



CHAPTER 4: SPATIAL DEVELOPMENT FRAMEWORK



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4.1. INTRODUCTION

Spatial Development Framework (SDF) is one of the main tools which is utilized by Government and Local Government to ensure the eventual realization of the spatial vision and spatial objectives of the Growth and Development Strategy and the Integrated Development Plan of the municipality. Reference must be made to capital investment programmes, Government and Local Government's spending on infrastructure, public works, community facilities, housing and the like. The location of these public projects should obviously strengthen and support the spatial philosophy, principles and vision as set out in the Spatial Development Framework.

Therefore, a Spatial Development Framework (SDF) is a core component of a Municipality's economic, sectoral, spatial, social, institutional, environmental vision. In other words it is a tool to achieve the desired spatial form of the Municipality.

In order to achieve this, the SDF's *role* is to:

- a) Guide all decisions of the municipality that involve the use and development of land (including infrastructure and buildings), or planning for the future use and development of land. These decisions include:
 - Land use management decisions on applications for changes in land use, such as rezoning or subdivision applications;
 - Decisions on where and how public funds (from municipal and other government agencies) are invested, such as the extension of bulk service networks, or the provision of community facilities.

- b) Guide developers and investors to appropriate locations and forms of development.

The Spatial Development Framework (SDF) is a key legislative mechanism to address the numerous developmental challenges of the District. A number of these challenges considered and interpreted by the SDF include:

- Integrating the urban spatial form created under apartheid to separate townships from economic areas;
- Addressing the services backlogs for the poorest of the poor and the market-related residential development property boom;
- Providing an effective and affordable district-wide public transportation network that takes into account the reliance of the low-income communities on public transport (at a greater relative monthly cost) and conversely, the dependence of middle income communities on private modes;
- Balancing and facilitating market and public sector development in an effective and co-ordinated manner; optimising the use of existing resources;
- Determining and communicating reasonable and effective development policies and strategies;
- Investing in infrastructure in a cost-effective and proactive fashion whilst ensuring that historical backlogs are addressed.

The purpose of the SDF is not to infringe upon land rights but to guide future land uses. No proposals in this plan creates any land use right or exempt anyone from his or her obligation in terms of any other act controlling land uses. The maps should be used as a schematic



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representation of the desired spatial form to be achieved by the municipality in the long term.

This is a draft Spatial Development Framework for inclusion in the IDP for 2012-13. The aim of this framework is to consolidate the local frameworks developed by the local municipalities and provide a consolidated, high level view of the proposed development in the area. Through the public participation process various additional inputs will be made and the SDF will be refined in order to be approved in June 2012.

4.2. CONTEXT

There are various plans and policies that influence the development of the Spatial Development Framework. These aspects have been incorporated in order to develop the proposals as set out in the framework.

Legal Framework

In terms of Chapter 5 of the Municipal Systems Act each Local Authority is required to compile an Integrated Development Plan for its area of jurisdiction and Section 26 of the Municipal Systems Act. It is furthermore stated that the SDF forms a core component of the Integrated Development Plan.

Other legislative frameworks that will be taken into account are:

- Government Gazette No. 22605 dated 24 August 2001
- The Gauteng Planning and Development Act 3 of 2003
- Development facilitation Act 67 of 1995
- Gauteng Urban Edge Delineation Policy of 2007

Provincial Context

Early in 2008 the Gauteng Department of Economic Development embarked on a project to develop a long-term development plan for Gauteng province and was finally approved in 2011. It proposed a spatial development pattern in the pursuit of planning for shared, equitable, sustainable and inclusive growth and development in the country.

The Spatial Development Framework with which this document is concerned is a key part of this initiative. In embarking on this initiative, Gauteng Provincial Government seeks to:

- i. provide a clear future provincial spatial structure that is robust to accommodate growth and sustainability;
- ii. specify a clear set of spatial objectives for municipalities to achieve in order to ensure the realisation of the future provincial spatial structure;
- iii. propose a set of plans that municipalities have to prepare in their pursuit of these objectives;
- iv. provide a common language and set of shared planning constructs for municipalities to use in their planning processes and plans; and
- v. enable and direct growth.

In addition to the Provincial SDF, there are various policies and strategies that have been developed that provides direction to Municipalities with regard to the type of developments to promote in the area. Some of these documents included the Integrated Energy Strategy, Green Economy Strategy, ICT Strategy and the Innovation Strategy.



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Although these strategies do not directly impact on the spatial development of the regions, they do provide some guidance with regard to the types of activities to be promoted. These strategies promote manufacturing related to the green economy, better use of broadband and fibre optic infrastructure that may facilitate developments such as BPO parks.

Local Municipality SDF

The Gauteng Spatial Development Framework identifies the Johannesburg/Pretoria axis as the main development focus in Gauteng. The Sedibeng SDF proposals that show that the majority of the proposed land use in the district would be rural in nature. The plan provides for some future urban development between Vereeniging/Vanderbijlpark and Sebokeng/Evaton, and along the R59 as well as in Heidelberg (Zone of Opportunity).

All three local municipalities in the district have prepared spatial development frameworks as part of their IDPs. These are briefly discussed hereunder:

■ **Emfuleni**

The Emfuleni SDF is a detailed plan, indicating a variety of future proposed land uses, as well as development corridors, activity nodes and rural service centres.

■ **Midvaal**

The Midvaal SDF indicates other areas of strategic development where the plan is mainly focusing on future development along the R59 corridor,

Henley-on-Klip, Vaal Marina/Mamello, De Deur and Walkerville. In addition the densification of existing urban areas is a key priority for the Municipality.

■ **Lesedi**

The Lesedi SDF makes broad proposals relating to strategic development areas. It is proposed that future urban development will be concentrated mainly in Heidelberg/Ratanda and in Devon/Impumelelo, while the rest of the area will retain its rural character. The area linking Ratanda to Heidelberg is earmarked as infill development area where mixed uses will be promoted. The area next to the N17 has been identified as a “Zone of Opportunity”, pertaining to future local economic development of a rural nature.

The Devon, Vischkuil and N3 corridor “Zone of Opportunity” will be financed by Development of Rural Development and Land Reform and DBSA.

Hierarchy of SDFs

The SDF report will be structured in a hierarchical manner to provide plans that will guide the municipality with guidance for development and land use control. The plans will be the following:

- The District Spatial Development Framework, which should be regarded as a strategic tool, providing broad spatial direction and context to development in the district as a whole.
- Local Municipality Spatial Development Frameworks, which are detailed plans and aligned with the district SDF and which will contain the local spatial objectives and strategy. Nodes and



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corridors will also be more detailed and may have a different priority in terms of the local plans.

- Precinct Development Plans, which are development policies/land use plans for specific areas within local municipality, and are refinements of the SDF proposals and policies. A number of areas within the local municipalities, which are subject to development pressure and are of strategic importance, requiring detail planning.

4.3. DEVELOPMENT ISSUES

Emanating from the situational analysis, the identified main development issues in Sedibeng District can be summarized as follows:

Provincial Periphery

Sedibeng is situated on the southern periphery of Gauteng Province, away from the hub of economic activity, which is situated in the Johannesburg/Pretoria area. Because of its location, the district will find it difficult to compete with more centrally situated areas for new investment, which will hamper the economic growth rate. Development policy for the district should concentrate on maintaining and strengthening the existing linkages between the district and the economic hub to the north.

There are features that provide opportunities for alternative uses in the area that do not necessarily compete with the urban complex of Johannesburg, Tshwane and Ekurhuleni, such as opportunities for tourism activities and commercial agriculture.

Rural Nature of the area

Sedibeng District can be categorized as a largely rural area, with low population densities, which has serious implications in terms of cost effective service delivery. The towns in the district are far apart and lack a common identity. Due to the long distance and low population densities, infrastructural and social service provision to the rural communities is very expensive, and innovative ways to provide basic services to these communities must be sought. The bulk of municipal service provision will be concentrated in the urban areas.

Good urban services Infrastructure

The existing services infrastructure in the urban areas of the district is reasonably good, and has spare capacity to accommodate further urban development. Services backlogs are experienced in certain areas, while services upgrading is also required in certain areas, notably the previous disadvantaged township areas.

Future urban development should be concentrated in those infill/densification areas where spare bulk services capacity is already available. The unavailability of infrastructure like sewer hampers the future growth potential of the area and will be a priority to be addressed.

Economic Stagnation

Economic growth in the district during the last few decades has failed to keep pace with population growth, and this has resulted in a general decrease in the standard of living. The spatial manifestation of the growing poverty in the area will include general urban decay, growth in



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informal settlements, decreasing service levels, increased informal economic activity, etc.

The local economy is overly dependent on the heavy industrial sector [Sasol, Arcelor Mittal, Samancor, etc.] and economic diversification is urgently required. Economic sectors that show potential for future growth include tourism and agriculture, and investment into these sectors should be actively promoted. The economic growth rate of the three municipal areas has a high degree of correlation while that of Midvaal and Emfuleni show similar growth rates.

Economic growth for Lesedi has been the highest of all the municipal areas in the district. Economic growth in Emfuleni is vulnerable to fluctuations in the Manufacturing sector due to the high dominance of this sector in the local economy. Alternative manufacturing activities related to the green economy should also be considered. There are also opportunities to include manufacturing of pharmaceutical products in order to reduce the dependence on the heavy industrial sector.

Socio-Economic Disparities

There are huge socio-economic disparities between the different communities in the district, with high levels of poverty prevailing in the previously disadvantaged township areas. These disparities should be addressed as part of a holistic development strategy to be followed by the district and local municipalities. Public investment initiatives should favour those projects that will result in the upliftment of the previously disadvantaged communities and narrowing the gap between these communities and their more affluent neighbours.

Environmental Constraints and Opportunities

There are a number of major environmental constraints and opportunities in the district, which should be taken into account in the planning for future development in the area. Environmental constraints include the high levels of pollution, especially in the western parts of the study area, the visual unattractiveness of certain parts of the study area, adverse environmental conditions in the township areas, etc.

Environmental opportunities in the district include the existing nature reserves [Suikerbosrand and Alice Glockner], the various conservancies and watercourses through the study area, especially the Vaalriver and Vaal dam, the Suikerbosrand ridges, and the agricultural potential of the study area.

4.4. SITUATIONAL ANALYSIS

Economic Activity

There are various nodes with concentrated economic activity in the region. These relate to Retail, Business, Industrial and Commercial areas. Commercial/industrial activities in Emfuleni (ELM) are mainly around Vanderbijlpark and Vereeniging and relate to the steel and petro-chemical industries. There is also a line of industrial activity along the R59 from Kliprivier to the Meydustria area. The most important industry in this area is Samancor. Most of the industries in the Meyerton/Vereeniging/Vanderbijlpark area are heavy/noxious industries and thus potentially have a high environmental impact on the residential areas in the proximity.



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Industrial activity in Lesedi is concentrated primarily in two areas in Heidelberg, namely between the railway line and Rensburg where the two major concerns of the BAT Cigarette Manufacturing Plant and the Escort Meat Processing Plant is situated, and a light industrial area to the north of railway line and east of Route R23, where a range of smaller industrial concerns are situated. Commercial activity [which can be defined as warehousing, distribution and transport businesses] is found interspersed with industries within these areas. The quality of structures in the industrial areas vary from neat and well maintained to dilapidated and poorly maintained.

Some light industrial and commercial activities are also undertaken from small holdings, specifically in areas such as Vischkuil, Endicott, Spaarwater and Hallgate. These activities are mostly illegal in terms of environmental legislation and existing land use rights allocated to the properties, and in certain cases significantly contribute to the aesthetic and environmental degradation in these areas.

Retail / business activities take up a total area of ± 71 ha (0,05% of the study area) and are located predominantly in the CBD of Heidelberg, both north and south of the Blesbokspruit. Major shopping nodes in the Heidelberg CBD include the Shoprite/Checkers centre in the central part of town and the Pick a Pay centre on its northern fringe. There is a relatively large variety of shops and tertiary business services in the CBD, e.g. Most major banks, a number of financial service companies, attorneys etc. A motortown with a more distinct commercial character has established south of the Blesbokspruit along Schoeman Street. Businesses

in this area include a number of motor dealerships, filling stations, hardware stores, light industrial / commercial enterprises and retailers.

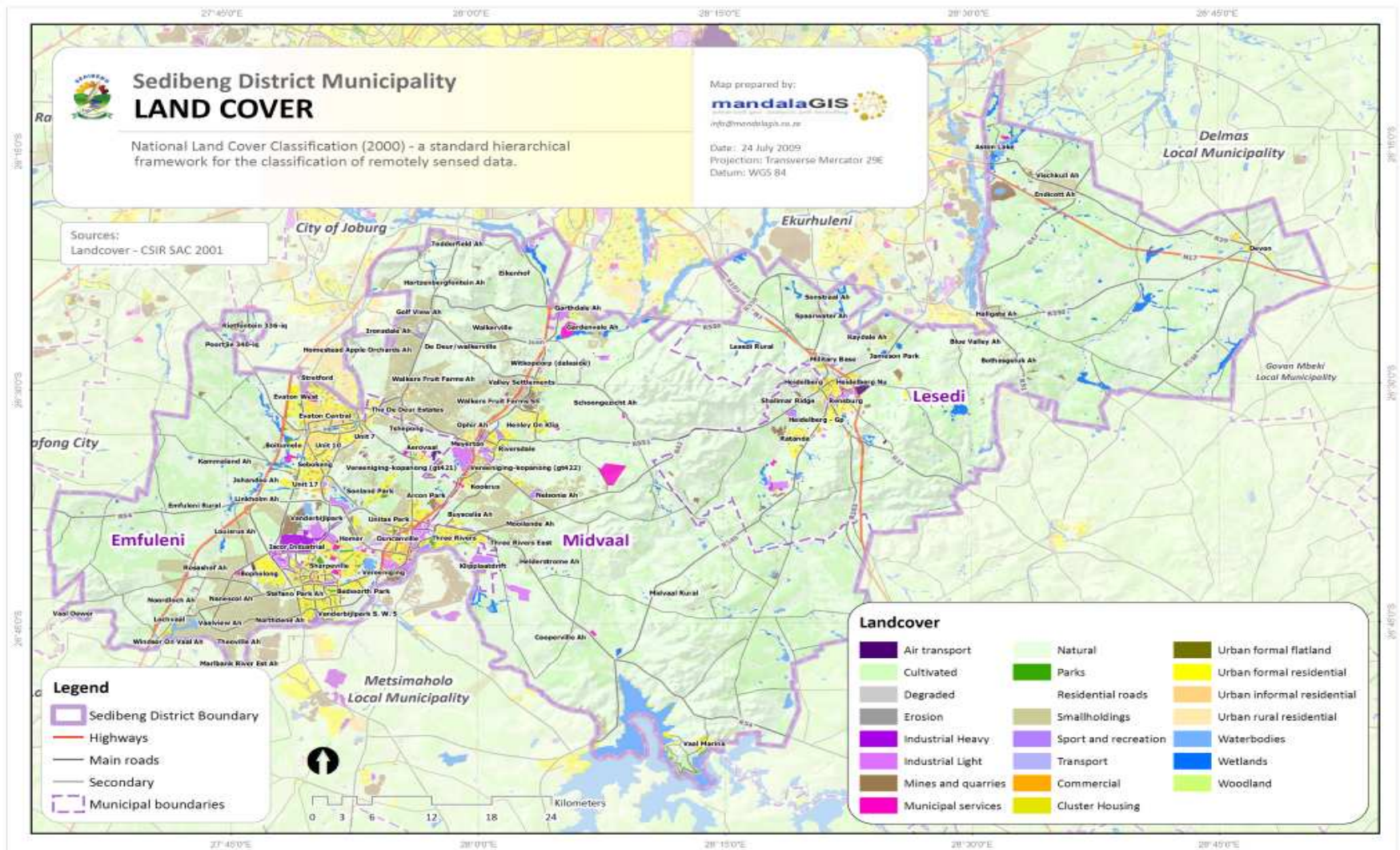
A few small formal businesses are located in Devon, Vischkuil/Endicott, and Ratanda. There is a significant informal component of spazashops, shebeens, backyard mechanics and the like in the previously disadvantaged areas of Ratanda and Impumelelo, while hawking and street trading, primarily on the main routes and in the proximity of taxi ranks and major shopping nodes, is on the increase.

Commercial agriculture takes up the largest area within the district and makes up $\pm 33\%$ of the total land usage. Agricultural activity in the district is dominated by large-scale commercial farming operations [crop production including maize, grain, sorghum, wheat, soya and dry beans, ground nuts, sunflower seeds and vegetables, and animal production including milk, beef, mutton and lamb, eggs and poultry]. Sedibeng is a very important resource to Gauteng in terms of food production, and this fact should be taken into consideration in the spatial planning of the area.

The **Map** below indicates the current land use activities in the district. It is clear that development is concentrated in the Vereeniging / Vanderbijlpark area with some industrial activity along the R82. Dense residential development is evident along the R553 with heavy industrial uses also evident in this area. The R82 and R553 form links to the municipalities to the north of Sedibeng with infill development between the two corridors.



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The areas outside of these corridors are mainly used for agriculture activities.

Residential Areas

Residential land uses include both formal and informal residential suburbs. The defined residential areas within Emfuleni include the areas of Evaton, Sebokeng, Bophelong, Boipatong, Tshepiso, and Sharpeville, which are all previously disadvantaged township areas, as well as the previous white suburbs of Vanderbijlpark and Vereeniging. A number of informal settlements occur in and around the previously disadvantaged township areas. Due to the depressed local economy, private sector housing development has been slow during the last decade, consisting mostly of small housing schemes within or abutting the existing medium and high-income residential areas.

The highest density of households living below the minimum living level (MLL) is evident in Sebokeng, Evaton, Boitumelo, Bopheleng, Sharpeville and Ratanda. This is depicted on the **MLL** and **Population Density Maps** below.

Environmentally Sensitive Areas

The Suikerbosrand Nature Reserve is situated mostly in Midvaal and the Alice Glockner Nature Reserve is situated towards the southeast of it within Lesedi.

The Suikerbosrand Nature Reserve

The Suikerbosrand Nature Reserve forms an enclave into the western edge of the Lesedi Municipal Area. This nature reserve is situated in the Suikerbosrand Hills which contribute substantially to the natural beauty of the area. The nature reserve is well managed and the eco system is fully protected in this area. The reserve has huge eco tourism potential and is promoted as such.

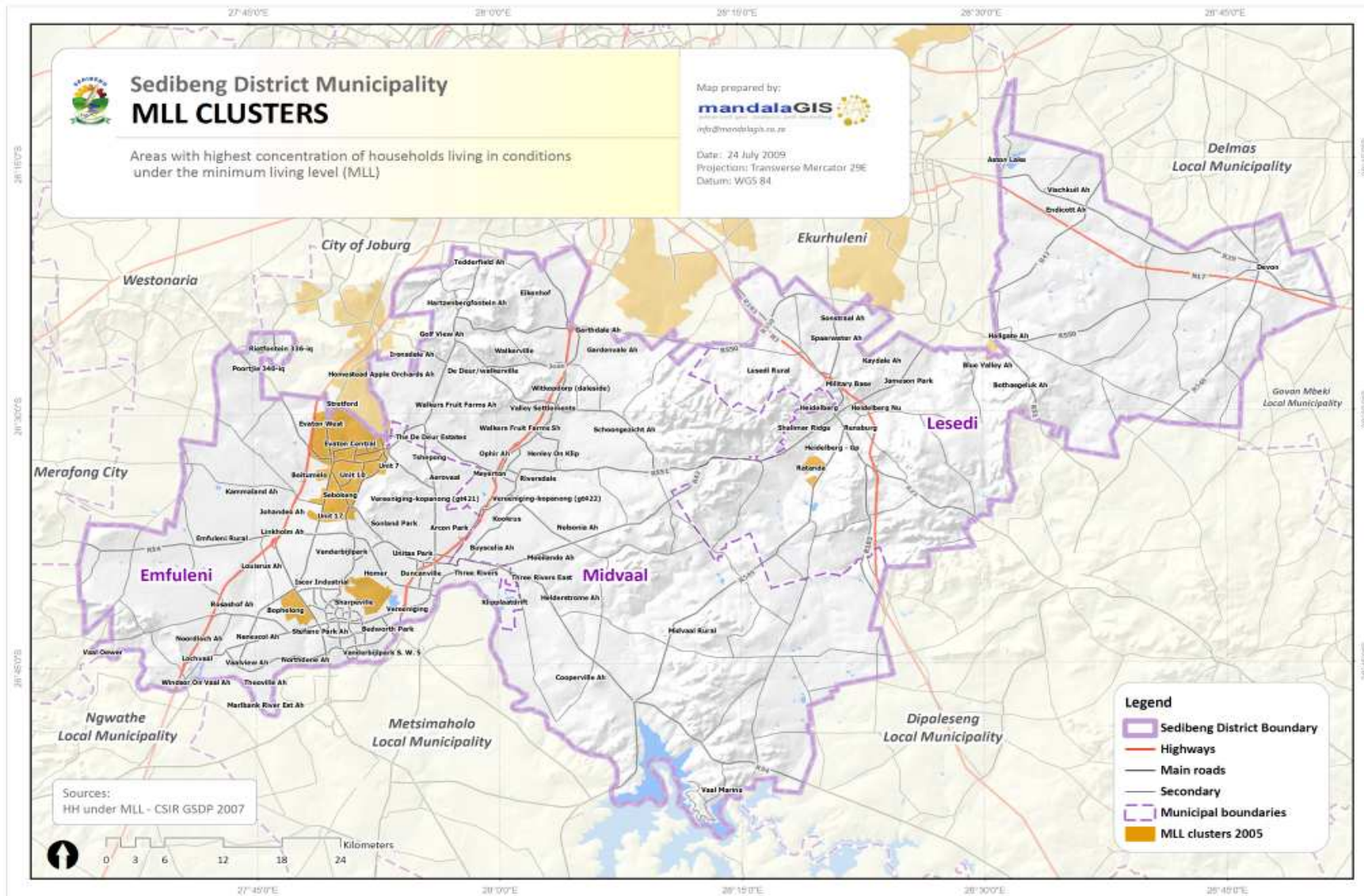
The Alice Glockner Nature Reserve

The Alice Glockner Nature Reserve to the south of Heidelberg/Ratanda has been upgraded in the recent past. The reserve is primarily known for the Heidelberg Copper butterfly, which is a red data species. A number of other interesting flora and fauna and geological features can be found in the reserve, while red data plants are currently being investigated. The Alice Glockner Nature Reserve forms part of a large area for conservation envisaged by GDARD, including links with the Suikerbosrand Nature Reserve and the military land to the northeast of Heidelberg.

There are also other areas that are noteworthy for their environmental importance in the area such as the Vaal River, Vaal dam as well as the Klip River. These form part of an ecologically important open space system of natural assets. Pollution is the major concern for the Vaal River and Klip River especially in areas where the rivers are flowing past developed areas. The **Environmentally Sensitive Areas Map** below indicates area described above.

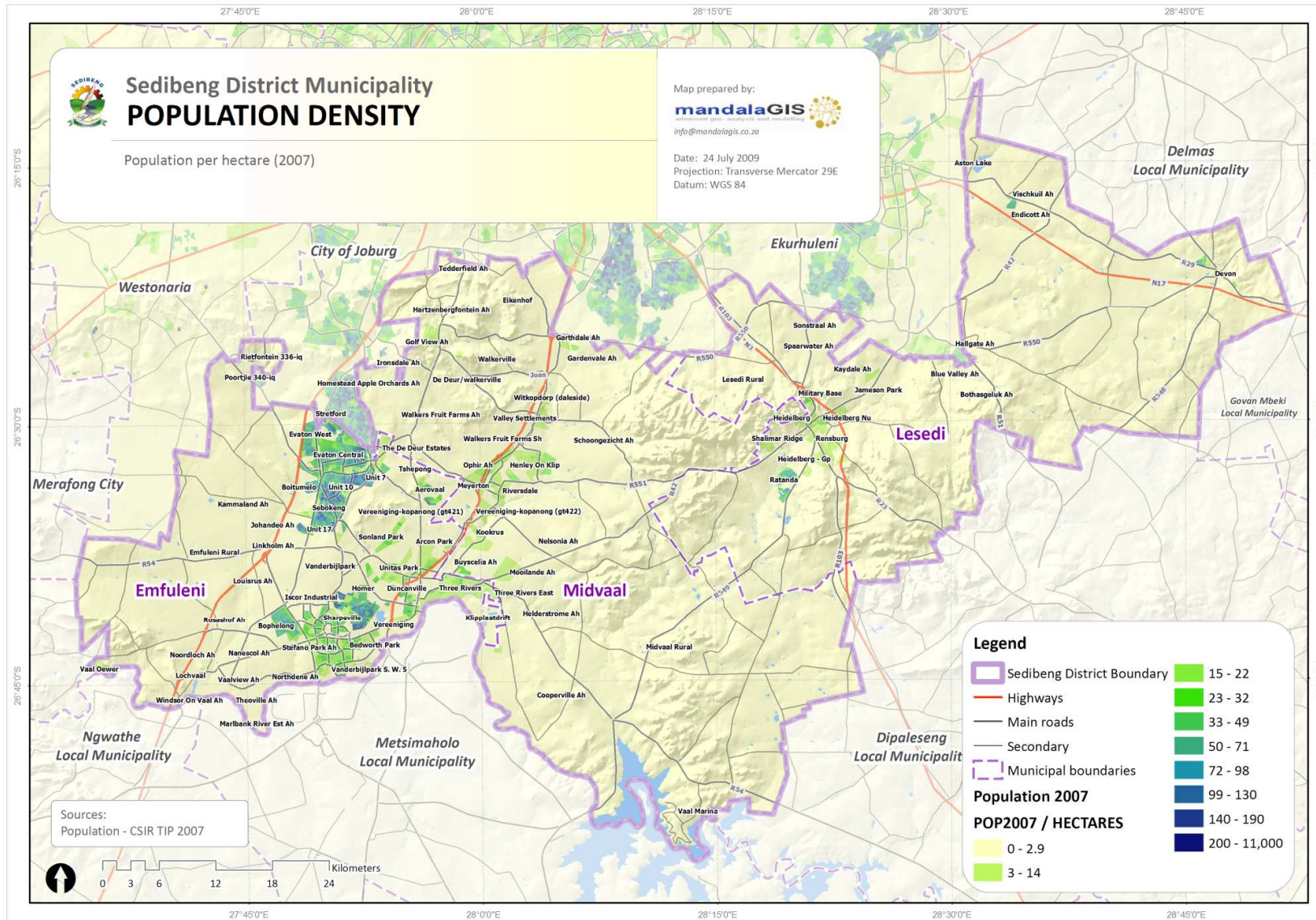


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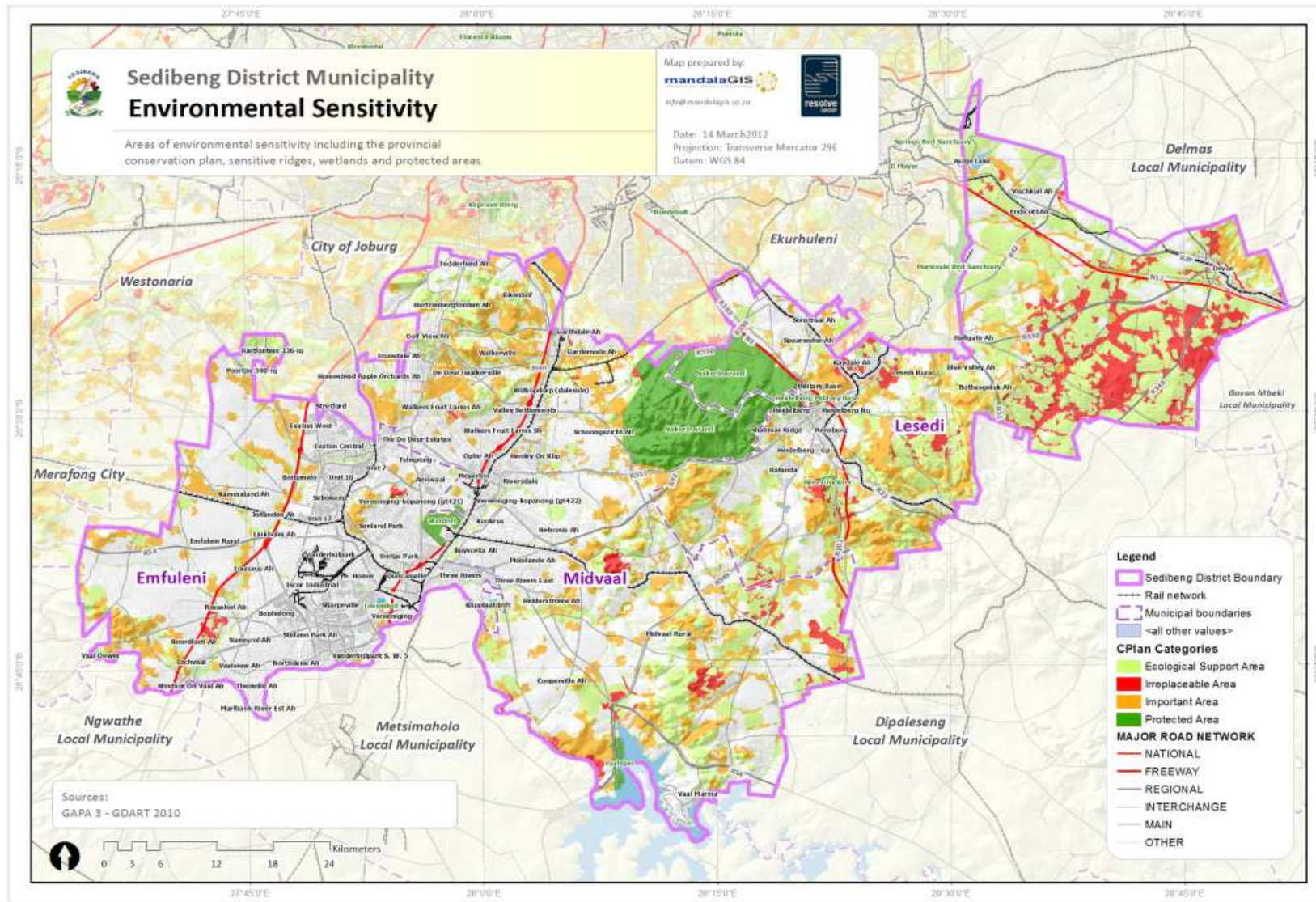


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Transport Linkages

Sedibeng District is well covered with an extensive road network, including national roads. Major routes are predominantly on a north-south axis, whilst regional main roads operating on a district level tend to radiate out from or converge on the commercial centres of Vereeniging and Vanderbijlpark. The R42 provides the main east-west linkage across the district.

There are two railway lines running through Lesedi Local Municipality, one linking the East Rand with Balfour and running through Heidelberg, and the other one running parallel to the N17 through Devon. Both these rail lines are used for freight only.

4.5. STRUCTURING ELEMENTS

Various structuring elements are applied to describe the intention of the Spatial Development Framework in order to support the GDS and the IDP. These relate to principles for development as well as the more detailed objectives to be achieved. Development proposals should be evaluated to determine if it meets these principles and objectives.

4.5.1. Development Principles

Sustainability

It is absolutely essential for the future survival of the Sedibeng District and Gauteng province, from a social, economical and political perspective, that the environment we live in is used in a sustainable and efficient

manner. While addressing the problems of today, without cognisance of the consequences for tomorrow, Sedibeng will become an undesirable, unhealthy, uneconomical and unsustainable place to live in the future.

Therefore, in all the developments and GDS, it is necessary to ensure that they are developed in an environmentally manner that ensures sustainable and healthy communities, in a way that creates opportunities for future generations, not challenges.

This aspect relates to the efficient use of resources, preserving and protecting natural resources, including conservation and heritage areas. The outcome is aimed at sustainable economic growth and job creation.

Efficiency

There are limited resources in the Municipality, both natural and financial. It is therefore critical that resources are used in the most efficient way to limit wasted resources. Efficiency will be achieved through a robust urban form and structure, managed growth based on infrastructure availability and interconnectivity between facilities.

Accessibility

Accessibility refers to the ability of residents to access various opportunities in the most effective way to reduce unnecessary costs and improve quality of life. Accessibility also provides a catalyst for economic growth in areas and should thus be supported by all modes of transport. The re-structuring and re-engineering of the existing urban form and function of the whole District without defined direction and intervention will take generations. To accelerate the delivery of developments that support the SDF's principles of Sustainability, Accessibility and Efficiency,



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medium- to long-term objectives and strategies have been supplemented by specific instruments that are used on a daily basis to address recurring development issues and assess the appropriateness of a development proposal or initiative.

4.6. DEVELOPMENT OBJECTIVES

The spatial objectives and the spatial development principles need to be promoted. These objectives have been developed as part of the 2011-12 SDF, but remain applicable as broad development objectives. These objectives have also not been achieved and therefore should remain and be monitored. In the current IDP, the seven main spatial objectives have been formalized for the district as follows:

- A **continuous and sustainable open space network** has been created throughout Sedibeng District, utilizing the natural features within the area, such as the ridges, rivers, nature reserves, etc. The two major elements within this system will be the greater Suikerbosrand area, as well as the Vaalriver area.
- A **system of functionally defined activity nodes** has been promoted within the district. The main activity node will be Vereeniging/Vanderbijlpark, while two secondary nodes already exist, namely, Meyerton in Midvaal and Heidelberg/Ratanda in Lesedi. In addition to these nodes a number of rural service nodes should be promoted throughout the district.
- **Linkages** between the identified nodes in the district have been **optimized**, as well as linkages between the disadvantaged communities

and the main employment centres. In this regard a number of main road linkages have been identified, including Routes R29, R42, R59, R82, R54 and R553. Mixed-use high-density development should be promoted along the routes. The current commuter rail linkages still needs to be promoted as the main public transport system within the district.

- An **urban development boundary/ urban edge** has been demarcated and enforced in order to strengthen the existing urban areas and nodes, to contain urban sprawl, to promote more compact urban development and to protect the agricultural and ecological potential of the rural hinterland within the district. Future urban development should consist primarily of infill and densification within the current urban edge.
- The **existing major development opportunities** in the district should be **maximized through tourism development opportunities** around the Suikerbosrand and along the Vaalriver, and economic development opportunities along Provincial Routes R59. The area abutting Route R59 is seen as a major future economic development corridor.
- **Corridors** should be enhanced by promoting **High-density development** along main public transport links.
- Upgrading of services should be focused primarily on previously disadvantaged township areas.



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4.7. THE STRATEGIC CONCEPT

In order to achieve the above spatial development objectives, the Sedibeng District Municipality proposes to manage spatial development in a manner that will focus on existing strengths and development opportunities, whilst addressing areas of critical need. Conceptually, this approach is labelled as:

Building on Urban and Rural Strengths

In essence, the conceptual approach acknowledges that the urban areas of greater Lesedi, Emfuleni and Midvaal and environs, are likely to be the focal points for significant economic growth and development within Sedibeng District over an extended period of time.

However, it is accepted that there is a dependency amongst a significant proportion of the residents of Sedibeng District on access to peri-urban and/or rural land for basic livelihood (i.e. survival or subsistence) purposes, and that this is likely to continue to be so, at least in the medium term (10 years).

Therefore, it is concluded that:

- It must be accepted that it is most rational and economically effective to focus higher order development investment (in infrastructure, housing and a diversity of economic enterprises) in the urban core areas.
- However, a proportion of the resources of the Sedibeng District Municipality must also be targeted in areas of opportunity and areas of need in fringe rural and peri-urban areas, in order to

upgrade existing settlements and create or facilitate new development opportunities in these areas.

4.8. SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Framework provides descriptions of the locations for various initiatives, but also refers to some policy interventions that are required with these, in order to guide development decisions in the areas.

The Concept Plan

The Municipality has identified four Land Use Precincts as the basic elements (or “building blocks”) of a conceptual Spatial Development Framework. A Precinct is defined as an area within which certain types of land use dominate and where specific developmental outcomes are preferred. The following applies:

Urban Development – Existing and New

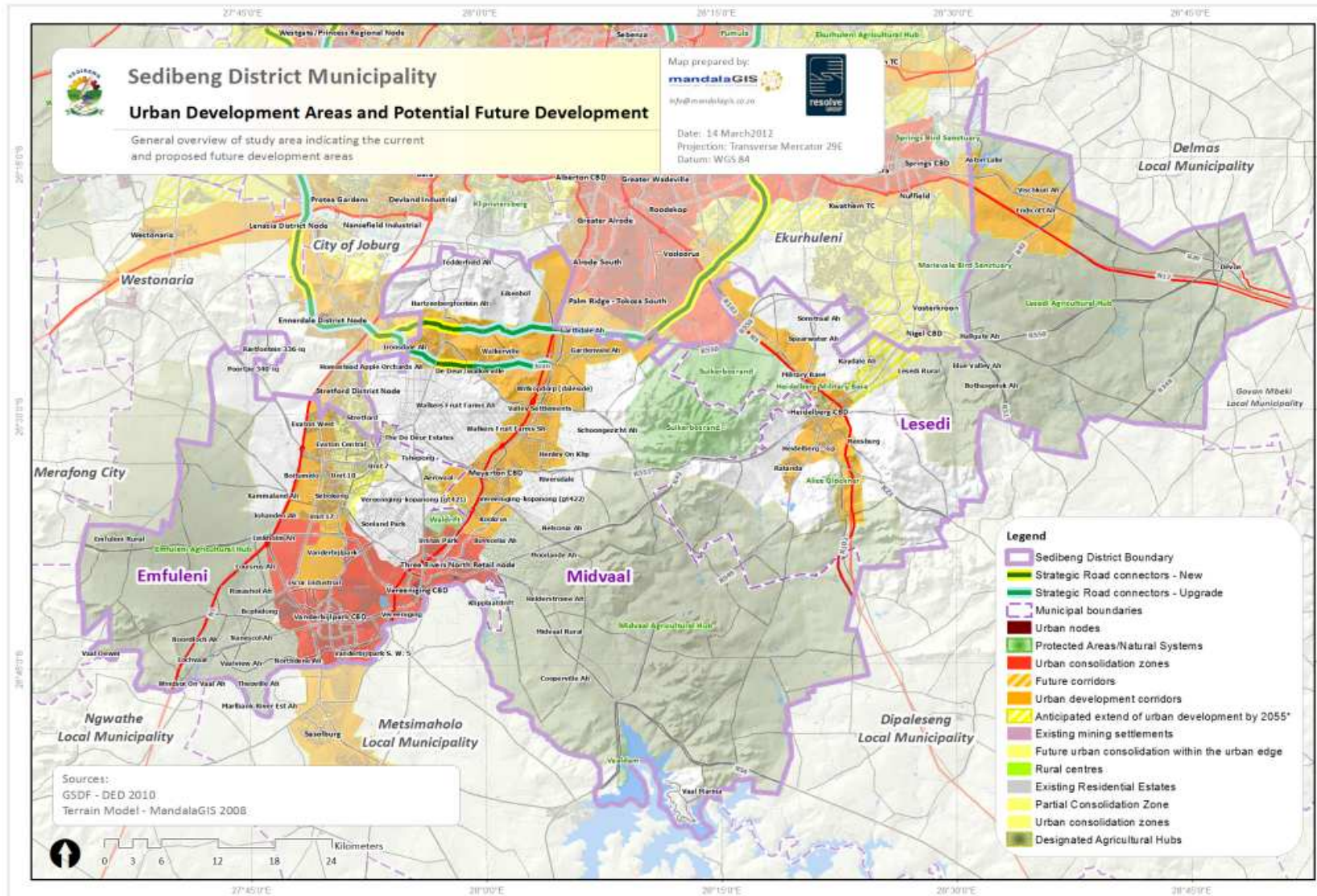
Preferred development outcomes in this Precinct would include the maintenance and upgrade of existing levels of service, the intensification of development (including higher density residential and mixed land use development), and the development of suitable vacant “infill” land parcels in an efficient and sustainable manner.

These areas mainly refer to:

- Vereeniging/ Vanderbijlpark CBD
- Meyerton CBD
- N3 Zone of Opportunity
- R59 Corridor



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The spatial arrangement of the core areas requires strengthening to support city integration and ensure relatively short travelling distances between all the residential areas and the main business areas. The strengthening of the CBDs would also support the future viability of public and non-motorised transport as well as city centre parking. This basic structure is developed through regeneration in order to shape the city to enhance integration to the advantage of all residents of the municipality and region.

The urban development areas and potentially developable areas are indicated on **Map** above. The areas with the highest concentration of development require densification, upgrade and maintenance whereas the high potential areas indicate opportunities for the development of corridors and development areas. The information is based on the current development in areas, availability of engineering services, access to social services and other facilities including transport linkages and public transport and employment centres.

These areas and activities will relate to nodes and development corridors to be developed in the area. Some specific precincts have been identified that is of importance, and include:

- Government Precinct (Vereeniging)
- Fresh Produce Market Precinct
- Doornkuil Precinct
- Waterfront Precinct

Although Sasolburg does not fall within the administrative jurisdiction of the Sedibeng District Municipality, it is acknowledged that the CBDs

function as a unit with interdependencies between the various nodes. It is important that these do not compete but rather complement each other in terms of the services and opportunities offered.

Upgrade of Existing Rural Settlements

This Precinct identifies areas where it is anticipated that lower density peri-urban and rural settlement development and mixed land use environments could be supported.

The most important areas identified include:

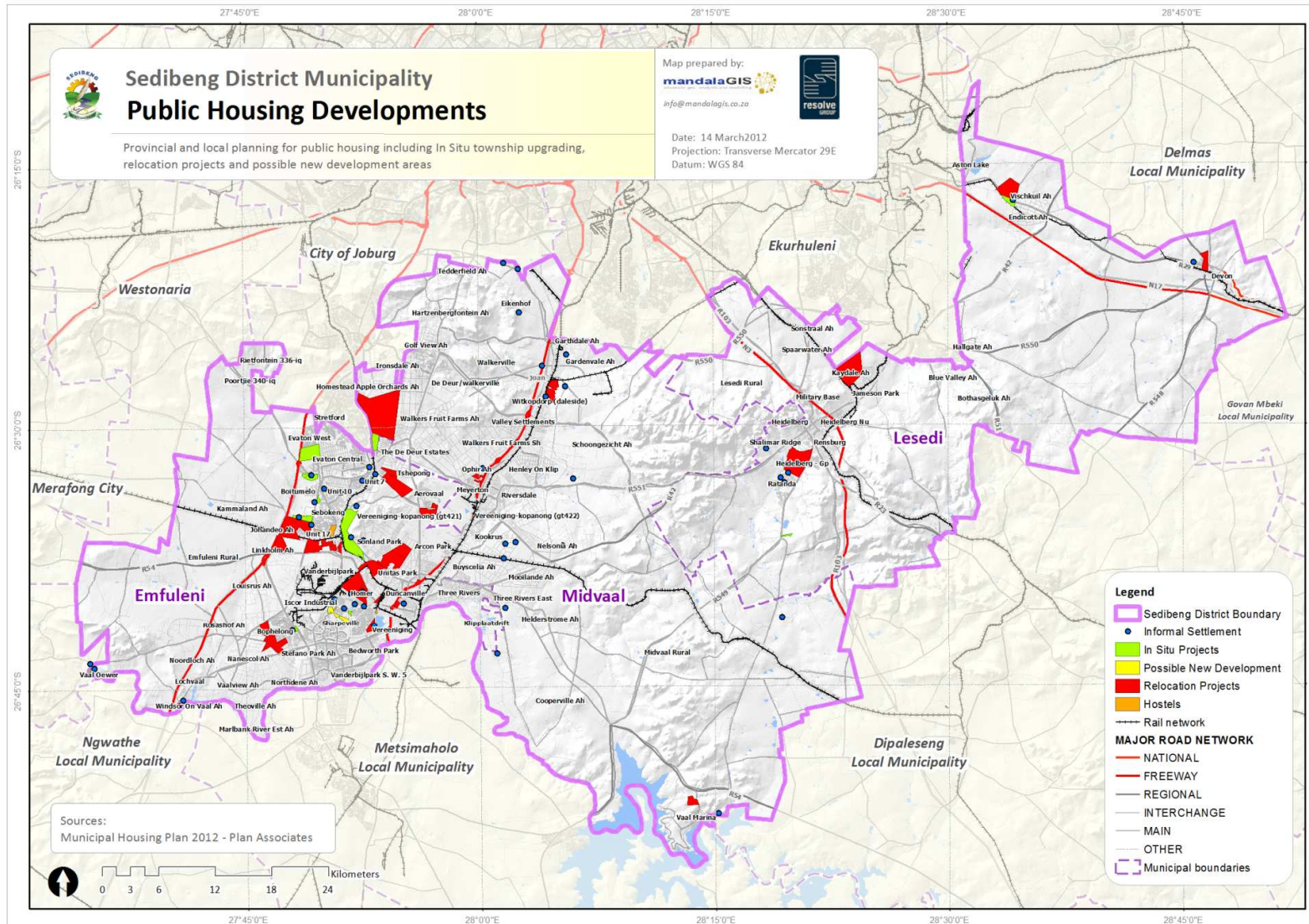
- Heidelberg/Ratanda
- Devon/ Impumelelo
- Vischuil/Endicott
- Tshepiso North Ext 3 and 4
- Sonderwater
- Boipatong
- Lakeside Ext 4
- Sebokeng Ext 24
- Lakeside Proper

Preferred outcomes in this Precinct include the upgrading of existing peri-urban and rural settlements, the extension of such settlements where feasible and the development of additional settlements with access to land for cultivation or stock farming purposes, where possible.

It is emphasised that lower basic levels of service are likely to prevail in these areas than would be the norm in urban areas. Minimum standards would, however, apply.

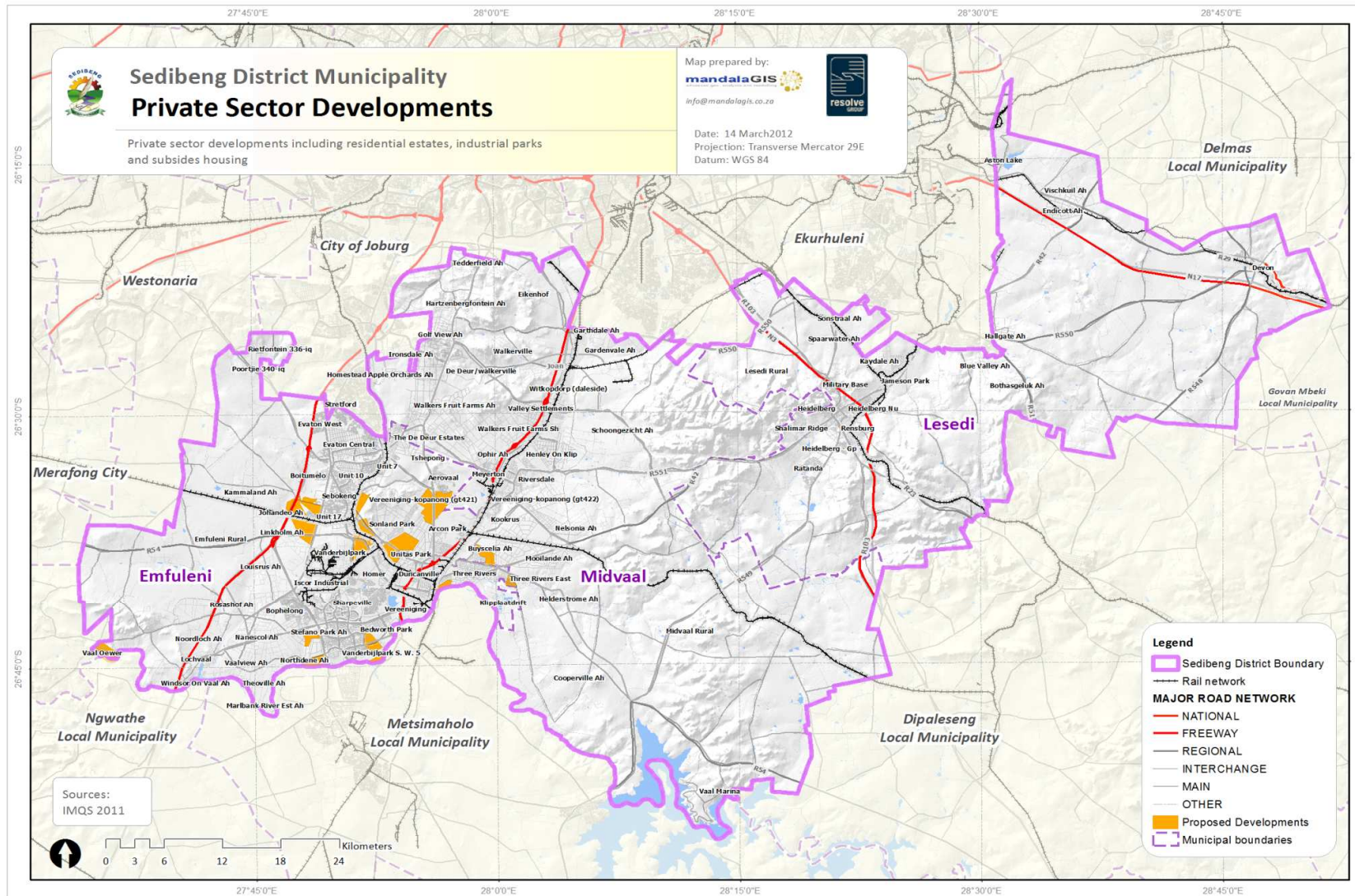


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Proposed public housing developments as well as private housing developments can be seen on **Maps** above. These are clearly related to the development corridors and nodes and should be encouraged. Private sector development is encouraged between the R553 and R82 as it falls within the development corridors and thus provides opportunities to employment centres, transport and services. Developments in these areas will lead to a more compact urban form and the efficient use of resources.

Environmentally Sensitive Areas

This Precinct includes areas of importance at the broad Municipal scale, where conservation-worthy or sensitive natural features require protection. The following zones are noted:

- Suikerbosrand Nature Reserve
- Alice Glockner Nature Reserve
- Vaal River and Vaal Dam
- Klipriver

Preferred outcomes in this Precinct include managed land use practices (where limited development appropriate to the environment could be permitted) and the demarcation of restricted conservation areas. The controls for development along these areas will be implemented through land use management, promoting low density developments. These developments will focus mainly on tourism activities and should be limited based on the intensity of the use.

These areas are also not well serviced, and thus financial instruments should be used to curtail sprawl and intensive development. Such controls may be to make the developer responsible for the provision of infrastructure and linking such infrastructure to the municipal network.

These areas are indicated on the **Environmentally Sensitive Areas Map** on above.

Agriculture

This Precinct includes areas where extensive and intensive agricultural land uses predominate. The area provides a very important commercial agricultural complex to the province and region.

Preferred outcomes in this area include sustainable agricultural practices, rural-based enterprise development and tourism development. It is emphasised that most development activity in this zone would be market-driven. Land use will be managed to ensure appropriate use of the available natural resource base in the area.

Agricultural land as a scarce natural resource should ultimately be conserved and development thereon limited; Applications for land use change to develop on agricultural land, will be considered on an individual basis after thorough analysis of:

- Need and desirability of such development;
- Motivation for specific locality;
- Should be a single development;
- Environmental impact assessment;
- Consideration of alternative sites;
- Whether it compliments or improves the SDF plans; and
- Compliance to SDF and Nodal Development Plans.



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Subdivision of high potential agricultural land will be discouraged. Applications for subdivision will be considered in the following instances:

- Subdivision needed as a result of a physical boundary, example a railway line, river or national road. A pre-requisite might be the consolidation with adjacent property to ensure a viable economic agricultural unit;
- Subdivision of existing or proposed non-agricultural land uses, example business, will be considered on an individual basis;
- In cases where subdivision would precede consolidation into more functional agricultural units;
- Proof be submitted by an agricultural specialist that agricultural viable units are created and will be sustained.
- Detailed soil survey and analyses by a registered soil scientist;
- Soil analyses by registered soil laboratory indicating the soil physical and chemical characteristics;
- Analyses by an agricultural economist indicating the agricultural viability of the land as high potential arable land;
- Soil map and soil sensitivity map with regards to specific development zones;
- Fit in with surrounding sub divisional pattern and size;
- Proof of adequate quality and quantity of own sources of water.

4.9. KEY STRUCTURING ELEMENTS

Within the overall conceptual framework described above, certain local areas and roads of potential (or existing) developmental importance have been identified and assigned broad land use categorisations.

These areas are termed spatial structuring elements of Sedibeng District Municipality, and are described individually as Development Nodes, Development Zones, Settlement Zones, and Corridors.

The following applies:

4.9.1. Development Nodes

These are defined as local areas where current and potential development activities are such that significant levels of development could be achieved in the locality. Mixed land uses and high-density development are proposed to predominate in these development nodes.

It should be noted that these nodes are ranked based on the regional importance it plays and thus not all nodes reflected on a Local Municipality level may have been included. The scale of intensity and use also plays a role in the classification of the nodes.

At the District scale, two Primary Development Nodes are identified:

- Vereeniging CBD
- Vanderbijlpark CBD

Strategies to densify and create more intensive uses in the area should be developed. This will also provide a more efficient use of the existing engineering services. It should however be noted that there is a need for maintenance of services as well as regeneration in the existing areas in order to increase their value proposition.

In addition, two Secondary Development Nodes are proposed:

- **Meyerton** will be the primary node along the R59 corridor, with a mix of land uses. This area can accommodate heavy industries, large-scale



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manufacturing, commercial uses, retail, general business and urban residential uses.

- **Heidelberg CBD**, the economic and administrative centre of Lesedi. It's location on the N3 at the intersection of a number of provincial roads will ensure ongoing growth and it will remain the main source of job opportunities in the municipal area. Further economic diversification and residential opportunities should be promoted here.
- **Zone of Opportunity** has been identified at the intersection of the R42 and the N3 for the purposes of mixed retail, commerce and service industries. The process of installing bulk services has commenced, with a planned retail shopping centre of approximately 13 000m² to be constructed.

Finally, additional Tertiary Development Nodes are proposed to function as local service centres.

- **Vischkuil/Endicott**, which is an emerging node in the N17 corridor to the west of Devon/Impumelelo, closer to Springs.
- **Devon/Impumelelo**, which is the second largest node in Lesedi and is situated in the N17 corridor on the north-eastern edge of the municipality; and
- **The Nampak/Everite area**: This node is situated at the gateway of the R59 corridor and should therefore be protected in terms of the type of uses and aesthetic appearance. Light industrial uses, mini-factories, offices, warehouses and commercial uses are proposed for this node.
- **Sebokeng**, the proposed node is situated coincidental to the hospital and taxi ranking facilities. For all intents and purposes, it shows all the characteristics of an activity node in the making. It currently comprises an agglomeration of various complementary land uses such as health, commercial, retail and light industrial activities. Further, it is

located along the most important and busiest road in the area (Moshoeshoe Road), and is also close to an active rail line. If the node is to be developing as hoped, the current land use must be supplemented with formal retail and banking facilities.

- **Evaton**: This node is situated adjacent to the Golden Highway. Apart from providing retail and commercial facilities this node could also accommodate community facilities like a post office, clinic and police station. The proximity of the node to the Golden highway and Moshoeshoe Roads suggest that a public transport facility would be particularly appropriate.

4.9.2. Development Corridors

These coincide with Existing and New Development Areas as described above and represent areas where new urban development of an appropriate nature will be encouraged. Development corridors are urban phenomena and vary in scale. They feature a combination of transport services and supporting infrastructure in parallel and denser mixed land use integrated with the transport system, which includes land uses such as retail, residential, service industries, commercial, activities, social, agricultural related uses and recreation.

The approach that is required to support the development of the Sedibeng District Municipality needs to be well serviced by a well-established network of roads (North / South and East / West) and rail. They include (in no order of priority):

(a) Along the R59 between Meyerton and Vereeniging

The R59, and the rail line that runs adjacent to it, forms a natural opportunity for a corridor. In fact, previous studies have recognized it for



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this potential. However, because of the underlying geology and relative remoteness from the largest population concentrations in the area we would recommend that it only enjoy partial development. The siting of industrial activities, which are incompatible with residential land uses, would be ideal. Generally speaking, the best opportunities lie to the west of the R59, especially when one considers the industry type that is recommended. The existing local road running to the west of the R59 is ideally situated to serve as a frontage road and provide direct access to potential development sites.

(b) N17 Freeway

The N17 Freeway is located within the northern section of the Lesedi Local Municipality and creates a link between Gauteng and Mpumalanga Province. Although the R29 Road (between Endicott AH and Devon) runs parallel to the N17, the distance between these roads is too far to provide an effective development corridor. It is proposed that development nodes be established at the intersection of the R42/N17 and R550/N17. These development nodes could act as catalysts for the development of Endicott/ Vischkuil and Impumelelo / Devon.

(e) N3 Freeway

The development focus along the N3 freeway should be a combination of Nodal development and corridor development in order to maximize investment opportunities. The existing accesses and entrances to the N3 with the R23, R42 and the R550 should be strengthening by nodal development. Apart from the frontage (visual impact) along the N3 between the respective nodal areas which should be utilized (subject to available areas) for “clean” service industries, the development strip between the N3 and the R103 presents the ideal opportunity for the

establishment mixed land uses, with the focus on industries, office parks and manufacturing. This area could become the new locality for investors, which are dependent on the Gauteng/Kwazulu Natal and Free State link.

4.9.3. Mobility Corridors

In addition to the development corridors that are situated along major routes, the following routes have been identified in the area. These corridors relate to the main transportation function of the road and may allow some economic activity to take place surrounding the corridors. These Roads are identified as priority areas to facilitate accessibility and provide connectivity between the respective nodes.

(a) R54, between Sebokeng and Vereeniging

The R54 forms a very important link between Sebokeng, the largest residential area in the Emfuleni Local Municipality area, and Vereeniging. Being situated adjacent a relatively under-utilized rail line and numerous packets of undeveloped land, this road provides a natural spine for an activity corridor.

There is vacant land to the north of Tshepiso and Boipatong, and south of the R54. It is suitable for economic activity, which thrives on high levels of passing trade, easy access and high visual exposure. Employment and services provided by a node situated at this point will not only cater for the need of Sharpsville, but will also serve the Steel Park area and its proposed extensions. The development of this activity node will probably form the best first step in the development of a development corridor along the R54



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(b) R82, between Vereeniging and De Deur.

This corridor is likely to become a prospect over the long term. The development of residential land uses should be sensitive to this eventually. The GDS recognised this corridor as a potential for small craft hubs, coffee shops, art dealers and light industry. The failure of the Gauteng Department of Transport to implement a long standing upgrade plan for this road has delayed the potential of this corridor. The expansion of the Jacobskop Cemetery and the boom of an organised 'Flee Market' in De Deur, has seen huge increases in traffic volumes on this corridor on weekends especially. The proposal is to limit and manage development permitted along the R82 to:

- Firstly ensure that the road is upgraded to improve safety and service standards; and
- Secondly protect the mobility function of the route;
 - Protect the existing rural character and associated tourism potential of Midvaal;
 - Limit land use changes for business purposes to properties directly fronting onto the R82 Activity Spine. The highest order land uses should be directly adjacent to the road, with a decline in the intensity and scale of uses away from the road;
 - Protect the farms and agricultural holdings in the area for agricultural and rural residential purposes; and
 - Promote the development of alternative north/south routes, which could compliment the R82 and R59, specifically the K47 and K7.

(c) R42 Route – This road provides an important linkage between the Lesedi Local Municipality and the remainder of the Sedibeng District Municipality towards the south and northwards through Heidelberg towards Endicott / Vischkuil. Although it would be impossible to develop

the total corridor, emphasis should be given to certain sections of the road. The following areas along the R42 should receive priority:

- The section south of the Suikerbosrand Nature Reserve towards Heidelberg CBD. The type of activity should focus on tourism, arts and craft, recreational, hospitality and environmental related activities. It would also be important to provide an access point to the Suikerbosrand Nature reserve along the routes;
- Section through the Heidelberg;
- Intersection of the R42/N3 where the opportunity zone has identified and planned;
- Section between the N3 and Nigel which should focus on the establishment of service industries (mixed activities); and
- Section between the N17 and R29 that should focus on mixed land uses (service industries, housing, social and manufacturing).