

DIPALESENG MUNICIPALITY

IN PARTNERSHIP WITH



**rural development
& land reform**

Department:
Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA

SPATIAL DEVELOPMENT FRAMEWORK

2010

Prepared by:



Approved in terms of Council Resolution _____ dated _____ 2010

Table of Contents

CHAPTER 1.....	10
1 Forward by Executive Mayor	11
2 Background	11
3 Institutional framework.....	11
CHAPTER 2.....	13
4 Phase 1	14
5 Municipality in context	14
5.1 Contextual overview	14
5.2 Population	14
5.3 Resources	15
5.4 Engineering infrastructure	16
6 Pressing needs.....	19
6.1 District needs	19
6.2 Local needs.....	19
7 Municipal Vision	20
7.1 District municipality vision.....	20
7.2 Local municipality vision	20
7.3 Local municipality mission	21
7.4 Interrelationship of visions	21
8 Spatial implication of municipal vision.....	21
9 IDP principles and strategies	22
10 IDP projects	23
11 Synopsis of spatial interpretation of municipal IDP.....	27
11.1 Provision of services	27
11.2 Local economic development	28
12 Synopsis of phase 1.....	28
CHAPTER 3.....	31
13 Phase 2	32
14 Institutional analysis.....	32
14.1 Institutional background.....	32
14.2 South African Constitution and Principles of Sustainable Development.....	33
14.3 Local Government: Municipal Structures Act, Act 117 of 1998	33

14.4	Local Government: Municipal Systems Act 32 of 2000	33
14.5	Municipal Planning and Performance Management Regulations, 2001	34
14.6	The Development Facilitation Act 67 of 1995	34
14.7	National Environmental Management Act, 1998.....	37
14.8	The Land Use Management Bill, 2001.....	37
14.9	Accelerated and Shared Growth Initiative for South Africa (AsgiSA).....	38
14.10	Transformation of Certain Rural Areas Act (1998)	38
15	Alignment with national development perspectives	39
16	Alignment with provincial perspectives.....	54
17	Alignment with district development perspectives	58
18	Alignment with local development perspectives	70
19	Other initiatives	72
19.1	Maputo Development Corridor Flagship Programme.....	72
19.2	Mpumalanga Terrestrial Biodiversity Assessment	72
20	Spatial analysis and implication	74
20.1	Regional context.....	74
21	Environment.....	75
21.1	Climate.....	75
21.2	Topography	76
21.3	Geology.....	76
21.4	Agriculture crop potential	78
21.5	Conservation areas	79
22	Demographic characteristics.....	80
22.1	Population size.....	80
22.2	Population dependency ratio	81
22.3	Employment sector.....	82
22.4	Household income.....	84
22.5	Population age and gender composition.....	85
22.6	Education levels	86
22.7	Impact of HIV/Aids.....	88
23	Movement and linkages	90
24	Development trends.....	91
24.1	Structuring elements	91
24.2	Land use and settlement patterns	92

24.3	Proposed future projects/land uses	97
24.4	Vacant land analysis	98
24.5	Urban-rural spatial relationship.....	99
24.6	Heritage features.....	99
25	Economic activity	100
25.1	Agriculture	100
25.2	Mining	100
25.3	Investment patterns.....	101
26	Infrastructure.....	102
26.1	Water	102
26.2	Sanitation	103
26.3	Electricity.....	104
26.4	Waste management	105
27	Land ownership	107
27.1	Land tenure and ownership	107
27.2	Municipal land	108
27.3	Land reform.....	108
28	Relationship between IDP and Current Reality	110
28.1	Relationship between spatial issues and vision	110
29	Strategic Development Concept.....	112
29.1	Nodal development	113
29.2	Corridor development.....	113
29.3	Precincts	114
30	Synopsis of phase 2.....	114
CHAPTER 4	119
31	Phase 3	120
32	Spatial goal & objectives.....	124
32.1	Spatial goal	124
32.2	Spatial objectives	124
32.3	Spatial strategies.....	125
33	Strategic Development Concept.....	126
33.1	Structuring elements	126
33.2	Development opportunities.....	127
33.3	Rural environment.....	127

34	Macro Strategic Development Concept.....	127
34.1	Nodal development	128
34.2	Corridor development.....	129
34.3	Tourism development.....	131
34.4	Environmental conservation	132
34.5	Mining development	132
34.6	Agriculture	133
35	Departure points	136
35.1	Methodology.....	137
35.2	Limitations and assumptions	137
35.3	Balfour / Siyathemba	137
35.4	Greylingstad / Nthorwane	140
35.5	Grootvlei Extension 1 & 2, and Dasville	143
35.6	Interpretation of Table 41	144
36	Micro Strategic Development Concept.....	146
36.1	Spatial planning tools	146
36.2	Balfour.....	147
36.3	Tourism and accommodation	149
36.4	Greylingstad & Nthorwane.....	150
36.5	Grootvlei Extension 1, 2 & Dasville.....	152
37	Intervention Areas.....	154
37.1	Priority investment areas	154
37.2	Investment strategies	155
37.3	Strategic Areas for Thusong Service Centres.....	159
37.4	Policy intervention areas	160
38	Synopsis of phase 3.....	160
CHAPTER 5.....		173
39	Phase 4	174
40	Capital Expenditure Framework	175
41	Implementation policies	175
41.1	Nodal policy.....	175
41.2	Movement policy	178
41.3	Urban edge policy	179
41.4	Residential densification policy.....	180

41.5	Urban integration policy	182
41.6	Infrastructure policy	183
41.7	Sustainability policy	184
42	Land Management System Guidelines.....	185
42.1	Environmental conservation	185
42.2	Tourism	186
42.3	Mining	187
42.4	Agriculture	188
42.5	Residential	190
42.6	Rural residential/small holdings	190
42.7	Industrial.....	191
42.8	Cemeteries.....	191
42.9	Open space.....	193
42.10	Secondary open space network	193
43	Sector plan alignment	194
44	Monitoring tools	195
45	Marketing strategy	196
45.1	Establishment of an SDF committee.....	196
45.2	Establishment of a District Economic and Development Agency	197
45.3	Establishment of a Tourism Marketing Directorate or Agency	198
46	List of References	204
47	ANNEXURE A: CAPITAL EXPENDITURE FRAMEWORK	206
48	ANNEXURE B: PROJECT PRIORITISATION MATRIX	207
49	ANNEXURE C: MAPS	208

List of tables:

TABLE	1	CONTEXTUAL OVERVIEW
TABLE	2	POPULATION AND HOUSEHOLD FIGURES PER URBAN AREA
TABLE	3	BASIC INFRASTRUCTURE STANDARDS: ENGINEERING INFRASTRUCTURE
TABLE	4	BASIC INFRASTRUCTURE STANDARDS: SOCIAL INFRASTRUCTURE
TABLE	5	BASIC SERVICES BACKLOG
TABLE	6	INTERRELATIONSHIP OF VISIONS
TABLE	7	SPATIAL IMPLICATION OF VISION
TABLE	8	KPA'S AND KEY OBJECTIVES
TABLE	9	IDP PROJECTS
TABLE	10	ALIGNMENT WITH NATIONAL DEVELOPMENT PERSPECTIVE
TABLE	11	ALIGNMENT WITH PROVINCIAL PERSPECTIVE
TABLE	12	ALIGNMENT WITH DISTRICT DEVELOPMENT PERSPECTIVE
TABLE	13	ALIGNMENT WITH LOCAL DEVELOPMENT PERSPECTIVE
TABLE	14	DESCRIPTION OF BIODIVERSITY ASSESSMENT CATEGORIES
TABLE	15	REGIONAL CONTEXT
TABLE	16	AVERAGE ANNUAL RAINFALL
TABLE	17	GEOLOGY TYPES
TABLE	18	AGRICULTURAL CROP POTENTIAL
TABLE	19	POPULATION AND HOUSEHOLD FIGURES PER URBAN AREA
TABLE	20	EMPLOYMENT SECTOR AS PER GLOBAL INSIGHT
TABLE	21	HOUSEHOLD INCOME
TABLE	22	INCOME & EXPENDITURE AS PER GLOBAL INSIGHT 2009
TABLE	23	EDUCATION LEVEL AS PER GLOBAL INSIGHT 2009
TABLE	24	MPUMALANGA HIV/AIDS STATISTICS
TABLE	25	DISTANCES AND TRAVEL TIMES
TABLE	26	MODE OF TRANSPORT IN DIPALESENG
TABLE	27	SOCIAL INFRASTRUCTURE
TABLE	28	FUNDED PROJECTS AND LOCATION
TABLE	29	INVESTMENT PATTERNS
TABLE	30	WATER ACCESS
TABLE	31	DIPALESENG STRUCTURING ELEMENTS
TABLE	32	FUNCTIONALITY TYPES
TABLE	33	POPULATION AND HOUSEHOLD PROJECTIONS
TABLE	34	BALFOUR LAND DEMAND
TABLE	35	BALFOUR INFRASTRUCTURE DEMAND
TABLE	36	BALFOUR & SIYATHEMBA PROPOSED DEVELOPMENT PHASES
TABLE	37	GREYLINGSTAD LAND DEMAND
TABLE	38	GREYLINGSTAD/NTHORWANE INFRASTRUCTURE DEMAND
TABLE	39	GREYLINGSTAD/NTHORWANE PROPOSED DEVELOPMENT PHASES
TABLE	40	GROOTVLEI EXTENSION 1 & 2 AND DASVILLE LAND DEMAND
TABLE	41	GROOTVLEI EXTENSION 1 & 2 AND DASVILLE INFRASTRUCTURE DEMAND
TABLE	42	GROOTVLEI PROPOSED DEVELOPMENT PHASES
TABLE	43	SPATIAL PLANNING TOOLS
TABLE	44	BALFOUR STRUCTURING ELEMENTS
TABLE	45	GREYLINGSTAD STRUCTURING ELEMENTS
TABLE	46	GROOTVLEI EXTENSION 1 & 2, DASVILLE STRUCTURING ELEMENTS
TABLE	47	INVESTMENT STRATEGY 1 LINK TO INSTITUTIONAL FRAMEWORK

TABLE	48	INVESTMENT STRATEGY 2 LINK TO INSTITUTIONAL FRAMEWORK
TABLE	49	INVESTMENT STRATEGY 3 LINK TO INSTITUTIONAL FRAMEWORK
TABLE	50	INVESTMENT STRATEGY 4 LINK TO INSTITUTIONAL FRAMEWORK
TABLE	51	NODAL CLASSIFICATION
TABLE	52	STATUS OF SECTOR PLANS

LIST OF FIGURES

FIGURE	1	SEQUENCE OF PROCESSES
FIGURE	2	GERT SIBANDE DISTRICT HOUSEHOLD POPULATION PER MUNICIPALITY
FIGURE	3	EMPLOYMENT STATUS
FIGURE	4	EMPLOYMENT COMPARISON 2001 VS. 2007
FIGURE	5	EMPLOYMENT DISTRIBUTION
FIGURE	6	AGE AND GENDER
FIGURE	7	AGE TREND 2001 VS. 2007
FIGURE	8	EDUCATION LEVELS
FIGURE	9	SANITATION ACCESS
FIGURE	10	ELECTRICITY PROVISION
FIGURE	11	REFUSE REMOVAL 2001 VS. 2007
FIGURE	12	HOME OWNERSHIP AND TENURE
FIGURE	13	ORGANISATION
FIGURE	14	SPATIAL STRATEGIES
FIGURE	15	COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME
FIGURE	16	THE SIX-BLOCK SERVICE MODEL

MAPS

PLAN	1	NATIONAL CONTEXT
PLAN	2	PROVINCIAL CONTEXT
PLAN	3	DISTRICT CONTEXT
PLAN	4	URBAN/RURAL CONTEXT
PLAN	5	MAIN RESOURCES
PLAN	6	SETTLEMENT PATTERNS & POPULATION DISTRIBUTION
PLAN	7	INFRASTRUCTURE
PLAN	8	PRESSING NEEDS VERSES FUNDED PROJECTS
PLAN	9	NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE 2006: AREAS OF NATIONAL ECONOMIC SIGNIFICANCE
PLAN	10	MPUMALANGA SPACIAL DEVELOPMENT FRAMEWORK 2007
PLAN	11	DISTRICT SPATIAL DEVELOPMENT PERSPECTIVE 2007: PRINCIPLES AFFECTING DIPALESENG
PLAN	12	GERT SIBANDE DISTRICT ECONOMIC GROWTH STRATEGY
PLAN	13	DISTRICT INTERGRATED TRANSPORT STRATEGY 2008: DIPALESENG ANALYSIS
PLAN	14	MPUMALANGA TERRESTRIAL BIODIVERSITY ASSESSMENT
PLAN	15	DIPALESENG TERRESTRIAL BIODIVERSITY ASSESSMENT
PLAN	16	REGIONAL LINKAGES
PLAN	17	ANNUAL RAINFALL
PLAN	18	SLOPE ANALYSIS
PLAN	19	GEOLOGY
PLAN	20	DISTRICT ECONOMIC GEOLOGY
PLAN	21	ECONOMIC GEOLOGY
PLAN	22	MINING LAND
PLAN	23	AGRICULTURAL CROP POTENTIAL
PLAN	24	WATER BODIES

PLAN	25	MUNICIPAL LAND COVER
PLAN	26	BALFOUR & SIYATHEMBA
PLAN	27	DASVILLE & GROOTVLEI EXT1
PLAN	28	GROOTVLEI EXT2
PLAN	29	GREYLINGSTAD & NTHORWANE
PLAN	30	WATER INFRASTRUCTURE
PLAN	31	SANITATION INFRASTRUCTURE
PLAN	32	ELECTRICAL INFRASTRUCTURE
PLAN	33	LAND OWNERSHIP
PLAN	34	LAND REFORM DISTRICT CONTEXT
PLAN	35	LAND REFORM
PLAN	36	DIPALESENG STRUCTURING ELEMENTS
PLAN	37	MACRO STRATEGIC DEVELOPMENT CONCEPT
PLAN	38	BALFOUR & SIYATHEMBA STRUCTURING ELEMENTS
PLAN	39	BALFOUR & SIYATHEMBA MICRO STRATEGIC DEVELOPMENT CONCEPT
PLAN	40	GREYLINGSTAD & NTHORWANE STRUCTURING ELEMENTS
PLAN	41	GREYLINGSTAD & NTHORWANE MICRO STRATEGIC DEVELOPMENT CONCEPT
PLAN	42	GROOTVLEI & DASVILLE STRUCTURING ELEMENTS
PLAN	43	GROOTVLEI & DASVILLE MICRO STRATEGIC DEVELOPMENT CONCEPT

CHAPTER 1



1 Forward by Executive Mayor

NOTE: The forward by the Executive Mayor, will be included in the final document.

2 Background

The Department of Rural Development and Land Reform has invited bids from Service Providers to develop a rural municipal Spatial Development Framework (RSDF) for the Dipaleseng Municipality in the Gert Sibande District Municipality.

Umsebe Development Planners was appointed by the aforementioned department with the main objective to:

“To develop a SDF for Dipaleseng Local Municipality to address spatial, environmental and socio-economic issues confronting rural areas, to develop a SDF that will facilitate the implementation of the Integrated Development Plan and all government programmes or intentions to fight poverty and facilitate development”

3 Institutional framework

The compilation of the Dipaleseng Municipality Spatial Development Framework (SDF) has involved various role-players, municipal officials, elected representatives, government departments and key stakeholders through regular consultative meetings.

The SDF was steered, managed and approved within the following institutional framework:

Project Steering Committee

A Project Steering Committee was established to ensure overall management of the project. This committee consisted of representatives from the following organisations:

1. Office of the Premier
2. Department of Rural Development and Land Reform
3. Development Bank of South Africa
4. Gert Sibande District Municipality
5. Provincial Department of Cooperative Governance and Traditional Affairs
6. Department of Local Economic Development, Environment and Tourism
7. Department of Agriculture
8. Department of Roads and Transport
9. Department of Health and Social Development
10. Department of Water Affairs
11. Department of Agriculture, Rural Development and Land Administration

Project Management Team

A Project Management Team was established to carry out the day to day management of the project. This team consisted of representatives from the following organizations:

1. Department of Rural Development and Land Reform
2. Local Municipality
3. Service Provider

CHAPTER 2



4 Phase 1

The Integrated Development Plan (IDP) constitutes the blueprint of the Municipality's strategies in addressing the socio-economic development needs of the communities (*Local Government: Municipal Systems Act, Act 32 of 2000*). The IDP reflects the key development focus areas agreed upon with communities and stakeholders and the Spatial Development Framework (SDF) in turn guides and informs land development and management. In other words the SDF gives spatial effect to multi-sectoral projects identified in the IDP and assists the municipality in coordinating the implementation of the various sector plans. Therefore, the SDF cannot operate in isolation but is directly linked to the IDP to ensure consistency and harmony.

This chapter focuses on the spatial interpretation of the Dipaleseng IDP 2010/2011. The purpose is to spatially interpret the municipal vision and strategy to ensure the alignment thereof with national and provincial planning requirements and to identify key intervention areas possibly not catered for in the municipal area.

5 Municipality in context

5.1 Contextual overview

Table 1: Contextual overview

ATTRIBUTES	DESCRIPTION	PLAN
NATIONAL CONTEXT:	Located in the Mpumalanga Province, RSA.	Plan 1
PROVINCIAL CONTEXT:	Located in the Gert Sibande District Municipality, one of 3 district municipalities in the Mpumalanga Province.	Plan 2
DISTRICT CONTEXT:	Dipaleseng Municipality is situated in the south western part of the district municipality, one of 7 local municipalities in Gert Sibande district. Dipaleseng Municipality is bordered by the Free State Province to the south, Gauteng Province to the north west, Govan Mbeki Municipality to the north east and Lekwa Municipality to the south east.	Plan 3
WARDS:	6	
URBAN NODES:	Balfour/ Siyathemba, Grootvlei and Greylingstad/ Nthorwane.	
POPULATION:	38 618 (Census 2001) 37 873 (Community Survey 2007)	
HOUSEHOLDS:	9 474 (Census 2001) 12 324 (Community Survey 2007)	
SIZE (km ²):	2 616km ²	

5.2 Population

According to the 2001 Census, the population of Dipaleseng was estimated at 38 618 and the community survey of 2007 estimated the population to be 37 873 people. The majority of people are concentrated in municipal urban areas which are Balfour/Siyathemba, Grootvlei and Greylingstad, the rest of the people are dispersed in the rural areas. (*See Plan 6: Settlement patterns & population distribution*). In terms of the 2001 Census, the number of households were 9 474 and the 2007 community survey estimated the number of households to be 12 324.

The number of people and households per area are indicated in Table 2 below. Dipaleseng Municipality is the smallest municipality in the district with a small population. The population density is of 14 people per km².

Table 2: Population and household figures per urban area

Towns	Population	Current Household
Balfour	2073	593
Ekanini	287	78
Siyathemba	17744	4850
Grootvlei	1121	204
Greylingstad	1502	392
Nthorwane	2882	760
Rural/Farmland	13009	2597
TOTALS	38618	9474

(Source: Stats SA 2001)

Population concentrations are also indicated on the attached plan (Plan 6). From Table 2 above it is evident that more than half of the population of Dipaleseng are concentrated in the Balfour/Siyathemba area (51%) while almost 34% are dispersed throughout the rural areas. The rest of the population are concentrated in the remaining urban nodes, with 11% in Greylingstad/Nthorwane and 4% in Grootvlei.

5.3 Resources

The availability and accessibility of resources (natural and human) determines the potential for economic development of the municipal area. The resources of the Dipaleseng Municipality are as follows:

- **Extensive Land**

The economy of Dipaleseng Municipality is predominantly dependent on its extensive land which is dominated by wide spread commercial agriculture, mainly maize and livestock farming. Opportunities for local beneficiation of raw agricultural resources have not yet been exploited because the municipality does not have any major industries.

- **Minerals and Metals**

The Dipaleseng municipal area is underlain by coal deposits; however there are no local coal mines that supply coal to the Eskom Power Station situated in Grootvlei. Currently, the Eskom Power Station receives coal from mines in other local municipalities. Therefore, the development of a coal mine needs to be investigated to ensure that the communities of Dipaleseng benefit from the opportunities offered by the natural resource (coal). The municipal area is also host of some gold deposits which have not been adequately explored. At the present moment, the Great Basin Gold Mine is the only mine in Dipaleseng. This section will further be explored in the next Phases of the document.

- **Water (Vaal River)**

The Vaal River which flows from the Vaal Dam in the Free State Province forms part of the southern boundary of the municipality. The river is an important source of water for agriculture and domestic use. The Vaal River further provides opportunities for water sport and recreation, tourism and resort development.

- **Pristine Natural Environment**

The natural environment of the municipality presents numerous tourism opportunities such as lodges, resorts and bed and breakfast establishments. The Grootvlei Dam attracts unique bird species that are not found elsewhere in the world.

5.4 Engineering infrastructure

The development potential of certain areas can only be realised if the necessary engineering infrastructure is developed. The IDP 2010-2011 confirms the following information on engineering infrastructure: (*See Plan 7: Infrastructure*). Refer to Table 3: Basic Infrastructure Standards.

Since 1994 the Municipality has been striving to provide and improve basic services and engineering infrastructure to its communities:

- The municipality has extended its services to rural communities/farms by providing boreholes where farm owners consented to this service through funding from the District, MIG, and MSIG.
- In some rural/farm areas, service provision became difficult due to resistance by farm/land owners and this poses a challenge to the municipality.
- The development of informal settlements around urban nodes hinders the municipal programme's service delivery, particularly at Balfour and Grootvlei.
- The availability of land suitable for the provision of housing is still a challenge. The municipality is unable to purchase land but rely on external funding to purchase land for housing purposes.
- The municipality is still unable to effectively provide free basic electricity to its indigent households.

Water

The number of households that have access to piped water has increased from 93.7% in 2001 to 95.5% in 2007. There has also been an increase in the number of households that receive water through boreholes from 1.5% to 2.9%.

- There is only one water purification plant in the Dipaleseng municipal area.
- All urban areas including squatter settlements within the municipality have access to potable water.

- There are still some backlogs in the provision of potable water in the rural farming area. A number of boreholes have been sunk on some farms to help alleviate the problem.
- Dipaleseng Municipality provides free basic water to its indigent residents.

Sanitation

The number of households that have a flush toilet connected to a sewerage system has increased from 38.4% in 2001 to 68.1% in 2007. There has also been a decline in the number of households that have a flush toilet with a septic tank from 17.8% to 1.2%. This therefore indicates that more and more households are being connected to the sewerage system. In 2001, 1.7% of the households were using pit latrines with ventilation (VIP) and this figure had increased to 6.8% in 2007. 14.4% of households were using the pit latrine without ventilation in 2001 but no figures are available for 2007. There are currently no households that make use of the bucket latrine system, however, the number of households without any toilet facilities has increased from 7.9% to 16.5%.

Electricity

According to Stats SA, the number of households that use electricity for heating has increased from 27.0% in 2001 to 40.4% in 2007, whereas the number of households using coal has decreased from 47.6% to 42.0%. With regards to energy for cooking, there has been an increase in the number of households that use electricity for cooking from 28.2% in 2001 to 57.3% in 2007. This increase was followed by a decrease in the use of coal for cooking from 44.2% in 2001 to 24.5% in 2007. Although there is a decline in the use of coal for heating and cooking, the coal usage is still high implying that air pollution as a result of the burning of coal is still high in this area. This therefore has a serious implication on the quality of the municipal environment.

- Eskom provides electricity infrastructure to all three urban nodes as well as some rural areas.
- All formal areas have access to electricity.
- The total backlog for electricity for both Eskom and the Municipality is approximately 2900 households.

Refuse disposal

According to Stats SA, there has been an increase in the number of households who have their refuse removed by the local authority/private company at least once a week, from 65.5% in 2001 to 77.4% in 2007. The number of households with their own refuse dumps has decreased from 29.3% to 10.2% and this indicates that more households are having their refuse removed by the local authority/private company. The number of households with no rubbish disposal has however increased from 2.9% in 2001 to 11.2% in 2007. The lack of refuse disposal sites in some communities is a threat to the quality of the municipal environment.

Roads

- The municipality has a good road system that comprises of national, provincial and local roads.
- The national road, the N3 from Johannesburg to Durban, is a first order road which is highly mobile and well maintained.
- The provincial roads, R21 and R53, are not in good condition as they are damaged by heavy trucks transporting coal. There is therefore a constant need for the maintenance and upgrading of these roads.
- Other secondary roads linking various farms and settlements within Dipaleseng are not in good condition, some are gravel roads and the tarred roads need to be upgraded.

Table 3: Basic Infrastructure Standards: Engineering Infrastructure

BASIC ENGINEERING INFRASTRUCTURE STANDARDS	
Engineering Infrastructure	
Water	25 litres per person per day; Maximum distance a person should have to cart water to their dwelling is 200 metres; The flow rate of water from the outlet should not be less than 10 litres per minute.
Sanitation	Ventilated Improved Pit toilet (VIP) per household, if constructed to agreed standards and maintained properly, provides an appropriate and adequate basic level of sanitation service. Bucket system of sanitation is not considered an adequate service.

(Source: Water Supply and Sanitation Policy White Paper, 1994)

Table 4: Basic Infrastructure Standards: Social Infrastructure

BASIC SOCIAL INFRASTRUCTURE STANDARDS		
Social Infrastructure		
Land Use	Stand Size	Standard
Primary schools	2,4ha	1/3 000-4 000 pers.
Secondary schools	4,6ha	1/6 000 - 10 000 pers.
Tertiary facilities	No specifics	N/A
Mobile clinics	No specifics	1/5 000 pers.
Clinic	0,1ha	1/5 000 pers.
Hospitals	No specifics	N/A
Libraries	Minimum size for facility 130m ²	1/5 000-50 000 pers.
Community centres	5 000m ²	1/10 000 pers.
Religious centres (churches, mosques, etc.)	150m ² – 3 000m ²	1/2 000 pers.
Municipal offices/pay points	3 000m ²	1/50 000 pers.
Fire stations	1.2ha	1/60 000 pers.
Post office	500m ² generally incorporated into commercial shopping nodes	1/11 000 pers.
Police station	0,1ha to 1,0ha	1/25 000 pers.

(Source: Guidelines for human settlement planning and design, 2000)

6 Pressing needs

6.1 District needs

The Gert Sibande District IDP 2010-2011 identified the following needs for the Dipaleseng Local Municipality:

1. Facilitation and support of local municipalities in the development of sport, arts and cultural facilities and traditional arts.
2. Identification and implementation of high impact LED projects/programmes.
3. Providing support services, mentorship and investment towards ensuring sustainability and effective utilisation of farms attained through Land Reform Programmes.
4. Progressively ensuring that rural communities enjoy the same rights and benefits as urban communities in terms of free basic services and provision of housing.
5. Eradication of the remaining water and sanitation backlogs.
6. The establishment of systems for the proper monitoring and testing of potable and effluent water quality.
7. Supporting municipalities with the purchasing of land for residential purposes.
8. Need to proactively prevent emergence and spread of informal settlements whilst formalising the existing backlog.
9. Fragmented Town Planning Schemes.
10. Inadequate knowledge of land ownership and uses of varying pockets of land across the District.
11. Addressing the current state of poorly repaired roads in the District.
12. Equitable distribution of facilities across the District as per the spatial dynamics.
13. Vandalism of upgraded facilities.
14. Addressing the substandard nature of sport facilities.
15. Need for specialised housing for terminally ill and wheelchair-bound people.
16. Unpermitted and illegal land-fill sites.
17. Increase in waste generation with no sufficient corresponding planning of future sites.
18. Un-maintained landfill sites.
19. Existence of some sections of the community not receiving waste collection service.
20. Management of cemeteries and future planning for land needs.

6.2 Local needs

The Dipaleseng IDP 2009/2010 identified the following key intervention areas:

1. Increase in unemployment amongst residents, which creates an additional strain on municipal service delivery as more people cannot afford to pay for municipal services.
2. Shortage of land for housing and other social amenities.
3. Lack of libraries.
4. Unfenced cemeteries.
5. Provision of potable water in the rural/farmland areas within the municipality.
6. Poor road conditions.

The backlogs on basic services per area are as follows:

Table 5: Basic services backlog

Community	Water	Electricity	Sanitation	Bucket	Housing
Balfour/Siyathemba	-	900	-	-	3000
Grootvlei	-	1200	-	-	1000
Greylingstad/Nthorwane	-	800	-	-	1000
Rural/Farmland	-	-	-	-	1000
Total	2700	2900	2000	0	6000

(Source: Stats SA, 2001)

7 Municipal Vision

One of the core components of an IDP is the municipal council's vision for the long term development of the municipality with special emphasis on the municipality's most critical development needs and internal transformation needs (*Local Government: Municipal Systems Act, Act 32 of 2000*).

A municipal vision, informed by national legislation, policies and strategies, will ultimately determine what strategies, plans, projects and programmes the municipality will implement in order to attain its vision.

7.1 District municipality vision

"Striving to excel in good governance and quality infrastructure"

7.2 Local municipality vision

Based on the pressing needs, the Dipaleseng Local Municipality has formulated the following vision:

"Providing quality affordable services, good governance and sustainable economic opportunities"

7.3 Local municipality mission

"Implement programmes and services that help to ensure that residents are served by accountable and effective Local Government"

7.4 Interrelationship of visions

The central concerns that underpin the vision and mission of the municipalities are reflected in the table below:

Table 6: Interrelationship of visions

District municipality vision	Local municipality vision
<ul style="list-style-type: none"> • Quality Infrastructure • Good Governance 	<ul style="list-style-type: none"> • Quality Affordable Services • Good Governance • Sustainable economic opportunities

Both Gert Sibande District and Dipaleseng Local Municipality's visions are similar in that they both emphasise the importance of good governance and provision of quality infrastructure and affordable services to its residents. The difference between the district and local municipality is that the local municipality also places emphasis on the creation of sustainable economic opportunities to improve the economic situation of the residents.

8 Spatial implication of municipal vision

This section unpacks the vision of Dipaleseng Municipality to determine what is spatially required to achieve its vision.

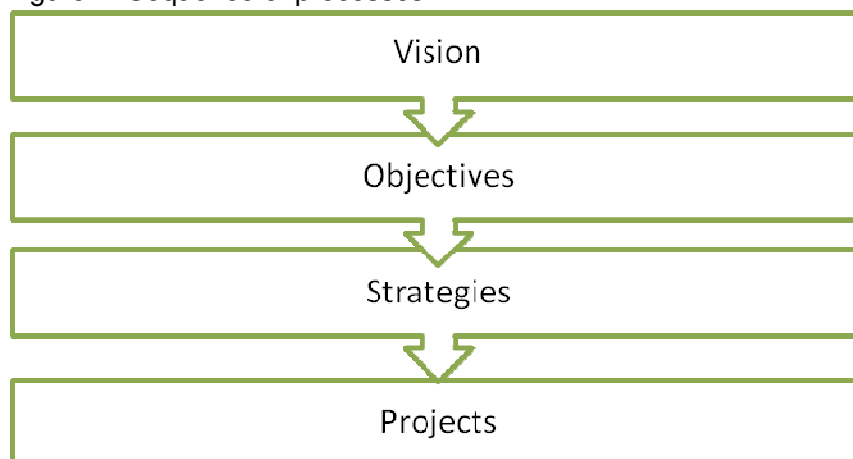
Table 7: Spatial implication of Vision

Spatial Requirements
Quality and Affordable Basic Services
<ul style="list-style-type: none"> ○ Densification and compaction of existing settlements for maximum utilisation of existing services; ○ In each urban area define the urban edge to prevent urban sprawl; ○ Ensure that all new developments have access to sufficient bulk basic service; and ○ The provision of social facilities in close proximity to residential areas.
Good Governance
<ul style="list-style-type: none"> ○ Enforce proper and effective land use control; ○ Prevent all forms of land invasions and development of informal settlements; ○ Protect environmentally sensitive areas; and ○ Infill development to ensure optimal utilisation of existing services.
Creating Sustainable Economic Opportunities
<ul style="list-style-type: none"> ○ Protect and conserve agricultural land; ○ Protect environmentally sensitive areas with tourism potential; ○ Define and protect land for industrial/business development; and ○ Integrate commercial and residential land uses.

9 IDP principles and strategies

A municipal vision, directed by national legislation, policies and strategies, will ultimately determine the objectives, strategies and projects to be implemented in order to achieve its vision and to address its most critical development needs. The sequences of processes are illustrated in the figure below:

Figure 1: Sequence of processes



Deriving from its vision, Dipaleseng Local Municipality has developed key objectives, strategies and projects for the implementation of its IDP as stated in the following Key Performance Areas (KPA's):

Table 8: KPA's and key objectives

No.	KPA	KEY OBJECTIVE
1	Institutional transformation and organisational development:	<ul style="list-style-type: none"> To improve service excellence in terms of service standards; To provide potable water to local communities, rural areas, schools, clinics and industries within the municipality; To ensure that raw water is purified according to SANS 241; To comply with legislative requirements in gender issues; and To ensure that the municipality complies with the employment equity legislation.
2	Basic service delivery:	<ul style="list-style-type: none"> To manage water purification processes; To manage waste water processes; Maintaining the sewer network on a daily basis to ensure unrestricted flow to purification plants; To provide sanitation to all households in developed areas; To purify sewer effluent to the specified permit requirements; To maintain municipal buildings; To co-ordinate and facilitate the provision of housing within Dipaleseng Municipality; To provide a holistic sustainable, effective, efficient and integrated waste management service; To provide access to basic electrical services for all households within the municipal area including clinics, schools and rural areas;

		<ul style="list-style-type: none"> To construct and maintain municipal roads, sidewalks and storm water; To meet the primary and curative health needs of the community; To provide well structured planning mechanisms which will facilitate sustainable service delivery; To provide effective, efficient and accessible public safety services to all local communities; To ensure a safe environment, functional disaster management centre and timeous response to disaster within the municipality; To ensure safety/protection of life, property and speedy reaction time in case of fire; and To ensure the application of sound licensing practices and effective and efficient station within Dipaleseng Municipality.
3	Local economic development:	<ul style="list-style-type: none"> Create an enabling environment for new enterprises; Facilitate the development of skills and the creation of an entrepreneurial culture; To capacitate co-ops and new enterprises; To improve the local business investment climate; and To co-ordinate the provision of work opportunities aimed at creating work and improving skills levels.
4	Municipal financial viability and management:	<ul style="list-style-type: none"> To ensure that financial transactions are executed in accordance with legislation; To ensure the monitoring of budgeted income and expenditure; To ensure compliance with legislation; To ensure that the policy remains relevant; and To ensure financial reporting on expenditure and income.
5	Good governance:	<ul style="list-style-type: none"> To strengthen and enhance participation of legislated structures and stakeholders in the IGR forums of the municipality; To ensure that ward committees are established, monitored and offered necessary administrative support; To ensure that there are well structured mechanisms to allow community participation on issues of governance; To facilitate the employment and functions of CDW within the municipality; To ensure that CDW are part of the overall Community Participation Strategy; To offer effective administrative support to all councilors; To improve co-operation of all spheres of government; To ensure that youth development is institutionalised; and To ensure that all events are properly coordinated.

10 IDP projects

Dipaleseng Municipality has identified projects in the IDP 2009/2010 to achieve its objectives in the aforementioned Key Performance Areas. Projects considered to have a spatial dimension are listed hereunder and shown on *Plan 8 Pressing Needs vs. Funded Projects*

Table 9: IDP Projects

DIPALESENG MUNICIPALITY						
ENGINEERING INFRASTRUCTURE						
No.	Project	Locality	Ward	Funded (Yes/No)	Amount (R)	Funding Source
2	New WTP Greylingstad (Phase 1)	Greylingstad	Ward 6	Yes	1 560 000	GSDM
5	Basic construction of rural roads	Rural communities	All Wards	Yes	5 000 000	GSDM
12	Extend paving programme to Erskine Str. linking with Sebeloane Str.	Erskine Str. linking with Sebeloane Str.	Ward 3	Yes	1 000 000	GSDM
15	Completion of access road Ext 5 from East Str. via Lephatoane Str. into Mthimkhulu Str.	Ext 5 from East Str. via Lephatoane Str. into Mthimkhulu Str.	Ward 1	Yes	3 191 000	GSDM
26	Water reticulation to informal area 700		Ward 05	Yes	1 200 000	GSDM
27	Provision of boreholes to the rural community		Ward 3,5 & 6	Yes	1 000 000	GSDM
28	Upgrade water network: Dipaleseng		All Wards	No	TBD	GSDM
29	Upgrade water network		Ward 6	No	TBD	GSDM
30	Sewer reticulation [Phase2]		Ward 3	No	TBD	GSDM
31	Sewer reticulation and maintenance		All Wards	No	TBD	GSDM
32	Sewer reticulation 700 H/H Ext 1		Ward 6	No	TBD	GSDM
33	Sewer reticulation Ext 1		Ward 5	No	TBD	GSDM
34	Provision of VIP toilets: rural		Ward 5	No	TBD	GSDM
35	Extent sewer plant capacity		Ward 3	No	TBD	GSDM

36	Extend street lighting on major routes		Ward 3	No	TBD	GSDM
37	Provision of high mast and street lights		All Wards	Yes	230 000	GSDM
40	Provision of high mast and street lights		All Wards	Yes	618 000	GSDM
41	Electricity reticulation 700H/H Ext 1		Ward 6	Yes	2 830 000	GSDM
42	Upgrade electrical network		All Wards	Yes	250 000	DME
43	Upgrade phase 2 sport complex		Ward 1 & 5	No	TBD	GSDM
LOCAL ECONOMIC DEVELOPMENT						
No	Project	Locality	Ward	Funded (Yes/No)	Amount (R)	Funding Source
1	Establishment of a mushroom project	Nthorwane		Yes	300 000	DLM
2	Waste management project - Burnstone	Balfour		Yes	1 200 000	GBS
3	Establish local radio station	Balfour		Yes	1000 000	GSDM
4	Establish brick plant	Balfour		Yes	300 000	DLM
5	Car wash facility	Balfour		Yes	60 000	DLM
6	Sewing and mending projects.	Balfour		Yes	50 000	DOS
7	Youth development programmes	Balfour		Yes	100 000	DLM
8	SMME/BEE development programmes	DLM		Yes	50 000	DOS
9	Tshimoloho ya Kattleho	Ward 04		No	TBD	DOS
10	Amacembe Aluhlaza Milling	Ward 03		No	TBD	DOS
11	Mphatlalatsane Cooking Oil Company	Ward 06		No	TBD	DOS

SOCIAL INFRASTRUCTURE						
No	Project	Locality	Ward	Funded (Yes/No)	Amount (R)	Funding Source
1	Build new MPCC'S [TSC]		Ward 5 & 6	No	TBD	GSDM
2	Upgrade phase 2 sport complex	Siyathemba	Ward 04	No	TBD	GSDM
3	Upgrade phase 2 sport complex		Ward 1 & 5	No	TBD	GSDM
4	Establish parking bay - [TSC]		Ward 4	Yes	10 000	GSDM
6	Establish parking bay - [TSC]		Ward 4	Yes	10 000	GSDM
7	Internet connectivity for libraries		Ward 1 & 3	Yes	15 000	GSDM
8	Public internet facilities at libraries		Ward 1 & 3	Yes	20 000	GSDM
9	Computers for libraries		Ward 1 & 3	Yes	30 000	GSDM
10	Public internet facilities at libraries		Ward 1 & 3	Yes	20 000	GSDM
11	Identify and develop waste disposal site		DLM	Yes	100 000	GSDM
12	Identification/ development of regional multi-recreational centre		DLM	No	TBD	DLM

11 Synopsis of spatial interpretation of municipal IDP

Through its vision and mission the Dipaleseng Municipality commits itself to good governance by providing quality, affordable services to its citizens and creating economic opportunities to improve the socio-economic conditions of its communities.

Throughout the IDP process the Municipality has succeeded in exposing its pressing needs, objectives, strategies and projects that seek to achieve its vision. Most of these projects have to be implemented within the municipal space, thus they have some spatial implications. The municipal space is also a limited resource that needs to be used wisely, hence the compilation of the municipal spatial development framework to ensure that the implementation of the IDP does not compromise the limited municipal space.

11.1 Provision of services

In terms of the Dipaleseng IDP 2009/2010, most of the settlements are very small and far apart, resulting in limited public transport services and facilities that do not match the socio-economic travel needs in the municipality. In addition this makes it difficult for regional services schemes to be economically viable. As a result, the provision of adequate services is mostly limited to the existing settlements. In implementing these projects the municipality seems to be focus on upgrading the existing services and infrastructure.

Basic Services

The provision of basic services is a major structuring component and should be used as a force for the development of sustainable settlements. These services have the following spatial implications:

- The provision of services should be used to indicate and direct the development and growth pattern. These services need to be directed to nodal and population concentration zones in order to achieve the densification and integration of settlements as well as optimal utilisation of services.
- Housing development impacts on urban growth and puts pressure on municipal land. As stated above housing developments should adhere to the densification and the integration of settlement principles.
- The upgrading and construction of new roads should be done with the aim of improving access and linkages between places to *inter alia*, improve the economic development potential of the municipal area.

Social Services

- The provision of social services such as schools, clinics and libraries should be concentrated in the existing settlements and be aligned to the densification and integration of settlements principles to ensure optimal utilisation of services.

11.2 Local economic development

In its vision the municipality aspires to *inter alia*, create an environment conducive for the development of sustainable economic opportunities that could improve the socio-economic condition of the residents. In order to achieve this vision, the municipality must have a full understanding of the local economic opportunities and potential of its area and then support all projects that capitalise on its unique advantages. The municipality has identified the implementation of its Local Economic Development Strategy as a key project that would address the socio-economic challenges the Municipality is faced with. This section will further be explored in Phase 2 of this document.

Although the entire municipal area seems to be rich in eco-tourism, it seems little effort has been made to attract potential investors. It is worth considering developing a tourism market strategy to look at the somewhat limited opportunities in the area.

The Municipality has vast agricultural land mainly used extensively for agricultural purpose. It seems that little efforts have been made to explore the economic opportunities that could alleviate the socio-economic problems faced by the communities within the municipal area. In addition, the municipality is rich in coal and some gold deposits, which still need to be explored for economic purposes. This will be further explored in the next Phases of this document.

There are land claims, some of which have been settled. The economic opportunities of these farms still need to be explored.

In general, the implementation of the municipal IDP needs to take cognisance of the spatial dynamics of the municipal area and how these could complement one another in this municipal space in order to realise the municipal vision.

12 Synopsis of phase 1

DIPALESENG PHASE 1 SUMMARY TABLE - SPATIAL INTERPRETATION OF MUNICIPAL IDP		
NO	SPATIAL REQUIREMENTS	DEVELOPMENT IMPERATIVES
1	VISION KEY ASPECT: QUALITY AND AFFORDABLE BASIC SERVICES	
1.1	Household Income	
1.1.1	Residential and employment opportunities in close proximity to each other.	Address the housing backlog.
1.2	Basic Services	
1.2.1	Densification of existing settlements for maximum utilisation of existing services - especially in Balfour.	Address the service backlog in all areas and maximise the use of existing services restricting development within the urban edge.
1.2.2	Define the urban edge to prevent urban sprawl - especially in Balfour, Grootvlei and Greylingstad.	
1.2.3	Employment and residential opportunities must be developed closed to bulk engineering infrastructure.	
1.2.4	Service backlogs must be addressed in all settlements.	Address the service delivery backlog with particular focus on the provision of safe water, especially in the rural areas.
1.2.5	Waste management collection points must be established, per settlement, away from residential areas and a regular collection service must be implemented.	None
1.2.6	Provision of sport and recreation facilities in close proximity to residential areas.	Utilise and promote the use of existing facilities such as schools.
1.2.7	Establish multi-purpose sport and recreational facilities - making maximum use of existing facilities, including schools.	Limited social infrastructure needs to be addressed.
1.2.8	Provide MPCC's per settlement to function as pension/grant payout points, banking facilities, satellite municipal facilities, basic communication points, skills-development centres, to provide home-based care and to provide a municipal human resource capacity.	Limited social infrastructure must be addressed.

1.2.9	Make provision for properly planned waste disposal sites.	None
1.2.10	Make provision for properly planned cemeteries.	None
1.2.11	Ensure the provision of potable water and safe sanitation.	In addressing the services backlog, particular focus must be given to the provision of potable water and safe sanitation to a minimum of basic service standards.
1.3	Housing	
1.3.1	Integrate commercial and residential land uses, close to bulk engineering infrastructure.	Address the housing backlog and make timeous provision for projected growth. Prioritise densification over expansion.
1.3.2	Formalise existing informal housing and prevent further informal settlement development.	
1.3.3	Infill development between existing developments to ensure maximum utilisation of bulk infrastructure.	
1.3.4	Develop housing in close proximity to social facilities and employment opportunities.	
1.3.5	Improve public transport links between Balfour, Grootvlei and Greylingstad.	Need to improve existing transport links to ensure better accessibility between these centres.

CHAPTER 3



13 Phase 2

The chapter consists of two parts:

- a) **Institutional Analysis** – to assess the institutional arrangements in order to understand the implications of the national, provincial and local development objectives and priorities for the spatial development framework.
- b) **Spatial Analysis** - to investigate the spatial context of Dipaleseng Municipality to determine national, regional and local economic, social and service delivery environments and the impact that it has on the development potential of the municipal area.

The purpose of this chapter is to assess whether Dipaleseng Local Municipality is spatially conducive for the delivery of its Integrated Development Plan and the relevant sector plans.

14 Institutional analysis

14.1 Institutional background

As noted in the Integrated Sustainable Rural Development Strategy published in November 2000, “communities, *if appropriately empowered*, can often manage their own local development efforts, and sometimes considerably better than any agency of the state. The report finds that a properly worked through system of participation and decentralisation holds the promise to provide mechanisms for empowering communities appropriately, though this process is by no means guaranteed”.

In order to test the compatibility of the Dipaleseng Municipality’s execution and/or adoption of its Rural Spatial Development Framework, there are a number of policies, legislations and planning documents that should either be used as guides or, by law, must be followed. These include in the main, and as such are not limited to, the following:

Legislation

1. The South African Constitution and Principles of Sustainable Development
2. Local Government Municipal Structures Act, Act 117 of 1998
3. Local Government Municipal Systems Act 32 of 2000
4. Municipal Planning and Performance Management Regulations 2001
5. The Development Facilitation Act 67 of 1995
6. The White Paper on Spatial Planning and Land use Management 2001
7. Accelerated and Shared Growth Initiative for South Africa (AsgiSA)
8. Transformation of Certain Rural Areas Act (1998)
9. National Environmental Management Act (1998)

14.2 South African Constitution and Principles of Sustainable Development

The Constitution of South Africa protects human rights and promotes democratic governance. Part of the Constitution is dedicated to define the role and function of government at national, provincial and local level.

Part B of Schedule 4 identifies municipal planning as a local governmental matter. Aspects influencing spatial planning are local tourism, municipal airports, municipal health services, and municipal public transport, water and sanitation services.

Part B of Schedule 5 does not specifically mention any planning function but identifies the aspects of cemeteries, municipal parks and recreation, public places, municipal roads, traffic and parking, which have an influence on spatial planning.

14.3 Local Government: Municipal Structures Act, Act 117 of 1998

The Municipal Structures Act, 1998 (MSA) assigns and divides powers to and between district and local municipalities.

The MSA requires that Local Municipalities “must seek to achieve integrated, sustainable and equitable social and economic development of its area as a whole”. It also assigns powers and functions to Local Municipalities that includes, *inter alia*:

- Integrated development planning for the Local Municipality as a whole;
- Bulk supply of water, sewerage, electricity and solid waste disposal;
- Municipal roads that form an integral part of a road transport system for the area of the Local Municipality; and
- Promotion of local tourism for its area, etc.

The aforementioned powers and exercising of such powers by Dipaleseng Municipality have an impact on the spatial development pattern of the local municipal area and district municipal area. It is therefore essential that horizontal (between local municipalities) and vertical alignment (between district and local municipalities) take place during the drafting of the Spatial Development Framework.

14.4 Local Government: Municipal Systems Act 32 of 2000

In terms of chapter 5 of the Municipal Systems Act 2000 (Act 32 of 2000), every local municipality should prepare an Integrated Development Plan (IDP). In terms of the act the IDP is a single, inclusive and strategic plan for the development of a municipality that operates as a strategic planning instrument which guides and informs all decisions with regard to the planning and development in a municipal area.

Section 26(e) of the MSA stipulates that the local municipality should prepare a SDF which must include basic guidelines for a Land Use Management System (LUMS) as part of the IDP. The SDF shall act as a forward plan that illustrates the intended nature of spatial development and shall take precedence over any other plan approved by the Municipality. Furthermore the SDF shall be the first point of reference for decision-makers when seeking guidance on specific land development issues.

14.5 Municipal Planning and Performance Management Regulations, 2001

The Local Government Municipal Planning and Performance Regulations (2001) stipulate the content of the SDF. In terms of Section 4 of the Regulations the SDF is required to:

- give effect to principles contained in Chapter 1 of the Development Facilitation Act, 1995;
- set out objectives that reflect desired spatial form of the municipality;
- contain strategies and policies regarding the manner in which to achieve the objectives which must:
 - Indicate the desired pattern of land use
 - Indicate the direction of growth;
- provide strategic guidance in respect to location and nature of development;
- set out basic guidelines for a land use management system;
- set out a capital investment framework for development programmes;
- incorporate a strategic assessment of the environmental impact of land within the municipality;
- identify programmes and projects for development of land within the municipality;
- be aligned with neighbouring municipal SDF's;
- provide visual representation of the desired spatial form which:
 - must indicate areas in which the intensity of land development could be either increased or reduced;
 - must indicate desired and undesired utilisation of land in an area;
 - indicate conservation of both the built and natural environment;
 - must indicate where public and private land development and infrastructure investment should take place;
 - may delineate the urban edge;
 - must identify areas where strategic intervention is required; and
 - must indicate where priority spending is required.

14.6 The Development Facilitation Act 67 of 1995

The Development Facilitation Act (DFA) moves away from a control based planning system to a principle planning approach and it establishes measures that facilitate and speed up the implementation of reconstruction and development programmes and projects relating to land development.

The principles of the DFA are uniform throughout the country and regulate the subdivision and development of land in both urban and rural areas to promote speedy provision and development of land for residential, small scale farming and other purposes.

Chapter 1 of the Act lays down principles that apply to all types of land planning and development. These principles are vital to establishing a more equitable and development planning system for Dipaleseng. In order to realise a more efficient and equitable planning system the following general principles apply to all land development:

- policy, administrative practice and laws should make provision for urban and rural land development and should facilitate the development of formal and informal, existing and new settlements;
- policy, administrative practice and laws should discourage illegal occupation of land, with due recognition of informal land development processes;
- policy, administrative practice and laws should promote efficient and integrated land development if they:
 - promote the integration of the social, economic, institutional and physical aspects of land development;
 - promote integrated land development in rural and urban areas in support of each other;
 - promote the availability of residential and employment opportunities in close proximity to or integrated with each other;
 - optimise the use of existing resources including such resources relating to agriculture, land, minerals, bulk infrastructure, roads, transportation and social facilities;
 - promote a diverse combination of land uses, also at the level of individual erven or subdivisions of land;
 - discourage the phenomenon of "urban sprawl" in urban areas and contribute to the development of more compact towns and cities;
 - contribute to the correction of the historically distorted spatial patterns of settlement in the Republic and to the optimum use of existing infrastructure in excess of current needs; and
 - encourage environmentally sustainable land development practices and processes.
- members of communities affected by land development should actively participate in the process of land development;
- the skills and capacities of disadvantaged persons involved in land development should be developed;
- policy, administrative practice and laws should encourage and optimise the contributions of all sectors of the economy (government and non-government) to land development so as to maximise the Republic's capacity to undertake land development and to this end, and without derogating from the generality of this principle:
 - national, provincial and local governments should strive clearly to define and make known the required functions and responsibilities of all sectors of the

- economy in relation to land development as well as the desired relationship between such sectors; and
 - a competent authority in national, provincial or local government responsible for the administration of any law relating to land development shall provide particulars of the identity of legislation administered by it, the posts and names of persons responsible for the administration of such legislation and the addresses and locality of the offices of such persons to any person who requires such information.
- laws, procedures and administrative practice relating to land development should:
 - be clear and generally available to those likely to be affected thereby;
 - in addition to serving as regulatory measures, also provide guidance and information to those affected thereby;
 - be calculated to promote trust and acceptance on the part of those likely to be affected thereby; and
 - give further content to the fundamental rights set out in the Constitution.
- policy, administrative practice and laws should promote sustainable land development at the required scale in that they should:
 - promote land development which is within the fiscal, institutional and administrative means of the Republic;
 - promote the establishment of viable communities;
 - promote sustained protection of the environment;
 - meet the basic needs of all citizens in an affordable way; and
 - ensure the safe utilisation of land by taking into consideration factors such as geological formations and hazardous undermined areas.
- policy, administrative practice and laws should promote speedy land development;
- each proposed land development area should be judged on its own merits and no particular use of land, such as residential, commercial, conservational, industrial, community facility, mining, agricultural or public use, should in advance or in general be regarded as being less important or desirable than any other use of land;
- land development should result in security of tenure, provide for the widest possible range of tenure alternatives, including individual and communal tenure, and in cases where land development takes the form of upgrading an existing settlement, not deprive beneficial occupiers of homes or land or, where it is necessary for land or homes occupied by them to be utilised for other purposes, their interests in such land or homes should be reasonably accommodated in some other manner;
- a competent authority at national, provincial and local government level should coordinate the interests of the various sectors involved in or affected by land development so as to minimise conflicting demands on scarce resources; and
- policy, administrative practice and laws relating to land development should stimulate the effective functioning of a land development market based on open competition between suppliers of goods and services.

Five central concerns underpin the Chapter 1 principles:

1. The need to create new forms and structures for South African settlements to improve their performance;
2. The need to work harmoniously with nature;
3. The need to speed up the pace of development;
4. The need to promote a better planning system; and
5. The need to promote security of tenure.

14.7 National Environmental Management Act, 1998

NEMA provides the overarching legislative framework for environmental governance in South Africa. The point of departure of NEMA is a set of National Environmental Management Principles that inform any subsequent environmental legislation, implementation of that legislation and formulation and implementation of environmental management plans at all levels of government.

The following principles reflect the core values of NEMA:

- Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
- Development must be socially, environmentally and economically sustainable.

The Act has identified and listed certain activities which may have significant negative effect on the environment. In 2004, the NEMA Second Amendment Act (8 of 2004) expanded significantly on Section 24 of NEMA. The Amendment allows for the identification and listing of activities requiring an Environmental Impact Assessment and also provides for the registration and regulation of environmental consultants.

14.8 The Land Use Management Bill, 2001

The main objective of this Bill is to provide a legislative and policy framework that enables local government to formulate policies, plans and strategies for land use and development in order to address spatial, economic, social and environmental issues. It attempts to provide uniform land use management in the Republic of South Africa.

The Land Use Bill is based on the general principle that spatial planning, land use management and land development must:

- be environmentally friendly;
- enhance equality;
- be efficient;
- be integrated; and
- be based on fair and good governance.

The key subject is that the Land Use Management Bill makes reference to Section 26(e) of the Municipal Systems Act, 2000. It provides clarity on issues related to the content of the SDF and it clearly explains that one of the functions of the SDF is to inform development and the application of new land use management systems.

14.9 Accelerated and Shared Growth Initiative for South Africa (AsgiSA)

Investigations by government indicate that the growth rate needed to achieve its social objectives is around 5% on average between 2004 and 2014.

In order to achieve this objective the following interventions/initiatives were identified:

- significant investment in infrastructure, including provincial and local roads, bulk water infrastructure and water supply networks, energy distribution, housing, schools and clinics, business centres, sports facilities, and multi-purpose government service centres, including police stations, courts and correctional facilities;
- targeting economic sectors with good growth potential. In this regard two sectors have been identified namely Business Process Outsourcing and Tourism. A third sector, bio-fuels, is being finalised. What these industries have in common is that they are labour-intensive, growing rapidly worldwide, suited to South African circumstances, and open to opportunities for Broad-Based Black Economic Empowerment (BBBEE) and small business development;
- skills development;
- eliminating the Second Economy - building up small businesses to bridge the gap between the formal and informal economies; and
- governance and Institutional Interventions - Beefing up public administration and creating a macro-economic environment that is more conducive to economic growth.

The Dipaleseng Spatial Development Framework needs to be conducive to the implementation of the AsgiSA initiatives.

14.10 Transformation of Certain Rural Areas Act (1998)

The purpose of this act is to provide for the transfer of certain land to municipalities and certain other legal entities, the removal of restrictions on the alienation of land, matters with regard to minerals, the repeal of the Rural Areas Act, and related laws; and to provide for matters connected therewith.

Policies and Strategies

What is addressed at this stage is the extent to which policies and strategies can advance the desired spatial plan of Dipaleseng. See Table 1, 2, 3 and 4: Institutional Analysis below.

15 Alignment with national development perspectives

Table 10: Alignment with national development perspectives

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
Rural Development Framework (1997)	The key document providing the leading perspective on rural development is the Rural Development Framework , which was borne out of the no longer active RDP. It highlights the RDP's role as embodying the commitment of government to the eradication of poverty in a rapidly growing economy and in the context of an open, peaceful and democratic society.	Policies must be orientated towards the provision of basic needs, the development of human resources and a growing economy, which is capable of generating sustainable livelihoods in rural as well as urban areas.
Growth, Employment and Redistribution (GEAR) (1996)	<p>The Growth, Employment and Redistribution (GEAR) strategy took this perspective further, pronouncing an economic reform programme directed towards:</p> <ul style="list-style-type: none"> • a competitive fast-growing economy that creates sufficient jobs for all job seekers; • a redistribution of income opportunities in favour of the poor; • a society capable of ensuring that sound health, education and other services are available to all; and • an environment in which homes are safe and places of work are productive. <p>These principles went on to form the macro-economic framework within which the Rural Development Framework was drafted.</p>	For rural areas, however, the challenge remains to achieve their development objectives with limited resources. This requires striking a balance between basic service delivery on the one hand and stimulating economic development that will help to pay for these services on the other.
Integrated Sustainable Rural Development Strategy (2000)	<p>The Integrated Sustainable Rural Development Strategy (ISRDS) provides a framework for rural municipalities to attain socially cohesive and stable communities with viable institutions, sustainable economies and universal access to social amenities, able to attract skilled and knowledgeable people, and equipped to contribute to their own and the nation's growth and development.</p> <p>The strategic intent of the ISRDS is to transform rural South Africa into an economically viable, socially stable and harmonious sector</p>	The basic focus on rural areas should focus on the provision of constitutionally mandated minimum level of services in such a way that is financially sustainable. Through planning the variations on the levels of inequality in living standards and access to planning services between rural and urban areas should be addressed in Dipaleseng. The markets for rural products should be created and integrated through proper infrastructure investment to ensure that rural products are supported with the necessary services and infrastructure. Furthermore, the development of tourism should

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>that makes a significant contribution to the nation's GDP.</p> <p>A successful strategy to achieve integrated sustainable rural development will reflect each of its three key elements: i.e., <u>integrated</u>, <u>sustainable</u>, and <u>rural development</u>.</p>	enhance and protect the natural environment
National Spatial Development Perspective (2006) Plan 9: NSDP	<p>The <i>National Spatial Development Perspective (NSDP)</i> reflects on the need to address first that the provision of basic services is a constitutional right and that government spending should focus on localities of economic growth and/or economic potential.</p> <p>The NSDP's five normative principles are:</p> <ol style="list-style-type: none"> 1. Rapid economic growth that is sustained and inclusive is a pre-requisite for the achievement of other policy objectives, along with poverty alleviation is key. 2. Government has a constitutional obligation to provide basic services to all citizens (e.g., water, energy, health and educational facilities) wherever they reside. 3. Beyond the constitutional obligation identified in Principle 2 above, <i>government spending on fixed investment should be focused on localities of economic growth and/or economic potential in order to gear up private sector investment, to stimulate sustainable economic activities and to create long-term employment opportunities.</i> 4. Efforts to address past and current social inequalities should focus on people, not places. In localities where there are both high levels of poverty and low demonstrated economic potential, government should, beyond the provision of basic services, concentrate primarily on human capital development by providing education and training, social transfers such as grants and poverty-relief programmes. It should also reduce migration costs by providing labour-market intelligence to give people better information, opportunities and capabilities to enable them to gravitate, if 	<p>The different towns in Dipaleseng have different economic development potential. These towns are dispersed and far apart, they are lagging extensively in economic growth in relation to other towns in the Gert Sibande District Municipality. This creates the need for the emphasis on economic growth and development within the context of limited resources.</p> <p>In areas of low or no economic potential, the course of development planning and poverty reduction should focus on human capital development (education, training, social welfare, sound rural development planning, aggressive land and agrarian reform, expansion of agricultural extension services, etc.)</p> <p>The NSDP identifies different typologies of economic activity: areas of national economic significance as follows (note only areas of typologies in close proximity to Dipaleseng were considered):</p> <p>Highly diversified economic concentrations; these areas include the Gauteng area which is to the north of Dipaleseng. These areas are characterised by a diverse economy accounting for 58% of national GVA. High share of national GVA in all categories excluding agriculture and an exceptionally high GVA in services and retail. There population is large with a high percentage living below MLL.</p> <p>Diversified service economy concentrations; these include the Nelspruit – Bosbokrand (Bushbuckridge) areas. These areas are</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>they choose to, to localities that are more likely to provide sustainable employment and economic opportunities.</p> <p>5. In order to overcome the spatial distortions of Apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or that link the main growth centres. Infrastructure investment should primarily support localities that will become major growth nodes in South Africa and the SADC region to create regional gateways to the global economy.</p>	<p>characterised by reasonably diverse economy accounting for 7% of national GVA with high GVA in services and retail, as well as industrial activity. The population is relative and with a high percentage living below MLL.</p> <p>Mass-produced and specialised economy concentrations; these areas include the Witbank – Secunda areas. They are characterised by a highly labour-intensive economy. Generally, the percentage of the population living below MLL is in line with the national average.</p>
White Paper on Spatial Planning and Land use Management (2001)	<p>The White Paper on Spatial Planning and Land use Management (2001) is based on the general principles of the DFA and attempts to cement the normative approach to land use and planning.</p> <ul style="list-style-type: none"> • <u>Sustainability</u> – The principle requires the sustainable management and use of resources making up the natural and built environment. • <u>Equality</u> – The principle requires that everyone affected by spatial planning, land use management and land development actions or decisions must enjoy equal protection and benefits. • <u>Efficiency</u> – The principle requires the development of land uses with the minimum expenditure of resources by means of the discouragement of urban sprawl through densification policies to provide compact towns and cities. • <u>Integration</u> – The principle requires that the separate and diverse elements involved in development planning and land uses should be combined and coordinated into a more complete and harmonious whole. The principle also calls for spatial integration and corrections of historically distorted spatial patterns. <p>The overall aim of the principles and norms is to achieve planning</p>	<p>The development of settlements needs to be contained in order to achieve the development of integrated and sustainable settlements. The low density areas located in close proximity to employment nodes need to be compacted to ensure the optimal utilisation of existing services and infrastructure. The inclusion of the Rural Spatial Development Framework for Dipaleseng, with a direct legal link to the land use management scheme, is an essential step towards integrated and coordinated planning for sustainable and equitable growth and development.</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>outcomes that:</p> <ul style="list-style-type: none"> restructure spatially inefficient settlements; promote the sustainable use of the land resources in the country; channel resources to areas of greatest need and development potential, thereby redressing the inequitable historical treatment of marginalised areas; take into account the fiscal, institutional and administrative capacities of role players, the needs of communities and the environment; stimulate economic development opportunities in rural and urban areas; and support an equitable protection of rights to and in land. 	
Rural Transport Strategy for South Africa (2007)	<p>The strategy provides strategic direction and proposes direct facilitating actions to address service delivery priorities by developing the requisite planning and implementation capacity in the provincial and local spheres of government. The Rural Transport Strategy maps out sustainable programmes of action for the short, medium <i>and</i> long term (i.e. up to 20 years), while the National Land Transport Strategic Framework (NLTSF) is only focused on the next five years (2006- 2011). The Rural Transport Strategy outlines the government's stated commitments and interventions to uplifting the material conditions of rural communities through the National Spatial Development Perspective (NSDP), Expanded Public Works Programme (EPWP), and Joint Initiative for Priority Skills Acquisition (JIPSA) and Accelerated Shared Growth Initiative for South Africa (ASGISA). It also highlights the need to improve transport efficiency and sustainability by way of policy, institutional reform, capacity building and monitoring within the ambit of the Integrated Sustainable Rural Development Strategy (ISRDS).</p>	<p>The rural transport interventions will be coordinated with and will incorporate the objectives of the ISRDS and Municipal IDP's. This is thus a point of reference for the Dipaleseng Municipality to ensure that its roads form part of the overarching rural development strategy in the region.</p>
Draft Regional Industrial	<p>The implication of the draft RIDS is that it should:</p> <ol style="list-style-type: none"> Attempt to reduce economic disparities between regions, 	<p>The main intentions of the draft RIDS is to:</p> <ol style="list-style-type: none"> help to achieve the national industrial development

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
Development Strategy (RIDS) 2006	<p>adders the need of both the first and the second economies and narrow the gap between them.</p> <ol style="list-style-type: none"> pay attention to the needs of those regions which are lagging behind the national norms, enhance current regional strengths and lead sectors of the economy promote sustainable economic growth and employment in provinces and municipalities and build regional competitive capacities and firm-level support measures 	<p>objectives as set out in the NSDP</p> <ol style="list-style-type: none"> further the goals of the Accelerated and Shared Growth Initiative of South Africa (ASGISA) conform to the principles of the Integrated Manufacturing Strategy, the Microeconomic Reform Strategy and the draft National Industrial Policy Framework enhance the capacities and potentials that seek to address spatial constraints and opportunities related to industrial development in municipalities conform to the principles of enterprise development and Black Economic Empowerment conform to the government's environmental and other policies.
Comprehensive Rural Development Programme (2009)	<p>The Comprehensive Rural Development Programme (CRDP) is deemed "strategic priority number 3" within the government's current Medium Term Strategic Framework.</p> <p>The strategic objective of the CRDP is to facilitate integrated development and social cohesion through participatory approaches in partnership with all sectors of society.</p> <p>The vision of the CRDP is to create vibrant, equitable and sustainable rural communities with a view to contributing to the redistribution of 30% of the country's agricultural land; improving food security of the rural poor; creation of business opportunities, de-congesting and rehabilitation of over-crowded former homeland areas; and expanding opportunities for women, youth, people with disabilities and older persons who stay in rural areas.</p> <p>The Department of Rural Development will use spatially targeted grants, such as the neighbourhood development grant programme, to help support revitalisation and development of rural towns.</p> <p>Following this approach, it believes, will give more impetus to making rural towns serve as service centres of rural economies.</p>	<p>The CRDP holds perhaps the most promise for rural areas in that it has clearly defined principles of intervention and support from which areas like Dipaleseng are eligible to benefit.</p> <p>In terms of the CRDP pilot sites for the 2009/2010 financial year, Dipaleseng does not feature in any of the sites. Only one site has been chosen within the Mpumalanga Province and that is the Donkerhoek/Emmahashini site situated east of Dipaleseng.</p> <p>The District Municipalities that are responsible for the development of the constituent Local Municipalities need to play a strong role in facilitating access to the CRDP. As and when budgets are in place and allocations to rural municipalities are determined, Districts such as Gert Sibande and Nkangala and Ehlanzeni must be ready with proposed plans and projects that can utilise the funds according to the approved activities and desired outcomes.</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>As part of the overall strategy, government will also support initiatives that promote other forms of economic potential of rural areas including tourism, light manufacturing and cultural work. Various cultural activities such as traditional music, arts and crafts and traditional sports can be useful income generating activities in our rural areas and should be harnessed.</p> <p>The first leg of the strategy is to ensure that economic and social infrastructure development takes place in South Africa's rural communities. This will be done through a proactive strategy of upgrading infrastructure, some of which would also serve as a tool of social transformation, by providing roads, electricity, water and telecommunications to support sustainable economic development.</p> <p>The types of projects and priorities cited include, but are not limited to the following:</p> <ul style="list-style-type: none"> • Agrarian transformation: <ul style="list-style-type: none"> ○ livestock farming and related value chain development (exploring all possible species for food and economic activity); and ○ cropping and related value chain development (exploring all possible species, especially indigenous plants, for food economic activity). • Rural development: <ul style="list-style-type: none"> ○ the establishment of business initiatives, agro-industries, cooperatives, cultural initiatives and vibrant local markets in rural settings; ○ the empowerment of rural communities, especially women and the youth, through facilitating and 	

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>mediating strong organisational and institutional capabilities and abilities to take full charge of their collective destiny;</p> <ul style="list-style-type: none"> ○ capacity building initiatives, where rural communities are trained in technical skills, combining them with indigenous knowledge to mitigate community vulnerability to, especially climate change, soil erosion, adverse weather conditions and natural disasters, hunger and food insecurity; and ○ revitalisation and revamping of old, and the creation of new economic, social and information communication infrastructure and public amenities and facilities in villages and small rural towns. <p>Projects must be undertaken in a manner consistent with the integrated development plans, provincial growth and development strategies, area-based plans and other planning frameworks. Projects must be undertaken within a participatory community-based planning approach. Projects must be packaged and coordinated at provincial level in consultation with local level structures.</p> <p>Beneficiaries of the CRDS will be stratified into five categories, namely:</p> <ul style="list-style-type: none"> • Category 1: <i>Landless households</i> – those who have no space even for subsistence production and seek land for small-scale subsistence purposes, with or without settlement; including rights-based applicants such as farm dwellers. • Category 2: <i>Commercial-ready subsistence producers</i> – 	

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>those who wish and are capable of having a more commercial focus but need land and support, mostly on part-time basis; including rights-based applicants such as farm dwellers.</p> <ul style="list-style-type: none"> Category 3: <i>Expanding commercial smallholders</i> – those who have already been farming commercially at a small-scale and with aptitude to expand, but are constrained by land and other resources. Category 4: <i>Well-established black commercial farmers</i> – those who have been farming at a reasonable scale, but are disadvantaged by location and other circumstances, and with real potential to become large-scale commercial farmers. Category 5: <i>Financially capable, aspirant black commercial farmers</i> – established businesspeople who aspire to expand into commercial agriculture and who by and large will be part-time farmers. 	
The National Transportation Master Plan 2050 (NATMAP)	<p>The aim of the NATMAP project is address problems surrounding transport systems in South Africa, to achieve a coordinated, efficient and cost effective transport plan investment strategy that will streamline transport planning vertically (among the planning authorities) and horizontally (across all modes)</p> <p>The project goal of the National Transport Master Plan 2050 (NATMAP) is to develop a dynamic, long term and sustainable land use/ multi-modal transportation systems framework for the development of networks infrastructure facilities, interchange terminal facilities and service delivery that shall be:</p> <ul style="list-style-type: none"> Demand responsive to national / provincial / district and / or any socio-economic growth strategy, and / or any 	<p>In terms of the Dipaleseng, the report indicates that there are plans for construction of a New Multi-Product Pipeline (NMPP) between Durban and Gauteng. This pipeline will run through the Mpumalanga Province (from Vrede in the Free State, through Balfour to Gauteng). The NMPP is designed to accumulate and transport about 24 billion litres of fuel by year 2030. The potential impact for the construction of this pipeline to the town of Balfour needs to be investigated in detail.</p> <p>Within the Mpumalanga Province , there are four national road freight corridors (some only traverses Mpumalanga) as follows:</p> <ul style="list-style-type: none"> Durban – Gauteng (N3/N11/R103/R23): some of these roads traverse through Dipaleseng therefore could from

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>sectoral integrated spatial development plan;</p> <ul style="list-style-type: none"> A coordinated implementation schedule and / or action agenda for the whole country and / or specific national and provincial spatial development corridors and regions until 2050. <p>The project is structured into four phases as follows:</p> <ul style="list-style-type: none"> Phase1: Status Quo/Inventory Phase 2: Estimate Population, Land use, Economic activity and travel demand/capacity. Phase 3: Development of Planning Criteria and Projections Phase 4: Implementation of Action Agenda <p>Phase 1 report of the Master Plan for Mpumalanga Province, identified the following issues regarding land uses:</p> <ul style="list-style-type: none"> There is too much competition for land use between agriculture, mining and forestry. Valuable agricultural ground is being destroyed by mining activities. Loss of production during land reform. There is a need to provide training to ensure continued production during land reform. Concerns for agricultural sector (tobacco industry affected by government policy on smoking, decline in commercial milk producers, low price of grain and fluctuation in rainfall). However there are opportunities to expand the sector i.e. growing soya beans for plant protein, increase in sugar cane production, increased cotton production, increased agricultural activities. Mpumalanga is a favourable location for bio-fuel industry. Mining industry is hampered by infrastructure constraints (rail and ports). No downstream value added to primary products (e.g. 	<p>the base for the SDF proposals.</p> <ul style="list-style-type: none"> Gauteng – Ressano Garcia (N4 East); Gauteng – Mpumalanga / Swaziland N17 Volksrust – Martins Drift (N11 North) <p>The Gauteng to Durban N3/ N11/ R103/ R23 route is categorised as road freight corridor. This corridor is pertinent to the Dipaleseng Municipality as it facilitates accessibility and mobility. Nodes such as Balfour where the R23 passes through are directly supported by the movement of goods and people in the corridor.</p> <p>The Eskom Power Station in Grootvlei requires large quantities of coal haulage by road between the mines and the power station. This results in the over-utilisation of the provincial roads connecting these points. However, limited funding is available for maintenance of these roads, resulting in most of these roads being in a poor condition.</p> <p>The following options have been identified in the NATMAP document to address the over-utilisation of roads in the coal haulage areas:</p> <p>Alternative 1: Identify a coal network, consisting of a core network of roads required for hauling of coal between mines and power stations. This network should then be upgraded to standards suitable for the volumes of freight transported along the roads, and should be maintained continuously. Road hauliers should be forced to not deviate from this network. Responsibility for funding of upgrading and maintaining this network should not be limited to the province, but should be supported by government (perhaps by means of a dedicated budget for this network);</p> <p>Alternative 2: Determine a long term coal sourcing plan that invests in the development and expansion of the rail network to</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>forestry products and steel products). This presents an opportunity for manufacturing of downstream products i.e. Chemical Incubator in Secunda due to Sasol's petro-chemical plant.</p> <ul style="list-style-type: none"> Mpumalanga has famous tourist destinations, however the number of tourist visits very low (the province is rated 4th as a foreign destination, and 8th as a domestic tourist destination). The tourism market presents opportunities for growth in the industry. Environmental concerns (the impact of mining and electricity generation). <p>In terms of passenger operations, NATMAP identifies issues such the following:</p> <ul style="list-style-type: none"> Mpumalanga Province does not have a dedicated rail commuter services. There is a high utilisation of minibus-taxis and buses. Lack of access to motorised transport modes (only 22% have access to private vehicles) <p>Phase 2 of the report broadly focused on settlement development, rural development, economic growth and sustainable development. The following directives were formulated based on the analysis:</p> <p>Directive 1: Settlement and investment must be encouraged in areas with high development and economic growth potential, to exploit the inherent potential on such areas. This will inevitably encourage settlement growth in areas with high development potential and economic growth potential.</p> <p>Directives 2: Settlements of exclusion must be linked to areas with economic opportunity. To achieve this, areas of exclusion should be linked to growth centres, rather than investing heavily in areas with limited economic growth potential. Growth centres can</p>	<p>transport coal directly to power stations, or to centrally located areas from where it is hauled, over short distances, by road to power stations. This alternative may especially become feasible in the longer term, when coal from Mpumalanga has been mined out, and power stations become dependent on coal from the Lephalale district. Coal will then primarily come from a single destination, allowing better and long-term planning for distribution of coal to the power stations.</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>be towns or settlement within rural areas that show high levels of economic development potential.</p> <p>Directives 3: Transportation must support an integrated settlement pattern. The integration of settlement and economic opportunity and potential requires focusing future settlement and economic development into activity corridors and nodes that are linked to main growth centres.</p> <p>Directive 4: Growth and development must be environmentally sustainable. This includes the conservation of natural resources, such as high-potential agricultural soils and ecological sensitive area, as well as the sensible management of mineral resources.</p> <p>Directive 5: Key rural areas must be developed into sustainable economic entities. This requires focused development or spatial targeting, where resources are directed to selected areas and nodes in response to development opportunities.</p> <p>Directive 6: Industrial development must focus on international markets, and the export of manufactured goods as a means to accelerate economic growth. Industrial areas need to be linked to major harbours or airports to enhance the export-orientated focus of these industrial areas.</p> <p>Directive 7: Comparative and competitive advantages of regions must be exploited. Investment in transportation infrastructure needs to be able to unlock the comparative and competitive advantages of regions be it urban areas or rural areas.</p>	
Guide to the Outcomes Approach (2010)	The guide to the Outcomes Approach describes government performance monitoring and evaluating system, and the management for outcomes that have been approved by Cabinet.	The outcomes based approach implies that strategic plans such as the Dipaleseng SDF should reflect on the outcomes. The

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>These outcomes reflect the desired development impacts government seeks to achieve, given government's policy priorities.</p> <p>The 12 outcomes adopted by government are as follows:</p> <ol style="list-style-type: none"> 1. Improving quality of basic education: <ul style="list-style-type: none"> • Improve the quality of teaching and learning, • Undertake regular assessment to track progress, • Improve early childhood development, • Ensure a credible outcomes-focused planning and accountability system. 2. A long and healthy life for all South Africans: <ul style="list-style-type: none"> • Increasing life expectancy, • Decreasing maternal and child mortality rates, • Combating HIV and AIDS and decreasing the burden of disease from Tuberculosis, • Strengthening health system effectiveness. 3. All people in South Africa are and feel: <ul style="list-style-type: none"> • Address overall levels of crime and reduce the levels of contact and trio crimes, • Improve effectiveness and ensure integration of the Criminal Justice System (CJS), • Combat corruption within the Justice, Crime Prevention and Security Cluster to enhance its effectiveness and its ability to serve as deterrent against crime, • Manage perceptions of crime among the population, • Ensure security at the border environment, • Secure the identity and status of citizens, • Integrate ICT systems and combat cyber crime. 4. Decent employment through inclusive economic growth. 	<p>Presidency proposes that the production of IDPs should include commitments made in Delivery Agreements where relevant (in addition to all the other issues to be covered in IDPs). This process will provide an opportunity to create alignment with the 12 national outcomes.</p>

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>5. A skilled and capable workforce to support an inclusive growth path;</p> <ul style="list-style-type: none"> • Establish a credible institutional mechanism for skills planning, • Increase access to programmes leading to intermediate and high level learning, • Increase access to occupationally-directed programmes in needed areas and thereby expand the availability of intermediate level skills (with a special focus on artisan skills), • Increase access to high level occupationally-directed programmes in needed areas, • Research, development and innovation in human capital for a growing knowledge economy. <p>6. An efficient, competitive and responsive economic infrastructure network:</p> <ul style="list-style-type: none"> • Improving competition and regulation, • Ensure reliable generation, distribution and transmission of electricity, • To ensure the maintenance and strategic expansion of our road and rail network, and the operational efficiency, capacity and competitiveness of our sea ports, • Maintenance and supply availability of our bulk water infrastructure, • Communication and information technology, • Develop a set of operational indicators for each segment. <p>7. Vibrant, equitable and sustainable rural communities with food security for all:</p> <ul style="list-style-type: none"> • Sustainable agrarian reform, • Improved access to affordable and diverse food, • Rural services and sustainable livelihoods, • Rural job creation linked to skills training and promoting 	

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>economic livelihoods,</p> <ul style="list-style-type: none"> • Enabling institutional environment for sustainable and inclusive growth. <p>8. Sustainable human settlements and improved quality of household life:</p> <ul style="list-style-type: none"> • Upgrading of 400 000 units of accommodation within informal settlements, • Improving access to basic services, • Facilitate the provision of 600 000 accommodation units within the gap market for people earning R3 500 and R12 800, • Mobilisation of well located public land for low income and affordable housing with increased densities on this land and in general. <p>9. A responsive, accountable, effective and efficient local government system:</p> <ul style="list-style-type: none"> • Implement a differentiated approach to municipal financing, planning and support, • Improving access to basic services, • Implementation of the Community Work Programme, • Actions supportive of the human settlement outcome, • Deepen democracy through a refined Ward Committee model, • Administrative and financial capability, • Single window of coordination. <p>10. Environmental assets and natural resources that are well protected and continually enhanced:</p> <ul style="list-style-type: none"> • Enhanced quality and quantity of water resources, • Reduced greenhouse gas emissions, climate change, impacts and improved air/atmospheric quality, • Sustainable environmental management, • Protected biodiversity. 	

NATIONAL LEVEL		
Policy/Legislation/S strategies	Description/Intention	Implications
	<p>11. Create a better South Africa and contribute to a better and safer Africa and World.</p> <p>12. An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship:</p> <ul style="list-style-type: none"> • Service delivery quality and access, • Human resource management and development, • Business processes, systems, decision rights and accountability management, • Tackling corruption in the public service. 	

16 Alignment with provincial perspectives

Table 11: Alignment with provincial perspectives

PROVINCIAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
Mpumalanga Provincial Growth and Development Strategy (2008)	<p>The Mpumalanga Provincial Growth and Development Strategy (PGDS) is a strategy developed by the Mpumalanga Provincial Cabinet and it is based on National policies and strategies. The PGDS typically contain an indication of the various developments potential in the province broken down to a district level, the province's proposed economic growth trajectory and an indication of the sectors and the areas of comparative advantage in which the province plans to invest.</p> <p>In order to achieve growth and development in the province the MPDGS identifies key intervention areas that need urgent attention. The MPDGS also provides guidance to district and local municipalities in their attempt to achieve economic growth and sustainability; to promote integrated development planning and alignment of National, Provincial and Municipal development strategies. Furthermore the MPDGS identifies the development challenges within the province and it also develops the strategic trusts and programmes that comprise of elements that are relevant to the SDF of Dipaleseng Municipality:</p> <ul style="list-style-type: none"> • Economic Development; • Development Infrastructure; • Social Development; • Sustainable environmental development; • Good Governance; and • Human Resource Development. 	<p>The PGDS guides development spending between the provincial sector departments, district and local municipalities so as to ensure alignment with national and provincial objectives. This implies that the development plans and service delivery plans and programmes should be integrated and aligned in the SDF.</p> <p>The planning for the provision of public infrastructure and facilitation of public employment programmes should be directed to the most vulnerable households. The provision of education, skills development and training and intensive commercial activities and facilities should be prioritised in order to address the needs of the current unemployed.</p> <p>The spatial development of the Dipaleseng municipal area should take into account the impact of mining, electricity generation, manufacturing and agricultural activities. The planning for the maximisation of profits by these sectors should be environmentally sustainable for both physical and economic health of the residents of Dipaleseng.</p>
Mpumalanga Spatial Development Framework, 2007	In terms of the Mpumalanga Spatial Development Framework, 2007, There is a significant variation in the social and economic structure, performance, potential and needs of different areas	The planning and development of Dipaleseng should be participatory and should involve key national departments, provincial departments, Municipal stakeholders, non-government

PROVINCIAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
Plan 10:MSDF 2007	<p>across Mpumalanga; There are also significant variations in the nature and extent of the principal forces contributing to these differences.</p> <p>As a result different spheres of government have different strategic objectives, and deal with space at different scales. The framework act as a catalyst for further engagement and discussions to generate an informed consensus on spatial priorities and the nature and type of service delivery responses in different areas. The framework is a starting for discussion and engagement and the outcome expected to flow using this framework is as follows:</p> <ul style="list-style-type: none"> • In a series of joint talks it is expected that confirmation and/or alterations to the current spatial patterns will be provided by Provincial departments and District Municipalities. • An accepted baseline on which further analysis/refinement can be undertaken. • Information/special studies allowing for further refinement and understanding of the space economy. • Improved understanding of issues and barriers to development as an input into spatial strategies. • Provoke thought on the present space economy and the dynamics behind patterns. • Development of a deeper understanding of the development needs and potentials of the various geo-political areas of shared impact in the province. • Improved spatial analysis of the developmental issues and challenges in the province with a focus on PGDS priority areas. • Improved understanding of the linkages and flows in the provincial spatial economy as well as the province in the larger space economy. • Better understanding of theme hierarchies and typologies to help prioritise and differentiate areas in terms of possible 	<p>organisations, public enterprises and leading private sector stakeholders to ensure that the SDF ends off in an improved understanding of the likely spatial, environmental, social and economic implications.</p> <p>Through continual engagement and discussions, a common base from where linkages, patterns and emerging trends can be derived is created. This will inform a high level of understanding of the linkages and interdependencies in the provincial spatial system, hence highlighting possible cause-effect implications when considering spatial priorities.</p> <p>In terms of spatial elements contributing to economic linkages, the N4 Maputo Corridor between Mozambique and Gauteng transects Mpumalanga and passes through the economic concentrations around Nelspruit, Middelburg and Witbank. This corridor contributes towards economic development in the province itself and also in adjoining areas (significantly Gauteng), as well as the international ports situated in the province (the Komatipoort border post and the Kruger Mpumalanga International Airport).</p> <p>The Trichardt, Evander, Kinross and Secunda area is home to some of the major industrial complexes in the province, associated with petro-chemical industries. The N17 and R23 transportation routes establish excellent links with Gauteng and Richards Bay. Furthermore, the R23 is an important linkage from Gauteng via Newcastle to Durban. These road links are important for the industries located in the TEKS area (Trichardt, Evander, Kinross and Secunda</p> <p>Settlement types/ layers identified in the MSDF as constituting the Mpumalanga Province are as follows:</p> <p>Agricultural Layer; Agricultural is the first layer of human</p>

PROVINCIAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
	development responses.	<p>activities. A feature of this layer is that agricultural activities tend to be nodal (i.e. when activities in the region are directed to a central or management function, for instance all farm activities are controlled from the farm homestead) but they are spatially dispersed. Together, farms tend to produce the same product in an area. These settlement type Ermelo as main Agricultural Service Centre, servicing and interacting with the following agricultural communities & towns in its area of influence: Davel, Amersfoort, Morgenson, Amsterdam, Lothair, Breyten, Crissiesmeer and Hendrina. Other Agricultural Service Centre examples are: Standerton, Bethal, Belfast, Balfour, Lydenburg, Piet Retief, Malelane, Hazzyview, Evander and Barberton.</p> <p>Extracting Industrial Layer; The second layer of human activities is related to economically viable natural capital, such as mineral/mining deposits. A common feature of this layer is that there are usually not many sustainable mineral reserves and that activities resulting from them are usually scarce and spatially concentrated. Associated human settlements come into being not as a result of a wide distribution of people but as a result of specific exploitable natural resource. These settlements locate in space regardless of where other surrounding settlements are located. Witbank is identified as the main Extracting Industrial Service Centre.</p> <p>Manufacturing Layer; This layer consists of industries that derive their input from the first two (2) layers. Production and consumption of goods are produced by this layer for business and for individuals operating in the other subsequent layers in the model, thereby enhancing settlement development and growth. In most cases, it is the activities in this layer, combined with activities in the second layer that have transformed urban centres from ordinary local rural</p>

PROVINCIAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
		<p>service centres into higher order centres of attraction. Secunda, Middelburg, Nelspruit, Barberton and Lydenburg as main Manufacturing Service Centres.</p> <p>Commerce and Services Layer; the importance of the commerce layer is when considering the economic potential of key areas, is highlighted in the fact that in actual terms commercial activities are not limited to the commercial districts (e.g. Central Business District of a city or town). The services layer is a transitional layer bridging the lower four layers, where consumer goods are produced and sold, with the upper four where social needs are fulfilled. It covers a wide range of personal and professional services that are needed to sustain community life, such as health, education, financial, intellectual and civil services. Because most of these services are used directly by the community, they are spatially associated with the activities in the commercial layer. The following areas are identified under the Commerce and Service's Centres are Nelspruit, Witbank, Middelburg, Secunda, Standerton, Ermelo, Piet Retief, Barberton, White River, Hazyview and Lydenburg.</p>
Mpumalanga Tourism Growth Strategy (2007)	<p>The objective of the tourism growth strategy is to spell out a framework to guide tourism initiatives and development in the province. The wider objective of the tourism strategy is to attain sustainable benefits for the people of Mpumalanga by creating further economic activity. The essential mechanism to realize this wider objective is by increasing tourism revenue.</p> <p>In order to secure these sustainable benefits from tourism revenue, the strategy requires implementation of the following ten strategic initiatives to deal with challenges confronting the Mpumalanga tourism sector:</p> <ul style="list-style-type: none"> reorganise the institutional framework 	<p>The implication of the strategy is the development of the tourism sector to diversify and steer economic activity in Mpumalanga. According to the Mpumalanga tourism strategy, Dipaleseng doesn't have significant tourist attraction areas. Therefore, ways in which Dipaleseng can benefit from tourism and related activities in regions with significant tourism places needs to be explored.</p>

PROVINCIAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<ul style="list-style-type: none"> • improve air access • upgrade, diversify and expand the product • attract tourism investment • improve customer research and 'know how' • increase destination and product promotion • upgrade service skills • improve economic infrastructure • strengthen transformation and empowerment • improve product standards <p>The Implementation of these initiatives is expected to increase spending in the Province from international and domestic tourists, create new job opportunities in the provincial tourism sector and will also result in an increase in tourism related tax and other revenues for the Provincial Government.</p>	

17 Alignment with district development perspectives

Table 12: Alignment with district development perspectives

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
Gert Sibande District Municipality Spatial Development Framework, 2009	The Spatial Development Framework for the Gert Sibande District, aims to facilitate the consolidation the District's settlement structure; encourage "step-wise" rural – urban migration; promote the efficient, equitable and sustainable provision of community infrastructure and services; unlock the development potential of existing towns through developing industry specific economic cluster; functionally link the main growth centres via well developed corridors; and mitigate existing and potential future land use	

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
Plan 11: DSDP: Principles affecting Dipaleseng	<p>conflict(s) between industrial developments, agriculture, forestry and tourism. The SDF will guide the development of the District to ensure that the spatial restructuring component of the local municipalities is done in an integrated manner.</p> <p>The Situational Analysis of the District revealed a number of spatial issues and directives that formed a basis for the formulation of the Development Principles that seek to address the primary guiding directives.</p> <p>The Development Principles and its spatial implication for Dipaleseng are summarised as follows:</p> <p>Development Principle 1:</p> <p>To actively protect, enhance and manage the natural environmental resources of the District, in order to ensure a sustainable equilibrium between biodiversity conservation, mining, manufacturing and industrial activities, agriculture, forestry, and tourism related activities within the District.</p>	<p>Principle 1 Implication:</p> <p>Planning and Development initiatives within Dipaleseng should ensure that the entire Municipality's biodiversity as described in the Mpumalanga Terrestrial Biodiversity Assessment is protected, managed and enhanced. These would include the following:</p> <ul style="list-style-type: none"> • The Ecological Corridor that runs from the north to south traversing through Greylingstad needs to be protected. • The Highly Significant areas located mostly to the south, east and north-west of the Municipality need to be protected in such a way that conservation objectives are met. • The Important and Necessary are areas where the biodiversity has been heavily compromised and very

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>Development Principle 2:</p> <p>To optimally capitalise on the strategic location of the District and its five key economic strips/ corridors, and to functionally link all towns and settlements to one another through establishing and maintaining a strategic road and rail network comprising internal and external linkages.</p>	<p>few options remain to meet biodiversity targets. These areas are situated mostly in the central region of the municipality and need to be protected in such a way that conservation objectives are met.</p> <ul style="list-style-type: none"> • The Least Concern areas have biodiversity value in the form of natural vegetation cover. These areas situated in most parts of the municipality and they are subject to National EIA legislation. • The No Natural Habitat Remaining areas include areas where the natural vegetation has been lost. These areas include land that has been transformed by urban/industrial development and cultivation. <p>Principle 2 Implication:</p> <p>In terms of the District's five key economic strips/corridors, Dipaleseng is affected by the R23 Corridor which represents the old route between the Gauteng Province and Durban/eThekweni in KwaZulu-Natal, linking prominent towns and settlements such as Balfour, Standerton and Volksrust to one another. This corridor including the others forms the base of a strategic road network for the District, and should therefore be maintained as a top priority. The following development implications of the corridors include the following:</p> <ul style="list-style-type: none"> • The thorough maintenance and upgrading of the national and provincial road network constituting the five main transportation corridors in the Gert Sibande District. • The efficient "branding" of the five corridors through

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>Development Principle 3:</p> <p>To utilise the existing natural environmental, cultural-historic and man-made activity areas within the District as Tourism Anchors and Nodes; and to develop and promote the eastern parts of the District (around route R33) as a Primary Tourism Corridor linking the Lowveld Tourism Precinct to the north (in Ehlanzeni), to the St Lucia Tourism Precinct located to the south of the District.</p> <p>Development Principle 4:</p> <p>To promote forestry within and along the identified Primary Tourism Corridor this includes areas around the R33 route. The commercial forestry areas are along the north-south band in the east of the District.</p> <p>Development Principle 5:</p> <p>To promote intensive and extensive commercial farming</p>	<p>appropriate signage in order to attract more tourist traffic through the area (Establishment of “Theme Routes”).</p> <ul style="list-style-type: none"> Active promotion of rail as transport mode in the district – especially as an alternative to road-trucking of coal in the District. <p>Principle 3 Implication:</p> <p>Dipaleseng does not feature in the Primary Tourism Corridors (areas around the R33 route) identified in the District SDF, therefore not affected. However, due to its spatial location, Dipaleseng can align its tourism plans to the closest areas identified in the District SDF as supporting Tourism Nodes. These areas would include the following:</p> <ul style="list-style-type: none"> The Grootdraai Dam Water Tourism Node situated in Standerton. The Industrial and Entertainment Tourism Node situated in Secunda. <p>Principle 4 Implication:</p> <p>Dipaleseng does not feature in the Primary Tourism Corridors and the commercial forestry areas, therefore not affected by this principle.</p> <p>Principle 5 Implication:</p> <p>The Dipaleseng falls within the area to the west of District which is earmarked for extensive agriculture, therefore</p>

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>activities throughout the District, and to facilitate and concentrate subsistence farming activities within certain rural communities. The SDF identifies that the central and western parts of the District have larger concentrations of land suitable for agricultural purposes. These areas have been earmarked for extensive agriculture</p> <p>Development Principle 6:</p> <p>To unlock the development potential of existing towns through developing industry specific Special Economic Zones / Economic Clusters throughout the District, in line with the MPISF and the provincial LED Strategy and in accordance with the following sectors:</p> <ul style="list-style-type: none"> - Agricultural Cluster - Forestry Cluster - Industrial Cluster <p>Development Principle 7:</p> <p>To facilitate and accommodate mining in the District in a sustainable manner in order to support local electricity generation and industrial development.</p> <p>Development Principle 8:</p> <p>To establish a functional hierarchy of towns and settlements in the District, and to ensure equitable access to social infrastructure and the promotion of local economic development by way of Thusong Centres (Multi Purpose</p>	<p>agricultural land should be protected to ensure it continuously produces. The town of Balfour should serve as an agricultural service center for the Municipality.</p> <p>Principle 6 Implication:</p> <p>Balfour is the only town affected by this principle and is categorised as a Secondary Cluster within the Agricultural Cluster category.</p> <p>Principle 7 Implication:</p> <p>Grootvlei is the only town affected by this principle, as it is host to the Eskom Power Station. The coal fields within and around the Municipality should be utilised in order to serve the power station.</p> <p>Principles 8 Implication:</p> <p>Within Dipaleseng, three centres are proposed to be situated within a 10km radius around the main town of Balfour, Greylingstad and Grootvlei. The intention of these facilities is thus twofold:</p>

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>Community Centres (MPCCs).</p> <p>Development Principle 9:</p> <p>To ensure that all communities have access to at least the minimum levels of service as enshrined in the Constitution. This principle is in line with the principles contained in the National Spatial Development Perspective.</p> <p>Development Principle 10:</p>	<ul style="list-style-type: none"> To provide the broader community with a full range of community services and facilities at a single point which is accessible within 5 to 10 kilometres from the majority of people living in the surrounding area; and To promote local economic development at these nodes which not only serves the retail needs of the local community, but which also provides opportunities for people to establish their own businesses and to feed from the markets created at these nodes. <p>Principle 9 Implication:</p> <p>None of the areas in Dipaleseng are part of the two major areas that stand out as priority Service Upgrading Priority/Areas within the District. These priority areas are situated north-eastern precinct in the Albert Luthuli and Msukaligwa Municipalities and areas around the Mkhondo municipal area. However areas such as those in Dipaleseng that are outside these priority areas should follow a dual approach to basic services provision. This entails that whilst urban communities are provided with basic services and facilities, it is equally important that rural communities are not neglected, and that they are provided with an appropriate range of services and facilities to meet their minimum needs.</p> <p>Principle 10 Implication:</p> <p>Within the Dipaleseng, the town of Balfour is featured in the Strategic Development Areas whereby the proposed future</p>

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	To consolidate the urban structure of the District around the highest order centres by way of infill development and densification in Strategic Development Areas (SDAs). The District SDF proposes that the towns and settlements within the District should be developed in a manner aimed at consolidating the urban form, rather than allowing for further expansion.	direction or trend for development is highlighted. The compilation of the Local Spatial Development Framework should incorporate the District Directives and more detailed Precinct Plans should be developed for each town/settlement.
Gert Sibande District Integrated Development Plan 2010/2011	<p>The Gert Sibande District IDP contains investment and development initiatives; all the projects, plans and programmes that have an impact on the Dipaleseng SDF. The IDP ensures that all local municipalities are aligned with the current and proposed macro-economic policies, strategies, public investment plans and sectoral programmes to speed up the reduction of poverty, underdevelopment and unemployment in Mpumalanga. The SDF strives to make an impact towards improving the life of all the residents within the district and it identify the following areas as key to achieve its goals and objective:</p> <ol style="list-style-type: none"> 1. Municipal Transformation and Organization Development 2. Municipal Financial Viability and Management 3. Local Economic Development 4. Infrastructure Development and Service Delivery 5. Social Development and Community Services 6. Intergovernmental Relations, Good Governance and Public Participation 	
Gert Sibande Growth and Development Strategy 2006 (GSGDS)	The strategy aim to help guide the development of the District over the next five years, by consolidating and exploiting its natural resources and development opportunities, and to assist all role players in helping to grow the District's economy. The District has delineated five "District Strategic Focus Area" which are as follows:	The GSDDS identities the following main urban centers within the District as Secunda, Piet Retief and Ermelo. The District is seen as ideally spatially located in close proximity to the Maputo corridor which offers access to the Maputo harbour. Further, the District has some important regional linkages such as the South East of Mpumalanga and North of KZN.

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
Plan 12: Gert Sibande District Economic Growth Strategy	<ol style="list-style-type: none"> 1. Tourism 2. Spatial Development Initiatives 3. Local Economic Development 4. Agriculture, Forestry, Manufacturing and Mining 5. Environmental Management 	<p>The GSDDS proposes a downstream chemical incubator in the District. The SASOL Petro-chemical plant provides opportunities for down-stream chemical production due its chemical production. The proposed incubator will provide opportunities for entrance of small entrepreneurs in the chemical industry by providing opportunities for entrance of small entrepreneurs in the chemicals industry by providing access to facilities like laboratories & testing facilities, as well as business support services like offices, internet, faxes, etc.</p> <p>In terms of tourism, the GSDDS perceives the District to have huge tourism potential due to the following:</p> <ul style="list-style-type: none"> • The District is well accessible via the main routes that cross the GSDM area. • The GSDM is in close proximity to Swaziland with the main border posts bordering the District. The District shares a number of important border posts with Swaziland, including Oshoek and others. The District can capitalise on the substantial volumes of traffic going into Swaziland.
<p>Gert Sibande District Municipality Integrated Transport Plan 2008</p> <p>Plan 13: Gert Sibande District Integrated Transport Plan 2008: Dipaleseng Analysis</p>	<p>The District Integrated Transport Plan (DITP) 2008 is a strategic plan with the aim of effecting the Municipality's transport vision. In line with the Province's vision the District strives to have a suitable transport system planned together with the community and perceived to be:</p> <ul style="list-style-type: none"> • Integrated • Efficient and effective • Affordable • Safe <p>The District Municipality's transport goals and objectives have been developed on the basis of the National and Provincial</p>	<p>The DITP has identified strategies for realisation of the District transport vision through a consultation with the community and its stakeholders.</p> <p>The following is apparent for Dipaleseng:</p> <ul style="list-style-type: none"> • Dipaleseng has no formal taxi rank facility with isles and shelter, however it has one semi-formal facility with at least a surfaced area y and three (3) informal taxi ranks located on virgin land and are not surfaced or have no infrastructure for operation. There is a need to develop taxi rank facilities with accompanying facilities such as toilets, water, shelters, parking and loading spaces, lighting and telephones. These facilities should be closely linked with

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>documents.</p> <p>In order to achieve the goals and objectives in the district the DITP identifies key intervention areas that need urgent attention. The DTIP also provides guidance to district and local municipalities in their attempt to achieve the district's transport needs; to create integrated, efficient, effective, affordable and safe transport system. Furthermore the DTIP identifies the land transport challenges within the district and it also develops the strategic trusts and programmes that are believed to be attainable. The following is a list strategies unpacked in the DITP:</p> <ul style="list-style-type: none"> • Public Transport Operational Strategy • Transport Infrastructure Strategy • Travel (Transport) Demand Management • Freight Logistics Strategies • Other Transport Related Strategies i.e. Non Motorised Transport, Safety and Security Strategy for Public Transport, • Funding Strategy and Summary of Proposals and Programmes 	<p>business centers to ensure their optimal usage.</p> <ul style="list-style-type: none"> • In Dipaleseng, a new taxi rank has been constructed with the necessary facilities. The local taxi association has began utilising the rank to its maximum capacity. • The Siyathemba Taxi Rank has exceeded its utilisation capacity. Plans need to be put in place to rectify the situation by adding more bays. • The R23 and R51 have high numbers of public transport passengers. Both routes (inclusive of taxi and bus passenger) are measured to carry 0-500 Passengers during peak hours. Although this range is the lowest in the district, it is still significant for Dipaleseng. • The N3 has been identified as a long distance road freight transport route linking Gauteng to Durban. • The R23 has been identified as freight corridor associated with high volumes of coal haulage. The trucks moving along these corridor cause damage to the road, hence there is a need to constantly upgrade and maintain the road. • A total of nine (9) weighbridges exist within the Gert Sibande. One is located in Dipaleseng along the R23 route in Balfour. However the status quo of the weighbridge could is not confirmed. • The DTIP outlines suggested upgrading or road infrastructure and the priorities thereof. Within Dipaleseng the road R548/R51 traversing through Balfour to Grootvlei has been prioritised for upgrade and maintenance. The upgrading of the Municipality's roads will ensure that the roads are able to withstand the impact of high frequency of heavy coal trucks. In general, there is definitely a need to bring the Districts roads standards to be equivalent to some of the most heavily trafficked freight routes in South Africa, such as the N3 to Durban harbour.

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
		<p>In terms of the stakeholder consultation, the Dipaleseng Transport forum yielded the following summarised inputs and/or issues:</p> <ul style="list-style-type: none"> • The taxi industry is concerned that there are many taxis earmarked to be scrapped in the Municipality but do not have a local facility for scrapping. It was proposed that that scrapping facility be established for the District • There is a concern that the process of taxi scrapping is very slow and needs to be improved. • The taxi industry is disturbed by the way the traffic department handles the scrapping process. • The improvement of access roads to schools could ensure provision off public transport to a number of schools affected by the gravel roads. <p>In response to the above, together the District and Local Municipality need to focus on addressing transportation needs such as the following:</p> <ul style="list-style-type: none"> • The provision of affordable basic access to transportation; • Reducing long walking and travel distances; • The provision of integrated modal interchanges supported by infrastructure inter alia taxi-bus ranks, amenities, footpaths and security facilities in all Activity Nodes be it is small or large.
Gert Sibande Local Economic Development Strategy and Implementation Plan 2009	The Gert Sibande District Municipality Local Economic Development Strategy and Implementation (2009), is a plan relating to the opportunities for the development of the District, focusing on the region's comparative advantages and the need to adopt strategies that can maximise the benefits for the citizens of the District.	A number of the LED strategy opportunities and proposed projects are very pertinent to the Dipaleseng Local Municipality, which points to the need for the municipality to focus more on activities associated with the expansion of the agriculture, mining and electricity sector. The Municipality needs to improve standard of its infrastructure i.e. the roads in order to provide an enabling environment to implement the LED strategies.

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>The SWOT analysis revealed that GSDM has a comparative advantage in the agriculture and forestry; mining, manufacturing and electricity. In recognition of its strategic importance within GSDM, the tourism industry has also been added to the list of sectors. The LED in GSDM is to be driven through the stimulation and growth these economic sectors and industries. The LED strategy identified existing potential opportunities that can be exploited based on the Districts comparative advantage in the following sectors:</p> <p>Agriculture Opportunities:</p> <p>Opportunities in this sector are mainly in beneficiation of existing primary produce. Value adding opportunities have been identified within the following areas:</p> <ul style="list-style-type: none"> • Poultry farming (cold meats, stock feed production; egg packaging) • Sunflower (cooking oil) • Livestock farming (beef, cold meats; wool production) • Biofuels (biofuels and lubricants production) • Fruit production (canning and juice production) • Maize production (milling) • Fresh produce market (lettuce, tomatoes, rosemary, basil, fruits) <p>Forestry, Timber, Pulp, and Paper (FTPP) Opportunities:</p> <ul style="list-style-type: none"> • Exploration of opportunities for a new forestation ; • Improved management and regulation of existing plantations; • Increased equity ownership in existing plantations; • Contracting enterprises (community based tree nurseries; working for water; ownership and contracting companies etc); • Timber processing, value adding, and marketing enterprises 	<p>Following from the District LED, the Dipaleseng LED should focus on job creation, promoting and support SMME sustaining of existing business, promoting of tourism, increasing local beneficiation and shared growth. The LED should reflect on local initiatives and be driven by local stakeholders.</p>

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<p>(charcoal production for wholesale, retail and contract etc);</p> <ul style="list-style-type: none"> • Non-timber forest products (private community based nurseries for indigenous trees and medicinal plants; carving and curios etc) • Small scale saw milling • Recycling of paper waste • Manufacture of timber products for construction, e.g. trusses, doors, windows, flooring, skirting boards • Manufacture of pallets • Manufacture of poles for mine support • Manufacture of a range of flat-pack furniture <p>Tourism Opportunities:</p> <ul style="list-style-type: none"> • The development of a family eco-adventure resort at the Hey/Shope Dam situated between Wakkerstroom and Piet Retief in the Mkhondo Local Municipality. • The establishment of the Songimvelo-Malolotja Trans-Frontier Park with Swaziland. • Within the coal mining area, it is proposed that at least two industrial museums/interpretative centres be established – one at Middleburg (based on coal mining) and one at Secunda (based on Sasol's fuel-from-coal plant and underground coal mining complex). <p>Manufacturing Opportunities:</p> <ul style="list-style-type: none"> • Water treatment chemicals; • Styrene; • Detergents and cleaning chemicals; • Paints and protective coatings; • Fuel dyes; • Tower packing; • Pallets; and 	

DISTRICT LEVEL		
Policy/Legislation /Strategies	Description	Implications
	<ul style="list-style-type: none"> Drum refurbishment. 	

18 Alignment with local development perspectives

Table 13: Alignment with local development perspectives

LOCAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
Draft Environmental Management Framework for the Dipaleseng Local Municipality 2010	<p>The <i>Draft Environmental Management Framework (EMF)</i> compiled by BKS (Pty) Ltd was formulated to support decision-making by authorities, It provides authorities with information about the 'state of the environment' and the associated planning parameters. It will identify and spatially represent areas of potential conflict between sensitive environments and development proposals thus assisting in integrating social, economic and environmental factors into planning.</p> <p>In terms of National Environmental Management Framework, 1998 the contents of the EMF must include the following:</p> <ul style="list-style-type: none"> Identify by way of a map or otherwise the geographical area to which it applies; Specify the attributes of the environment in the area, including the sensitivity, extent interrelationship and significance of those attributes; Identify any parts in the area to which those attributes 	<p>Phase 2 of the Draft Dipaleseng EMF provides a status quo assessment of the environment of Dipaleseng. The status quo is based on specialist studies, literature review and stakeholder consultation. The following components form part of the specialist studies that were undertaken:</p> <ul style="list-style-type: none"> Spatial planning and land use; Socio-economic; Cultural heritage; Hydrology; Terrestrial ecology; Agriculture; and Air quality <p>The studies reveal that Dipaleseng is experiencing immense pressure specifically from mining manner. There is a growing concern that mining activities pose a threat to water resources, air</p>

LOCAL LEVEL		
Policy/Legislation /Strategies	Description	Implications
Alignment with Surrounding Municipalities	<p>relate;</p> <ul style="list-style-type: none"> • State the conservation status of the area and on those parts; • State the environmental priorities in the area; • Indicate the kind of activities that would have a significant impact on those attributes and those that would not; • Indicate the kind of activities that would be undesirable in the area or in specific part of the area; and • Include any other matters that may be specified. 	<p>quality and ecological functioning, while providing job opportunities and economic development. The municipality through its EMF should promote environmentally and socially responsible development, supported by guidelines and incentives.</p> <p>In areas of conflict between the SDF and EMF, it is suggested that the EMF should inform the SDF in order to ensure that resources are not compromised.</p> <p>Due to its strategic location, Dipaleseng has the N3, R23 and R51 roads cutting across the municipal area thereby linking the municipality with economic centres from other local Municipalities. The development initiative that takes place in these local municipalities has direct and indirect impact in Dipaleseng. Therefore planning and development that takes places in adjoining Lesedi, Midvaal, Lekwa, Metsimaholo and Mafube local municipalities needs to be taken into consideration to ensure coordinated and integrated development action to achieve common objectives and maximisation of development impact.</p>

19 Other initiatives

19.1 Maputo Development Corridor Flagship Programme

The term “Spatial Development Initiatives” (SDIs) has been coined by the departments of Trade and Industry and Transport to describe a programme of strategic initiative by government aimed at unlocking the underutilised economic development potential of certain strategically spatial locations in South Africa. There are a number of these initiatives being pursued by national, provincial and local government in South Africa. The Maputo Development Corridor is the most advanced and the best known of the SDI’s.

The MDC initiative has to date helped facilitate over \$5 billion in private sector investments into regional infrastructure development, industrial development and natural resources exploitation and beneficiation (www.mdc.org.za). Investors target the provision of infrastructure, agriculture, mining, energy, chemicals, tourism and manufacturing sectors.

The MDC does not transverse the Dipaleseng municipal area and therefore it has no direct impact in the municipal area. However it connects South Africa's major industrial and commercial centres of which some are connected to the Dipaleseng Local Municipality.

Through the upgrading of roads and tourism facilities, Dipaleseng can position itself to attract traffic from MDC to the Municipality. The tourism sector of Dipaleseng can be enhanced through eco-tourism and agri-tourism opportunities considering that the Municipality has a pristine natural environment and game ranches. The establishment of traditional African tribal art and craftwork centres can further boost Dipaleseng’s potential to attract traffic from the MDC.

19.2 Mpumalanga Terrestrial Biodiversity Assessment

In terms of the District and Dipaleseng biodiversity assessment the following descriptions apply (Mpumalanga Biodiversity Conservation Plan)

(See Plan 14: Mpumalanga Terrestrial Biodiversity Assessment) and

(See Plan 15: Dipaleseng Terrestrial Biodiversity Assessment)

Table 14: Description of Biodiversity Assessment Categories

Category	Description of biodiversity assessment
Protected Areas (PAs)	These include all formally proclaimed PAs on both state and private land. All are managed for biodiversity conservation and sustainable use. Such use includes: commercial nature based tourism, education, and limited production and harvesting of wild resources, especially game animals. State owned PAs are required to be managed in terms of formal management plans and to benefit local communities. All PAs contribute to meeting biodiversity targets, although not all were originally established for their biodiversity values.
Ecological	The purpose of ecological corridors is to provide intact mega-pathways

Category	Description of biodiversity assessment
Corridors	<p>for long-term biological movement. They are selected primarily along river-lines and altitudinal gradients to provide for the natural retreat and advance of plants and animals in response to environmental change. Where possible they are also selected to follow lines of intact natural habitat and to link areas holding the Province's most valuable ecological assets.</p> <p>Ecological corridors function at the landscape scale and for the very long term. Natural vegetation in corridors should be maintained, loss of natural habitat minimised, and restoration encouraged. Approved development or changes in land use must be compatible with conservation objectives. Decisions on land use change may require a biodiversity specialist study as part of the EIA.</p>
Irreplaceable	<p>Irreplaceable areas are those of highest biodiversity value outside the formal PA network. They support unique biodiversity features, such as endangered species or rare habitat patches that do not occur anywhere else in the province. These features have already been so reduced by loss of natural habitat, that 100% of what remains must be protected to achieve biodiversity targets. All land in this category must be managed for biodiversity conservation to meet the targets set. All development must be strictly controlled in line with biodiversity conservation objectives.</p>
Highly Significant	<p>Highly significant areas are those where biodiversity has been heavily compromised and very few options remain to meet biodiversity targets. Natural vegetation cover in these areas should be maintained or restored. Any significant habitat loss may cause these areas to become irreplaceable. Approved developments or changes in land use must be compatible with conservation objectives, e.g. well managed livestock grazing. If development is unavoidable, such land uses must be made sufficiently dispersed and/or small scale, so as to be biodiversity friendly. Decisions on land use changes will require a biodiversity specialist study as part of the EIA.</p>
Important and Necessary	<p>Biodiversity in this category is relatively intact. It represents the areas which most efficiently contribute to meeting biodiversity targets and minimise land use conflict. If biodiversity is lost from these areas, larger areas will be required elsewhere for targets to be met. This category allows some flexibility and there are options for development. However, approved developments or changes in land use must still be compatible with conservation objectives. Decisions on land use changes will require a biodiversity specialist study as part of the EIA. Developments most antagonistic to biodiversity should be discouraged.</p>
Least Concern	<p>These areas have biodiversity value in the form of natural vegetation cover. Although they are not currently required in order to meet biodiversity targets, they do contribute significantly to functioning ecosystems, including ecological connectivity. A greater variety of development choices exists in these areas. However they are still subject to National EIA legislation, where at least a scoping report is required for all listed activities.</p>
No Natural Habitat Remaining	<p>This category covers the rest of the Province in which natural vegetation has been lost. It includes all land transformed by urban / industrial</p>

Category	Description of biodiversity assessment
	development and cultivation. Biodiversity is irreversibly changed, reduced to levels that are virtually dysfunctional. These landscapes have only residual or negative effects on the functioning of natural ecosystems.

20 Spatial analysis and implication

20.1 Regional context

Dipaleseng is situated in the southern part of the Mpumalanga Province, under the Gert Sibande District Municipality. The municipality's main town, Balfour, is isolated from the province's main city Nelspruit (324km). However, since the municipality is bordered by the Free State and Gauteng Province to the south and north respectively. The municipality is in close proximity to major economic centres situated in these provinces such as the industrial town of Sasolburg (89km) and the metropolitan city of Johannesburg (89km) from Balfour. Other significant nodes in close proximity are the Middleburg-Witbank conurbation situated approximately 120km from Balfour (**See Plan 16: Regional Linkages**).

Table 15: Regional Context

Urban Centres	Distance from Balfour (km)
Main centres	
Secunda	67
Witbank	121
Ermelo	157
Middleburg	148
Nelspruit	324
Standerton	85
Vereeniging - Kopanong	87
Metropolises	
Johannesburg	89
Pretoria	125
Durban	498
Bloemfontein	403
Other towns	
Bethal	106
Sasolburg	89
Benoni	73
Volksrust	175
Carolina	197
Piet Retief	264
Calvinia	1192
Evander	67
New Castle	204

In terms of movement linkages between the municipality and major centres in neighbouring municipalities, Dipaleseng is well accessible via road and rail. The N3 national road is the most important northwest to southeast corridor linking Johannesburg and Durban traversing through Dipaleseng thereby ensuring that the municipality is connected with these major economic centres.

The R23 provincial road is a significant provincial corridor linking Balfour to Secunda. The municipality is linked to Witbank and Middleburg by provincial roads R51 and R548 which are further link with other roads leading to these towns.

The rail network links the municipality's main towns with Heidelberg which is situated towards Johannesburg to the north, Secunda to the east, Villiers to the south and Vereeniging to the west.

Within the municipality and the district, there is no significant airport, except for minor airstrips. The OR Tambo International Airport situated in the north of the municipality is the only major airport that provides air services to the municipalities needs.

Spatial Implication

Economic development of Dipaleseng depends substantially on its regional accessibility via road, railway and airport. The municipality is well suited to exploit its competitive advantage to other municipalities due to its accessibility and its close proximity to major economic centres such as Johannesburg, Pretoria, Secunda and Witbank.

The spatial implication of the close proximity to the major economic centres is that people of Dipaleseng travel short distances i.e. to schools, tertiary institutions, health facilities, shopping centres and markets, which is an opportunity for socio-economic stability. However, within the municipality's main towns the population growth is affected by the lack of economic activities that can attract investment thereby creating job opportunities.

21 Environment

21.1 Climate

Dipaleseng falls under the Highveld climatic conditions which are generally associated with moderate temperatures and rainfall. The summers are mild with maximum temperatures hardly ever exceeding 25°C. Winters are cold with minimum temperatures commonly reaching below zero. The area often experiences very cold weather conditions and frost which can cause widespread damage to crops and wildlife.

The area falls within the summer rainfall region with an annual rainfall of between 600 - 800mm per annum. Evaporation rates are between 1300 – 1700 mm per year. **(See Plan 17: Annual Rainfall).**

Table 16: Average annual rainfall

Average Rainfall (mm)	Area (ha)	%
0-200	0	0
200-400	0	0
400-600	249315.3	95
600-800	12698.47	5
800-1500	0	0
Total	262013.8 ha	100%

Source: Department of Water Affairs and Forestry

DISCLAIMER: In terms of the municipal area (ha), it must be noted that the source data collected from the Municipal Demarcation Board differs from the sourced data provided by the Department of Water Affairs and Forestry.

±95% of Dipaleseng has an average annual rainfall of between 400-600mm, while ±5% of the area has an average annual rainfall of between 600-800mm.

Spatial Implication

The industrial towns, mines and irrigation farms in and around Dipaleseng have a negative impact on the water sources available within the municipality. These limited water sources (surface) include the Haarhof Dam, Suikerbosrand River and the Vaal River. The bulk of the water is used in the industries (including power generation at Grootvlei), irrigation farms, mining related activities and the rest for domestic waster needs. There is a need for more effective utilisation of water and the conservation of the limited water resources in the area.

The cold and frost conditions often experienced in the area has a negative impact on agricultural production as some crops cannot withstand the cold weather for prolonged periods. There is a need to adopt farming methods that can ensure the production of crops can withstand the effects of frost.

21.2 Topography

The landscape of Dipaleseng consists of relatively flat areas and a fair amount of moderate to steep areas. Mountainous areas occur in the northern part alongside the Greylingstad - Balfour railway line and south of Greylingstad. Fairly flat areas occur in the south western part (the Vaal River catchment area) and the northern parts of the municipality. The Municipality's drainage is southwards towards the Vaal River in the south (**See Plan 18: Slope Analysis**).

Spatial Implication

- Land where the gradient is steeper than 20% is not suitable for development in terms of environmental regulations and guidelines.
- The provision of engineering services is expensive in areas with steep slopes.
- Areas presenting topographical constraints should be carefully assessed in any land use management decision.
- Environmental legislation requires the protection of granite or rocky outcrops due to the diverse and sensitive vegetation types associated with these features.
- Areas regarded not suitable for development due to topographical constraints should form part of a municipal open space system.

21.3 Geology

Table 17: Geology Types

Geology	Area (ha)	%
Andesite	47888	18
Arenite	121451	46
Dolerite	65629	25

Geology	Area (ha)	%
Granite	3591	1
Lutaceous Arenite	6299	2
Migmatite	0	0
Quartzite	6935	3
Shale	6593	3
Waterbody	3059	1
Total	261446	100

Source: Council for Geoscience

DISCLAIMER: In terms of the municipal area (ha), it must be noted that the source data collected from the Municipal Demarcation Board differs from the sourced data provided by the Council for Geosciences

Geology Types

A large portion ($\pm 46\%$) of Dipaleseng is underlain with Arenite (**See Plan 19: Geology**). Dolerite (25%) and Andesite (18%) are the second most dominant geology type. The south western part is predominantly underlain with Arenite. The least occurring geology types are Quartzite, Shale and Lutaceous Arenite. The main area of Balfour is underlain with Andesite, Greylingstad is underlain with Dolerite and Grootvlei with Arenite.

Economic Geology

Economic geology is concerned with earth materials that can be used for economic and/or industrial purposes. These include precious and base metals, non-metallic mineral, construction grade stone, petroleum minerals, coal and water (Wikipedia, 2010). The economic geology of Dipaleseng is briefly discussed below.

The economic geology for the broader district is indicated on **Plan 20: District Economic Geology**.

The geological composition provides numerous economic opportunities in the Dipaleseng Municipality through mining. The municipality is predominantly underlain by coal and gold deposits. Coal mining occurs along the coal belt on the south and other coal related activities are found within the municipality such as the coal powered Grootvlei Power Station. Gold deposits provide mining opportunities in various parts of the municipality. These deposits are evenly spread throughout the Municipality. (**See Plan 21: Economic Geology**).

The geological composition provides numerous mining opportunities (**See Plan 22: Mining Land**). Dipaleseng is rich in minerals and metals such as coal and gold deposits originating from the geology types above.

Spatial Implication - Basic Management Guidelines

- Caution must be taken when developing on less ideal geological terrain with specific reference to risks and costs.
- Greylingstad – intrusive dolerites are likely to be found.
- From a geological perspective “no development areas” include areas affected by undermining, dolomite and areas where heaving clays are present. These features are present in Dipaleseng.
- Areas underlain by geology types not suitable for development must be excluded from development and included into a conservation zone or an open space system.

Any township development should be headed by a geotechnical investigation to determine if the soils are likely to cause foundation problems, especially when densification or multiple storey development is proposed which impact heavily on underlying soils.

21.4 Agriculture crop potential**Agricultural Crop Potential**

Table 18: Agricultural Crop Potential

Categories	Area (hectares)	Percentage (%)
High Cultivation	16895.22	6.46
Low Cultivation	10280.66	3.93
Medium Cultivation	63716.35	24.36
Pivot Irrigation	3302.16	1.26
Undetermined (No Data)	167405.61	63.99
Total Area (Dipaleseng)	261600.00	100

Source: Gert Sibande District Municipality

Accordingly, about 24% of the municipal area is regarded as medium cultivation agricultural areas. Approximately, 6% of land in Dipaleseng is regarded as high cultivation and about 3% low cultivation. Pivot irrigation areas consist of about 1%. The remaining 64% of the municipal area is undetermined in terms of the agricultural crop potential. The banks of the Vaal River and the north eastern part of Balfour are presumed to have high cultivation areas. The areas south east along the banks of the Vaal River and the Waterval River are dominated by pivot irrigated areas (**See Plan 23: Agricultural Crop Potential**).

The agricultural crop potential of land in Dipaleseng allows for:

- high cultivation or crops such as maize, wheat and sorghum;
- livestock farming is conducive for cattle and sheep; and
- irrigation farming on the banks of the Vaal River - this need to be well-managed for it to not impact negatively on environmental sensitive areas.

The criteria for identifying prime and unique agricultural land are as follows (Agis, 2010):

- absence of restrictions on cultivation (i.e. slopes and distance from watercourses);
- present irrigation (land under permanent or seasonal irrigation is deemed to qualify as prime agricultural land);
- moisture availability;
- the scarcity factor; and
- soil type, soil texture and soil depth (soil depths deeper than 750mm within access of a water source need to be regarded as worthy of protection as a scarce resource).

These criteria are used as guidelines when evaluating an area. Areas that do not meet the criteria are not automatically available for development or change in land use i.e. areas with a low potential for crop production might have a high potential for grazing, making it an area of high agricultural value.

21.5 Conservation areas

There are currently no statutory protected areas in Dipaleseng. The Mpumalanga Biodiversity Conservation Plan indicates biodiversity categories from which Dipaleseng is has highly significant, important & necessary, least concern and no natural habitat remaining.

There are five major water bodies that have been identified in Dipaleseng, namely (**See Plan 24: Water Bodies**):

- the Vaal Dam and Vaal River are an important water resource;
- the Grootvlei Dam;
- the Waterval River;
- the Grootspuit River;
- the Petrus van Merwe Haarhof Dam;

Occasional pans and wetlands various parts of the municipality, but have been transformed due intensive agricultural activities. These wetlands are under threat from agricultural activities, erosion and draining of wetlands that disturbs the biodiversity of the wetlands (Draft Environmental Management Framework, 2010).

Spatial Implication

The implication of conservation areas on development includes the development of infrastructure away from sensitive areas. The development of mining activities in and around Dipaleseng presents a huge threat to local biodiversity – especially to the Municipality's pans and wetlands.

The irrigation along the Vaal River banks poses a threat to the biodiversity of the area as large tracts of land are cleared for cultivation. The Gert Sibande District SDF (2009) has identified environmental concerns that should inform the development of the SDFs of the district including particularly the areas within the ecological corridor.

The clearing of natural vegetation to make way for both commercial and subsistence agricultural activities impacts negatively on local biodiversity. The open cast coal mines have adverse effects on the environment when rehabilitation is not undertaken as is usually the case.

Soil potential is being reduced by pollution, acidification, declining fertility, compaction and erosion. The coal-fired power stations and other industries increase acidity levels to a great extent in areas such as Balfour in Dipaleseng. Therefore, the development of these activities should be guided by Environmental Management Plans to limit the clearing of natural vegetation in areas required for development.

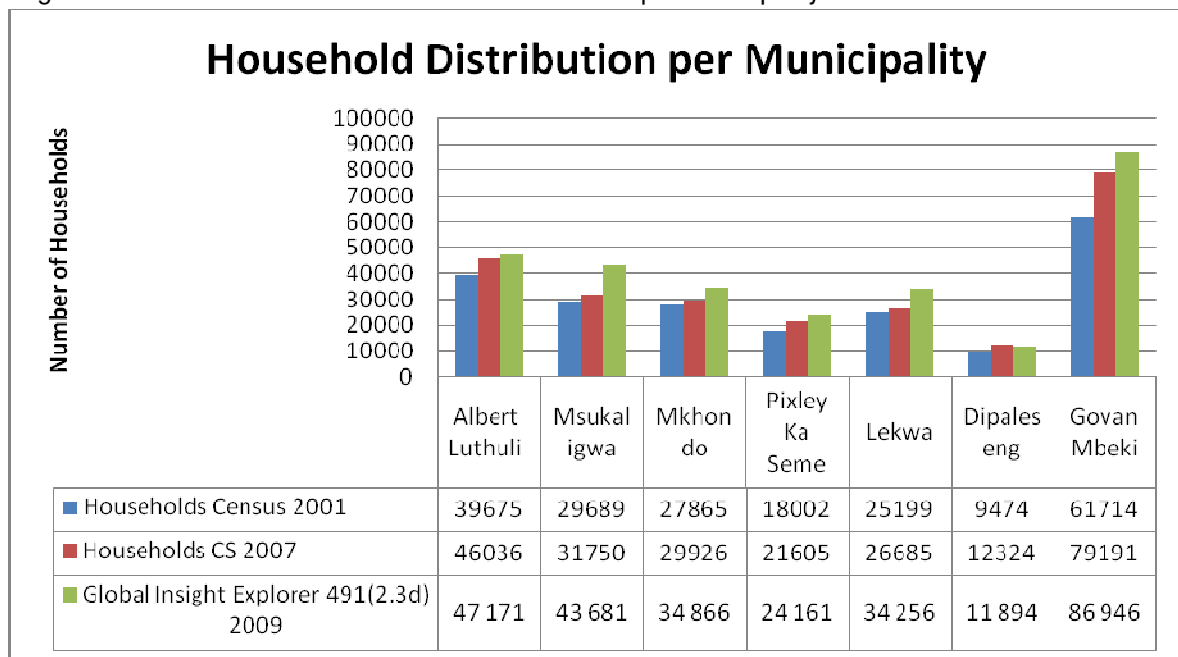
22 Demographic characteristics

Statistics SA Census 2001 and the Statistics SA Community Survey 2007 are currently the only two official population data sources and they may appear to be outdated but they are the only official sources used for planning purposes.

22.1 Population size

Statistics SA Census 2001 and Statistics SA Community Survey 2007 are currently the only two official population data sources used for planning purposes. Data from Global Insight South Africa 2009 was used to supplement the data from Stats SA as it is more recent.

Figure 2: Gert Sibande District Household Distribution per Municipality



Source: Community Survey, 2007

The above table confirms the following statistics:

- The total number of households in Gert Sibande District was 211 618 in 2001, in 2007 it was 247 517 and in 2009 it was 282 975. This indicates a gradual increase in the population.
- The highest number of households are located in Govan Mbeki with 86 946 in 2009 and the lowest are located in Dipaleseng with 11 894.

- In Dipaleseng households decreased by 430 from 12 324 in 2007 to 11 894 in 2009. However all the other municipalities experienced a growth of households from 2001 to 2009.

Within Dipaleseng in 2001, the number of people and households per area were as indicated in Table 19 below.

Table 19: Population and household figures per urban area

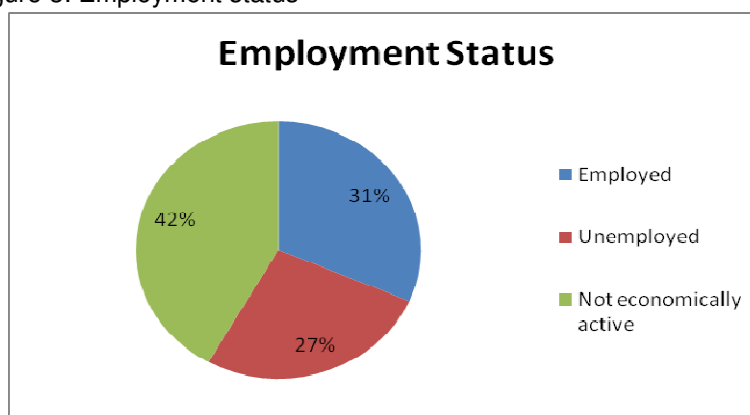
Towns	Population	Current Household	Household Percentages (%)
Balfour	2073	593	6
Ekanini	287	78	1
Siyathemba	17744	4850	51
Grootvlei	1121	204	2
Greylingstad	1502	392	4
Nthorwane	2882	760	8
Rural/Farmland	13009	2597	27
TOTALS	38618	9474	100

(Source: Stats SA 2001)

From Table 19 above, it is evident that more than half of the population of Dipaleseng is concentrated in the Balfour/Siyathemba area (51%) while almost 34% are dispersed throughout the rural areas. The rest of the population is concentrated in the remaining urban nodes of Greylingstad/Nthorwane with 11% and Grootvlei with 4%.

22.2 Population dependency ratio

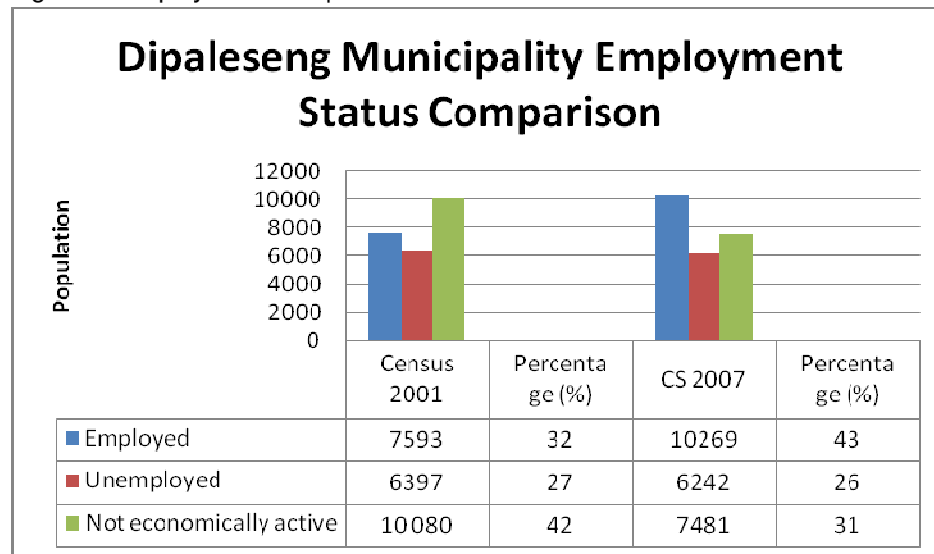
Figure 3: Employment status



Source: Statistics SA, 2001

- At the present moment there are a smaller amount of employment opportunities in the Dipaleseng municipal area.
- About 31% of the people are employed, 27% are unemployed and 42% are economically inactive.

Figure 4: Employment Comparison 2001 vs. 2007

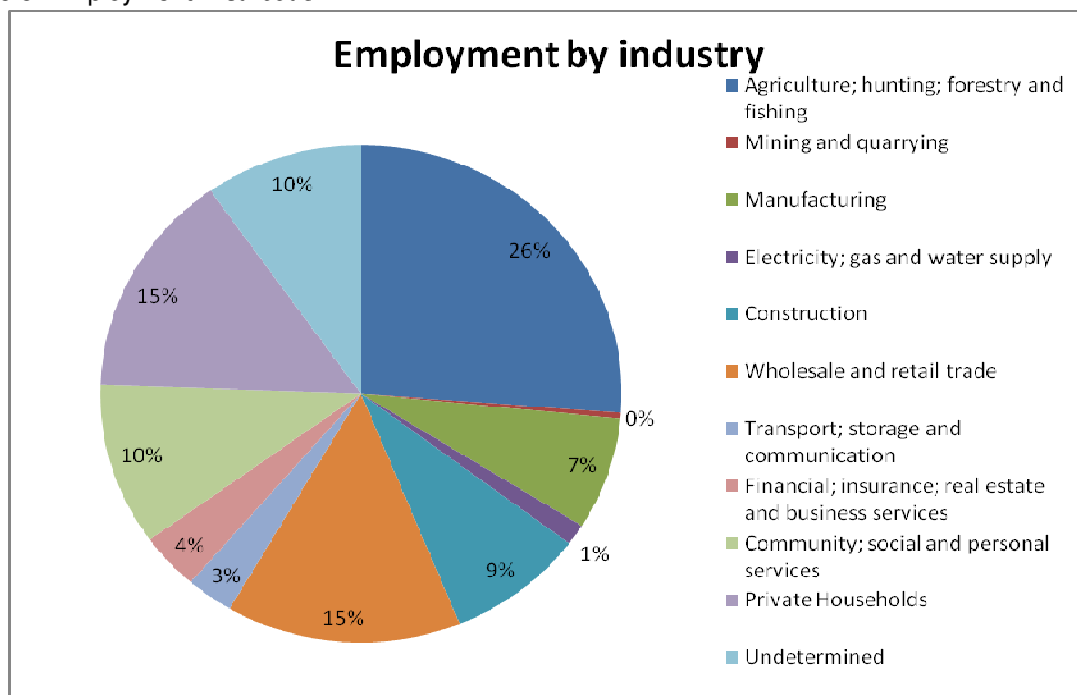


Source: Statistics SA Census 2001 and Community Survey 2007

During the six year period from 2001 to 2007, unemployment declined by 1% and the number of employed individuals increased by 11%. The non-economically active people decreased by 11%.

22.3 Employment sector

Figure 5: Employment Distribution



(Source: Stats SA, 2001)

- Clearly the majority of people are involved in the agricultural sector, followed by electricity, wholesale and retail trade, transport and construction and then manufacturing.
- Dipaleseng needs a strategy that will further diversify the economy, reducing dominance of agricultural in the employment per industry.
- High unemployment is a serious concern as it leads to socio-economic problems such as alcohol and drug abuse, crime, early pregnancy etc.

According to the GSDM IDP Directorate (Global Insight South Africa: Regional Explorer 491 (2.3d), the 2009 Employment sector estimates are as follows:

Table 20: Employment Sector as per Global Insight

Employment Sector	Formal	Informal
1 Agriculture	1 969	0
2 Mining	320	0
3 Manufacturing	203	133
4 Electricity	186	0
5 Construction	173	193
6 Trade	552	585
7 Transport	84	94
8 Finance	132	60
9 Community services	1 051	221
Households	791	0
Total	5 459	1 286

- From the 2009 estimated population of 39 893 people, a total of 6 745 people are employed in the formal and informal sector. About 14% of the people are employed formally and about 3% are employed on the informal sector.
- Most of the formally employed people work in the agriculture sector, followed by community services and trade

22.4 Household income

Table 21: Household income

Income Level (Monthly)	Population Number
No income	155
R 1 - R 400	2407
R 401 - R 800	1841
R 801 - R 1600	1613
R 1601 - R 3200	852
R 3201 - R 6400	474
R 6401 - R 12800	174
R 12801 - R 25600	53
R 25601 - R 51200	16
R 51201 - R 102400	8
R 102401 - R 204800	0
R 204801 or more	3

Source: Stats SA, 2001

- The high poverty level directly affects the municipality's financial ability to provide and maintain services.
- The majority of the households earn a monthly income level of between R401.00 and R1600.00. Many of the residents earn a living from employment in the industries outlined in Figure 3 above.
- Generally, the low monthly income results in households failing to own assets and reduced living standards/quality of life.
- This indicates that the majority of the population is experiencing a low standard of living and poorer quality of life.

According to the GSDM IDP Directorate (Global Insight South Africa: Regional Explorer 491 (2.3d), the 2009 Income and Expenditure estimates are as follows:

Table 22: Income & Expenditure as per Global Insight 2009

Income & Expenditure Category	Households
R 0 - R2400	38
R2400 - R6000	121
R6000 - R12000	1 131
R12000 - R18000	1 445
R18000 - R30000	2 052
R30000 - R42000	1 795

Income & Expenditure Category	Households
R42000 - R54000	1 276
R54000 - R72000	1 051
R72000 - R96000	803
R96000 - R132000	635
R132000 - R192000	524
R192000 - R360000	584
R360000 - R600000	271
R600000 - R1200000	133
R1200000 - R2400000	31
R2400000+	5
Total	11 894

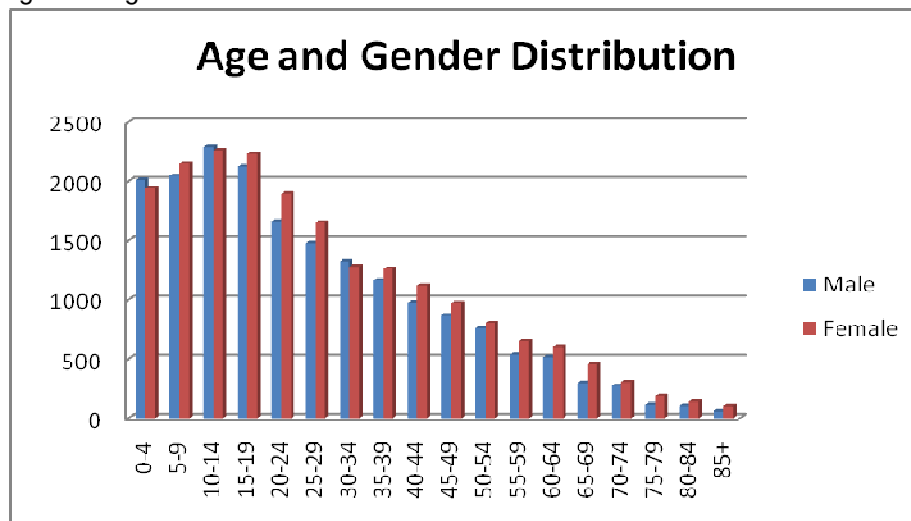
Source: Global Insight South Africa: Regional Explorer 491 (2.3d)

The income and expenditure table above indicates the following:

- The highest number of households have an income and expenditure between R18, 000 and R30, 000, followed by R30, 000 to R42, 000.
- The lowest income and expenditure category has 38 households between R0 – R2, 400 and only 5 above R240, 0000.

22.5 Population age and gender composition

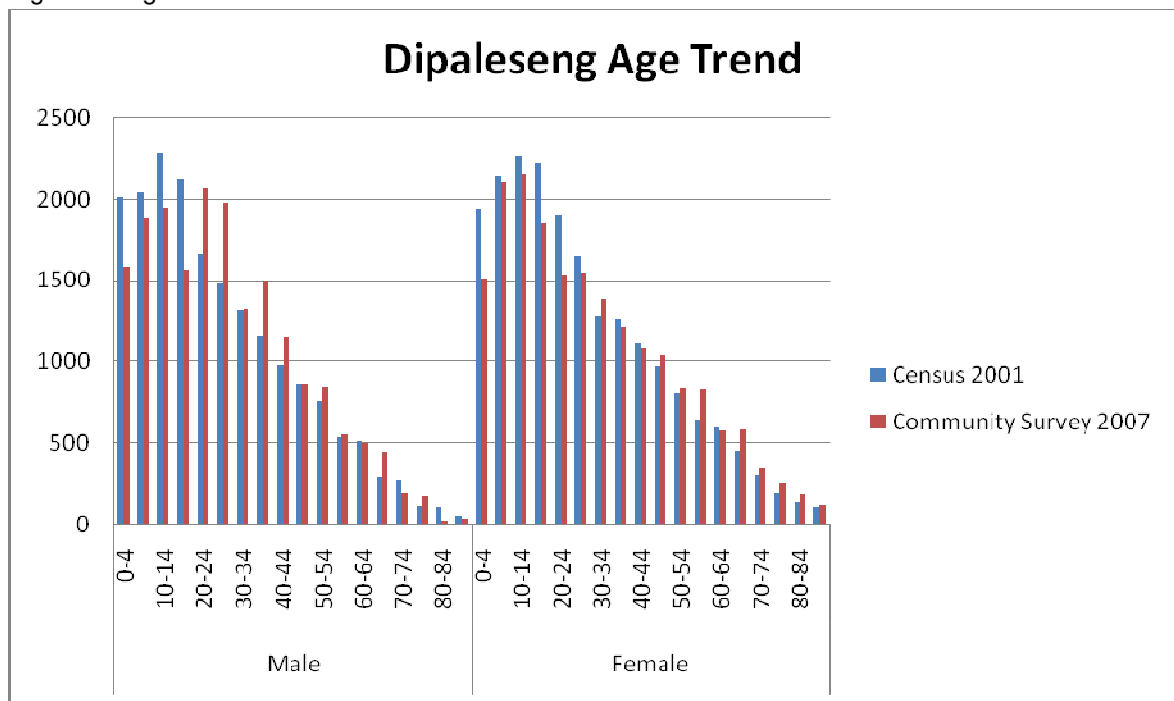
Figure 6: Age and Gender



Source: Stats SA, 2001

- The age structure indicates that the population is dominated by the youth (below 30 years). A fairly young population requires skills development programmes matched with appropriate jobs to ensure that this group do not immigrate to other parts of the country in search of: a) tertiary education and employment; or b) rely on grants to survive.
- The younger age structure implies a population explosion resulting in additional strain on social and engineering infrastructure (i.e. health care facilities, schools, water, sanitation, electricity etc.).
- A relatively high number of people below the age of 24 mean that health and education services must be prioritised in development planning.
- The gender distribution indicates that there are more females from the ages of 15 to 85 and above. This could be due to males leaving the area for job opportunities outside the municipality leaving the females behind.

Figure 7: Age trend 2001 vs. 2007



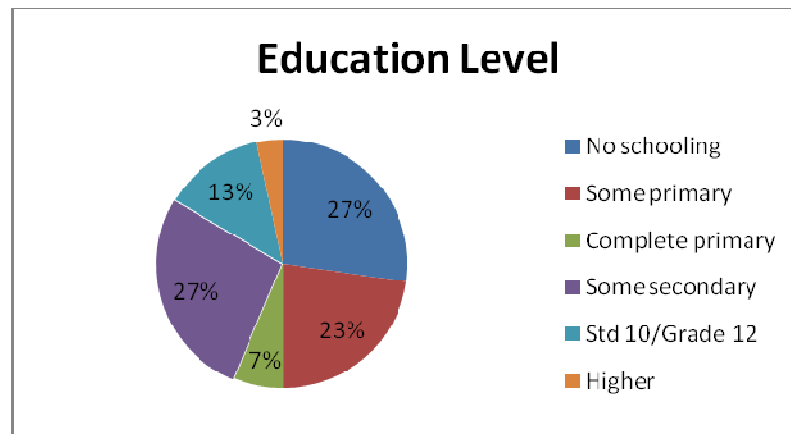
Source: Statistics SA Census 2001 and Community Survey 2007

The age trend graph above indicates the following:

- From 2001 to 2007 there was a decline in both males and females for the age groups between 0 – 19 years.
- Between 2001 and 2007 there was a sharp increase of males from the age group 20 – 54.

22.6 Education levels

Figure 8: Education Levels



Source: Stats SA, 2001

- 27% of the population has some secondary education and no schooling, while 23% have some primary schooling and 13% have a Grade 12 certificate.
- Only 3% of the Dipaleseng population has received tertiary education, this can be ascribed to the fact that Gert Sibande District does not have a University and is mainly reliant on Gauteng Universities. Further due to the lack of employment opportunities within the Municipality, students who move to attend universities around the country tend not to return to the Municipality after gaining their qualifications.

According to the GSDM IDP Directorate (Global Insight South Africa: Regional Explorer 491 (2.3d), the 2009 education estimates are as follows:

Table 23: Education Level as per Global Insight 2009

Education Level	Number	%
No schooling	4 144	15
Grade 0-2	1 049	4
Grade 3-6	4 035	15
Grade 7-9	6 465	24
Grade 10-11	5 966	22
Less than matric & certif./dip	201	1
Matric only	4 383	16
Matric & certificate / diploma	914	3
Matric & Bachelors degree	182	1
Matric & Post grad. degree	78	0
Total	27 416	100

Source: Global Insight South Africa: Regional Explorer 491 (2.3d)

- Most of the residence have Grade 7-9 (24%) followed by Grade 10-11 (22%).

- Only 1% of the residents have Matric & Bachelor's degrees.
- 15% have no form of schooling.

22.7 Impact of HIV/Aids

South Africa

According to the projections about 5.4 million people out of a total of nearly 48 million South Africans were HIV positive in the middle of 2006, giving a total population prevalence rate of a little over 11%. Around 600,000 are sick with AIDS (11% of the HIV infected) (*Demographic Impact of HIV/Aids in South Africa: National and Provincial Indicators for, 2006*).

Mpumalanga

Table 24: Mpumalanga HIV/AIDS statistics

Whole population	13%	<ol style="list-style-type: none"> 1. Mpumalanga has just less than half a million HIV positive people. Around 13% of the population and one in every 5 adults are estimated to be HIV positive in 2008. 2. The Mpumalanga epidemic is reaching maturity with new infections and AIDS related deaths approaching 40 000 per annum. 3. An estimated 87 000 people are in need of antiretroviral treatment in 2008 with around 44% having taken up treatment.
Antenatal clinic estimate	33%	
Adults (ages 20-64)	23%	
People living with HIV	455 000	
New HIV infections (over the year)	40 000	
AIDS deaths (over the year)	33 000	
Total people in need of ART (mid- year)	87 000	
Total people accessing ART (mid- year)	38 000	
Accumulated Aids deaths	256 000	
New infections per day	109	
New deaths per day	92	

Source: Summary of Provincial HIV/Aids Statistics for South Africa: Nathea Nicolay, Metropolitan, October 2008

Gert Sibande District

In 2006, the HIV/AIDS prevalence (%) was estimated to be 38.9% in Gert Sibande District and it is the highest in relation to the Ehlanzeni and Nkangala District Municipalities in the Mpumalanga Province. The second highest HIV/AIDS prevalence is in the Ehlanzeni District (32%), with the lowest being Nkangala District at 26.8%. In the Gert Sibande District, the impact of HIV/AIDS between 2001 and 2011 will be very high in the rural areas around Piet Retief (Mpumalanga SDF, 2007).

Dipaleseng Municipality has to make provision for the effects of HIV/Aids with regard to lowered productivity, increased need for health services, increasing number of orphans, cemetery sites etc. The HIV and AIDS epidemic results in the following:

- increased mortality (death rate) and morbidity (the relative frequency of occurrence of a disease) rates;

- reduced life expectancy and quality of life; and
- reversing all developmental and political gains.

As the HIV/AIDS prevalence is at a high in the District, the Municipality should increase all initiatives and responses aimed at:

- preventing the transmission of HIV/AIDS, TB and STI's;
- providing care and support to all infected and affected by HIV/AIDS;
- reducing the vulnerability of individuals and communities to HIV/AIDS; and
- alleviating the impact of the epidemic within the District.

Spatial Implication

The population of Dipaleseng is mostly concentrated in the urban centres, resulting in a high demand for basic services in these centres. This implies that the urban centres will always be experiencing growth/expansion; therefore the provision of services should be cost-effective and sustainable in terms of the utilisation of the available land and other resources.

High levels of unemployment and resultant social problems such as alcohol and drug abuse and the increase in crime and domestic violence need to be addressed, especially in the squatter settlements around the main urban nodes.

The high unemployment and low income levels frustrate the service delivery programme of the municipality since the municipality does not generate sufficient funds that are needed for the provision and maintenance of these services. The high unemployment rate also contributes to the continual existence of social fragmented settlement patterns. This hinders the growth and development since vast amounts of resources are required to service dispersed settlement areas. This implies that the planning for the provision of services should be cost-effective and based on optimal usage of the services provided.

Currently, the employment opportunities in the municipality do not match the needs of the economically active population. The majority of the people are not working; this places enormous pressure on the municipality to provide free basic services with a small income. This implies that the municipality should explore available alternatives that can create sustainable job opportunities. These economic opportunities need to be identified in close proximity to disadvantaged areas, alternatively, effective public transport systems need to be implemented to reduce travel time between work and home.

Community upliftment and skills development programmes, social support structures, food security (soup kitchens) and proper health care facilities need to be prioritised in disadvantaged areas by clustering them in multi-purpose Community Centres. The municipality needs to prioritise the development of educational facilities, particularly post-Grade 12 training as well as accredited tertiary institutions that can offer affordable and appropriate qualifications. There is also a need to attract and retain qualified professionals in Dipaleseng.

23 Movement and linkages

Movement linkages in Dipaleseng are indicated in the table below.

Table 25: Distances and travel times

Access	Distance (km)	Travel Time	Road Status
Balfour – Greylingstad	22	11min	Tar
Balfour – Grootvlei	27	13.5min	Tar
Grootvlei – Greylingstad	33	16.5min	Tar

Note: Travel time is calculated by using an average travel speed of 80km/h on gravel roads and 120km/h on tar roads.

In terms of Stats SA, 2001 the usage of different modes of transport in Dipaleseng is indicated in the table below:

Table 26: Mode of transport in Dipaleseng

Mode of travel	People	Percentage (%)
On foot	12944	34
By bicycle	323	1
By motorcycle	56	0
By car as a driver	938	2
By car as a passenger	1361	4
By minibus/taxi	1664	4
By bus	1236	3
By train	58	0
Other	208	1
Not applicable	19824	51

- The main mode of transport is walking, about 34% of the population commutes to work or school on foot. Since 2001, the Department of Transport has developed a strategy called the Shova Kalula Bicycle Project (2007), which is aimed at addressing transport challenges in rural communities by distributing bicycles. It is anticipated that the number of bicycle users have increased since the inception of the Shova Kalula Bicycle Project.
- Private cars (as a driver or as a passenger) and minibus/taxis are the second-most used mode of transport ($\pm 4\%$) followed by buses $\pm 3\%$.

Spatial Implication

The road network linking these areas provides strategic movement patterns and could be used as a force to improve economic growth and development in the Dipaleseng Municipal Area. When considering the fact that these areas are far apart and with rural settlements dispersed all over the municipal area, the reduction of travel time between towns within Dipaleseng and to economic centres outside the municipality is equally important to the residents and tourists or prospective investors visiting the area.

Many households in Dipaleseng live in poverty, the lack of transport adds to the so-called “poverty trap”, as these people are less able to conduct informal activities to alleviate their circumstances.

Efforts must be made to adhere to the principles of the National Spatial Development Perspective whereby strong linkages between low economic potential areas and high economic potential areas are promoted. This is to ensure that marginalised areas such as Greylingstad and Grootvlei are absorbed by the stronger economies of Balfour (secondary economy) and Secunda (primary economy within the District).

24 Development trends**24.1 Structuring elements**

There are numerous factors that influence where and how people settle and organise themselves in an area. The following structuring elements impact directly on the formation and development of settlements in South Africa:

- environmental factors such as resources, climate, landforms (topography) and water features i.e. agriculture, availability of minerals and metals, Vaal River;
- spatial characteristics and location of, for example the distance between activities, i.e. where people stay and where they work; and
- other factors including cultural factors, economies of scale, political and economic systems.

The following structuring elements mainly influenced the spatial form of the Dipaleseng Municipality as it exists today:

Past Political Ideologies

During apartheid the former white areas were situated within the urban centres and the former black townships outside the urban centres thereby depriving the people residing in the townships of opportunities for economic growth. Generally the black townships were under-served in comparison to the former white areas. The issue of providing services to former black areas still persists thus far. This is evident in the number of backlogs within the municipality in terms of water, sanitation and electricity. The three main areas of Dipaleseng consist of former black townships namely, Siyathemba, Nthorwane and Grootvlei Extension1.

Provincial Borders

The Free State and Gauteng Province boundaries act as institutional barriers limiting the benefits that can be derived from the close proximity to the main economic centres such as Johannesburg.

Main Roads

The N3 linking Gauteng to Kwa-Zulu Natal plays a significant role in commuting goods and people through the Dipaleseng Municipality. This corridor plays an important role in the development of towns located along the route.

Vaal River

The Vaal River which is the southern boundary of the municipality plays a significant role in terms of the possibilities it provides for agriculture and the livelihood of the rural areas of the municipality. The river is regarded as conservation vicinity and therefore no major development should take place around the river.

Grootvlei Dam

The Grootvlei Dam is considered an environmentally sensitive area that provides a pristine natural feature. The dam presents opportunities for the development of tourism and related initiatives due to its unique bird species. The areas around the dam might experience pressure from the development of high income housing. In addition, the Eskom power station will also exert much pressure for the development of low and high income housing. The management of this vicinity is therefore critical.

Climate

The relatively high rainfall and available water resources open up economic opportunities for extensive agriculture and irrigated agricultural opportunities along the banks of the Vaal River.

24.2 Land use and settlement patterns

Municipal Land Cover

The different land cover categories for Dipaleseng are indicated in the land cover map: **(See Plan 25: Municipal Land Cover)**

Dipaleseng consists of the following land cover categories:

- Bare rock & soil
- Cultivated land
- Forest & plantations
- Grasslands
- Mines
- Thicket & bushland

- Built up areas
- Water bodies & wetlands

Settlement Analysis

Herewith a brief settlement analysis:

1. Balfour & Siyathemba

Balfour is located in the north-western part of Dipaleseng Local Municipality. According to the Municipality's IDP (2007-2011), Balfour is regarded as the primary urban node due to its size and the level of economic activity in comparison to other urban nodes in the area (**See Plan 26: Balfour & Siyathemba**).

The Balfour CBD has various retail outlets, stores and cafes. At a glance the buildings look outdated, dull and neglected - this highlights opportunity for urban regeneration. Outside the CBD, there are a number of guest houses and industries. The residential areas are characterised by large erven of which a majority of them have not yet been developed

Siyathemba Township is located on the eastern side of Balfour town. The township is a fully serviced, previously disadvantaged traditional township that was established in terms of the pre-1994 planning legislations. The township features residential areas with formal dwellings as well as larger informal settlements adjacent to the edges and on open spaces within the township

The informal settlements are characterised mainly by informal dwellings. However, according to a representative from the technical department at Dipaleseng Local Municipality, the informal settlements in Siyathemba Township are currently in a process of being formalised.



2. Grootvlei Extension 1 and 2 & Dasville

Grootvlei is located in the western part of the Dipaleseng Local Municipality and 18 km south west of Balfour and accessible via the R51 provincial road. The Municipality's IDP (2007-2011) regards the town as a secondary urban node due to its limited size and level of diversification of the local economy when compared to Balfour. The formal economy of the area is dependent on the surrounding agricultural activity and the re-commissioned Grootvlei Power Station. Typical land uses associated with Grootvlei are formal residential settlements with few businesses and office uses (**Plan 27 & 28: Land Uses Grootvlei**).



The township of Dasville is located south west of Grootvlei and comprises of both formal and informal settlements. The southern section of the township is formalised and features fully serviced infrastructure. In addition, there is also a neglected golf course. The northern section of Dasville is characterised mainly by informal settlements with few industries. The informal settlements originated from people seeking employment opportunities from industries in Dasville and at the Grootvlei Eskom power station (**See Plan 27 & 28: Land Uses Dasville**).



3. Greylingstad & Nthorwane

Greylingstad and Nthorwane are located in the eastern section of the Dipaleseng Local Municipality, approximately 21 km east of Balfour (**See Plan 29: Greylingstad & Nthorwane**).

The Municipality's IDP (2007-2011) also regards this town as a secondary urban node due to its limited size and level of diversification of the local economy when compared to Balfour. Greylingstad is mostly residential in character featuring large parcels of undeveloped land. There are limited business activities and buildings along the main road are dilapidated.



Nthorwane is a fully serviced, previously disadvantaged traditional township established in terms of the old apartheid planning policies. Like in all urban areas within the Dipaleseng Local Municipality, there has been an increase of informal settlements and this need to be addressed as informal development of land results in uncoordinated settlements that are not serviceable.



Other trends notable in Dipaleseng are:

- Many cemeteries have exhausted their maximum carrying capacity, which forces families to bury their relatives outside the demarcated cemetery boundaries (e.g. Siyathemba Cemetery). This implies a need for the reservation of land for graveyards.
- Mushrooming of informal residential settlements around Dasville, Nthorwane and Siyathemba.
- Gold Mining Activity is taking place on the far northern boundaries of Siyathemba.
- Dilapidated Buildings are a common feature in Balfour and Greylingstad CBD's.

Social Services

Table 27: Social Infrastructure

Category	Balfour	Siyathemba	Greylingstad	Nthorwane	Grootvlei	Dasville
Primary School	1	5	1	1		2
	1	2	1	1		
No. Combined Schools	1					
No. of Training/ ABET Centres		1		1		
Day Care Centres	4	4		4		3
Multipurpose Service Centre		1				
Police Station	1		1			1
Hospital						
Clinic	1	1		1		1
Mobile Clinic	1					
Library	1	1	1		1	
	2	2	2		1	

Source: Dipaleseng Municipality (Building Control Office)

24.3 Proposed future projects/land uses

From the projects identified in Phase 1, the following are considered notable from a land use perspective:

Table 28: Funded projects and location

Projects	Location
Establishment of a Cemetery	Grootvlei
Completion of a taxi rank & Market stalls	Balfour
Development of a mushroom project	Nthorwane
Establish community hall	Nthorwane
Establish Brick Plant	Balfour
Extension of Cemetery	Balfour
Develop waste disposal site	Dipaleseng
Identification/Development of regional multi Recreational centre	Dipaleseng

The location of new land uses/projects requires careful planning, firstly to ensure effective and sustainable human settlements and secondly to conserve the environment. From a planning perspective the following locational criteria need to be considered:

Cemeteries – cemeteries should not be located near riverbanks, springs or boreholes used by the communities as potable water. Inappropriately located cemeteries could impact on the water quality, causing health problems such as diarrhoea. Cemeteries located in areas with unstable riverbanks, erodible soils, unstable slopes or floodplains could be damaged through floods or heavy rainfall and storms.

Community halls/centres – as they provide a variety of services to a number of residential communities they should be easily accessible to these communities, preferably on a main thoroughfare in close proximity to public transport stops.

Waste disposal sites – the identification of potential sites for new waste management facilities has to be undertaken with regard to planning criteria which recognise the various location constraints, namely, physical, safety, environmental, political and technical.

24.4 Vacant land analysis

Vacant land parcels are a common feature throughout the Dipaleseng Municipal Area and could ideally be used as a catalyst for densification, integration and mixed land use orientated development in both the residential and typically non-residential earmarked areas.

1. Balfour

Vacant land is abundant in Balfour. There are strategically located vacant land parcels suitable for business use scattered along the main access route as well as strategically positioned vacant land parcels towards the outskirts of town suitable for industrial use. Large residential erven are readily available throughout town. The vacant land parcels should be viewed as a resource for well planned and sustainable development in Balfour town.

2. Grootvlei

Originally established for the workers at the Grootvlei Power Station, houses were supplied by demand. Residential dwellings were later sold to workers as a direct result of the power station closing down, therefore Grootvlei favours no vacant residential, business or other use land parcels.

3. Greylingstad & Nthorwane

Greylingstad is a well planned, but underdeveloped town. The town has numerous vacant land parcels within the Business, Industrial and Residential orientated areas. The vacant land parcels offer opportunities for integration and densification.

24.5 Urban-rural spatial relationship

In general, rural and urban development takes place in close proximity and should be mutually beneficial. However, in Dipaleseng the spatial configuration between rural and urban is characterised by dispersed settlements, in that way resulting in unbalanced services and infrastructure development between urban and rural areas. The towns of Balfour, Grootvlei and Greylingstad provide a variety of services to the surrounding farmers and communities, but these rural or farm areas are isolated from these service centres. These service centres also fail to provide specialised services and lack proper health care and educational facilities such as tertiary institutions (i.e. colleges).

On the other hand the opportunities for employment are limited and not balanced between rural and urban areas. This has resulted in people concentrating in towns, creating a condition for further sprawling of squatter settlements within the municipal area. This places enormous pressure for residential development on the agricultural land. It is therefore necessary to include development measures outside agriculture to safeguard against the development of non-agricultural economic activities and other rural developments. With Dipaleseng comprising of a number of dispersed settlements, it is necessary to define growth boundaries around these settlements in terms of rural and urban to accommodate and control future growth.

Furthermore, In order to strengthen the urban-rural relationship it is critical to comply with the principles of the National Development Perspective, which requires economic development opportunities to be channelled into activity corridors, nodes and in areas of determined economic development potential. Therefore, the development of existing nodes should be enhanced to ensure that they provide proper services to the surrounding rural areas. The accessibility and linkages between these areas need to be improved to ensure that the services offered are mutually beneficial to both rural and urban environments.

24.6 Heritage features

The National Heritage Resources Act, 1999 (Act 25 of 1999), provides for the creation of the South African Heritage Resources Agency (SAHRA), which together with provincial heritage resource authorities are obliged to identify those places that have special national and or provincial significance in terms of heritage assessment criteria. A heritage resource is protected by law from certain actions (alteration, subdivision, and change in land use) without the necessary consents from the relevant authority.

Although the heritage status thereof could not be verified, the following areas have reached historical significance:

- the Anglo Boer War Battlefields in Greylingstad; and
- the historic graves of the Scottish regime in Greylingstad.

25 Economic activity

The main economic sectors of Dipaleseng are:

- Agriculture
- Mining

25.1 Agriculture

Dipaleseng has areas with fertile soil and favourable climatic conditions that promote agricultural activity. Agriculture is the backbone of Dipaleseng Municipality's local economy as it provides the majority of employment opportunities and is also an important food production resource for other provinces, particularly the Gauteng province. The predominantly agricultural activities include maize, sunflower, dairy farming and commercial game ranching. There is also a major abattoir in Balfour which mainly caters for an export driven market.

There is also a fruit juice processing plant operating in Balfour and a cooking oil producing plant in Grootvlei. The improvement and expansion in the current agricultural practices can have a major contribution to economic growth in the area. This implies that the beneficiation of raw agricultural and related resources should be extensively explored. Furthermore, the development of local industries to process agricultural products produced in Dipaleseng should be prioritised to ensure that further job opportunities are created for local residents.

25.2 Mining

The municipal area is underlain by coal deposits. In the past, Springfield Colliery was a coal mine that operated in Dipaleseng and used to supply Eskom, but it was closed in 1988. Currently, the coal supply to Eskom Power Station in Grootvlei is done by coal mines from outside Dipaleseng. The coal deposits need to be extensively exploited to ensure that the supply of coal is also carried locally. This will also contribute to the creation of sustainable job opportunities for the residents of Dipaleseng.

The municipality also hosts some gold deposits. Currently, the Great Basin Investment Group is operating the Burnstone Gold Mine. The mine is located just east of Balfour. Labour for the mine is sourced from the Dipaleseng area.

Spatial Implication

It is of utmost importance that the mobility links between areas with low and higher economic potential be strengthened. This will improve the probability that individuals from low potential localities will be absorbed into the economies of towns or areas with higher economic potential i.e. between:

- Balfour and Greylingstad;
- Greylingstad and Grootvlei; and
- Balfour and Grootvlei

These areas offer opportunities for the establishment of new areas for investment. Due to the fact that there are certain neighbourhoods with decayed buildings in some of these towns, there are opportunities for urban regeneration (i.e. infill development). This will result in improvements in urban housing conditions and standards.

Economic development opportunities in the form of mining promote the development of dense settlements in close proximity to mining areas. It should be anticipated that the development mining activities will attract an influx of people to the Dipaleseng municipal area.

In order to achieve economic growth, public and private sector investment spending should be directed to areas with demonstrated economic potential to inspire sustainable economies. The development of these areas will be sustainable if they are integrated and this could be achieved by addressing the road linkages and network between places of work and places of residence. In areas with low economic potential, investment spending should focus on human development by providing social transfers, education and training, poverty relief programmes and by providing opportunities and capabilities to gravitate towards areas with greater established potential for economic development (NSDP, 2006).

25.3 Investment patterns

Distinction is made between urban and rural investment patterns in terms of municipal funding from external funding sources namely: Gert Sibande District Municipality (GSDM) and Municipal Infrastructure Grant (MIG).

Table 29: Investment patterns

	Urban	Rural
GSDM Funded Projects 2010/2011	±R12, 000,000	±R2, 000,000
GSDM Funded Projects 2011/2012	±R12, 000,000	
GSDM Funded Projects 2012/2013	±R14, 000,000	
MIG Funded Projects 2010/2011	±R14, 867,000	
MIG Funded Projects 2011/2012	±R17, 881,000	
MIG Funded Projects 2012/2013	±R18, 000,000	
Total	±R88,748,000	±R2, 000,000

Source: Dipaleseng Municipality: Approved Gert Sibande District Municipality (GSDM) and Municipal Infrastructure Grant (MIG) funded projects for 2010/2011, 2011/2012 and 2012/2013 Financial Year's

It is evident that substantially more money is allocated to the towns of Balfour/Siyathemba, Grootvlei and Greylingstad than the rural parts. Money allocated to rural areas include projects such as the provision of VIP toilets on farm areas (Wards 2,3,5 and 6) and the installation of boreholes on farms (Wards 2,3,5 and 6).

Money allocated to urban areas mainly includes the upgrade, extension and maintenance of engineering infrastructure (water, sanitation, roads, electricity, refuse sites etc.) and the provision of social infrastructure requirements and public facilities (cemetery, streetlights, high light mass, taxi ranks and market stalls).

26 Infrastructure

Statistics SA Census 2001 is used as the data source, unless more recent statistics are available from the Dipaleseng IDP 2010/2011.

26.1 Water

In terms of surface water sources the communities of Dipaleseng rely on the Haarhof Dam, Suikerbosrand River and Vaal River catchment area for water and there are two water treatment plants within the municipality, namely:

- **Balfour Fortuna Water Treatment Plant** - raw water is extracted from the Petrus van der Merwe Haarhof Dam where it is treated in a conventional water treatment plant. The treated water is pumped to a reservoir in Balfour and to the town of Greylingstad. The plant supplies communities in Balfour, Siyathemba, Greylingstad, Nthorwane and Willemsdal with water.
- **The Grootvlei Water Treatment Plant** is on the Eskom site and it is operated and maintained by Eskom personnel. Raw water is extracted from the Suikerbosrand River and supplies water to Grootvlei Ext 1 and the mine.

The Dipaleseng WSDP 2009-2014 indicates that in terms of ground water sources there are approximately 142 boreholes in the rural areas whereas the Great Basin Gold Mine has 3 boreholes that are used to provide water to the mine. **(See Plan 30: Water Infrastructure)**

Table 30: Water access

	Census 2001	C.S 2007
Piped water inside the dwelling	19.8	48.6
Piped water inside the yard	56.7	32.9
Piped water from access point outside the yard	17.2	14
Borehole	1.5	2.9
Spring	0.1	0.3
Dam/pool	0.5	0.4
River/stream	0.1	0

	Census 2001	C.S 2007
Water vendor	0.2	0.2
Rainwater tank	0.9	0
Other	3.1	0.7

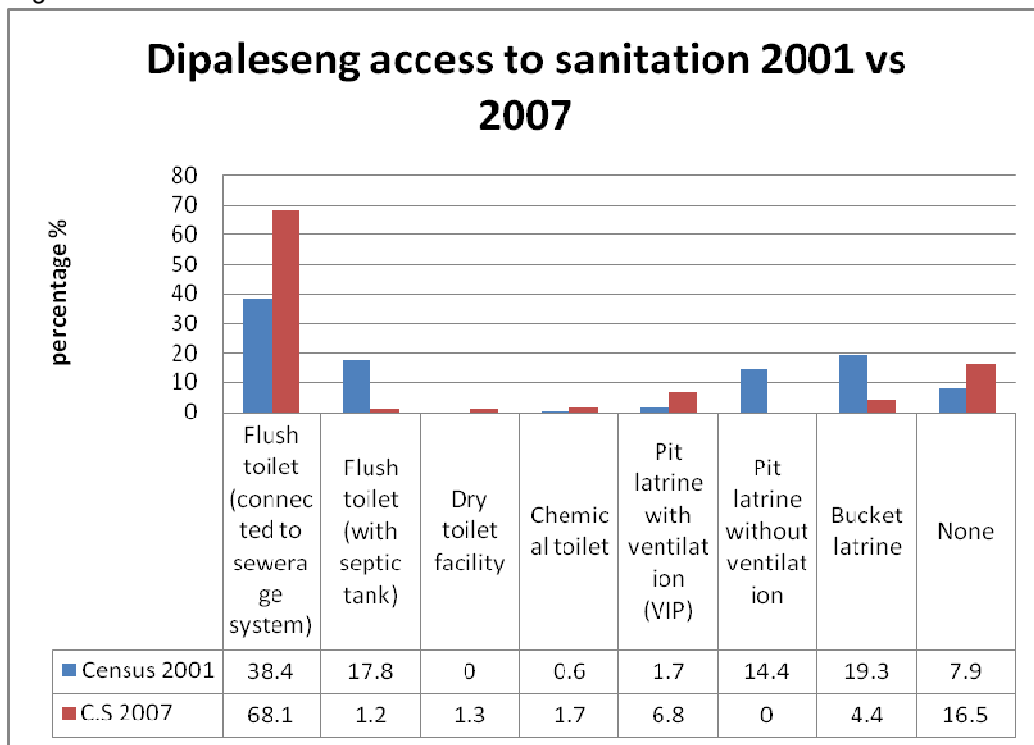
Source: Statistics SA Census 2001 and Community Survey 2007

- The number of households that have access to piped water has increased from 93.7% in 2001 to 95.5% in 2007.
- All the formal areas including squatter settlements have access to portable water however there are still backlogs in the provision of water in rural areas, hence a number of additional boreholes have been sunk on some farms to help alleviate the problem.
- The municipality also provides free basic water to indigent residents.

26.2 Sanitation

The sanitation infrastructure of Dipaleseng is indicated on **Plan 31: Sanitation Infrastructure**.

Figure 9: Sanitation access



Source: Stats SA Community Survey, 2007

- The number of households that have a flush toilet connected to a sewerage system has increased from 38.4% in 2001 to 68.1% in 2007.
- There has been a decline in the number of households that have a flush toilet with a septic tank from 17.8% in 2001 to 1.2% in 2007

- The number of households using pit latrines with ventilation has increased from 1.7% in 2001 to 6.8% in 2007.
- This therefore indicates that more households are being connected to the sewerage system. However, there are still households with septic tanks in Greylingstad.

26.3 Electricity

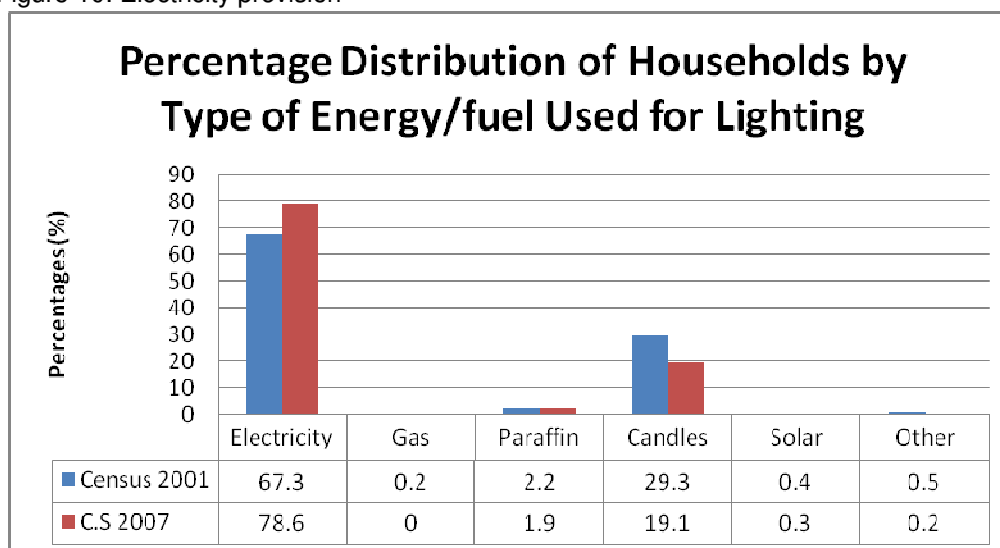
The electrical infrastructure of Dipaleseng is indicated on **Plan 32: Electricity Infrastructure**.

All the formal areas in Dipaleseng have access to electricity. However, there are still backlogs in the provision of services in rural/farm areas and squatter areas. In terms of electricity provision, a great deal of progress has been made in Dipaleseng, namely:

- The use of electricity for heating has increased from 27.0% in 2001 to 40.4% in 2007
- The use of electricity for cooking has increased from 28.2% in 2001 to 57.3% in 2007
- The use of coal for heating and cooking has also declined from 44.2% in 2001 to 24.5% in 2007

Although there is a decline in the use of coal as a source for cooking and heating, the use of coal is implying that air pollution is still high in this area. This has serious implications on the quality of the municipal environment. The provision of electricity to these areas is vital to add to the social upliftment of the residents of Dipaleseng. In addition, the provision of electricity is essential in alleviating air pollution and dreadful incidents caused by the customary means of energy such as fire and candles.

Figure 10: Electricity provision



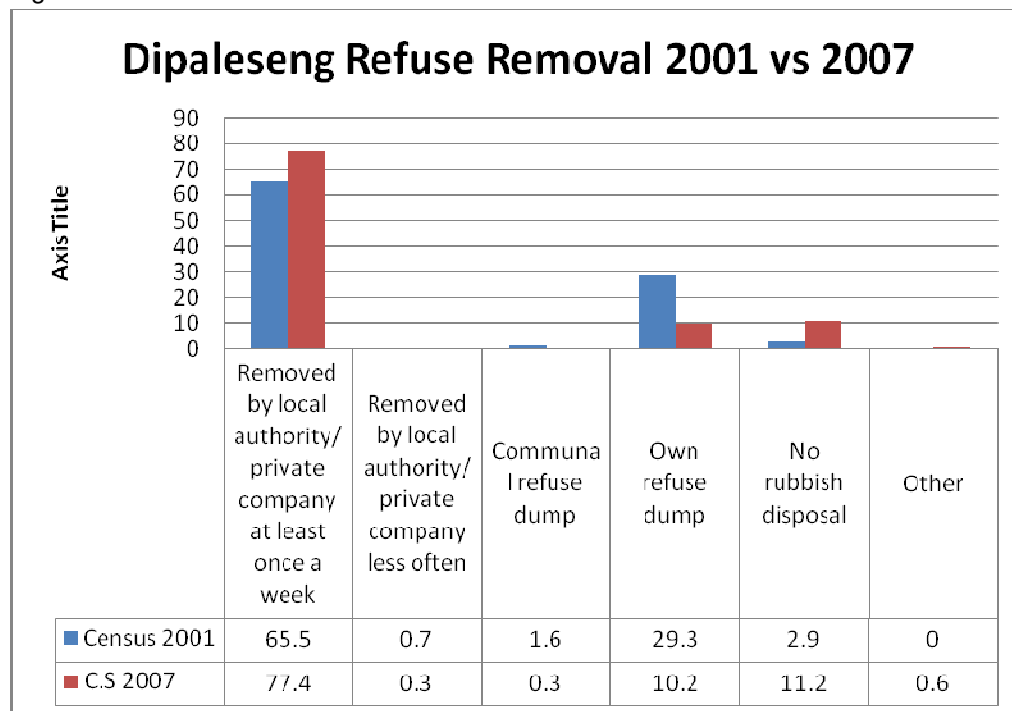
Source: Stats SA Community Survey, 2007

- Electricity provision as a source for lighting has increased by approximately 11% between 2001 and 2007. The use of candles has decreased by about 10%.
- Most households are reliant on electricity for lights and energy. A small proportion of the households use candles and paraffin. This indicates that in all the towns electricity is available.

26.4 Waste management

The availability of the refuse removal service in Dipaleseng Local Municipality is limited to the formal towns and there are no formal refuse removal services in rural parts of the Municipality.

Figure 11: Refuse Removal 2001 vs. 2007



Source: Stats SA Community Survey, 2007

- The number of households who have their refuse removed by the local authority/private company has increased by about 12% from 2001 to 2007.
- The number of households with their own refuse dumps has decreased from 29.3% in 2001 to 10.2% in 2007 and this implies that the refuse removal service has increased.
- The number of households with no rubbish disposal has however increased from 2.9% in 2001 to 11.2% in 2007.
- The lack of refuse disposal sites in some communities poses a threat to the quality of the environment.

Spatial Implication

Water

The spatial implication of providing water to communities includes locating settlements where it will be more cost effective to provide water i.e. where bulk water infrastructure exists. Therefore potential water sources must first be assessed. Consideration should be given to the quantity of water available to meet the present and future needs in the area, as well as the quality of the water. Water that is of poor quality for human consumption needs to be treated at a water treatment plant before being supplied to consumers.

Sanitation

According to the Guidelines for Human Settlement Planning and Design (2000), the provision of appropriate sanitation to a community should occur within the ambience of the National Sanitation Policy which aims at achieving the following:

- to improve the health and quality of life of the whole population;
- to integrate the development of a community in the provision of sanitation;
- to protect the environment; and
- to place the responsibility for household sanitation provision with the family or household.

Spatially, the following principles should be considered when a sanitation system is selected having looked at factors influencing the selection of a sanitation system:

- sanitation provision must not take place in isolation from other services, it must be simultaneously provided with other bulk infrastructure such as water and electricity;
- the environment must be considered and protected in all development activities; and
- the cost of providing and operating the system should be kept low especially if the chosen system requires waste to be removed from site and treated elsewhere.

Waste Management

The lack of proper waste disposal services in some settlements, particularly the isolated rural settlements has a negative impact on the environment as unmanaged waste often causes widespread diseases among residents, pollution of water courses and ground water, contamination of soil and has a negative effect on the aesthetics of the area. In this regard, there is a need to prevent further degradation of the ecosystem and to rehabilitate those areas that have been degraded in order have more sustainable areas in the future.

To achieve sustainability, in terms of waste management for urban areas in particular, a waste management plan needs to be implemented. The waste management plan aims at ensuring that waste is dealt with in an economical and safe manner. Waste needs to be collected from all sources as efficiently as possible, and disposed of in controlled disposal facility such as a landfill site.

According to the Guidelines for Human Settlement Planning and Design (2000), the location of landfill sites should be within an economically viable radius of collection and disposal operations. However it should not be too close to human settlements for environment, health and safety reasons. The involvement of communities (public participation) in identification and location of landfill sites is therefore of utmost importance in order to ensure it acceptability.

27 Land ownership

Property ownership and land tenure are key elements in land use management in that it reveals the rights the holder of the land has and therefore the procedures the holder of the land has to follow to effect land use change.

In areas where private ownership is the predominant form of land ownership, land use regulation and tenure are two separate but linked processes. Where land is held in communal ownership, land use rights and tenure are closely linked.

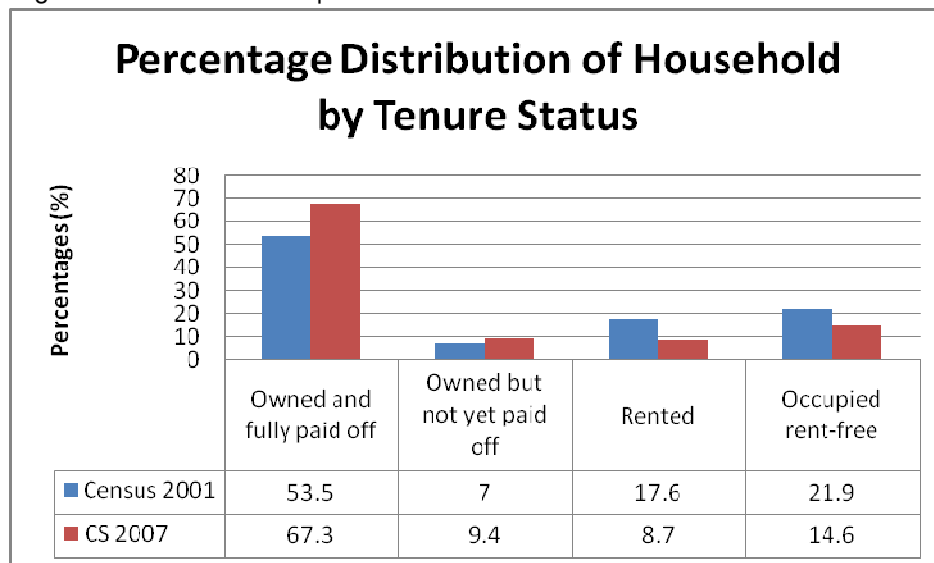
27.1 Land tenure and ownership

The ownership of land in Dipaleseng is as follows:

- Most land in the Dipaleseng Local Municipality area is privately owned and is used mainly for commercial agricultural purposes. (**Refer to Plan 33: Land Ownership**)

The figure below reflects home ownership and tenure:

Figure 12: Home ownership and tenure



Source: Stats SA, 2001

- There is a decrease of about 7% in households occupying homes rent-free from 2001 to 2007.
- Approximately 67.3% of households own and have their homes fully paid off which shows an increase of about 13% from 2001.
- In 2007, only 9.4% owned a bonded property which is a slight increase of about 2% from 2001.

27.2 Municipal land

Municipal property is preferred for affordable housing provision, because the purchase and transfer of privately owned land is often both tedious and expensive. The land owned by the municipality and its use thereof is still under investigation.

27.3 Land reform

A brief overview of land reform is discussed hereunder:

The democratic government in 1994 opted for a three-pronged land reform policy to redress the historical injustice of land dispossession, denial of access to land and forced removals:

1. Land Restitution to restore land or provide financial compensation for people dispossessed of the land after 1913.
2. Land Redistribution
3. Land Tenure reform

Land Restitution

The Restitution of Land Rights Act, applicable in both rural and urban areas, addresses the restitution of land rights lost by any South African as the result of racially discriminatory laws passed since 1913, to establish a Commission on Restitution of Land Rights and a Land Claims Court.

The act invites persons or communities who lost their property as a result of apartheid laws after 1913 to submit claims for restitution or compensation. The cut-off date was March 1999.

Land Redistribution

Land redistribution refers to making land available for:

- agricultural production
- settlement; and
- non-agricultural enterprises

a) The Settlement Land Acquisition Grant (SLAG)

SLAG was a R16 000 cash grant for which poor and landless black South Africans could form a group to apply and to buy and develop farm land.

b) Land Re-distribution for Agricultural Development (LRAD)

The SLAG programme ended in 2000, and the LRAD was introduced later that year. Its major difference from SLAF was that beneficiaries do not have to be poor to apply for the minimum of R20 000 land grant and those who have more savings can raise bigger loans.

Land Tenure Reform

Laws were introduced after 1994 to give people security of tenure, over houses and land where they work and stay (especially farm workers and labour tenants).

With regard to land reform, the 2010/2011 Gert Sibande District Municipality Integrated Development Plan confirms the following: **(See Plan 34: Land Reform District Context)**

There are 77 communities that have benefited from land re-form projects in the District. However, due to uncoordinated capacity building and support for the beneficiaries, this has led to some challenges in the sustainability on most of the previously economically viable farms. The district hopes to form partnerships with the Department of Agriculture Land Affairs and Department of Labour. These partners will be encouraged to form joint initiatives to focus on the following key development areas:

- training and skills transfer on management of farms;
- advance training on farm methods; and
- partnerships and marketing.

Land Reform Projects and Land Claims in Dipaleseng are indicated on **Plan 35: Land Reform**. Land claim status and information may be outdated and must be verified with the Land Claims Commissioner.

In Dipaleseng, there are farms that were claimed by communities. Some of the claims have been settled whilst some have been gazetted. The farm properties that have been settled are located on the north and the properties with gazetted claims are situated on the southern part along the N3, on the south along R51 and in to the north-west. The slow pace of Land Claims (Reform) hinders development on areas earmarked for development.

Spatial Implication

People have moved back onto ancestral and other land which resulted from land restitution and land re-distribution cases that have been settled. In most cases, this has led to the need to provide services in previously under or non-serviced areas.

From a spatial development perspective the locality of these areas will be a critical determinant of their future viability. Areas close to economic activity are beneficial, but in many cases the economic potential of the land in question is inadequate as a source of economic livelihoods.

Additional to the considerations above, strict settlement regulations need to apply to land that is purchased by government and made available to emerging farmers. In this regard specific reference must be made to number of families allowed on a farm.

28 Relationship between IDP and Current Reality

28.1 Relationship between spatial issues and vision

The following issues and opportunities are evident from the spatial analysis:

1. Dipaleseng Municipality is assessable by road linkages that provide regional connectivity. Major roads passing through the Municipality include the following:
 - National road N3 - linking Gauteng and Kwa-Zulu Natal
 - Provincial road R23 – linking towns such as Balfour, Standerton and Volksrust
 - Provincial road R51 – linking the south with to the north of Municipality and the N3 with the N17.
2. The Municipality is faced a challenge of quality road infrastructure. The standard of the municipality's roads impacts on local economic development and tourism development. Heavy trucks transporting coal are causing major damage to the municipal and provincial roads such as the R51. Upgrading of roads is a priority and public transport services need to be improved knowing that most people travel by foot.
3. The municipality is accessible via the railway line linking Gauteng with Richards Bay. However more efforts need to be made to increase passenger and freight haulage via the rail network traversing through the municipality.
4. Dipaleseng is categorised under the Highveld climatic conditions which are generally associated with moderate temperatures and rainfall. A large part of the municipality receives an annual average rainfall between 400 – 600mm. The area often experiences very cold weather conditions and frost which can cause widespread damage to crops and wildlife thereby decreasing agricultural productivity.
5. In terms of the municipal land cover, the municipality is dominated by cultivated land. Areas to the south-east and a small portion to the north are regarded as high cultivation. A large part is dominated by medium cultivation areas.
6. Spatial initiatives need to plan for a population that is characterised with high unemployment levels, low household income, high dependency ratio, a fairly young age structure and few tertiary qualified people with specific attention to:
 - the provision of engineering services considering that the costs cannot be recovered;
 - social infrastructure and services need to be accessible and efficient due to an expected increase in social issues; and
 - reduced travel time between employment areas and place of residence considering most people travel to work or school by foot.
7. Dipaleseng spatial structure as it exists today is the result of nodal development at main road intersections, railway infrastructure, Eskom power generation, mineral deposits (mining related activities) and conducive climate conditions for commercial agriculture.
8. The legacy of apartheid is evident in the towns of Dipaleseng indicating a clear separation between advantaged and disadvantaged areas.
9. The municipality is faced with the challenge of providing services to the rural or farmlands as it is expensive. It should be noted that service provision at some rural/farm areas is difficult due to resistance by farm/land owners which poses a challenge to the municipality.
10. Provision of land for housing purposes is the biggest challenge for the municipality and based on the financial status of the municipality, it becomes difficult to fund the procurement of land from our limited budget.

The Municipality therefore relies on funding from external funding institutions such as Government (Municipal Infrastructure Grant – MIG) and Gert Sibande District Municipality to assist in the purchasing of land.

11. The Municipality lacks or has very limited tourism opportunities that can significantly contribute to the municipality's economic growth.
12. Taking into consideration the way in which the Municipality is growing and the shortage of skills within the communities, there is need for at least one tertiary institution.
13. The Municipality lacks adequate social infrastructure such as sporting and health facilities.
14. The Municipality is faced with the challenge of the mushrooming of squatter settlements around the main towns such as Balfour and Grootvlei as a result of population growth. These informal settlements impact negatively on community health due to poor sanitary services.
15. The Municipality's economy is mainly reliant on agriculture and processing. The Municipality is also host to a Gold Mine and an Eskom power station. There is a need to further diversify the economy in order to create more job opportunities and retain existing human capital.

Key perspectives transpiring from the institutional analysis and relevant to Dipaleseng Municipality are:

1. A balance must be reached between basic service delivery on the one hand and stimulating economic development on the other to help to pay for these services – GEAR.
2. Since Dipaleseng is semi-rural in nature and its main town Balfour is classified in the Mpumalanga Spatial Development Framework (2007) as an agricultural service centre, the focus should be on the provision of constitutionally mandated minimum level of service in such a way that is financially sustainable and also taking into consideration its economic potential.
1. The NSDP (2006) provides a framework to deliberate the future development of the national space economy and recommends mechanisms to bring about optimum alignment between infrastructure investment and development programmes within localities. Accordingly, it confirms that localities such as Dipaleseng should concentrate on providing basic services. From a macro planning perspective, government should focus on providing social transfers, human resource development and labour market intelligence, which would enable people, if they chose to, to become more mobile and to migrate to localities that are more likely to provide sustainable employment or other economic opportunities. In addition to this, important interventions that support and enhance livelihoods will have to be identified and implemented. These may include (1) sound rural-development planning policies and programmes; (2) far more aggressive land – and agrarian-reform initiatives that can advance economically viable and sustainable farm development; (3) significant expansion of agricultural extension services; and (4) focusing on other activities that would promote the improvement of human resource development; education and local skills development.
2. The first leg of the CRDP strategy is to ensure that economic and social development infrastructure takes place in rural communities with project such as agrarian transformation and rural development.
3. The Mpumalanga PGDS recognises that the Dipaleseng region would not be regarded as one of economic importance and thus the region should rather concentrate on the stabilisation of its resource base to serve the existing population and to provide for the best possible basic services, given the limited resources.
4. The Mpumalanga Spatial Development Framework (2007) assumes that not all regions in the province will have the capacity or potential to develop as a significant exporter of products and services. The challenge of these areas is to develop a strong link to a region that does have in effect a strong export driven economy, thereby creating a "niche role" in the broader regional economic system.

5. The Gert Sibande Spatial Development Framework (2009) identifies, amongst others, that Balfour is not an important economic activity area (in terms of labour-intense and mass produced goods), it nevertheless represents an important economic activity concentration point. In terms of the Gert Sibande space-economy, the Balfour – Volksrust strip (R23) forms part of the economic corridors of the District.

Relationship with IDP

The 2007- 2011 Integrated Development Plan document is intended to guide development and planning for Dipaleseng Municipality with an emphasis on improving socio- economic situation, meeting millennium targets, improving service delivery mechanisms, strengthening and improving and inter-governmental relations and community participation.

The Municipality intends to focus on facilitating Public Private Partnerships in order to accelerate Shared Economic Growth and Development, Tourism Development and Marketing, Environmental Management, Youth and Woman Development, Promotion and Support of people with disability, Economic Diversification and Beneficiation of its Mineral and Agriculture Resources and Community development.

At a minimum, the region must provide for the necessary basic services, amenities, educational and social (health and safety) resources that can form the basis for a good standard of life for its citizens. In the Dipaleseng 2009/2010 IDP, the key interventions that are associated with this are:

1. Increase in unemployment amongst residents, which creates an additional strain on municipal service delivery as more people cannot afford to pay for municipal services.
2. Shortage of land for housing and other social amenities.
3. Lack of libraries.
4. Unfenced cemeteries.
5. Provision of potable water in the rural/farmlands within the municipality.
6. Poor road conditions.

29 Strategic Development Concept

The strategic development concept for Dipaleseng, which is elaborated on in Phase 3, should be based on nodes, corridors and precincts. The aim is to reconstruct and integrate the urban and rural landscape of Dipaleseng into a more rational, cost effective and manageable structure.

Dipaleseng is lagging behind in development in comparison to other municipalities within the district. Also widespread poverty makes it difficult for the municipality to achieve its vision of providing quality affordable services good governance and sustainable economic opportunities.

However, due to its location in close proximity to major economic hubs, the municipality has the potential to achieve its vision. The municipality has the R23, R51 and N3 and a railway network as the major structuring elements that can be utilised to restructure the spatial configurations in manner that creates livable environments and sustainable employment opportunities. These roads also form a backbone of the corridors that link the municipality with adjoining local municipalities.

The municipality has not yet capitalised on the economic development opportunities offered by these roads. With the re-commissioned Eskom Grootvlei Power Station and the development of the gold mine by the Great Basin Investment Group, more economic opportunities are to be created. These initiatives provide alternatives for economic development than in other natural resource poor areas and will attract more people who will seek employment in the Dipaleseng municipal area, thereby creating a need for residential and infrastructure services provision.

The municipality should look at providing a better business-enabling environment to promote investments in agriculture, agro-processing, mining and related activities. Furthermore, the development orientation of the Municipality needs to be more closely aligned with the development corridors identified in the Gert Sibande District SDF. Possibly, more direction and strategic planning needs to take place with other municipalities and the District to better enhance the municipality's position in order to take advantage of the economic opportunities.

29.1 Nodal development

Dipaleseng Municipality is strategically located within the Gert Sibande District with major Provincial roads (R23, R54 and R51) and 1 National road (N3) crossing through the Municipality in particular the town of Balfour which is the main town of the municipality. This creates high potential for nodal development and tourism development as these roads are linking Dipaleseng with Kwa-Zulu Natal (via the N3), Free State (via the R54) and Gauteng (via N3 and R23) and the Eastern part of Mpumalanga Province (via the R23).

In terms of economic development and growth, the municipality should ensure sufficient support is provided to enhance urban development in the established node of **Balfour**, which is the main economic node of the municipality. Normal activities and functions that provide goods and services to the entire area are provided within this primary development node. It is further centrally located within the municipality with good accessibility from the regional routes. The extent and variety of functions provided in Balfour make it the primary development node.

Grootvlei is regarded as a secondary node with more industrial function due to the town hosting the Eskom power station. The power station provides a lot of employment opportunities for the locals and the economy of the town is mainly reliant on the power station.

Greylingstad/Nthorwane is regarded as a secondary node providing more agricultural services. The size and the level of diversification of the local economy are limited in relation to the main node Balfour.

It is likely that the municipality will need to grow organically and incrementally, depending on what activities can be stimulated to increase the money supply to the area. This would usually be associated with agriculture and mining, as such, this may be the only real, viable alternative for the municipality to pursue in order to stimulate an expansion of the economy and a few more sustainable jobs.

29.2 Corridor development

Movement and linkages within the Dipaleseng Municipality should be in line with the following principles amongst others:

1. Ensure and maintain a high standard of regional accessibility (road, rail and air).

2. Orientate regional access to accommodate freight, private vehicles, mini-bus taxis and buses.
3. Orientate local access to foster public transport, non-motorised transport (pedestrian/cyclist) and private transport.
4. Provide a high level of regional and local convenience.
5. To ensure that modal transfer points (transport stations) are safe, secure, clean and appealing.
6. To ensure that the movement system links directly with, and is supported by, strong high intensity mixed-use nodes and higher residential densities.

Dipaleseng is crossed by the two Provincial roads R23 and R51 including the N3 going through from Johannesburg to Durban. Possibly, more direction and strategic planning needs to take place with other municipalities and the District to better enhance Dipaleseng and its position on these routes. The provincial road R23, R51 would need to be upgraded significantly (heavy trucks transporting coal damage the road) in order to leverage on the through traffic and to reduce travel time to the main towns along the routes

29.3 Precincts

Precincts are areas with common identifying characteristics and usually have a homogenous land use associated with it. It comprises medium to large sections of the spatial environment i.e. mixed land use districts, neighbourhood districts, industrial districts, agricultural districts, institutional districts, office districts and historical precincts. Within the main towns of Dipaleseng precincts should be identified in order to actively promote their uniqueness.

30 Synopsis of phase 2

DIPALESENG PHASE 2 SUMMARY TABLE - SPATIAL INTERPRETATION OF CURRENT REALITY						
NO	VISION: KEY ASPECTS (FROM PHASE 1)	SPATIAL		INSTITUTIONAL		RELATIONSHIP BETWEEN IDP & CURRENT REALITY
		OPPORTUNITIES	LIMITATIONS	PERSPECTIVES	IMPLICATION	
1	QUALITY AND AFFORDABLE BASIC SERVICES	Address the housing and services backlog. The shortage of available land for housing and social amenities must also be addressed.	Limited funding exacerbated by high unemployment levels which prevent residents from contributing to municipal revenue. Furthermore, the lack of land available and lack of funds to purchase land for housing is a big challenge.	GEAR - a balance must be reached between basic service delivery and stimulating economic development to help pay for these services. NSDP (2006) confirms that localities such as Dipaleseng should concentrate on providing basic services.	Without economic stimulation, provision of basic service needs and housing backlogs cannot be addressed.	The main focus of the IDP is provision of housing and basic services to raise the standard of living of residents. Currently, Dipaleseng has a severe housing shortage which is exacerbated by the lack of available land, which must be addressed. There is also an urgent need to provide basic services with particular emphasis on potable water for rural communities and an upgrade of road infrastructure and health facilities. This is hampered by a lack of revenue from the largely unemployed population and the strain on existing facilities.
		Provide social infrastructure (such as community, health and safety facilities and a tertiary education institution).	Lack of funding and lack of sufficient existing facilities. The growth in informal housing which have poor sanitation is causing health problems which impact on the	The CRDP strategy indicates that economic and social development infrastructure must take place in rural communities with projects such as agrarian transformation and rural development.	None	The IDP identifies the need for social infrastructure and, in particular, health facilities. Currently health facilities are challenged by high HIV/AIDS rates and health problems associated with poor sanitation and unhealthy living conditions.

DIPALESENG PHASE 2 SUMMARY TABLE - SPATIAL INTERPRETATION OF CURRENT REALITY						
NO	VISION: KEY ASPECTS (FROM PHASE 1)	SPATIAL		INSTITUTIONAL		RELATIONSHIP BETWEEN IDP & CURRENT REALITY
		OPPORTUNITIES	LIMITATIONS	PERSPECTIVES	IMPLICATION	
			existing health infrastructure.			
2	IMPLEMENT PRINCIPLES OF GOOD GOVERNANCE	Establish MPCC's to provide a forum for communication and public participation.	Lack of funding to create MPCC's.	None	None	The IDP recognises the need for social facilities such as libraries which will provide a forum for communication. The establishment of such facilities is currently hampered by lack of funds.
3	CREATE SUSTAINABLE ECONOMIC OPPORTUNITIES	Job creation and economic development.	Limited by poor transport infrastructure, lack of basic engineering infrastructure and a largely uneducated population with limited skills.	The PGDS recognises that Dipaleseng would not be regarded as an area of economic importance and thus should concentrate on stabilisation of its resource base to serve the existing population and provide the best possible basic services given limited resources.	The municipality will need to investigate external, private funding and possible private sector partnerships to fund economic development.	The IDP identifies the need to form public-private partnerships to accelerate shared economic growth and development, youth and woman development, economic diversification and beneficiation of resources. However, currently the lack of basic service provision and the poor road infrastructure has made the area unattractive for potential investors.

DIPALESENG PHASE 2 SUMMARY TABLE - SPATIAL INTERPRETATION OF CURRENT REALITY						
NO	VISION: KEY ASPECTS (FROM PHASE 1)	SPATIAL		INSTITUTIONAL		RELATIONSHIP BETWEEN IDP & CURRENT REALITY
		OPPORTUNITIES	LIMITATIONS	PERSPECTIVES	IMPLICATION	
		Capitalise on existing agriculture and consider beneficiation of agricultural products for job creation and income generation.	Lack of funding for small scale farming and beneficiation projects.	The Mpumalanga SDF (2007) classifies Balfour as an agricultural service centre and indicates that its focus should be on the provision of constitutionally mandated minimum levels of service in such a way that is financially sustainable and also considers its economic potential.	Without meeting basic service level requirements, economic development in agriculture or other sectors will not take place. The municipality will need to consider public-private partnerships to allow for economic diversification projects to be implemented.	The IDP recognises the need for beneficiation of agricultural products. However, the infrastructure limitations and lack of funding currently restrict these projects.
		Consider projects to diversify the economy to reduce reliance on agriculture and mining.	Lack of training and skills development facilities to train population in alternative sectors and lack of funding to provide such facilities and to invest in alternative employment sectors.	The NSDP (2006) recognises the need for intervention programmes that support and enhance livelihoods such as rural-development planning policies and programmes; aggressive land agrarian reform initiatives that can enhance economic viability and sustainable farm development; expansion of agricultural services;	The municipality will need to investigate external, private funding and possible private sector partnerships to fund economic development.	The IDP recognises the need for diversification of the economy. However, the infrastructure limitations, lack of educated/skilled workers and lack of funding currently restrict these projects.

DIPALESENG PHASE 2 SUMMARY TABLE - SPATIAL INTERPRETATION OF CURRENT REALITY						
NO	VISION: KEY ASPECTS (FROM PHASE 1)	SPATIAL		INSTITUTIONAL		RELATIONSHIP BETWEEN IDP & CURRENT REALITY
		OPPORTUNITIES	LIMITATIONS	PERSPECTIVES	IMPLICATION	
				and focus on other activities that would promote the improvement of human resource development, education and local skills development.		
		Improve existing, and provide for new, engineering infrastructure; improve road infrastructure by improving road quality and access.	Lack of funding and the poor state of existing roads and services.	The Gert Sibande SDF (2009) identifies that Balfour, although not an important economic activity area, represents an important activity concentration point and forms part of the economic corridors of the district.	Without meeting basic service level requirements and maintaining road links, economic development will not take place.	The IDP identifies the need to address the poor state of the roads but is hampered by lack of funding.
		Improve public transport and access to economic opportunities.	Lack of funding.	GEAR - a balance must be reached between basic service delivery and stimulating economic development to help pay for these services. NSDP (2006) confirms that localities such as Dipaleseng should concentrate on providing basic services.	Without meeting basic service level requirements, economic development will not take place.	The IDP recognises that in order for social and economic development to take place and in order to establish residential areas to eliminate housing backlog, public transport needs will need to be addressed. The lack of funds currently inhibits this.

CHAPTER 4



31 Phase 3

The purpose of this chapter is to sketch the desired spatial pattern for Dipaleseng Local Municipality taking into account the provisions of its Integrated Development Plan, the institutional requirements of different government spheres (institutional analysis) and the inherent spatial opportunities the Municipality offers.

The spatial development of Dipaleseng should take into account the impact of mining, electricity generation, manufacturing and agricultural activities. The planning for the maximization of profits by these sectors should be environmentally sustainable for both physical and economic health of the residents of Dipaleseng.

This chapter therefore looks at the overall spatial pattern of the municipality, given its strengths and opportunities, and makes recommendations that take into account the underlying threats and weaknesses in its developmental options. The proposed set of project priorities will lend themselves to facilitating the best possible development scenario for the Municipality, given the limited financial resources available to it.

Importantly, the Dipaleseng SDF has to be aligned with the 2009 Spatial Development Framework for the Gert Sibande District. The District SDF proposed 10 main development principles that the local SDF should make align with. The District SDF guides the development of the District to ensure that the spatial restructuring component of the local municipalities is done in an integrated manner.

The 10 Development Principles and its spatial implication for Dipaleseng are summarised as follows:

Development Principle 1:

To actively protect, enhance and manage the natural environmental resources of the District, in order to ensure a sustainable equilibrium between biodiversity conservation, mining, manufacturing and industrial activities, agriculture, forestry, and tourism related activities within the District.

Planning and Development initiatives within Dipaleseng should ensure that the entire Municipality's biodiversity as described in the Mpumalanga Biodiversity Conservation Plan is protected, managed and enhanced. These would include the following:

- The ***Ecological Corridor*** that runs from the north to south traversing through Greylingstad needs to be protected.
- The ***Highly Significant*** areas located mostly to the south, east and north-west of the Municipality need to be protected in such a way that conservation objectives are met.
- The ***Important and Necessary*** areas are those areas where the biodiversity has been heavily compromised and very few options remain to meet biodiversity targets. These areas are situated mostly in the central region of the municipality and need to be protected in such a way that conservation objectives are met.
- The ***Least Concern*** areas have biodiversity value in the form of natural vegetation cover. These areas situated in most parts of the municipality and they are subject to National EIA legislation.

- The **No Natural Habitat Remaining** areas include areas where the natural vegetation has been lost. These areas include land that has been transformed by urban/industrial development and cultivation.

Development Principle 2:

To optimally capitalise on the strategic location of the District and its five key economic strips/corridors, and to functionally link all towns and settlements to one another through establishing and maintaining a strategic road and rail network comprising internal and external linkages.

In terms of the District's five key economic strips/corridors, Dipaleseng is affected by the R23 Corridor which represents the old route between the Gauteng Province and Durban/eThekweni in KwaZulu-Natal. This route links prominent towns and settlements such as Balfour, Standerton and Volksrust to one another. This corridor including others forms the base of a strategic road network for the District, and should therefore be maintained as a top priority. The following development implications of the corridors include the following:

- The thorough maintenance and upgrading of the national and provincial road network constituting the five main transportation corridors in the Gert Sibande District.
- The efficient "branding" of the five corridors through appropriate signage in order to attract more tourist traffic through the area (Establishment of "Theme Routes").
- Active promotion of rail as transport mode in the district – especially as an alternative to road-trucking of coal in the District.

Development Principle 3:

To utilise the existing natural environmental, cultural-historic and man-made activity areas within the District as Tourism Anchors and Nodes; and to develop and promote the eastern parts of the District (around route R33) as a Primary Tourism Corridor linking the Lowveld Tourism Precinct to the north (in Ehlanzeni), to the St Lucia Tourism Precinct located to the south of the District.

Dipaleseng does not feature in the Primary Tourism Corridors (areas around the R33 route) identified in the District SDF, therefore not directly affected. However, due to its spatial location, Dipaleseng can align its tourism plans to the closest areas identified in the District SDF as supporting Tourism Nodes. These areas would include the following:

- The Grootdraai Dam Water Tourism Node situated in Standerton.
- The Industrial and Entertainment Tourism Node situated in Secunda.

Development Principle 4:

To promote forestry within and along the identified Primary Tourism Corridor this includes areas around the R33 route. The commercial forestry areas are along the north-south band in the east of the District.

Dipaleseng does not feature in the primary tourism corridors and the commercial forestry areas, therefore not directly affected by this principle.

Development Principle 5:

To promote intensive and extensive commercial farming activities throughout the District, and to facilitate and concentrate subsistence farming activities within certain rural communities. The SDF identifies that the central and western parts of the District have larger concentrations of land suitable for agricultural purposes. These areas have been earmarked for extensive agriculture

Dipaleseng falls within the area to the west of the district which is earmarked for extensive agriculture; therefore agricultural land should be protected to ensure continuous production. Balfour should serve as the main agricultural service center supplying the surrounding agricultural communities and towns with commodities and services. Commercial and industrial activities and important services of the region should be centered in Balfour. Balfour is well suitable to become a major activity node because of the following:

- existing infrastructure, availability of bulk infrastructure,
- strategic location at the intersection of the R23 and R51 roads,
- railway line infrastructure traversing through the center of the town,
- population to support economic growth.

Development Principle 6:

To unlock the development potential of existing towns through developing industry specific Special Economic Zones / Economic Clusters throughout the District, in line with the MPISF and the provincial LED Strategy and in accordance with the following sectors:

- *Agricultural Cluster*
- *Forestry Cluster*
- *Industrial Cluster*

Balfour is the only town affected by this principle and is categorised as a secondary cluster within the agricultural cluster category.

Development Principle 7:

To facilitate and accommodate mining in the District in a sustainable manner in order to support local electricity generation and industrial development.

Within Dipaleseng, Grootvlei is host to the re-commissioned Eskom Power Station. The coal fields within and around the Municipality should be utilised in order to supply the power station with coal. Dipaleseng is also a host to a gold mine situated nearby Balfour and these mining activities have positive economic spin-offs for the municipality. However, strict environmental caution should be applied to ensure that mining activities are undertaken in a sustainable manner.

Development Principle 8:

To establish a functional hierarchy of towns and settlements in the District, and to ensure equitable access to social infrastructure and the promotion of local economic development by way of Thusong Centres (Multi Purpose Community Centres (MPCCs)).

Within Dipaleseng, three centres are proposed to be situated within a 10km radius around the main town of Balfour, Greylingstad and Grootvlei. The intention of these facilities is thus twofold:

- To provide the broader community with a full range of community services and facilities at a single point which is accessible within 5 to 10 kilometres from the majority of people living in the surrounding area; and
- To promote local economic development at these nodes which not only serves the retail needs of the local community, but which also provides opportunities for people to establish their own businesses and to feed from the markets created at these nodes.

Development Principle 9:

To ensure that all communities have access to at least the minimum levels of service as enshrined in the Constitution. This principle is in line with the principles contained in the National Spatial Development Perspective.

None of the areas in Dipaleseng are part of the two major areas that stand out as priority Service Upgrading Priority/Areas within the District. These priority areas are situated north-eastern precinct in the Albert Luthuli and Msukaligwa Municipalities and areas around the Mkhondo municipal area. However, areas in Dipaleseng that are outside the mentioned priority areas should follow a dual approach to basic services provision. This entails that whilst urban communities are provided with basic services and facilities, it is equally important that rural communities are not neglected, and that they are provided with an appropriate range of services and facilities to meet their minimum needs.

Development Principle 10:

To consolidate the urban structure of the District around the highest order centres by way of infill development and densification in Strategic Development Areas (SDAs). The District SDF proposes that the towns and settlements within the District should be developed in a manner aimed at consolidating the urban form, rather than allowing for further expansion.

Within Dipaleseng, Balfour is featured in the Strategic Development Areas whereby the proposed future direction or trend for development is highlighted. The compilation of the Local Spatial Development Framework should incorporate the District Directives and more detailed Precinct Plans should be developed for each town/settlement. The Micro Strategic Plans for each town in Dipaleseng provide spatial proposals that are in line with the District and National policies.

The development plans for Dipaleseng are primarily aimed at achieving the main goals of service delivery and dealing with the backlog of housing, access to bulk services and the need for better social facilities. The focus on economic development activities such as mining and electricity generation should be balanced with the

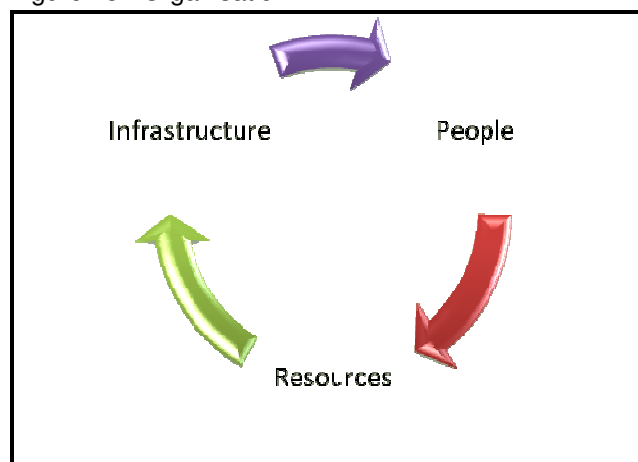
need to protect the biodiversity as described in the Mpumalanga Biodiversity Conservation Plan. The municipality has opportunities to improve its agricultural potential over time due to favourable climatic conditions and high potential agricultural soils. Efforts should be made to assist emerging farmers in the agricultural sector through land reform programmes.

For purposes of clarity, the municipality's spatial goals and objectives are restated here:

32 Spatial goal & objectives

Dipaleseng Municipality needs to organise and manage its people, resources and infrastructure in such a manner as to ensure a safe, healthy, sustainable and economically viable environment.

Figure 13: Organisation



The spatial vision describes what Dipaleseng Municipality wants to achieve with the physical environment in the long term. The vision must therefore be based on a desired, yet realistic future state.

32.1 Spatial goal

"To optimally develop our inherent economic opportunities such as the natural beauty characterised by the biodiversity, wetlands, Vaal River, mining opportunities including gold and coal, electricity generation, to protect and utilise the rich agricultural land and diverse natural environment for the enjoyment of all and to develop sustainable settlements where residents can lead enriched, healthy and convenient lives".

32.2 Spatial objectives

The development objectives derived from the municipality's spatial vision include:

- To exploit economic opportunities in a sustainable manner;
- To create sustainable human settlements; and

- To protect the natural environment and resources from inappropriate and opportunistic development;

Spatial strategies that can facilitate the achievement of these goals and objectives are set forth in the next section.

32.3 Spatial strategies

The spatial strategies indicate how the objectives can be achieved through a series of interventions that are designed to address the opportunities within the Municipality.

Spatial strategies can address different facets of a region's development. These are captured in the table below:

Figure 14: Spatial Strategies

Exploit economic opportunities
<ul style="list-style-type: none"> • Enhance regional accessibility through improved road and rail linkage to unlock the economic potential of the municipality i.e. R23, R51, N3 and railway. • Identify tourism opportunities to develop a possible tourism strategy albeit limited in Dipaleseng. • Identify land suitable for arable cultivation and beneficiation of agricultural products. • Demarcate land with mineral deposits for mining development. • Identify areas with potential for economic growth, declare them as Special Economic Zones with incentives to attract specific developments to these zones. • Identify areas with low economic development potential, these areas must be provided with the constitutionally acceptable level of services as enshrined in the Constitution. As per the NSDP 2006 principles, infrastructure investment must be directed to high potential areas as per nodal hierarchy:; Balfour (primary node), Greylingstad and Grootvlei (secondary nodes).
Create sustainable human settlements
<ul style="list-style-type: none"> • Contain urban development within urban settlement boundaries/urban edge • Densify existing settlements to optimise engineering services and viability of public transport systems • The establishment of human settlements should be within reasonable walking distance to public transport, this is to enhance accessibility to employment opportunities, social facilities and greater variety of goods and services • Develop employment and residential opportunities close to bulk engineering infrastructure • Eradicate the disfunctional spatial pattern that was created by past spatial policies • Identify appropriate locations for land reform purposes to prevent the development of marginalised rural settlements • Increase internal road access to ensure functional urban and rural integration
Protect the natural and built environment
<ul style="list-style-type: none"> • Protect ecologically sensitive natural open spaces and utilise valuable natural assets i.e. ecological corridors, Vaal River, tributaries and wetlands. • Comply with the Mpumalanga Biodiversity Conservation Plan and all district and local environmental management frameworks. • Protect and manage the built and natural environment with heritage value i.e. Greylingstad Mountains. • Identify high potential agricultural land and protect it from development i.e. land along Vaal Rivers. • Ensure detailed planning and management where areas have high priority for development and high environmental sensitivity i.e. areas around Greylingstad with mining potential yet situated in the ecological corridor (IMBCP).

33 Strategic Development Concept

The Strategic Development Concept identifies how the spatial form of Dipaleseng Municipality should be shaped, based on the identified spatial objectives and strategies. The strategic development concept is basically informed by the following:

33.1 Structuring elements

Structuring elements, to a large extent, dictate the location of development and direction for growth (**Refer to Plan 36: Structuring Elements**).

Table 31: Dipaleseng Structuring Elements

Spatial Element	Specific Character	Location	Implications for Development
Existing physical natural elements that cannot be moved or changed	Mountains	Greylingstad Mountains	Pristine environment presenting tourism opportunities, associated sensitive biodiversity
	Rivers	Vaal River, Waterval River, Grootspuit and Molspruit. Tributaries (river systems) within the towns	Risks of flooding, managed irrigation development. Major rivers provide opportunities for eco-tourism related activities.
	Wetlands	Wetlands in various places around the Municipality	No development areas
	Dams	Grootvlei Dam	Dams provide opportunities for eco-tourism related activities
	Conservation Areas		Restricted development
Existing major movement infrastructure playing a vital role in commuting goods and services between towns and on a regional level	Main roads	The national road N3, the provincial roads R23 and R51. Other major roads R548 and R541	Increase mobility
	Railway lines and stations	The east-west railway line, north-south railway line.	Creates physical bearers for integrated development within towns/settlements.
Built-up areas	Existing settlements	Balfour & Siyathemba, Greylingstad & Nthorwane, Grootvlei Extension 2 & Grootvlei Extension1 and Dasville	Focus services
	Development areas	N/A	N/A

From the outset, it should be stated that any further growth to the towns in the region will need to be predicated on the supply of water and bulk services. In this regard, all the towns; Balfour, Greylingstad and Grootvlei are likely to have significant limits to their expansion potential and thus will need to contain their development plans to limit any additional demand for services outside of its existing population. The proposed phasing plans on the micro strategies for each town provide guidelines for future development based on the population projects and existing infrastructure.

33.2 Development opportunities

Key areas of opportunity that transpired from the institutional and contextual analysis are:

- Agricultural development through diversification, beneficiation of agricultural products and the continued promotion of existing extensive commercial farming activities.
- Apart from the existing mining activities, there are opportunities for possible mining development due to the availability of mineral deposits such as gold and coal, if proven to be feasible.
- Strategic location of Dipaleseng in close proximity to Secunda ($\pm 67\text{Km}$) which is an important town within the District. Secunda is a major economic contributor in the District due to it hosting a number of industries including petrochemical.
- Dipaleseng is situated close to Gauteng where the Johannesburg Metropole ($\pm 89\text{km}$) and O.R. Tambo International Airport are situated. Gauteng is the primary market for agricultural products from the Municipality.
- Tourism development that focuses on the Vaal River, eco-tourism and agri-tourism.

33.3 Rural environment

The rural environment is not a “development area”; urban development should be contained within the urban edges as demarcated in the Micro-Strategic Concept Plans for each town. The rest of the areas are regarded as rural areas where mainly agricultural activities dominate. Therefore, interventions in this area (rural areas) should be minimised to:

- Utilising high potential agricultural land to promote intensive agriculture and environmental assets to promote tourism;
- Creating rural service centres where rural communities can access day-to-day services and to provide housing opportunities for people who are involved in the rural economy;
- Ensure sufficient linkages between the rural and urban environments; and
- Promoting rural development

A Macro Strategic Development Concept is developed for Dipaleseng for the entire Municipality and Micro Strategic Development Concepts for the respective nodal points.

34 Macro Strategic Development Concept

The development rationale for Dipaleseng is based on:

- Nodal development

- Corridor development
- Tourism development
- Environmental conservation
- Mining development
- Agricultural development

34.1 Nodal development

Refer to Plan 37: Macro Strategic Development Concept

Settlements can be classified into various functionality types according to the number and types of commercial, industrial and service functions provided by each.

The towns of Dipaleseng, based on strategic location, existing functions and services, expected future development and existing population size are classified into the following functionality types:

Table 32: Functionality Types

Primary activity node:	Balfour and Siyathemba situated in the north at the intersection of the R23 and R51.
Secondary activity node:	Greylingstad and Nthorwane situated in the east along the R23. Grootvlei (including Extension 1, 2, Dasville and Thubelisha Informal Settlement) situated on the south-west along the R51 and close to the N3.

34.1.1 Balfour/Siyathemba

Balfour/Siyathemba is favoured as a primary activity node due to its location at major road intersections (R23 and R51) and the railway line traversing through the town. The town's population, services and functions are higher and more diverse than the other two nodes namely, Grootvlei and Greylingstad. (**Refer to Plan 37: Dipaleseng Macro Strategic Development Concept**)

The aim should be to attract private and public investments to these nodes to increase economic and social opportunities, to accommodate regional and sub-regional growth, to aggressively market the investment opportunities in these towns and to provide an effective service to the broader region.

These nodes need to form the focus areas to which catalyst development projects are directed, providing for sustainable communities involving:

- Urban renewal initiatives and economic regeneration;
- Human resources development;
- Neighbourhood development;
- The upgrading and restructuring of engineering and social infrastructure;

- Urban management; and
- Transportation and roads.

34.1.2 Greylingstad/Nthorwane

Greylingstad and Nthorwane are jointly known as Greylingstad and are favoured as a secondary node mainly providing services to the surrounding farming communities. The town is situated on the R23 main route, which links Gauteng and Northern Kwa-Zulu Natal. Nthorwane is a residential area to the east of Greylingstad and the where the majority of the population resides.

34.1.3 Grootvlei

The town comprises of Grootvlei Extension 1 and 2, and Dasville. Grootvlei Extension 1 serves as a residential town with some industrial, social and business uses. The majority of people in Grootvlei reside in Grootvlei Extension 1 in both the formalised area and the informal settlement. Grootvlei Extension 2 developed as a result of the Eskom power station, and serves as the residential area for the station workers. The town provides better housing, infrastructure and social amenities for the station workers. Dasville is a small business area mainly servicing the local community and traffic passing through.

The types of services that could be found in these settlements (Greylingstad and Grootvlei) include:

- Anchor economic activity, i.e., industrial activity, mine, tourism development, etc.;
- Municipal services such as pay-pay points;
- Social and support services;
- Small scale retail (convenience);
- Tourism facilities and services; and
- Transportation services.

34.2 Corridor development

Corridor development in Dipaleseng does not necessarily imply that development is supported along identified corridors, but rather that these routes should function as regional linkages with the focus on transport mobility.

Urban development should be focused within the urban boundaries of the three activity nodes of Balfour, Greylingstad and Grootvlei. Refer to Micro Strategic Development Concepts for more detail regarding land use proposals.

The identified transport corridors include:

National Roads:

- **The N3 Corridor** between Gauteng and KwaZulu-Natal passing through the Municipality diagonally along the south-western boundary. The road provides a mobility function of national importance and supports economic growth. The mobility function of the road should be promoted and protected, i.e., limited access and minimum interference to the free flow of traffic should be maintained.

Provincial Roads:

- **Gauteng-Balfour-Standerton-Volksrust** west to east corridor consisting of the R23 tar road between Heidelberg, Balfour, Standerton, Volksrust and the N11 toward the east of the District.
- **Nigel-Balfour-Grootvlei** corridor consisting of the R51 provincial road linking the N3 to the south and the N17 to the north.

The provincial roads support regional access and mobility. These roads form links between towns not situated along national roads. In Dipaleseng these roads further play an important role in the transportation of coal freight to the Grootvlei Power Station. However, the transporting of coal by trucks has a negative effect on the roads as they damage the roads.

The District Integrated Transport Plan (2008) proposes the following strategic approach to the coal haulage problem:

Road Based Solution:

- Implementation of a tripartite strategy which advocates the following:
 - Definition of a Coal Network Grid which will be ring-fenced and coal movements to be restricted to this network. Any movement of coal outside of this network will be penalised;
 - Stepping up of overload control through the introduction of a dedicated overload control enforcement capacity; and
 - Increased investment in rail infrastructure to minimise the impact of coal freight on the road.

The following road upgrading and maintenance is proposed, to cater for coal haulage:

- **Priority 1** – R51/R548 from Balfour to Devon and N17
- **Priority 2** – R51 from Grootvlei to Balfour

The priorities suggested above for road upgrading and maintenance are corridors mainly needed for coal transport and which does not necessarily consist of the highest total volume corridors.

Improved connectivity within Dipaleseng Municipality will advance its regional accessibility which is important to:

- unlock the economic and tourism potential;
- ensure functional urban and rural integration; and
- to enhance inter and intra municipal accessibility.

Connectivity between the nodes and rural areas needs to be improved to ensure accessibility to goods and services provided at these nodes.

34.3 Tourism development

The tourism industry within the Dipaleseng area is relatively small due to the lack of a major attraction and the expectation of high standard tourist products and services. However, opportunities do exist for tourism facilities and should be developed where feasible to create more employment opportunities.

The location of Dipaleseng in close proximity to major economic hubs, presents opportunities for eco-tourism development. The Municipality, including the Vaal River, presents ample opportunities for the establishment of eco-tourism developments such as offering water sport, hiking trails, adventure tourism, lodges and guest house/bed & breakfast operations and resort development. The three towns of Grootvlei, Greylingstad and Balfour host the following tourism attractions:

- The **Grootvlei** area is host to bird species such as the black korhaan and the blue crane. The areas where the birds occur provide an opportunity for bird watching activities and eco-tourism related activities in and en route to these areas. There is an accommodation establishment in the form of a lodge.
- The mountain in **Greylingstad** is historically significant. It is host to the Anglo Boer War Battlefields and the historic graves of the Scottish regime. The town has a unique church that was built in the 1800s and has the potential to be a heritage site.
- The town of **Balfour** has a guest house facility to cater for visitors and offers retail facilities for shopping. Currently, there is a proposed tourism development north of the Bluesky industrial area to cater of conferencing, events, recreation and accommodation needs for the town.

Tourism in Dipaleseng should be promoted and marketed through a well-developed tourism strategy. Such a strategy should focus on the very limited tourism potential of the three towns.

The most suitable form of tourism for Dipaleseng rural areas would be **eco-tourism** which aims to balance the needs of people with the need to protect the environment.

Eco-tourism has the following advantages:

- Eco-tourism projects are more likely to be sustainable because the natural environment is protected.
- Eco-tourism projects are on a smaller scale than other forms of tourism which makes it easier for rural communities to participate.

Agri-tourism relates to visiting a working farm or any agricultural, horticultural or agri-business operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or its operation.

Agri-tourism has the following advantages:

- Farmers, crafters, municipalities and tour operators can work jointly to promote businesses that are producing goods in the rural areas.

- A niche market for “farm” style accommodation can be promoted within the Municipality which offers a quiet, restful atmosphere, connection to agrarian roots, simple activities, personal contact and agricultural education.
- Production in farms is not affected as active farms continue with their normal production.

The provincial roads (R23, R51 and R548) and the national road (N3) traversing the Municipality provide good infrastructure for tourism. These roads link Dipaleseng with Kwa-Zulu Natal, the Free State and Gauteng as well as the rest of the Province. These roads create possible opportunities to advance tourism development within the Municipality.

More importantly for the tourism strategy to succeed, the roads need to be improved between the towns, proper signage to be erected on the roads and that sufficient tourism infrastructure be developed in the towns.

Refer to Land Use Management Guidelines in Phase 4

34.4 Environmental conservation

The environmental conservation zone should include all ecologically sensitive, natural open spaces with conservation value, i.e., mountain ranges, proclaimed nature reserves, conservancies, river environments, wetlands, biodiversity corridors, etc.

The following areas form part of the environmental conservation zone:

- The Bethal-Evander-Greylingstad corridor forms a continuous ecological unit that runs across the eastern part of the Municipality from north-east to south-west.
- Mountainous areas along the R23 stretching from Balfour to Greylingstad and in the central region of the Municipality.
- Major river systems include the Vaal River, Waterval River, Grootspuit, Molspruit, Riet-, Sout- and Sak Rivers and associated riparian vegetation form important biodiversity corridors and should therefore be protected from human settlement.
- The wetlands in various parts of the Municipality.

Refer to Land Use Management Guidelines in Phase 4

34.5 Mining development

Mining activities are a major contributor in the Dipaleseng Municipality's economy. Mining occurs throughout the north eastern and southern western parts of the municipality. The municipality has gold (one gold mine nearby Balfour) and coal reserves but a number of quarry areas also exist which mine stone aggregate. The coal reserves mainly support the re-commissioned Eskom Power Station in Grootvlei.

When considering opening mines based on the available reserves, careful thought must be given to the potential conflict between the mines, agricultural, environment and urban development. The scarcity of water resources should be evaluated against the need to open mines.

Refer to Land Use Management Guidelines in Phase 4

34.6 Agriculture

The larger extent of Dipaleseng consists of agricultural land with high potential grazing (game ranching and dairy farming) and cultivation of crops (maize and sunflower). In terms of agricultural beneficiation facilities, the Karan Beef abattoir in Balfour is a major facility that employs a large number of people.

More efforts should be made to promote clustering of agricultural beneficiation enterprises within the municipality to enhance more employment opportunities and agglomeration of economies in the sector. In this regard, it would be more beneficial for Dipaleseng to not only have the abattoir in its jurisdiction, but also all the feed lots and other linked enterprises.

The benefits of clustering agricultural enterprises within the municipality are as follows:

- Formation of strategic partnerships between government, farmers, customers, research & education institutions and the wider business community;
- Improvement in agricultural sector performance (competitiveness);
- through resource and information sharing emerging farmers would be assisted to develop themselves;
- increased innovation; and
- increased investment within the municipality;

At present, about 34% of the municipal area is regarded as medium cultivation agricultural areas, with soils that are suitable for arable agriculture. Possibilities for small-scale intensive irrigation farming exist on the banks of the Vaal and Waterval Rivers.

The climate of Dipaleseng is ideally suited for growing maize, sunflower, dairy and game farming and the beneficiation of agricultural products should be exploited.

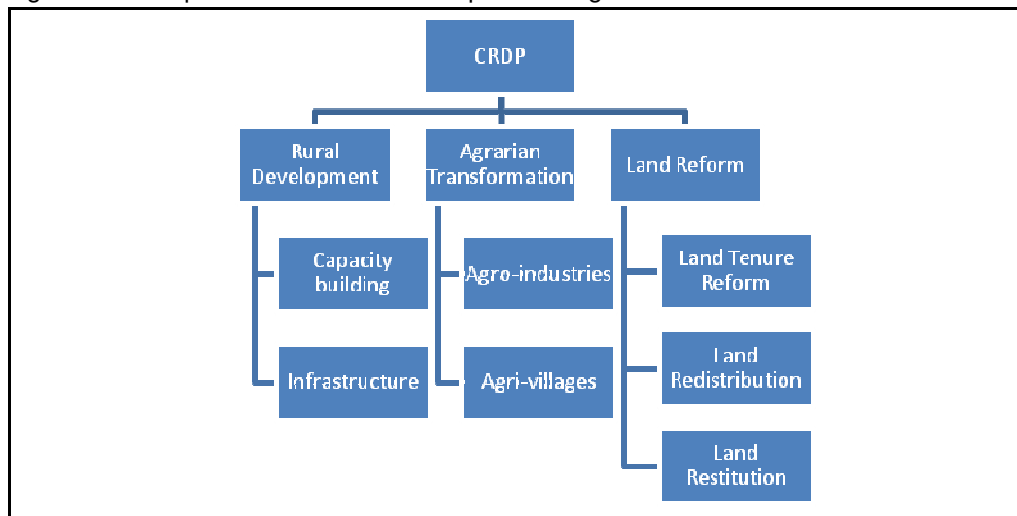
Refer to Land Use Management Guidelines in Phase 4

34.6.1 Comprehensive Rural Development Program (CRDP)

The vision of the Comprehensive Rural Development Programme CRDP is to create vibrant, equitable and sustainable rural communities and to improve the livelihoods of the rural poor and to revitalise and develop rural towns.

The key thrust of the CRDP is an integrated programme of rural development, agrarian change and land reform.

Figure 15: Comprehensive Rural Development Programme



34.6.2 Rural development

The scope of rural development is mainly about positive advancement of people in rural areas through improvement of rural institutions and systems, expansion of rural infrastructure, and growth in economic activities for better rural life. The following strategies relate to rural development and should be applied within Dipaleseng:

- agrarian transformation
- improved land reform
- strategic investment in economic & social infrastructure
- water access & natural resource management
- Promoting social cohesion

With regard to rural development in Dipaleseng it is suggested that the CRDP should focus on:

Development of human resources

Provide training and capacity building initiatives that:

- Relate to economic opportunities in Dipaleseng, i.e., livestock farming, agri-tourism and eco-tourism, possible mining and arable agriculture. **See Macro Strategic Development Concept;**
- Provide technical skills, combining them with indigenous knowledge to mitigate community vulnerability to especially climate change, soil erosion, adverse weather conditions and natural disasters, hunger and food insecurity; and
- Empowerment of rural communities, especially the women and the youth.

Development of infrastructure

The CRDP focuses largely on rural communities which also include farmers and farm workers living on privately owned farms or subsistence and emerging farmers.

In this regard the CRDP should focus on:

- upgrading of major roads in all wards to improve access to amenities and government services provided in the towns;
- the establishment of irrigation land in all towns; and
- providing a basic level of service to rural communities.

Local economic development

In terms of the CRDP the following aspects are important for rural development:

- The establishment of business initiatives, agro industries, cooperatives, cultural initiatives and vibrant local markets in rural settings;
- Revitalisation and revamping of old, and the creation of new economic, social and information communication infrastructure and public amenities; and
- Tourism Associations need to be established in the towns of Balfour, Greylingstad and Grootvlei.

34.6.3 Agrarian transformation

Beneficiation of agricultural products could provide opportunities to emerging farmers and create more employment opportunities that could reduce the high unemployment rate in Dipaleseng. Little attention has been paid to the value chain thorough which agricultural commodities and products reach the final consumers within the country and abroad. This neglect results in enormous potential losses of value added and employment opportunities.

Agro-industries in Dipaleseng should include:

- The further processing, packaging and distribution of meat and fruit juices – Balfour.
- Production of cooking oil – Grootvlei
- Organic farming – the Organics SA organisation claims that it is inundated with enquiries from restaurants, supermarkets, wholesalers and food processing businesses wanting to know where they can source supplies of organically produced foodstuffs and vegetables.

It is suggested these industries are located in the towns of Balfour, Grootvlei and Greylingstad in the areas earmarked for industrial development in the micro strategic plans for each town. The nature of the produce, poor road access and lack of public transport between rural and urban areas do not lend itself suitable for the establishment of agro-industries on farms

34.6.4 Land reform

Land reform is one of the three legs of the CRDP programme.

In terms of the reviewed 2008 - 2014 Mpumalanga Provincial Growth and Development Strategy the national target is to redistribute 30% of agricultural land in Mpumalanga.

The Department of Rural Development and Land Reform is responsible for land reform and for the implementation of a variety of land reform programmes of which some initiatives including land claims have been completed in Dipaleseng.

Locational criteria

The following locational criteria are considered important in identifying areas for land reform purposes:

- Ownership and land prices;
- Resource potential (agricultural potential, mineral deposits, tourism potential, etc.);
- Available infrastructure on the land, i.e., water, fencing, roads, shelter; and
- Proximity of the market.

Proposals

In terms of the above criteria, the following areas are considered suitable for land reform projects:

- Farms located in the south along the Vaal River catchment area, along the N3 and R51 roads have of soils that are suitable for large-scale cultivation; and
- Land situated along the coal deposit belt on the south and eastern parts of the Municipality provide opportunities for downstream beneficiation of mining products for SMME's.

Land reform success

In order to make a success of land reform, the following should be noted:

- The development of management skills must form an integral part of all projects, especially if lower rainfall is expected that will result in a decrease in livestock carrying capacity;
- Focus must be on commercial ventures, rather than subsistence farming due to the importance of the agricultural sector in Dipaleseng;
- A feasibility or land potential study needs to be undertaken prior to purchasing land for land reform purposes; and
- Access to agricultural support programmes are important, i.e., Comprehensive Agricultural Support Programme (CASP), Land Care Programme, Land Redistribution for Agricultural Development Programme (LRAD), Household Food Production, Food Security and Starter Packs and Irrigation, Rehabilitation and Development Programme.

35 Departure points

The purpose of this section is to estimate

1. the need for land (hectare) for housing development,
2. the demand for social infrastructure facilities and
3. engineering services (water, sanitation and electricity)

35.1 Methodology

The following basic steps were followed to estimate the demand for these facilities:

- Population and household projections to determine the number of people that need to be planned for during the planning horizon 2010 - 2025, based on Stats SA 2001 and the 2007 Community Survey;
- Apply a density of 10-15 dwelling units per hectare to the projected households to determine the land required for housing; and
- Apply the standards contained in the “Guidelines for Human Settlement Planning and Design” (known as the Red Book) to the projected population and households to determine:
 - the need for social infrastructure facilities; and
 - the need for engineering services (water, sanitation and electricity).

Table 33: Population and household projections

Dipaleseng	2001	2007	Increase / Decrease over 6 years (%)	Annual increase (%)
Total Households	9474	12324	30.1%	4.5%
Total Population	38618	37873	-1.9%	0.3%

35.2 Limitations and assumptions

The methodology has the following limitations:

- The projections are based on two data sources only, being Stats SA 2001 and the Community Survey 2007 and are therefore not necessarily accurate;
- It is accepted that the % increase in households for the entire Municipality during the period 2001 - 2007 (30.1%) is the same for each town and the rural area (equating to an annual increase of 4.5%);
- It is accepted that the % decrease in population for the entire Municipality over the period 2001 - 2007 (-1.9%) is the same for each town (equating to an annual decrease of 0.3%);
- The increasing impact of HIV/Aids and related deaths on population growth after 2007 have not been included in these projections;
- Migration trends and associated population figures are difficult to determine and not readily available; and
- The attractiveness of Dipaleseng Municipality in terms of future economic development and associated employment opportunities is not considered in these projections.

Cognisance should be taken, that this is essentially a quantitative assessment, and therefore, does not achieve a qualitative assessment, which relates to the realism of meeting determined needs.

35.3 Balfour / Siyathemba

Table 34: Balfour land demand

Balfour			2010	2015	2020	2025
Projected households	4.5%/annum	households	8197	10215	12730	15864
Projected housing demand		houses	3000	2018	2515	3134
Land size (@15du/ha)		ha	200.0	134.5	167.7	208.9
Location (see plan)			A	B	C	D
Projected population	(-) 0.3%/annum		19545	19254	18967	18684
Social infrastructure		Existing 2010	Required			
Crèche/nursery school	1/5000 pers.	2	3.9	3.9	3.8	3.7
Primary schools	1/3000 pers.	5	6.5	6.4	6.3	6.2
Secondary schools	1/6000 pers.	4	3.3	3.2	3.2	3.1
Tertiary facilities	No specs	0	0.0	0.0	0.0	0.0
Mobile clinics	1/5000 pers.	0	3.9	3.9	3.8	3.7
Clinic	1/5000 pers.	3	3.9	3.9	3.8	3.7
Hospitals	No specs	0				
Libraries	1/5000 pers.	0	3.9	3.9	3.8	3.7
Community centres	1/10000 pers.	2	2.0	1.9	1.9	1.9
Religious centres	1/2000 pers.	17	9.8	9.6	9.5	9.3
Municipal offices/pay points	1/50 000 pers.	1	0.4	0.4	0.4	0.4
Fire stations	1/60 000 pers.	0	0.3	0.3	0.3	0.3
Post office	1/11000 pers.	2	1.8	1.8	1.7	1.7
Police station	1/25000 pers.	1	0.8	0.8	0.8	0.7
Sports facilities		1				

35.3.1 Interpretation of Table 34

Housing

- Currently the housing backlog stands at 3,000 houses requiring ±200ha of land to be developed at a density of 15 units/ha.
- An additional 2018 houses will be required in 2015 at an average annual growth rate of 4.5%.
- 8403 houses will be required in 2025 if no houses are built during the 2010 to 2025 planning horizon.

Social infrastructure

- Presently there is a shortfall of 2 crèche/nursery facilities.
- There is a need for at least 2 more primary schools.
- There is a need for at least 4 mobile clinics and 1 clinic.

Table 35: Balfour Infrastructure demand

Balfour			2010	2015	2020	2025
Projected housing demand			3000	2018	2515	3134
Bulk water & sanitation						
Water demand - high income	1250l/stand		3750000	2522500	3143750	3917500
Water demand - low income	750l/stand		2250000	1513500	1886250	2350500
Existing capacity						
Additional bulk required						
Electricity						
Electricity demand - average household	1100kWh/month		3300000	2219800	2766500	3447400

35.3.2 Interpretation of Table 35

Bulk water & sanitation

- An additional 2.25ML/day is required to service the immediate housing backlog of 3,000 houses – 2010 (at 750l/stand).
- A maximum total of 11.7ML/day is needed to service the projected housing need in 2025, being 8403 houses at 750l/stand.

Electricity

- The immediate electricity demand for 3,000 houses is 3,300,000kWh/month – 2010.
- An additional 2,219,800kWh/month will be required in year 2015.
- A total of 4,295,500kWh/month will be required in 2030, if no provision is made during 2010-2030.

35.3.3 Development phases

Development phases are identified on **Plan 39: Balfour & Siyathemba Micro Strategic Development Concept** and indicate areas to meet the current and future housing demand. In calculating the land size earmarked for densification, it is assumed that 50% of these areas are available for infill development and densification purposes.

Development Phase B must be considered as a critical issue and planning and implementation must commence parallel to Phase A to prevent future housing backlogs.

In discussing the development phases, road linkages and road upgrades are addressed. It must be stressed, however, that although new road linkages and upgrades are discussed, it should remain a priority of the Municipality to maintain all existing roads in all phases.

In considering proposed future expansion and densification to cater for calculated housing growth, an escalation in the demand for bulk water, sewer and electrical services must be taken into account, as per the development phase. Table 35: Balfour Infrastructure Demand highlights the anticipated future demand.

It is critical that each development phase is completed before the next development phase commences. This will ensure the maximum utilisation of bulk services and available land.

The requirements of each development phase and how these will be addressed is depicted in the table below and on **Plan 39: Balfour & Siyathemba Micro Strategic Development Concept**.

Table 36: Balfour & Siyathemba Proposed Development Phases

Balfour & Siyathemba						
Development Phase	Period	Plan Notation	Housing Demand	Land Required (Hectares)	Land Identified on Plan (Hectares)	Road Linkages and Upgrades
A	Current backlog	A	3000	200	217	1
B	2011 - 2015	B	693	134.5	178	1 & 3
C	2016 - 2020	C + D	765	167.7	243	1, 5 & 6
D	2021 - 2025	D	845	208.9	175	1, 5 & 6

- Development Phase A requirements will be met by utilising 74 hectares of densification land (148 hectares at 50% utilisation) and 163 hectares of new development land.
- Development Phase B requirements will be met by utilising 85 hectares of densification land (170 hectares at 50% utilisation) and 93 hectares of new development land.
- For Development Phase C and D 418 hectares of new development land are available. However, priority must be given to densification rather than expansion.

35.4 Greylingstad / Nthorwane

Table 37: Greylingstad Land Demand

Greylingstad/ Nthorwane			2010	2015	2020	2025	2030
Projected households	4.5%/annum	households	1709	2130	2654	3307	4122
Projected housing demand		houses	1000	421	524	653	815
Land size (@15du/ha)		ha	66.7	28.1	34.9	43.5	54.3
Location (see plan)			A	B	C	D	E
Projected population	(-) 0.3%/annum		4261	4197	4135	4073	4012
Social infrastructure		Existing 2010	Required				
Crèche/nursery school	1/5000 pers.	2	0.9	0.8	0.8	0.8	0.8
Primary schools	1/3000 pers.	2	1.4	1.4	1.4	1.4	1.3
Secondary schools	1/6000 pers.	1	0.7	0.7	0.7	0.7	0.7

Greylingstad/ Nthorwane			2010	2015	2020	2025	2030
Tertiary facilities	No specs	0	0.0	0.0	0.0	0.0	0.0
Mobile clinics	1/5000 pers.	0	0.9	0.8	0.8	0.8	0.8
Clinic	1/5000 pers.	2	0.9	0.8	0.8	0.8	0.8
Hospitals	No specs	0					
Libraries	1/5000 pers.	0	0.9	0.8	0.8	0.8	0.8
Community centres	1/10000 pers.	2	0.4	0.4	0.4	0.4	0.4
Religious centres	1/2000 pers.	4	2.1	2.1	2.1	2.0	2.0
Municipal offices/pay points	1/50 000 pers.	0	0.1	0.1	0.1	0.1	0.1
Fire stations	1/60 000 pers.	0	0.1	0.1	0.1	0.1	0.1
Post office	1/11000 pers.	1	0.4	0.4	0.4	0.4	0.4
Police station	1/25000 pers.	1	0.2	0.2	0.2	0.2	0.2
Sports facilities		2					

35.4.1 Interpretation of Table 37

Housing

- Currently, the housing backlog is estimated to be 1,000 houses.
- An additional 421 houses will be required in 2015 at an average annual growth rate of 4.5%.
- 2598 houses will be required in 2030 if no houses are built and the current backlog eradicated during the 2010 to 2030 planning horizon.

Social infrastructure

- Currently there is no shortfall of social infrastructure facilities.

Table 38: Greylingstad/Nthorwane Infrastructure Demand

Greylingstad/Nthorwane			2010	2015	2020	2025	2030
Projected housing demand			1000	421	524	653	815
Bulk water & sanitation							
Water demand - high income	1250l/stand		1250000	526250	655000	816250	1018750
Water demand - low income	750l/stand		750000	315750	393000	489750	611250
Existing capacity							
Additional bulk required							
Electricity							
Electricity demand - average household	1100kWh/month		1100000	463100	576400	718300	896500

35.4.2 Interpretation of Table 38:

Bulk water & sanitation

- An additional 0.75Ml/day will be required to service the immediate housing backlog of 1000 at 750l/day.
- A maximum total of 4.26Ml/day will be needed to service the projected housing need in 2030, being 3413 houses at 1250l/day per household.

Electricity

- The electricity demand for 1000 houses is approximately 1 100 000 kWh/month – 2010.
- An additional 463 100kWh/month will be required in year 2015.
- A total of 3.75kWh/month will be required in 2030, if no provision is made during 2010-2030.

35.4.3 Development phases

Development phases are identified on **Plan 41: Greylingstad & Nthorwane Micro Strategic Development Concept** and indicate areas to meet current and future housing demand. In calculating the land size earmarked for densification, it is assumed that 50% of these areas are available for infill development and densification purposes.

Development Phase B must be considered as a critical issue and planning and implementation must commence parallel to Phase A to prevent future housing backlogs.

In discussing the development phases, road linkages and road upgrades are addressed. It must be stressed, however, that although new road linkages and upgrades are discussed, it should remain a priority of the Municipality to maintain all existing roads in all phases.

In considering proposed future expansion and densification to cater for calculated housing growth, an escalation in the demand for bulk water, sewer and electrical services must be taken into account, per development phase. Table 10: Greylingstad/Nthorwane Infrastructure Demand highlights the anticipated future demand.

It is critical that each development phase is completed before the next development phase commences. This will ensure the maximum utilisation of bulk services and available land.

The requirements of each development phase and how these will be addressed are depicted in the table below and on **Plan 41: Greylingstad & Nthorwane Micro Strategic Development Concept**.

Table 39: Greylingstad/Nthorwane Proposed Development Phases

Greylingstad & Nthorwane						
Development Phase	Period	Plan Notation	Housing Demand	Land Required (Hectares)	Land Identified on Plan (Hectares)	Road Linkages and Upgrades
A	2010	A	1000	67	76	1 & 2
B	2011-2015	B + C	150	28	51	3

Greylingstad & Nthorwane						
Development Phase	Period	Plan Notation	Housing Demand	Land Required (Hectares)	Land Identified on Plan (Hectares)	Road Linkages and Upgrades
C	2016-2020	C + D	165	35	48	3
D	2021-2025	D + E	182	44	81	-
E	2025-2030	D + E	201	54	55	-

35.5 Grootvlei Extension 1 & 2, and Dasville

Table 40: Grootvlei Extension 1 & 2 and Dasville Land Demand

Grootvlei			2010	2015	2020	2025	2030
Projected households	4.5%/annum	households	302	376	469	584	728
Projected housing demand		houses	1000	74	93	115	144
Land size (@15du/ha)		ha	66.7	4.9	6.2	7.7	9.6
Location (see plan)			A	B	C	D	E
Projected population	(-) 0.3%/annum		1107	1090	1074	1058	1042
Social infrastructure		Existing 2010	Required				
Crèche/nursery school	1/5000 pers.	0	0.2	0.2	0.2	0.2	0.2
Primary schools	1/3000 pers.	2	0.4	0.4	0.4	0.4	0.3
Secondary schools	1/6000 pers.	0	0.2	0.2	0.2	0.2	0.2
Tertiary facilities	No specs	0	0.0	0.0	0.0	0.0	0.0
Mobile clinics	1/5000 pers.	0	0.2	0.2	0.2	0.2	0.2
Clinic	1/5000 pers.	2	0.2	0.2	0.2	0.2	0.2
Hospitals	No specs	0					
Libraries	1/5000 pers.	0	0.2	0.2	0.2	0.2	0.2
Community centres	1/10000 pers.	0	0.1	0.1	0.1	0.1	0.1
Religious centres	1/2000 pers.	2	0.6	0.5	0.5	0.5	0.5
Municipal offices/pay points	1/50 000 pers.	0	0.0	0.0	0.0	0.0	0.0
Fire stations	1/60 000 pers.	0	0.0	0.0	0.0	0.0	0.0
Post office	1/11000 pers.	0	0.1	0.1	0.1	0.1	0.1
Police station	1/25000 pers.	1	0.0	0.0	0.0	0.0	0.0
Sports facilities		3					

35.5.1 Interpretation of Table 40

Housing

- Currently the housing backlog is estimated to be 1,000 houses, requiring ± 302 ha of land to be developed at a density of 15 units/ha.
- An additional 376 houses will be required in 2015 at an average annual growth rate of 4.5%.
- 2459 houses will be required at the end of 2030 if no houses are built during 2010 to 2030 planning horizon.

Social infrastructure

- There is no need for additional social infrastructure facilities.

Table 41: Grootvlei Extension 1 & 2 and Dasville Infrastructure Demand

Infrastructure demand							
Projected housing demand			1000	74	93	115	144
Bulk water & sanitation							
Water demand - high income	1250l/stand		1250000	92500	116250	143750	180000
Water demand - low income	750l/stand		750000	55500	69750	86250	108000
Existing capacity							
Additional bulk required							
Electricity							
Electricity demand - average household	1100kWh/month		1100000	81400	102300	126500	158400

35.6 Interpretation of Table 41

Bulk water & sanitation

- An additional 0.75Ml/day is required to service the immediate housing backlog of 1,000 houses at 750l/day per household.
- A maximum total of 1.78Ml/day will be needed to service the projected housing need in 2030, being 1426 houses at 750/day per household.

Electricity

- The electricity demand for 1,000 houses is approximately 110,000kWh/month – 2010.
- An additional 81400kWh/month will be required in year 2015.
- A total of 1,568,600kWh/month will be required in 2030, if no provision is made during 2010 - 2030.

35.6.1 Development phases

Development phases are identified on **Plan 43: Grootvlei & Dasville Micro Strategic Development Concept** and indicate areas to meet current and future housing demand. In calculating the land size earmarked for densification, it is assumed that 50% of these areas are available for infill development and densification purposes.

Development Phase B must be considered as a critical issue and planning and implementation must commence parallel to Phase A to prevent future housing backlogs.

In discussing the development phases, road linkages and road upgrades are addressed. It must be stressed, however, that although new road linkages and upgrades are discussed, it should remain a priority of the Municipality to maintain all existing roads in all phases.

In considering proposed future expansion and densification to cater for calculated housing growth, an escalation in the demand for bulk water, sewer and electrical services must be taken into account, per development phase. Table 41 (Infrastructure demand) highlights the anticipated future demand.

It is critical that each development phase is completed before the next development phase commences. This will ensure the maximum utilisation of bulk services and available land.

The requirements of each development phase and how these will be addressed is depicted in the table below and on **Plan 43: Grootvlei & Dasville Micro Strategic Development Concept**.

Table 42: Grootvlei Proposed Development Phases

Grootvlei Extension 1, 2 and Dasville						
Development Phase	Period	Plan Notation	Housing Demand	Land Required (Hectares)	Land Identified on Plan (Hectares)	Road Linkages and Upgrades
A	Current backlog	A & A + B	1000	67	75	1, 2 & 3
B	2011-2015	B -E	101	76	36	4
C	2016-2020	B -E	110	8	36	4
D	2021-2025	B -E	123	8	36	4
E	2025-2030	B -E	136	9	36	4

- Development Phase A requirements will be met by utilising 67 hectares of extension and infill land and upgrading of informal settlements and the land identified on the plan is 75 hectares which is a surplus.
- Development Phase B to E requirements will be met by utilising 101 hectares of new development land. Priority must be given to infill development, densification efforts rather than expansion

General Remarks

- A town may not qualify for a certain facility in terms of its population size and prescribed standards for social services. The reality, however, is that the towns are situated in close proximity to each other

(within less than 40km radius) and this renders the need to improve the links between the towns in order to facilitate resource sharing where towns do not qualify for certain facilities.

- The re-commissioning of the Eskom power station, opening of new mines, i.e., gold mine in Balfour and expected increase in rural-urban migration will put additional strain on existing engineering and social infrastructure facilities in towns.
- There may not be a need for social infrastructure facilities in terms of quantity, but a need for the improvement or upgrade of existing facilities.
- A shortage of medicine and qualified personnel, limited funding and lack of maintenance of buildings and equipment are common problems experienced by health care facilities.
- Other factors such as the learner-teacher ratio (1 teacher: 40 learners), the condition of schools and the availability of teaching materials/equipment may also be hampering the delivery of education to communities.

36 Micro Strategic Development Concept

Micro Strategic Development Concepts are formulated for the three nodes:

- Balfour/Siyathemba
- Greylingstad/Nthorwane
- Grootvlei (Extension 1, 2 and Dasville)

The key objectives of the micro strategic development concept are to achieve objectives such as functional integration of different neighbourhoods (communities), improved access to social amenities and work opportunities, optimising existing infrastructure and integrating development with public transport.

These objectives can be achieved by applying the following tools:

36.1 Spatial planning tools

The spatial planning tools most appropriate to municipalities such as Dipaleseng tend to require more attention to curbing urban spread, which enables the municipality to maximize economies of scale in the distribution of basic services.

The following spatial planning tools will ensure the development of sustainable settlements in Dipaleseng.

Table 43: Spatial planning tools

Tool	Definition	Location	Why
Urban edge (Refer to guidelines in Phase 4)	The urban growth boundary indicates the interface between urban and rural environments. It therefore indicates the area where urban growth should not be allowed	As indicated on Micro Development Concept Plan	A major spatial problem is uncontrolled, low-density sprawling of settlements into the surrounding rural area. This has a number of disadvantages: <ul style="list-style-type: none"> • It results in a settlement pattern that has neither urban nor rural advantages.

Tool	Definition	Location	Why
			<ul style="list-style-type: none"> • In terms of infrastructure investment it is impossibly expensive to serve. • It could compromise valuable natural environments and high potential agricultural land
Densification	<p>Densification is the process whereby densities, i.e. the number of dwelling units per hectare, increase in a planned and sustainable manner.</p> <p>It can take place by means of:</p> <ul style="list-style-type: none"> • Apartment buildings (flats) • Cluster housing (group housing) • Subdivision and second dwelling 	As indicated on Micro Development Concept Plan	Densification creates more compact environments that improve access to work, services. It also provides for more efficient use of infrastructure
Infill/Extension	<p>Is the process whereby vacant land, within the urban edge, is used for infill development.</p> <p>It can take place by means of:</p> <ul style="list-style-type: none"> • Development of vacant erven that are already surveyed • “Greenfields” development, being the natural extension of town. 	As indicated on Micro Development Concept Plan	Infill development creates more compact environments that improve access to work, services. It also provides for more efficient use of infrastructure
Mixed use	The mixing of different land uses within a specific location or precinct. Mixed uses can comprise a combination of residential (mostly higher density residential), businesses, offices and community facilities. Mixed uses can either comprise different land uses on different erven but within the same locality or mixed use in the same building	As indicated on Micro Development Concept Plan	Nodes are important urban elements which can be used to restructure areas where activity is disperse and where there is no sense of place legibility or special focus.

36.2 Balfour

Balfour/Siyathemba is regarded as the main node of Dipaleseng and is characterised by the development of municipal offices, retail facilities, industrial and agri-processing uses, and a taxi rank. There are other mixed land use developments and vacant land that are suitable for higher residential densities.

36.2.1 Structuring elements

The following structuring elements play a significant role in the existing and future development of Balfour (Refer to Plan 38: Balfour & Siyathemba Structuring Elements):

Table 44: Balfour Structuring Elements

Movement Infrastructure	Balfour developed around the intersection between R51 to Grootvlei and R23 to Greylingstad in the east and Grootvlei in the south. The railway from Gauteng passing through the town to Greylingstad in the east divides the town between Balfour (CBD) and Siyathemba Township. Main roads through Balfour provide good access and visual exposure to adjacent land uses.
Physical natural elements	Balfour has a lot of available land for extension in any direction due to the relatively flat landscape. The town is not surrounded by mountains, hills, perennial rivers etc. There are tributaries passing through the town.
Built-up area	The built-up area of Balfour will largely dictate the location of future land uses. Business uses tend to locate around the R51 and Steward Street linking with the R23 road. Higher density subsidised housing occurs to the north-east, with lower residential densities to the south. Industrial developments are located to the west and south of the town. Use of vacant land will largely be supported to avoid urban sprawl and to better deliver services.

36.2.2 Mixed use

The focus of this area must be to enhance and protect economic development within a within the urban edge.

Promote the expansion and development of new business investments and the protection and enhancement of existing investment by creating an enabling environment.

- Support and promote mix use developments within the mix use area including business, offices, community facilities and social services
- Support and promote residential densification.
- Support facilities that attract expenditure from the increasing traffic flow on the main roads.
- Limit informal trade to predefined and allocated areas
- Improve accessibility and functionality of the mixed use precinct through the provision of proper road linkages and pedestrian friendly areas.

Within mixed use areas, a mixture of land uses are promoted namely; commercial, administration, industrial and residential. The proposed uses need to complement each other comply with environmental requirements.

The Central Business District (Balfour) developed around the R51 (Jubilee Street) and Steward Street intersection. It is suggested to provide facilities that attract expenditure from the increasing traffic flow on these streets. The grid road network of CDB provides good access to the business strip that developed along the main access roads. This presents an ideal opportunity to confine mixed land uses, improve legibility and initiate urban renewal strategies.

36.2.3 Residential development

Densification of existing low-density residential areas should be prioritised through subdivisions and development of vacant properties. Higher densities must be allowed in proximity to schools and in the mixed use precinct.

Residential development is proposed to the west and north-east of Balfour in phases (A – D) and includes:

- The development of existing residential areas through infill and densification.
- The extension of existing residential areas.
- Formalisation of informal settlements in Siyathemba

36.2.4 Industrial development

The industrial component of Balfour is confined to the west and southern parts of town.

- Further industrial development should be supported in close proximity to the existing industrial uses.
- Future industrial development is proposed to the south of town, along the R23 road.

Support and promote all industrial enterprises.

36.2.5 Open space

The tributaries that run through the town along the railway line and its associated riparian vegetation are environmentally sensitive with conservation value. These tributaries must be protected from development through proper flood line calculations.

36.2.6 Sports and recreation

It is proposed that the existing facilities be upgraded and developed rather than to identify new areas for recreational purposes. The location of these facilities is easily accessed by all communities.

36.3 Tourism and accommodation

There is a need to improve the tourism package offered by the town to cater for a variety of tourists. To enhance the existing accommodation facilities within the town, proper marketing and branding should be encouraged. The improvement of the CBD of Balfour through precinct planning and urban design would ensure that the town's image is aesthetically pleasing.

Currently, there is a proposed establishment of a tourism and accommodation facility to the north of the Bluesky industrial area which will include a conference center.

36.3.1 Urban agriculture

To the south of the R23 and Balfour Extension 3, the land is earmarked for urban agriculture, whereby agriculture is the predominant land. It is proposed that environmental standards should be promoted to ensure

sustainable use of the land. The practice of urban agriculture should be compatible with other land uses and should minimise problems of competing land and land conflicts.

36.3.2 Integration

The railway line traversing through the town provides a physical barrier between Balfour the main centre where all the socio-economic activities occur and Siyathemba Township which is mainly a residential area with limited socio-economic opportunities. In an attempt to break this barrier and provide more socio-economic opportunities to the residents of Siyathemba, the municipality should consider the following:

- fostering the mixed use of social facilities, amenities, commercial, office and higher density residential land uses within CBD to bring social cohesion.
- improve access to public transport linking both areas and opportunities for employment within the CBD.
- new residential developments should comply with Breaking New Ground (BNG) policy of 2004 whose aim is to promote the achievement of non-racial integrated society through the development of sustainable human settlements and quality housing.
- within Siyathemba, an Urban Development Framework Plan should be established to provide an integrated urban design vision for the development of Siyathemba. This will stimulate socio-economic development for the locals.

36.4 Greylingstad & Nthorwane

Greylingstad is situated to the east of Balfour along the R23 road leading to Standerton. The town is regarded as a secondary node due to its size and the level of diversification of the local economy is limited, compared to Balfour which is the primary node. The town is characterised by the development of retail, transportation terminus, agricultural facilities, residential development and the closed OTK silo which is a prominent feature of the town.

36.4.1 Structuring elements

The following structuring elements play a significant role in the existing and future development of Greylingstad: **(Refer to Plan 40: Greylingstad & Nthorwane Structuring Elements)**

Table 45: Greylingstad Structuring Elements

Movement Infrastructure	<p>Greylingstad developed around the convergence of the R23 to Standerton and the road links to Villiers to the south, Devon to north and R547 to the north-east.</p> <p>The railway line from Gauteng to Standerton - Volksrust, running parallel to the R23 road, forms a strong structuring element in the town.</p>
Physical natural elements	<p>There is no perennial river passing through Greylingstad other than minor tributaries linking to the Grootspuit River and Waterval River. The Greylingstad Mountains in the</p>

	north of the town prevent development to that direction.
Built-up area	The town is characterized by the development of retail, taxi rank, agriculture facilities and residential area. There is an increase in the number of informal settlements due the slow delivery of housing.

36.4.2 Mixed use

The focus of this area must be to enhance and protect economic development within the demarcated area.

- Confine the development of new business investments within the mixed use precinct.
- Support and promote mix use developments including business, community facilities and social services.
- Support residential densification.
- Support facilities that attract expenditure from the increasing traffic flow on the main roads i.e. tourist and motor related facilities.
- Improve accessibility and functionality of the precinct through the provision of proper road linkages and pedestrian friendly areas.

Within mixed use areas, a mixture of land uses are promoted namely; commercial, administration, industrial and residential. The proposed uses need to complement each other comply with environmental requirements.

36.4.3 Residential development

Densification of existing low-density residential areas should be prioritised through subdivisions and development of vacant properties. Higher densities must be allowed in proximity to schools and in the mixed use precinct.

36.4.4 Open space

The tributaries, flood plain areas running from west to east and the undevelopable mountainous areas to the north must form part of a continuous open space system, which forms part of the broader municipal open space system.

These areas are considered environmentally sensitive with conservation value.

36.4.5 Sports and recreation

It is proposed that the existing facilities be upgraded for recreational purposes. Informal sports field should be developed and provided with relevant infrastructure. The location of these facilities is easily accessed by all communities.

36.4.6 Tourism and accommodation

The rich cultural heritage offered by the Greylingstad Mountain in the form the Anglo Boer War Battlefields and the historic graves of the Scottish regime should be promoted as a tourist attraction site. The possibilities for establishing guest houses/ bed & breakfast facilities should be considered as a viable initiative for the town to bolster tourism development.

36.4.7 Industrial development

New industrial developments should be supported in close proximity to the OTK silo.

36.5 Grootvlei Extension 1, 2 & Dasville

36.5.1 Structuring elements

The following structuring elements play a significant role in the existing and future development of Grootvlei Extension 1, 2 & Dasville. **(Refer to Plan 42: Grootvlei & Dasville Structuring Elements):**

Table 46: Grootvlei Extension 1 & 2, Dasville Structuring Elements

Movement Infrastructure	The railway line and the main R51 from the N3 to Balfour provides a barrier for further development towards the east. The road from the R51 leading to Dasville at the intersection with the N3 divides Grootvlei Extension 1 into clear segments. The northern segment is the higher density subsidised housing and the low density in the southern part. Business uses tend to be located at the intersection of N3 in Dasville with the road linking with the R51.
Physical natural elements	A minor tributary in the north of the residential area prevents further development in the north direction. Development on the floodplains should be investigated for the risk of flooding.
Built-up area	Grootvlei Extension 1 is mainly residential and does not have a highly developed business area except for a few retail outlets that provide basic commodities. Dasville is regarded as the business area for Grootvlei Extension 1. Industrial type uses and sports fields are located to the north of the subsidized housing area and to the west of the railway line.

36.5.2 Mixed use

The focus of this area must be to enhance and protect economic development.

- Confine the development of new business investments within the mixed use precinct.
- Support and promote mix use developments including business, community facilities and social services.
- Support residential densification.
- Support facilities that attract expenditure from the traffic flow on the main roads i.e. tourist and motor related facilities.
- Improve accessibility and functionality of the precinct through proper road linkages.

Within mixed use areas, a mixture of land uses are promoted namely; commercial, administration, industrial and residential. The proposed uses need to complement each other comply with environmental requirements.

36.5.3 Residential development

The re-commissioning of the Eskom power station in Grootvlei Extension 2 has brought about the need for residential development to accommodate employees and potential investors. Based on the population projections, the proposed residential areas in the Grootvlei Extension 1 should provide sufficient space for residential development for next few years.

The total area proposed for residential extension measures approximately 72 hectares in extent.

36.5.4 Open space

Minor tributaries in Grootvlei Extension 1, 2 and Dasville form part of a continuous open space system that forms part of the broader municipal open space system. The tributaries in Grootvlei are further linked to smaller dams and the Grootvlei Dam situated to the east of Extension 1 These areas are considered environmentally sensitive with conservation value.

36.5.5 Sports and recreation

Sufficient sports and recreation facilities exist in Grootvlei. It is proposed that the existing facilities be improved and developed rather than to identify new areas for such purposes.

36.5.6 Industrial development

Lighter industrial developments and service industries should be located north and east of the informal settlement between the road leading to the power station and the open space. Heavier industrial uses should be located in proximity to the Eskom power station in order to minimise the possible negative impacts.

37 Intervention Areas

Intervention areas are seen as those areas that require internal or external assistance to prevent further deterioration or to maintain or to improve the current state of affairs.

Dipaleseng Municipality needs to focus on:

- Ensuring that all its communities have access to at least the minimum levels of service. The Municipality should focus on upgrading the poor state of the roads, water quality, sanitation, housing and other service delivery issues.
- Economic development through supporting extensive commercial farming activities, dairy and game farming and to facilitate and concentrate subsistence farming activities within certain rural areas.
- Mining development, since the municipality has large gold and coal reserves that can still be mined for the next medium to long term if managed properly. However, caution must be taken that mining has serious land use and environmental consequences that could impact on the municipality during and after the mining operation.
- Eco-tourism and recreational opportunities that can be maximized strategically by linking natural resources such rivers i.e. the Vaal River, Suikerbosrand and Waterval River, dams, mountains, hills to cultural and historical places within the municipality.
- Optimising the strategic location of the municipality in close proximity to Gauteng Province through improved linkages by road and rail network. The N3, R51, R23 and the railway line are the key elements in the Municipality. These roads and railway line form the backbone of linkages to the adjoining municipalities and major roads. The maintenance of these transport networks will have a positive spin off for the population of Dipaleseng in terms of better access to job opportunities than those with poor transport networks.
- Conserving its natural resources; conserving the sensitive ecological features as demarcated in the Mpumalanga Biodiversity Conservation Plan (both aquatic and terrestrial) in order to preserve the integrity of the biophysical environment.

37.1 Priority investment areas

As determined in the institutional analysis, the priority investment areas are the settlements in Dipaleseng, as these are the areas where the people are concentrated.

The N3 and the Vaal River provide a potential for both agricultural and tourism development. While this may suggest more investment outside of government, Dipaleseng should look to providing a better business-enabling environment to promote such investments.

37.2 Investment strategies

The following 4 investment strategies are identified:

Strategy 1: Investment in infrastructure to provide a basic level of infrastructure services

This investment entails the provision of a basic level of infrastructure services in an area, independent of the growth potential of the area or town:

- The provision of a basic level of services in all towns.
- To develop basic services in rural areas (farms).
- Currently, the Department of Human Settlements is in the process of completing 71 houses that were unfinished in previous projects. In April 2010, a project of constructing 100 houses began to address the housing backlogs that the Municipality is faced with.
- According to the Dipaleseng Housing Chapter (2009), the biggest need for government subsidised housing is in the Grootvlei/Thubelisha Informal Settlement (800), followed by Siyathemba Informal Settlement (divided into four sections) (700) and Nthorwane/Nkanini Informal Settlements (500).
- Community facilities such as the construction of a new Community Hall in Greylingstad/Nthorwane to assist with community events and meetings.
- Roads between the towns need to be upgraded to improve accessibility to the towns.

Table 47: Investment Strategy 1 link to Institutional Framework

Policy/Legislation//Strategy	Description
Government's 12 Priority Outcomes 2010-2014	<p>Outcome 2: A long and healthy life for all South Africans. This would include the provision of decent sanitation, water, electricity, housing, primary health care etc.</p> <p>Outcome 3: All people in South Africa are and feel safe. This includes the provision of policing services at strategic locations and implementing street/mast lighting to communities to reduce crime.</p>
Gert Sibande District SDF 2009	Development Principle 8: To ensure that communities have access to at least the minimum levels of service as enshrined in the Constitution.
The NATMAP 2050	The NATMAP project goal is to develop a dynamic, long term and sustainable land use/multi-modal transportation systems frameworks. The plans aims to streamline transport planning vertically (among the authorities) and horizontally (across all modes).
National Spatial Development Framework, 2006	The NSDP advocates the provision of basic services to all citizens wherever they reside.

Policy/Legislation//Strategy	Description
Municipal Structures Act 1998	The Act emphasises Municipalities should exercise powers assigned to it to provide amongst others Bulk supply of water, sewerage, electricity and solid waste disposal. Hence investment in basic infrastructure would be fulfilling the requirements of this Act.
Accelerated and Shared Growth Initiative for South Africa (AsgiSA)	In the strategy, the following is proposed; investment in infrastructure, including provincial and local roads, bulk infrastructure and water supply networks, energy distribution, housing, schools, clinics etc are

Strategy 2: Investment in human capital to promote economic growth

This investment refers to the development of human and social capital in order to promote and grow the economic potential of the individual.

This strategy needs to be aligned with the capacity building and training initiatives identified for the CRDP focus areas. Furthermore, the following initiatives have been identified:

- Improve existing library facilities and provide computer and internet access to ensure that communities are able to expand their knowledge. Revamping of libraries in Nthorwane and Grootvlei is currently being implemented.
- Empowering local Small, Micro and Medium Entrepreneurs (SMME's) by training them on government's procurement processes in order to ensure that they take advantage of business opportunities offered by government and the Municipality.

Table 48: Investment Strategy 2 link to Institutional Framework

Policy/Legislation//Strategy	Description
Government's 12 Priority Outcomes 2010-2014	<p>Outcome 1: Improved quality of basic education; invest in the construction and upgrade of schools and colleges.</p> <p>Outcome 5: A skilled and capable workforce to support an inclusive economic growth.</p> <p>Outcome 7: A vibrant, equitable and sustainable rural communities with food security for all.</p>
Gert Sibande District SDF 2009	Development Principle 8: To establish a functional hierarchy of towns and settlements in the District, and to ensure equitable access to social infrastructure and the promotion of local economic development by way of Thusong Centres (Multi Purpose Centres (MPCCs).
Accelerated and Shared Growth Initiative for South Africa (AsgiSA)	In the strategy skills development is identified as intervention that can contribute to governments social objectives.

Strategy 3: Investment in human capital to promote general welfare

This investment refers to the support given to vulnerable groups and communities, as well as the development of basic life skills to:

- Improve primary health care in all towns.
- Ensure food security, especially for the elderly and infants – promote the establishment of community gardens in all towns.
- Development of life skills in the most important areas.
- Increase access to government services throughout the municipal area through Thusong Service Centres in all towns.
- Establishment of a Youth Council to advocate for youth development issues and how the youth can participate meaningfully and effectively in the economic development of the Municipality.

Table 49: Investment Strategy 3 link to Institutional Framework

Policy/Legislation//Strategy	Description
Government's 12 Priority Outcomes 2010-2014	Outcome 5: A skilled and capable workforce to support an inclusive economic growth. Outcome 8: Sustainable human settlements and improved quality of household life. This includes ensuring that spatial planning achieves the principles of sustainable development.
Accelerated and Shared Growth Initiative for South Africa (AsgiSA)	In the strategy, investment in social infrastructure such as clinics, schools, government service centres, police stations is promoted.
Gert Sibande District SDF 2009	Development Principle 8: To establish a functional hierarchy of towns and settlements in the District, and to ensure equitable access to social infrastructure and the promotion of local economic development by way of Thusong Centres (Multi Purpose Centres (MPCCs).
National Spatial Development Framework, 2006	In areas of low or no economic potential, the NSDP promotes investment on human capital development (education, training, social welfare, sound rural development planning, aggressive land and agrarian reform, expansion of agricultural extension services etc).

Strategy 4: Investment in Environmental Conservation

This investment refers to any investment that provides direct financial benefits for conservation of biological diversity and cultural diversity through ecosystem protection:

- Investing in educating the youth and the public on the values of environmental conservation.
- Implement measures of containing or preventing the movement of pollutants or the causing of degradation.
- Eliminate any source of pollution or degradation.
- Remedy the effects of pollution or degradation.
- Act against and control any activity or process causing the pollution or degradation.
- Develop a formal waste management plan to limit pollution.
- Construction, upgrading and rehabilitation of landfills site, waste disposal sites, incinerators, etc.

Table 50: Investment Strategy 4 link to Institutional Framework

Policy/Legislation//Strategy	Description
Government's 12 Priority Outcomes 2010-2014	Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced
Draft Environmental Management Framework for Dipaleseng 2010	The Environmental Management Framework was developed to support decision-making that will ensure the sustainable development and management of the natural resource of the Municipality.
Gert Sibande District SDF 2009	Development Principle 1: To actively protect, enhance and manage the natural environmental resources of the District.
Mpumalanga Provincial Growth and Development Framework 2008	One of the strategic thrusts identified include sustainable environmental development. The impact of mining, electricity generation, and agricultural activities should be environmentally sustainable.
The NATMAP 2050: Phase 1 - Land Use Framework	One of the issues identified in the framework is the impact of roads infrastructure on the environment and the impact of mining and electricity generation on the environment.
White Paper on Spatial Planning and Land Use Management 2001	One of the principles of policy is Sustainability; the principle requires the sustainable management and use of resources making up the natural and built environment.
National Environmental Management Act, 1998	The Act, ensure that all spatial plans on land should take into account the dynamic system of plant, animal and micro-organism communities and their non-living environment.

37.3 Strategic Areas for Thusong Service Centres

Definition

*Thusong Service Centres are **one-stop, integrated community development centres**, with community participation and services relevant to people's needs. They aim to empower the poor and disadvantaged through access to information, services and resources from government, non-governmental organisations (NGOs), parastatal, business, etc. enabling them to engage in government programmes for the improvement of their lives (Source: <http://www.thusong.gov.za/about/what/index.htm>).*

Figure 16: The Six-Block Service Model



The infrastructure is influenced by the services offered, population size and distances between access points in an area. This results in the establishment of **hub centres** which offer permanent services including, government, economic, community and private sector services, education and skills development, telecommunication, communication and information. **Satellite centres and mobiles** which are extensions of the hub centre offer some of the above services according to demand.

It is suggested that a hub service centre be provided in Balfour and satellite service centres be established in the towns of Greylingstad and Grootvlei. These centres should be easily accessible to communities, preferably on a main thoroughfare in close proximity to public transport stops.

37.4 Policy intervention areas

Generally, a policy is required for an area where the potential exist that undesirable circumstance may be occur. A policy is developed to provide clear guidelines as to what is desirable and intended for a certain area/s.

The following areas in Dipaleseng Municipality may require policy intervention:

- Establishment of a mineral and mining policy to look into issues of environmental management, housing needs, health and safety, etc., and the responsibilities of the mines to the Municipality.
- A policy for road transporting freight to look into issues of the effects of coal haulage within the Municipality and to look into approaches to coordinate the maintaining and upgrading of the roads between all the freight industry stakeholders.
- A policy for the subdivision of farm portions to prevent the creation of uneconomical farming units.
- A densification policy indicating the type of residential densities (units/ha) applicable to certain urban areas.
- Land use management guidelines in the ecological corridor traversing the Municipality from north to south passing through Greylingstad.
- Biodiversity priority areas and environmentally sensitive areas require special intervention in order to maintain the environmental integrity of Dipaleseng
- A policy for the development of guest houses and guest farms.

38 Synopsis of phase 3

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPE NT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
							SPATIAL OPPORTUNITIES	SPATIAL LIMITATIONS
1. SPATIAL OBJECTIVE: SPATIAL OBJECTIVE: EXPLOIT ECONOMIC OPPORTUNITIES								
1	Support sustainable mining exploration	Mining Areas	Mining development	Compilation of an implementat ion plan to create mining enabling environment	Macro Strategic Developm ent Concept Map	Job creation, local economic development,	sustainable mining within demarcated zones, extraction of untapped mineral resources to strengthen the local economy	Threat to local biodiversity and high potential agricultural land
2	Promote the beneficiation of mining products	Mining Areas	value adding	Beneficiation of coal	Grootvlei	Job creation, local economic development,	resource sharing, proximity to primary raw material, proximity to tertiary sector, coal transported to Grootvlei power station	Degradation of roads by heavy vehicles
3	Development of Vaal River eco-tourism corridor	Agri/Eco tourism zones	Tourism development	Developmen t of a Tourism Strategy	Macro Strategic Developm ent Concept Map	Tourism, Job creation, local economic development,	Tourism spans different economic sectors therefore it contributes to a large spectrum of economic development in Dipaleseng, environmental protection of corridor	A prerequisite for the success of tourism in the area is improvement of the road linkages between the towns and to towns strategically located near or on a main road or national road.
	Agri-tourism development							
4	Optimal use of high potential agricultural land	High Potential Agricultural Areas	agriculture development/ economic development	Access suitable land for irrigation farming and beneficiation of	Macro Strategic Developm ent Concept	Job creation, empowerment of emerging farmers	Arable land close to towns, sustainable farming within demarcated areas	Purchasing private land is costly

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
				agricultural products	Map			
5	Development of supply chains for primary agricultural products to increase efficiencies to main markets	Agricultural Precinct and Nodal Development	agriculture development/ economic development	Access agricultural support programmes for the development of arable land	Macro Strategic Development Concept Map			Shortage of Municipal owned land.
6	Promote the beneficiation of agricultural products	Agricultural Precinct and Nodal Development	value adding	Create feedlots at Balfour	Balfour Micro Strategic Development Plan	Job creation, empowerment of emerging farmers	Development and enhance the local economic base of the municipality, sustainable farming within demarcated areas	high costs to set-up, lack of expert knowledge, land access limited.
7		Agricultural Precinct and Nodal Development	value adding	Beneficiation of agricultural products	Macro Strategic Development Concept Map			lack of expert knowledge, lack of markets, lack of sufficient services.
8	Procurement of land for usage by emerging farmers (land reform)	Agricultural Precinct and Nodal Development	land reform Programme	Implement land reform Programme	Macro Strategic Development Concept Map	Job creation,	Development and enhance the local economic base of the municipality, farming close to water resources, farming closing towns.	high costs of obtaining private owned land.
9	LED Programmes	Nodal Development	LED Programme	Waste Management Project-Burnstone	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery	lack of funds.

RURAL SPATIAL DEVELOPMENT FRAMEWORK/LAND DEVELOPMENT PLAN

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
10		Nodal Development	Social Infrastructure	Establish Local Radio Station	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery	logistical limitations
11		Nodal Development	LED Programme	Establish Brick Plant	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery, close to markets, close to raw material	lack of funds to setup infrastructure
12		Nodal Development	LED Programme	Car wash facility	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery, close to markets, close to traffic	logistical limitations, environmental degradation due to use of detergents.
13		Nodal Development	LED Programme	Sewing and Mending Projects	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and close markets	none
14		Nodal Development	Youth Development Programmes	Youth Development Programmes	Balfour	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery	none
15		Nodal Development	SMME/BEE Development Programmes	SMME/BEE Development Programmes	Macro Strategic Development Concept Map	Job creation, local economic development,	location close to settlements therefore efficiency and effective delivery	human capacity to facilitate processes, lack of funds

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPME NT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
							SPATIAL OPPORTUNITIES	SPATIAL LIMITATIONS
2. SPATIAL OBJECTIVE: CREATE SUSTAINABLE URBAN & RURAL SETTLEMENTS								
16		Nodal Development	Urban renewal	Urban regeneration policy for Balfour as primary activity node.	Balfour	Attract investment, tourism development, aesthetics, increase tax base, legibility	mixed land use, integrated settlements, perceived shorter distances, clustering of services in close proximity to each other, safety.	Property speculation
17		Nodal Development	Social Infrastructure	Thusong service centres.	Macro Strategic Developm ent Concept Map	Access to services, improved quality of life	location close to settlements therefore efficiency and effective delivery	none
18		Nodal Development	Urban renewal	Draft detailed Urban Design Framework for nodes	Macro Strategic Developm ent Concept Map	Attract investment, tourism development, aesthetics, increase tax base, legibility	strategic spatial planning tool	none
19	Strengthen mobility and economic links	Corridor Development	Roads upgrade	Upgrade of the R23 road between Greylingstad and Balfour	Macro Strategic Developm ent Concept Map	Enhanced regional accessibility through improved road links	Improving access to Greylingstad	Length of road requiring paving is long and costly.

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
20		Corridor Development	Roads upgrade	Upgrade of the R51 road between Balfour and Grootvlei	Macro Strategic Development Concept Map	Enhanced regional accessibility through improved road links	Improving access to Grootvlei	Length of road requiring paving is long and costly.
21		Corridor Development	Roads upgrade	Maintain R23 transport corridor to the east of Greylingstad and to the north of Balfour	Macro Strategic Development Concept Map	Enhanced regional accessibility through improved road links	Improve access to Dipaleseng Municipality. Enhanced regional accessibility will improve competitiveness of the area and link economic opportunities to transportation corridors.	Length of road requiring paving is long and costly.
22		Corridor Development	Roads upgrade	Upgrade gravel access roads to schools to enable public transport provision	Macro Strategic Development Concept Map	Enhanced regional accessibility through improved road links		Length of road requiring paving is long and costly.
23		Corridor Development	Roads upgrade	Maintain R51-R548 main road south of Grootvlei (to Vaal River) and north of Balfour (to Devon, Secunda)	Macro Strategic Development Concept Map	Enhanced regional accessibility through improved road links	Densify existing settlements to optimise engineering services and viability of public transport systems	None
24	Develop residential & employment	Urban edges/densification/Integration/Nodal	Engineering infrastructure	Develop services master plans	Macro Strategic Development	Attract investment, tourism development, aesthetics, increase	Eradicate the dysfunctional spatial settlement patterns	

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
25	opportunities close to bulk engineering infrastructure	Development	Engineering infrastructure	(roads, water, sewer, electricity) for Balfour, Greylingstad and Grootvlei	ent Concept Map	tax base, legibility	Greylingstad & Balfour have numerous vacant stands	
			Engineering infrastructure				Densify existing settlements to optimise engineering services and viability of public transport systems	Informal settlements at Balfour
		Urban edges/densification/Integration/Nodal Development	Housing development	Subsidised housing project Balfour 3000 houses	Balfour	Improved quality of life	Densify existing settlements to optimise engineering services and viability of public transport systems	High costs of housing projects, Lack of municipal land
			Housing development	Subsidised housing project Greylingstad 1000 houses	Greylingstad	Improved quality of life	Densify existing settlements to optimise engineering services and viability of public transport systems	High costs of housing projects, Lack of municipal land
26			Housing development	Subsidised housing project Grootvlei 1000 houses	Grootvlei	Improved quality of life	Strengthen Balfour as the main activity node.	High costs of housing projects, Lack of municipal land
27								
28	Eradicate basic services backlogs	Urban edges/densification/Integration/Nodal Development	Social Infrastructure	Improve and upgrade sports facilities.	Macro Strategic Development Concept Map	Improved quality of life	Adhere to the demand in social infrastructure shortfall.	Poor maintenance
29			Social Infrastructure	Development of day-care centres	Macro Strategic Development	Improved quality of life	Adhere to the demand in social infrastructure shortfall.	none

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
					Concept Map			
30		Urban edges/densification/Integration/Nodal Development	Engineering infrastructure	Rural Water Supply (15 boreholes)	Macro Strategic Development Concept Map	Access to quality water	effective and efficient delivery of services to settlements	High costs
31			Engineering infrastructure	New WTP for Greylingstad	Greylingstad	Access to quality water	effective and efficient delivery of services to settlements	High costs
32			Engineering infrastructure	Provision of VIP's	Macro Strategic Development Concept Map	Access to quality sanitation	effective and efficient delivery of services to settlements	High costs
33			Engineering infrastructure	Provision of Sewer Network	Grootvlei and Greylingstad	Access to quality sanitation	effective and efficient delivery of services to settlements	High costs
34			Engineering infrastructure	Extension of Graveyard in Balfour	Balfour	health & environmental protection	close proximity to settlements	Environmental considerations
35		Urban edges/densification/Integration/Nodal Development	Engineering infrastructure	Develop Storm Water Master Plan	Macro Strategic Development Concept Map	Coordinated infrastructure planning,	effective and efficient delivery of services to settlements	none

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
36		Urban edges/densification/Integration/Nodal Development	Engineering infrastructure	Upgrade Water Network	Balfour Ward 3	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
37			Engineering infrastructure	Sewer Reticulation Phase 3	Balfour Ward 3	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
38			Engineering infrastructure	Sewer Reticulation & Maintenance	Macro Strategic Development Concept Map	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
39		Urban edges/densification/Integration/Nodal Development	Engineering infrastructure	Sewer Reticulation 700 H/H Ext. 1	Greylingstad Ward 06	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
40			Engineering infrastructure	Sewer Reticulation Ext. 1	Nthorwane Ward 05	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
41			Engineering infrastructure	Extend Sewer Plant Capacity	Balfour Ward 03	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs
42		Urban edges/densification/Integration/Nodal Development	Engineering infrastructure	extend street lighting to major routes	Balfour Ward 03	Improved quality of life, service delivery	effective and efficient delivery of services to settlements	High costs

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPE NT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
43			Engineering infrastructure	Massive Electrification of Households	Macro Strategic Developm ent Concept Map	eradicate backlogs, service delivery, quality of time	effective and efficient delivery of services to settlements, direction of settlement growth patterns	High costs
44			Engineering infrastructure	Provision of High Mast and Street Lights	Macro Strategic Developm ent Concept Map	eradicate backlogs, service delivery, quality of time	effective and efficient delivery of services to settlements	High costs
45			Urban edges/densification/Integ ration/Nodal Development	Engineering infrastructure	Electricity Reticulation 700 H/H Ext. 1	Nthorwane Ward 5	eradicate backlogs, service delivery, quality of time	effective and efficient delivery of services to settlements
46	Engineering infrastructure	Upgrade Electrical Network		Macro Strategic Developm ent Concept Map	eradicate backlogs, service delivery, quality of time	effective and efficient delivery of services to settlements	High costs	
47	Provision of Municipal Facilities	Social Infrastructure		Upgrade Phase 2 Sports Complex	Macro Strategic Developm ent Concept Map	recreational benefits, health, social cohesion, quality of life	Adhere to the demand in social infrastructure shortfall.	Maintenance costs
48		Urban edges/densification/Integ ration/Nodal Development	Land development	Development Planning Capacity	Macro Strategic Developm ent Concept Map	redistribution of resources, economic benefits, housing delivery	densification	Lack of capacity

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
49	Land Development Planning		Land development	Re-survey	Macro Strategic Development Concept Map	redistribution of resources, economic benefits, housing delivery	compact settlement	Lack of capacity
50	Waste Management		Engineering infrastructure	Identify and Develop Waste Disposal Site	Macro Strategic Development Concept Map	health & sanitation, sustainable development	effective and efficient delivery of services to settlements	High costs
51	Sports, Recreation and Arts and Culture		Social Infrastructure	Identify/ Develop Regional Multi Purpose recreational Centre	Macro Strategic Development Concept Map	recreational benefits, health, social cohesion, quality of life	clustering of services, balance between supply and demand of social infrastructure	Lack of municipal land
52	HIV/AIDS		Social Infrastructure	Multiple purpose Centre for Hospice, Orphanage home and old age home	Macro Strategic Development Concept Map	recreational benefits, health, social cohesion, quality of life	proximity to households, reduced travel time, accessibility	none

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
							SPATIAL OPPORTUNITIES	SPATIAL LIMITATIONS
3. SPATIAL OBJECTIVE: PROTECT THE NATURAL AND BUILT ENVIRONMENT								
53	Protect ecological corridors and zones	Conservation Zone/Environmental Sensitive	Environmental Conservation	Formulate land use management guidelines for Conservation zone	Macro Strategic Development Concept Map	environmental sustainability	Untapped eco-tourism potential	none
54	Protect areas with heritage value	Conservation Zone/Environmental Sensitive	Heritage Conservation	Establish the Anglo Boer War fields and historic graves as tourist destinations	Macro Strategic Development Concept Map	heritage protection, environmental sustainability, edu-eco tourism	Proximity to Greylingstad	Lack of tourism marketing strategy, lack of proclamation of areas as provincial heritage sites by SAHARA
55	Protect high potential agricultural land	Agriculture zone/Conservation Zone/Environmental Sensitive	Environmental Conservation	Formulate land use management guidelines for high value agricultural land	Macro Strategic Development Concept Map	economic development, job creation, environmental sustainability	Irrigation farming and arable agriculture	none
56	Implement effective land use control & management with primary focus on	Conservation Zone/Environmental Sensitive	Environmental Conservation	Development of a "green policy" for municipality on use of renewable energy,	Macro Strategic Development Concept Map	economic development, job creation, environmental sustainability	Untapped eco-tourism potential	none

DIPALESENG MUNICIPALITY PHASE 3 SUMMARY TABLE - DESIRED SPATIAL GOAL AND DEVELOPMENT PATTERN								
No	SPATIAL STRATEGIES	STRATEGIC DEVELOPMENT CONCEPT LINK	PROGRAM	PROJECTS	LOCALITY	PROJECT BENEFITS	PROJECT ADDRESSING:	
							SPATIAL OPPORTUNITIES	SPATIAL LIMITATIONS
3. SPATIAL OBJECTIVE: PROTECT THE NATURAL AND BUILT ENVIRONMENT								
	environmental sustainability			recycling and water saving measures				
57	Development of eco-tourism, eco-adventure, water sport recreational resort along the Vaal River	Tourism Areas/ Conservation Zone/Environmental Sensitive	Environmental Conservation	Resort Development and tourism infrastructure development	Macro Strategic Development Concept Map	heritage protection, environmental sustainability, edu-eco tourism	Untapped eco-tourism potential	high costs, logistical requirements complex
58	Environmental Awareness Programme	Conservation Zone/Environmental Sensitive	Environmental Awareness Programme	Formulate Environmental Awareness Programme to educate communities on environmental conservation	Macro Strategic Development Concept Map	edu-tourism, environmental sustainability	environmental conservation	lack of capacity

CHAPTER 5



39 Phase 4

As demonstrated in previous sections, LED in the rural context includes diversifying the economic base, building backward and forward linkages, ensuring basic standards of health and safety through provision of basic infrastructure and services, maximising job creation and building on the inherent potential of local areas. For rural municipal areas, the path to economic development is usually encumbered by the need to use limited budgets to address the fulfillment of basic service needs first. While legislation also protects South Africa's citizens, making it their right to have access to basic amenities and services, the distribution of these is bound to be imperfect. Thus, the legislation points to citizens having a choice to move to a region where such services are more accessible. By contrast, the policies also point to the need to prevent urban migration and depopulation of rural areas, preferring to rather find mechanisms that will make these areas more attractive for residents to stay, both from an economic standpoint and in terms of their quality of life.

At a minimum, the region must provide for the necessary basic services, amenities, educational and social (health and safety) resources that can form the basis for a good standard of life for its citizens. In the 2009/2010 IDP, the key interventions that are associated with this are:

- The economy of Dipaleseng is not well-diversified, and is predominantly dependent on its extensive land which is dominated by wide spread commercial agriculture, mainly maize and livestock farming;
- Increasing unemployment places additional strain on municipal service delivery as more people cannot afford to pay for these services;
- Shortage of land for housing and other social amenities;
- Lack of libraries;
- Unfenced cemeteries;
- Provision of potable water in the rural/farmlands within the municipality;
- Poor road conditions; and
- Dipaleseng has a total housing backlog of 6,000 houses, with Siyathemba Ext 1 – 7 at 3,000, Grootvlei 1,000, Greylingstad/Nthorwane 1,000 and rural/farmland 1,000 (Dipaleseng Municipality IDP 2009/2010).

In Phase 3, the report considered the desired spatial pattern of the municipality, based on its spatial goals and objectives to address some of these challenges. It also considered the types of strategies that may be most pertinent to finding solutions for the municipality's goals and suggested a number of different approaches. This included the development of nodes and corridors, which could be enhanced through better-defined tourism, mining and agricultural strategies that can bolster economic development in the towns. In addition, strategies considered ways to ensure better service delivery and coordinated planning methods to ensure that the towns are cohesive and inclusive and operate to the benefit of the whole population.

In the sections that follow, this Chapter will consider how best to implement the spatial plan, strategies and projects, how to package and market the areas and towns, and the ways in which the impact of the interventions can be measured and evaluated to ensure that the desired outcomes are achieved.

40 Capital Expenditure Framework

The Capital Expenditure Framework (**See Annexure A: Capital Expenditure Framework**) is a tool to be used by the municipality to realise all the ideas as conceptualised in the previous phases. A project priority matrix is included to aid in the prioritisation of the projects. (**See Annexure B: Project Prioritisation Matrix**).

The main purpose of this framework is to:

- Identify projects transpiring from the spatial objectives and strategies;
- To allocate a cost and timing to identified projects; and
- To identify a source of funding and implementation agent.

41 Implementation policies

The following policies will assure the effective implementation of the Spatial Development Framework and it is fundamental that:

- The Comprehensive Rural Development Program (CRDP) align its strategies to these; and
- A Land Use Management System incorporates these guidelines to ensure effective land use management in Dipaleseng.

41.1 Nodal policy

Nodes are locations of concentrated activity often associated with the presence of employment opportunities, residential development and supporting social infrastructure located on or adjacent to mobility roads and spines, and as such act as destinations for public transport.

Nodes can be classified into higher order nodes and local nodes depending on their function, size and economic growth potential. The nodal order will determine the development guidelines and management approach to each node.

For Dipaleseng distinction is made between:

41.1.1 Primary activity node

A primary node is characterised by a concentration of a higher level of services such as a hospital, taxi rank, shops and schools and they have a history of service delivery to the surrounding areas.

41.1.2 Secondary activity node

These nodes correspond with settlements that function as important urban foci in the rural areas. These nodes have lower levels of services than the primary node and often act as dormitories for the primary node.

41.1.3 Nodal hierarchy

Table 52: Nodal classification

Classification	Characteristics	Interventions
Primary activity node		
Balfour	<ul style="list-style-type: none"> • Main economic centre • provides a variety of services and functions. • Accommodates a variety of developments and social support infrastructure. • Serves as the main connection point with other centres within Dipaleseng. • Strategically located on the main R23 and R51 road. • Largest population size. 	<ul style="list-style-type: none"> • Facilitate the development of Balfour into an economic growth centre. • Attract private and public investments. • Promote urban renewal strategies. • Increase economic and social opportunities. • Accommodate regional and sub-regional growth. • Provide a full range of services and goods.
Secondary activity node		
Grootvlei (Extension 1, 2 and Dasville) and Greylingstad/Nthorwane	<ul style="list-style-type: none"> • Industrial function (Grootvlei Power Station). • Little economic base. • Provides basic services and goods. • Crippled by a lack of engineering and social infrastructure services. • Relatively small populations in both towns. 	<ul style="list-style-type: none"> • Improve the provision of basic engineering. • Provide rural communities with a range of lower order (day to day) services and facilities. • Restrict further growth and development. • Improve main road section through town.

*In terms of the Mpumalanga Spatial Development Framework 2007 Balfour is identified as an agricultural service centre for the municipal area since agriculture is the first layer of human activities (Refer to Phase 2: Alignment with provincial perspectives)

*In terms of the Gert Sibande Spatial Development Framework (Refer to Phase 2: Alignment with district development perspectives):

- In terms of Principle 5 and 6, Balfour is identified as a agricultural service centre within the agricultural cluster for the municipality.

- Greylingstad and Grootvlei are secondary towns that should be provided with at least the minimum levels of service.

41.1.4 Nodal development guidelines

Balfour clearly is a node of importance and should be developed as such. In this regard, the municipality should develop the town as a complete, compact community with a number of social, environmental, health and economic benefits, such as:

- **Community benefits:** Nodal development encourages people to walk by placing shopping, services and housing in close proximity to one another. This revitalises community life by helping streets, public spaces and pedestrian-oriented retail to become places where people gather and shop. Enhancing neighbourhood life can boost the perceived security too, of an area by increasing the number of people on the street. It also makes neighbourhoods more attractive to visit, providing tourists with a welcoming environment in which to dine shop or stay over.
- **Environmental benefits:** Nodal development is compact development. It reduces sprawl and traffic, and preserves limited open spaces and environmentally sensitive areas. In addition, natural features can be integrated into nodal developments and used as recreation areas and greenways.
- **Agricultural benefits:** Compact development helps preserve important agricultural land and reduce development pressures on them.
- **Public health benefits:** With shops, services and housing in such close proximity to one another, nodal development helps make active transportation options like walking or biking more realistic for a broader range of community members. This helps reduce the number of automobile trips residents have to make and pedestrian-friendly environments are recognised as improving community health by making them more active and reducing obesity and stress.
- **Economic benefits:** Nodal development has substantial fiscal and economic benefits for municipalities, developers, community businesses and residents. By concentrating growth in areas that are already serviced with water and sanitation, municipalities are able to reduce infrastructure servicing costs, while diversifying and growing their tax base. For developers, nodal development can reduce the cost of infrastructure and increase the efficiency of land use.

Secondary Activity Nodes, such as Grootvlei and Greylingstad can also be defined as having an important role in providing for populations that have limited mobility. Over time, these nodes can become the focus of development in their communities and can grow to provide a broader range of services and housing options.

Thus, for Dipaleseng, Balfour's value as a node is primarily driven by its already more advanced development than either Grootvlei and Greylingstad.

While the latter two towns should be developed in terms of their nodal importance to the communities they serve, providing essential goods and services and keeping an eye on improving the level of service delivery in the future, they do not have the potential to become regional nodes in their own right.

41.2 Movement policy

Ideally, a movement policy would promote the following:

- 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; and
- To create an effective transportation corridor.

A point of reference for Dipaleseng Municipality's movement system is to ensure that its roads form part of the overarching transport policies such as the following:

- National Transport Master Plan 2050.
- Rural Transport Strategy for South Africa's roads.
- Gert Sibande District Municipality Integrated Transport Plan, 2008.

The towns of Balfour, Grootvlei and Greylingstad are economically dependent on one another, and have valid reasons to cooperate as economic units and sub-units as a direct result of their geographic proximity to one another.

The movement system is seen as the key structuring elements within the Dipaleseng Municipal area to ensure functional urban and rural integration. The efficiency of the towns is directly related to the efficiency of the movement system.

The movement policy focuses on:

41.2.1 Regional linkages

- Ensure and maintain a high standard of regional accessibility (R23, R51 and railway line);
- Orientate regional access to the N3 and N17 main roads;
- Encourage improved linkages between municipalities; and
- Promote and retain the mobility function of existing regional linkages (R23 and R51).

41.2.2 Internal road linkages

- Ensure and maintain a high standard of local access within the municipality (R51 between Balfour and Grootvlei and the R23 between Balfour and Greylingstad) considering Balfour to be developed as a primary activity node; and
- Improve road access to strategic areas within the municipality.

41.2.3 Road access in towns

- Roads need to be upgraded and maintained in accordance with the Micro Spatial Development Concept Plans.

The identified Gauteng-Balfour-Standerton-Volksrust-KZN corridor, consisting of the R23, is an important inter-nodal corridor that facilitates access to the municipality's primary node, Balfour.

The roads, R23 between Balfour and Greylingstad and the R51 between Balfour and Grootvlei, are prioritised for road upgrading to ensure connectivity between the nodes. The upgrading of the road should reduce the total travel time between the nodes thus encouraging investor confidence.

41.3 Urban edge policy

The objective of the Urban Edge Policy is to contain urban sprawl and focus on infill and densification orientated development, thereby maximising the use of existing infrastructure.

Ideally, the urban edge policy strives to ensure:

- Optimal utilisation of engineering services;
- Optimisation of public transport;
- Prevention of urban decay and promotion of urban integration;
- Promotion of opportunities for redevelopment;
- The conservation of environmentally sensitive areas;
- The protection of high-potential agricultural land; and
- The creation of urban corridors along public transportation routes.

Delineation of urban edges

The urban edge is a conceptual line that includes existing settlement footprints and provides for a projected future growth for the next 20 years. The alignment roughly follows movement infrastructure (roads, rail), natural physical elements (rivers, mountains) and the built-up areas.

Description

The urban development boundary (UDB) indicates the interface between urban and rural environments. It therefore indicates the area where urban growth should not be allowed.

Objective

A major spatial problem is uncontrolled, low-density sprawling of settlements into the surrounding rural area. This has a number of disadvantages:

- It results in a settlement pattern that has neither urban nor rural advantages;
- In terms of infrastructure investment it is impossibly expensive to serve; and
- It could compromise valuable natural environments and high potential agricultural land.

Guidelines

Land uses which can be allowed in the rural areas outside the urban edge will include, *inter alia*, the following:

- Extensive and intensive agriculture;
- Conservation areas and nature reserves, tourism and related activities, i.e., accommodation establishments, guest houses, conference centres, tea gardens, craft markets, etc.;
- Recreational facilities and venues, e.g., hiking, hunting, adventure sports, horse riding schools and stables, etc.;
- Farm stalls, home industries and small-scale agri-industries, e.g., cheese making, meat processing, etc.;
- Rural residential/agricultural holdings in specific areas;
- Agri-villages or agricultural communities; and
- Community facilities and business uses clustered in rural service centres/rural settlements.

41.4 Residential densification policy

Description

Densification is the process whereby densities, i.e., the number of dwelling units per hectare, increase in a planned and sustainable manner.

Densification should take place:

- Along main roads;

- In and around nodes; and
- On the periphery of open spaces to increase surveillance.

Proposed Densification

- **Balfour** – the total proposed densification area is approximately 159 hectares at 15 units per hectare.

Objectives of densification

Densification creates a more compact environment that improves access to work, services and public transport. It also provides for more efficient use of infrastructure, i.e.:

- Ensures a diversification of housing typologies;
- Promotes adequate provision of social and economic amenities to ensure better quality of life;
- New settlements/developments must promote the optimal use of infrastructure and resources;
- Promote safety through design;
- Reduce travel and transaction costs through appropriate infrastructure planning; and
- Rationalisation of housing patterns in relation to urban opportunities and public transportation.

Guidelines

The following matters should be taken into account when considering an application for a non-residential or higher-density residential land use within a residential area:

- Residential amenity should in general be protected, specifically, but not exclusively, from:
 - significant changes to traffic conditions in local streets including an increase in car parking demand;
 - noise, light or odours emitted from the site; and
 - disturbance associated with the hours of operation.
- Low scale, non-intrusive, non-residential uses should be permitted in residential areas, i.e., shopping facilities, home offices, home industries, etc.
- Higher residential densities along main roads, around major nodes and employment areas should be promoted and actively supported.
- The density of proposed and existing built-up areas should correlate with the availability of productive open spaces and public amenities in close proximity thereto, the higher the density/intensity of residential developments, the more productive open space and public amenities are warranted.

- Areas designated for public use should be incorporated within high-density developments and larger public open spaces should be provided in close vicinity to these developments.
- Medium-density residential development should promote a mixture of cluster housing.
- Densification of existing residential areas should take place without compromising the quality of living principles.

41.5 Urban integration policy

Description:

Integration refers to the interdependence of urban functions and activities resulting from a fine-grained mix of land uses and/or income groups.

Location:

Integration should be concentrated:

- Along main roads to improve access to opportunities, services and facilities;
- Around public spaces in order to create spaces where social integration can occur; and
- On land located adjacent to, or in close proximity to public/social facilities (as integration spaces).

Planning efforts should strive to integrate:

- Balfour - Siyathemba
- Greylingstad - Willemsdal - Nthorwane
- Grootvlei Ext 1 (North and South of the road to Dasville)

Goals:

- To redress past spatial imbalances;
- Improve access to social economic and recreational opportunities services and facilities; and
- To create a fine-grained mix of income categories and cultural groups within the municipal area.

In order for integration to take place, the following guidelines should be followed:

- Ensure the provision of complete, integrated urban settlements comprising of all elements of an urban settlement (residential, shops, offices, schools, parks, social facilities, etc.) for all residents;
- Ensure the location of various social and economic activities within walking distance of transport interchanges;

- Provision of a wide variety of housing types to enable people of a wide range of life stages and economic status to live in close proximity;
- Establish a transport network that is consistent with the location and needs of the community of Dipaleseng; and
- Ensure the concentrations of non-residential urban functions including recreational, employment and commercial land uses in order to improve access to urban opportunities.

41.6 Infrastructure policy

The General Guidelines set out in the “Guidelines for Human Settlement and Design” are accepted as general policy for the development and provision of infrastructure within Dipaleseng Municipality.

Provision of engineering services

A stand or a portion of a stand within a proclaimed township and a new township development within an area, must be provided with the following essential municipal engineering services:

- Water supply;
- Sewerage disposal;
- Roads and storm water; and
- Electricity supply.

External services include the bulk supply of, for example, water and electricity by a water board, electricity supply authority or other body. Sewerage treatment works and waste disposal are usually the responsibility of the local authority. Link roads are provided by the local or provincial authority.

Internal services are the services provided by the developer throughout the township up to the boundary of individual erven. They include roads, storm water drainage, water, sewerage and electricity reticulation within the township. The cost of providing these services is added onto the cost of the land when a new township is developed.

Phasing of engineering services

A phased approach shall be followed in the provision of engineering services as indicated in areas A, B, C, D and E in the Micro Spatial Development Concept Plans.

The phasing is based on the following priorities:

- The upgrade of existing engineering services in all towns to eradicate the backlog and simultaneously to rural areas that do not comply with RDP standards;
- Increase engineering capacities to provide for projected growth; and

- To increase the capacity to attract future economic growth in all the towns.

41.7 Sustainability policy

Water conservation

- A Water Conservation and Water Demand Management strategy must be implemented to reduce water losses in all three towns.
- Rain water harvesting can potentially benefit individual households as well as the municipality by reducing the strain on the existing ground water resources.
- Re-use of effluent from the waste water treatment works must be investigated against the cost and technical requirements.

Energy efficiency

All new developments shall demonstrate their commitment to energy efficiency by introducing measures such as:

- **Water heating:** Each residential unit provides for solar heated hot water cylinders, or the development as a whole could consider a heat-pump driven water heating system.
- **Cooking:** Each residential unit makes provision for use of gas for cooking purposes, and should comply with the required legislation for piping and gas cylinder storage.
- **Air conditioning:** The installation of air conditioners to be limited to a maximum of two 1.5kW units per residential unit. If possible, green building designs should be implemented to limit the need for heating in winter and cooling in summer through electricity.
- **Under floor heating:** Under floor heating with electricity should not be allowed. Under floor heating with water heated systems are allowed, provided that the water is not heated with electricity during peak consumption periods.
- **Washing machines, tumble dryers and dishwashers:** Washing machines, tumble dryers and dishwashers should preferably be operated in Eskom's standard and off-peak time slots and not in peak time-slots.
- **Lighting:** Lighting could contain power factor corrected energy efficient lamps. A building management system could be installed to switch off lights automatically when shops or offices are empty.
- **Street lighting:** Street lighting could be done by means of energy efficient lighting.
- **Alternative energy:** Each connection to the conventional electrical grid should be supplemented with alternative energy sources *inter alia*, solar, gas and wind.

42 Land Management System Guidelines

Section 26(e) of the Municipal Systems Act, (Act 32 of 2000), stipulates that the Local Municipality should prepare a SDF which must include basic guidelines for a Land Use Management System (LUMS) as part of the IDP.

Currently, the Balfour Town Planning Scheme 1979, is in place for the Dipaleseng Local Municipality. It is proposed that a Land Use Management System/Scheme be developed for Dipaleseng to ensure effective land use management.

The purpose of this section is to facilitate a better understanding of what is desired in terms of the SDF. These guidelines should be used to inform and guide development proposals and should be incorporated into a land use scheme/management system.

42.1 Environmental conservation

Development or any human intervention within these areas should adhere to the following guidelines:

- Effective veld management plans and practices are critical if sustainability of land use is to be achieved in Dipaleseng Municipality.
- Associated land uses may include nature conservation, tourist facilities, stock farming with the implementation of grazing management guidelines, hunting safaris, scientific research, religious ceremonies and environmental education.
- Encourage the utilisation of the environment as an economic asset in order to promote and develop agri-, edu- and eco-tourism.
- The most suitable form of tourism is eco-tourism which aims to balance the needs of people with the need to protect the environment. It is low impact tourism, which means minimal disturbance to the environment.
- The outcome of an Environmental Impact Assessment is important when mining development is considered. Currently, the Department of Mineral Resources approves mining licenses without the consent of the municipality. There is a need to involve the municipality in process in order to address land use issues impacting on the municipality as a result of mining operations.
- Restrict the development of any uses with a negative environmental or visually unbecoming impact in this zone.
- Environmentally significant areas with a high conservation value must be included into or proclaimed as statutory protected areas.
- Reference must be made to the following plans:
 - Mpumalanga Biodiversity Conservation Plan with respect to specific land use regulations.
 - Environmental Management Framework for Dipaleseng Local Municipality 2010 upon approval.

Further environmental guidelines:

42.1.1 Water bodies

- Dams and rivers, or any water resource, should be managed in a sustainable way, especially when development or change in land use is envisaged.
- Compliance with the requirements of the Department of Water Affairs, when developing around dams, alongside rivers or when crossing rivers or streams, is a prerequisite.
- Proposed watercourse crossings must be placed in areas where the impact on the watercourse will be minimal.
- In terms of the National Water Act 1998, no development shall be permitted below the 1:100 year flood line, to be determined by a professional engineer.
- A 100m buffer for rivers was demarcated for non-perennial rivers in the absence of flood line calculations.
- Wetlands and perched water tables need to be identified and protected from encroachment.

42.1.2 Topography

- Land where the gradient is steeper than 20% is not suitable for development in terms of environmental regulations and guidelines.
- The provision of engineering services is expensive in areas with steep slopes.
- Areas presenting topographical constraints should be carefully assessed in any land use management decision.
- Environmental legislation requires the protection of granite or rocky outcrops due to the diverse and sensitive vegetation types associated with these features.
- Areas regarded as unsuitable for development due to topographical constraints should form part of a municipal open space system.

42.1.3 Geotechnical considerations

- From a geological perspective “no development areas” include areas affected by undermining, dolomite and areas where heaving clays are present.
- Areas underlain by geology types not suitable for development must be excluded from development and included into a conservation zone or an open space system.
- Any township development should be headed by a geotechnical investigation to determine if the soils are likely to cause foundation problems, especially when densification or multiple storey development is proposed which impacts heavily on underlying soils.

42.2 Tourism

Resort development in rural areas should be informed by the following basic guidelines:

- Availability of a resource (natural feature, i.e., hot water spring, lake, river, or a feature with cultural historic value) and environmental opportunities and constraints are the most important criteria for the location of tourism development.
- Such a resource must make the property more attractive than surrounding property in the area, be worthwhile to holidaymakers to travel from afar for a prolonged stay.
- A resort and its resource must be inseparable and access thereto must be guaranteed.
- The outcome of an Environmental Impact Assessment is important when resort development is considered.
- Topography, soils, flood plains, vegetation and infrastructure are other factors that need consideration in the establishment of tourist facilities.
- The land uses should be restricted to tourism activities and uses ancillary and complementary thereto.
- A site development plan approved by the municipality involving the design and functional utilisation of the site is required.
- Resort categories:
 - small: 1-10 units and floor area not more than 120m² (60m² in sensitive natural areas);
 - medium: 11-30 units and floor area not more than 120m² per unit (or up to 175m²) and total floor area of all buildings not more than 3600m²; and
 - large: 30-50 units.
- Maximum floor areas recommended for other buildings in resorts are:
 - bed and breakfast establishments/guest house = 350m² (5 bedrooms per unit);
 - farm stalls: 100m²; and
 - businesses: 150m² (shops), 250m² (restaurants).
- Height of resort units should generally be restricted to 6.5m measured from the natural ground level to the apex of the roof.

42.3 Mining

The geological composition of Dipaleseng is comprised of rich mineral resources. The municipality has gold and coal reserves but a number of quarry sites also exist in the area.

Development of these areas should adhere to the following development guidelines:

- Mining will be allowed only after the necessary consents from the Department of Mineral Resources have been obtained. Currently the department is responsible for ensuring the exploration, development, processing, utilisation and management of South Africa's mineral resources.
- The outcome of an Environmental Impact Assessment is important when mining development is considered. This is important because mining has dampening land use and environmental consequences impacting on municipalities such as Dipaleseng during and after the mining operation.
- Housing for mine workers should be accommodated within the nearest existing urban areas/towns where social and economic infrastructure exists.

- Mining development should be avoided in environmentally significant areas with high biodiversity value.
- The application for mining rights should be accompanied by a Social and Labour Plan as prescribed in terms of the Minerals and Petroleum Resources Development Act, (Act 28 of 2002).
- The provision of resorts or lodges on farms to provide for the housing needs of mine personnel should not be permitted.
- The commercial use of farms for ancillary uses to mining industry should not be permitted.

42.4 Agriculture

In Dipaleseng, the high cultivation areas (6.46%), medium cultivation areas (24.36%) and pivot irrigation areas (1.26%) should be utilised in a sustainable manner. Areas with a low potential for crop production might have a high potential for grazing, making it an area of high agricultural value. It is imperative that agricultural land be utilised in a sustainable manner in order to obtain the greatest long-term benefit from the agricultural potential of the land.

The following guidelines are proposed to ensure the sustainable use of agricultural land:

- Livestock and game farming practices must comply with the grazing management guidelines and recommendations by the Mpumalanga Department of Agriculture, Rural Development and Land Administration;
- Fragmentation of farms should be prevented. Each subdivided portion should remain an economically viable agricultural farming unit as approved by the National Department of Agriculture;
- The potential of agricultural land should be carefully assessed prior to the subdivision or change thereof to any other land use;
- Currently, the retention of productive agricultural land is administrated through the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) which controls the subdivision of agricultural land and its use for purposes other than agriculture;
- The land uses should be restricted to agricultural and tourism activities and uses ancillary and complementary thereto. A Site Development Plan approved by the municipality involving the design and functional utilisation of the site should be provided;
- Cultivated dry land or cultivated irrigation along river banks should be managed in a sustainable manner not to impact negatively on the biodiversity value of these areas. This would include areas along the Vaal River, Waterval River and Grootspuit River amongst others;
- An Environmental Management Program, headed by an Environmental Impact Assessment, should be provided with every new development or change in land use;
- The specific situation or scenario of each application is also considered, i.e., size of the area, availability of water, economic viability, sustainable agricultural use and external factors such as political influences, development trends, etc.; and

- Agricultural land should be protected against bush fires that can cause damage to infrastructure or grazing. Firebreaks should be made in accordance with the Forestry Act.

42.4.1 Agri-village

- The size of agri-villages need to be balanced with the agricultural potential of the land and also the sustainability of the settlement in terms of the provision of a minimum standard of social and engineering infrastructure.
- Accessibility to viable transportation options and main roads is a determining factor in the location of agri-villages.
- People not directly involved with the use of the resource should not be allowed to settle on the land.
- The outcome of an EIA is also a key consideration in the establishment of agri-villages.

42.4.2 Agri-industry

The municipality may grant its consent for an agricultural industry provided that:

- It is satisfied as to the desirability of the agricultural industry on the land unit in question. Consideration should be given to the physical suitability, location, the availability of infrastructure and services, present and future land utilisation, community and individual needs as well as economic and financial constraints.
- The agricultural industry is subservient and ancillary to the dominant agricultural use of the property.
- The agricultural industry does not adversely affect the agricultural potential of the property.
- The area allocated for purposes of an agricultural industry shall be clearly identified on a plan prepared by a suitably qualified person to the municipality's satisfaction.

42.4.3 Urban agriculture

Urban agriculture can be defined shortly as the growing of plants and the raising of animals within and around urban centres (peri-urban areas). Urban agriculture is integrated into the urban economic and ecological system. The provision of food security is closely linked to households and settlements.

The following guidelines should be considered in regulating urban agriculture land uses:

- Urban agriculture should be included both local and district land use or strategic plans.
- On micro-spatial plans, urban renewal plans, neighbourhood improvement plans should include elements of micro-planning to delineate spaces that could potentially be used for urban agriculture.
- Urban agricultural areas should be managed as public, shared or private schemes.

- The municipality should specify the type of activities allowed on urban agricultural land.

42.5 Residential

In order to achieve sustainable residential development, infill development should be prioritised, particularly in the areas demarcated for urban infill and densification in the Spatial Development Framework.

42.5.1 Affordable housing

The following guidelines are presented for the location of affordable housing projects:

Availability of bulk services

As a rule, bulk municipal services are available in or next to existing urban areas. This favours infill development and opposes urban sprawl as a form of urban development.

Ownership of land

Land already owned by the municipality avoids the tedious and expensive purchase and transfer of private owned land for affordable housing development.

Access to social amenities and economic opportunities

Affordable housing projects should be located close to existing social and economic nodes or close to planned socio-economic nodes.

Access to public transportation

The aim is to place higher-density land uses, such as affordable housing, in a strip abutting public transport routes and in doing so, increase access to the public transportation systems.

Integration of urban structure

Affordable housing should contribute to the establishment of integrated, economically viable and sustainable communities.

Located within urban edge

No affordable housing projects must be developed outside the urban edge.

42.6 Rural residential/small holdings

- The main land use should be residential in nature. Other uses such as agriculture, business, offices, restaurants, guest houses, lodges, tourist related facilities and game keeping, ancillary to the main land use, may be allowed with the consent of the municipality, subject to a compatibility analysis.
- Should businesses, offices and restaurants be allowed, such uses must not exceed 10% of the total residential floor area developed on the property.

- Second dwellings can be allowed on rural residential properties with the consent of the municipality.
- The following uses are not supported: noxious industries, pig farming, poultry farming, scrap yards, panel beaters, spray painters, vehicle servicing, maintenance and repairs, warehouses and transportation companies.

42.7 Industrial

As far as industrial development is concerned the following general guidelines should be complied with:

- For commercial and industrial land, ideally, a slope of 1:200 or less is suitable. The alternatives are an expensive cut and fill exercise for each commercial or industrial building.
- Industrial/commercial developments generally require fairly large areas, with gentle slopes.
- Easy access to road and/or rail transport is imperative when new areas are planned for industrial development.
- Service industries and light industries may develop in close proximity to residential areas.
- Existing industrial/commercial zoned land should be substantially filled up before new industrial/commercial areas are developed.
- Noxious industries should not be developed in close proximity to residential areas. Specific areas should be delineated for this kind of land use in order to isolate the impact it might have on its surroundings with specific reference to the direction of prevailing winds, natural resources downstream, accessibility, infrastructure provision and handling of waste.
- All industries must comply with environmental and health standard regulations.

42.8 Cemeteries

Communities in Dipaleseng make use of cemeteries in Balfour, Siyathemba, Greylingstad and Grootvlei. Most of the cemeteries are operating on full capacity and are left with a short lifespan. Therefore the municipality needs to procure land for new cemetery establishment or extend the existing one's where feasible. A regional cemetery is not recommended for Dipaleseng due to the scattered nature of the settlements.

The following general guidelines should inform the development of cemeteries:

- An Environmental Impact Assessment, Heritage Scoping Study and geotechnical study are a prerequisite for the approval of a cemetery site;
- Distance from access roads and churches needs careful consideration; Public amenities need to be provided at cemetery sites; and

- A reversion clause must be registered in the Title Deed that, should the property not develop as a cemetery within a specified time frame, the land will be used for agricultural purposes.

In the identification of new sites for development of new cemeteries, specialist studies need to be conducted on the preferred sites. Upon identification of preferred sites, detailed studies need to be undertaken to confirm the suitability of the sites in terms of the topography, geology and environmental restrictions. Once the site has been selected and approved by all parties concerned, the township establishment process should be conducted to formalise (if not formalised) the site for cemetery use.

The specialist studies to be completed on the site are as follows:

- **Geology**

These studies are completed by a registered geologist and determine the suitability of the geology type for development, the rock and soil type and the presence of a water table. A geotechnical investigation confirms the suitability of the site in terms of its geology.

- **Environment**

The environmental specialist establishes suitable areas for development with due cognisance of the need to protect the environment.

- **Wetlands**

The wetland specialist will determine the wetland delineation for protection of grave sites and will ensure that no development, including burials, takes place within the wetland area. The wetland specialist will work in close consultation with the environmental specialist and with the civil engineer who will determine the flood line.

- **Heritage**

The purpose of this study is to determine the possible heritage potential of a site.

- **Civil & Electrical Services**

The civil and electrical engineers compile a services report which addresses existing services infrastructure, if any, and determines the future requirement in terms of roads and storm water, sanitation and electricity. The civil engineer is also responsible for determining the flood line.

The site selected, and their location and accessibility, may require the completion of a Traffic Impact Study.

42.9 Open space

42.9.1 Primary open space network

A primary open space network will function on a regional scale and includes all significant natural or ecological assets of the municipality i.e. mountain ranges, proclaimed nature reserves, river environments, wetlands and biodiversity corridors. By protecting such areas, urban areas are prohibited from sprawl freely and are therefore forced into denser urban agglomerations.

42.10 Secondary open space network

A secondary open space network has a neighbourhood function and scale, and includes all open spaces, parks and sports facilities within neighbourhoods.

Guidelines for planning and design of open spaces:

- Smaller and fewer active open spaces that are reasonably developed and maintained are far more useful than a large number of active open spaces that are not. Larger parks should be located in areas with no or limited access to natural amenities, i.e., mountains or coastlines. It should be evenly distributed and where possible, connected by parkways ($\pm 500\text{m}$ walking distance or 10 min.).
- Larger parks can be juxtaposed to, and incorporate, urban agriculture, fuel wood planting, solid waste disposal and nature conservation sites.
- Smaller parks can be located within easy walking distance (i.e., $\pm 300\text{m}$) of workers situated within busy commercial and industrial centres, in order to create contrasting spaces of relief within predominantly residential areas to create easy surveillance of child-play spaces, and within school clusters, which create safe, shared playtime space (300m to 700m or 10min.).
- Larger sports fields should be located within clusters of schools and close to private sports clubs, in order to facilitate the sharing of amenities between different user groups and to avoid under utilisation. Schools can have allocated times of use during the day, while sports clubs can use the amenities mainly during the evening ($\pm 300\text{m}$ of school buildings and 500m to 1500m of other user groups).
- Developed and properly maintained sports fields should be located close to public transport services, in order to facilitate the access by visiting teams.
- Sports fields can be located on low-lying land adjacent to water courses and incorporated into parkways, in order to act as part of the major storm water management system in the event of storms.

43 Sector plan alignment

The Spatial Development Framework integrates all actions and interests that manifest in the physical environment.

The SDF must, together with the municipal development priorities and objectives, inform the operational strategies and plans of the different departments in the municipality (i.e., infrastructure master plans, housing delivery plans, public transport plans and plans for the delivery of social and community services such as health and educational facilities. These sector plans then become implementation mechanisms for the Spatial Development Framework.

The following sector plans are considered relevant implementation mechanisms for the Spatial Development Framework

Table 53: Status of sector plans

Plan or strategy	In place/absent	Status/date	Comment
Water Services Development Plan	In place	2009 - 2013 Complete	To be updated and consider the SDF proposals.
Local Economic Development Strategy	In place	Draft document – 2010 review	To be aligned with SDF proposals and projects.
Comprehensive Infrastructure Plan (CIP)	Absent		
Integrated Transport Plan (ITP)	Absent		Only the Gert Sibande ITP exists for 2008. The review of the plan needs to be aligned with current SDF proposals and projects.
Housing Plan/Chapter	In place	2008 – 2009 Housing Chapter exists only for Dipaleseng	To be aligned with SDF proposals and projects.
Tourism Plan/Strategy	Absent		To be aligned with SDF proposals and projects.
Energy Master Plan	Absent		
Disaster Management Plan	Absent	Exists as part of the 2008/2009 IDP review process.	To be aligned with SDF proposals and projects.
Integrated Waste Management Plan	Absent		

Sector plans that have not been prepared for Dipaleseng have to consider the proposals and projects listed in the Spatial Development Framework. Existing sector plans have to be reviewed to make provision for the SDF proposals.

44 Monitoring tools

Municipalities should be committed to evaluating and monitoring the impact of their activities, services and results. Assessment of these activities and outcomes can then be communicated back to its stakeholders and into the organisation in order for them to continue to grow and adapt in ways that best suit their beneficiaries.

Dipaleseng should develop a Results Based Management (RBM) Framework, upon which its monitoring and evaluation can be based. This will also assist it in planning, implementing and assessing its interventions in terms of the extent to which they achieve their projected results. Progress therefore can be tracked in terms of the types of results that can be generated by its interventions.

The proposed RBM model will seek to achieve the **ultimate outcome** of achieving its mission “to provide continuous, affordable service and to develop the quality of life of all of the residents.” **Intermediate outcomes** will then focus on:

- Exploiting economic opportunities
- Creating sustainable urban and rural settlements
- Protecting the natural and built environment

The municipality should monitor and evaluate the impact of its activities on **intermediate outcomes** through regular assessments of its interventions using interim surveys linked to its financial cycles. This will use measurement indicators, such as:

- Number of jobs created
- Number of new businesses
- Increase in turnover of existing businesses
- Number of new or improved roads
- Number of tourists visiting the area, decreasing/increasing
- Quality of the natural and built environment

Immediate outcomes will be evaluated in terms of why these outcomes are changing, what steps or actions were taken to achieve them and whether the desired output was achieved. This might include looking more closely at such things as:

- Number of development incentives provided and taken up by residents
- Number of tourist events held in the region
- Number of people involved in improving roads

Quantitative Monitoring

The municipality should engage an independent auditor to assess its performance based on agreed indicators. The performance audit will focus on measurable performance indicators relating to progress on a bi-yearly basis. Where possible, data will be disaggregated by gender, age, race and income group.

Qualitative Monitoring

Qualitative feedback will be a continuous process. The municipality should hold focus groups and community feedback sessions, prepare regular case studies relating to its projects, its results and community perceptions.

Reporting

The municipality should report on its progress made towards the benchmarks set for each of its outputs and outcomes as described above either on a monthly or quarterly basis. It should provide the community with quarterly reports and one annual summary report per year.

45 Marketing strategy

A Spatial Development Framework (SDF) should indicate areas where strategic intervention is required and act as a marketing tool to promote the development of the region from a business, tourism and social responsibility perspective. Marketing of the SDF should be driven by the officials and stakeholders responsible for its delivery and should play a prominent role in all structures within the municipality. In order to develop a proactive and programmatic approach, the first step should be to develop an SDF Committee that can help guide the dissemination of the information to the public and private sector.

45.1 Establishment of an SDF committee

In terms of the NSDP principles, it is an essential requirement that each official and decision-maker have a copy of the Spatial Development Framework and that the key Provincial Departments understand, support and are committed to the municipality's SDF. There must be a vertical alignment and synergy between local, provincial and national government in order to work towards the successful achievement of this SDF.

An SDF committee should be established within the province to ensure that it is communicated to the appropriate audiences of public institutions and private sector individuals and companies that may have an interest in its success. This would include those that may benefit in some way from the implementation of the SDF as well as those that may play a role as investors or facilitators of the projects or goals of the SDF. Thus, the committee should act to coordinate the interests of both internal and external stakeholders and beneficiaries.

The Committee should play a key role in supporting the establishment of structures aimed at promoting or facilitating the goals of the SDF. These may take the form as suggested below.

45.2 Establishment of a District Economic and Development Agency

According to the Gert Sibande District Economic Growth Summit 2006, the district took a significant resolution to establish a District Economic and Development Agency. The agency will be a municipal entity and will be mandated to coordinate and manage the economic development initiatives, coordinate and manage key stakeholders, facilitate marketing and investment initiatives and support throughout GSDM.

To thus far, the district is still in the process of establishing the agency with the assistance of the Industrial Development Corporation (IDC).

The main objectives of the economic and development agency are to achieve *inter alia* the following:

- To attract specialised skills to drive the implementation of the economic and development programs and projects;
- To increase implementation capacity and minimise bureaucracy;
- To manage liaising, consultation and involvement of key stakeholders, private sector and government departments and parastatal;
- To explore investment opportunities and initiatives;
- To facilitate the development and sustainability of existing businesses, development and investment initiatives; and
- To facilitate and coordinate effective functioning of business structure and forums (Business organisations, SMME forums, hawkers associations, farmers associations, etc).

Further the agency can align the Dipaleseng Macro Strategic Development Concept with other municipalities and facilitate access to finance or development assistance.

This may include the following units:

45.2.1 Local business support unit

The district municipality should create a local business support unit which could offer assistance with compiling business plans, gaining access to business skills and networking opportunities. The aim will be to promote the sustainability of local SMME and BEE companies by creating an enabling small businesses environment that can support their growth over time. The aim will be to promote SME's to encourage further economic growth and job creation.

45.2.2 Proactive direct sector marketing

Where key issues and needs have been identified, it is important that each sector and national department be contacted and be made aware of these, so that funding can be utilised towards addressing these specific requirements. As each department has a budget and a mandate to support these initiatives, they would have to be made aware of it and this responsibility would rest on the district and local municipality. The SDF must be utilised as a key decision making tool when prioritising projects and allocating budgets.

45.2.3 Marketing to other sources of funding

- **State-Owned Enterprises**, such as parastatal utility companies like Transnet, Eskom and Telkom that provide important services in support of economic growth and social development. In addition, there are a number of development finance institutions such as the Development Bank of South Africa (DBSA), Industrial Development Corporation (IDC), Land Bank, USAID and Khula that finance commercially viable economic development projects and social projects and programmes utilising a range of financial instruments.
- **Private Financial Institutions** support SME development through a range of financial products. In addition, Enterprise Development funds are increasingly available to enable SMME's and BEE companies to access funding from private financial institutions.
- **Donor Funding** can be a source of funding for qualifying social development projects and programmes.
- **Other Funding** may include the National Empowerment Fund and the Umsobovu Fund, tourism and conservation groups, or other corporate development (CSI) funds.

45.2.4 Marketing of agricultural produce

The SDF can provide a strategic marketing role in terms of giving direction to the promotion of the agricultural sector in Dipaleseng. Cognisance must be taken that the economy of Dipaleseng is driven by agricultural activities such as maize, sunflower, dairy and game farming. The marketing and selling of raw agricultural and related resources should be extensively explored. This would be advantageous for emerging farmers and livestock farmers across the area. In addition, linkages with commercial farmers should be promoted to provide incentives to forge partnerships with smaller farmers and to help them take part in supply chain initiatives.

45.3 Establishment of a Tourism Marketing Directorate or Agency

A tourism marketing directorate or agency should be established on district or regional level to assist local municipalities such as Dipaleseng in developing a marketing plan.

The main thrust of a municipality's marketing plan, in particular as it relates to the SDF, should address the region's strengths, which primarily reside in its natural resources, historical value and its people.

Thus, much of the attention from outside comes from an interest in viewing the region through tourism, which means that each region must be marketed using the full strength of the region as a destination.

In the main, the municipality must ensure that it can:

- Offer the best quality experiences to visitors, with a better understanding of what they are seeking;
- Provide service of the highest quality, e.g., doing more than people expect;
- Have excellent, prize winning guesthouses and other places where visitors can stay;
- Host region-wide programmes of events and festivals that celebrate the region's historical, cultural and environmental diversity;
- Have a productive, highly talented workforce;
- Demonstrate through action that the people in the region really care for the environment and for the people who visit the region and its destinations; and
- Generate economic and social benefits for communities and for the region as a whole by adding value to them through this strategy.

The main constraint to promoting tourism as a development catalyst is an inadequate marketing approach to the region as a whole. There is currently no website dedicated to the area or the district and thus no clear direction in terms of what to do while visiting the area. Most international visitors to the country, and increasingly local tourists, use the internet to choose their preferred travel targets, or they rely on travel agents or tour operators to do this for them. Likewise, travel agents use the internet to make inquiries and to seek out unique packages for their clients. Local travellers also increasingly use the internet to choose their holidays around the country. Those regions with a pre-defined plan of activities and events are clearly the most popular.

There are therefore two targets:

- Those seeking travel possibilities through the internet; and
- Travel agents and tour operators seeking destinations for their clients.

The role of a Marketing Plan is to make it easy for both to achieve their desired results. A destination must define what makes it distinctive in order to understand the best strategy to attract guests that will appreciate what the destination has to offer, while having a positive impact on the local economy and no negative impact on the natural and built environment.

45.3.1 Developing the plan

It is envisaged that such a process of developing a marketing plan for Dipaleseng will require the following key steps:

1. Development of a website and corresponding activity loops
2. Accreditation and alignment to build quality value
 - “Quali-mark” in conjunction with operators, which designates:
 - i. a quality brand;
 - ii. sector standards; and
 - iii. an effective regional accreditation framework for tourism.
3. Specific recommendations include:
 - Developing and implementing a single, integrated, effective quality standard and accreditation;
 - Developing a framework for regional tourism products and services;
 - Supporting and providing incentives for the adoption of these by operators, building a regional tourism quality brand; and
 - Clarifying the relationship of the quality brand to other industry standards and quality marks.
4. Gathering, analysing and disseminating information about the fit between visitors’ expectations and their actual experience;
5. Benchmarking international tourism standards and service levels; and
6. Ensuring operators have the necessary capability building tools, training and assistance.

The first major driver of this strategy is increased productivity and a bigger market share within the region; there are two tourism strategy aims that support the delivery of this:

- Enhanced communication with the region’s visitors through a dedicated “Destination Marketing Tourism” website;
- Higher levels of productivity and performance from the businesses operating in the visitor economy through a localised capacity building organisation; and

The second major driver within this strategy underpins the first, that is, to grow the size and capability of the workforce, ensuring that a higher proportion of those able to work are able to do so.

45.3.2 Strategic objectives

The strategic objectives described below are those things that need to be achieved in order to realize the strategic aims of the plan.

a) Improved Visitor Experience

‘Visitor experience’ objectives are to promote:

- Productivity
- Performance
- Quality
- Accessibility

These can be achieved by helping businesses improve their performance and the quality of the products and services that they provide. At the same time, competition must be stimulated in order to overcome barriers to higher productivity, performance and quality.

- **Superior skills** will be achieved by improving the skills of our workforce and the attractiveness of the sector as an employer.
- Creating **a sense of place** will improve the public realm as well as the built and natural environment.
- **Signature projects** will support and encourage projects that will transform the region's appeal to visitors.
- **Signature events** will support and encourage a programme of sustainable events of national and international significance.

The Municipality can play a role in addressing the structural and policy barriers to improving productivity and working with other regional bodies. It can also play a role of quality assurance by maintaining the standards of the industry through an agreed grading scheme. In this regard, only quality-inspected properties will be marketed to visitors on the public visitor information sites.

This will add value in terms of improving market intelligence and sharing this with businesses in a way that assists them to make good investment decisions that support the vision and aims of this strategy. A key focus will be on regional "routes" to support beacon businesses and the development of clusters that have potential for growth and improvement.

b) Easy Access

The transport infrastructure is a fundamental part of the visitor economy. Both leisure and business visitors require roads that are easy to travel, well-marked and offer options for dining or refuelling. An important contribution that can be directly delivered by the Municipality is to ensure that integrated, comprehensive route planning information is available.

c) The "Attack Brand" Approach to Destination Marketing

The "Attack Brand" approach is about leading tourism promotion with what is strongest and has most appeal to visitors. The region has a number of attractions that can act as attack brands that are capable of attracting the attention and meeting the needs of significant numbers of the high spending visitors who are needed to grow the visitor economy. They are:

- the Grootvlei Dam which attracts a unique bird species to the area;
- eco-tourism;
- the Vaal River which provides opportunities for water sport and recreation;
- historical heritage features such as the Anglo Boer War Battlefields and the historic graves of the Scottish regime in Greylingstad.

The methodology that will be applied to develop this concept will be based on:

- a) Identifying a comprehensive programme to improve service standards and the quality of the establishments that will support this strategy;
- b) Identifying tourism routes, following the “Attack Brand” approach, where individual or special transport can help to grow regions successfully. The focus will be on both “day routes” and “thematic routes”. In this regard:
 - *Day visits* are an important element of the visitor economy. Day visitors also sustain the infrastructure of attractions, restaurants, and shops that are essential elements in attracting overnight visitors. **Local communities** will be responsible for leading actions to grow the day visitor economy in their area. **Tourism agents** or the Municipality will be responsible for developing approaches to dispersing visitors across the region through promotion and information.
 - *Thematic marketing* recognises that many people are motivated by a particular activity or interest. It is also a useful mechanism to tie together a range of destinations and present them to the market. A number of themes are identified at the regional level as having market potential: these are Cultural Activities, Natural Environment, Eco-Tourism and Mining. At the sub-regional level **the communities** will identify those themes that have the best market opportunity. Communities may work together on marketing common themes. There are also opportunities for tourist boards to link together places under a thematic approach.
- c) The creation of a Destination Marketing Website, which encompasses the above Attack Brand model.

Thus, the development of a marketing plan will need to include:

- a) Stakeholder consultations, particularly among:
 - Communities forming part of the regional approach to branding
 - Local tourism groups
 - Government and its agencies
- b) Research into Destination Marketing “Attack Brands”. This will include research into existing programs and events that may form part of the overall attraction to the area.

With heightened awareness of the area and the corresponding impact of its marketing plan, this should bolster the number of visitors to Dipaleseng. Correspondingly, developments of an industrial or service nature will organically grow based on an increasing demand for goods and services. This will at the same time bring more attention to the SDF, its goals and objectives, and provide potential investors with a more compelling reason to invest in the area, based upon evidence of sustainable development principles.

46 List of References

1. **Agricultural Geo-Referenced Information System (AGIS), 2010**, viewed July 2010, <<http://www.agis.agric.za.htm>>.
2. **Environmental Potential Atlas for South Africa**, <http://www.environment.gov.za/Enviro-Info/enpat.htm> - accessed June 2010 <<http://www.environment.gov.za/Enviro-Info/enpat.htm%20-%20accessed%20June%202010>>.
3. **Comprehensive Rural Development Programme 2009**. RSA
4. Council for GeoScience 2010. **Geology types**. Pretoria. Viewed July 2010 <http://www.geoscience.org.za/index.php?option=com_content&task=view&id=164&Itemid=151>.
5. CSIR, 2000, **Guidelines for human settlement planning and design**, CTP Book Printers (Pty) Ltd, Cape Town.
6. **Demographic Impact of HIV/Aids in South Africa: National and Provincial Indicators for, 2006**.
7. Department of Transport, 2007. **A Roll-Out-Plan for Shova Kalula Bicycle Project**. Kimberley.
8. Department of Water Affairs and Forestry, 2010. **Annual Rainfall Data**. Pretoria
9. **Draft Regional Industrial Development Strategy**, 2006. RSA
10. **Gert Sibande District Municipality, Spatial Development Framework**, 2009. Mpumalanga.
11. Gert Sibande District Municipality. 2006. **Gert Sibande Growth & Development Strategy**. Mpumalanga.
12. Gert Sibande District Municipality. 2010. **Gert Sibande Integrated Development Plan 2010 to 2011**. Mpumalanga Province.
13. Gert Sibande District Municipality IDP Office, 2010. **Global Insight South Africa: Regional Explorer 491 (2.3d)**. Mpumalanga.
14. Letter from Dipaleseng Municipality dated 02 November 2009. **Approved Gert Sibande District Municipality (GSDM) and Municipal Infrastructure Grant (MIG) funded projects for 2010/2011, 2011/2012 and 2012/2013 Financial Year's**. Dipaleseng.
15. **Maputo Development Corridor Flagship Programme** - Accessed June 2010. <<http://www.mdc.org.za>>.
16. Mpumalanga Province, 2008. **Provincial Growth and Development Strategy**.
17. **Mpumalanga Spatial Development Framework, 2007**. Mpumalanga.
18. **Mpumalanga Terrestrial Biodiversity Assessment**, 2010. Mpumalanga
19. **Mpumalanga Tourism Growth Strategy, 2007**. Mpumalanga.
20. Nathea Nicolay, 2008. **Summary of Provincial HIV/AIDS Statistics for South Africa**. Metropolitan
21. National Department of Agriculture 2001. **Agricultural Soil Potential Data**. Pretoria
22. Republic of South Africa, 1995. **The Development Facilitation Act (Act 67 of 1995)**. Cape Town.
23. Republic of South Africa, 1996. **Growth, Employment and Redistribution 1996**. Cape Town.
24. Republic of South Africa, 1997. **Rural Development Framework 1997**. Cape Town.
25. Republic of South Africa, 1998. **Local Government Municipal Structures Act (Act 117 of 1998)**. Cape Town.
26. Republic of South Africa, 1998. **National Environmental Management Framework 1998**. Cape Town.
27. Republic of South Africa, 1998. **Transformation of Certain Rural Areas Act (Act No. 94 of 1998)**. Cape Town.
28. Republic of South Africa, 2000. **Integrated Sustainable Rural Development Strategy 2000**. Cape Town.
29. Republic of South Africa, 2000. **Local Government: Municipal Systems Act 32 of 2000**. Cape Town.

30. Republic of South Africa, 2001. **Land Use Management Bill 2001**. Cape Town.
31. Republic of South Africa, 2001. **Municipal Planning and Performance Management Regulations, 2001**. Cape Town
32. Republic of South Africa. **National Heritage Resources Act, 1999 (Act 25 of 1999)**. Cape Town.
33. **Rural Transport Strategy for South Africa, 2007**. RSA.
34. Statistics South Africa, 2007. **Community Survey 2007: Key Municipal Data**. Statistics South Africa. Pretoria.
35. Statistics South Africa. **2001 Census Data 2001**. Statistics South Africa. Pretoria
36. The Presidency, 2006. **National Spatial Development Perspective, 2006**. Pretoria.
37. The Presidency, 2010. **Guide to the outcomes Approach. 2010**. Pretoria.
38. **White paper on Spatial Planning and Land use Management, 2001**. RSA
39. **Wikipedia 2010**. Viewed July 2010, <http://en.wikipedia.org/wiki/Economic_geology>.
- 40 CSIR, 2000, *Guidelines for human settlement planning and design*, CTP Book Printers (Pty) Ltd, Cape Town
40. Dipaleseng Municipality, 2009. *Dipaleseng Municipality Integrated Development Plan 2009-2010*
41. Gert Sibande District, 2010. *Gert Sibande District IDP 2010-2011*
42. Republic of South Africa, 1994. *Water Supply and Sanitation Policy White Paper: Water-an indivisible national asset*, Nov 1994. Cape town
43. Republic of South Africa, 2000. Local Government: Municipal Systems Act (Act 32 of 2000). Cape Town

47 ANNEXURE A: CAPITAL EXPENDITURE FRAMEWORK

48 ANNEXURE B: PROJECT PRIORITISATION MATRIX

49 ANNEXURE C: MAPS