services is specifically concerned with programmes that address the needs of the community in relation to poverty alleviation, child care, youth, the elderly, disabled and women.

2.4.1.1 Clinics

Clinics form the cornerstone of any health care practice. In Soweto, the challenge is one that puts pressure more on the need to provide staff, than the need for more facilities. The Chris Hani Baragwanath Hospital is the only regional hospital available within the entire Greater Soweto Area that places enormous strain on it and other health care facilities in the vicinity. The 24-hour clinic at Zola does not have sufficient staff to remain open for the full 24-hour period. An additional strain that needs to be carefully managed is the proposed devolution of Provincial Health Care to the local level. The exact period for this transfer has, as yet, not been decided upon. The challenge therefore is not one that will see massive capital investment in facilities, but rather the investment in personnel to provide an effective service in the existing clinics.

The Health Services are rendered by:

Local Authority -	24 clinics
Province -	Clinics 12
Mobile Points -	12 (Local authority)
Private Clinics -	4
Satellite -	1

Priority Areas : Previously Neglected Areas, Protea Glen, Slovoville, Braamfisherville, Devland, Shanty Clinic, and the upgrading of existing facilities

2.4.1.2 Libraries

Most of the public libraries lack adequate storage and reading space and have a poor stock of books. Few libraries remain open in the afternoon or evenings when scholars require the facilities most. Apart from informal settlements, the following areas lack library facilities: Naledi, Moroka, Protea South and Protea North. Sites for libraries have been identified to secure funding. There are only a few computer centres in Soweto, located at Emdeni, Chiawelo Community Centre (digital village), Funda Centre and Damelin (formerly the Soweto College of Education).

AREA	AREA
1.Protea North library	9. Klipspruit Children's
2.Protea Glen library	10. Meadowlands
3.Tshiawelo library	11. Mofolo
4.Phiri library	12. Noordgesig
5.Dobsonville library	13. Orlando East
6.Emdemi library	14. Pimville
7.Klipspruit West library	15. Eldorado Park Ext. 2
8. Diepkloof Zone 1 library	16. Diepkloof Zone 5
	17. Eldorado Park Ext. 5

The following Table lists current Libraries in the Greater Soweto Area.

2.4.1.3 Sports and Recreation

Sports and Recreation has an important role to play in one's quality of life. It includes all leisure time activities whether passive (spectator) or active and can apply to a range of activities such as sports, social, cultural, entertainment, educational and/or environmental.

Most sports and social / community facilities are undeveloped, poorly maintained and do not reflect the community needs. There is a lack of a hierarchy of facilities, in particular regional centres. At present, *ad hoc* provision of facilities occurs rather than multi-use ones. In most instances, it has been found that the equipment becomes damaged and abused through over-usage and not vandalism.

Planning for recreation has typically been based on empirical standards and the post-World War two development of Soweto was not an exception: Overall recommended provision: 0.5 ha per 1000 population. Comparative standards at the time (whites) were 2.43 hectares of play space per 1000 population. (LIDP, 2001). It is now more acceptable that recreation be determined by use and appropriateness and optimising the use of existing assets e.g. Orlando Stadium and the Soweto Golf course, Mofolo Park, Orlando Dam, Zondi Koppies. This is particularly pertinent to Soweto because of shortages in the capital budget.

Active recreation in Soweto includes a variety of facilities that cater for a range of different sports. Soccer is the predominant sport in Soweto and the FNB Stadium hosts key matches. Soccer is also extremely popular amongst the youth. In a survey of five Soweto schools for this Development Plan, soccer emerged as the second most popular sporting activity after swimming.

2.4.2 Infrastructure

Engineering infrastructure is needed to support and sustain the urban environment. The provision, operation and maintenance of engineering infrastructure service to meet the needs of the community are major functions of local government.

The provision of services in Soweto has been substandard, bearing testimony to the absence of forward planning, political activism (non-payment was used as a political

tool during the 1980s), periodic shifts in state policy and inconsistent provision by the different administrations in Soweto. By the late 1980s, the level of service provision particularly for water, sanitation and waste management, was deemed hazardous to community health. Since then, significant upgrading has occurred, although improvements are still required.

2.4.2.1 Roads and Storm Water

Roads

Soweto's isolation is most evident in its lack of road linkages and access. External linkages are limited as well as northern access from the two interchanges onto the N1. Internal linkages are indirect and many local roads are unpaved, particularly in the western portion of Soweto. There are approximately 715 km paved roads and 349 km unpaved roads with reduce the efficiency of the road network and storm water drainage which is inadequate throughout Soweto that creates both environmental and health concerns.

The main congestion points are concentrated in the approaches to Jabulani node and nearly all inbound routes have little spare capacity or are overloaded.

Road priorities include the following: K43, Emdeni link, Westlake Road extension to Meadowlands, upgrading of Koma Road, Jabulani north-south link and internal access, northern ramps from the Soweto Highway to N1, northern ramps from Old Potchefstroom Road to N1, Soweto Highway extension to Roodepoort Road, upgrading of Ben Naude / Sofasonke Road, K122, Klipspruit Valley Road to Golden Highway, East Road link to Nicholas Road, K102, K15, M2 extension to Klipspruit Valley Road, Mooki Street uprading, Soweto Highway extension to Rosettenville Road, and the possible downgrading of N17.

To determine priorities for streets to be upgraded from gravel to surfaced standards remains a sensitive task. Within this assignment a prioritization philosophy has been developed taking economical, socio-political factors and the network characteristics into account. In terms of the Soweto Development Program (referred to in Section 4) the criteria used to prioritize areas was:

- ∉# Community input (public meetings);
- *∉* # Age of Township;
- ∉# Impact on the environment;
- # Engineering Design Rationale (slope, topography).

As the recommended priorities are mainly the obvious main access roads or bigger access collectors the reliability of the algorithms was not tested. Feedback of the results of the lower order streets is essential, as future prioritization will become increasingly difficult as the obvious priorities get eliminated or surfaced. The algorithms and allocated weighting factors will be adjusted accordingly to achieve an enhanced network upgrading prioritization model. The master GIS / PMS data of October 2001 was used as the base data set for this project. The status of the above data set is as follows:

Storm water

Soweto lacks a complete storm water system. A storm water policy was approved by the old Johannesburg Administration and is currently being revised by Johannesburg Roads Agency for approval by Council. The following are required for an effective storm water management system:

- \notin An inventory of the existing system including condition.
- ## A master plan (needs assessment and development strategy) including both the roads and storm water and environmental health departments.
- ∉ A design model (catchments response and development criteria).
- # The following issues need to be addressed in order to provide an effective storm water management system; flooding; improvement to water quality of Klip River as a natural drainage system; management of sedimentation; management of land use; management of Klip River ecology.

The compiling of a Storm Water Master Plan is required to give form to existing and future developments. This Storm Water Master Plan would need to take cognisance of updated 1:50 and 1:100 year flood lines. Without such a key implementation mechanism, rivers, dams and the existing storm water system will continue to be silted up and ineffective.

2.4.2.2 Water and Sanitation

Johannesburg Water is responsible for the provision of water and sanitation to the Greater Soweto Area. Bulk water is supplied by Rand Water. Apart from informal settlements, Soweto is fully serviced in terms of water and sanitation provision, although levels of service vary according to housing type. Basic water and sanitation services, which are extremely costly to maintain, are provided to informal settlements.

Bulk water infrastructure for most of Soweto is limited, but improves in the west (Jabulani, Dobsonville, Naledi). It has become apparent that it is in the areas to the west of Soweto that there is a limited water pressure. Weekly, water shortages are reported with lack of pressure being an everyday phenomena. The result of the unreliable water supply has culminated in the migration out of the Jabulani area of business's as well as some serious health concerns as toilets remain unflushed. With regard to bulk sewer capacity, the western portion of Soweto has no spare capacity, while the eastern areas including most of the mining belt, have spare capacity for 200 000-400 000 people, (JHB Water, 2002).

At present the current system of deemed consumption billing does not reflect the actual monthly supply. There is still significant outstanding payment arrears that necessitates that an accurate metering system is adopted. The effective metering of private properties is also a requirement by central government. A new project "**Gcina Manzi**", is planned to be initiated by Johannesburg Water that will to upgrade the existing water and sewer pipes in order to reduce the high degree of water loss. The high rate of water consumption in Soweto equates to approximately 85kl per month per household. In order to address the water loss problem in the Greater Soweto Area, the City of Johannesburg will require R 500 million. The project entails:

- # Approximately 160 km of water mains still need to be replaced.
- # An educational program to promote water wise initiatives.

Soweto ranks amongst one of the highest water consumers in Greater Johannesburg. While this can be attributed to its size, this is also largely due to water loss. Soweto's water and to a less extent, sanitation networks have undergone major upgrading over the past 10 years (mainly in parts of the erstwhile SMLC and NMLC portions of Soweto). Although household metering has been installed in most areas where uprading has occurred, district meters, which provide important water management mechanisms, still need to be installed.

There are 2071 chemical toilets in Region 6 and Region 10 and the water stand pipes that form part of the 6kl free water program.

The Jabulani Reservoir is in the process of being emptied, cleaned and disinfected but will not be repaired at this stage. At Zondi, the intake pipe is currently being refurbished.

Replacement of the mid block water and sanitation networks with street block system is an important upgrading requirement. Other problems include the misuse of the sanitation network e.g. diversion of storm water into household sewerage system and litter dumped down manholes which causes blockages.

2.4.2.3 Waste Management

Although a weekly refuse removal service operates throughout Soweto, waste management is particularly problematic and requires great improvement. Dumping which occurs on open spaces and vacant sites, is due to a range of factors including: the small size of bin liners, increased waste volumes due to backyard shacks and an inadequate system of waste management in informal settlements. Dumping is common practice because of poor environmental awareness.

An area of great concern, especially from an environmental health aspect, is the use of dump skips. Skips are strategically located in and around specific collection points in Soweto. The intention is that the community use these skips in an attempt to prevent littering. Unfortunately, these skips become the focal point for the dumping of all types of material and when the skips become full, spillage surrounds the site, which becomes unsightly and unhygienic. Often, it is only the skip that is removed and the excess litter remains. Pikitup is in the process of adopting strategies that will remedy the situation to the benefit of all parties involved.

Proposals to improve the waste management system includes the establishment of refuse gardens and a 'deep waste collection system' (sunken waste receptacles which will be emptied regularly) as well as the provision of large 240l capacity plastic bins to formal areas.

One of the primary objectives of Pikitup is to ensure that, through providing efficient service delivery, communities take pride in their environments and make use of the facilities provided by Pikitup. Consistency is of the essence to ensure that communities rely on Pikitup in terms of refuse removal schedules. It is estimated that there are approximately 600 informal dumping sites located on parks and open spaces throughout Soweto. The perpetuation of illegal dumping is a prominent feature which impacts negatively on the environment and poses a number of health concerns. Efforts to improve the waste management system by Pikitup are currently underway.

2.4.2.4 Electricity

In terms of public lighting, historically, only area lighting (high masts) existed in Soweto. Streetlights were installed between 1981 and 1984. Since then, streetlights have been installed along a few major roads such as Koma Road, Klip Valley Road and Old Potchefstroom Road. Between 1995 and 1997, an additional 4000 streetlights were installed in secondary streets to 'normalise' street lighting.

According to Eskom, there is limited bulk spare capacity at substations in Soweto. This means that in the event of a breakdown in the system, major supply problems will be experienced. Household electrification was only undertaken between 1979 and 1998. The electrification project was considered inappropriate as it was not considered affordable. High costs remain an issue for many Sowetans.

City Power's primary responsibility in the area is to provide public lighting. It has committed itself to putting together a structure that will focus and ensure a reliable, sustainable and economical viable infrastructure.

The allocation and sharing of limited budget is the beginning of a journey and commitment by City Power to the communities of Soweto by rejuvenating years of infrastructural neglect. The community and Ward Committees together with their respective Councillors need to take ownership and responsibility for the infrastructure, especially against vandalism and theft. In doing so, it will enable the limited funds to be stretched further and improve service delivery and the quality of life for communities. A coordinated approach has been put in place by the Soweto Development Program that ensures that infrastructure between all UAC's is not duplicated.

During the public participation process for the RSDF, areas in need of street lighting were identified. The list was then prioritised before being implemented in-line with community needs. An approximate R 4 million was made available for the electrification of street lights in Soweto in the 2002/2003 financial year. No CMIP application was submitted in 2002/2003. In order to further the delivery of street lighting, it is proposed that an application should be submitted to CMIP for future funding.

The need to provide and sustain an effective and efficient infrastructure base in the Greater Soweto Area cannot be overemphasised. Although it would appear that capacity does exist for the expansion of both commercial and industrial growth within the area, the upgrading of the existing infrastructure needs to be undertaken. Infrastructure in the build-up areas is not use to it's fullest potential whilst that in the informal areas is increasingly overburden.

Current Operational Budget Allocation

For the entire City of JHB area, R 28.5 million has been allocated that will primarily focus on repairing infrastructure that has been damaged and not repaired. (City Power, LIDP Review, 2002). Replacement of old technology with the latest technology e.g. clock timers will be replaced with photoelectric cells. The City of JHB has been divided into three regions by City Power:

∉# North - R 9.273 million (32%)

∉# Central	-	R 9.438 million (33%)
<i>∉</i> # South	-	R 10.110 million (35%)

Current Financial Year

City Power estimates that the cost for a 7.2m pole with a 100HPS street light luminaire is R 4 446.43. The average spacing per pole is between 36m and 42m. It is therefore deduced that R5 million will enable City Power to install 45km of road with 1125 street poles.

For the entire City of JHB area, R 24.25 million has been allocated that will focus on the curtailment of the escalating theft and vandalism to Public Lighting. There are six focus areas:

- 1 Social Commitments the reduction of backlogs
- 2 Refurbishment of current infrastructure
- 3 Extension of existing networks
- 4 Focus on hub-areas and motorways
- 5 Focus on formal and informal settlements
- 6 Projects identified through communities and councillors inputs.

26% of the available funds will be allocated to Soweto/Lenasia. The following Projects have been identified.

1 High Mast Refurbishment

The replacement of luminaries and lamps as well as lifting gear. R 1.5 million

2 Klipvalley Road/Fred Clark

The replacement of cables submerged in water as well as the replacement of stolen infrastructure. R 0.25 million

3 Dlamini Network Extension

The excavation and lying of street light network comprising poles and luminaries. R 0.2 million.

4 Mabalane Road – Merafe

Network upgrade comprising of 250W HPS energy saving Luminaries. R 0.25 million.

5 Legwale Street – Jabulani – Tladi

Network upgrade comprising of 250W HPS energy saving Luminaries. R 0.25 million.

6 Old Potch road – Bara to Southgate

Extension of the existing motorway lighting comprising of poles and energy saving luminaries. R 0.6 million.

2.5 REGIONAL CHARACTERISTICS, TRENDS AND IMPLICATIONS

This section deals with the regional characteristics, trends and implications in order to provide an overview of the Region's main features, trends, problems and opportunities.

2.5.1 Land use Management

Trends

Soweto is a vast, sprawling urban area. Although it has been referred to as a citywithin-a-city and is bigger than many cities, it lacks the typical range of uses, facilities and the urban cohesion. Land use and development is largely a result of restrictive legislation that regulated and controlled almost all development and produced Soweto's distorted land use pattern. There are numerous portions of vacant, developable land of various sizes, approximately 883.6 ha in total, half of which is unproclaimed and distributed throughout Soweto.

There are few access points to the area and internally, the maze-like roads provide indirect circulation. There are few significant sites for commerce, office, retail and industry. Community facilities are unevenly distributed and most sites designated for community facilities are undeveloped. Most parks, open spaces and vacant land are unmaintained, posing safety problems. Soweto does not have a town centre, but there are several nodes of significance, which are mainly associated with public transport. Although not as prominent as the nodes, a number of activity spines are emerging along key transportation routes. The river system provides a prominent open space network.

There is significant informal activity in Soweto. It occurs in houses (spaza) shops, at main intersections, bus stops, taxi ranks, and rail stations - areas with high volumes of pedestrians. Some of these outlets are set up in containers or makeshift structures, usually located illegally on road reserves or on undeveloped sites reserved for other purposes. While there are moves to manage illegal uses, a balance needs to be struck between good planning practice and the critical need for local economic development.

Implications

Residential uses (95% of all erven) with uniform high population densities but low building densities are still the dominant land use in Soweto today. Most shopping occurs outside Soweto, but recently local shopping centres have been developed e.g. Chiawelo, Protea, Eldorado Park, Pimville. The largest retail centre is Dobsonville Mall. Concurrently, there has been a proliferation of informal 'spaza' shops or house shops. Due to the kind of businesses operating in Soweto at present, the area has attracted limited office uses. Conventional office space is located at Jabulani, Eldorado Park, Dube, Dobsonville and Baragwanath. Occupancy levels very but it there is a general movement away from these areas as the Inner City becomes more attractive. Industry is proposed at Protea Industrial Park, Golden Triangle and Baralink.

Several significant nodes are found in Soweto. These include Baragwanath, Jabulani, Ikwezi, Dube, Dobsonville, Kliptown, Meadowlands, Eldorado Park, Crossroads and Merafi. The construction of Taxi Rank facilities adjacent to railway

stations has stimulated the local economy and emerging nodes are developing. Some of these nodes are experiencing major changes. Activity spines, not as prominent as the nodes, are emerging along Old Potchefstroom Road, Koma Road, the Soweto Highway and its extensions and Mahalefele Road. There is concern that uncontrolled development of these routes could lead to congestion and also weaken nodes. Land use and transportation management mechanisms are required. It is of paramount importance that the nodal and mobility policies should be applied in order to ensure that non-residential uses occur only in the specified nodes.

No overall Town-Planning Scheme exists for the area. Instead, Soweto is administered through an amalgam of planning legislation from the Roodepoort Town Planning Scheme, the Johannesburg Town Planning Scheme, Annexure F of the repealed Black Communities Development Act. In the mid 1980s, the Soweto Council initiated a process of formally establishing the Soweto Township with funding from the Transvaal Provincial Authority (TPA). However, the process is incomplete as some townships have not been established and the funding is no longer available.

The City of Johannesburg is in the process of establishing a uniform Land Use Management System which will govern all 11 Regions.

2.5.2 Environmental Management

Trends

The natural environment in the Greater Soweto Area consists of areas of urban development loosely intersected by the Vista Koppies, Pimville and Zondi Koppies and the river system that forms a prominent open space system. To a large extent, this open space and natural environment remains undeveloped as a direct result of the marginalized nature of the area with limited social and economic development opportunities, poor infrastructure services and the poor condition of housing.

Historically, there is no overall environmental management system which has resulted in a situation ranging from no overall environmental control to the most modern control system as applied by the Town Planning Schemes.

2.5.2.1 Parks and Open Spaces

The open spaces in the low income areas are not developed and very little attention is given to the environment in this areas. The haphazard open space network reflects that it is merely a reactive response on the vast development with very little proactive inputs. The reactive development has in the past and still continues to impact on the bio-diversity of the region. A concern is the number of undeveloped parks, which creates areas of vacant land, characterised by illegal dumping, littering and in some cases squatting. The problems surrounding vacant land especially with parks and public open spaces is a contentious issue that needs urgent resolution. Johannesburg Property Company is in the process of selling Council owned property in the greater Soweto Area in order to stimulate local development.

2.5.2.2 Watercourses and Wetlands

Consideration should be given to the protection and conservation of the watercourses and wetlands. The status of these watercourses and wetlands needs to be assessed in order to make informed decisions regarding their management.

As Soweto falls within the Greater Klip River Catchments, the areas alongside the Klipspruit and Klip River are often flooded after downpours due to the lack of adequate storm water control. A number of residences along this area experience periodic flooding of their property as a result of excess storm water.

The water resources are under great threat from the pollutants such as the urban storm water run-off and informal settlements. A proper storm water management system could assist in this regard. Clean up of rivers and parks is important and should be considered.

2.5.2.3 Red Data Species

The presence of Red Data Species (plants and grasses) and the conservation of the vegetation areas offer an opportunity in terms of potential recreation, eco-tourism and improved quality of life for all the inhabitants of the area.

2.5.2.4 Flora and Fauna

The natural vegetation type found in this Region is grassland with Bankenveld (a unique form of grassland that is potentially rich in biodiversity) as the dominant type. Most of Soweto's indigenous vegetation and environmentally sensitive land with high conservation potential is located on the above koppies or within the river system. There are no significant bird or fish species present. This is indicative of a disturbed and generally poor environment, particularly within the wetlands.

Implications

With over 600 informal dumping sites located on parks and open spaces throughout Soweto, illegal dumping and litter are common and pose health concerns. Environmental awareness is poor. The main source of air pollution in this Region is the domestic coal fires, with the pollution from industrial emission low in comparison with the rest of Gauteng. The informal settlements pose the main problems due to the high housing densities and the use of coal fires (suspended particles in winter days exceed the World Health Organisation Standards by over 1100%).

The Polifin Klipspruit Cyanide Factory (KCF) site located near the Klipspruit Dam contains 600kg of "free cyanide" in over 30 000 tons of sludge, due to former waste disposal procedures where waste was disposed directly into the Klipspruit Dam. Pollution seeping from this site could seriously affect the quality of surface and groundwater.

The river system is extremely polluted from a variety of sources mainly due to mining pollution (low PH values and high electrical conductivity and sulphate values), contamination from raw sewage (from overloaded sewers) and informal settlements located in the floodplains.

Air quality in Soweto is poor. Air pollution levels are particularly high during winter as anti-cyclonic airflow causes inversion, which traps pollutants. Factors affecting air quality include the following:

∉# Coal and motor vehicle emissions;

- # Untarred roads: The high percentage of untarred roads aggravates the dust problem;
- ∉# Mine dust: Mine dumps are likely to remain a major factor affecting both air and water quality in the area. Meadowlands experiences some of the worst mine dust problems in Johannesburg; (LIDP, 2002);
- # High and unsafe recordings (almost 10 times higher than the recommended guidelines) of asbestos fibres, which were used in 70% of low cost housing.

The criteria of topography, slope analysis, geology and environmental sensitivity were used to determine development potential. The highest development potential is found in the north. A large portion of Soweto is of moderate development potential (e.g. Jabulani CBD, southern portions of Baralink). A surprisingly small area has low development potential, which tends to run along the rivers and dolomite belt.

Parks and open spaces play an important role in the social environment of the city, if well developed. Therefore, the upkeep of these areas is important. The creation of the Metropolitan Open Space System (MOSS) is one of the key issues. The open spaces, parks and Nature Reserves currently form part of MOSS in the City of Johannesburg.

The MOSS will fulfil the following purposes:

- š Protect the sensitive environmental areas;
- š Provision of recreational spaces;
- š Assist with storm water management.

2.5.3 Economic Development

Trends

The legacy of Apartheid has had such a restrictive effect that Soweto remains economically entrapped. It continues to function as a dormitory town and labour reservoir for Johannesburg despite the rescinding of most of the legal constraints in 1994. This is highlighted by the fact that most workers (79%) work outside Soweto and significantly, 84% of disposable income is spent outside the area.

Soweto is characterised by:

- 1. High unemployment, which is estimated at 45%, significantly higher than Greater Johannesburg (31.8%).
- 2. A tiny commercial and industrial and rates base (as a result of historical legislative restrictions).
- 3. Low levels of income.
- 4. Limited internal circulation of money, reducing multiplier effects to probably around 1.0-1.3.

Economic development is dependant on key resources of labour, skills and capital. While Soweto has huge labour resources, these are relatively unskilled. The community is mainly working class. Professionals account 8.9% of the labour force while 23% are semi-skilled and 16.4% unskilled. With regard to capital, the economy is characterised by low levels of both private and public investment.

From 1990 to 1996, the Small Business Development Corporation approved a total loan amount of R33 629 065 to Sowetans. This is significant as mainly small loans (about R800) were disbursed and the 'reach' was large. With restructuring in 1996, Business Partners was established as a commercial enterprise and the size of loans increased to a minimum of R150 000 and a maximum of R15 million. This increased the quality of loans provided but reduced the 'reach' of entrepreneurs able to access loans. From August 1996 to 2000, a total of 87 loans were approved amounting to a total value of R36 066 669

Investment Environment

Investors perceive Soweto as a high risk, low yield area for a variety of reasons, some of which may be based on factors such as low incomes, poor governance and high crime.

There have also been major changes in the property market, mainly due to globalisation and the mobility of capital. The major South African investment institutions such as insurance companies and pension funds traditionally had an over-representation of property in their portfolios and have downscaled their property investments towards more balanced portfolios. In this light, improved economic prospects for Soweto are limited, unless significant public interventions are made to leverage private investment and unless the concerns of investors and developers are met.

In a survey of investors and developers, the following weaknesses were revealed:

- # Established patterns of consumption by Sowetans.
- ∉# Inadequate market intelligence.
- ∉ Lack of promotion.
- # Lack of political will and public commitment to Soweto.
- ∉# Gate-keeping mentality.
- ∉# Lack of financial incentives.
- ∉ #No official prioritisation of Soweto.
- \notin No direction / plan for the area.
- ∉ Poor access and internal circulation.
- # Lack of perceived rental, capital and income growth.
- # Aggregated fixed investment is needed to sustain market activities.
- # Lack of entrepreneurial skills and the capacity to raise funds and implement development.
- ∉ # Perpetuation of crime.

(LIDP, 2002).

2.5.4 Housing and Settlement

Trends

Housing remains the dominant land use in the Greater Soweto Area. The location of the formal and the informal settlements in the Region is a consequence of the previous political ideology and planning. Rental housing is the most common from of tenure that is available in the form of flats, backyard shacks, hostels. There are approximately 30 000 informal housing structures in the 25 informal settlements in Soweto. The combined population is over 116 000 with an average number of 3.5 people per dwelling unit or household. Soweto has about one third of all informal settlements (86 in total) in the Greater Johannesburg area. Added to this pressure, is the proliferation of backyard shacks that places immense strain on the existing infrastructure. It is estimated that as many as one third of the population of Soweto reside in backyard shacks.

2.5.4.1 Informal Settlements

Most of the informal settlements in Soweto (84%) are concentrated around the Klipspruit Valley area. Some of these settlements have existed for more than 10 years. Most occur in environmentally unsafe areas, such as within a 1:50 floodplain or located on ash dumps, next to mine dumps, open shafts, sink holes, etc. They tend to have a poor quality environment, inadequate services, and lack of bulk infrastructure and social and community facilities.

The housing transfer process is seen as an important instrument for economic development since housing assets can be used as collateral in business transactions. In this light, the fact that only 34% of Soweto housing stock is privately owned, limits the development of a property market and importantly, affects economic development prospects for many Sowetans.

Mobility in the housing market is also limited, due in part to previous restrictive legislation, the lack of a real property market and general shortages of affordable housing. Significantly, over 40% of households have lived at their current address for 19 years.

The following table depicts the total number of recorded informal settlements in the Greater Soweto Area: (COJ, Housing 2002).

SETTLEMENT	STRUCTURES
Naledi Camp 1	254
Naledi Camp 2	526
Naledi Camp 3	100
Dhlamini Camp 1	284
Dhlamini Camp 2	346
Dhlamini Camp 3	452
Slovo Park	1052
Ebumnandini	4500
Doornkop/Thulani	14500
Protea South	3079
Fred Clarke	258
Chris Hani	1205
Freedom Square	2691
Orlando East	403
Diepkloof	1289
Johnsonstop	445

Mandela Square	878
Tamatievlei	443
Racecourse	177
Winnies Camp	141
Geelkamers	81
Angola	630
Ngubane	135
Freedom Park	4730
Mshenguville	481
Orlando East	500
Emagandagadini	978
Total	38 866

2.5.4.2 Formal Settlements

In the early 1980s, the public authorities in Soweto encouraged involvement by the private sector. The public authorities made land available for housing development through land availability and service agreements. A number of housing infill schemes throughout Soweto were implemented. However, only 19 883 houses have been built by the private sector (GJMC, October 1999). This constitutes 16% of the formal houses and 6.6% of all dwelling units in Soweto.

All new housing development has been led by the private sector, with the largest developments occurring to the West and north of Soweto e.g. Protea Glen and Diepkloof extensions. The annual take up rate of private sector housing is limited (700 houses per annum) and average prices fluctuate between R65000 and R90000. Stand prices in Protea Glen were sold for between R16000 to R20000.

Housing Provision and Categories

One third of all Sowetan housing was built by the City Council/TPA between 1956 and 1968 after a financial kick-start from the private sector. Housing was built at a rate of up to 40 units a day. The 1950s also saw the development of Meadowlands and Diepkloof by the State to relocate blacks from declared white areas like Sophia Town. Soweto's historical housing backlog persists.

Soweto had a variety of house types before publication of the "Green Book" in 1951, which introduced standardised housing. The subsequent housing schemes that were built were predominantly on stands between 230-260m2. Five broad housing categories can be distinguished.

- ∉# Council houses 36% of total units but occupied by a larger proportion (57%) of the population.
- ∉ # Private sector houses about 7% of dwelling units.
- ∉# Hostels (8% of dwelling units).
- ∉# Informal settlements (including site and service schemes) 6% of dwelling units.
- # Backyard structures constitute the largest proportion of total housing units (over 40%) while accommodating only 20% of the population. Most

backyard structures, which include formal (garage and outside rooms) and informal buildings (shacks).

Current Public Sector Involvement

New housing is being built in the north west of Soweto. About 5000 units have been built at Brink's Vlakfontein and 20 000 units are proposed for Bram Fischerville and the proposed Doornkop extensions. (The first phase of 5000 units is complete.) Other initiatives to address some of the housing problems include a Council housing transfer process which entails the sale and transfer of Council housing stock to tenants; upgrading of hostels into family units and an informal settlement upgrading programme which encompasses the relocation, upgrading and de-densification of informal settlements. Only Motswaledi, Freedom Park and Ruth First have started.

Density

Statistics on densities in Soweto vary considerably between 42/7 people per hectare compared with the average density for Greater Johannesburg of 25 people per hectare. Backyard structures show the highest average number of people per stand (10.1), followed by Council housing (7.6), private sector housing (4.7), informal settlements ((3.7) and hostels (2.7). With regard to room occupancy by dwelling unit, the more informal the housing, the higher the number of people. This varies from 2 to 3 people per room.

Tenure

Rental housing is the most common form of tenure. This is largely due to the discouragement of urban permanence. From 1983 the State initiated a house purchase scheme. The response was poor as only 2 852 houses were sold after a nine month period despite fair prices. Council houses are now being transferred to tenants and/or claimed in terms of the Housing Bureau process in Soweto and in terms of the State Discount Benefit of R7500 in Eldorado Park and Klipspruit-West. In most instances, the discount of R7500 does not cover the full purchase price. Tenants are therefore required to pay the difference either in cash or obtain bonds.

2.5.5 Transportation

As Soweto is located 15km south west of the Johannesburg CBD, the vast majority of people commute to the CBD. The long commute, historically poor roads and restricted access both into and through Soweto has created a particularly inefficient and poorly structured transportation system. There is a growing trend towards private motor vehicle usage but this in no way negates the importance of public transport.

There are a number of transportation authorities and service providers with different strategies and priorities for addressing transportation in Greater Soweto:

- # National Department of Transport (the existing N1 and proposed N17 freeways).
- # Gauteng Department of Transport and Public Works (Provincial road network PWV and "K" routes).
- ## Greater Johannesburg Metropolitan Council (the defined Metropolitan roads and proposed Metropolitan transportation planning routes).

- # Transnet/Spoornet/Metro Rail/South African Rail Commuter Corporation (SARCC).
- # Private (subsidised and unsubsidised) bus companies
- # A multitude of taxi operators (organised / unorganised and legal / semi-legal / illegal).

2.5.5.1 Current Planning and Construction Initiatives

The Gauteng Transport Framework Bill makes provision for the establishment of transport authorities in the Province. The Bill resulted from the Gauteng White Paper on Transport Policy, November 1997 that identified the need for a co-ordinated approach to land use, transport planning and implementation as well as the establishment of institutional structures to ensure co-ordination of transportation within metropolitan areas.

Previous transport plans prepared for Greater Johannesburg will be replaced by an Integrated Transport Plan (ITP) - a Metropolitan Strategic Transport Plan. This Plan, based on spatial and economic trends and the existing transportation systems, will be reviewed annually and incorporated into the LIDP process. It will attempt to integrate transportation planning across departments and at a Provincial level.

The draft ITP proposes major transport corridors following the nodes and mobility spines as identified in the Spatial Development Framework (SDF) for Greater Johannesburg.

- ∉# Upgrading of existing mobility spine;
- ∉ # Main Reef Road (West) link south to Dobsonville Road;
- # Southern Development Corridor (N1) link up to the Golden Highway;
- # Moroka Bypass and Old Potchefstroom Road.

Future Mobility Spines:

- ∉# North south.
- # Soweto West to Roodepoort Business District.
- ∉# Baragwanath to Roodepoort.
- # Southern development zone to Auckland Park / Beyers Naude
- # Retail corridors are proposed along the existing infrastructure as part of the transportation system to and from the Johannesburg CBD. A limited number of decentralised nodes are proposed at concentrated activity areas that attract (or will attract) high levels of travel demand. Baragwanath and Jabulani are envisaged as future Metro transport nodes. The nodes will be connected by high frequency services and act as major transfer points to destinations off the major system corridors.

The First Integrated Transport Plan has not as yet received Council approval and therefore does not have full standing status. The key proposals as mentioned above may therefore be subject to change in the final ITP. The document does, however represent a substantial body of work which will provide useful insights to future planning and policy.

2.5.5.2 Trends

Minibus-Taxi

The minibus-taxi is the major mode of transport in Soweto. Taxis account for nearly half of users (46.3%) whilst train and bus transport just 16.6% and 9.3% respectively. Mixed-mode journeys amount to only 5% of trips. Minibus-taxis are also the most time-efficient mode of transport, apart from private cars. According to the Central Witwatersrand Regional Services Council's Regional Passenger Transport Plan (RPTP) of 1993, the average travel time of Soweto commuters in 1992 was 55 minutes. Rail being 77 minutes, minibus-taxi 49 minutes, car 42 minutes and walking 21 minutes. However, SARCC's research, estimates average rail travel time at 45 minutes. Estimated rail travel time at 45 minutes. Estimated rail travel time at 45 minutes for train, 8 minutes for bus and 7 minutes for minibus-taxi passengers.

The upgrading of taxi ranks is therefore seen as important from a metropolitan perspective. Priorities include Bara, Ikwezi, Freedom Square and Phefeni. Both the minibus-taxi and bus services are being rationalised. For minibus-taxis, this includes efforts to register taxi operators and routes and proposals to increase the size of vehicles for efficiency and safety purposes.

Due to the informal nature of the industry, operators have generally chosen their own routes, which are not in the interest of an efficient metropolitan transportation system (e.g. turf battles have historically decided routes and violence has impacted on certain routes). Routes, therefore, are complicated and co-ordination of routing is required. The majority of routes change between R2.50 and R3.50 with R3.00 being by far the most common fare (Current Public Transport Record 1999).

Bus

The Greater Soweto area is services by Eldo Coaches, Eyakho and Comuta. The Metro Bus service does not have permits to operate to or from the area. Rationalisation of the bus service includes proposals to co-ordinate the feeder and line-haul routing system by formalising natural transfer points on the borders of Soweto (e.g. Baragwanath) instead of using a starting points within Soweto which give most bus routes a feeder as well as line-haul function, which is both inefficient and time consuming.

Rail

Two rail lines service Soweto and there appears to be no immediate constraints in the system. Eight rail proposals affect Soweto but these are long term and compete with other national rail priorities, calling into question the likelihood of implementation. Use of rail has declined substantially in the last decade. The table showing preferred mode of transport on the previous page shows that in just three years - from 1989 to 1992 - rail declined from 49% as a favoured mode of transport to 13%. Intersite has, however, undertaken a major revamp of 14 stations, e.g. Ikwezi.

2.5.5.3 Development Direction

Soweto's isolation is most evident in its lack of road linkages and access. External linkages are limited as well as northern access from the two interchanges onto the N1 P. Internal linkages are indirect and many local roads are unpaved, particularly in the Western portion of Soweto. The main congestion points are concentrated in the approaches to Jabulani CBD and nearly all inbound routes have little spare capacity

or are overloaded. In terms of the definition of a corridor, please see the attached Nodal Policy definition of corridors as well as the illustrated example.

2.5.5.4 Implications

From a Transport point of view the major problems are:

- š The major problems will be caused by the continued growth in the area, placing a burden on the already congested infrastructure.
- š Provision needs to be made for adequate transport infrastructure, which to a large extent will be road based.
- š Continued expansion of informal residential areas placing further pressure on the existing public transport system.
- š Mini-bus taxis will continue to predominate the public transport sector.
- š There are limited linkages to the regional network and there are therefore limited choices in the routes available to communities.
- š There needs to be effective co-ordination between the different modes of services at key area such as railway stations and taxi ranks.

SECTION THREE

POLICIES AND STRUCTURING ELEMENTS

3.1 STRATEGIC SPATIAL ELEMENTS

The Spatial Plan is based on seven strategies that address a more sustainable urban environment with inherent savings as a result of greater efficiencies. Although these aspects are presented here in separate sections, they are inter-related and impact on one-another.

The elements are:

- ∉# The Movement System
- *∉*# Nodal Development
- # Sustainable Neighbourhood Development/Densities
- ∉# Environmental Management
- ∉# Corridor Development.
- ∉ Design guidelines
- ∉# Urban Development Boundary (UDB)

3.2 MOVEMENT SYSTEM

The SDF has a range of policy guidelines developed to support the City's current and future transportation needs. An Integrated Transport Plan (ITP) is being developed for the City that will consider a much wider base of transportation issues in detail.

AN EFFECTIVE MOVEMENT SYSTEM CAN:

- ∉# Support public transport
- # Promote accessibility of communities to employment, recreation and social opportunities
- # Promote protection of mobility function of major arterials and roads
- # Ensure that the movement system directly links with, and is supported by, strong high intensity nodes and higher density residential development

The movement system is seen as one of the key structuring elements within the urban area. Cities are to a large extent "movement economies", and the efficiency of the urban system is, therefore, directly related to the efficiency of the movement system. Three main strategic issues are at the core of the strategy:

- # Changing from a predominantly private vehicle transport system to an appropriate publictransport system over the long term
- # Ensuring that the mobility function of major roads is retained and enhanced
- # Ensuring that the movement system links directly with, and is supported by, strong highintensity mixed-use nodes and higher residential densities.

In a number of strategic areas, the City's road system has been compromised over a period of time owing to unmanaged location of activities (both legal and illegal) and the accesses pertaining to these activities. Uncoordinated management of the levels of access on the movement system will have an increasingly negative impact on the traffic flows and ultimately on the sustainable development of an area.

The table below defines various road types and indicates and identifies the interrelationship between movement and activity. This comprises the Mobility Policy.

REGIONAL SPATIAL DEVELOPMENT FRAMEWORK. 2003 ADMINISTRATIVE REGION 6 AND REGION 10

DEVELOPMENT COMPONENT	LAND USE	FUNCTION AND DESIGN
MOBILITY SPINES	2,412 002	
A Mobility Spine is an arterial along which	Nodal	∉# Mainly for inter regional mobility
through traffic flows with minimum interruption	development	# Standard of vehicle intersection spacing tends to
(optimal mobility), whilst development abutting	Higher density	be lower
the spine is in terms of specific policy criteria	residential	∉# No direct access
relating to the type of land use to be		# Access from side roads or service roads
accommodated and to level of access.		Consider pedestrian movement and public
Mahility Onigon and he sub slassified into Llinkar		transport services.
Mobility Spines can be sub-classified into Higher or Lower Order roads. The shift from one order		Provision of pavements for pedestrians
to the other will depend on the intensity of activity		Restrictions on frontage access – controlled
and subsequently the need for the provision of		access
more or less accesses.		# Provide public transport facilities
		∉# Ensure pedestrian access
MOBILITY ROADS		
	Local nodal	# Shorter distance distribution
A Mobility Road carries mainly intra regional	development	∉# Link between the urban main road system and
traffic i.e. Traffic of a local nature. The focus is	Higher density	neighbourhoods
on mobility along the route. It is of a lower order than a mobility spine. It often connects mobility	residential	∉# Limited direct access
spines or neighbourhood nodes.		∉# Ensure pedestrian access
spines of heighbourhood hodes.		∉# Provide public transport facilities
		∉# Provision of pavements for pedestrians
ACTIVITY STREET	Desidential	
An Activity Street is a local street where access	Residential Business	4 Accommodate padactrian intensive year
to the activity along the street is of paramount	Retail	# Accommodate pedestrian intensive uses
importance. Mobility is compromised in favour of	Retail	 ∉# High level of (direct) access ∉# Speed calming
the activity.	All uses to be of	
	a local and fine	 ∉# Provide public transport facilities ∉# Activity preferably one block/erf deep
	grain nature	
LOCAL RESIDENTIAL STREET	<u> </u>	
A Residential Street is a local road that serves	Residential	Provides direct access to residential property
primarily local traffic accessing the served area.	uses	∉# Facilitates mixed traffic within neighbourhoods
	Low intensity	safely and at low speed
	non-residential	# Provision of pavements for pedestrians
	uses, as per	∉# Feeds into arterial road
	sub-area tables	

The uses to be supported adjacent to Mobility Spines and Mobility Roads are only permitted in designated areas specified in terms of the Development Management / Interventions Tables per Sub Area and indicated on the Regional Spatial Development Frameworks.

Apart from a roads' based transport system, the City has an existing rail network that will be enhanced by the proposed Gautrain project. Rail has the benefit that it can move a large number of people and that the stations can act as catalysts for development. It is acknowledged that this important structuring element is not being not being fully utilised presently.

It is essential to ensure proper integration between road, rail and air transport as well as between private and public transport options. For this purpose the feeder system servicing nodes and stations needs to be developed. This will allow passengers to make more choices between transport modes and would result in greater economies of scale and urban efficiencies.

3.3 NODAL DEVELOPMENT

Numerous activity nodes have developed throughout Johannesburg and are important structuring elements within the City. As they develop and re-develop in a cyclical manner, nodes impact on the surrounding areas. Declining and / or stagnant nodes have a detrimental impact on both public and private investments. It is therefore, important to manage the growth of nodes as a strategic element within the urban context at both local and metropolitan levels.

Nodal Management serves to:

- # Ensure clustering of various activities at appropriate locations
- # Support viable public transport
- # Create opportunities for people to manufacture, trade and provide services (e.g. establishment of markets)
- # Maximise opportunities and diversity at accessible points
- ∉# Support Inner City focus
- # Combat / manage investment leakage and degradation of nodes
- # Ensure that re-investment, rather than flight to a 'new' node serving the same or similar purpose, occurs

The intention of the Nodal Policy is to ensure that the urban structure is sufficiently robust to allow these urban opportunity areas to adapt to market and demographic changes.

In general terms, nodes have the following fundamental characteristics:

- Clustering of activities to achieve economic efficiency
- Accessibility via public and private transport
- Nodes may accommodate a single land use (e.g. industrial or commercial) or a mix of uses. These may include a range of public facilities (e.g. hospitals, municipal offices, libraries) depending on the node's role and function within the City.
- there is a recognisable centre or core, which supports a pedestrian environment and public spaces, but does not necessarily exclude vehicular traffic.

3.3.1 GENERAL PRINCIPLES

The following generic principles need to be applied to inform nodal development throughout the City:

- # The size (geographic spread) of the node is determined by the node's function in the City, its proximity to and the role of neighbouring nodes. The catchment area for users is relative to the node's size and the types of services offered.
- # Density and intensity of development within a node is determined by the mixture of land use activities, the supporting transport infrastructure, public facilities and services infrastructure.
- # The relationship between transportation routes / facilities and land uses are major structuring elements of nodes, which in turn structure the City.

From a City management perspective, the main issues pertaining to a particular node relate to:

- *∉*# Size and significance
- ∉ Physical configuration/ Classification
- ∉ Modal cycle phase
- # Relationship to Road Classification (as per Mobility Policy)
- # Integration into the development lattice

i) Size and Significance

The size, scale and significance of the node in relation to the metropolitan area are described in terms of it having neighbourhood, district or regional importance.

NODES, SIZE AND SIGNIFICANCE

Neighbourhood	# Serves 1 or more local neighbourhoods
	∉# Meets local needs
	∉# Pedestrian friendly
	<i>∉</i> # Generally have on street parking
	∉# Situated on mobility roads
District	∉# Serves Sub-regional areas or districts
	# Larger than neighbourhood nodes but may still serve the local market as well as the broader
	community.
	∉# May have developed from neighbourhood nodes.
	# May have specialised services e.g. offices, industry
	# Public transport access
	∉# Situated on mobility spines supported by mobility roads*
Regional	et Regional significance (attract people from city-wide and beyond) due to variety of goods,
	services and speciality products, based on its scale and development intensity.
	∉# On site parking
	<i>∉</i> # Public transport access
	# Situated on mobility spines supported by urban freeways and mobility roads*

ii) Physical Configuration / Classification

Four classes of activity areas are defined in terms of their configuration; Points, Strips, Activity Streets and Nodes.

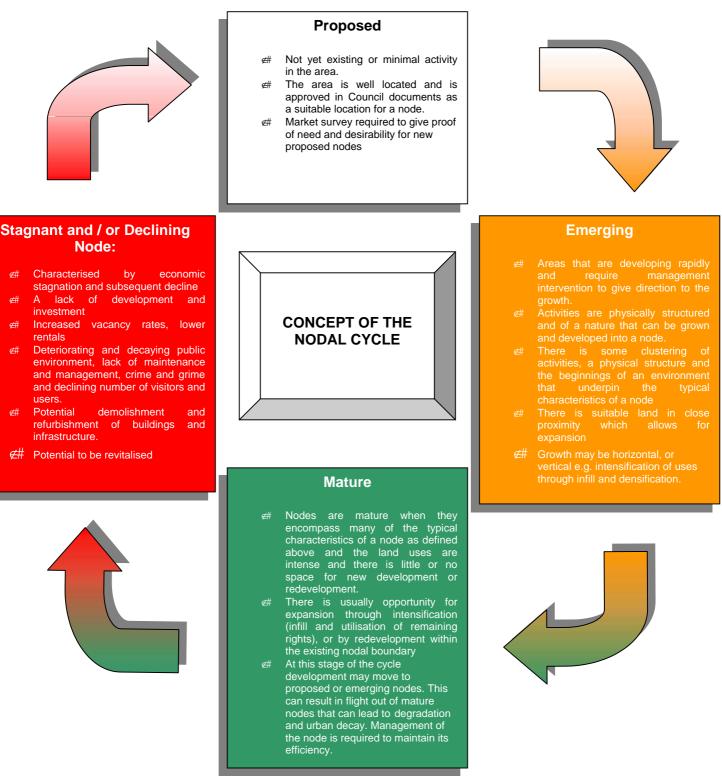
CLASSIFICATION OF NODES

CLASSIFICATION		CHARACTERISTICS
Point	∉#	Contained within one building or development
	∉#	At the intersection of 2 routes
	∉#	Good access
	∉#	Single land use
	∉#	Single land owner
	∉#	Low intensity development
	∉#	Neighbourhood, district or regional significance
	∉#	E.g. filling stations as neighbourhood points
Strip	∉#	Linear form
	∉#	Along a mobility road or spine, preferably on a service road
	∉#	Single or mixed land uses
	∉#	Single or multiple land ownership
	∉#	Movement is vehicle related, not pedestrian focussed
	∉#	Differs from Activity Street that is pedestrian related.
	∉#	District or regional significance
	∉#	E.g. 7 th Avenue Parktown North
Activity Street	∉#	Mixed use, the traditional "high street"
	∉#	Pedestrian dominant with slow moving traffic
	∉#	On street parking
	∉#	Fine grain urban fabric, short blocks
	∉#	Maximum length is 10 minute walk
	∉#	Neighbourhood, district or regional significance
	∉#	E.g. 7 th Street Melville
Node	∉#	At the intersection of metropolitan movement routes – good access
	∉#	Good public transport
	∉#	Mixed land uses activities – public and private investment
	∉#	Intense concentrations of activity
	∉#	Multi-ownership
	∉#	Size depends on access
	∉#	Neighbourhood, district or regional significance
	∉#	E.g. Sandton

iii) Nodal Cycle

Cities, and their constituent nodes, go through phases of growth and development, reach maturity and then decline. In theory, points can grow to become strips or nodes. Nodes can develop out of activity streets etc. The growth, and decline, of nodes depends on their location, the road system, infrastructure capacity, proximity to other nodes, the character of

the area as well as need and desirability. The cycle needs to be understood as it affects the manner in which various nodes are managed as illustrated below.



iv) Relationship With Road Classification (As per Mobility Policy)

Activity cannot be detached from movement in urban systems.

MOVEMENT COMPONENT RELATIONSHIP TO ACTIVITY AREAS Mobility Spine Existing points, strips, activity streets and nodes can be found Arterials along which through-traffic flows with minimum intermittently along the length of a mobility spine. At these areas interruption (optimal mobility). Development abutting the spine is the mobility function may be compromised in favour of activity. in terms of specific land uses and levels of access. New developments to be designed so as not to impede mobility. Mobility Road Mobility roads could connect points, strips, activity streets or Carries mainly intra-regional traffic (of a local nature). The focus nodes, or a mix of these. The areas being connected are of local is on mobility. It is a lower order than a Mobility Spine. Connects or district significance. Mobility Spines or neighbourhood nodes Points, strips and activity streets of neighbourhood significance. Activity Street A local street where pedestrian movement and access to the Note: Activity Street is a classification of both the Nodal and the activity along the street are of paramount importance. Mobility is **Movement Policies** compromised in favour of activity.

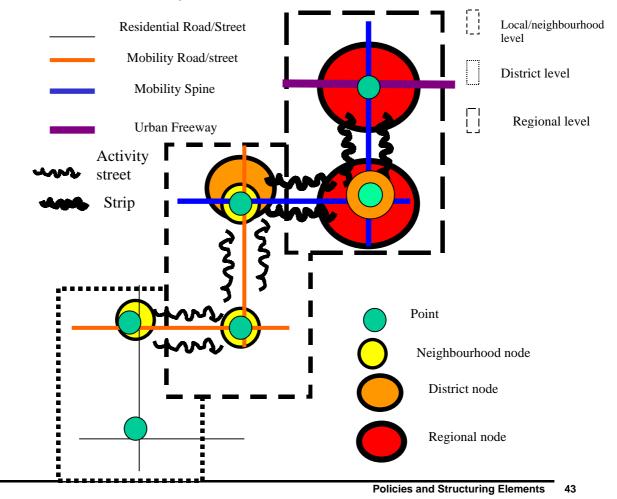
Nodal Relationship With Road Classification (As per Mobility Policy)

v) Integration into the Development Lattice

All the preceding structuring elements are integrated into a conceptual development lattice encompassing :

- # A hierarchy of nodes, occurring at major intersections
- # The level of accessibility afforded to each node
- # Linkages between nodes via mobility spines and mobility roads
- *∉*# An extensive public transport network

One advantage of the development lattice is the protection of neighbourhoods where particular land-use activities, such as residential suburbs, are protected and consolidated. Unnecessary movements and/or conflicting land-use activities are directed into more appropriate locations. The diagram below conceptually illustrates the manner in which the City can accommodate nodes of varying levels of significance and configuration within the context of the movement system.

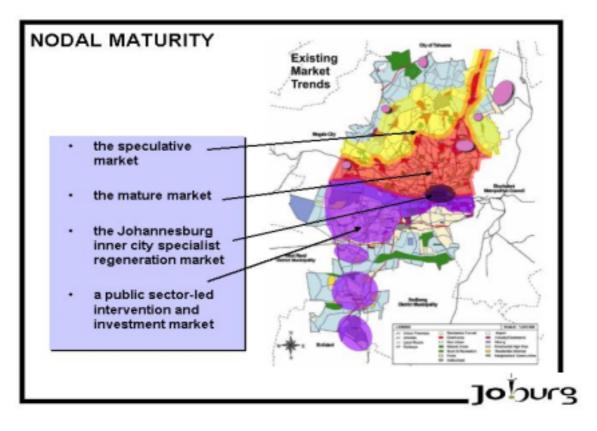


3.3.2 THE NODAL STUDY

A Nodal Study has been undertaken with specific reference to certain identified nodes. These were: Woodmead; Sunninghill; Bryanston; Fourways; Sandton Business District; Rosebank with reference to Parktown, Illovo and Melrose Arch; the Marlboro, Wynberg & Eastgate Extensions industrial area; City Deep / Kaserne; Baralink; Jabulani; Hyde Park; Midrand; Bruma / Eastgate; Constantia Kloof and Randburg.

i) Nodal Markets in Johannesburg

The outcome of a property economic assessment of the nodes in Johannesburg highlighted the emergence of a number of markets that characterise the development of the City as illustrated below.



- *∉*# A public sector-led intervention and investment market: Development in this area occurs predominantly as a result of public investments and public development, forming development catalysts. The major areas occur from the Inner City southwards, including Soweto, Lenasia, Ennerdale and Orange Farm. Isolated pockets of publicly led investment occur in the northern areas, including Alexandra, Cosmo City, Diepsloot, Ivory Park and others.
- š The Johannesburg Inner City specialist regeneration and rejuvenation market: Development within the Inner City is initiated by both the public sector and the private sector, which often work in partnership.
- **The "mature" market**: The consolidation of the property market in an east-west band from Parktown northwards to Randburg, Sandton and Woodmead. It is characterised by a number of mature activity nodes and associated mobility spines, mobility roads and activity streets. In general development activity is consolidating in the nodes, but intensifying and expanding along the routes that link these nodes.
- š **The "speculation" market**: The supply driven market, situated in a band north from the "mature" market to Fourways, Rivonia and Sunninghill. This market is driven by property speculation.

The nature of the property economics within each market sector requires a tailored property management response. :

- # "Mature" market: Consolidation and intensification of the nodes, and where appropriate in line with the Mobility Policy, directing development along the mobility spines and roads, as well as activity streets.
- # "Speculation" market: Directing all development into the nodes, combined with the total prohibition of development along the mobility spines and roads (until the nodes have developed to their capacities).
- # The "**public-led intervention**" market is reliant on public sector funding initiatives that can "kick-start" development, for example within the Jabulani node in Soweto. These public-led interventions seek to provide a favourable investment environment to which the private sector can respond independently or via public-private partnerships.

The spatial urban structure of these markets is highlighted as follows:

- # The "mature" market comprises a series of established nodes that are linked through mobility spines and roads, including activity streets. This structure begins to form a development lattice, based on a distorted street grid, along which development is occurring (at the moment in a hap-hazard and expanding manner and often illegally without Council knowledge or consent).
- # The "**speculation**" **market** comprises a series of emerging nodes, as well as emerging mobility spines and roads. The pattern of development is similar to that of the aforementioned lattice, but is very much in its infancy. To ensure the development of a logical urban structure it is essential that these nodes and surrounding areas achieve a level of maturity before development outside the nodes (along mobility spines and roads) is allowed.

In the "Mature" Market Area,

- # Physical development and growth is managed both within the nodes and along the mobility spines and roads, as per this Nodal Policy and the Mobility Policy.
- # Development and growth is consolidated within the current nodes. When nodes within this band are operating at optimal levels and there is limited opportunity of further intensification of land uses, additional development will be located in surrounding nodes.
- # Only when these are operating at optimal levels, will non-residential development be permitted along the mobility spines and roads, and then, it will be within certain development parameters and design principles.
- # Development "spill over" is therefore subject to the above-mentioned development pre-requisites.

In the "Speculation" Market Area development must be directed into the nodes and no development should be permitted along the mobility spines and mobility roads until such time as the development pre-requisites of maturity have been met.

In the "Public-led" Market Area :

This band includes the previously disadvantaged areas, which never had well defined or developed nodes. Opportunities presently exist to change this situation and to incorporate public transport facilities and open space into the nodal system. Vital development components such a infrastructure, roads, transport and community facilities need to be the focus of public investment in identified nodes.

3.3.3 MANAGEMENT OF NODES

Guidelines for the assessment and management of development in existing and proposed nodes are noted in the table illustrated below.

NODAL MANAGEMENT GUIDELINES

Urban Management	∉#	Promote a property owners' association or Business / City Improvement Districts (CIDs).	
and Maintenance	∉#		
Public transport and	∉#		
pedestrian focus	∉#		
	∉#		
Train Stations	∉#	Precinct Plans required for all major existing and proposed stations	
	∉#	Plans to consider:	
		 Residential densification 	
		 Pedestrian access, linkages and movement 	
		 Dedicated road-based feeder and distribution systems 	
		 Road network improvements, (road intersections, station access intersections, parking areas and 	
		facilities).	
		 Assessment and the upgrading of service infrastructure 	
Parking	∉#	Parking for both public and private vehicles should not inhibit pedestrian movement and social activities.	
	∉#	Limited on-street parking on the main roads if these are not on mobility spines or roads.	
Security	∉#	Security is enhanced when open spaces are well used, have buildings facing onto them, especially residential,	
		where there are people 24 hours a day and the space is lit.	
Public Institutions	∉#	Health, education, social, religious and other public facilities that attract a constant flow of people should be	
		used as 'anchors' in nodes (aim to maximize private investment in proximity to these facilities).	
Surrounding areas	∉#	Highest intensity of land use must be within the nodes	
	∉#	The intensity of land uses scales down away from the node into the surrounding urban fabric.	
	∉#	Mixed land uses in the node only.	
Residential uses	∉#	High density residential in and around nodes	
	∉#	Residential use encouraged in the same building as other land uses	
Horizontal / lateral	∉#	Horizontal spread of nodes to be contained within defined boundaries and according to the road type and	
extent of the node		capacity, infrastructure capacities and neighbourhood character.	
	∉#	Nodal boundaries as per the Management Tables in the RSDFs, Precinct Plans and/or this policy.	
	∉#	The site next to existing non-residential uses in a node and facing on to the main road, may be utilised for	
		lower order uses so as to form an interface with the surrounding residential urban fabric. The extent or	
		geographic or lateral spread of a node is thus contained to within designated nodal boundaries. These	
		boundaries recognise existing and approved (but not lapsed) rights.	
Access	∉#	Vehicular access as per the Mobility Policy	
Filling Stations	∉#	Filling stations to be regarded as neighbourhood points and contained as per the point classification (approval	
		must not result in further non-residential land use change in immediate surroundings).	
Informal trade	∉#	Market places and facilities to be accommodated in the design.	
Public Environment	∉#	Extensive landscaping/colonnades/covered walkways for beautification and protection from the elements.	
	∉#	Outdoor spaces must cater for the elderly, young and disabled – e.g. ramps, seating, shade	
	∉#	Buildings need to front directly onto the street and have active ground floor uses. In this way they become	
		"walls" and give enclosure.	
	∉#	Linkages between the nodes need to be identified in an easily recognisable manner.	

3.4 SUSTAINABLE NEIGHBOURHOODS

Residential developments should support the urban structure, with the following implications:

- š Residential densification is supported in and around nodes and along the movement network, in support of vibrant nodes and viable public transport.
- S Densification should occur in accordance with Regional Spatial Development Framework (RSDF) guidelines and provide for different densities to complement the urban form and preferred city structure.
- š The development of new residential areas should complement the urban structure, through adequate provision for social and economic land uses. This should include adequate provision for functional open space as part of the Metropolitan Open Space System.
- s Layouts should be focused on creating sustainable neighbourhoods with a variety of housing options and robustness to meet changing demands over time.

Housing cannot be viewed in isolation, but should be assessed in conjunction with infrastructure services, social services, transportation, economic opportunities and the natural environment. Housing should also be addressed in terms of security of tenure as well as access to rental stock, services and facilities.

3.4.1 DENSITY POLICY

The SDF promotes the strategic residential densification:

- š In and around nodes
- \check{s}^{\cdot} Along mobility spines and mobility roads in support of public transport
- š On the periphery of open spaces
- š Within areas of focussed public-sector investments (e.g Kliptown, Alexandra)
- š In selected areas of strong private sector investment in economic activity as highlighted in the RSDFs

WHY DENSIFY?

- *∉*# Ensures a diversification of housing typologies
- # Promotes adequate provision of social and economic amenities to ensure better quality of life
- ∉# Promote safety through design
- # Reduce travel and transaction costs through appropriate design
- # Rationalisation of housing patterns in relation to urban opportunities and public transportation

The densification approach has a number of important **benefits**:

- š The viability of existing and proposed public transportation infrastructure and services increases in areas of higher densities given the increased potential number of uses.
- š Higher density development optimises the use of land and provides accommodation in close proximity to urban opportunities.
- s Densification promotes the efficient use of existing infrastructure and can be implemented in a phased manner with obvious cash-flow advantages.
- s Appropriate densification can improve residents' quality of life as it brings them closer to urban opportunities and reduces travel time.
- s Densification reduces pressure for the development of open spaces and environmentally sensitive areas due to the optimal use of available land.
- š Densification together with appropriate sustainability measures can reduce air, water and land pollution.

However, the City also acknowledges that there are **concerns** about densification:

- š Significant public expenditure is needed for the development of an integrated movement system, including a reliable and efficient public transport system. There is a limited capital fund within the public sector in the short term to either carry the cost of actual developments, or to provide infrastructure across the City in support of densification.
- š The market is largely demand driven and profit oriented. This means that the areas of densification and the rate of development in support of densification are dependent on market demand, capital availability and profit. The intention is to channel market supply into strategic areas.
- š It is hard to find well-located land for housing for the poor.
- š Residents have diverse requirements and need areas of both low and high densities.
- š Higher-density living environments require an appropriate design to mitigate against social stress.
- š Higher densities may result in concentrations of air and noise pollution.

i) Dynamics Of The Johannesburg Scenario

The City has introduced a gross Base Density of 10 units of hectare to guide future residential developments. Beyond the citywide base density, locational factors may increase the Base Density figure in accordance with the RSDF's Density Calculation Table. These factors may include the proximity of a site / area to one or more of the following: public facilities (e.g. school, open spaces) and public transport routes. In an instance where an RSDF stipulates a density of less than the Base Density, the lower RSDF density will prevail.

In all instances, development must not overload the capacity of existing public infrastructure including bulk services, streets, open spaces and social and community services. Special note needs to be taken regarding densification in the following instances:

ii) Nodes

The Base Density is the minimum density applicable in the City's nodes. The potential increase of population within demarcated nodes with their range of employment, recreation, educational, commercial and retail uses will curtail travel demands. These locations have the greatest potential for the creation of sustainable patterns of development. Such an increase in population will assist in urban regeneration, make more intensive use of existing infrastructure, support local services and employment, encourage affordable housing provision and sustain alternative modes of travel, such as walking, cycling and public transport. Increased densities may be controlled in terms of design criteria. In order to maximise nodal growth, there should, in principle, be no upper limit on the number of dwellings that may be provided in any node subject to the following safeguards:

- # Compliance with existing policies / development plans.
- # Avoidance of undue adverse impact on the amenities of existing or future adjoining neighbours.
- *∉*# Availability of adequate services

iii) Infill Residential Development

Infill residential development may be facilitated on single sites or on larger sites assembled from different landowners. In residential areas where a unique ambience and character has been established owing to particular density or architectural aspects, a balance has to be struck between the reasonable protection of this character and the desire to encourage residential infill.

iv) Outer Suburbs

These are the outer suburbs on the periphery of the City but within the Urban Development Boundary. These areas currently represent the largest growth in terms of residential development within the City and hence provide an opportunity to be developed at appropriate densities. It is, therefore, recommended that these areas be guided by the base density policy and design criteria as per the applicable RSDF.

v) Historically Disadvantaged Areas

The majority of historically disadvantaged areas were generally developed with higher densities. The application of a base density would be difficult to apply within existing townships due to numerous historical abnormalities. However, the base density policy may be applicable to new developments.

The aim of densification in these areas is twofold. Firstly to achieve a desired urban fabric that is in accordance with the established areas of the City. Secondly, it is to aid the much needed restructuring of these areas.

vi) Site Specific Dynamics

In assessing higher density development proposals, Floor Area Ratio (FAR) and coverage are not the sole criteria that need to be considered. An integrated assessment of site-specifics and the surroundings needs to consider:

- The location and use of adjacent buildings
- Street frontage features
- The built form and character of adjacent developments
- The difference in levels between the subject land and adjacent properties
- Direction and distance to local shops, schools, public transport facilities and community amenities
- o Classification or size of road onto which the development is abutting
- Contours and existing vegetation
- Existing buildings
- Views to and from the site
- Access and connection points

- Drainage and services
- Fences and boundaries

DENSITY CALCULATION TABLE

CATEGORY	CONTROL
Nodes and movement systems as defined in terms of the Nodal and Mobility Policies.	# Density Calculation Table will be used as minimum guideline
	# Application of design criteria.
Within the Urban Development Boundary.	∉# Base density will apply.
	# Application of design criteria.
Areas requiring consolidation.	# Base density will not apply (historical developments).
	# Base density to apply to new developments.
	# Application of design criteria.

	GROSS DENSITY: UNITS PER HECTARE
Standard base density (Can be replace by a different standard density in the sub- area tables)	10
LOCATIONS PARAMETER	ADDITIONAL UNITS PER HECTARE (Cumulative – add to the base density)
Within 400m of an office or shopping node	10
Adjacent to a node	To be determined by the type of node 20
Within 400m of a primary of high school	5
Adjacent to (fronting on to) an activity street	15
Adjacent to (fronting on to) an mobility road	30
Adjacent to (fronting on to) a mobility spine	50
Adjacent to a park (Public open space system)	10
Interface – directly adjacent to or opposite a non- residential use)	5
Application merit including: ∉# Historical precedent ∉# Density promotion ∉# Special merit ∉# Critical assessment of adjacent properties	As may be agreed by the applicant, local development forum and planning department on submission of an acceptable site development plan

3.4.2 SETTLEMENTS / HOUSING

Johannesburg has two primary responsibilities in respect of housing. Firstly, it needs to establish policies and guidelines to direct and focus both public and private, market driven residential developments in order to achieve the desired spatial form of the City. Secondly, the City is tasked with addressing the substantial housing backlogs within its area of jurisdiction via subsidized housing initiatives.

The policies and strategic elements outlined in the SDF and the associated implementation tools (detailed in Section C) have established the foundations to direct both private and public investments. The manner in which low-income, subsidised housing is addressed will dictate the success or failure of the City to realise the vision of an African World Class City.

Although most of the key issues noted below are not unique to Johannesburg or even Gauteng Province, they are still prevalent issues the City faces:

- # A significant housing backlog exists (estimates suggest over 240,000 units)¹
- ∉# Approximately 100 informal settlements
- # Poverty and low-income levels necessitate the subsidization of housing
- # Current housing delivery programmes lack the social and economic development components required to address historic disparities
- # It is a financial reality that land costs in "well-located" areas nearer the City's nodes and core tend to be higher than large tracts of land located on the periphery
- # Financial resources for housing provision are limited

The typical "RDP house" typology reflecting a single unit on serviced stand of 250m has secured tenure and accommodation for tens of thousands of Johannesburg's citizens. However, private investment continues to remain low in the City's old and new historically marginalised townships. Minimal job opportunities have transpired. The provision of social facilities has not kept pace with housing delivery. Transportation costs remain, in relative terms, continue to remain more expensive for these communities. Consequently, the dormitory nature of old and new townships remains.

Further, the subsidised "give-away" initiatives pertaining to home ownership have addressed only qualifying beneficiaries (in terms of National Housing Code regulations) and not all members within low-low/middle income communities. A gap remains between the "give-away" initiatives for the poorest of the poor qualifiers and non-qualifiers. Non-qualifiers include households earning a joint income of greater than R3,500.00 rands per month, non-South African citizens and child-headed households.

Even with the best intentions, from a desired urban structure perspective, peripheral developments have historically perpetuated sprawl and incurred increased maintenance and capital costs for the City in terms of engineering and social infrastructure.

Locating and integrating low-income developments adjacent to existing middle/high income residential areas and/or areas of economic opportunity continues to be a challenge facing the City. This challenge is premised on land costs and availability, the "Not In my Back Yard" syndrome and perceptions pertaining to disinvestments.

i) Housing Focus Areas

New housing initiatives should be developed within defined Housing Focus Areas. These Focus Areas contribute to the compact urban form in the following ways:

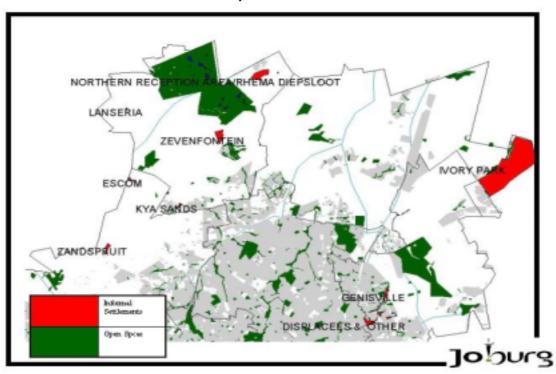
- # Strict adherence to the urban development boundary
- # Promote the optimal use of infrastructure and resources
- # Maximise exchange and minimise transaction costs through their location on the movement network
- # Situate in close proximity to socio-economic concentrations, thereby optimising access to city opportunities and services
- # Benefits exceed social, environmental and physical costs
- # Promote integration through connectivity
- # Work, residential and recreational opportunities are all in close proximity, further reducing transaction costs
- # Linked to the movement network and operating transportation systems, promoting city efficiency
- # Provide accessibility to urban opportunities and services, thereby promoting a vibrant living environment
- # Housing typologies (types of housing) should range according to desirable densities and tenure
- ## Residential infill is supported within the mining belt, in support of integration. Provision of road linkages across the mining belt will create linkages to areas on the north and south as well as provide access to land in the mining belt. Residential infill should be linked to ensure connectivity and integration.

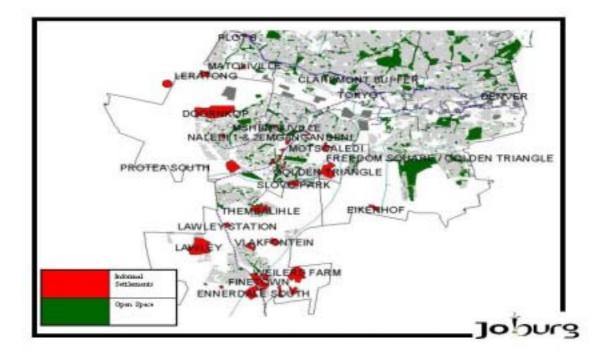
¹ iGoli 2010

Provision of rental housing stock is promoted in appropriate locations, notably the Inner City.

ii) Informal Settlements

Informal settlements continue to proliferate within the City. It is acknowledged that large-scale mass invasions of the past have, too a large extent, been eliminated. Government's policy of intolerance towards land invasions is well stated. However, the number of households residing in informal settlements continues to grow. The growth is being accommodated in new, smaller scale settlements or through the expansion of existing ones. The diagrams below indicate the location of the major informal settlements.





Key issues pertaining to Johannesburg's informal settlements include:

- # Pockets of informal settlements are located throughout the City,
- \notin Some have been established for over a decade
- # Most of the informal settlements located on privately owned land is located to the north and west of the city
- # In most instances informal settlements have remained at the periphery of Johannesburg's economic and social opportunities and have compounded the marginalised nature of the communities.
- # Numerous buildings (many of which are located centrally e.g. Inner City and surrounds) have been invaded
- # There is an inter-relationship between hostels and informal settlements in certain areas within the City (e.g. City Deep)
- # The informal settlements have developed in an extremely dense manner presenting serious health and environmental risks (e.g. fire, waste management)
- ## A number of non-South African citizens and non-qualifiers are living within the settlements
- # Certain settlements are located in hazardous locations e.g. under high voltage power lines, on dolomitic land or within floodlines
- *e* Generally, the provision of basic services is extremely poor.
- ∉# Cost recovery for these services is limited
- # Shack-farming (landowners allowing settlement of an informal nature without provision or with minimal provision of services) is increasingly evident

The City has determined which of the informal settlements require *in-situ* upgrading and which owing to locational, social or geo-technical factors require relocation. Approximately 125,000 units will be accommodated in-situ. The prioritisation of the relocation or upgrading will be determined by a number of factors including the age and condition of the settlement; prevailing social and economic conditions; availability of suitability located land and/or bulk services and finance.

iii) Consolidation

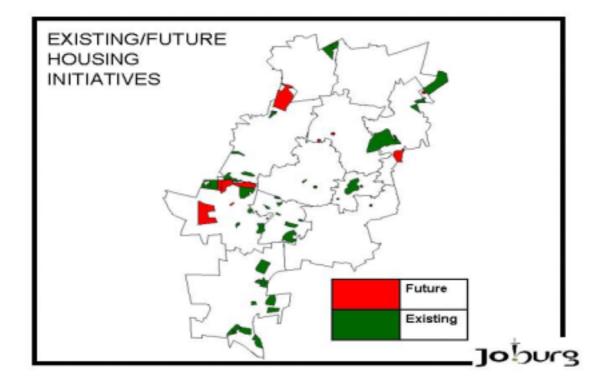
The City has adopted an approach of consolidation with respect to areas located peripherally such as Diepsloot, Orange Farm and Poortjie. This approach seeks to maintain and upgrade facilities for the existing communities and further expansion beyond existing township boundaries is not supported. Linkages to economic and social opportunities are facilitated via the movement system and upgrading of public transport facilities.

iv) Focus Areas

Approximately 100,000 units will be developed within the City's Focus Areas. Current initiatives in locations such as Alexandra (via the associated Renewal Project), Inner City and Malvern/Jeppestown (Bad/Better Buildings Programmes and Institutional/ Social Housing Subsidy), Cosmo City, Baralink, Kliptown and Ivory Park are among the existing housing focus areas and planning initiatives. In terms of location and the opportunities afforded to diverse housing typologies, these areas have the potential to support the spatial principles of the SDF.

The East-West Corridor hosts a number of Housing Focus Areas, notably Braam Fisherville, the Inner City and Princess Agricultural Holdings. The on-going investigation may reveal further opportunities for housing.

The map illustrated below indicates the location of present and proposed housing developments.



v) Addressing The Backlog

In theory, the Informal Settlements strategy and Focus Areas initiatives will accommodate much of the estimated backlog within the City.

3.5 ENVIRONMENT

3.5.1 JOHANNESBURG METROPOLITAN OPEN SPACE SYSTEM (JMOSS)

An integral component of the City's Spatial Plan is a well-defined open space system that seeks to conserve and enhance the City's existing and future physical and natural resources.

The inception of the first phase of the Johannesburg Metropolitan Open Space System (JMOSS) has added value to this component.

ENVIRONMENTAL MANAGEMENT IN THE CITY WILL:

- ∉# Support the creation of a network of open spaces which is one of the key elements in providing quality of live
- # Support sustainable storm water catchment practices
- # Protect important environmental areas
- # Promote the prevention and reduction of pollution

JMOSS is an inter-connected and managed network of open space which supports interactions between social, economic and ecological activities, sustaining and enhancing both ecological processes and human settlements. These open spaces should perform an ecological, social and institutional function and contribute to the preservation of the City's heritage. Further as densities increase within the City, the need to preserve the finite open spaces is increasingly important. In many instances this will require the rehabilitation of degraded vacant land.

Quality open spaces should be: *∉*# Inviting and accommodating

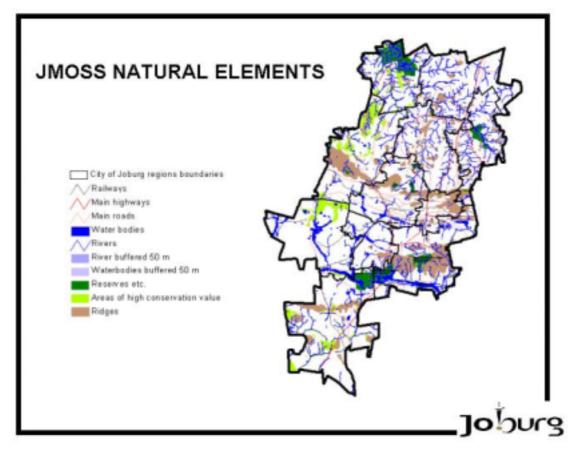
- *∉*# Accessible to all residents
- ∉# Able to meet local or regional needs
- $\not \# \quad \text{Suitable for use by multiple generations and differing cultures}$
- # Useable by individuals of various physical and cognitive abilities
- ∉# Safe
- ∉# Able to accommodate diverse user groups

Open spaces, such as roads, pedestrian paths and linear parks, can provide a network connecting public transportation routes and important community facilities such as libraries, schools and sports facilities. Such inter-connected open spaces also enhance ecological diversity by providing habitats for the City's fauna and flora. A connected system of open spaces is required to minimise storm-water run-off and therefore help to protect the City's rivers and streams.

The stated high-level goals of JMOSS are to:

- ∉# Protect water quality
- # Provide high quality outdoor recreation, on land and water, accessible to all citizens
- # Protect and enhance readily identifiable scenic, historic and cultural resources
- *∉* Protect habitat diversity for plants and animals
- # Maintain critical natural resource based industries e.g. tourism
- # Provide places for education and research on ecological, environmental and appropriate cultural resources
- # Preserve open space for the protection and enhancement of air quality

The natural elements comprising JMOSS are mapped on the map illustrated below.



3.5.2 CATEGORISATION OF OPEN SPACES

The six proposed categories relate to current land use as well as provincial planning and decision support tools (e.g. Gauteng Open Space Plan).

Each of these categories has a number of sub-categories, the inclusion of which has largely been dictated by the availability of spatial data.

	EGORY	SUB-CATEGORIES	
Ecological open	Existing	# Nature reserves # Botanical gardens # Water bodies (buffered by 50 m) # Undeveloped ridges # Bird sanctuaries # Nature trails	
space # Areas of "high" const Desired ## Areas with "high" hal ## Areas with a low dist ## Red Data fauna (from ## Red Data flora (from		 # Areas with "high" habitat diversity (as determined by specialist ecologist) # Areas with a low disturbance (as determined by specialist ecologist) # Red Data fauna (from GDACEL) # Red Data flora (from GDACEL) # "Natural" land cover categories 	
Social open space		# Zoological gardens # Sports facilities # Recreational facilities # Places of interest ## Places of worship ## Libraries ## Community centres	
Institutional		# Municipal facilities # Airports/airfields # Educational facilities # Public service facilities (e.g. police stations, post offices etc.) # Health facilities (i.e. hospitals and clinics) ## Cemeteries	
Heritage		 # Historical monuments # Museums # Art galleries # Cemeteries of historical importance # Archaeological sites # Cultural sites 	
Agricultural ¢#			
Prospective open space		Refuse sites Mine dumps Slimes dams Landfill sites Mining land & quarries	

PROPOSED CATEGORISATION OF OPEN SPACE

3.5.3 GROUPING OPEN SPACES

The various open space categories were grouped into 3 main classes, namely primary, secondary and tertiary open space.

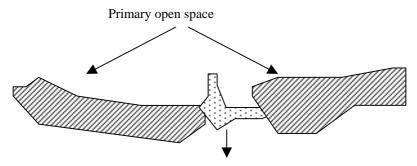
During the second phase of JMOSS, certain areas placed within the open space network during Phase 1 may be moved into one of the other categories defined in Table 1.

i) Primary open space network

- Existing ecological open spaces :

- All areas within the existing ecological open space category.
- All areas are assumed to have equal importance in terms of performing ecological processes (for example, no distinction will be made between nature reserves and botanical gardens). These are the core areas of the MOSS.
- The City will not support development in these "non negotiable" areas.
- **Desired ecological open spaces** includes, as a separate layer, areas to be included in the ecological open space network

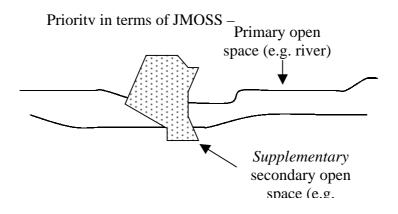
Priority in terms of JMOSS - HIGH



Connecting secondary open space

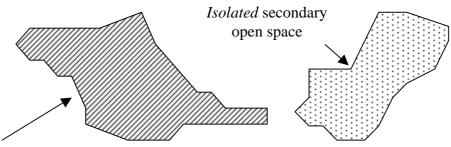
ii) Secondary open space

- Social open space, institutional, heritage and agriculture.
- Areas within this open space classification may be developed, subject to certain conditions.
- Some areas within this open space complement the primary open space network to varying degrees, depending on the extent of connectivity between the two types of open space. The following distinctions are made:
 - Connecting secondary open spaces these are the secondary open spaces that form linkages with primary open spaces and can contribute to the connectivity of the primary open space network.
 - Supplementary secondary open spaces these are the secondary open spaces that overlap with and extend beyond water bodies and/or ridges (components of the primary open space network). This would typically be the case where a river runs through a public park or where a dam is located within educational grounds.



iii) Tertiary open space

- These open spaces may be developable within the parameters of existing environmental legislation.
- Certain of these areas complement the primary open space network to varying degrees, depending on the extent of connectivity between the two types of open space. Hence, the same differentiation as for the secondary open space is made for tertiary open space:
 - o Connecting tertiary open spaces
 - Supplementary tertiary open spaces
 - Isolated tertiary open spaces



Primary open space

Finally, it is important to understand that the potential of the JMOSS to deliver the best range of open space services is dependent on all of these ecosystems being managed collectively as part of the overall open space system.

3.5.4 GENERAL DEVELOPMENT GUIDELINES

- # All planning phases for developments should follow a sustainable development approach (i.e. development providing basic environmental, social and economic services to all, without threatening the ecological and community)
- # Open space and environmental considerations should enjoy precedence over development considerations in areas identified with high conservation or recreational potential e.g. in areas:
 - Where the linking of open spaces to form a continuous system is required
 - In ecologically sensitive areas
 - o Where restoring the ecological balance in a built-up
- # Safety and surveillance can be increased by placing roads on one or more sides of an open space and orientating developments to face onto open space
- # Stormwater should be managed on-site before entering the City's stormwater system. The post-development stormwater run-off should not significantly exceed the predevelopment values in peak charge for any given storm. The same principle applies to pollutant and debris concentrations reaching the watercourses.
- # In order to regulate small and larger volumes of runoff, a hierarchical system of retention ponds should be considered.
- # The overriding principle for peak flow discharge should be to control runoff as close to the source as possible.
- # In the case of developments with large paved areas or steep slopes a specialist should assist in the storm water design in order to ensure that the change in land-use would not result in significant changes to specific site run-off characteristics and to prevent siltation, erosion and water pollution (i.e. oil catch pits on parking areas).
- # Stormwater outlets need to be correctly designed to prevent soil erosion.

3.6 CORRIDOR DEVELOPMENT

The development of corridors has been identified as one of the potential instruments available to restructure the City into a robust and efficient urban areas.

PURPOSE OF CORRIDORS IN THE CITY:

- # Contributes to the growth and development of the city
- ∉# Realises economies of urbanisation
- ∉# Supports more efficient service provision
- # Creates access to opportunities to large numbers of the community located in the corridor
- *∉* Support public transport
- ∉ Major restructuring element

Corridors are linear tracts of land that contain a variety of transportation modes, especially public transport, and a variety of intense and dense land uses.

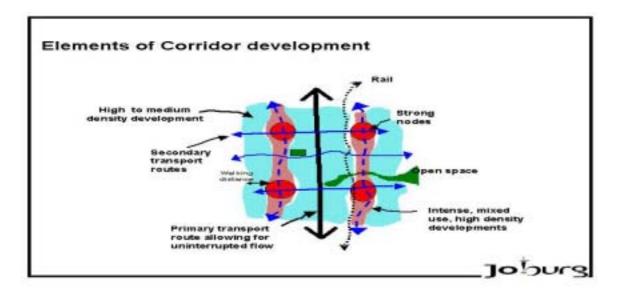
- # It is important to recognise that corridor development does not occur over a short period of time. The critical factors to take into account are time frames and phasing of development
- ∉# Availability of adequate infrastructure
- ∉# Development take-up rate
- ∉# Basics first
 - š Link roads which have a transportation and mobility function first
 - š Need strong, viable nodes

Two corridors have been identified in the City :

The first is the East-West Corridor, which runs midway through Johannesburg from the eastern boundary linking the industrial development on the East Rand to western boundary of the City. This Corridor contains the mining belt, which has been traditionally perceived as a barrier to the integration of the northern and southern parts of the City. With respect to transportation, there is an existing railway line with a number of associated stations and good east west road linkages. However, there are few strategically located road linkages to the north. Many of the existing industrial, commercial, retail and residential areas are not operating at close to optimal levels.

Due to the central location of the Corridor it has the potential become an integral restructuring element within the City. The challenge for the City is to optimise the opportunities this area presents and transform it into a vibrant, mixed-use urban environment with a thriving economy. The East-West Corridor Study is currently being undertaken. The study will provide an implementation strategy pinpointing specific key projects.

The second corridor is the North-South Corridor which runs from the Inner City through Sandton to Midrand and beyond to Tshwane. The N1 / M1 and the proposed Gautrain stations fall within this Corridor. These factors are likely to attract further development and will reinforce the vibrant economic activity in the area. The Corridor is already the location of choice for many high tech industries and office nodes. The challenge for the City is to integrate and manage existing, well-established land uses in a manner that has sustainable benefits for the residents and the City.



3.7 DESIGN GUIDELINES

Design guidelines are necessary as they provide the framework at a local level that gives shape and form to urban spaces that together shape the City. These guidelines provide basic direction for the manner in which buildings should relate to the spaces around them, such as roads and open spaces, as well as to other buildings. This is important as where there is synergy between buildings and spaces, the area between buildings takes on a definite form that adds to the urban character and contributes to the better functioning of the area.

Why design guidelines?

- *∉*# Shape and form development
- # Promote preferred patterns of development
- # Add value to the city's development policies
- ∉ Enhance existing natural and man-made features

These guidelines inform all development and provide parameters for the interface between the public and private spaces.

3.7.1 GENERAL DESIGN CRITERIA

A sense of identity or place has to be created through the design and placement of buildings. Built form needs to take cognisance of:

- # Variation in the alignment of roofs
- ∉# A variety of facades promote diversity and individuality and overcome monotony.
- ∉ # Screen walls are to be staggered or otherwise articulated.
- # Hard landscaping should be restricted to vehicle parking and access zones, essential pedestrian pathways and private patios so as to reduce storm water runoff.
- # Variation in scale through mixing single and multi-storeyed units in one development is encouraged.
- # Street frontage should suit the efficient use of the site, the residential amenity and the character of the neighbourhood

3.7.2 BUILDING STANDARDS

- *∉* ∉ Energy efficient measures to reduce energy requirements and costs are encouraged.
- # All SABS and NBR standards must be achieved.

3.7.3 NEIGHBOURING CHARACTER, SITE LAYOUT AND LANDSCAPING

- # Development should be sited and designed to acknowledge the privacy of abutting developments
- # The sitting of individual dwelling units should avoid long rows of buildings, minimise setbacks preferably not position buildings at right angles to the street boundary
- # Layouts should respond positively to site features e.g. topography, drainage, vegetation
- # Good lighting, visibility and surveillance with perimeter lighting on the street frontage is encouraged.

3.7.4 SAFETY AND SECURITY

The guidelines are designed to promote surveillance and visibility; territoriality; access and escape routes levels of planning and design.

- ∉# The placement of windows on the façade of buildings to allow for surveillance from the building onto the street and other public spaces.
- # Spaces around buildings should be designed to relate to the built form, so that residents can take ownership of the space.
- # Property enclosures should be permeable to allow for visual surveillance onto and from the street.
- # Landscaping should not detract from lines of vision and hiding places should not be created.
- ∉# Lighting of common spaces such as the perimeter, pathways, and entrance halls.

3.7.5 PARKING AND VEHICLE ACCESS

- š[•] The number of bays in residential developments should be in line with the car ownership trends in the particular area and the Town Planning Scheme requirements.
- š The access must be in line with mobility policy requirements and the access way must be sited so that cars entering the development will not hinder the vehicle movement in the public street
- š Paved areas must not hamper the efficient management of storm water
- š A minimum of one tree for three open parking bays to be planted
- š Car parking facilities should not dominate the development or street frontage.

3.7.6 VARIETY OF DENSITIES

- # Compatibility of densities is a key consideration in restructuring the city and in the urban design of local areas.
- # Transitional zones can be established where appropriate, so that there are gradual increases and decreases in density.

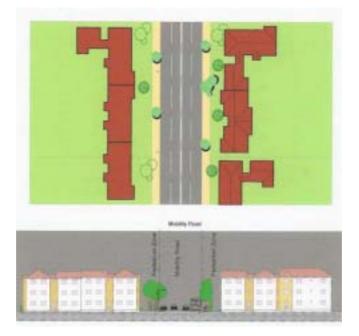
3.7.7 MOVEMENT

Movement in this context refers to pedestrian movement as well as roads for vehicular traffic.

3.7.8 PEDESTRAIN MOVEMENT

Pedestrian paths, particularly along mobility spines and roads and along public transport routes, to be strengthened.

Residential developments along mobility spines and roads should have a strong edge with the road. Perimeter block courtyard buildings as well as linear buildings along the street edge would be appropriate.



Example Of Residential Development Along Mobility Spines And Roads

3.8 URBAN DEVELOPMENT BOUNDARY

As one of the tools available to the City to manage growth, an Urban Development Boundary (UDB) was adopted as part of the city's Spatial Development Framework. The concept of the UDB was also an integral component of the 2030 Vision and had already been piloted via the Provincial Gauteng Spatial Development Framework.

PURPOSE

- ∉# Combat urban sprawl
- ∉# Create economies of urbanisation
- ∉# Focus on in-fill and redevelopment
- *∉*# Protect natural environment
- # Support efficient infrastructure provision (capital investment)

The delineation of the Urban Development Boundary for the City of Johannesburg was undertaken in terms of the following considerations and criteria:

- # Considering proposed future city structure and growth management strategy
- # Availability of bulk engineering and social infrastructure.
- ∉# Existing Provincial Urban Edge
- # Existing Johannesburg Urban Development Boundary
- # Providing limited capacity for future growth, i.e. not restricting development to its current extent
- # Areas already compromised in terms of development proposals/policy plans
- # Excluding areas with no previous compromise in terms of development proposals/policy plans
- # Strategically located vacant land favourable for infill
- # Existing developments, such as Lanseria, Diepsloot and existing peripheral settlements in the Deep South
- # Housing projects and areas compromised by housing proposals
- # Prominent growth areas and emerging areas
- # Protecting the Metropolitan Open Space System

- # Logical alignment of boundary along existing physical features, to prevent the creation of isolated land parcels with no development potential
- *#* Considering existing developments and proclaimed rights
- # Existing municipal boundary and development beyond the municipal boundary

The refined Urban Development Boundary for the City of Johannesburg applicable to this Region is indicated on the Conceptual Regional Spatial Development Framework (Plan No. 4). The UDB is however, only one form of government intervention to assist growth management and its application should be in conjunction with other interventions and strategies to influence city structure. Other interventions have yet to be fully considered. These could include:

- ∉# Fiscal Impact Analysis
- *∉*# Threshold Public Service Standards
- ∉# Land Use and Infrastructure Coordination
- # Enterprise Zones/Strategic Development Areas
- # Focused Economic Development in Growth Areas (Activity Nodes)
- ∉# Targeted Development Areas (Greenfields)
- ∉# Zoning
 - Minimum Density Zoning
 - o Cluster Zoning
 - o Overlay Zoning
 - o Incentive Zoning
 - o Impact Fees/Exactions/Bulk Contributions
- ∉# Purchase of Development Rights
- ∉# Incentives
 - o Tax incentives
 - o Infrastructure
 - o Land and buildings
 - o Regulatory reform
 - o Finance
 - Public Transport Orientated Development
- *∉*# Annexation Plans

Over time, the City will need to determine the most appropriate of these other tools to complement the UDB and the principles of growth management.

3.8.1 CRITERIA FOR DEVELOPMENT WITHIN THE URBAN DEVELOPMENT BOUNDARY

Development within the Urban Development Boundary will be considered in terms of the prevailing RSDFs, applicable Framework / Precinct Plans for a specific area. Development outside the Urban Development Boundary will be considered in terms of their compliance with the following criteria:

- ∉# Agriculture
- ∉# Conservation Areas / Nature Reserves
- # Tourism and related activities (e.g. curio markets)
- # Recreational facilities (e.g. hiking trails, hotels, game lodges)
- # Farm stalls and allied home industries
- ∉ Rural residential uses / agricultural holdings²

- The building(s) (that may include a dwelling house) shall be designed and / or used in connection with the prevailing agricultural use and / or any use ordinarily incidental thereto.
- The land may include arable land, meadows or grassland, vegetable gardens, poultry farms, pigfarms, land used for apiculture, nursery, plantation and orchard, but does not include the following:
 - š Land used as a park (Except stipulated conservation areas).
 - \check{s}^{\cdot} \quad Land used or zoned for the purpose of sport.

² Any existing or potential building on any portion of land, be it an existing land portion or on future divided land, shall be subject to the following:

Proposed activities that conform to the above uses will be further evaluated noting whether:

- # The development is in a proclaimed Nature Conservation Area, or an area that has been identified to be ecologically sensitive or contains Red Data Species proposals would not generally be supported in these instances
- # The development would have a detrimental effect on the environment applicable environmental legislation will prevail
- # Bulk infrastructure capacities would be exceeded proposals would not generally be supported in these instances

3.8.2 SUBDIVISION OF LAND OUTSIDE THE URBAN DEVELOPMENT BOUNDARY

The subdivision of land outside the Urban Development Boundary will only be allowed if it complies with the following criteria and associated table:

- *∉*# Compliance with the land use criteria
- # Division is within the parameters of the following Subdivision Table (Table 9)
- # An existing second dwelling is not the motivation for the subdivision
- # Subdivision of productive agricultural areas with agricultural potential should only be allowed in special circumstances and only with the written consent from the National Department of Agriculture.
- # Where a subdivision is motivated because of a road, river or servitude physically severing land, the reason for the severance should be proven. The provision of services and registration of servitudes should be to the satisfaction of the local authority.

It should be noted that these are interim guidelines for subdivision that will be refined and tailored to specific areas via the SDF/RSDF revision process 2003/04.

Category	Size	Min Portion
Minor	4ha And Below	1 Morgen (+/- 0.8ha)
Intermediate	4ha-10ha	1 Ha
Major (a)	10+ha-20ha	2 ha
Maior (b)	20+ha	4ha

Division of Land Categories

General Provisions:

- ∉# Once a property has been divided in terms of the criteria above, it may not be subdivided again unless there is a material change in circumstance within the broader area that would necessitate a review of the Urban Development Boundary. This condition is to be included in all division of land application approvals. Consideration for re-subdivision may only take place on the outcome of a reviewed urban development boundary study.
- # There shall be no obligation on Council or UACs to render services in any form whatsoever.

SECTION 4

REGIONAL SPATIAL DEVELOPMENT FRAMEWORK

4.1 DEVELOPMENT DIRECTION, HOT SPOTS AND KEY INTERVENTIONS

The strategic thrust in terms of development in Soweto has been divided up into key interventions and guidelines. The strategic directives for transformation include restructuring the area, improving access and integration, economic development, material improvement to the quality of life for Sowetans and a supportive land-use management system.

The interventions and guidelines provide a brief overview of the objective as well as the intervention and guidelines that need to be followed to address the objective. A list of potential projects is detailed in the Capital Investment Programme that will provide the necessary catalyst towards attaining the objective. Map 4.

There are a number of Key Issues relevant to the Greater Soweto Area that will have a serious impact on the development and strategy formulation for the Area. The following key issues are relevant:

- # Soweto, in the south of Johannesburg, is affected by the 'rich (north) city poor (south) city' divide;
- # Global, national and regional trends towards high tech development and jobless growth limits opportunities for people with a low skills base.
- # Negative perceptions and "stigmatisation" of Soweto and lack of investor interest due to perceived low rates of return;
- ∉# Investment, economy and job growth in far north of Johannesburg. The distance from Soweto to the main job market in the CBD ranges from about 10-20 km depending on location within Soweto or a further 30-35 km to the growing job market of Sandton;
- ∉# Apartheid legacy; lack of urban spatial integration and various physical barriers (mining belt, Klip River, N1, N17 if not downgraded and K15), exacerbated by a lack of adequate external linkages around Soweto;
- Apartheid legacies that paralysed normal urban functions (especially economic development) and left an effectively institutionalised dormitory area as most residents are forced to commute for work and shop outside Soweto. This also contributes to a low rates base and persistent dependence on Johannesburg;
- ## A history of conflict in development, duplication of administrative functions and inefficient service delivery that is being addressed;
- # High crime rate and perceptions of crime have negative implications for investment and quality of life;
- # Although an attempt to address infrastructural backlogs has been made like roads, water and sanitation, backlogs remain. Soweto still lacks proper storm water and waste management;
- # Although payment levels for services are improving, these remain low (40% payment levels);
- # Major housing backlogs and doubling up through backyard shacks.
- *∉*# Poor environmental quality;
- # No proper land use management mechanisms;
- # Uncoordinated public transport. The major mode (combi-taxis) is chaotic with little route coordination;
- # Pressure on the north-east exists by commuters as the area is poorly service for public transport;
- # Under-provision of community facilities and need for optimisation of existing facilities;

- ∉# Continued urban sprawl westwards;
- # The need for integration northwards across the mining belt.

It has been recorded at the public participation process that was conducted for the RSDF and supported by the Regional Administrators that there is need to revitalise the Masakhane Campaign. A strategy needs to be adopted that seeks to advertise and promote Council development initiatives and link this onto a campaign that promotes increased payment levels.

Three nodes have been identified as being of catalytic significance. By catalytic, it is implied that by ensuring that development is focused within these areas, the spin-offs will be of such a magnitude that the Greater Soweto will benefit. The nodes must not be seen in isolation but all attempts must be made to ensure that the combined resources of Council, including all UAC's must focus their energy to stimulate the growth and development of these areas. It is therefore implied that if, for example, a road is to be constructed at Jabulani, City Power must be made aware to ensure that there are street lights, City Parks must be informed to prioritise parks that maybe affected, JMPD must also be informed to remove any abandoned vehicles and to remove any informal traders that maybe temporarily marginalize by the road development. In this way, money is stretched further and development is seen to be undertaken in a coordinated approach. In order to ensure that there is this form of coordination, the Infrastructure Coordinating Committee has been established where all infrastructural development is co-ordinated in the City. On a more local level, the Soweto Development Program has been launched which facilitates and promotes the development of Soweto through a single co-ordinated plan. The said committee currently focus's on infrastructure development. Linked to this is the intention to establish a forum where the social and economic developments are also coordinated so as to ensure no duplication or confusion occurs.

The three nodes referred to above are: Kliptown, Baralink, and Jabulani. In order to obtain a greater understanding of the land use mechanisms, refer to the specific land use tables in this section.

Kliptown

Kliptown currently forms the largest single development in Soweto. It comprises a mixed-use district that centre around Freedom Square with institutional housing and retail facilities being of primary importance. The Kliptown Development is a Blue IQ initiative that is being administered by the Johannesburg Development Agency. The overall objective for the area is to create a diversified economic and cultural node and to improve the living conditions in the area through the introduction and support of the local economic activities. The upgrading of the surrounding settlements with associated facilities forms an integrated component of the overall approach.

Baralink

The Baralink area is strategically located between the eastern sector of Soweto and the south of Johannesburg CBD. Although Baralink has historically separated Greater Soweto from Johannesburg, the area now performs the strategic function of being the "Gateway to Soweto". There is a pressing need in Soweto to identify sites for new residential development, to encourage industrial and commercial investment, to promote the development of new economic nodes and to improve the transport network and linkages. The Baralink area comprises substantial land parcels that can be in-filled to provide a more compact and integrated urban form and provides one of the real opportunities for investment.

Jabulani

The objective of the Jabulani Precinct is to improve the image of the region as a safe, viable and investor friendly area. This is to be achieved by improving the existing infrastructure especially accessibility and water supply/pressure which is virtually non-existent. The precinct will encapsulate a Town Hall, Regional Library, and offices and associated activity rooms that will compliment the existing fire station, police station, post office and bank. Once established, attempts will be made to stimulate public/private sector partnership to create employment opportunities that will enable the area to create a spine of economic and social activities. Linked to the social infrastructure, is the need for a Regional Sports facility that includes an Olympic swimming pool with a grand stand.

4.1.1 **Priority Linkages**

Provision of more direct and adequately constructed external and internal linkages. The 1998 Strategic Metropolitan Development Framework identified Soweto and particularly the integration of Soweto as a Priority Intervention Zone (PIZ), with a specific focus on improving major transport linkages to Soweto.

Priority Actions identified were:

- # Westlake Road Extension to Meadowlands providing a north-south link between Roodepoort and Soweto.
- # Northern ramps onto the N1 from the Soweto Highway, providing direct northern access onto the N1.
- # Soweto Highway Extension eastwards to Rosettenville Road improving access to City Deep Economic Development Zone.
- # Potchefstroom Road Extension onto the N1, providing direct access onto the N1.
- # Emdeni link promoting access to new development to the West of Soweto.
- # K43 improving access and linkages southward.
- # K102 linking the K15 in the West and northward to Roodepoort Road.

4.1.2 A Consolidated Approach

The development direction needs to take into consideration the key linkages as well as the consolidation of the existing nodes. A holistic approach needs to be followed in order to ensure that development is brought to the people in a very real and tangible way.

The following development direction is to be applied to the Greater Soweto Area.

To the North, the East West Corridor Study will indicate the key linkages as well as land use changes that will be incorporated into the RSDF review for 2003/2004. Key factors that will influence the study are the identification of the linkages that include the upgrading of New Canada Road, Westlake extension, Klipriviersoog extension, and the R 558. These roads must not be seen as mere attempts to connect the area but must provide catalytic development initiatives by opening up areas for industrial/commercial usage, residential densification and public amenities. The areas of Bram Fischerville, Slovoville, Tsepisong and Vlakfontein all need to be incorporated into the greater urban fabric of Soweto. Linkages as well as the

provision of services and infrastructure are a priority to ensure integration to Florida as well as to Soweto.

To the West, the Urban Growth Management Study identifies the Urban Boundary that forms the most western border for development. The intention of the boundary is to ensure that consolidation of the existing services and infrastructure takes place prior to continued urban sprawl. The areas of Protea Glen, as well as the new proposed areas of Doornkop must be contained and consolidated. The area westwards of these suburbs remains predominantly agricultural with sporadic occurrence of dolomite that inhibits further development.

To the South, the linkage of Protea South with Lenasia as well as the Eldorado Park suburbs needs to be prioritised. The N12 must not be allowed to perpetuate the barrier between the areas but needs to form the spine for consolidation. Lenasia and its extensions that form part of the Greater Soweto Area are assimilated with Region 11 and the land use tables for Sub-Area Fourteen are similar to Sub-Area One in Region 11. The extension of Klipriviersoog Road as well as the linkage of the K43 to the Kliptown needs to be seen as being the main arterials that will facilitate accessibility and an efficient public transport system. Within this area, the revitalization of the industrial parks, specifically Protea Industrial Park and Nancefield need to be uplifted and made attractive to investment.

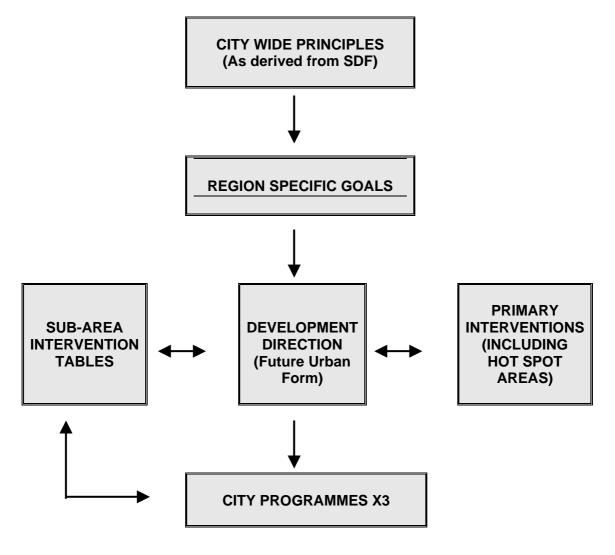
To the East, the key strategy will be the implementation of the Baralink Development Framework. By kick starting the Baralink Development, specifically the Gateway Precinct, investor confidence will be installed so that the area can emerge as a primary commercial and retail node in Soweto. The success of this initiative rests upon the prioritisation of and implementation of the north/south on-off ramps to the highway. The Baralink Taxi Rank is currently under construction together with informal street trading shelters. The rank will go along way to normalising the area in terms of traffic congestion as well as providing a public transport service. The success of the eastern sector will be dependant on the East-West Corridor study as well as the Southern Johannesburg (SOJO) initiative that examines the extension of the Nasrec/Ben Naude road to allow for more intensive utilization of the vacant land. The accessibility to the N1 from Old Potch Road both North bound and South bound needs to be investigated and finalised as this will have an enormous economical and physical impact on Soweto.

After examining the four main development directions that will be applied to the Greater Soweto Area, the bulk of Soweto, *i.e.* the internal areas, a programme of consolidation and upgrading will be undertaken. The importance of this program has been mentioned earlier in the text and cannot be overemphasised. The upgrading of all gravel roads, public lighting, reliable water supply and new road construction are all on the priority listing for the consolidation of infrastructure provision. In terms of social facilities, the provision of services and the upgrading of existing facilities are of critical importance. Housing projects that include investigations into institutional housing programs as well as the possibility of de-densifying the backyard shacks is of importance. The identification and consolidation of nodes in terms of the Nodal Policy as well as the implementation of the "Municipal Precinct" strategy will also be part of the overall consolidation process. The enforcement of Council by-laws as well as the drafting of specific policies related to the less established areas will be undertaken in order to provide the necessary impetus to ensure that the consolidation and development of existing infrastructure and services occurs.

A number of smaller neighbourhood nodes are locate throughout the Greater Soweto Area. These include areas like Dube, Ikwezi, Naledi, Crossroads, Merafi, Phefeni and

Eldorado Park business district. These nodes will not be neglected but where applicable, such as in the areas of Crossroads and Ikwezi, precinct plans have been undertaken and will be implemented and used to guide specific development within the area. In those nodes, which, as yet, have no precinct plans, the Nodal Policy will be applied until such time as detailed precinct plans have been undertaken.

In order to understand the linkages between the development direction, goals and objectives and ultimately the programmes, the following flow chart best illustrates the relationship.



4.2 SUB – AREA SUBURB LISTS

The following suburbs have been grouped together to form sub-areas.

SUB - AREA ONE

Baralink, Power Park, Power Park Ext 2.

SUB - AREA TWO

Noordgesig, Noordgesig Ext 1, Orlando, Orlando West, Orlando West Ext 1, Orlando West Ext 2, Orlando West Ext 5, Orlando East, Diepkloof Zone 1, Diepkloof Zone 2, Diepkloof Zone 3, Diepkloof Zone 4, Diepkloof Zone 5, Diepkloof Zone 6, Diepkloof Ext 1, Diepkloof Ext 2, Diepkloof Ext 3, Diepkloof Ext 3, Diepkloof Ext 3.

SUB - AREA THREE

Dobsonville, Dobsonville Ext 1, Dobsonville Ext 2, Dobsonville Ext 3, Dobsonville Ext 4, Dobsonville Ext 5, Meadowlands, Meadowlands Ext 11, Meadowlands Ext 12, Meadowlands West Zone 6, Meadowlands West Zone 7, Meadowlands West Zone 8, Meadowlands West Zone 9, Meadowlands West Zone 10, Meadowlands East Zone 1, Meadowlands East Zone 2, Meadowlands East Zone 3, Meadowlands East Zone 4, Meadowlands East Zone 5, Mmesi Park.

SUB - AREA FOUR

Mofolo North, Mofolo Central, Mofolo South, Molapo, Jabavu, Jabavu Ext 1, Moroka, Moroka North, Dube.

SUB - AREA FIVE

Jabulani.

SUB - AREA SIX

Emdeni, Emdeni Ext 1, Naledi, Naledi Ext 1, Naledi Ext 2, Tladi, Zola, Zondi, Moletsane, Doornkop, Doornkop Ext 1.

SUB - AREA SEVEN

Protea Glen, Protea Glen Ext 1, Protea Glen Ext 2, Protea Glen Ext 3, Protea Glen Ext 4, Protea Glen Ext 5, Protea Glen Ext 11, Protea Glen Ext 12, Protea North, Protea South, Protea Industrial Park.

SUB - AREA EIGHT

Chiawelo, Chiawelo Ext 2, Chiawelo Ext 3, Chiawelo Ext 4, Chiawelo Ext 5, Mapetla, Phiri, Senaoane, Dhlamini.

SUB - AREA NINE

Kliptown.

SUB – AREA TEN

Eldorado Park, Eldorado Park Ext 1, Eldorado Park Ext 2, Eldorado Park Ext 3, Eldorado Park Ext 4, Eldorado Park Ext 5, Eldorado Park Ext 6, Eldorado Park Ext 7, Eldorado Park Ext 8, Eldorado Park Ext 9, Eldorado Park Ext 10, Klipspruit West,

Klipspruit West Ext 1, Klipspruit West Ext 2, Racecourse, Klipriviersoog Estate, Nancefield Ext 1, Klipriviersoog.

SUB - AREA ELEVEN

Pimville Zone 1, Pimville Zone 2, Pimville Zone 3, Pimville Zone 4, Pimville Zone 5, Pimville Zone 6, Pimville Zone 7, Klipspruit, Klipspruit Ext 1, Klipspruit Ext 3, Klipspruit Ext 4, Klipspruit Ext 5.

SUB – AREA TWELVE

Open space system including the Klipspruit and Klipriver catchments areas.

<u>SUB – AREA THIRTEEN</u>

Armadale, Devland, Devland Ext 1, Devland Ext 2, Devland Ext 6, Devland Ext 9, Devland Ext 14, Devland Ext 15, Devland Ext 16, Devland Ext 27, Naturena, Naturena Ext 5, Naturena Ext 6, Naturena Ext 11, Naturena Ext 13, Naturena Ext 17, Naturena Ext 19, Naturena ext 20, Naturena Ext 25, Naturena Ext 26, Rivasdale.

SUB – AREA FOURTEEN

Lenasia Ext 1, Lenasia Ext 3, Lenasia Ext 5, Lenasia Ext 13.

SUB – AREA FIFTEEN

Agricultural Land extending until the urban boundary.

SUB – AREA SIXTEEN

Bram Fischerville and it's extensions, Slovoville, Slovoville Ext 1, Doornkop new extensions, Thulani and Tsepisong.

4.3 SUB – AREA DEVELOPMENT CONTROL TABLES

THESE OBJECTIVES ARE APPLICABLE TO ALL SUB - AREAS

DEVELOPMENT OBJECTIVE ONE

Soweto Empowerment Zone.

The need to create employment opportunities close to Soweto by providing an investor friendly environment. Being strategically located on the highway, with linkages to the surrounding labour markets of Soweto, Eldorado Park and Lenasia, Devland and Baralink form the cornerstone of the Soweto Empowerment Zone.

INTERVENTIONS	GUIDELINES
1.1 Create sustainable employment opportunities.	 <i>∉</i> Provide an investor friendly environment. <i>∉ #</i> Draft a Policy that examines effective land release mechanisms for economic development.
1.2 Promote safety and security to stimulate economic investment. Promote Soweto Tourist Route.	 Controlled access to Industrial Parks and Tourist Heritage sites will need to be investigated as well as local policing and public awareness. Implement Soweto Tourism Trail proposals.
1.3 Stimulate the development of a viable local economy in the area.	 Apply nodal policy. Apply nodal policy. Secure private land ownership. Encourage the establishment of SMME's by linking onto LED inititatives. Establishment of a business advice centre. Concentrate non-residential uses in and around defined nodes in support of higher order economic activity. Encourage the establishment of public-private partnerships to stimulate development.
1.4 Support the development of a mixed use (commerce with associated service industry and residential nodes).	∉# Apply the nodal policy.
1.5 Promote infill and densification for	∉# Apply density policy.

Various housing typologies.	Development only permitted within the existing urban development boundary.
1.6 Promote consolidation within the Urban Boundary.	 ∉# Urban Growth Management Study. ∉# Nodal Study.
1.7 Propcom land sales to be assessed.	Propcom to consult more widely and to devise policy on land sales.

DEVELOPMENT OBJECTIVE TWO

Land Use Management

To formulate a consolidated statutory land-use management system.

Soweto is administered through an amalgam of planning legislation from the Roodepoort Town Planning Scheme (1987), Johannesburg Town Planning Scheme (1979) and Annexure F of the repealed Black Communities Development Act (1984). No overall town planning scheme currently exists for Soweto.

INTERVENTIONS	GUIDELINES
1.1 Promote consistent development management and stable land market.	∉# Formulate an appropriate statutory land –use management system.
 1.2 Contain the growth on the urban edge, promote higher densities and mixed land use, integrate public ∉# open spaces. 	∉# Comply with guidelines of the Spatial Framework, Metro Spatial Framework, and the Vision 2030.
1.3 Undertake a vacant land assessment, with specific reference to the development of non-residential land uses.	Appropriate size of land parcels for local community facilities.
1.4 Promote land release.	∉# Approve and land release strategy.
1.5 Reduce and regulate the Informalisation activities.	Ø Develop Local Economic Development Initiatives. Regulate and restrict illegal land uses.
1.6 Regulate scrap yards, taverns and informal land uses.	 ∉ Enforce Council Policy. ∉ Need to review the effectiveness of the policies on scrap yards and taverns. ∉ Adopt policy mechanisms to reduce proliferation of scrap yards and taverns.
1.7 Curtailment of proliferation of Back Yard Shacks.	An appropriate density policy needs to be adopted.
 1.8 Implement a uniform land-use management system, with specific reference to: ∉# Development in road reserves; ∉# Legalising existing developments. 	 ∉# Develop and complete a land use management mechanism. ∉# Ensure effective law enforcement.
1.9 Promote strong nodal developments at identified intersection points.	 ∉# Apply nodal policy. ∉# Adequate public transport system and facilities to be provided.
1.10 Support the development of an appropriate infrastructure management plan for public	Ensure consistent service levels in the area. Allocation criteria in conjunction with community.

investment in conjunction with the metro wide infrastructure plan.	 ∉# Control land invasions. ∉# Apply urban development boundary. ∉# Promote greater access. ∉# Improve linkages with other settlements and the surrounding developed areas.
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DEVELOPMENT OBJECTIVE THREE

"Green Heart for Soweto Programme"

The recent Metropolitan Open Space System Plan (MOSS) for Soweto provides a framework within which the Green Heart for Soweto Programme can be implemented. Although priority has been given to the upgrading and development of parks that are of a regional scale, the remaining parks will be developed as funding becomes available.

INTERVENTIONS	GUIDELINES
1.1 Develop and implement a co-	∉# Apply the JMOSS strategy.
ordinated recreation/open space framework.	
namework.	recreational and open space plan including the management and
	use of recreational areas.
1.2 Formulate/implement Wetland	∉ Keep existing reed beds' intact.
Conservation Policy.	∉# Urban agriculture can be located
	in appropriate areas. ∉ Reinforce the use of wetlands for
	recreational use.
1.3 Promote the development of public recreational facilities and Open Space System.	∉# Develop walking and passive recreational sites. Develop restrictions on the types of development permitted in specifically identified environmentally sensitive areas.
1.4 Sustainable practices in the use of resources to be employed.	∉# Apply environmental policy.
1.5 The appropriate use of the Klipriver wetlands corridor to be improved.	∉# Apply environmental policy.
1.6 Greater correspondence to be placed	# Specific reference to be placed
on sale of Council owned property in Soweto.	on the sale of land without an
	approved policy.

SUB - AREA ONE

BARALINK, POWER PARK, POWER PARK EXT 2.

To enhance the integration of Soweto and Johannesburg CBD as well as to improve access to employment opportunities.

DEVELOPMENT OBJECTIVE

To integrate Greater Soweto with the City by promoting commercial and retail development along Old Potch road and within the Nasrec Area. Accessibility to the N1 must be expedited.

INTERVENTIONS	GUIDELINES
1.1 Enhance the integration of Soweto	# Implement the Baralink
and Johannesburg CBD.	Development Framework.
	Co-ordinated development through the Baralink Coordination
	Committee.
	# Identify quick win projects to
	stimulate development.
1.2 Improve access to employment opportunities.	∉# Implement key linkages as identified in the RSDF.
1.3 Promote the development of mixed-	∉ Apply Mobility Policy.
use precincts.	∉# Apply Nodal Policy.
	# Guided by the infrastructure
	capacities.
1.4 The provision of modal interchanges	∉# Apply Nodal Policy.
and/or taxi stops facilities.	Apply the Baralink Development Framework.
1.5 Promote the optimal use of existing	∉ Permissible uses to compliment
land uses.	Regional character.
1.6 Support business, institutional uses	∉# Apply Density Policy.
and high density residential.	# Guided by infrastructure
	capacities.
1.7 Provide or facilitate the provision of a	∉# Apply Nodal Policy.
diversity of social and community	∉# Clustering of services – (One stop-
services.	service)
	Establish public-private partnership.
	# Coordination between all spheres
	of Government.
	# Apply service provision standards.

1.8 Prioritise and encourage the development of under-utilized land within the area.	 ∉# Identify key linkages. ∉# Improve linkages. ∉# Enforce by-laws. ∉# Ensure that the future urban development is not isolated from the rest of the residential developments.
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SUB - AREA TWO

NOORDGESIG, NOORDGESIG EXT 1, ORLANDO, ORLANDO EAST, ORLANDO WEST EXT 1, ORLANDO WEST EXT 2, ORLANDO WEST EXT 5, DIEPKLOOF ZONE 1, DIEPKLOOF ZONE 2, DIEPKLOOF ZONE 3, DIEPKLOOF ZONE 4, DIEPKLOOF ZONE 5, DIEPKLOOF ZONE 6, DIEPKLOOF EXT 1, DIEPKLOOF EXT 2, DIEPKLOOF EXT 3, DIEPKLOOF EXT 10, POWER PARK EXT 3

The aim of this sub-area is to consolidate and upgrade the existing infrastructure in the area. The consolidation of the Baralink Precinct is of paramount importance.

DEVELOPMENT OBJECTIVE

To expedite service delivery and manage the Baralink Development Framework.

INTERVENTIONS	GUIDELINES
1.1 Support the development of a mix of compatible land uses.	 ∉# Optimal use of existing infrastructure. ∉# Integration of surrounding land uses. ∉# Manage the informal economic activities. ∉# Revitalization and renewal through economic development.
1.2 Upgrade the public environment.	 # Apply Nodal Policy. # Promote job creation by identifying those key aspects of the public environment that need to be upgraded.
1.4 Support commercial, business and related developments.	 ∉# Promote job creation. ∉# Support training and skills development programmes.
1.5 Improve and retain all residential amenity by allowing business development in demarcated areas.	 ∉# Apply nodal policy. ∉# Apply Baralink Development Framework.
1.6 Support the formulation of a focused economic development strategy.	 ∉# Promote SMME's. ∉# Establish and support public- private partnerships. ∉# Support the establishment of local business forums.
1.7 Noordgesig new extensions to be incorporated into the JHB Town Planning Scheme later this year.	

SUB - AREA THREE

DOBSONVILLE, DOBSONVILLE EXT 1, DOBSONVILLE EXT 2, DOBSONVILLE EXT 3, DOBSONVILLE EXT 4, DOBSONVILLE EXT 5, MEADOWLANDS, MEADOWLANDS EXT 11, MEADOWLANDS EXT 12, MEADOWLANDS WEST ZONE 6, MEADOWLANDS WEST ZONE 7, MEADOWLANDS WEST ZONE 8, MEADOWLANDS WEST ZONE 9, MEADOWLANDS WEST ZONE 8, MEADOWLANDS EASTZONE 9, MEADOWLANDS EASTZONE 10, MEADOWLANDS EASTZONE 1, MEADOWLANDS EASTZONE 2, MEADOWLANDS EASTZONE 3, MEADOWLANDS EASTZONE 4, MEADOWLANDS EASTZONE 5, MMESI PARK.

The consolidation of land uses to improve the functionality of the node and to create employment opportunities by the upgrading of public facilities and the improvement of traffic management.

DEVELOPMENT OBJECTIVE 1

To strengthen the existing nodes by integrating the existing land uses.

INTERVENTIONS	GUIDELINES
1.1 Support the Dobsonville Neighbourhood Node.	 ∉# Ensure adequate service levels. ∉# Apply Nodal Policy. Strengthen the area by: ∉# Allowing business development. ∉# Allowing limited amount of residential development on vacant land. ∉# Allow businesses that provide a neighbourhood service
1.2 Stimulate the development of the local economy in the area.	 ∉# Put in place an effective land release mechanism. ∉# Make land available to privately interested parties.
1.3 Prioritise and encourage the Development of underutilised land within the area.	 ∉# Promote infill and the productive use of vacant land. ∉# Apply Nodal Policy. ∉# Apply Mobility Policy
1.4 Some Extensions and Zones have no conditions of establishment.	∉# Request deeds office needs to expedite the allocation of new numbering system.

SUB-AREA FOUR

MOFOLO NORTH, MOFOLO CENTRAL, MOFOLO SOUTH, MOLAPO, JABAVU, JABAVU EXT 1, MOROKA, MOROKA NORTH, DUBE.

To improve the functionality and accessibility of the node by integrating the intermodal facility within the existing urban fabric.

DEVELOPMENT OBJECTIVE

To revitalize and upgrade the public environment.

INTERVENTIONS	GUIDELINES
1.1 Prioritise and encourage the development of underutilised land.	 ∉# Develop vacant land to improve functionality of the node. ∉# Improve linkages to the area. ∉# Undertake detailed study of vacant land.
1.2 Upgrading the Public Environment.	Promote job creation by identifying those key aspects of the public environment that need to be upgraded.
1.3 Assess needs and provide amenities as required in Dube Node.	∉# Apply Nodal Policy.
1.4 Improve and retain a residential amenity by allowing business development in demarcated areas.	 <i>∉</i># Promote SMME's. <i>∉</i># Establish and support public- private partnerships. <i>∉</i># Support the establishment of local business forums.
1.5 Support the formulation of a focused economic development strategy.	

SUB - AREA FIVE

JABULANI

Jabulani which already has a fledgling civic uses (civic centre, fire station, police station, technical college and retail) is intended to provide a focus for development and integration.

DEVELOPMENT OBJECTIVE

To promote the area as a town centre and district node in Soweto.

INTERVENTIONS	GUIDELINES
1.1 Apply precinct plans as per Jabulani Urban Design Framework.	∉# Jabulani Urban Design Framework.
1.2 Draft the Jabulani Implementation Strategy.	 # Promote regional functions and land uses. # Establish regional economic linkages. # Apply the Mobility Policy. # Manage informal trade and markets. # Apply Nodal Policy
1.3 Identify strategic infrastructure capacities.	Prioritisation of infrastructural co- ordination and priority areas.
1.4 The provision of modal interchanges and/or taxi stop facilities.	Refer to proposed Integrated Transportation policy
1.5 Support industrial, business and related developments.	 Promote employment creation. Supported by training and skills development.

SUB - AREA SIX

EMDENI, EMDENI EXT 1, NALEDI, NALEDI EXT 1, NALEDI EXT 2, TLADI, ZOLA, ZONDI, MOLETSANE, DOORNKOP, DOORNKOP EXT 1.

To ensure the integration of existing infrastructure with the proposed facilities and surrounding land uses. Specific emphasis must be placed on the linkage across the railway line and Ikwezi Node.

DEVELOPMENT OBJECTIVE

To enhance the public environment and improve the functionality of the area by integrating the proposed retail facilities with transport inter-modal facilities and open space proposals for Zondi Koppies.

INTERVENTIONS	GUIDELINES
1.1 Redefine the function of the Ikwezi Node in favour of a multi-	∉# Implement the Ikwezi Node Precinct Plan.
purpose node, focusing on integrating proposed retail and open space proposals.	∉# Revive community participation in Precinct.
1.2 Support the development of a mix of compatible land uses in the Ikwezi Node	∉# Apply Density Policy. ∉# Apply Nodal Policy
1.3 Promote the regional function of the Zondi Koppies through the encouragement of supportive land uses and facilities.	∉# Refer to Moss Plan.
1.4 Access across the railway line.	∉# Apply ITP Plan.
1.5 Optimal use of social infrastructure.	∉# Apply minimum prescribed Council standards.
1.6 Integration of residential, retail and open space land uses.	∉# Apply Density Policy.
1.7 Revitalization of open space system.	∉ Refer to Moss Plan.
1.8 Manage informal economic activities.	∉# Apply Nodal Policy
1.9 Investigate impact of 150m ² stands in Naledi.	∉# Apply Density Policy.
1.9 Annexure F allows maximum coverage and business as a primary right.	One land use policy must be implemented.

SUB – AREA SEVEN

PROTEA GLEN, PROTEA GLEN EXT 1, PROTEA GLEN EXT 2, PROTEA GLEN EXT 3, PROTEA GLEN EXT 4, PROTEA GLEN EXT 5, PROTEA GLEN EXT 11, PROTEA GLEN EXT 12, PROTEA NORTH, PROTEA SOUTH, PROTEA INDUSTRIAL PARK.

To promote sustainable growth and development. The consolidation of existing facilities in-line with the minimum standards as set by Council.

DEVELOPMENT OBJECTIVE

Consolidation of the existing area and to improve the public environment by attracting investment.

INTERVENTIONS	GUIDELINES
 1.1 Undertake a Precinct Plan with specific reference to: ∉# Growth potential; ∉# Development capacity and scale; ∉# Urban design, urban environmental quality and signage; ∉# Vehicular and pedestrian 	 <i>∉</i> Promote regional functions and land uses. <i>∉</i> Establish regional economic linkages. <i>∉</i> Apply the Mobility Policy. <i>∉</i> Manage informal trade and markets. <i>∉</i> Apply Nodal Policy.
movements. 1.2 Identify strategic infrastructure capacities and linkages to Old Potch Road.	∉# Prioritisation of infrastructural co- ordination and priority areas.
1.3 The provision of modal interchanges and/or taxi stop facilities	 ∉# Refer to proposed Integrated Transportation Policy ∉# Apply Mobility Policy.
1.4 Support industrial, business and related developments.	 # Promote employment creation. # Supported by training and skills development.
1.5 Assess the impact of the R558 on the area.	∉# Apply Mobility and Nodal Policy. The ITP must also be applied.
1.6 Draft a single Town Planning Scheme.	
1.7 Contain western expansion to consolidate growth inside boundary.	∉ Follow guidelines as set down in the Urban Growth Management Study.

SUB - AREA EIGHT

CHIAWELO , CHIAWELO EXT 2, CHIAWELO EXT 3, CHIAWELO EXT 4, CHIAWELO EXT 5, MAPETLA, PHIRI, SENOANE, DHLAMINI.

To promote and enhance the residential component to the benefit of the local communities.

DEVELOPMENT OBJECTIVE

To promote and upgrade the public environment.

INTERVENTIONS	GUIDELINES
1.1 Prioritise and encourage the development of underutilised land.	 ∉# Develop vacant land to improve functionality of the node. ∉# Improve linkages to the area.
1.2 Upgrading the public environment.	 ∉# Apply Nodal Policy. ∉# Apply Density Policy ∉# Apply Mobility Policy
1.3 Assess needs and provide amenities as required.	∉# Apply Nodal Policy.
1.4 Improve and retain a residential amenity by allowing business development in demarcated areas.	
1.5 Support the formulation of a focused economic development strategy.	∉# Apply Nodal Policy.

SUB - AREA NINE

KLIPTOWN

To overcome the backyard nature of the area through the creation of a diversified economic node, a transport hierarchy and to improve the living conditions in the area by the introduction and support of local economic activities.

DEVELOPMENT OBJECTIVE

To strengthen the existing infrastructure by integrating the existing fragmented uses and improving the overall functionality. Freedom Square, an important historical and cultural asset forms the central focus of the Kliptown Node.

INTERVENTIONS	GUIDELINES
1.1 Promote the optimal use of the existing land in terms of the Kliptown Development Framework.	∉# Refer to the Kliptown Development Framework.
1.2 Encourage the integration of existing land uses.	 ∉# Density according to density policy. ∉# Optimal use of facilities.
 Promote the regional function of Freedom Square through the encouragement of supportive land uses and facilities. 	 Maintenance of the existing infrastructure. Establish public private partnerships.
	∉# Permissible uses to compliment regional historical character.
1.4 Improve accessibility to the node by providing inter-modal transport facilities.	∉# In accordance with the proposed Integrated Transport Plan.
1.5 Promote a sense of place and community ownership.	 <i>∉</i> Providing signage, street names and house numbers. <i>∉</i> Apply MOSS Principles.
1.6 Stimulate the development of a viable local economy.	 <i>#</i> Provision of taxis/buses. <i>∉ #</i> Apply Nodal Policy
1.7 Allow business sites along K 43.	
1.8 Investigate feasibility of institutional housing as example for rest of Soweto	∉# Kliptown Development Framework.

SUB - AREA TEN

ELDORADO PARK, ELDORADO PARK EXT 1, ELDORADO PARK EXT 2, ELDORADO PARK EXT 3, ELDORADO PARK EXT 4, ELDORADO PARK EXT 5, ELDORADO PARK EXT 6, ELDORADO PARK EXT 7, ELDORADO PARK EXT 8, ELDORADO PARK EXT 9, ELDORADO PARK EXT 10, KLIPSPRUIT WEST, KLIPSPRUIT WEST EXT 1, KLIPSPRUIT WEST EXT 2, RACECOURSE, KLIPRIVIERSOOG ESTATE, NANCEFIELD EXT 1, KLIPRIVIERSOOG.

To promote the consolidation of existing services and to strengthen the linkage to Soweto, in particular Kliptown.

DEVELOPMENT OBJECTIVE

To contain the area's residential character and to strengthen the existing infrastructure.

INTERVENTIONS	GUIDELINES
1.1 Prioritise and encourage the development of underutilised land.	 ∉# Develop vacant land to improve functionality of the node. ∉# Improve linkages to the area. ∉# Undertake detailed study of vacant land.
1.2 Assess needs and provide amenities as required.	∉# Apply Nodal Policy.
1.3 Improve and retain a residential amenity by allowing business development in demarcated areas.	 ∉# Promote SMME's. ∉# Establish and support public- private partnerships. ∉# Support the establishment of local business forums.
1.4 Support the formulation of a focused economic development strategy.	
1.5 Allow for access and linkage to Golden Highway and N12.	∉# Integrate Eldorado Park Business District into surrounding areas especially Devland and Kliptown.
1.6 Tavern policy urgently needed.1.7 Undertake a Business District revitalization strategy.	∉# Apply Nodal Policy.

SUB - AREA ELEVEN

PIMVILLE ZONE 1, PIMVILLE ZONE 2, PIMVILLE ZONE 3, PIMVILLE ZONE 4, PIMVILLE ZONE 5, PIMVILLE ZONE 6, PIMVILLE ZONE 7, KLIPSPRUIT , KLIPSPRUIT EXT 1, KLIPSPRUIT EXT 3, KLIPSPRUIT EXT 4, KLIPSPRUIT EXT 5.

To ensure the integration of the area with the proposed Blue IQ developments in Kliptown. To enhance the public environment is essential to the sustainability of the area.

DEVELOPMENT OBJECTIVE

Upgrading of the public environment including improved traffic management, creating employment opportunities and attracting investment by the consolidation of land uses.

INTERVENTIONS	GUIDELINES
1.1 Prioritise and encourage the development of underutilised land.	 ∉# Apply Kliptown Development Strategy ∉# Apply Baralink Development Strategy
1.2 Assess needs and provide amenities as required.	
1.3 Improve and retain a residential amenity by allowing business development in demarcated areas.	 ∉# Apply nodal policy. ∉# Apply Kliptown Development Strategy ∉# Apply Baralink Development Strategy
1.4 Support the formulation of a focused economic development strategy.	
1.6 Allow higher densities along Old Potch Rd in specific areas.	 ∉# Apply Mobility Policy. ∉# Apply Nodal Policy. ∉# Apply Density Policy

SUB - AREA TWELVE

Open space system including the Klipspruit and Klipriver catchment areas.

DEVELOPMENT OBJECTIVE

To retain and enhance the public open space system.

INTERVENTIONS	GUIDELINES
1.1 To implement the JMOSS plan.	∉# JMOSS plan.
1.2 Create linkages with "Working for Water"	
1.3 Create synergy with the Baralink Coordination Committee	Ensure that there is clear communication between all stakeholders.
1.4 Regions to be involved in projects through coordination initiatives.	Apply Environmental Health Standards and identify strategic projects.

SUB - AREA THIRTEEN

ARMADALE, DEVLAND, DEVLAND EXT 1, DEVLAND EXT 2, DEVLAND EXT 6, DEVLAND EXT 9, DEVLAND EXT 14, DEVLAND EXT 15, DEVLAND EXT 16, DEVLAND EXT 27, NATURENA, NATURENA EXT 5, NATURENA EXT 6, NATURENA EXT 11, NATURENA EXT 13, NATURENA EXT 17, NATURENA EXT 19, NATURENA EXT 20, NATURENA EXT 25, NATURENA EXT 26, RIVASDALE.

To promote the development of the industrial areas of Devland while ensuring the residential component of Naturena remains viable.

DEVELOPMENT OBJECTIVE

To strengthen the existing economic environment by providing related infrastructure.

INTERVENTIONS	GUIDELINES
1.1Support industrial, business and	∉ Guided by infrastructure capacity.
related development in the Industrial	∉# Apply Density Policy.
areas.	∉# Apply Nodal Policy
1.2 Support mixed industrial related land	∉# Apply Density Policy
uses on Golden Highway.	∉# Apply Mobility Policy
1.3 Develop and economic strategy with incentives for job creation.	
1.4The optimal use and integration of the	
Goudkoppies Landfill site must be examined.	Strategy.
1.5 Determine the alignment and	∉# Refer to proposed ITP.
programme proposed for the K122.	

SUB - AREA FOURTEEN

LENASIA EXT 1, LENASIA EXT 3, LENASIA EXT 5, LENASIA EXT 13.

To retain neighbourhood nodes for local neighbourhood functions in order to protect the residential environment. As this area is more closely linked to the South, the development direction and land use tables conform to the proposals as set out in Region 11 RSDF.

DEVELOPMENT OBJECTIVE ONE

Business retention and regeneration by promoting inward investment.

	INTERVENTIONS	GUIDELINES
1.1	Develop the potential of Lenasia Business District .	 Any further non-residential development to be restricted to the existing Business District. The boundary of the Business District can however be extended one erf to the east. The boundary will then be located mid-block to the east of Gemsbok Avenue. Formulate a Lenasia Business District Precinct Plan. Create a business improvement district within the Business District to handle public safety, informal trade and environmental improvements.
1.2	Develop the potential of the industrial areas south of the Lenasia Business District.	 ∉# Establish an industrial park adjacent to the southern edge of the business district, extending to Anchorville. ∉# Consolidate industrial development to a strip development along the railway line.
1.3	Promote the mobility function of: ∉# Nirvana Drive East ∉# Nirvana Drive West ∉# Klipspruit Valley	∉# Apply mobility policy.

enforce Restore	e informal land uses and the law appropriately. the compromised tial fabric.	∉#	Apply Density Policy.
	e Lenasia's potential to from the local market.	∉# ∉#	Investigate pooling of resources, i.e. locating all medical services together to create a medical cluster. Apply Nodal Policy. Assist local businesses to identify market opportunities. Apply home office policy.
	t the formulation of a ed economic development y.	∉#	Promote small enterprises, training and business supports. Establish and support public- private partnerships. Support the establishment of local business forums.
	age the development of an agriculture.		Identify mechanisms for the development of an urban agricultural programme. Select sites for the piloting of urban agriculture projects.
1.8 Promot campai		∉#	Improve the reaction times of emergency services. Promote visible policing. Promote city improvement districts around the major nodes to include safety officers. Promote administrative support for community policing forums.
1.9 Develop ti Industria	he potential of Nancefield I area	∉#	Formulate guidelines for consolidation of Nancefield industrial area into a Local Industrial Park Improve linkages with the regional road network

DEVELOPMENT OBJECTIVE TWO

To develop vacant land within the built up area.

INTERVENTIONS	GUIDELINES
2.1 Prioritise and encourage th development of under-utilised lan within the built up area.	

DEVELOPMENT OBJECTIVE THREE

To promote more functional internal linkages.

	INTERVENTIONS	GUIDELINES
3.1	Create residential precincts that are protected from extraneous traffic.	 ∉# Apply mobility policy. ∉# Apply nodal policy. ∉# Apply density policy. ∉# Disallow the development of mixed use strips elsewhere.
3.2	Activity Streets that are the focus of non-residential uses include: § ' Rose Avenue § ' Flamingo Avenue § ' Robin / Hummingbird / Protea Avenues § ' Hydrangea Avenue § ' Bangalore Drive	 ∉# Apply nodal policy. ∉# Apply mobility policy. ∉# Non-residential activities to be located on these roads.
3.3	Improve traffic linkages and crossings of the rail reserve.	 ∉# Investigate more direct linkages, crossing the rail reserve. ∉# Link nodes to improve the traffic flow. ∉# Investigate the development of a road along the rail reserve linking the planned new retail node (Trade Route Shopping Centre) with the Lenasia business district.

SUB - AREA FIFTEEN

AGRICULTURE LAND WESTWARDS TOWARDS THE URBAN BOUNDARY

In order to ensure that sustainable planning practices are implemented in the Greater Soweto Area, further expansion westwards should be limited to allow for the consolidation eastwards.

DEVELOPMENT OBJECTIVE

The objective of this area is to retain the existing status quo.

INTERVENTIONS	GUIDELINES
1.1 Limit further expansion westwards.	∉ Retain Status Quo.
1.2 Apply recommendations of Growth Management Study.	∉# Apply Growth Management Study.
1.3 Contain growth to inside the urban Boundary.	∉# Apply Growth Management Study.
1.4 Coordination of development across urban boundary.	∉# Open dialogue with adjacent Mega City.
1.4 Investigate future infrastructural Capacities.	∉# UAC'S to be consulted on potential for future expansion.
1.5 Undertake a policy study on possible future expansion westwards.	

SUB - AREA SIXTEEN

BRAM FISCHERVILLE EXT 1, SLOVOVILLE, SLOVOVILLE EXT 1, THULANI, TSEPISONG.

To ensure that the sub area is integrated into the Greater Soweto Area with clearly defined linkages northward.

DEVELOPMENT OBJECTIVE

To strengthen and consolidate the area by promoting linkages as well as southwards towards Soweto.

INTERVENTIONS	GUIDELINES
1.1 Apply linkages northwards and southwards	∉# Apply ITP. ∉# Guided by the proposed East
	West Corridor Strategy.
1.2 Integration of Slovoville and Bram Fischerville into the Urban fabric of	Determine appropriate infill roads to connect to Provincial and local
Soweto.	road systems.
1.3 Promotion of a mixed use character.	Apply standards and norms for
	open spaces and social services
	∉ Cognisance to be taken of the
	Soweto Development
	Programme.
1.4 Investigate the infrastructural implications.	# Zero tolerance for Land invasions.
1.5 Support hierarchy of nodal	∉# Apply Nodal Study
development.	Development to be undertaken in consultation with community structures.

SECTION FIVE

CITY DEVELOPMENT PROGRAMMES / REGIONAL SUB-PROGRAMMES

5.1 INTRODUCTION

Historically, physical planning and the provision of infrastructure have, to a large extent, been fragmented. Beyond the obvious historical apartheid disparities in service provision, the lack of a long term, clear vision within the City has been one of the primary obstacles towards efficient and effective medium-long term service provision. The 2030 Economic Strategy (2002) has recently determined the long-term vision for the City. Accordingly, the Council and the Utilities, Agencies and Corporation have an obligation to ensure that services rendered are in line with an African World Class City goal and according to the direction that the SDF is providing.

PURPOSE

- To improve the City's service delivery through infrastructure and services that is planned, delivered, upgraded or managed in ways that support the City's vision and priorities.
- To direct future public and private investment
- To identify types of infrastructure and services planning and implementation choices

5.2 MANAGEMENT PROGRAMMES

The packaging of development and infrastructure issues into Programmes provides a comprehensive solution and set of specific actions to address a number of development and infrastructure. These will deliver benefits by integrating infrastructure and development proposals to ensure co-ordinated implementation. It is important to note that a programme does not have to be area bounded but can also be issue related or related to a specific sector. It is important to note that the programme relate to only capital investment and planning. The following is an illustration of the benefits of a programme approach.

- # Identification of commonalities and grouping issues across planning regions
- # Recognizing unique approaches required for each area or issue
- ∉# Allowing for linkages to other planning processes
- # Accommodating the integration and co-ordination of inputs from various processes
- # The comparing of "wish lists" and budget realities is possible
- # Identification of short term catalytic initiatives
- # It is the basis for monitoring of progress and impact

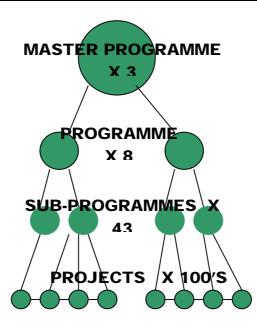


Figure 12 : CONCEPTUAL REPRESENTATION OF PROGRAMMES IN THE CITY

The following are broad definitions for each of the identified programmes:

5.2.1 CITY FOUNDATIONS MASTER PROGRAMME (CITY PRESENT)

This is a Master Programme comprising of two programmes: the Established Areas Programme and the Environmental Areas Programme.

The emphasis of this Master Programme is to maintain and wherever possible enhance the City's existing resources, both with respect to natural environmental assets and developed infrastructure.

i) Established Areas Programme

Parts of the city are well established and have developed over time. In relative terms, these services function well and the focus of the programme is to maintain and refurbish these services.

ii) Conservation Programme

There are some areas of the city that, for environmental, economic or other reasons, should not be developed as mainstream urban activity areas. These should be considered within the context of the Johannesburg Metropolitan Open Space System (JMOSS) and the urban development boundary.

Some areas may need to be preserved as formalised Conservation Areas, others as rural or agricultural areas. A number of the areas have been identified as having recreation or tourism potential.

5.2.2 METROPOLITAN DEVELOPMENT MASTER PROGRAMME (CITY PAST)

This Master Programme comprises of three Programmes: the Consolidation Programme, the Upgrade and Regeneration Programme and the Settlement Programme.

This Master Programme seeks to cluster the historically disadvantaged areas, whilst acknowledging that several developmental approaches are required to overcome the variety of issues within each area.

The need to significantly increase quality of life within these existing communities via the provision of formal housing and engineering and social services necessitates a capital investment programme that addresses backlogs as well as the upgrading and maintenance of existing infrastructure.

i) Consolidation Programme

The city's previously disadvantaged areas require a package of strategic interventions that will 'normalise' them and allow them to develop as viable, self-sustaining communities.

Within the marginalized, formal townships of the City, levels of service provision may need to be improved, economic activity stimulated and a variety of other spatial and non-spatial interventions required. It is important to note that these interventions may not all be within the mandate of the City, specifically with regard to certain social and welfare functions.

Where these areas are beyond the defined urban development boundary of the city, the development rationale is to contain development within the defined boundaries to provide greater economies of scale and to curb urban sprawl.

The rationale with respect to marginalized formal townships within the urban development boundary is to integrate them functionally with the core economic areas within the city (Established Areas).

The upgrading of gravel roads is integral to this Programme.

The purpose of this programme is to identify the interventions that will have most impact on the development and growth of these areas and the respective communities.

ii) Upgrade And Redevelopment Programme

Within the City, a number of priority areas have been subjected to intensive planning and re-investment due to the inherent opportunities, qualities and resources of the particular area. The Central Business District of the City and Alexandra Township are two notable and popular examples.

Some areas of the city have become run down over time due to a variety of reasons such as neglect and lack of financial input. The problems in these areas are both physical (e.g. bad buildings and lack of service maintenance) and social (e.g. social problems such as gangsterism or substance abuse). Programmes already exist for two of these areas, namely Alexandra and the Inner City.

iii) Settlement Programme

The City needs to address an estimated housing backlog of over 200,000 households both in terms of quantity as well as quantity and within the context of the stated vision of an African World Class City. Simply put, the development approach can make or break the City; it can achieve or fail in respect of its stated objectives.

It is vital that the provision of new housing and the associated infrastructure is provided in a way that contributes to the concept of sustainable environments and communities.

The primary objective of this Programme is to ensure that new subsidised housing projects are well located within the urban system and can be integrated into the city.

The Programme targets the upgrading and formalisation of informal settlements and the way the City deals with upgrading informal settlements. Fundamental issues such as housing typologies and densities will also be components of this programme.

5.2.3 STRATEGIC INTERVENTIONS MASTER PROGRAMME (CITY FUTURE)

This Master Programme comprises two programmes: the Opportunity Areas Programme, the Strategic Roads Programme and the Nodal Programme.

Whilst acknowledging the need to maintain, upgrade and facilitate new infrastructure within the existing areas of the City and within applicable fiscal constraints, the Strategic Interventions Master Programme focuses attention and potential investment on desirable development scenarios in the future. The sub-programmes emanating from this Master Programme suggest a number of strategic interventions that can unlock economic potential within the City. Naturally, these areas are focused within the context of an urban development boundary and do not seek to develop on peripheral areas of the City.

i) New Opportunity Areas Programme

A number of areas of growth potential have been identified in the city. The areas have been identified given unique attributes and compliance with accepted planning principles.

These vary in extent, the types of opportunities they may be suitable for and current land use. In certain instances planning initiatives have been undertaken, others have yet to be subjected to any detailed studies.

For the purpose of the Programme, the various opportunities have been classified as:

a. Corridors

The east / west and north / south corridors are integral elements of the spatial development framework. These are broad areas of land containing major transportation structures and may potentially support a high concentration of residential densities and economic activity.

b. New development

Strategically located vacant land parcels and brownfield sites exist within the city's urban development boundary. These can be developed in a manner that supports the key development strategies and goals of the city.

c. Redevelopment, Densification and Infill

Certain components of the city do not function optimally and require interventions to facilitate new development. Other components may be improved by fostering redevelopment of specific portions. Redevelopment could involve intensifying the land uses, or conversely, creating open space in densely developed areas.

It is an accepted principle that appropriate densities are required to support public transportation and support land uses within the urban development boundary. Appropriate densification strategies should be implemented in areas where it will have the greatest impact in achieving a commuting pattern that focuses on public rather than private transportation.

Infill development relates to the development of vacant portions of land that are found between existing developed land parcels.

ii) The Mobility And Connectivity Programme

The need to physically link and integrate marginalized and historically disadvantaged communities to the economic heart of the city is central to the developmental rationale of the capital investment framework. A series of strategic interventions in respect of roads will begin to address this need.

This programme has identified and listed the most strategically important road projects that would have citywide impact and significance.

Roads that improve accessibility, promote integration of communities and promote development in desired areas are prioritised under this programme.

Similarly, there are a number of major intersections and existing roads that need upgrading. Certain road proposals are listed in certain strategically located areas to alleviate congestion or to open up land for development.

Traffic calming measures and traffic light upgrading are required throughout the city and are listed accordingly.

Note that the resurfacing of existing gravel roads is part of the consolidation programme, **except** where these are roads that have strategic citywide significance.

iii) Economic Growth Programme

Outcome: Focused spatial approach to economic growth

Johannesburg is a city with numerous dispersed nodes. Whilst the nodes may share common characteristics, the management of each node will be unique to allow for optimal functioning. The purpose of this programme is to provide direction on the management and development of nodes, regardless of their size or role in the urban system.

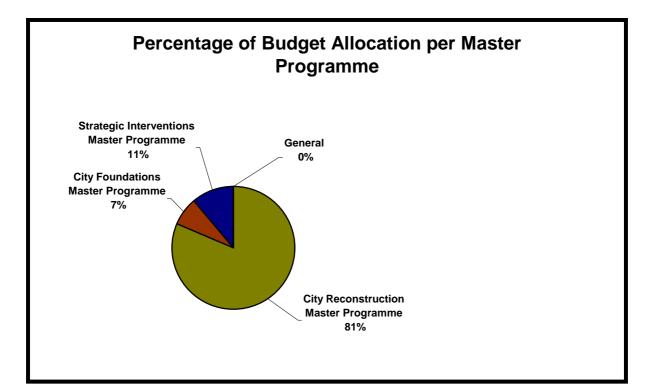
5.3 PROGRAMME PRIORITISATION AND BUDGET ALIGNMENT

With the sectoral alignment and prioritisation of programmes, it is important to ensure that the necessary budget alignment is achieved. This implies that, whenever an initiative is launched in a specific area, that all relevant line function departments have budgeted sufficiently for this in order to ensure that the initiative can be implemented in its totality. The capital budget alignment of projects and programmes is essential in order to ensure that implementation is really achieved. Without financial alignment all the above processes and programmes will remain initiatives on paper with virtually no impact on the ground.

If these programmes and plans are not efficiently implemented on the ground, the Urban Development Boundary will have no support and therefore it will come under immense pressure and/or become obsolete.

A assessment matrix comparing each of the programmes to the city priority criteria was developed. It assesses the level of inter-relationship in terms of direct impact on each of the above. The result was a specific weight per master program that is utilised in a prioritisation model.

From this prioritisation model a list of projects were identified and budgeted for. The pie chart below illustrated that the bulk of the budget was allocated to the City Reconstruction Master Programme. This is in line with the Mayoral Priorities and the City Scorecard. The detail of each of the following charts is in the full Capital Investment Framework document i.e. on which projects are the funds being spend.

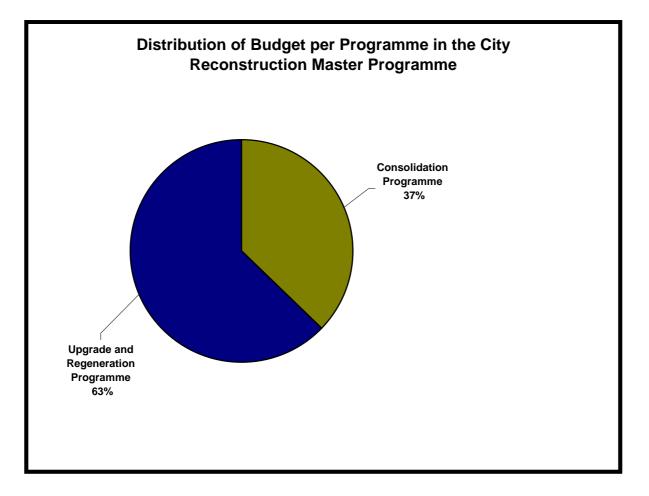


Graph 1 : Percentage of the budget distributed between the Master Programmes

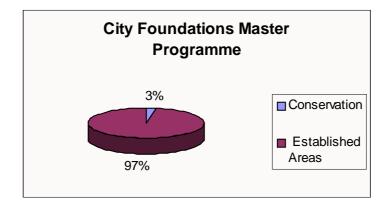
The City Reconstruction Master Programme has received 81% of the 2003/4 budgets. Of this 81%, approximately two-thirds is being allocated to the Upgrade and Regeneration Programme. The reason for the emphasis on this programme is that some of the backlogs mentioned in Section A will be eradicated.

The other third of the budget under this programme is focused on the Consolidation Programme, as this programme will help increase the standard of living in these areas. The pie chart below illustrates how the funds under the City reconstruction Master Programme are divided between the two programmes

Graph 2 : Percentage of the budget distributed within the City Reconstruction Master Programme.

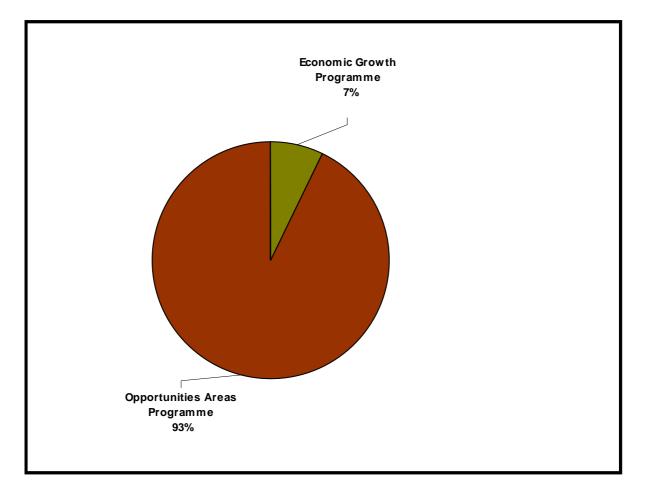


The aim of the City Foundations Master Programme is to sustain that pasts of the city that are functioning well and that are the "foundation" on which the rest of the city can be built upon. It is therefore logical that the bulk of the funds within this Master Programme be spent on the Established Areas.

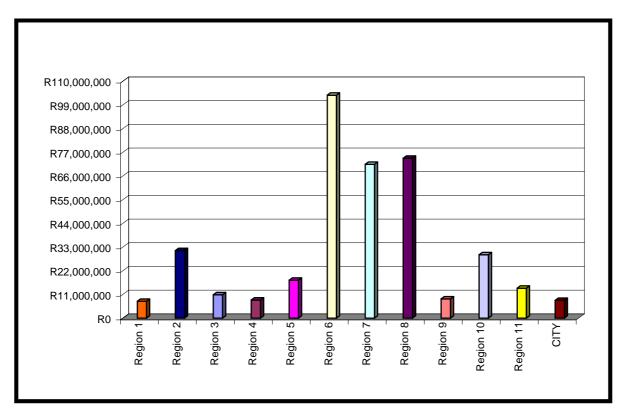


Graph 3 : Percentage of the budget distributed within the City Foundation Master Programme

The final Mater Programme is the Strategic Interventions Master Programme. The bulk of the funds within this Master Programme is being spent on the Opportunities Areas. These are areas where there is potential for further development. However, before one can make use of this opportunity, public intervention needs to occur in the form of basic infrastructure provision or catalytic projects. The Pie- Chart below illustrated how the finances are allocated within this Master Programme.

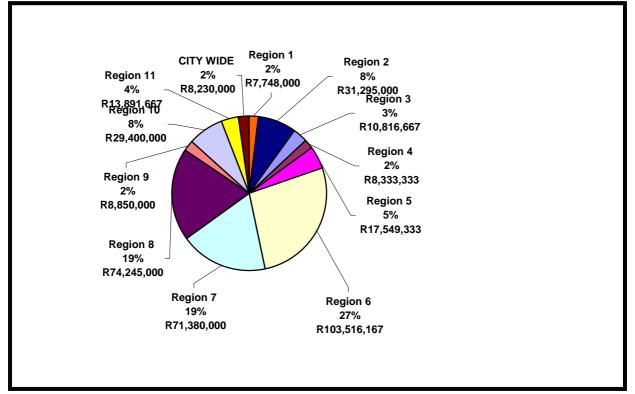


Graph 4 : Percentage of the budget distributed within the Strategic Interventions Master Programme



Graph 5 : Budget distributed within the various regions

Graph 6 : Percentage of the budget distributed within the various regions



5.4 SOWETO CONSOLIDATION SUB-PROGRAM

As previously mentioned under Section 1, in terms of the Municipal Systems Act, the Council needs to review the LIDP's each year. Included in the review process are public participation initiatives with communities, UAC's and internal Departments. The review process culminates into a reassessment of applicable policies and or interventions/guidelines along with potential projects, which will ultimately be classified according to the three masters, programmes as listed above. These projects are put forward for budgetary consideration and assessed by the necessary decision-making bodies based on, among others, Mayoral priorities, IDP objectives and budgetary constraints. Map 6.

Soweto falls under the generic consolidation programme. A specific sub-program is the Soweto Consolidation Sub-Programme. All projects that were identified during the public participation process were grouped under the Soweto Consolidation Sub-Programme. For ease of reference, the projects were further grouped into specific categories.

5.4.1 SUB-PROGRAMME 1: SOWETO CONSOLIDATION PROGRAMME

The table below depicts all the projects submitted by the community through the public participation process for the RSDF.

PROJECT	LOCATION	PROJECT	LOCATION
Social Services Clinics		Social Services Libraries	
Construct Clinic at Protea South.	Stand 2577.	Naledi Library.	Stand 676
Construct Clinic at Bram – Fischerville.	Stand 2514.	Fox Lake Library.	Stand 2010.
Construct Clinic at Protea Glen.	Stand 8996/58	Protea Glen Ext 11 and 12.	Protea Glen Ext 11 and 12.
Construct Clinic at Slovoville.	Stand 1082	Extension to Protea Glen Ext 1 Library.	Stand 1703
Extensions to Nokuphila Clinic.	Stand 8405	Extension to Phiri Library.	Stand 448
Extensions to Klipspruit-west Clinic.	Stand 481.	Extension of Mofolo Library.	Stand 129.
New Clinic to be constructed in Devland	Devland	Extension of Noordgesig library.	Stand 541
Shanty Clinic upgrade.	Stand 1000.	New library at Zondi.	Zondi.
Michael Maponya Clinic	Stand 3667	New library at Dube.	Dube.

INTEGRATED SOCIAL SERVICE DELIVERY

Eldorado Park Ext 9.	Stand 8552	New library at	Meadowlands
Zondi Clinic	Stand 1730	Meadowlands. New library at Diepkloof Zone 5.	Diepkloof Zone 5
Eldorado Park Ext 2,	Stand 3319	All libraries to be made accessible to the disabled and to accommodate computer literacy centres.	Greater Soweto Area.
Meadowlands Zone 11,	Stand 28662	Tshepisong Library.	Stand 2558.
Central Camp,	Stand 24673	PROJECT	LOCATION
Meadowlands Zone 10	Stand 27578	Social Services Skills Development Centre	
Orlando East Clinic.	Orlando East	Slovo Park Skills Development Centre.	Slovo Park
Upgrading of existing disaster management Offices	Greater Soweto Area.	Tshepisong Skills Development Centre.	Tshepisong Stand 2558.
New clinic required at Protea Glen.	Stand 8896/58	Tladi Skills Development Centre.	Tladi Stand 1592.
		Protea Glen Skills Development Centre.	Protea Glen
PROJECT	LOCATION	Kopanong Community Centre.	Stand 2332
Sports Facilities		Orlando West multi-purpose Centre.	Orlando West Stand 9975.
Naledi Sports Centre Upgrading.	Stand 741 Letsatai Street.	Conversion of Diepkloof Police Station into Community Centre.	Diepkloof Police Station
Nokuphila Recreation Centre.	Stand 8405 Sejoe Street.	Dube Hostel Skills Centre.	Dube
Metsi Recreation Centre.	Stand 2532 Mphephetho	Freedom Park multi-purpose	Kliptown

	Street.	centre.	
Protea Glen Sports	Protea Glen	Nomzamo Skills	
Complex.		Centre.	
Tshepisong	Tshepisong	Need for Child	Greater Soweto Area
Community Hall.	ronopioong	Care facilities	
		and people with	
		disabilities.	
Elkah Soccer fields.		Need to	Greater Soweto Area
1677 Lefatola Street.		identify Poverty	
		Alleviation	
		projects.	
Jabavu Soccer Fields.	Jabavu		
Stand 3133			
Numerous Butt huts	Greater		
	Soweto		
	Area		
Doornkop Recreation	Doornkop		
Centre. Block 4	-		
Doornkop.			
Chiawelo Community	Chiawelo		
Centre. 671 Old			
Potch Rd.			
Greening of Soccer	Greater		
fields. 2 per Zone.	Soweto		
	Area		
Revamp of Nancefield	Nancefield		
Boxing Academy.			
Slovoville Recreation	Slovoville		
Centre.			
Old Naledi Hall.	Naledi		
Phiri Hall	Phiri		
Lenasia Cricket	Lenasia		
Stadium.			
Lenasia Golf Course.	Lenasia		
Lenasia Ext 5 – Open	Lenasia Ext		
Fields.	5		
Eldorado Stadium	Eldorado		
Eldorado Stadium Ext	Eldorado		
6 Dimville Celf Course	Dimville		
Pimville Golf Course	Pimville		
Open Fields	Greater		
	Soweto		
Recreation Centre.	Area Meadowlan		
Meadowlands Zone 5.	ds Zone 5.		
Orlando Swimming	Orlando		
Pool			
Meadowlands	Meadowlan		
Swimming pool	ds		
Eldorado Park Proper	Eldorado		
Swimming pool	Park Proper		
Pimville Swimming	Pimville		
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Lack of decent facility Jabulani		Dobsonville.		
	Lack of decent facility			
	within Jabulani Hostel.	Hostel		

Green Heart for Soweto Programme

PROJECT	LOCATION	PROJECT	LOCATION
Regional Parks		Other Facilities	
NEAC Park,	Mofolo	Klipspruit West Cemetery	Portion 176 of farm Braamfontein
Orlando Dam Precinct	Orlando	Doornkop Cemetery	Portion 8 and 15 of portion 5 Jabulani
Regina Mundi/Moroka Dam Project	Moroka	Nancefield Cemetery	Portion 64 of farm Klipspruit 298
Other Facilities		Depot Upgrading	Nancefield
Cemetery Development	Klipspruit West Proper Le Roux Cemetery	Depot Upgrading	Dobsonville
Upgrading of middle islands	Old Potch Road	Development of park	Senaoane

New Park	Eldorado	Development of	Protea Glen
developments	Park Ext 1-9	park	
Develop entrance.	Diepkloof Cemetery	Development of park	Molapo
New Park	Klipspruit	Development of park	Jabavu
Proposed Wetlands	Klipriver berg	Develop entrance feature	Tsepisong / Protea South
Planned	Playground equipment	Development of entrance	Protea Glen
New Park	Meadowlan ds	Development of George Goch Park	Dube
Beautification Programs	Soweto Highway	Development of park	Chiawelo
New Development	Klipspruit Valley Road.	Development of park	Moletsane
New Park Development	Klipspruit	Development of park	Mofolo South
Avalon Cemetery	Portion 124 farm Klipriviersoo g 299	Development of park	CEJ and Tladi
Dobsonville Cemetery/Doornkop Cemetery	Re of farm Dobsonville 386	Development of entrance	Dobsonville Ext 3
New Roodepoort cemetery	Central Dobsonville	Development office surroundings	Kopanong Admin offices
Development of park	Zola	Development of park	Naledi
Development of park	Protea	Development of park	Bram Fischerville

Upgrading of Street Light Programme

PROJECT	LOCATION	PROJECT	LOCATION
Upgrading Street	Mofolo	Upgrading	Chiawelo.
Lighting.	North and	Street Lighting.	
	Central		
	Dube-		
	George		
	Goch		
Upgrading Street	Zola –	Emergency	Greater Soweto Area
Lighting.	Emdeni	High mast	
		repairs.	
Baralink Area.	Baralink		

Housing and Human Settlement

PROJECT	LOCATION	PROJECT	LOCATION
Chiawelo Flats.	Chiawelo	Essential	Golden Triangle
		Service	
Jabulani Flats.	Jabulani	Essential	Kliptown
		Service	
Zola Flats.	Zola	Job Summit	Kliptown.
Nancefield Hostel.	Nancefield	Mayibuye and	Kliptown.
		upgrading	
Lifateng Hostel.	Lifateng	Family Housing	Meadowlands Hostel.
Dobsonville Hostel.	Dobsonville	Essential	Nomzamo-Orlando
		Services	West
Jabulani Hostel.	Jabulani	Family Housing	Orlando West Hostel.
Mapetla Hostel.	Mapetla	Essential	Holomisa
		Services	
Baralink	Baralink	Need to identify	Greater Soweto Area
		land for housing	
		initiatives.	
Elias Motswaledi	Baralink	Develop hostels	Greater Soweto Area
		into self-	
		contained units.	
Diepkloof Hostel	Diepkloof		

Soweto Roads Consolidation Programme

PROJECT	LOCATION	PROJECT	LOCATION
Upgrading of Gravel	Orlando	Fast track	
Roads	East	projects Phase	
		4: Soweto	
		(VKE)	
	Pimville	Upgrading of	Slovoville, Protea Glen,
		storm water.	Bram Fischerville
	Moletsane	Access road to	Slovoville
		Hall	
	Jabavu	New Canada	
		Road Bridge.	
	Naledi	Kumalo Street	
		bridge	
	Diepkloof/	Diepkloof Spruit	
	Orlando	Gabion	
	East	Protection	
Soweto N1 Highway	Baralink	Road upgrading	Diepkloof Zone 3
Access.			
Westlake Extension		Naturena x15	
		and x 26	
		Engineering	
		Services	
N/S Soweto Highway		Enlarge Culvert	
Extension to City		Crossing:	
Deep.		Marthinus	

		Smuts	
Emdeni link westwards.	Emdeni	N1-Old Potch Rd Off ramps North	Old Potch
The K43 linkages Southward.	Kliptown	Klipspruit Flood Protection	Klipspruit Flood line
Intersection improvements: Rose Avenue & Nirvana Drive Lenasia		Upgrade Primary Storm water	Orlando East
Mapetla Storm water upgrade		Storm water Upgrade	Pimville Zone 6
Emdeni Bridge & Link Road Naledi Link bridge		Bridge Waterway	Pela Street
Jabavu Storm water upgrade		Kliptown Housing Project: Bus Route	Kliptown
Fast track projects Phase 4: Soweto (Africon)		Modjaji Rd Extension	
Fast track projects Phase 4: Soweto (J&G)		Pimville retention Pond Draining	Pimville
Fast track projects Phase 4: Soweto (J&G)		Koma/Bendle Intersection	
Fast track projects Phase 4: Soweto (KSI)		Upgrade Storm water reticulation:	South of Ben Naude – Diepkloof
N1-Old Potch Rd Off ramps South		Koma Road	Region 6
		Extension of Storm water: Mpondonde Street Pimville	Pimville
		Storm water Upgrade	Meadowlands/Dobsonv ille

Maps 5, Map 6, Map 7 depict a spatial representation of the broad development projects in the Greater Soweto Area.

5.5 INDICATIVE PROJECTS AS OF 1 MARCH 2003

The table below depicts the projects approved at the Mayoral Legotla in February 2003.

Region 6 and Region 10

Master	Programme	Sub-	Project	Amount	UAC
Programme		programme	Description		
City Reconstruction	Consolidation	Soweto	Gravel roads	R 30,000,000	JRA
City Reconstruction	Consolidation	Soweto	Street Lights	R 4,957,832	City Power
City Reconstruction	Consolidation	Soweto	Protea South Clinic Upgrade	R 1,600,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Protea Glen	R 500,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Hawker's Sheds enclosure	R 300,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Security Camera Installation	R 300,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Tsepisong: Multi Purpose	R 3,500,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Albertina Sisulu Centre	R 2,000,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	ST Jabulani Flats	R 781,000	Housing
City Reconstruction	Consolidation	Soweto	Mapetla Hostel	R 2,000,000	Housing
City Reconstruction	Consolidation	Soweto	Phiri Relocation	R 500,000	Housing
City Reconstruction	Consolidation	Soweto	Emdeni Bridge	R 11,000,000	JRA
City Reconstruction	Consolidation	Soweto	Modise, Vincent & Onslen	R 7,900,000	JRA
City Reconstruction	Consolidation	Soweto	Doornkop/Soweto	R 7,500,000	JRA
City Reconstruction	Consolidation	Soweto	Kliptown: Bus routes	R 1,450,000	JRA

City Reconstruction	Consolidation	Soweto	Doornkop/Soweto gravel roads	R 7,500,000	JRA
City Reconstruction	Consolidation	Soweto	Bram Fischerville: Gravel roads	R 6,000,000	JRA
City Reconstruction	Consolidation	Soweto	Replace existing transformer at Soweto Local	R 1,500,000	City Power
City Reconstruction	Consolidation	Soweto	Service Connections	R 200,000	City Power
City Reconstruction	Consolidation	Soweto	Township reticulations	R 75,000	City Power
City Reconstruction	Consolidation	Soweto	Public Lighting	R 783,333	City Power
City Reconstruction	Consolidation	Soweto	Refurbishment	R 250,000	City Power
City Reconstruction	Consolidation	Soweto	Doornkop / Soweto - Installation and upgrade of public lighting infrastructure	R 1,450,000	City Power
City Reconstruction	Consolidation	Soweto	Public lighting: Doornkop	R 950,000	City Power
City Reconstruction	Consolidation	Soweto	Avalon (Chiawelo)	R 1,000,000	City Parks
City Reconstruction	Consolidation	Soweto	New Roodepoort Cemetery (Dobsonville) (Change room)	R 100,000	City Parks
City Reconstruction	Consolidation	Soweto	Doornkop Cemetery (Fence)	R 500,000	City Parks
City Reconstruction	Consolidation	Soweto	Mapetla Wetlands and Park Development	R 500,000	City Parks
City Reconstruction	Consolidation	Soweto	Refurbishment of parks	R 1,000,000	City Parks

City Reconstruction	Consolidation	Soweto	Upgrading of existing and new Garden Sites	R 7,750,000	Pikitup
City Reconstruction	Consolidation	Soweto	Operation Gcina Manzi	R 6,200,000	JHB Water
City Reconstruction	Consolidation	Soweto	Robinson Landfill	R 1,600,000	Pikitup
City Reconstruction	Consolidation	Soweto	Marie Louise	R 1,600,000	Pikitup
City Reconstruction	Consolidation	Soweto	Amalgamation with HP Museum	R 1,000,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Revamping of the Cenotaph	R 150,000	Comm. Dev.
City Reconstruction	Consolidation	Soweto	Meadowlands Hostel	R 2,000,000	Housing
City Reconstruction	Consolidation	Soweto	Dube Hostel	R 1,000,000	Housing
City Reconstruction	Consolidation	Soweto	Diepkloof Hostel	R 1,000,000	Housing
City Reconstruction	Consolidation	Soweto	Orlando West Women's Hostel	R 1,000,000	Housing
City Reconstruction	Consolidation	Soweto	Golden Triangle	R 2,000,000	Housing
City Reconstruction	Consolidation	Soweto	Noordgesig relocation	R 52,000	Housing
City Reconstruction	Consolidation	Soweto	Noordgesig Culvert Improvement	R 1,500,000	JRA
City Reconstruction	Consolidation	Soweto	Eldorado Park Cemetery (Fence)	R 200,000	City Parks
City Reconstruction	Consolidation	Soweto	Dev of regional parks (Diepkloof, Mofolo, Klipspruit)	R 1,000,000	City Parks

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SECTION 6

APPLICABLE POLICIES AND PRECINCT PLANS

6.1 LISTING OF EXISTING PRECINCT PLANS AND POLICIES

The following list identifies those areas in which a precinct plan and/or a policy currently exists.

Baralink Development Framework; Ikwezi Precinct Plan; Jabulani Urban Design Framework; Kliptown Development Framework.

6.1 REQUIRED PRECINCT PLANS AND POLICIES

The following lists identify those areas that are in need of further detailed planning. The list appears in alphabetical order and is not representative of any form of priority.

Density Policy specific to Soweto and areas of similar characteristics; Dobsonville District Node; Dube Precinct Plan; Eldorado Park Business District; Jabulani Implementation Strategy; Merafi Precinct Plan; Nodal Policy specific to Soweto and areas of similar characteristics; Slovoville Multi-Purpose Precinct;

